EXHIBIT A

PUBLIC HEARING DRAFT CONTRA COSTA COUNTY 2045 GENERAL PLAN



Contra Costa County 2045 General Plan



Contra Costa County 2045 General Plan

Prepared By:

PlaceWorks

2040 Bancroft Way, Suite 400 Berkeley, California 94704 t 510.848.3815

In Association With:

Barry Miller Consulting Fehr & Peers BAE Urban Economics ICF Jones & Stokes, Inc.





In Contra Costa County in 2045:

- Communities are inclusive, close-knit, thriving, and engaged.
- All residents feel safe and secure in their homes and neighborhoods.
- Housing is affordable for everyone and no one is left without a home.
- All communities benefit equitably from an environmentally sustainable, prosperous, and just economy.
- All residents live in communities where they breathe clean air, are not burdened with toxic exposures, and have an opportunity to pursue healthy and fulfilling lives.
- Everyone enjoys safe, affordable, and reliable public transportation that takes them where they want and need to go: to good-paying sustainable jobs, quality schools, affordable grocery stores and essential services, recreation, and health care facilities.
- There are parks, community centers and gardens, small businesses, and faith spaces available to serve everyone in the diverse population.
- The county's scenic landscapes and unique natural features are preserved.
- Focused and ambitious actions are taken to reduce greenhouse gas emissions, improve community resilience, and adapt equitably to a changing climate.

TABLE OF CONTENTS

1 Introduction	1-1
What is the General Plan?	1-1
User's Guide	1-2
General Plan Objectives and Themes	1-5
Implementing the General Plan	1-7
2 Planning Context	2-1
Planning Area	2-1
Geographic Setting	2-1
Socioeconomic Setting	2-4
The General Plan Update Process	2-6
3 Stronger Communities Element	3-1
Environmental Justice	3-2
Community Health	3-7
Healthy Homes	3-16
Arts and Culture	3-19
Economic Vitality and Empowerment	3-21
Community Engagement	3-29
Stronger Communities Element Performance Measures	3-32
Community Profiles	3-32

4 Land Use Element
Land Use Designations and Map4-
Orderly, Well-Planned Growth4-
Specific Land Uses4-2
Land Use Element Performance Measures4-3
5 Transportation Element
Coordinated Planning5-
Safe and Sustainable Transportation5-
Multimodal Roadway Network5-1
Active Transportation5-1
Goods Movement5-2
Air Mobility5-2
Transportation Element Performance Measures5-2
6 Housing Element - This Element was adopted through a separate process
7 Conservation, Open Space, and Working Lands Element
Open Space Framework7-
Agricultural Resources and Working Lands7-
Ecological Resources and Natural Systems7-1
Water Resources
Historic and Cultural Resources7-3
Scenic Resources 7-3

Mineral Resources7-41	10 Growth M	anagement Element	10-
Energy Resources7-44	Backgrou	und	10-
Conservation, Open Space, and Working Lands Element Performance	Intent		10-2
Measures7-50	Authority	/	10-2
8 Public Facilities and Services Element	Relations	ship to Other General Plan Elements	10-2
General Public Facilities and Services	11 Glossary		11-
Water and Wastewater8-8	Abbrevia	tions	11-1
Drainage and Flood Risk8-12	Terminol	logy	11-4
Sheriff, Fire, and Emergency Medical Service8-17		-57	
Solid Waste Management8-20			
Parks and Recreation8-25	APPENDICES		
Schools	Annendiy A —	Summary of Policies and Actions by Theme	
Libraries8-35		Health and Safety Element Technical Appendix	
Public Facilities and Services Element Performance Measures8-36	Арреник в –	riealiti and Salety Liement recrinical Appendix	
9 Health and Safety Element			
Air Quality9-2	TABLES		
Greenhouse Gases	Table INT-1	State-Mandated and Contra Costa County 2045	
Climate Change, Resilience, and Adaptation9-12		General Plan Elements	1-4
Flood Hazards and Sea-Level Rise9-14	Table LU-1	Land Use Designations	4-5
Wildfire Hazards9-28	Table LU-2	Urban and Non-Urban Land Use Designations	4-1
Extreme Heat9-35	Table LU-3	Priority Development Areas in Unincorporated Contra Co	osta
Management of Hazardous Materials and Hazardous Waste9-38		County	
Seismic and Geologic Hazards9-46	Table HS-1	Climate Change Hazards of Concern in Contra Costa	
Emergency Preparedness, Response, and Evacuation Routes9-53		County	9-13
Noise and Vibration9-59	Table HS-2	Typical A-Weighted Sound Levels	9-60
Health and Safety Element Performance Measures9-64	Table HS-3	Maximum Allowable Noise Exposure by Use	9-6 ⁻
	Table HS-4	Rail Vibration Screening Distances	9-64

FIGURES		Figure TR-7	Goods Movement Facilities	5-24
Figure PC-1	Planning Jurisdictions2-2	Figure TR-8	Buchanan Field Airport and Byron Airport Compatibility Zones	5_27
Figure SC-1	Impacted Communities3-4	Figure COS-1	Agricultural Land	
Figure SC-2	Asthma Rankings Relative to the State3-8	9		
Figure SC-3	Cardiovascular Disease Rankings Relative to the State3-9		Prime Productive Agricultural Soils	
Figure SC-4	Low Birth Weight Rankings Relative to the State 3-10	Figure COS-3	East Contra Costa County Habitat Conservation Plan/ Natural Community Conservation Plan Area	
Figure SC-5	Children's Lead Risk from Housing Rankings Relative to the State	Figure COS-4	Priority Conservation Areas	7-15
Figure CC 6		Figure COS-5	Waterbodies and Natural Watercourses	7-18
Figure SC-6	Poverty Rankings Relative to the State	Figure COS-6	Watersheds	7-19
Figure SC-7	Adults without a High School Degree Rankings Relative to the State	Figure COS-7	Utility District Watershed Lands	7-24
Figure SC-8	Green Empowerment Zone and Priority Production	Figure COS-8	Impaired Waterbodies Rankings Relative to the State	7-25
	Areas	Figure COS-9	Groundwater Threat Rankings Relative to the State	7-26
Figure LU-1	General Plan Land Use Map4-9	Figure COS-10) Groundwater Basins	7-28
Figure LU-2	Urban Limit Line4-12	Figure COS-11	Estimated Tribal Homelands and Language Areas	7-36
Figure LU-3	Sacramento-San Joaquin Delta	Figure COS-12	2 Scenic Resources	7-40
Figure LU-4	Military Operations Areas 4-25	Figure COS-13	3 Mineral Resources	7-43
Figure LU-5	Priority Development Areas 4-26	Figure COS-14	4 Wind and Solar Energy Resource Areas in Rural	
Figure LU-6	Rural and Agricultural Areas		Areas	7-45
Figure TR-1	Routes of Regional Significance5-3	Figure PFS-1	Community Services for Impacted Communities	8-5
Figure TR-2	Passenger Rail and Ferry Services5-6	Figure PFS-2	Water Service Providers	8-9
Figure TR-3	Corridors with High Incidence of Pedestrian,	Figure PFS-3	Wastewater Service Providers	8-11
	Bicycle, and Automobile Collisions5-8	Figure PFS-4	Levee Centerlines	8-14
Figure TR-4	Roadway Classifications 5-14	Figure PFS-5	Fire Protection Districts	8-19
Figure TR-5	Existing and Planned Bicycle Network 5-19	Figure PFS-6	Solid Waste Processing and Disposal Facilities	8-21
Figure TR-6	Pedestrian Priority Areas 5-20	Figure PFS-7	Federal, State, Regional, and Local Recreation Lands	8-26
		-		



-igure HS-18	Seismic Hazard Zones	9-48
igure HS-18A	Liquefaction Susceptibility	9-49
igure HS-18B	Landslide Hazards	9-51
igure HS-19	Evacuation Routes	9-57
igure HS-20	Single-Access Road Residential Areas	9-58
Figure HS-21	2045 Roadway Noise Contours	9-62

INTRODUCTION

WHAT IS THE GENERAL PLAN?

The Contra Costa County 2045 General Plan is the County's primary policy tool to guide physical changes in the unincorporated areas of the county. This General Plan looks over 20 years into the future and establishes a vision for development of our communities and stewardship of our natural environment. It is aspirational and long-range, but also practical, providing a useful, everyday guide for community planning.

This General Plan references numerous public agencies, geographic areas, and political boundaries, which often share a common name. For example, the proper noun "Contra Costa County" can refer to either the public agency led by the Contra Costa County Board of Supervisors, or the geographic area defined by Contra Costa County's borders. To avoid confusion, this General Plan uses capital letters when referencing public agencies and lowercase letters when referencing political boundaries or geographic areas. Thus, "the County" (capitalized "C") means the governing body of Contra Costa County, while "the county" (lowercase "c") means the territory within Contra Costa County's borders. In instances where complete proper nouns are used, the meaning should be discernible from the context.

Legal Authority

California Government Code Section 65301 requires every county and city in the state to adopt a general plan "for the physical development of the county or city, and of any land outside its boundaries which in the planning agency's judgement bears relation to its planning." Decades ago, local general plans were viewed as a set of broad policies that had small roles in development decisions. However, changes in State law since the original statutes were

adopted in the 1950s have vastly increased the importance and authority of general plans. Each jurisdiction's general plan acts as its "charter" or "constitution" governing development. State law requires local governments to implement their general plan once it has been adopted.

A general plan provides a comprehensive, long-range statement of the jurisdiction's land use policies for the coming decades. It must respond to existing conditions, anticipate emerging trends that will shape the community of tomorrow, and provide flexibility for balancing necessarily competing goals and policies.

General plans typically have four defining features:

- Comprehensive. A general plan covers a wide range of planning-related topics such as land use, housing, economic development, environmental justice, sustainability and resiliency, transportation and mobility, public health and safety, recreation, and natural resources.
- General. A general plan does not attempt to address every topic in detail; instead, it provides high-level policy guidance that will be used to direct future decisions.
- Long-Range and Aspirational. A community's general plan articulates a vision for how it will develop, normally over a timeframe of approximately 20 years.
- Internally Consistent and Compatible. While addressing a wide range of topics, the goals, policies, and actions in a general plan nevertheless establish a unified and coherent framework for decision-making.

Together with specific plans adopted for various communities, the Zoning Code and related sections of the County Ordinance Code, Climate Action and Adaptation Plan, and Objective Design Standards, the County's General Plan serves as the basis for planning- and infrastructure-related decisions made by County staff, the County Planning Commission and other County commissions and committees, and the Board of Supervisors.

USER'S GUIDE

The Contra Costa County 2045 General Plan is for all members of the community and anyone interested in the future of the county. It was crafted with a constant eye toward keeping it clear, implementable, and useful as time passes. The graphic on the following page explains the individual components found on a typical page of the Plan providing policy guidance.

Words, Phrasing, and Interpretation

Great care was taken to ensure that this General Plan is relatable and easy to understand. Terms of art, jargon, and unnecessarily technical or abstract language have been avoided whenever possible. Unless context dictates otherwise, all words and phrases should be interpreted consistently with their most common usage and meaning.

The goals, policies, and actions in this General Plan include verbs, usually at or near the beginning, that provide direction and express varying degrees of obligation or applicability. Words such as "require," "prohibit," "approve," and "deny" indicate mandatory directives. "Encourage," "discourage," "consider," "should," "may," and similar words provide less rigid direction. The flexibility

inherent to such words must not be misinterpreted though; the guidance they provide must be followed absent compelling, conflicting considerations.

While every effort has been made to provide clear and comprehensive policy direction through this General Plan's text and graphics, unique or unusual situations will necessitate interpretation from time to time. The Department of Conservation and Development Director is ultimately responsible for interpreting this document, their decisions being appealable to the Board of Supervisors as provided in Title 1 of the County Ordinance Code.

Overview of the Elements

State law requires that general plans contain eight mandatory chapters, or "elements." The State allows considerable flexibility in how these elements are organized. They can be combined, split up, renamed, or otherwise modified so long as the required content is present. The State also allows for inclusion of any number of optional elements to address issues of local importance. All elements, mandatory or optional, have the same legal standing once adopted. No single element supersedes any other, and all elements must be internally consistent (i.e., the goals, policies, actions, maps, and diagrams must be in harmony with one another across topic areas and not conflict). Table INT-1 lists the State-mandated elements and their counterparts in the Contra Costa County 2045 General Plan, as well as two optional elements that the community considers fundamental to maintaining the quality of life in the county. This General Plan addresses all topics required by State law, with their organization tailored to the local context.

How to Use the General Plan

Goal: An end statement describing the general result sought by the community. Each goal has associated policies and most also have associated actions.

Goal Numbering: Each goal number starts with the element acronym and is followed by the number of the goal (e.g., COS-1 = Conservation, Open Space, and Working Lands Element, first goal).

Policy: A specific statement that guides decisionmaking as the County works to achieve a goal. Policies represent statements of County regulation and establish the standards used when considering proposed development and other decisions. A policy is ongoing and requires no corresponding action.

Policy Numbering: The policy number is shown as the last number, supporting the goal it follows (e.g., COS-P1.1 = Conservation, Open Space, and Working Lands Element, first goal, first policy). Policy numbers are not tied to action numbers.

Action: A measure, procedure, or activity that helps the County achieve a specific goal. An action is something concrete that can and will be completed.

Action Numbering: The action number is shown as the last number, supporting the goal it follows (e.g., COS-A1.1 = Conservation, Open Space, and Working Lands Element, first goal, first action). Action numbers are not tied to policy numbers.

Goal COS-1

Preserved open space for environmental protection, resource management and production, recreation, scenic value, and climate resilience and adaptation.

Policies





Support efforts by public agencies and nonprofit organizations to acquire and permanently protect open space areas containing important ecological or scenic resources and areas that connect protected lands to form a cohesive system of open space. Plan infrastructure to avoid interfering with such acquisitions whenever possible.

COS-P1.2





Pursue opportunities for permanent open space dedication for habitat, scenic, or passive recreation benefits as part of future development approvals and major capital improvement projects.

COS-P1.3





Discourage conversion of land designated Resource Conservation or Parks and Recreation to urban uses. If such conversion is to occur, require mitigation through permanent protection of other open space or park lands for habitat, scenic, or recreation benefits at a ratio to be determined based on the biological, scenic, or recreational value of the land, but not less than 3:1.*

COS-P1.4



Require new projects adjacent to protected open space areas, such as EBRPD lands, to establish buffers on their properties as necessary to minimize conflicts and protect the open space. If conflicts arise between protected open spaces and other uses, prioritize maintaining the viability of the open space functions.*

Actions



COS-A1.1

Convene an annual staff-level meeting with conservation agencies, such as the East Contra Costa County Habitat Conservancy and EBRPD, and conservation organizations (land trusts, watershed stewardship groups, etc.) to review current and planned efforts to protect and maintain open space and habitat.

See the Land Use Element for additional policies and actions related to the Urban Limit Line and open space uses.

AGRICULTURAL RESOURCES AND WORKING LANDS

Agricultural Resource Areas

There are approximately 254,500 acres of agricultural land mapped by the State in Contra Costa County, most of it in the unincorporated area. The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) maps land by agricultural production potential using the following categories:

Contra Costa County 2045 General Plan – Conservation, Open Space, and Working Lands Element | 7-3



Asterisks identify policies and actions that mitigate potential environmental impacts, as described in the General Plan Environmental Impact Report.

Section Footer: Identifies the Element title.

Page Numbering: Shows the chapter and page number (e.g., 7-3 = Chapter 7, page 3).

TABLE INT-1 STATE-MANDATED AND CONTRA COSTA COUNTY **2045 GENERAL PLAN ELEMENTS**

State-Mandated Element	Contra Costa County 2045 General Plan Element	
Land Use	Land Use	
Circulation	Transportation	
Housing	Housing	
Conservation	Constitution Court Court and Windian London	
Open Space	Conservation, Open Space, and Working Lands	
Safety	Health and Cafaty	
Noise	Health and Safety	
Environmental Justice	Stronger Communities Also incorporated throughout most other Elements	
Optional Elements		
Any element addressing a locally relevant topic relating	Public Facilities and Services	
to the jurisdiction's physical development	Growth Management	

Each Element of this General Plan includes background information that provides context for the goals, policies, and actions that follow. The background information often includes maps, diagrams, and other graphic components to illustrate key data and concepts.

In addition to the background information and goals, policies, and actions that are included in each Element, the Stronger Communities Element contains 22 Community Profiles, which provide community-specific guidance that speaks to the unique needs of individual communities.



Community members discuss their vision for the future of Crockett.

Goals, Policies, and Actions

The Contra Costa County 2045 General Plan is built around goals, policies, and actions that must be implemented to achieve the community's vision for the future. Goals, policies, and actions are found in every Element.

Placement of a goal, policy, or action in a specific Element does not limit its scope to only that Element's topic. For example, a policy in the Conservation, Open Space, and Working Lands Element can apply to topics beyond the realm of conservation, open space, and working lands. There also is not a one-to-one correspondence between policies and actions. An individual action can implement more than one policy and contribute to achieving multiple goals across different Elements.

Other Components of the Plan

A Glossary and List of Abbreviations are provided for reference (Chapter 11).

The **Appendices** include a compilation of the policies and actions that relate to each of the four themes described in the next section (Appendix A), as well as a technical appendix to provide additional detail on health and safety topics (Appendix B).

While not contained within the General Plan, an Environmental Impact Report (EIR) for the General Plan has been prepared pursuant to the requirements of the California Environmental Quality Act (CEQA). The EIR evaluates the effects of the General Plan's policy guidance on Contra Costa County's environment and includes mitigation measures to lessen the General Plan's potential environmental impacts when possible. Policies and actions that mitigate potential impacts are identified in this General Plan with an asterisk. The EIR also identifies impacts that cannot be mitigated to acceptable levels (i.e., significant and unavoidable impacts) and areas where more detailed environmental analysis may be required as specific projects are proposed in the future.

GENERAL PLAN OBJECTIVES AND THEMES

The Contra Costa County 2045 General Plan replaces the previous General Plan adopted in January 1991. While the 1991 General Plan was refreshed in 1996 and 2005, it remained rooted in planning concepts from the 1980s and earlier. The overarching objective of this comprehensive General Plan update has been the creation of a modern, visionary, and nimble policy document designed to address the opportunities and challenges of the 21st century. Because the county spans a wide geography with diverse communities that have different visions, goals, and opportunities for growth,

another important objective was to plan at a community scale, rather than relying on a one-size-fits-all policy approach throughout the county.



Sunrise over Mount Diablo. (Hao Li)

When it decided to update the General Plan, the Board of Supervisors directed County staff to incorporate four themes: environmental justice, community health, economic development, and sustainability. These themes are interrelated and woven throughout this General Plan. Policies and actions that relate to each theme are marked with a corresponding icon, as shown below and in the User's Guide above.

• Environmental Justice. Environmental justice policies and actions intend to reduce the unique or compounded health risks in communities that experience the highest levels of pollution and negative health outcomes, such as asthma and low birth weight babies, and the greatest social and economic disadvantages, such as poverty and housing instability. This General Plan refers to these areas as "Impacted Communities" and focuses on improving environmental

justice for the people living there by promoting meaningful community engagement and prioritizing improvements that address their needs. Environmental justice is a new topic that was not discussed in the prior General Plan. State law now requires that general plans address environmental justice and it is a matter of great concern to many county residents. While this topic is addressed throughout the General Plan, the Stronger Communities Element provides detailed information about Impacted Communities and environmental justice.

- Community Health. The physical and mental health of community members is inextricably linked to where and how communities are developed. Therefore, the community health policies and actions guide planning and development decisions to provide opportunities for community members to live healthy lifestyles, including by improving peoples' ability to walk or bike between destinations, providing multimodal transportation connections, creating opportunities for social interaction, and promoting access to outdoor recreation, healthy food, and medical facilities. The community health policy guidance additionally aims to reduce exposure of all community members to pollutants that can adversely affect their health.
- Economic Development. The economic development policies and actions aim to develop the county's workforce and attract and support sustainable businesses and industries that provide living-wage jobs, invest in hiring from the local workforce, and engage with communities. Investment in diversified industries, as supported in the economic development policy guidance, promotes innovation, builds the tax base, and allows residents to work in the county where they live.

Sustainability means meeting the needs of today's Sustainability. population while leaving viable resources to meet the needs of future generations. One important part of a sustainable future is resiliency, which is the ability to withstand, recover, and learn from a disruptive experience, such as a wildfire, flood, or pandemic. The sustainability policies and actions aim to conserve resources, improve resiliency (especially to the impacts of climate change), protect the environment, reduce pollution, and enhance overall quality of life.



Community farms promote access to healthy food, supporting environmental justice and community health goals.

IMPLEMENTING THE GENERAL PLAN

Long-range planning in Contra Costa County begins with adoption of the General Plan. To achieve the community's vision and objectives, decisions on development projects, capital improvements, County programs and services, and other issues related to the physical environment must be consistent with the General Plan's policies. The implementing actions identified throughout the Plan must be carried out. Finally, the County must monitor progress in achieving the major goals of the Plan, adjusting policy guidance as needed to advance those goals through the 2024-2045 planning period.



Contra Costa County's Administrative Campus in Martinez, the County seat.

County Decision-Making Structure

Decisions on matters addressed in this General Plan occur at various levels of County government.

- The Board of Supervisors is Contra Costa County's legislative body. The Board consists of five members, each representing a geographicallydefined supervisorial district. Among its many responsibilities, the Board adopts the County's annual budget, adopts General Plan amendments and rezonings, acts on appeals of County Planning Commission decisions, and authorizes construction of capital projects.
- The County Planning Commission (CPC) consists of seven residents appointed by the Board of Supervisors. The CPC's responsibilities include making recommendations to the Board on General Plan amendments and rezonings, hearing and deciding on development applications for projects generating 100 or more peak hour vehicular trips, and acting on appeals of County Zoning Administrator decisions. The CPC also acts on applications referred by the Zoning Administrator.
- The Contra Costa County Planning Director is the County Zoning **Administrator**. The Zoning Administrator and their appointed Deputy Zoning Administrators render decisions on most development applications (i.e., projects generating fewer than 100 peak hour vehicular trips, certain subdivisions, land use permits, development plans, variances, sign permits, lot line adjustments, etc.).
- Department of Conservation and Development (DCD) staff is responsible for day-to-day implementation of the General Plan, Zoning Code, and other County planning documents. DCD staff reviews development applications for compliance with County planning policies and regulations, conducts environmental reviews, and makes recommendations to decision-makers on planning matters.

Relationship of the General Plan to Other **County Planning Documents**

This General Plan establishes a vision and framework for land use planning and environmental stewardship in unincorporated Contra Costa County. To facilitate General Plan implementation, the Board of Supervisors has adopted additional documents regulating planning and development.

- Specific Plans focus on smaller geographic areas than general plans and address topics such as land use distribution, infrastructure, development standards (e.g., building heights and setbacks, parking ratios, and landscaping requirements), financing, and plan implementation in detail. The County has adopted specific plans for all or part of Alhambra Valley, Bay Point, Contra Costa Centre, El Sobrante, Montalvin Manor, North Richmond, Northgate, Rodeo, and Shell Ridge.
- Development activities in the unincorporated county are regulated primarily through four titles of the County Ordinance Code: Title 7 – Building Regulations, Title 8 – Zoning, Title 9 – Subdivisions, and Title 10 – Public Works and Flood Control. These precise regulations address building construction, land uses, development standards, and design and construction of public improvements in greater detail than the General Plan.
- Objective Design Standards (ODS) facilitate expedited review of qualifying multiple-family residential and mixed-use development projects. The ODS address site design and layout, architecture, building massing, materials, lighting, and landscaping.
- The Climate Action and Adaptation Plan (CAAP) implements the General Plan's policy guidance to adapt to changing climate conditions and reduce greenhouse gas (GHG) emissions. The CAAP addresses

behaviors, regulations, and investment decisions that directly reduce GHG emissions or promote climate resilience and lays out an implementation and monitoring program to ensure that the County reduces GHG emissions consistent with State emissions reduction targets.

State law requires consistency between the General Plan and its subordinate implementing documents. Thus, when the General Plan is amended, the County must review its other planning documents and amend them as necessary to ensure consistency is maintained. Pursuant to State law, wherever a conflict or inconsistency exists between the General Plan and its subordinate documents, the General Plan controls and shall be followed.

General Plan Action Program

The General Plan Action Program is the mechanism to track implementation of the General Plan's actions through 2045. The Action Program contains all actions from the General Plan, organized by Element, and provides important details for how each action will be implemented, including:

- The goal that the action implements.
- County departments and partner agencies and organizations with primary and supporting responsibility to execute the action.
- The timeframe for achieving the action.
- General cost range estimates associated with implementing the action.

The Contra Costa County DCD is responsible for maintaining the Action Program and tracking progress. The Action Program is maintained as an accompanying document to the General Plan so it can be updated as actions are accomplished without the need for a General Plan amendment. The pace of implementation of the Action Program ultimately is dependent on

the resources the County and its partners have available and must remain consistent with the County's long-term financial plans, as reflected in its annual budget.

Assessing Progress Toward Goals

Every five years over the lifetime of the General Plan, the County will assess progress in achieving its major goals through a review of the performance measures listed at the end of each General Plan Element. Based on these reviews, the County will consider whether changes are needed to the policy framework or implementation approach to improve performance. The County will present this five-year review in a clear, concise report to the CPC and Board of Supervisors and post the report on the County's website.

Amending the General Plan

The General Plan is not a static document; it is intended to be as dynamic as needed by the Contra Costa County community. Over time, the County will amend portions of the General Plan in response to new legislation, evolving community priorities and values, changes in the county's physical or economic conditions, and proposed development. It is also inevitable that refinements will be necessary to improve progress towards achieving the major goals of the General Plan.

General Plan amendments (GPAs) can be initiated by the County or requested by private entities. When the County receives a request for a GPA from a private entity, staff will forward the request to the Board of Supervisors with a recommendation on whether to consider the request further. If the Board authorizes the GPA process to proceed, staff will collect the required application materials and fees and prepare an environmental

evaluation of the proposal as required under CEQA. After the environmental documentation is prepared, staff will submit a report to the CPC. The report will include an analysis of the request, a recommendation to approve or deny, and findings to support the recommendation. The CPC will then conduct a public hearing and forward a recommendation to the Board of Supervisors, which will conduct another hearing and render a decision. The process is similar for County-initiated GPAs.

To amend the General Plan, the Board of Supervisors must determine that the proposed GPA satisfies the following findings:

- (a) That adoption of the proposed General Plan amendment is in the public interest, as required under Government Code Section 65359(a).
- (b) That adoption of the proposed General Plan amendment will not exceed the annual limit on General Plan amendments specified in Government Code Section 65358(b).
- (c) That upon adoption of the proposed General Plan amendment, the General Plan will remain internally consistent and compatible, as required under Government Code Section 65300.5(a).
- (d) That adoption of the proposed General Plan amendment will not violate the provisions of the 65/35 Land Preservation Standard or Urban Limit Line, as outlined in Measure L-2006.
- (e) That adoption of the proposed General Plan amendment is compliant with the provisions of Measure J-2004, the Contra Costa Growth Management Program, and related Contra Costa Transportation Authority resolutions.

(f) That adoption of the proposed General Plan amendment will not impede attainment of the County's goals related to environmental justice, community health, economic development, and sustainability.

If these findings can be satisfied, then the Board will adopt a resolution approving the GPA.

PLANNING CONTEXT

PLANNING AREA

Contra Costa County encompasses 806 square miles, approximately 716 of which are land. About 40 percent of this area is under the planning jurisdiction of 19 incorporated cities and towns. The remainder, which is under the County's planning jurisdiction, is diverse and ranges from small agricultural communities like Byron in the county's southeast corner, with a guiet downtown and fewer than 1,200 residents, to Contra Costa Centre, a bustling mixed-use transit village with a population density of 8,400 people per square mile.

The landscape of Contra Costa County is governed and managed by a variety of agencies. The 19 incorporated cities and towns control land use and various other activities within their city/town limits. The County controls land use and development in the unincorporated areas outside of those city/town limits. Each city or town has a "sphere of influence" (SOI) that extends beyond the city/town limits and delineates unincorporated areas that the city or town may annex in the future. Once annexed, those areas become part of the incorporated city or town and are no longer regulated by this General Plan. Figure PC-1 displays the planning area boundaries in the county.

Other agencies that regulate and manage land, resources, facilities, and activities in the county include various elements of the federal and California governments and many different types of special districts, such as transit, school, park, utility, and fire districts. The jurisdictional areas of these agencies overlap with the incorporated areas governed by cities and towns and the unincorporated areas governed by the County.

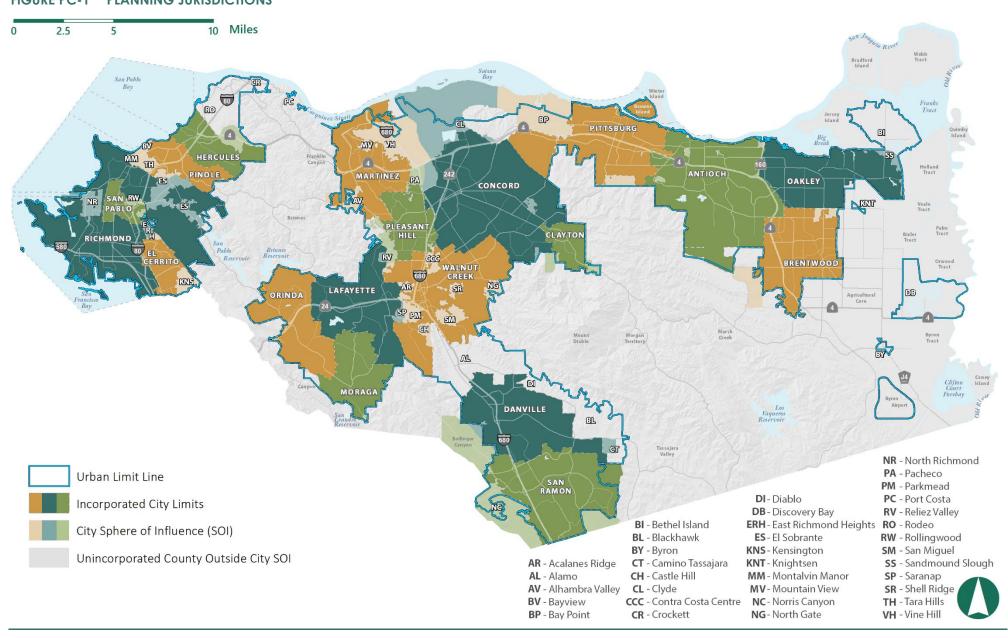


Rolling hills span large portions of Contra Costa County's vast landscape. (Communitysubmitted photo)

GEOGRAPHIC SETTING

Contra Costa County is in the East Bay region of the San Francisco Bay Area. The county directly abuts San Francisco, San Pablo, and Suisun Bays; the Sacramento-San Joaquin Delta; and Alameda and San Joaquin Counties. Beyond the Bays and Delta are the counties of San Francisco, Marin, Napa, Solano, and Sacramento.

FIGURE PC-1 PLANNING JURISDICTIONS



There is a long history of people living in what is now Contra Costa County and using the land for a variety of purposes. Members of the Bay Miwok, Northern Valley Yokuts, and Ohlone Tribes were the first inhabitants (the county's native people are further discussed in the Conservation, Open Space, and Working Lands Element). Spanish colonization of what is now California began in 1769 (Contra Costa County's name is Spanish for "opposite coast" because of its location across from San Francisco). Spain controlled the area until Mexico won its independence in 1821. Under Mexican rule, much of the county was divided amongst 15 land grants, or ranchos. Acalanes, Pacheco, El Sobrante, and many other locations in the county derive their names from the ranchos or their owners. The county, along with the rest of California, was ceded to the United States in 1848 following the Mexican-American War. Contra Costa County was established in 1850 as one of California's original 27 counties, with Martinez as the county seat. Fewer than 5,000 people lived in the county at the time.

The current physical form and character of the county has largely been defined by the pattern of urban development sparked by rapid industrialization during World War II and the economic expansion and diversification that followed.

• West County was the first area to develop with urban and industrial uses. Several cities and unincorporated communities existed in the area prior to World War II, but they were relatively small (Richmond, by far the largest city in the county at the time, had a population of 23,093 in the 1940 Census). However, West County became a hub of industrial activity during the war (Kaiser Shipyards in Richmond produced nearly 750 ships, more than any other shipyard complex in the country), leading to fast and extensive urbanization. By 1950, Richmond's population approached 100,000.

• Central County experienced a wave of suburbanization during the prosperous post-World War II economy of the 1950s and 1960s. Rural agricultural communities were transformed into cities as middle- and upper-class residents, most of whom were White, were provided the opportunity to live in newly constructed housing tracts and commute via the expanding freeway network. Construction of the Bay Area Rapid Transit (BART) system in the 1960s and 1970s enhanced the area's desirability and facilitated additional development.



Portions of Pleasant Hill and Concord in the late 1950s, including Interstate 680, which was under construction, and new subdivisions adjacent to the agriculture that existed at the time. (Contra Costa Historical Society)

• The suburban development pattern began extending into the agricultural landscape of East County in the 1980s. Small cities such as Brentwood grew rapidly, and a new city, Oakley, was incorporated in 1999. Residents were attracted to East County by lower housing costs and scenic open spaces, as well as the extension of BART to the Pittsburg/Bay Point Station in 1996.

SOCIOECONOMIC SETTING

Demographic Characteristics

Nearly 1.2 million people live in Contra Costa County. Approximately 175,000 reside in the unincorporated county, making it the most populous of Contra Costa County's 20 planning jurisdictions. Most of the county's population is consolidated along the major transportation corridors, including Interstates 80 and 680, State Routes 4 and 24, and the BART lines. Most job opportunities are within those same population centers, the majority of which are incorporated, though there are almost 40,000 jobs within the unincorporated county.

The median age of Contra Costa County residents is 40 years old. The population has been steadily aging since 1970, when the median age was about 28 years old. Since 2010, the fastest-growing age group has been seniors 65 and older as the Baby Boomer generation ages. The secondfastest growth occurred in the 55 to 64 age group, which includes younger Baby Boomers and older members of Generation X. In the unincorporated county, the majority of residents fall within the 45-64 and 5-19 age brackets. The youngest unincorporated communities are Bay Point and North Richmond, with respective median ages of 32 and 34, while the oldest unincorporated communities are Alamo and Diablo, where the median age is 51 and 56, respectively.

The median household income for a family of four in Contra Costa County is almost \$154,000. Median household incomes vary significantly across communities. The median household income for a family of four in North Richmond is under \$60,000, while median incomes for a family of four in Alamo and Diablo are over \$250,000

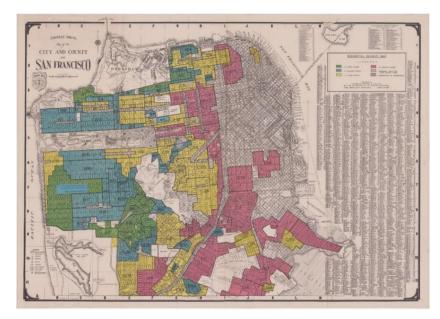
Overall, approximately 40 percent of Contra Costa County residents are non-Hispanic White, 9.5 percent are Black or African American, 27 percent are Hispanic or Latino, 20 percent are Asian, and 3.5 percent are Native American, Pacific Islander, or other races. The racial and ethnic makeup of communities also varies across the county, ranging from North Richmond, where 95 percent of residents are people of color, to Diablo, where 5 percent of residents are people of color.

Relationship Between Land Use Practices and Socioeconomic Outcomes

Land use practices across much of the United States are rooted in a legacy of discrimination. In the late 1800s and early 1900s, large American cities, including New York, San Francisco, Los Angeles, and Boston, began experimenting with regulations similar to modern zoning. Laws were enacted to address overcrowding, the negative impacts of industrialization, and development of substantially taller buildings made possible by new technologies and construction methods. In 1916 New York adopted the first American zoning ordinance.

These early planning regulations and policies aimed to improve public health, but typically had racist or classist underpinnings as well. Those responsible for shaping these policies often sought to maintain, and in many cases create, segregated communities. Racially-motivated zoning plans kept communities of color in the inner city near industrial and other polluting land uses, particularly during the Great Migration when Black people were moving from rural communities in the South to larger cities in the North and West. White families, meanwhile, were encouraged to move toward urban outskirts and newly-constructed suburbs, away from the harmful aspects of city life.

These discriminatory zoning practices were initially deemed unconstitutional in Buchanan v. Warley, a landmark Supreme Court case from 1917, but they continued to be enforced and shaped the future of racially discriminatory housing policies. Harland Bartholomew, the first urban planner employed full-time by a major American city, stated that a goal of St. Louis' 1919 zoning plan was to, "preserve the more desirable residential neighborhoods" and prevent movement into "finer residential districts...by colored people." In 1926 another landmark Supreme Court case, Euclid v. Ambler, established that zoning itself is constitutional. This prompted zoning, and its ability to segregate communities, to spread rapidly throughout the country.



This 1937 map illustrates the redlining of San Francisco based on Home Owners' Loan Corporation data. (Credit: University of Richmond Mapping Inequities Project)

Redlining, a practice that emerged in the 1930s, further perpetuated community segregation as it hindered the ability for people of color to obtain real estate loans. The Home Owners' Loan Corporation, established in 1933

as part of the New Deal, created maps to inform the risk level of a loan in a given area. Surveyors delineated and rated neighborhoods in numerous metropolitan areas; those with the lowest rating were outlined in red (hence the term "redlining"). These ratings were often based on the racial makeup of the neighborhood, with communities of color regularly ranking lowest. This practice denied people of color access to financial resources and associated opportunities, leading to disinvestment, low homeownership rates, and decreased property values. New Deal-era investments in the 1930s followed these trend lines by focusing investments in White neighborhoods.

New forms of housing-related discrimination appeared in the 1940s and 1950s. World War II veterans were entitled to benefits provided through the Servicemen's Readjustment Act of 1944, also known as the G.I. Bill, which among other things included access to low-cost mortgages and money to attend college. However, while these opportunities ostensibly were available to all who had served, they overwhelmingly benefited White veterans and facilitated "White flight" from cities to suburbs. Meanwhile, public infrastructure and redevelopment projects often displaced communities of color that remained in urban areas. Continuing through the 1950s and into the 1960s, urban renewal policies sought to eliminate blight by razing and reconstructing large sections of cities, dislocating residents and often destroying the fabric of minority communities in the process.

In the 1960s, legislation such as the Fair Housing Act and Civil Rights Act aimed to challenge exclusionary zoning and discrimination in housing. These laws prohibited discrimination based on race, color, religion, sex, national origin, disability, familial status, and age, and created a duty within all levels of government to promote fair housing and overcome segregation. Despite these efforts, the effects of exclusionary zoning practices and discriminatory housing policies still contribute to wealth disparities. Home ownership has been one of the most effective means of building family wealth in America. Communities of color who were denied home ownership opportunities have not been able to build equity and wealth as effectively as others.

10. The real property above described, or any portion thereof, shall never be occupied, used or resided in by any person not of the white or Caucasian race, except in the capacity of a servant or domestic employed thereon as such by a white Caucasian owner, tenant or occupant.

Restrictive covenants like this were included in the deeds to thousands of residential properties developed in Contra Costa County following World War II.

In Contra Costa County, this wealth disparity is evident through demographic data showing that many of the unincorporated communities with low median household incomes also have a high proportion of residents that are Black, Asian, or Latino. State data also indicates that the same communities suffer from higher rates of health conditions like asthma and cardiovascular disease. Proximity to pollution, lack of access to adequate healthcare, and public and private disinvestment have all contributed to these conditions.

In 2022, the County established the Office of Racial Equity and Social Justice to address local racial inequality and social injustice issues. This General Plan aligns with that mission by confronting over 100 years of discriminatory planning practices in our country, explicitly working to eliminate wealth and health disparities and progressively improve quality of life and health outcomes in communities of color.

THE GENERAL PLAN UPDATE PROCESS

The physical and socioeconomic settings of Contra Costa County are important in shaping the General Plan. Equally important are the voices of the people who shared their needs and ideas and helped the County articulate a vision for the future.

The process to update the General Plan began in December 2017 when the Board of Supervisors directed the Department of Conservation and Development (DCD) to oversee updates to the General Plan and Zoning

Code, which itself had never been comprehensively overhauled since its original adoption in 1947. The Board subsequently directed DCD to concurrently update the County's 2015 Climate Action Plan. Substantive work on the updates began in September 2018, with public outreach kicking off in February 2019. Over the next five years, the County held or participated in over 150 public and community-organized meetings with residents, community advocates, stakeholders, and public officials, including:

- Multiple meetings of the Board of Supervisors, Planning Commission, Sustainability Commission, Library Commission, Hazardous Materials Commission, Arts and Culture Commission, Sustainability Committee, Transportation, Water, and Infrastructure Committee, Aviation Advisory Committee, Historic Landmarks Advisory Committee, and all 13 Municipal Advisory Councils.
- Over 50 community meetings, workshops, and open houses held across the county.
- Stakeholder meetings on environmental justice, community health, sustainability, and economic development.
- Native American tribal consultations.
- Over 30 meetings with various community-based organizations representing a wide range of interests in the county.

In addition, throughout the process the Envision Contra Costa website provided information about upcoming meetings, access to draft documents, and online tools that community members used to share their thoughts. The online tools were especially important during the COVID-19 pandemic, as they allowed community members to remain engaged and even attend meetings virtually. Input and direction from the public and County officials were incorporated into each component of the General Plan.

The first phase of the process included research and documentation of baseline conditions in Contra Costa County. This effort resulted in an online Briefing Book that established a shared understanding of important characteristics of the county, and highlighted assets to build from and challenges to address as the General Plan was updated.

The Briefing Book was used during the initial phase of community outreach, which focused on individual unincorporated communities, to support conversations about community-specific challenges and opportunities. Input from this phase formed the basis for preparation of draft Community Profiles that provide a description of the community and its unique context and present a policy framework for a desired future. For communities with a robust set of concerns to address, the County held subsequent rounds of community meetings to present the draft Profiles for feedback and discussion, working to ensure the vision and policy guidance reflect each community's values and hopes.



Community members in North Richmond shared their concerns and ideas for the North Richmond Community Profile and the countywide environmental justice policy guidance.

This phase of outreach and engagement also supported preparation of goals, policies, and actions to address environmental justice throughout the county. While many issues raised during the community meetings were specific to a community and required community-specific policy guidance, as provided in the Community Profiles, some issues were common across communities, and lent themselves to the countywide policy framework. The County held three to four meetings in each community that is most impacted by environmental justice issues (i.e., Impacted Communities, which are defined and discussed in the Stronger Communities Element) to identify and understand the issues and consider policy approaches. These meetings were supplemented by two collaboration meetings with environmental justice stakeholders and about 15 meetings with community-based organizations who work with Impacted Communities to identify Impacted Communities, key environmental justice issues, and appropriate policy approaches. In addition, a three-part meeting series with environmental justice stakeholders was held to review and refine draft policy guidance, and several meetings were scheduled with the Board of Supervisors Sustainability Committee and the County's Sustainability Commission and Hazardous Materials Commission to discuss draft policy guidance. The County also conducted a hard copy and online survey to solicit feedback on draft environmental justice policy guidance, working with community partners to distribute hard copies at strategic locations to reach people during the COVID-19 pandemic, including at schools, libraries, farmers markets, food banks, and soup kitchens.

Following refinement of the Community Profiles and preparation of draft environmental justice policy guidance, the County prepared draft goals, policies, and actions for all remaining topics that apply throughout the unincorporated area. The countywide policy framework is based on input from community members and decision-makers throughout the process, State and local laws, best practices in the planning field, and to a lesser extent, guidance from the 1991 General Plan. The County Planning

Commission and other commissions and committees reviewed the draft policy guidance during study sessions in the first half of 2022, and an online survey was distributed to community members to gain additional feedback.

During the second half of 2022 and into 2023, the County refined the countywide goals, policies, and actions and prepared the remaining components of the General Plan (maps, context, glossary, etc.). The completed draft General Plan, along with the draft Climate Action and Adaptation Plan (CAAP) and their accompanying draft Environmental Impact Report, were released for public review in October 2023, with the review period ending in April 2024. Nearly 300 individual comments and suggestions were submitted. The County reviewed these comments and presented revised drafts of the General Plan and CAAP to the Planning Commission and Board of Supervisors during study sessions in August and September 2024.

STRONGER COMMUNITIES ELEMENT

A county is only as strong and healthy as its people. We all want the future to be safe, healthy, equitable, and sustainable for everyone, but these ideals may look different to individual people and communities. Most of the people in Contra Costa County live and work in incorporated cities and towns, but there are also a multitude of vibrant unincorporated communities that each contribute to a rich history and ongoing culture and identity of the people in the county.

This Stronger Communities Element aims for all of us to feel safe in our homes and neighborhoods; have access to healthy food, the outdoors, living wage jobs, and healthcare; have opportunities for self-expression through art and cultural celebration; benefit from business innovation and investment; and strengthen bonds with other community members. The focus of this Element is on promoting community resiliency and fostering a spirit of collaboration and opportunities for positive collective impact.

This Element presents policy guidance that applies to unincorporated communities throughout the county, followed by Community Profiles that address issues unique to each community. It is organized into eight sections that highlight the priorities of the broad Contra Costa County community:

- The **Environmental Justice** section includes policy guidance that works to counteract a history of discrimination, neglect, and disempowerment and improve the quality of life and health outcomes in low-income communities and communities of color.
- The Community Health section includes policy guidance to support the physical and mental health of community members through

improvements to the built environment and by providing services to bolster social support networks and promote physical wellbeing.

- The Healthy Homes section includes policy guidance aimed at providing safe and sanitary housing conditions for all residents.
- The Arts and Culture section includes policy guidance to promote civic art and cultural events that are accessible to every resident, celebrate the unique identity of individual communities, and strengthen the local economy.
- The **Economic Vitality and Empowerment** section includes policy guidance to develop and maintain a workforce that possesses the education and skills employers need, promote living wage job opportunities, and cultivate a thriving economy that contributes to the region's economic health.
- The Community Engagement section includes policy guidance to promote community involvement and ensure diverse viewpoints and values are represented in the decision-making process.
- The Stronger Communities Element Performance Measures describe how the County will track its progress in achieving some of the major objectives expressed in this Element.
- The Community Profiles provide community-specific contextual information and policy guidance for individual communities to address their unique needs.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.



Community Health



Environmental Justice



Economic Development



Sustainability



Community gardens provide access to fresh produce and can serve as focal points for communities.

ENVIRONMENTAL JUSTICE

Throughout California, low-income communities and communities of color have experienced a combination of historical discrimination, neglect, and political and economic disempowerment. The result is that today they are impacted with a disproportionate burden of pollution and associated health conditions, as well as disproportionate social and economic disadvantages such as poverty or housing instability. Many low-income households and communities of color in Contra Costa County are concentrated in neighborhoods where they continue to face significant threats to their overall health and livelihood. In 2022, in response to these and other related concerns, the County established the Office of Racial Equity and Social Justice to address local racial inequality and social injustice issues. The Office of Racial Equity and Social Justice is envisioned to enact and sustain principles, policies, practices, and investments that are racially just and equitable across all the County's departments and divisions.

California Senate Bill (SB) 1000, enacted in 2016, requires that general plans address environmental justice and respond to inequity by alleviating pollution and health impacts and compelling cities and counties to include the voices of previously marginalized residents in planning decisions. Community members across Contra Costa County have confirmed the need to prioritize these strategies.

What is Environmental Justice?

The fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

CALIFORNIA GOVERNMENT CODE §65040.12(E)

Figure SC-1 shows unincorporated communities in Contra Costa County that are disproportionately burdened by pollution or face disproportionate social or health vulnerabilities. These are called "Impacted Communities" throughout this General Plan. These areas were mapped using the California Communities Environmental Health Screening Tool (CalEnviroScreen), a tool advocated by community groups and developed by the State Office of Environmental Health Hazard Assessment on behalf of the California Environmental Protection Agency. CalEnviroScreen measures pollution and population characteristics using 21 indicators, such as air quality, hazardous waste sites, asthma rates, and poverty. It applies a formula to each census tract in the state to generate a score that ranks the level of cumulative impacts relative to the rest of the census tracts in the state. A census tract with a higher score is one that experiences higher pollution burdens and social or health vulnerabilities than census tracts with lower scores. The Impacted Communities shown in Figure SC-1 include census tracts with a cumulative score of 72 percent or higher. The CalEnviroScreen data is updated about every five years, so the Impacted Communities mapped in this General Plan may change over time. Accordingly, this General Plan includes policy guidance (see SC-A1.7) to regularly update the map of Impacted Communities with updated CalEnviroScreen data.

Contra Costa County is home to a high concentration of refineries and other large industrial facilities. While these industries contribute to pollution and contamination in Impacted Communities, they also provide jobs, tax revenue, community investments, and local energy production. To mitigate the health and safety impacts of these industrial facilities, the County's Industrial Safety Ordinance requires additional safety measures that go beyond State requirements to protect public health and safety. However, Impacted Communities still experience detrimental health outcomes due to their proximity to heavy industry and other sources of pollution like Interstate 80, State Route 4, and railroads.

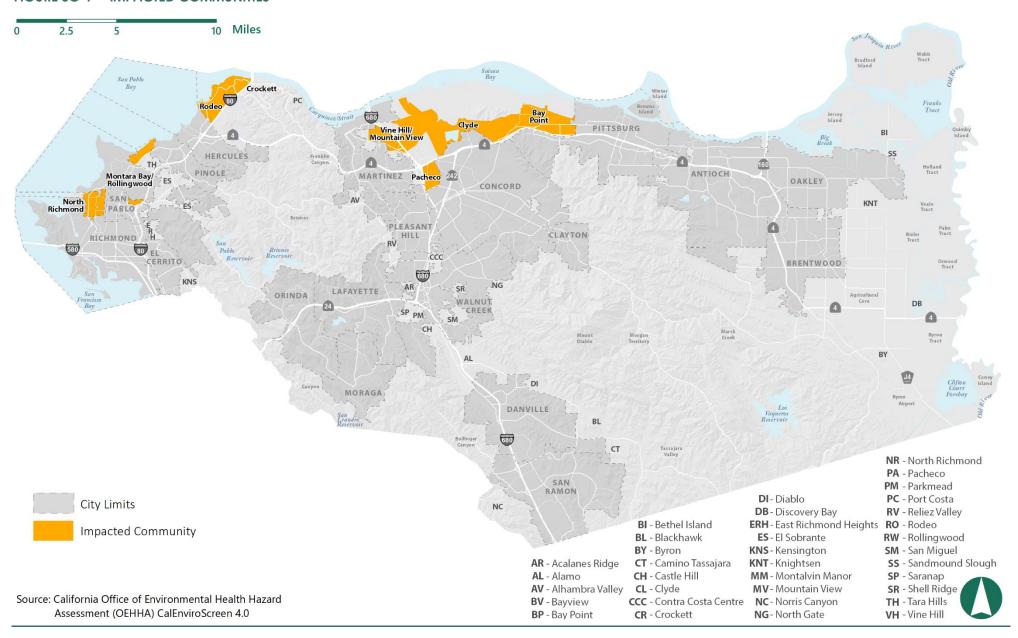


Railroads transport toxic substances through Impacted Communities such as North Richmond, presenting health and safety concerns for residents.

In addition to pollution burdens, Impacted Communities have suffered from a sustained lack of public and private investment that has generally resulted in inadequate infrastructure and services and unkempt vacant and underdeveloped areas, harming neighborhood vitality and limiting property values and wealth-building capacity.

The goals, policies, and actions in this section are intended to reduce these and other disadvantages and burdens experienced by Impacted Communities in Contra Costa County. It is a priority of the County to protect Impacted Communities from additional harm and progressively improve the quality of life and health outcomes of residents.

FIGURE SC-1 **IMPACTED COMMUNITIES**



Goal SC-1

Equitable distribution of social and economic resources among all communities in the county so that Impacted Communities are not disproportionately burdened by environmental pollution or other hazards.

Policies











In partnership with residents of Impacted Communities, affected workers, business/industry, environmental and environmental justice advocates, community colleges, workforce development and training entities, local government, and other involved agencies, support transition from highly polluting industries to a net-zero emission economy based on renewable and sustainable industries that provide living-wage jobs.

SC-P1.2





Streamline permitting for new development, redevelopment, and rehabilitation projects that promote community objectives in Impacted Communities, especially as identified in the Community Profiles.

SC-P1.3









Support creation of walkable districts by facilitating development of a range of neighborhood-serving retail and service uses, public amenities, and essential infrastructure (such as lighting) for residents of Impacted Communities within walking distance of their homes.

SC-P1.4





Support cultural and community-driven events, such as art festivals, farmers' markets, and community service days, that support social connections, neighborhood identity, and environmental stewardship.

SC-P1.5





Maintain a streamlined process to permit and facilitate partial and temporary street closures for communitysponsored amenities and activities, such as parklets, farmers' markets, arts and cultural events, and outdoor dining, and assist applicants through the permit process.

SC-P1.6



For projects with potential to negatively affect an Impacted Community, support community benefits agreements (CBAs) negotiated with the project applicant to address the community's expressed needs. The primary objective of these CBAs is to mitigate project impacts to the greatest extent possible, which could include mitigations exceeding the requirements of the California Environmental Quality Act (CEQA). Secondarily, to compensate for impacts that cannot be fully mitigated, these CBAs should secure community benefits that exceed inherent project benefits and support the community's objectives, especially as

identified in the Community Profile. Neighborhood-serving retail uses that fill critical needs are exempt from this policy.

SC-P1.7



Should a community no longer meet the threshold for designation as an Impacted Community during the 5-year review called for in Action SC-A1.7, examine the factors that contributed to the redesignation and determine whether continued action is needed to support the community in retaining its non-Impacted Community status.

Actions

SC-A1.1







Partner with the stakeholders identified in Policy SC-P1.1 to develop and implement a plan to transition from highly polluting industries to renewable, sustainable, and clean industries that provide living-wage jobs. The plan should address site remediation responsibilities along with timelines and strategies to improve health, safety, infrastructure, job opportunities, and revenue opportunities during the transition toward a net-zero-emission economy, paying special attention to developing new opportunities for Impacted Communities to realize economic, health, educational, and other benefits, without placing a disproportionate economic

SC-A1.2





burden on those with the least means.

Amend County Ordinance Code Chapter 84-63, Land Use Permits for Development Projects Involving Hazardous Waste or Hazardous Materials, to:

- (a) Increase the hazard scores for projects with potential to adversely affect Impacted Communities to ensure more projects are subject to discretionary review.
- (b) Address ambiguities and antiquated terminology that complicate administration of the ordinance.*

SC-A1.3







With input from residents of Impacted Communities, amend County Ordinance Code Title 8 – Zoning to create an Impacted Communities Overlay Zone that applies to areas within and adjacent to Impacted Communities. Heavy industrial projects and commercial and light industrial projects resulting in 25,000 square feet or more of gross habitable floor area within the overlay zone will be required to satisfy additional discretionary permit findings that promote environmental justice, health, safety, and economic prosperity. Projects able to satisfy the required findings will:

- (a) Provide benefits that support the community objectives, such as those identified in the Community Profile.
- (b) Provide economic benefits, including jobs, for residents of the community.
- (c) Avoid unwelcome permanent displacement of existing residents or businesses.
- Support community resiliency, cohesion, and safety.
- Positively impact health and quality of life within the community.

Create guidance for demonstrating consistency with these findings as part of the process to develop this ordinance.





Submit a report to the Board of Supervisors on the feasibility of creating or participating in a public bank, public-private partnerships, community land trusts, and other types of economic development and wealth-building tools to support local interests, community development, and longterm community ownership and housing affordability in Impacted Communities.

SC-A1.5







Establish a process for the County to assist community-based organizations and public-private partners with obtaining financing (e.g., grants) to implement physical improvements and beautification projects such as murals, vegetative buffers, and planting strips in Impacted Communities.

SC-A1.6



Dedicate staff in appropriate departments to assist applicants from Impacted Communities in navigating the project application and review process for projects in their communities.

SC-A1.7





Upon each 5-year review of the General Plan, review health outcomes data for Impacted Communities and assess any updated information related to the delineation of Impacted Communities in Contra Costa County. Update the map of Impacted Communities (Figure SC-1) and environmental justice-related goals, policies, and actions accordingly.

SC-A1.8



As part of the annual General Plan progress report to the Board of Supervisors, describe specific efforts to implement the General Plan policies and actions related to environmental justice, highlighting efforts in each Impacted Community. Post this report in a visible location on the County website.

See the Public Facilities and Services Element for policies and actions related to infrastructure and service deficiencies in disadvantaged unincorporated communities pursuant to Senate Bill 244.

COMMUNITY HEALTH

Healthy Neighborhoods

Promoting public health and achieving healthy communities through the built environment is a fundamental goal of this General Plan. We increasingly understand the connection between planning decisions and physical and mental health. The layout of our communities, the designs of buildings and public spaces, and the effectiveness of our transportation networks affect whether residents are able to make healthy food choices, walk or bike to a destination, play outside, and breathe clean air. The built environment also influences the level of community violence and overall social cohesion.

For many common health factors, residents in Contra Costa County generally fare better than others in California and the nation. However, asthma, cardiovascular disease, and low birth weight rates are higher in Contra Costa County than the rest of California (see Figures SC-2 through SC-4). There are many risk factors for these health conditions, including poor nutrition, lack of exercise, stress, smoking, and exposure to air pollution. Some of these factors are directly impacted by the built environment.

FIGURE SC-2 **ASTHMA RANKINGS RELATIVE TO THE STATE**

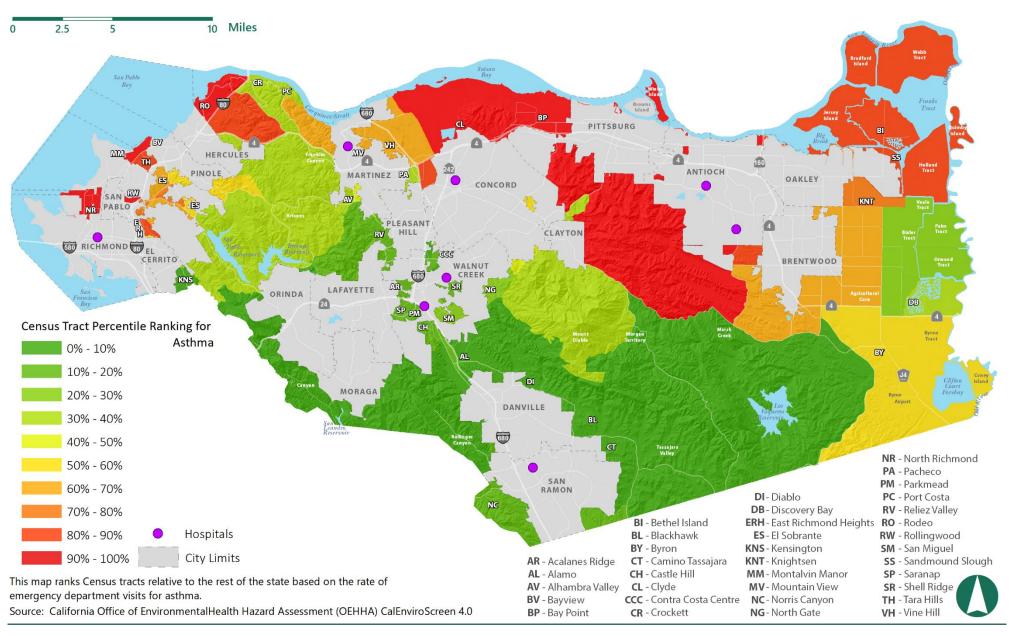


FIGURE SC-3 CARDIOVASCULAR DISEASE RANKINGS RELATIVE TO THE STATE

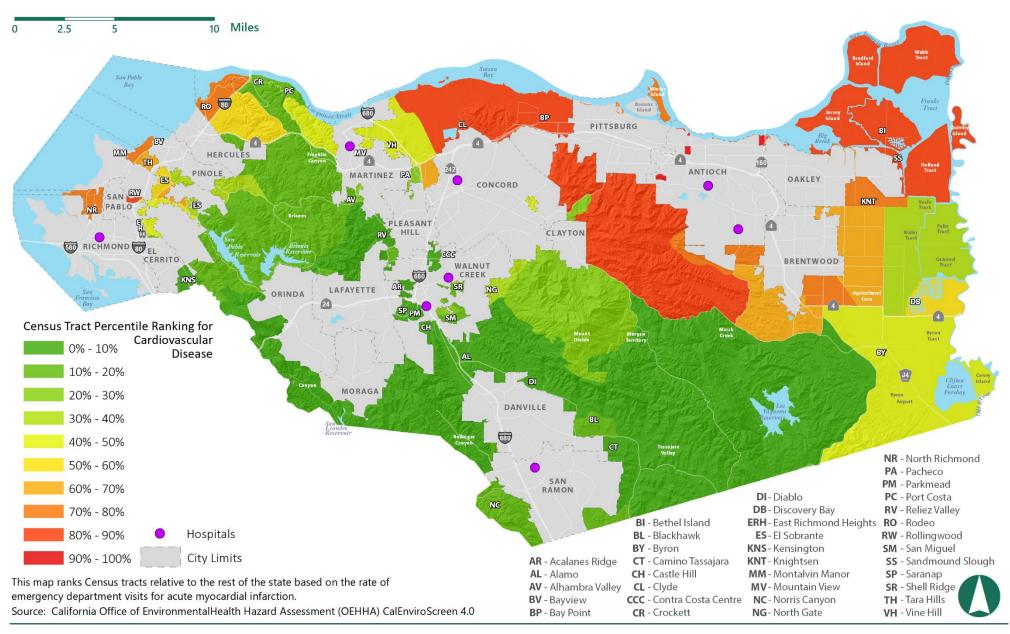
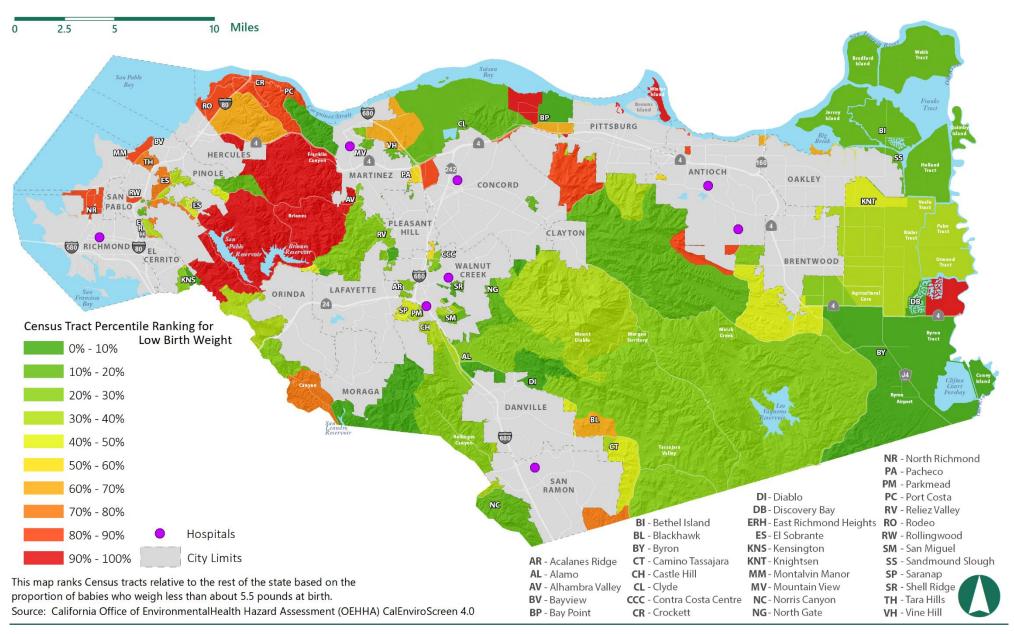


FIGURE SC-4 LOW BIRTH WEIGHT RANKINGS RELATIVE TO THE STATE



This section also emphasizes strong social networks, which improve health by offering emotional support through hardships, preventing isolation, and buffering stress. There is a recognized relationship between strong social networks, physical and mental health, and well-designed spaces. The most livable communities have high-quality public spaces that enhance community character, offer opportunities for formal and informal social interaction, and promote active recreation. Through the policy guidance in this section, the County commits to reversing community deterioration and improving other conditions detrimental to health, healing, and personal and property safety within neighborhoods.



Montalvin Park provides amenities for residents in West County.

Goal SC-2

Safe, welcoming neighborhoods that support physical activity and a healthy environment for all residents.

Policies

SC-P2.1



Welcome redevelopment and clean-up of undesirable uses and activities, such as highly polluting industries, and support uses that have a positive impact on community well-being.

SC-P2.2



Encourage development, preservation, and reinvestment that strengthen the unique character of each unincorporated community and advance community and neighborhood resilience. Ensure that future private and public projects provide infrastructure, parks and playgrounds, Complete Streets, trees and landscaping, streetscapes, signage, and sustainable building design that reflect and improve the character of the community, along with longterm maintenance mechanisms to ensure continued benefit from the improvements into the future.

SC-P2.3





Within established communities, complete construction of sidewalks and crosswalks and encourage neighborhood design and development that supports safe walking, biking, and other micro-mobility options, convenient access to services and transit, and opportunities for local shopping.







Provide functional civic space and well-maintained public amenities near high-volume transit hubs. Each hub area should project a positive visual image, a strong and unique identity, and a safe, inviting environment for pedestrians and passengers.

SC-P2.5



Promote creation of community focal points and gathering places.

SC-P2.6





Leverage community-specific natural features, such as creeks, shorelines, and trails, to strengthen community identity and connect residents to nature.

SC-P2.7



Encourage land uses and activities that reflect and enrich the history and cultural heritage of each unincorporated community.

SC-P2.8





Stimulate investment in communities by using CEQA infill exemptions to expedite environmental review and reduce project costs.

SC-P2.9



Implement principles of universal and barrier-free design so that people of all physical abilities can enjoy mobility and accessibility in their communities.

SC-P2.10



Empower residents of all ages and abilities to volunteer toward improving conditions in Contra Costa County and maintain a culture within County government that supports and celebrates such volunteerism.

Actions

SC-A2.1





Study the feasibility of implementing an amortization process to relocate or eliminate non-conforming land uses, with a focus on public nuisances and uses that pose threats to public health and safety.

See the Land Use Element for additional policies and actions on community design that supports active transportation. See the Transportation Element for policies and actions on pedestrian and bicycle safety, Safe Routes to Schools, and access to public transit. See the Public Facilities and Services Element for policies and actions on equitable access to parks and recreation areas.

Access to Health Services

While genetics and lifestyle choices affect health, so does access to quality, affordable medical care and health services. The county is served by nine hospitals: one in West County, six in Central County, and two in East County. This discrepancy is felt especially by West County residents, who throughout the General Plan update process expressed worry and frustration about long emergency response times and the lack of nearby medical facilities. Furthermore, even when these facilities are nearby, they can be especially difficult for seniors, people with disabilities, and other vulnerable populations to access due to gaps in the transit network. The policy guidance in this

section responds to community concerns by promoting access to comprehensive health services throughout the county.

Goal SC-3

Convenient access to comprehensive, co-located health services so all residents can access the physical and behavioral healthcare they need.

Policies

SC-P3.1



Provide all communities with sufficient and equitable access to adequate healthcare and behavioral health facilities and services.

SC-P3.2



Pursue feasible opportunities to co-locate healthcare services with other County services within new or substantially renovated County facilities.

SC-P3.3



Support and encourage provision of paratransit, public transit, and other transportation services to neighborhood and regional healthcare facilities to meet identified gaps in service.

SC-P3.4



Welcome establishment of medical clinics, behavioral health facilities, and pharmacies in Impacted Communities.

Actions

SC-A3.1





Streamline permitting processes for healthcare facilities to reduce barriers to their establishment in Impacted Communities.

SC-A3.2



Continue collaborating with neighboring jurisdictions to assess and address issues related to capacity and access to emergency, acute, and preventative/primary healthcare services, especially in the West County region.

Access to Healthy Food

Healthy food is one of the best tools to combat obesity and chronic diseases like diabetes. Nutrition influences not only the incidence of these health conditions, but also school achievement, job attainment, and quality of life generally. When the only food options in a neighborhood are small convenience stores offering pre-packaged goods and restaurants sell fast food (i.e., what's known as a "food desert"), it can be difficult to eat healthy. This becomes even more challenging when residents lack easy access to transportation, which can be common for vulnerable populations like children, seniors, people with disabilities, and people with low incomes. Grocery stores and markets that carry fresh foods, farmers' markets, farm stands, and community gardens are all outlets that can increase neighborhood access to healthy food options.

Urban agriculture (i.e., urban land used to grow crops or raise animals for food) can be another way to provide healthier food options. Reclaiming vacant land for urban agriculture can provide even more community benefits by bringing life and activity back to neglected areas. Locating urban farms in areas lacking access to fresh, healthy foods can expand opportunities for residents to eat healthy and improve overall community well-being.



Farmers markets provide access to fresh, seasonal produce.

Goal SC-4

Support and expand small-scale food production and urban agriculture in urban areas, including growing, processing, and distributing fresh food.

Policies

SC-P4.1



Encourage planting of home gardens and food-producing plants and trees on private property in urban areas. Encourage partnerships between property owners and gleaning and stewardship programs to harvest and maintain edible plantings.

SC-P4.2



Encourage all new residential development to incorporate community gardens into the project design and require incorporation of community gardens for projects that meet the criteria established through Action SC-A4.2.

SC-P4.3



Encourage urban agriculture, including urban farms and community gardens with collectively shared and managed plots, and demonstration and educational gardens operated by community organizations and educational institutions. Allow associated, limited on-site sales, processing of value-added products, and complementary agricultural activities when compatible with adjacent uses.







Support programs administered by water or wastewater service providers that increase the availability of recycled water for urban agriculture and landscaping through self-fill stations and similar facilities

Actions







Amend the urban agriculture provisions in County Ordinance Code Title 8 – Zoning to address the following:

- Zoning districts where urban agriculture is allowed.
- Permitting requirements. (b)
- Development and performance standards.
- Environmentally safe and sustainable practices. (d)
- Sale of crops and value-added products.
- (f) Animal husbandry.
- Disposal of food waste and agricultural byproducts.

SC-A4.2





Amend County Ordinance Code Title 8 – Zoning to add a requirement for certain projects to incorporate community gardens into the project design. As part of this process, identify a threshold for triggering this requirement, considering project type, size, and location, and establish standards for garden size and design. Consider the unique needs of Impacted Communities when developing these regulations.

SC-A4.3



Amend County Ordinance Code Title 4 – Health and Safety to allow food trucks within certain designated areas and on private property with special permits under Title 8.

Goal SC-5

Convenient access to fresh, healthy, and affordable food in Impacted Communities.

Policies









Increase access to fresh food in Impacted Communities by encouraging grocery stores, and urban agriculture, farmers' markets, and neighborhood kitchens on vacant or underutilized lands. Treat such uses as community benefits in and of themselves.

SC-P5.2







Maximize multimodal access to fresh food in Impacted Communities, prioritizing micro-mobility and pedestrian access, by encouraging grocery stores, healthy corner stores, community gardens, and outdoor markets at key transit nodes and within transit-oriented developments.



SC-P5.3





Provide temporary, and possibly permanent, access to County facilities and land for farmers' markets and community gardens, especially in Impacted Communities.

Actions

SC-A5.1





Inventory and map food deserts in the county. As part of the inventory, account for walking, micro-mobility, and transit access.

SC-A5.2







Amend the County Ordinance Code and/or procedures to streamline permitting processes for grocery stores and markets in Impacted Communities and food deserts.

SC-A5.3







Develop incentives to attract grocery stores, markets, and establishments selling fresh produce, preferably locally grown, in areas with poor access to fresh food.

SC-A5.4





Every five years beginning in 2025, review the Alcoholic Beverage Sales Commercial Activities Ordinance to ensure it protects Impacted Communities from experiencing disproportionate concentrations of, and impacts from, new bars and liquor stores. To support

implementation of this ordinance, set up and maintain a shared data system between the Health Services and Conservation and Development departments that identifies the location of current establishments, along with information about public safety and health.

SC-A5.5



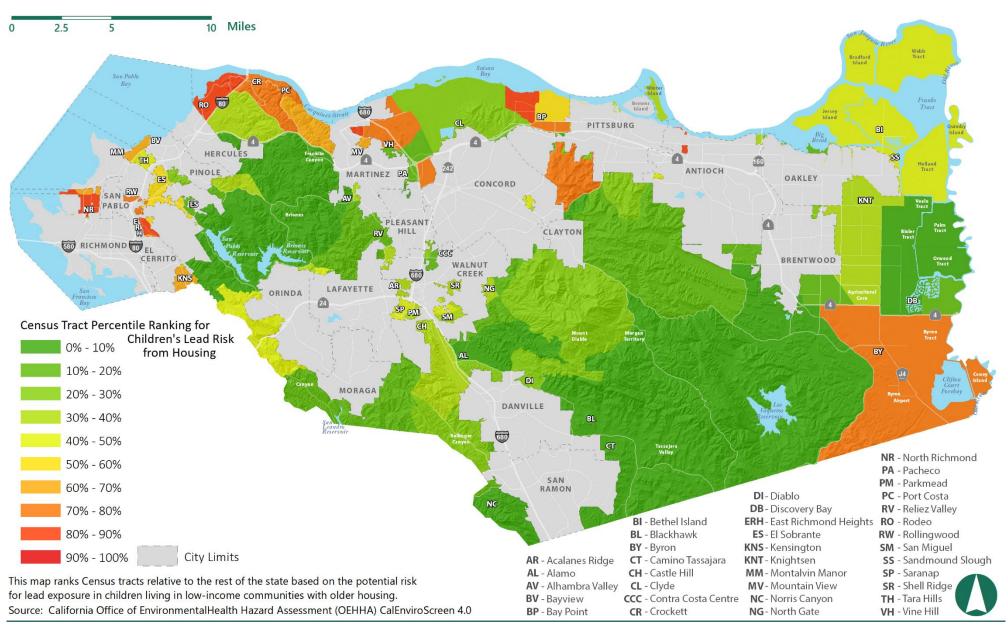


Study the feasibility of preventing fast-food restaurants from locating near schools, parks, and other places where children normally gather.

HEALTHY HOMES

Access to safe, sanitary housing is a fundamental part of strong, healthy, and just communities. With many county residents struggling to afford housing, and often dependent on a landlord's willingness to make improvements, people end up living in unsanitary or substandard homes or not having a stable home at all. For example, while lead-based paint was banned federally in 1978, there are still older homes in Contra Costa County that pose lead risks to children, especially in Impacted Communities (see Figure SC-5). Poor home conditions can adversely impact a resident's health from things like toxic building materials, pests and vermin, water intrusion, mold, exposure to climate variations, and poor air quality. Homes that lack air conditioning and air filtration can expose residents to extreme heat, wildfire smoke, and other air pollution, especially if they need to keep windows open for temperature control. In addition, some households may be overcrowded as families double or triple up to minimize housing costs.

FIGURE SC-5 CHILDREN'S LEAD RISK FROM HOUSING RANKINGS RELATIVE TO THE STATE





Aging houses may qualify for rehabilitation through the County's Neighborhood Preservation and Weatherization Programs.

The County currently provides programs to support healthy homes, including the Weatherization Program, the Asthma Initiative, the Neighborhood Preservation Program, and the Mortgage Credit Certificate Program, and connects residents to other housing resources. In addition, the Contra Costa Housing Authority, a separate public agency in Contra Costa County, provides rental subsidies and manages and develops affordable housing for low-income families, seniors, and people with disabilities

Contra Costa County's Housing Element, another Element of this General Plan, addresses a broader spectrum of housing issues and fulfills State housing law requirements for general plans.

Goal SC-6

Universal access to safe and sanitary homes.

Policies

SC-P6.1





Ensure that future improvements in Impacted Communities will not result in a net loss of affordable housing or significant preventable displacement of residents.

SC-P6.2





Prompt owners of substandard housing units in Impacted Communities to repair and rehabilitate their buildings.

SC-P6.3





Coordinate with residents of Impacted Communities, the Housing Authority of Contra Costa County, affordable housing developers, community land trusts, and housing advocates to transition vacant and underutilized land in Impacted Communities into affordable and transitional housing and shared equity models. This should include development of various types of innovative housing products and homeownership opportunities to help residents overcome past exclusionary practices and build intergenerational wealth.





Support voluntary removal of natural gas infrastructure and appliances from homes and replacement with electric appliances.

Actions









Obtain additional funding for, and address barriers to participation in, the County's Weatherization Program and similar programs like the Contra Costa Asthma Initiative and Neighborhood Preservation Program for extremely low-, very low-, and low-income homeowners, seniors, landlords, and renters. Focus these efforts on homes in Impacted Communities, particularly rental and multiple-family housing.

SC-A6.2







Create a bulk buying program or revolving loan fund that allows people to purchase energy-efficient electric appliances (air conditioners, fans, air purifiers, heaters, stoves, ovens, etc.) and other items that increase building efficiency at wholesale prices or minimal cost, possibly with zeropercent interest financing, to increase energy efficiency and replace hazardous appliances. Work with volunteer groups that help people install and dispose of air conditioners and other electrical appliances if they are unable to do so themselves, focusing on Impacted Communities and other areas with high concentrations of vulnerable people. Consider augmenting energy-efficiency programs to reduce electricity use and help offset the cost of operating electrical appliances.

SC-A6.3







Partner with local solar energy providers to enact a solar group buy program to purchase solar panels and battery storage in bulk for installation in Impacted Communities, including establishment and subsidization of community solar programs that supply electricity to multiple consumers from a single photovoltaic solar location. The program should include an educational component to inform the community about the benefits and process of solar installation and give them the opportunity to enroll in the program at a discounted rate.

SC-A6.4





Expand the County's first-time homebuyer program to provide more information and assistance, prioritizing outreach in Impacted Communities to spread awareness of the program.

See the Housing Element for a more comprehensive discussion of housing needs, homelessness, renter protection measures, and programs to affirmatively further fair housing.

ARTS AND CULTURE

Arts and culture play an integral role in Contra Costa County, as they enrich the lives of residents, visitors, and businesses alike. Artistic and cultural expression as present in historic buildings, residents' oral histories, and ongoing community traditions and celebrations contribute to an individual and collective sense of identity and pride. Every resident should have available easily accessible opportunities for cultural development, expression, and involvement. Art can be rooted in history and a catalyst for change in a culture. As a key driver of economic development and tourism,

arts and culture shape the community's creative workforce and future leaders by promoting skills such as creativity, innovation, and critical thinking. By working together to uphold and promote the value of engaging with arts and culture, we can strengthen local economies and create more vibrant, diverse, and resilient communities.

Contra Costa County supports art and culture through the Arts Council, a public-private partnership between the County and a nonprofit organization that also works in conjunction with the California Arts Council.



A mural brings life and color to this North Richmond building.

Goal SC-7

Vibrant communities with strong identities reflected in public art and cultural events.

Policies





Support development of cultural facilities and programs that are physically and financially accessible to all, with emphasis on bringing these to Impacted Communities.

SC-P7.2





Pursue arts and cultural investments as a tool for economic development, especially in Impacted Communities.

SC-P7.3



Support artists, community groups, and volunteer organizations in implementing temporary and permanent public art programs, especially in Impacted Communities.

SC-P7.4

Incorporate public art or artistic elements into County capital projects whenever feasible. Work with residents and the Arts Council to ensure works of public art are appropriate for the communities where they are installed.

Actions

SC-A7.1

Amend County Ordinance Code Title 8 – Zoning to establish a public art requirement for new development.

SC-A7.2



Partner with recycling centers to establish artist-in-residence programs to support art education while encouraging residents to repurpose unwanted items and conserve natural resources.

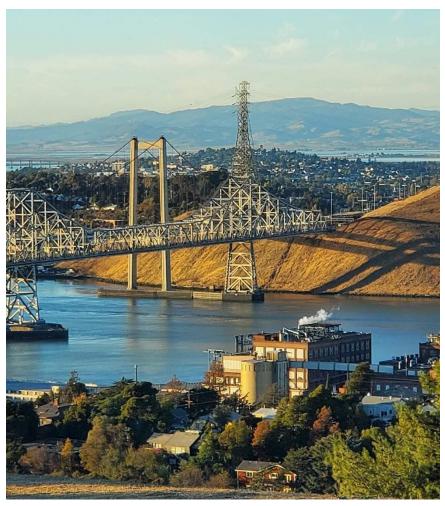
ECONOMIC VITALITY AND EMPOWERMENT

Workforce Development

To attract new businesses and retain those already here, the county must offer a workforce that possesses the education and skills employers need. The County supports economic and workforce development through the Workforce Development Board (WDB) staffed by the Employment and Human Services Department. WDB members are appointed by the County Board of Supervisors and include local business owners, economic development leaders, education professionals, labor advocates, communitybased organization staff, and public agency representatives. The County leverages the WDB and other economic development agencies and advocates to ensure that Contra Costa County remains economically competitive within the greater San Francisco Bay Area.

Workforce development is especially critical in Impacted Communities, which have higher rates of poverty and higher percentages of the adult population without a high school degree, as shown in Figures SC-6 and SC-7. By partnering with educational institutions and programs, employers, unions,

and trade associations to support job-skills training and recruitment from the local workforce, while also working to diversify the local economy, the County can help increase opportunities for residents in Impacted Communities to find local jobs that offer a living wage.



The historic C&H Sugar Refinery provides local jobs and bolsters the Crockett economy. (Community-submitted photo)

FIGURE SC-6 POVERTY RANKINGS RELATIVE TO THE STATE

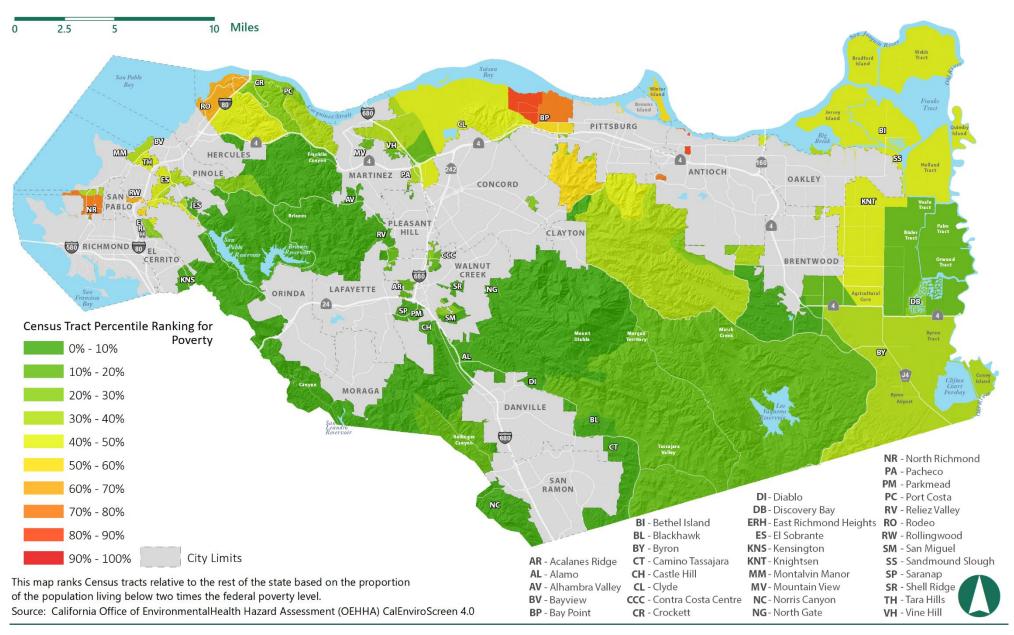
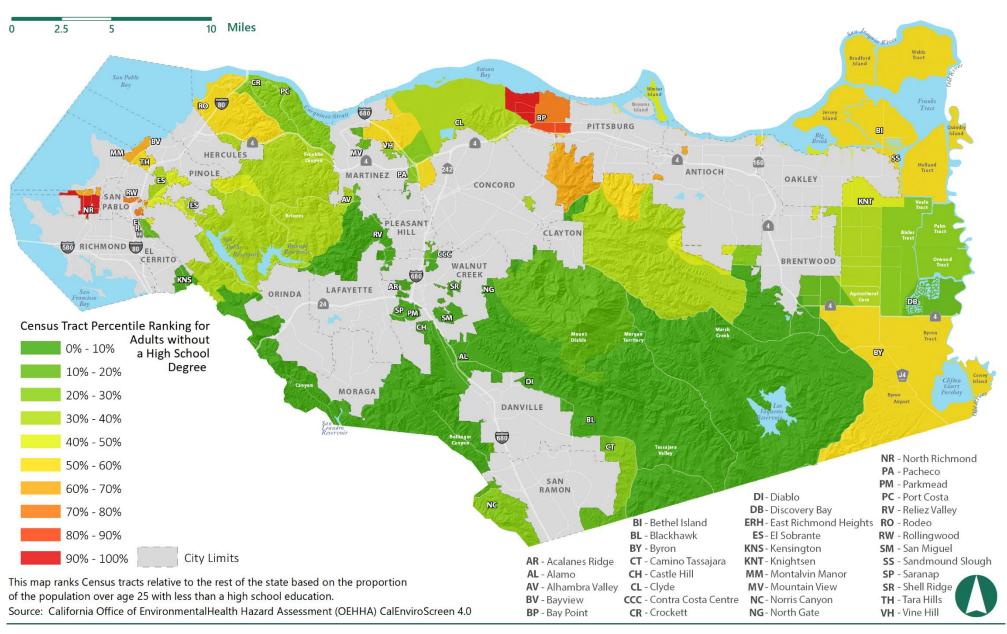


FIGURE SC-7 ADULTS WITHOUT A HIGH SCHOOL DEGREE RANKINGS RELATIVE TO THE STATE



Goal SC-8

Access to and expansion of high-quality job training, job opportunities, and economic resources so that residents in Impacted Communities can acquire safe jobs, earn a living wage to support their families, and build shared prosperity.

Policies





Support schools, training programs, the WDB, and other institutions whose mission is to develop and enhance local workforce skills, including training and apprenticeship programs.

SC-P8.2



Leverage opportunities to pursue workforce development, job training and re-training programs, and public-private partnerships that support economic growth. Support career pathway programs hosted by various County departments and encourage County staff to participate as mentors.

SC-P8.3







Welcome businesses, especially family-sustaining, locally hiring, sustainable businesses, that provide essential goods and services in Impacted Communities, including food stores with fresh produce, healthcare, childcare, pharmacies, and other retailers, while discouraging predatory lenders, liquor

stores, tobacco and cannabis retail stores, dollar stores, and fast-food restaurants.

SC-P8.4





Promote entrepreneurship, innovation, and locally owned businesses and enterprises, especially ethnic, immigrant, and Black, Indigenous, and people of color (BIPOC) entrepreneurship, for the purpose of improving economic self-sufficiency and stability, including through outreach efforts to local small business owners while minimizing permitting barriers.

SC-P8.5







Encourage more daycares, preschools, and early childhood development centers to make childcare more accessible and affordable for working families.

Actions

SC-A8.1





Establish a First Source Hiring Program encouraging developers, contractors, and employers to make good-faith efforts toward employing the local workforce to construct and operate their facilities, with emphasis on residents of Impacted Communities and those who are economically disadvantaged.

SC-A8.2







organizations, large employers, trade associations, unions, and job training centers to support enhanced job-skills training, recruitment programs and services, and childcare services to support the county's workforce, especially

workers in Impacted Communities. Work with experienced groups to ensure that programs will be properly staffed and funded. Training and intervention strategies should reduce barriers to employment for youth, formerly incarcerated residents, and residents with limited English proficiency, and should support a just transition from a fossil-fuel reliant economy by re-training displaced workers with skills for livingwage jobs in new, environmentally sustainable industries.

SC-A8.3





Explore the feasibility of establishing a revolving loan fund, grant program, or business incubator that supports small business formation and expansion in Impacted Communities. Connect to industries such as advanced manufacturing, biomedical/biotech, food, transportation technology, and clean technology that support an economic transition from fossil fuels.

SC-A8.4





Develop and sufficiently fund a program to offer one-on-one support to small businesses in Impacted Communities. Through this program, provide guidance related to available grants and other forms of financing, access to innovation, access to emerging industries and markets, and mentorship.

SC-A8.5





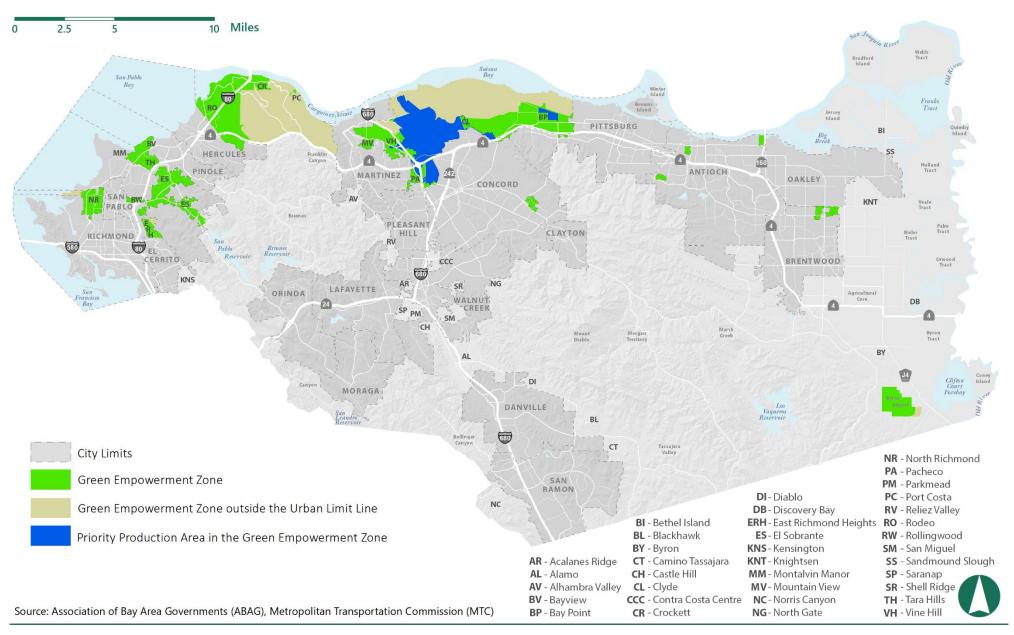
Explore use of existing federal and State government economic development programs, such as the "Opportunity Zone" program, "HUB Zone" program, and contracting designations, as a means to generate funding for transit, housing, and capital improvements, while attracting private investment.

Business and Innovation

Enhancing Contra Costa County's success as an economic hub depends on retaining, supporting, and attracting a diverse range of businesses that will sustain the local economy despite changing market forces. Petroleum refineries have been some of the largest employers and strongest economic drivers in the county for over 100 years. While demand for refined products remains significant and will persist until replacement technologies exist for current uses, the long-term future of these facilities is uncertain, and two of the four Contra Costa refineries have transitioned their operations as global and national energy trends shift toward carbon-free and renewable energy sources. Going forward, the county's economy should be centered on sustainable, clean, and green businesses and industries that provide livingwage jobs while protecting community health and the environment.

Less than 10 percent of the jobs in the county are in unincorporated areas, so coordination with incorporated cities is an important component of the County's economic development efforts. The Northern Waterfront Economic Development Initiative is a regional cluster-based economic development strategy, developed collaboratively between the County and seven partner cities. The Initiative intends to create 18,000 new jobs along Contra Costa County's Northern Waterfront, which extends along the shoreline from Hercules to Oakley and down to Brentwood, by 2035. The Initiative is focused on propelling the advanced manufacturing economic sector and investing in human capital to promote equitable economic growth. The State has designated the area as a Green Empowerment Zone, which will provide additional tools to implement the Initiative's goals. Additionally, the County worked with the Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) to designate Priority Production Areas (PPAs) in Bay Point and the North Concord/Pacheco/Vine Hill area. PPAs identify clusters of industrial businesses and prioritize them for economic development investments and protection from competing land uses. The Green Empowerment Zone and PPAs are depicted in Figure SC-8.

FIGURE SC-8 GREEN EMPOWERMENT ZONE AND PRIORITY PRODUCTION AREAS





Shipping along the Northern Waterfront is an important part of the local economy. (Community-submitted photo)

Goal SC-9

Sustain a resilient, diversified economy that supports existing businesses, attracts new businesses, and encourages investment and innovation while fostering economic opportunities for all residents.

Policies

SC-P9.1



Work collaboratively with cities and other local agencies to leverage Contra Costa County's competitive assets and elevate the county's role in the economic and cultural growth of the Bay Area and California.





Position Contra Costa County to be a hub of production and employment for industries that spur economic growth and innovation in the transition toward a zero-emission economy.





Support business retention, expansion, and attraction efforts that diversify and strengthen the economy with special emphasis on businesses and industries that provide livingwage jobs, invest in the community, hire from the local workforce, and embrace sustainability.

SC-P9.4



Maintain a well-balanced regulatory environment that facilitates business investment and expansion while addressing community concerns about potential impacts.

SC-P9.5



Continue to support and expand local tourism. Emphasize memorable experiences available in Contra Costa County, such as agritourism, and recreational opportunities offered by unique natural features such as the Delta and Mount Diablo.

SC-P9.6



Recognize agriculture as an important part of the County's economy and maintain conditions that support its ongoing economic viability.





Strengthen the viability of the Northern Waterfront as a dynamic economic asset and destination recreational area. Work with partner agencies to support beneficial, environmentally sustainable investment in this area.

SC-P9.8



Support formation of the Green Empowerment Zone for the Northern Waterfront area and development of designated PPAs.

SC-P9.9



Maximize Byron Airport's potential as a hub of aviation technology and innovation.

Actions

SC-A9.1



Adopt an Economic Development Strategy. The strategy should define a vision for the county's economy, identify and target suitable growth industries, and facilitate different types of economic development and employment growth in targeted areas.

SC-A9.2



Implement the Northern Waterfront Economic Development Initiative, including business attraction efforts aimed at biomedical and life science businesses, food and beverage processing, advanced materials and diversified manufacturing, advanced transportation technology, and clean technology.

SC-A9.3

Nominate the Phillips 66 San Francisco (Rodeo) Refinery and surrounding industrial areas, including the site of the former Phillips 66 Carbon Plant in Franklin Canyon, as a Priority Production Area.

SC-A9.4



Evaluate commercial and industrial regulations and permitting practices on an ongoing basis to ensure that they:

- (a) Address contemporary uses and activities.
- Promote compatibility between new and existing uses.
- (c) Avoid creating unnecessary barriers that hinder economic prosperity, investment, and sustainable growth.

SC-A9.5



Expand the Small Business Assistance Program, working collaboratively with technical assistance service providers.

SC-A9.6



Explore the feasibility of establishing a small and microbusiness fee-waiver program.

SC-A9.7



Expand the County's participation in the State's Green Business Program.

See the Open Space, Conservation, and Working Lands Element for policies about agritourism, solar and wind farms, and sustaining the agricultural economy.

COMMUNITY ENGAGEMENT

Community involvement is key to achieving the goals presented throughout this General Plan. Participation in County planning efforts brings diverse viewpoints and values into the decision-making process and helps ensure that County actions benefit the broadest range of people possible. Inclusive, participatory processes lead to better-informed solutions and build mutual understanding and trust between local government officials and the public they serve.

Equitable and effective community engagement is also foundational to environmental justice. By elevating the voices of people who have traditionally been left out of the planning process, we can learn from their wisdom and experience and begin correcting past wrongs. The County aims to create strong, collaborative partnerships between government and community members, proactively addressing challenges and promoting inclusion as a core value



Residents in Bay Point share their vision for the future of their community.

SC-10

Effective decision making that seeks and incorporates the voices of county residents.

Policies

SC-P10.1

Strengthen public trust through transparency, accessibility, and accountability in applying and implementing this General Plan and associated planning documents, such as the County Zoning Code.

SC-P10.2

Build positive relationships between residents, businesses, and County officials.

SC-P10.3



Expand opportunities to engage with County government. Provide residents with convenient access to information in the predominant languages spoken in their community.

SC-P10.4

Make appropriate County-owned facilities available to nonprofit civic organizations and neighborhood groups for meetings and events.

SC-P10.5

Support community-driven/community-led initiatives that work toward achieving the community objectives identified in the Community Profiles.

Actions

SC-A10.1

Amend County Ordinance Code Title 8 - Zoning to improve accessibility by:

- (a) Using formatting tools and techniques, such as matrices and tables, that streamline the document.
- (b) Incorporating diagrams and other graphics to reduce relignce on text.
- Using clear, unambiguous, and non-technical language whenever possible.

SC-11

Residents empowered with strong voices to communicate needs and solutions.

Policies

SC-P11.1



Engage with residents of Impacted Communities in a genuine, meaningful, and respectful manner.

SC-P11.2



Notify and engage community members, organizations, and leaders when County planning decisions on major projects are being considered in or near Impacted Communities. Conduct meaningful outreach and engagement with Impacted Communities as follows:

- (a) Notify Impacted Communities of the existence of major projects early in the planning process.
- (b) Prepare public notices in the predominant language(s) spoken in the community and provide interpretation services at meetings as needed.
- (c) Make public notices and other important documents easy to understand and available in print at local libraries, community centers, or other aathering places.
- (d) Use a wide array of methods to inform community members of opportunities to participate, such as the County website, social media, texts, banners, mailers, and flyers.
- (e) Use supplemental outreach approaches that are appropriate for the participating community.
- Schedule, format, and locate community workshops and meetings to be convenient for community members, both in person and online, whenever possible.
- (g) Use social media, virtual meeting platforms, recorded meetings, and other communication techniques to assist those without time or ability to attend public meetings.
- Consider the economic, gender, age, and racial diversity of the affected population when developing outreach strategies.

Clearly explain potential adverse impacts of a proposed project in plain language that is easily understood by the participating community.

SC-P11.3



Provide community engagement and information access options for people in Impacted Communities without access to computers or internet. Use facilities such as public libraries and community centers as a resource for making information and technology available.

SC-P11.4



Strive for more diverse representation on County boards, commissions, committees, and similar bodies to better reflect the demographics and varying viewpoints of county residents, with greater efforts to engage under-represented populations.

SC-P11.5

Overtly acknowledge public participation and input offered at hearings conducted by the County Zoning Administrator, County Planning Commission, and other bodies making land use decisions.

Actions

SC-A11.1



Designate staff in departments that routinely interact with residents of Impacted Communities, such as Conservation and Development, Public Works, and Health Services, as liaisons to each Impacted Community.

SC-A11.2



Hold semi-annual public meetings in each Impacted Community, including the County Supervisor representing the community and representatives from the full spectrum of County departments, to hear from residents of these communities, and use that input to inform the County's annual budgeting process. Provide interpretation services at these meetings.

SC-A11.3



Identify communities with a significant number of non-English-speaking households and develop resources and strategies for better engagement.

SC-A11.4



Develop centralized outreach services to support all County departments with language interpretation, translation services for written documents, and sign language services for public meetings.

SC-A11.5

Review procedures employed by the various County departments for collecting and disseminating data related to community health, safety, and economic vitality and study the feasibility of making additional data available to the public through accessible online tools.





Amend County Ordinance Code Title 2 - Administration to increase the public notification distance for hearings concerning refineries and other large stationary sources (i.e., any stationary source that emits, or has the potential to emit, 40 tons per year or more of nitrous oxides or sulfur dioxide; 15 tons per year of coarse particulate matter; 10 tons per year of fine particulate matter; and/or 200 tons per year of carbon dioxide) from 300 to 3,000 feet.

See the Public Facilities and Services Element for policies that prioritize public investment in capital improvements in Impacted Communities.

STRONGER COMMUNITIES ELEMENT PERFORMANCE MEASURES

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- Improved health outcomes of residents in Impacted Communities.
- Increased percentage of homes that are within a half-mile of a grocery store or other entity that offers fresh food.
- Reduced number of substandard homes that pose a health risk to residents in Impacted Communities.
- Increased amount of support provided to businesses in Impacted Communities through the County's small business assistance programs.

• Reduced rate of poverty in Impacted Communities.

COMMUNITY PROFILES

Unincorporated communities in Contra Costa County are at different stages of development. For many, the residents' vision for the future looks much like the community is today, while residents in other communities are more interested in transformation and evolution. Given the diversity of people, built environments, social and economic conditions, and natural landscapes across the county, this General Plan includes community-scale policy guidance in individual Community Profiles.

The Community Profiles are intended to close gaps in countywide policies by addressing issues and opportunities that apply only to that specific community. Each Community Profile includes:

- Contextual information summarizing local character, setting, land use patterns, demographics, history, natural resources, natural hazards, community vulnerabilities, and other key data.
- A summary of the planned land uses in the community, as mapped in Figure LU-1, the General Plan Land Use Map.
- Guiding principles that formulate a vision for the future of the community, plus policies and actions to support that vision.

The Community Profiles for Impacted Communities have an additional section that highlights environmental justice issues through maps and charts. As explained in the section of this Element on environmental justice, the CalEnviroScreen data that identifies Impacted Communities will change over time, so the County will periodically update the map of Impacted Communities and associated community profiles and policy guidance, as called for in Action SC-A1.7.

There are 22 Community Profiles presented in this section. These communities were identified through public input and collaboration among County staff and include communities with an individual identity and local concerns that are unique to their residents and businesses. They include:

- Alamo/Castle Hill
- Alhambra Valley/Reliez Valley/Briones/Franklin Canyon
- Bay Point
- Bethel Island
- Byron
- Canyon
- Clyde
- Contra Costa Centre
- Crockett
- Diablo
- Discovery Bay
- East Richmond Heights
- El Sobrante
- Kensington
- Knightsen
- Montara Bay/Rollingwood (i.e., Montalvin Manor, Tara Hills, Bayview, and Rollingwood)
- North Richmond

- Pacheco
- Port Costa
- Rodeo
- Saranap/Parkmead
- Vine Hill/Mountain View

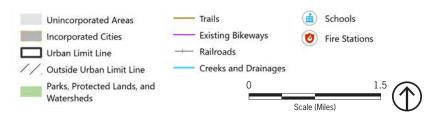
The County met with residents of each of these communities at least once during the General Plan update process to ensure each profile articulates the shared values, priorities, and aspirations for their future.

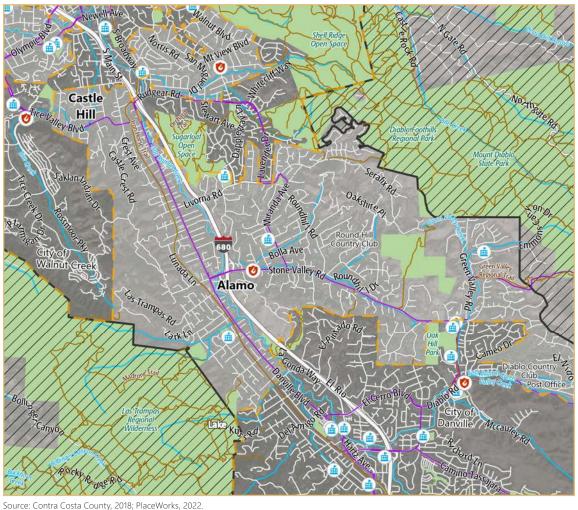


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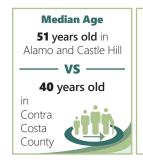
The Alamo and Castle Hill communities are located between Walnut Creek and Danville, with a portion of Castle Hill within Walnut Creek's Sphere of Influence. They are known for their comfortable residential neighborhoods, wooded hillsides, excellent schools, well-maintained parks, and strong sense of community. Alamo and Castle Hill are mostly comprised of single-family ranch-style homes on relatively large lots. However, Alamo also includes multiple-family homes along Danville Boulevard south of Stone Valley Road and estates on large rural tracts.

Alamo and Castle Hill originated as communities of ranches and orchards in the late 19th century. The area remained rural until after World War II when new freeways made it more accessible. Developments like the Round Hill Country Club (1960) helped establish the community's image as a desirable place to live. Major thoroughfares in the area are Danville Boulevard, which runs north-south along the west side of Interstate 680, and Stone Valley Road, which runs east from Danville Boulevard toward Diablo. Alamo's major commercial center is located around the intersection of these two streets and includes several shopping centers, office buildings, civic uses, and housing. Local planning priorities continue to be preserving Alamo's and Castle Hill's character, maintaining the scale of the housing stock, preserving mature trees, reducing wildfire risks, and managing traffic and safety on local roadways.





WHO LIVES IN ALAMO AND CASTLE HILL?



Average Life Expectancy 84 years old in Alamo and Castle Hill 81 years old Contra



Race & **Ethnicity** ▶ **78%** White ▶ **10%** Asian

▶ 8% Hispanic or Latino

▶ 1% Black or African American







HAZARDS

¥.

Drought



Extreme Heat



Flooding



Human Health Hazards



Landslides and Debris Flows



Seismic Hazards



Severe Storms



Wildfire

MAJOR VULNERABILITIES

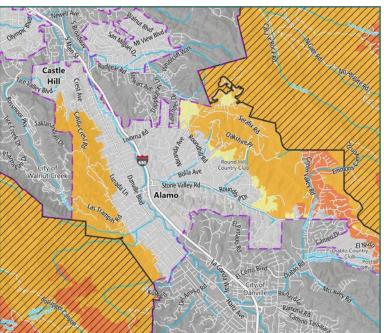
Seniors, especially seniors living alone, and cost-burdened house-holds are vulnerable to air quality, extreme heat, flooding, landslides, seismic hazards, and wildfire.

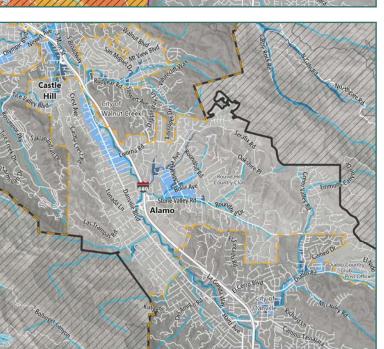
Persons without access to lifelines and persons living on single-access roads are vulnerable to wildfire, landslides, and flooding.

Energy delivery, solid waste removal, and water and wastewater services are vulnerable to landslides, flooding, seismic hazards, and wildfire.

Woodland and riparian woodland areas are vulnerable to agricultural pests and diseases, drought, and wildfire.

The information on this page presents a summary of hazards and vulnerabilities in Alamo and Castle Hill based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.





WILDFIRE

Wildfire Severity Zones

Very High

- High

Moderate

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

--- Railroads

Creeks and Drainages



Source: CalFire, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

FLOOD ZONES

Flood Hazard Areas

100-Year Flood Zone

500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

Creeks and Drainages



A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Alamo and Castle Hill are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Plans for both communities aim to maintain and enhance existing residential uses while accommodating new residential development that is in harmony with the surrounding natural setting. Minimal change is anticipated in existing single-family neighborhoods. Alamo contains an area along Danville Boulevard designated Mixed-Use Community-Specific Density, which overlaps a well-established commercial core comprised of existing uses that serve many residents' daily needs. The commercial viability of this mixed-use area is to be maintained while allowing for development of higher-density residential uses that provide a mix of housing options. Over time, a variety of housing types may be developed, diversifying the housing stock and accommodating housing needs at different stages of life.







GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Alamo and Castle Hill community members:

- 1. Alamo and Castle Hill residents value their existing lifestyle and community. The safe, quiet, small-town character should be maintained where possible.
- 2. Residents identify their undeveloped surroundings as one of the most valuable assets of this area. Preservation of the natural setting and wildlife habitat should be prioritized.
- 3. Multiple-family homes should generally be located within one mile of Alamo's commercial core to provide residents access to transit, commercial services, and the Iron Horse Trail.
- 4. The commercial core of Alamo should be maintained and enhanced so that it continues to provide jobs and services, as well as a central gathering place for the community.
- 5. New development should enrich the community's architectural character and scenic quality.
- 6. Because Alamo and Castle Hill are proximate to large swaths of wooded hills, grasslands, and pipelines carrying volatile materials, they are at risk of exposure to hazardous materials and potentially severe fires. The communities should be protected from these hazards through proper planning and emergency response.



(Community-submitted photo.)

POLICIES

- 1. Preserve the Alamo mixed-use area's role as a business district serving nearby neighborhoods. Support retention of active commercial uses and local-serving businesses while promoting new residential development.
- 2. Support development of a mix of housing types and densities to diversify the housing stock and better serve residents of all ages, including current residents choosing to downsize, while still maintaining the predominantly single-family residential character. (3-116)
- **3.** Prioritize preservation of irreplaceable natural features (e.g., mature stands of oak trees and riparian corridors) and wildlife habitat.
- **4.** Maintain public views of Mount Diablo, scenic ridges, and other defining natural elements of the local landscape to the greatest extent feasible.
- **5.** Encourage neighborhood-scale commercial uses that serve the needs of the community. Discourage large-scale commercial uses catering to a more regional customer base.
- **6.** Maintain Danville Boulevard and Stone Valley Road as two-lane roadways outside of Alamo's business district. Support projects and strategies that improve safety and traffic flow, such as turn lanes.
- **7.** Encourage community-wide pedestrian and bicycle mobility and use of public transportation.
- **8.** Deny applications for General Plan amendments to establish new Commercial and Office or Mixed Use designations along either side of Danville Boulevard north of St. Alphonsus Way and Jackson Way, and south of South Avenue.
- 9. Discourage roof heights exceeding 40 feet, or architectural features (such as parapets) exceeding 45 feet.
- **10.** Require commercial, multiple-family residential, and mixed-use projects along or near the west side of Danville Boulevard to provide unobstructed bicycle/pedestrian paths and public access to the Iron Horse Trail whenever feasible.
- **11.**Require commercial, multiple-family residential, and mixed-use projects in Alamo's commercial core to enhance the streetscape; emphasize pedestrian orientation, safety, and amenity; and provide outdoor civic space for gathering and entertainment.

ACTIONS

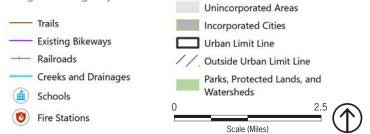
- Assist with a community-led process to create design guidelines and standards for new development that complement the County's Objective Design and Development Standards and aim to further enhance community character and preserve historic landmarks.
- 2. Explore the possibility of establishing a community center that provides facilities for library services, community meetings, and events/gatherings.
- 3. Improve pedestrian and bicycle safety and mobility through infrastructure enhancements. Specifically, widen shoulders, close bike lane gaps, plant native landscaping and street trees, install lighted crosswalks where appropriate, and improve connections to local and regional trails like the Iron Horse Trail.
- 4. Assist with community-led processes to develop congestion management plans for problem areas, including areas near schools and along local streets that are used for cut-through traffic. Engage the Sherriff's Office in the planning process to promote effective traffic enforcement.
- **5.** Work with local transit agencies to improve transit connections to the Walnut Creek BART Station.

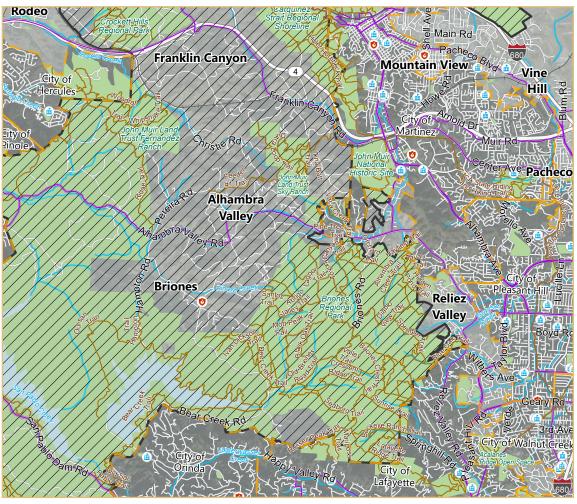
ALHAMBRA VALLEY, RELIEZ VALLEY, BRIONES, AND FRANKLIN CANYON - CONTEXT - 1

Alhambra Valley, Reliez Valley, Briones, and Franklin Canyon are small communities that value their proximity to open space, rolling hills, wildlife, and creeks. These communities are situated in central Contra Costa County and border Briones Regional Park and watershed lands owned by East Bay Municipal Utility District. Portions of Alhambra Valley, Reliez Valley, and Franklin Canyon are in the Spheres of Influence of the cities of Martinez, Pleasant Hill, and Hercules, respectively. Land uses primarily consist of ranches, small-scale agriculture, and low- or very-low-density housing.

Residents generally travel to Martinez, Pleasant Hill, Lafayette, or Hercules for goods and services. While there is little support for new commercial or employment uses locally, there is interest in providing more accessible services and housing that supports a multi-generational community, including a growing population of aging and retired residents.

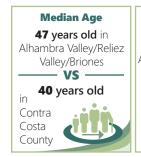
Given the relatively isolated location, residents are concerned about access to emergency services and safety. Timely roadway maintenance is essential, as emergency access is crucial in a high-fire-risk area. The communities appreciate Fire Station #19 and the services it provides. Residents are still concerned, however, about the lack of telecommunication services and communication reliability during an emergency.





Source: Contra Costa County, 2018; PlaceWorks, 2022.

WHO LIVES IN ALHAMBRA VALLEY, RELIEZ VALLEY, AND BRIONES?



Average
Life Expectancy
83 years old in
Alhambra/Reliez/Briones

VS

81 years old
in

Contra

Costa

Household Income
\$164,148 in
Alhambra/Reliez/Briones

VS
\$103,997
in
Contra
Costa
County

Median

Race & Ethnicity

- ► **34%** White
- **▶ 26%** Asian
- ▶ 17% Hispanic or Latino
- ▶ **13%** Black or African American



HAZARDS

Agricultural pests and diseases (Briones)

Drought

Extreme heat

Flooding (Alhambra Valley)

S Fog

Human health hazards

Landslides

Seismic hazards



Wildfire

MAJOR VULNERABILITIES

Seniors and seniors living alone are vulnerable to extreme heat, human health hazards, landslides, and wildfire.

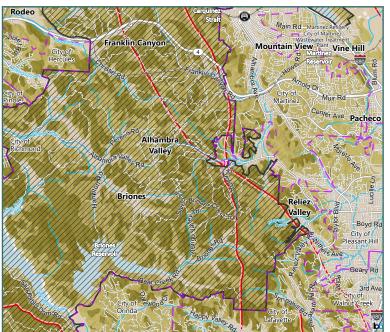
Persons living on single-access roads, persons without access to lifelines, and persons with disabilities are vulnerable to extreme heat, flooding, landslides, seismic hazards, severe storms, and wildfire.

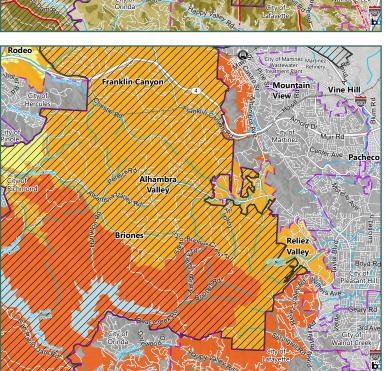
Highway 4, Alhambra Valley Road, Reliez Valley Road, and Bear Creek Road are vulnerable to flooding, landslides, severe storms, and wildfires

Agricultural operations in Alhambra Valley, Briones, and Franklin Canyon are vulnerable to damage from agricultural pests and diseases.

Briones Regional Park, chaparral and scrub habitat, woodland habitat, and outdoor recreation are vulnerable to drought, extreme heat, landslides, severe storms, and wildfire.

The information on this page presents a summary of hazards and vulnerabilities in Alhambra Valley, Reliez Valley, and Briones based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.





LANDSLIDE

Landslides

Mapped landslides

Few large mapped landslides, but contains scattered small landslides and questionablyidentified larger landslides

Areas of gentle slope at low elevation that have little or no potential for landslides

Incorporated Cities

Urban Limit Line

///, Outside Urban Limit Line

Regional Faults

--- Railroads

Creeks and Drainages



Source: California Geologic Survey, 2008; Contra Costa County, 2018; PlaceWorks, 2022.

WILDFIRE

Wildfire Severity Zones

Very High

High

Moderate

Unincorporated Areas

Incorporated Cities

Urban Limit Line

/// Outside Urban Limit Line

--- Railroads

Creeks and Drainages





Source: CAL FIRE, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Alhambra Valley, Reliez Valley, Briones, and Franklin Canyon are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Aside from the former Phillips 66 Carbon Plant site in Franklin Canyon, each community is planned to maintain existing low- and very-low-density residential uses surrounded by rural agricultural lands, resource conservation, and park and recreation areas. No commercial areas are planned. As most of the land in these communities is outside the Urban Limit Line, there will not be a substantial increase in density or widespread introduction of urban uses.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Alhambra Valley, Reliez Valley, and Briones community members:

- 1. The secluded qualities and rural lifestyle in the Alhambra Valley, Reliez Valley, Briones, and Franklin Canyon communities should be preserved and maintained.
- 2. The existing balance between developed and rural land uses should be preserved.
- **3.** The diversity of existing agricultural uses in the region, from vineyards to ranching, should be supported.
- 4. Residents of Alhambra Valley, Reliez Valley, Briones, and Franklin Canyon who lack housing should have access to quality services. Vital, easy-to-access community programs related to homelessness, housing, and elderly services should be available. Residents who are at risk of losing housing should be protected from displacement.
- **5.** The residents of Alhambra Valley, Reliez Valley, Briones, and Franklin Canyon should have access to quality transportation, housing, and program services that accommodate multi-generational community needs.
- **6.** Alhambra Valley, Reliez Valley, Briones, and Franklin Canyon should be protected from hazards, particularly wildfire, through proper planning, mitigation, and emergency preparedness and response.

POLICIES

- 1. Continue adhering to the Briones Hills Agricultural Preservation Area compact, which states that the surrounding jurisdictions (Contra Costa County and the cities of Martinez, Pleasant Hill, Walnut Creek, Lafayette, Orinda, Richmond, Pinole, and Hercules) voluntarily agree not to annex any lands within the 64-square-mile area for the purposes of allowing urban development (see Figure LU-6).
- 2. Require new development to be consistent with the communities' rural character in terms of massing and scale.
- **3.** Ensure roads are adequately maintained to provide for emergency access and evacuation.
- **4.** Support expansion of transportation services, affordable housing, and health resources for the communities' growing senior population.
- **5.** Support and encourage establishment of reliable community-wide internet access and telecommunication services.
- **6.** Encourage the Contra Costa County Fire Protection District to maintain adequate fire protection services, particularly to protect from wildfire hazards.
- **7.** Support efforts to have portions of Alhambra Valley/Briones recognized as an American Viticultural Area.

ACTIONS

1. Update the Alhambra Valley Specific Plan.

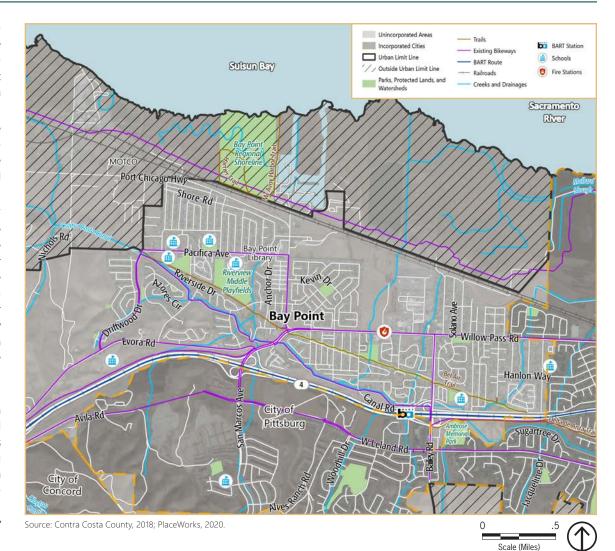
BAY POINT - CONTEXT - 1

Originally bordered by a large swath of tule marsh, Bay Point was settled for ranching in the 1800s. It became a lumber manufacturing and distribution port in the early 1900s. The area's prime location along the Southern Pacific Company's transcontinental railroad tracks and the deep water of Suisun Bay facilitated shipment of raw materials and products by land and water, spurring quick economic growth in the community.

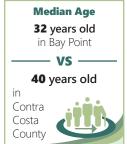
Today, most of the community consists of single- and multiple-family homes. While there are some commercial uses in Bay Point, primarily along the major thorough-fares of Willow Pass Road and Bailey Road, neighborhood-serving amenities are limited. The Bay Point shoreline, meanwhile, has mostly reverted to a fairly natural state, though a marina and some industrial uses remain.

In 1993, the community voted to be renamed from "West Pittsburg" to "Bay Point" to solidify its identity as separate from the City of Pittsburg to the east, though the community remains within Pittsburg's Sphere of Influence. Residents take pride in their independence from nearby cities, but are concerned about the need for increased services and coordination among service providers. This includes the Ambrose Recreation and Park District (ARPD), an important special district (independent from the County) that provides park facilities, programs, and activities for the community. Park safety and homelessness are issues of concern, particularly along the waterfront. Along major thoroughfares, street lighting and pedestrian safety improvements are local priorities. Community-led organizations advocate to address these local issues.

The Pittsburg/Bay Point BART Station is an important node for the community, as well as a key development opportunity. BART provides many residents with an essential regional transportation link to jobs in Concord, Walnut Creek, and beyond. Many in the com- munity also would like improved Tri Delta Transit bus services and improved transit stop amenities. Bay Point is also within the planning area of the 2020 Pittsburg/ Bay Point Community-Based Transportation Plan, a plan developed by the Contra Costa Transportation Authority to address the community's mobility needs.



WHO LIVES IN BAY POINT?



Average Life Expectancy 78 years old in Bay Point

81 years old

Contra Costa County

Median Household Income

\$67,908 in Bay Point

— VS — \$103,997

Contra Costa County

Race & Ethnicity

- ► **68%** Hispanic or Latino
- ▶ 11% White
- ▶ **9%** Black or African American
- ▶ 8% Asian







HAZARDS



Air quality from increased ozone and diesel particulate matter



Coastal flooding



Extreme heat



Flooding



Human health hazards



Landslides and debris flows



Sea level rise



Seismic hazards



Wildfire

The information on this page presents a summary of hazards and vulnerabilities in Bay Point based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.



A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

MAJOR VULNERABILITIES

Cost-burdened households, households in poverty, low-income households, persons experiencing homelessness, and persons with chronic illnesses are vulnerable to coastal flooding.

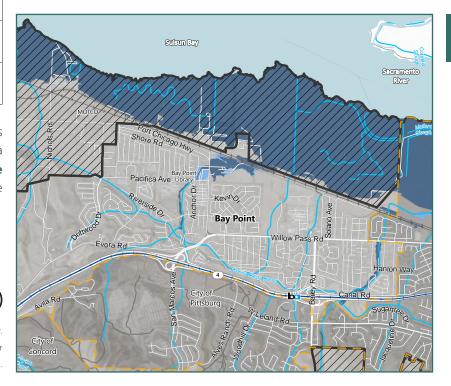
Cost-burdened households, households in poverty, and low-income households are highly vulnerable to having their homes damaged by landslides, seismic hazards, and sea level rise.

Cost-burdened households, households in poverty, low-income households, persons experiencing homelessness, and persons with chronic illnesses are vulnerable to wildfire.

The Amtrak line, neighborhoods connected by single-access roads, the library, and fire station are vulnerable to coastal flooding.

The Amtrak line, neighborhoods connected by single-access roads, the library, Pittsburg/Bay Point BART, and commercial buildings are vulnerable to sea level rise.

Public transit access, water and wastewater services, energy delivery services, and solid waste removal services are vulnerable to multiple hazards.



FLOOD ZONES

Flood Hazard Areas

100

100-Year Flood Zone

500-Year Flood Zone

A

Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

BART Route

--- Railroads

Creeks and Drainages

BART Station

IMPACTED COMMUNITY

The County has identified Bay Point as an Impacted Community under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages in these communities.

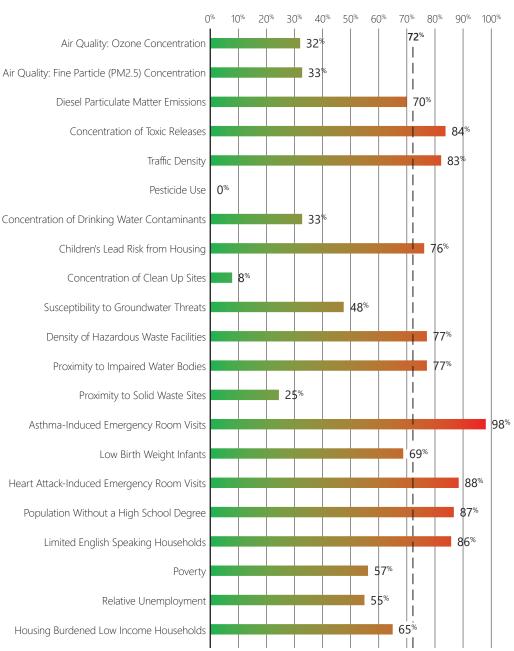
The 21 indicators that contribute to Bay Point's identification as an Impacted Community are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how Bay Point ranks for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher. While there are multiple Census tracts that make up Bay Point, this chart presents only the most-impacted Census tract in the community.

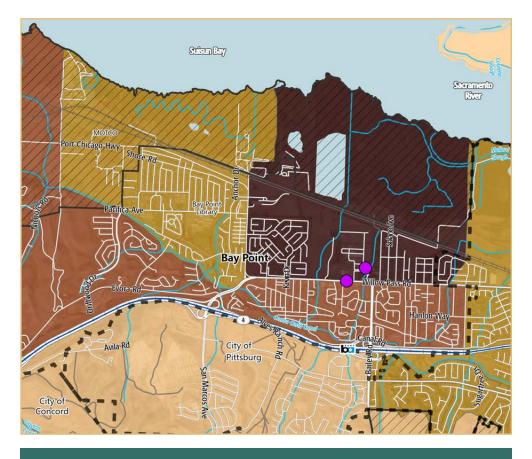
Chemical pollution from nearby heavy industrial and manufacturing uses has severely impacted Bay Point. While remediation efforts are underway, the continued presence of these uses creates the risk of community exposure to associated hazards. Meanwhile, these businesses often do not hire from the local population due to mismatched skill sets and language barriers. Therefore, many residents endure longer commutes to often low-paying jobs in central Contra Costa County where higher housing costs price them out of residency. This migration is mirrored by a larger trend in eastern Contra Costa County to drive into the Bay Area's employment centers, causing roadway congestion, increasing driving times, and polluting the air.

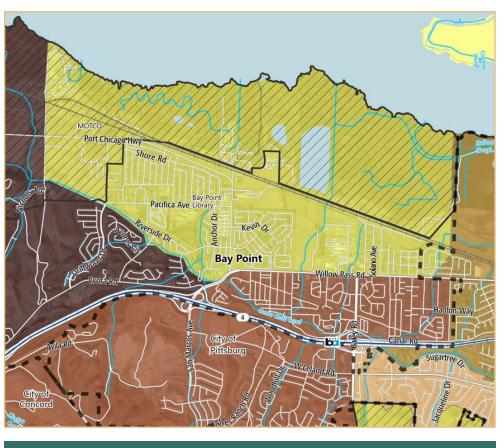
Water quality has long been a concern among Bay Point residents. In the last decade, relatively high levels of disinfection byproducts were identified in the drinking water. After strong community advocacy, the local private water company began purchasing treated water, and today the water company is compliant with all water quality standards.

IMPACTED COMMUNITY INDICATORS (2021)

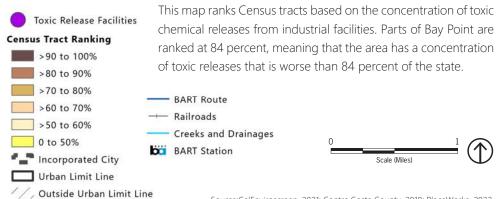
Ranking of Most Impacted Census Tract in Bay Point Relative to the State





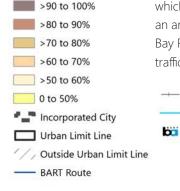


TOXIC RELEASES

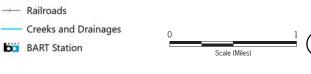


TRAFFIC DENSITY

Census Tract Ranking

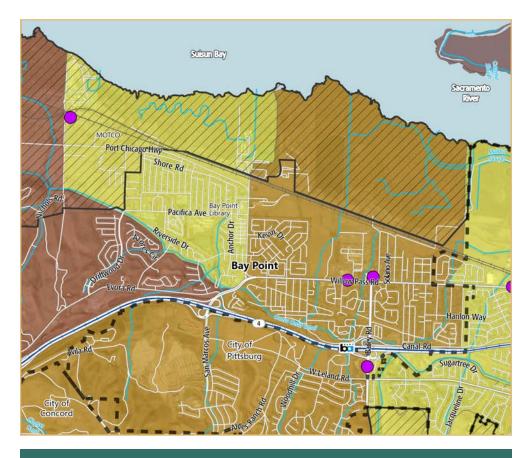


This map ranks Census tracts based on the density of traffic, which is a measure of the number of vehicles on the roads in an area. Traffic density is associated with poor air quality. Parts of Bay Point are ranked at 83 percent, meaning that the area has a traffic density that is worse than 83 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.







HAZARDOUS WASTE

Generators of Hazardous Waste

Census Tract Ranking >90 to 100%

>80 to 90%

>70 to 80%

>60 to 70%

>50 to 60%

0 to 50%

Incorporated City Urban Limit Line

// Outside Urban Limit Line

BART Route

--- Railroads

Creeks and Drainages

BART Station

This map ranks Census tracts based on the density of hazardous waste facilities and generators, considering each facility's type and permit status and generator activities. Parts of Bay Point are ranked at 77 percent, meaning that the area has a density of hazardous waste facilities and generators that is higher than 77 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Bay Point are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Bay Point includes a variety of land uses. Most of the community is planned for continued residential use at various densities. Over 200 acres toward the center of the community are designated for industry to encourage jobgenerating uses to locate here. Most of the land along the waterfront north of the railroad tracks is designated for protection, though McAvoy Harbor is designated for commercial recreation and medium-density residential development. Hillside areas defining the west end of the community will be preserved through Public and Semi-Public, Resource Conservation, Parks and Recreation, and Agricultural Lands designations.

Willow Pass Road and areas near the Pittsburg/Bay Point BART Station are envisioned as transitioning into denser and more vibrant community nodes. This will be accomplished by creating three distinct mixed-use areas, each with a different character. The three mixed-use areas share a common set of design principles intended to create a more walkable, pedestrian-friendly environment. Key principles include allowing varied setbacks, encouraging new buildings to be located close to the street frontage, and locating parking to the rear of the buildings rather than in front. The text to the right provides a summary of the three mixed-use areas and the vision for each.









Willow Pass Road Corridor

The mixed-use area along Willow Pass Road is envisioned as a unified, well-designed corridor that acts as the heart of the community. The area should incorporate a range of residential, neighborhood commercial, entertainment, and civic uses. Landscaping, signage, public art, and other amenities will establish a sense of place and enhance the pedestrian experience. Because the corridor is nearly two miles long, development of smaller nodes within the node is encouraged.

Bailey Road Urban Center

This mixed-use area north of the Highway 4/Bailey Road interchange aims to create a unified and vibrant urban center offering a mix of uses at a compact and walkable scale. Multiple-family residential development proximate to employment uses and services is highly desired. This area should develop into a pedestrian-oriented district serving residents who live nearby, with access to quality local and regional transportation.

Pittsburg/Bay Point BART Station Area

This mixed-use area south of the Highway 4/Bailey Road intersection is planned for dense residential development that takes advantage of the area's proximity to the BART Station and Ambrose Park. Limited commercial uses are secondary to residential development and should provide goods and services to commuters, neighborhood residents, and visitors to Ambrose Park. The Pittsburg/Bay Point BART Station Area Specific Plan (2002) remains in effect and provides more detailed guidance for this area.

GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Bay Point community members:

- 1. Bay Point is a great place to raise a family. Its small-town community-mindedness and relative affordability should be preserved and supported for future generations.
- 2. The entire community should enjoy streetscapes and open spaces that are free from abandoned cars, debris, and litter, with ample street lighting to improve visibility and safety when walking at night.
- 3. Bay Point residents need more local, high-quality jobs from a more diverse business base. Businesses should be encouraged to hire locally and provide living wage jobs.
- 4. Additional retail development should be encouraged along Willow Pass Road.
- 5. Bay Point residents enjoy a central location in the Bay Area, with easy regional access via multiple transportation modes. Easy access to local and regional transportation should be maintained and enhanced.
- 6. Bay Point residents who lack housing should have access to quality services and programs, including a new shelter, increased mental health and substance abuse services, and facilities that are tailored to specific age groups (e.g., seniors and teens). Bay Point residents who are at risk of losing housing should be protected from displacement.
- **7.** Bay Point's waterfront north of the railroad tracks should be developed with water recreation and commercial uses while ensuring greater resilience to near- and long-term hazards associated with sea-level rise.
- **8.** Park and recreation facilities should be made safe and inviting to residents and families through quality amenities and ongoing maintenance. The ARPD should have the funding it needs to enhance park and recreation services.
- 9. Agencies that provide community services should coordinate efforts to maximize effectiveness and reach all those who need their services.
- **10.** Bay Point residents should be safe from short- and long-term hazards associated with industrial facilities in and near the community.

POLICIES

- 1. Ensure new development does not create negative impacts such as increased toxic exposure, a net loss of affordable housing, or permanent displacement of residents and local legacy businesses that are valued by the community.
- 2. Coordinate with the Housing Authority of Contra Costa County, affordable housing developers, and other organizations to transition vacant and underutilized land into affordable rental and ownership housing that serves Bay Point's diverse population.
- **3.** Establish proactive and effective partnerships with local community-based organizations that have relationships, trust, and cultural competency with Bay Point communities to assist with outreach for local initiatives and issues and expand engagement efforts to schools and community centers.
- **4.** Support community beautification and safety through graffiti removal, improved trash collection litter reduction, street and sidewalk maintenance, abatement of illegal dumping, and code enforcement.
- 5. Support implementation of the 2020 Pittsburg/Bay Point Community-Based Transportation Plan.
- **6.** Encourage development of neighborhood-oriented shopping and services, especially within walking distance of housing.
- 7. Encourage assembly of parcels in medium- and higher-density residential areas to allow for higher-quality, denser residential development.
- **8.** Minimize the number of streets and driveways intersecting or entering Willow Pass Road by using secondary roads, assembling frontage parcels, using shared access on abutting properties, and other approaches.
- **9.** Improve commercial visibility on Willow Pass Road by controlling the placement, design, number, and size of new signs to convey business identity without being visually disruptive.
- **10.** Support ARPD efforts to meet the community's recreation needs effectively and efficiently.
- 11. Support proposals for high-quality redevelopment of McAvoy Harbor.

ACTIONS

- 1. Implement strategies to curb illegal dumping, particularly at Port Chicago Highway and Driftwood Drive, and along Pullman Avenue and Suisun Avenue.
- 2. Conduct education and outreach to inform residents about proper waste disposal opportunities beyond curbside trash and recycling collection.
- 3. Prepare and implement streetscape plans for Willow Pass Road, Bailey Road, and other major streets that include protected bike lanes, speed bumps, stop signs, upgraded sidewalks (including widening and closing gaps), street trees, and landscaping to slow traffic and enhance transit corridors. Streetscape plans should also address on-street parking, traffic movements, and transit facilities. Revise precise alignment plans to facilitate the streetscape plans wherever necessary.
- **4.** Install pedestrian lighting throughout the community to enhance safety and deter crime.
- 5. Work with BART, Tri-Delta Transit, and County Connection to:
 - a. Improve coordination of bus and BART arrival and departure times.
 - **b.** Create more frequent and direct bus routes and connections to connect residents with BART.
 - **C.** Increase ADA-accessible options on public transit.
- **6.** When coordinating with the ARPD, highlight the following goals identified by the community:
 - a. Expand sports programs and after-school activities.
 - **b.** Develop new youth recreation opportunities through bike trails, a new skate park, and a youth center.
 - c. Improve the community center and Ambrose and Lynbrook Parks.
 - **d.** Establish a new community-oriented park, potentially in Shore Acres.
 - e. Provide clear access points to their facilities.
 - f. Plant appropriate vegetation that provides shade and aesthetic benefits.
 - **g.** Maintain vegetation and regularly clean up trash to maximize visibility and demonstrate active attention to each park.

ACTIONS (CONTINUED)

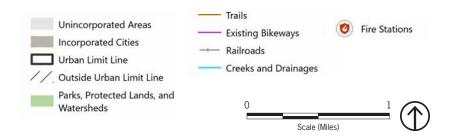
- h. Install more lighting to improve visibility and safety.
- i. Use signage to clearly convey site ownership and rules.
- 7. Work with the East Bay Regional Park District to develop a trail network connecting Bay Point residents to nature, recreation opportunities, the waterfront, and regional destinations.
- 8. Work with the community to create a mural or public art program to provide a positive alternative and deterrent to graffiti.

BETHEL ISLAND - CONTEXT - 1

Situated in eastern Contra Costa County at the heart of the Delta, Bethel Island has welcomed visitors and new residents alike since the 1930s. For nearly a century, residents have been attracted to this island community for its water-related recreational activities and agricultural assets. Bethel Island's marinas were developed to capitalize on a growing interest in the community's warm waters and relaxed, rural atmosphere, away from the urban bustle of San Francisco Bay.

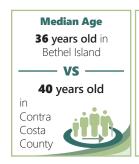
The residents of Bethel Island today cross the Bethel Island Bridge, replaced in 2009, to get to and from home. This singular ingress and egress to the 5.5-square-mile island limits development, but also causes roadway congestion during commute hours. Given the island's low elevation, there are also significant flooding and levee maintenance issues, as well as a need for improved infrastructure to address hazards.

Proud of their local tourism industry and water-oriented amenities, Bethel Island residents would like to further enhance the marinas with more retail uses, increased parking, and more family-oriented and/or water-related annual community events. The community may support limited job-generating uses, but seeks to retain and enhance local agricultural vibrancy and character.





WHO LIVES IN BETHEL ISLAND?



Average Life Expectancy 78 years old in Bethel Island VS 81 years old

in Contra Costa County

Median Household Income \$78,500 in Bethel Island

---- VS ----\$103,997

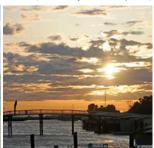
in Contra Costa County

Race & Ethnicity

- ▶ **58%** White
- ➤ **25%** Hispanic or Latino
- ▶ **9%** Black or African American
- ▶ **4%** Asian







(Community-submitted photo.)

BETHEL ISLAND - CONTEXT - 2

The information on this page presents a summary of hazards and vulnerabilities in Bethel Island based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities

HAZARDS



Agricultural Pests and Diseases



Air Quality



Coastal Flood





Extreme Heat



Flooding



Human Health Hazards



Seismic Hazards (Liquefaction)



Sea Level Rise



Severe Storm

MAJOR VULNERABILITIES

Cost-burdened households, households in poverty, and persons with chronic illnesses are vulnerable to coastal flooding.

The entire community is on a single-access road connected via a bridge, leaving it vulnerable to coastal flooding, flooding, sea level rise, and severe storms.

Outdoor recreation and rangeland in the community are vulnerable to coastal flooding and sea level rise.

Commercial and government buildings along Bethel Island Road, Stone Road, Willow Road, and Taylor Road are vulnerable to sea level

The island is vulnerable to liquefaction created by seismic hazards.

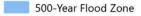




FLOOD ZONES

Flood Hazard Areas

100-Year Flood Zone



Areas of Undetermined but Possible Flood Hazard

Water

Incorporated Cities

Urban Limit Line

Outside Urban Limit Line

Creeks and Drainages



A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

SEA-LEVEL RISE

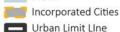
Sea Level Rise 2050 with 100-Year **Storm Severity**

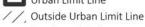
Water Depth (feet)











Creeks and Drainages

Source: San Francisco Bay Conservation and Development Commission, 2017; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Bethel Island are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. The majority of Bethel Island is planned to preserve its rural agricultural character while supporting and enhancing local tourism businesses and water-oriented recreation. Most of the area is designated Agricultural Lands, Commercial Recreation, and Resource Conservation. The commercial core of Bethel Island is located along Bethel Island Road and supports public, recreation, and residential uses. This core is envisioned to expand east along Gateway Road to allow for more retail uses, increased parking, and community events, enhancing community character and vibrancy. The perimeter of the island will continue to host most of the community's residences.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Bethel Island community members:

- 1. Bethel Island residents enjoy a relaxed, rural community located away from urban areas of San Francisco and the East Bay. The small-town, family-oriented atmosphere and quiet character should be preserved.
- 2. Local businesses, including tourism and water-oriented recreation amenities, are an asset to the community and should be supported. There should be more opportunities for new local businesses, such as a grocery store, to provide services to the community.
- **3.** To maintain a safe community, public services such as the Contra Costa County Fire Protection District and Sheriff's Office should be supported and enhanced.
- **4.** Bethel Island's topography and location within the Delta expose it to potential flooding hazards. The community should be protected from these and other hazards through proper emergency response planning and infrastructure upgrades.

POLICIES

- 1. Retain the characteristics of Bethel Island that make it a unique Delta community by limiting development to a low overall density and supporting uses that enhance the rural, relaxed, water-oriented character.
- 2. Preserve and protect agriculture, open space, wetlands, and rare plant communities found on Bethel Island.
- **3.** Encourage rehabilitation of distressed properties, including by improving aging structures and reducing vegetation overgrowth, on land and along waterways.
- **4.** To the extent permitted by State law, limit new residential development to already-approved development and one dwelling unit per legal parcel.
- **5.** Deny requests for General Plan amendments that would increase residential density unless at least the following are accomplished:
 - **a.** A financing mechanism is fully and completely assured for improvements to the entire perimeter on-island levee system.
 - b. Levee improvement plans are approved by the Bethel Island Municipal Improvement District (BIMID) and US Army Corps of Engineers.
 - c. Subsidence and impacts on wetlands are adequately mitigated.
- **6.** Prohibit levee breaches unless the entire perimeter levee is improved to US Army Corps of Engineers standards.
- 7. Require that any new internal levees meet US Army Corps of Engineers standards.
- 8. Require new construction to be set back from levee centerlines a minimum of 100 feet unless adequate substantiation for reduction of the setback is approved by Reclamation District 799 or BIMID.
- **9.** Require any new construction that is not protected by certified levees to meet FEMA flood protection standards.

POLICIES (CONTINUED)

- **10.** Support Diablo Water District's efforts to consolidate independent water mutuals on Bethel Island and extend service island-wide.
- **11.** Encourage establishment and growth of locally-serving businesses that fulfill the needs of Bethel Island residents.
- **12.** Allow temporary uses, such as food trucks, pop-up restaurants, retail shops, and recreation equipment rentals, to provide visitor-serving amenities during special events like fishing tournaments and the annual lighted boat parade.
- 13. Coordinate with the City of Oakley to implement roadway improvements that reduce traffic congestion on Bethel Island and directly connected public roads. Incorporate pedestrian, bicycle, and stormwater infrastructure improvements to improve safety and facilitate mobility throughout the island and onto the mainland.

ACTIONS

- 1. Identify suitable locations for additional park and recreation facilities, including kid-friendly amenities such as play structures, an expanded community gathering space, and a public access point to the water, potentially with a boat ramp.
- 2. Work with the California Department of Boating and Waterways to improve signage along waterways to minimize boat wakes and reduce accidents.
- 3. Work with the community to determine the feasibility of establishing a centralized parking area in the commercial core.
- **4.** Study the feasibility of providing additional evacuation options, including by boat.

Located near the eastern edge of the county, Byron is an agricultural community that prides itself on its rural roots. The area's fertile soil supported its initial settlement as a farming center. In 1878, Byron was the site of a new Southern Pacific railroad line that allowed the community to quickly expand. Early Byron attracted visitors from across the nation to the renowned Byron Hot Springs. This resort featured warm mineral pools and luxury accommodations prior to its closure just prior to World War II. In 1994, the County opened Byron Airport, providing opportunities for general aviation and recreational flight operations.

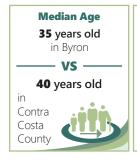






Residents enjoy the area's respite from busy city life, preferring Byron's small-town nature, though some have indicated that increased noise is an issue. Businesses in Byron are generally concentrated in the downtown along Camino Diablo, Byron Highway, and Main Street. However, business development and retention has been challenging. The County's Urban Limit Line (ULL) prohibits intense development outside of Byron's core area, preserving this land for farming and open space. Residents identify the surrounding agricultural land as a part of their community, although a lack of trail connections prevents residents from accessing potential recreational benefits. While growth is constrained by the ULL, traffic through the community to nearby cities has continued to grow, impacting local roads and safety. Key roadway projects, like State Route 239 and the Vasco Road-Byron Highway Connector, may improve connections and accommodate increased traffic throughout the area. Community members in Byron are also concerned about housing affordability and homelessness.

WHO LIVES IN BYRON?



Average Life Expectancy 78 years old in Byron VS 81 years old

Contra

Median **Household Income**

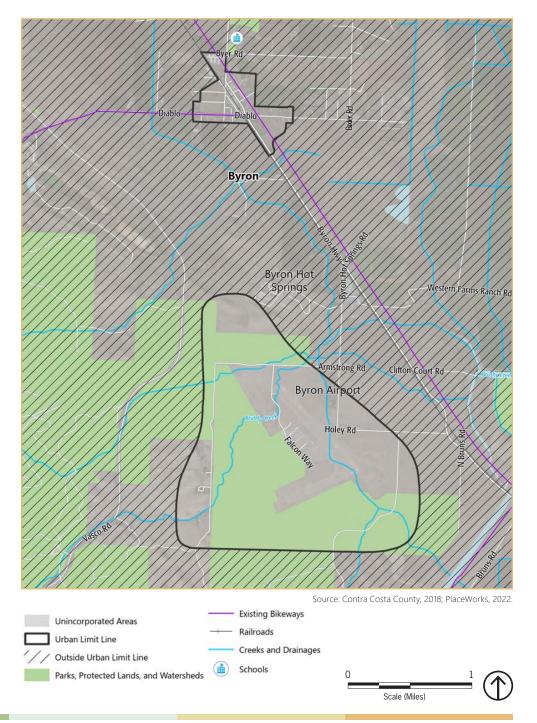
\$79,500 in Byron

\$103,997

Contra Costa County

Race & **Ethnicity**

- ▶ **62%** White
- ▶ 32% Hispanic or Latino
- ▶ 2% Black or African American
- > 2% Asian



The information on this page presents a summary of hazards and vulnerabilities in Byron based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.

HAZARDS



Agricultural pests and diseases



Air quality



Coastal flooding



Drought



Extreme heat



Flooding



Human health hazards



Severe storms

MAJOR VULNERABILITIES

Outdoor workers are vulnerable to all hazards in Byron.

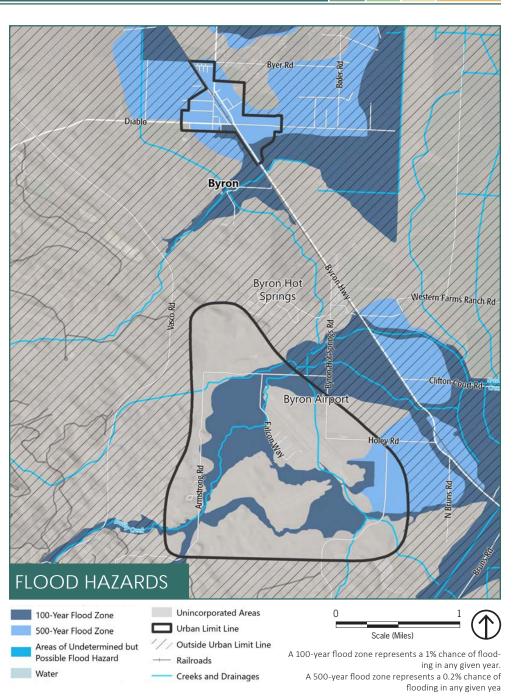
Byron Airport is vulnerable to coastal flooding, extreme heat, flooding, and severe storms.

Byron Highway is vulnerable to coastal flooding, flooding, extreme heat, and severe storms.

Agricultural operations are vulnerable to agricultural pests and diseases, coastal flooding, drought, extreme heat, flooding, and severe storms.

Water and wastewater services are vulnerable to coastal flooding, drought, and severe storms.

Energy delivery systems, such as high-voltage transmission lines, are vulnerable to extreme heat and severe storms.



Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Byron are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Most of Main Street is designated Mixed-Use Low Density to promote development of vacant and underutilized lots, ideally with residences above street-level businesses that support residents and boost local tourism. Commercial and light industrial uses are allowed between Byron Highway's intersections with Holway Drive and Camino Diablo. Around the downtown area and commercial core, but within the ULL, residential uses will continue at a varying densities, as along with public and airport-related uses around the Byron Airport to the south. Beyond the ULL, agricultural, open space, recreation, and public uses will continue, along with potential development of renewable energy facilities.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Byron community members:

- 1. Byron's rural, small-town character should be preserved, in part by supporting amenities like the post office, saloon, schools, churches, and surrounding open spaces.
- 2. Byron's downtown should be re-energized by filling empty storefronts and providing more businesses and services that make the area a center of activity again.
- **3.** Byron should attract regional tourists by fulfilling its potential as a historic, railroad, winery, and agricultural tourism destination, as well as through creative re-use of Byron Hot Springs.
- **4.** Roadways should be safe for all users, including pedestrians, bicyclists, and drivers. Sidewalks and bike lanes should be added in central Byron. Safety improvements should be made along Byron Highway, the Highway 4 Bypass, Camino Diablo, and the Byer Road/Bixler Road corner.
- **5.** Trucks should be directed around Byron to minimize safety and noise impacts to residents.
- **6.** Regional travel should be improved through projects like the Vasco Road-Byron Highway Connector.
- **7.** Housing growth should be deliberate, incremental, and supportive of the community's economic development goals.
- 8. Residents who lack housing should be treated with dignity and respect and have access to quality services. Vital, easy-to-access community programs related to homelessness, rehabilitation, education and training, youth, and elderly services should be available. Residents who are at risk of losing housing should be protected from displacement.
- 9. Redevelopment and development should align with the community's rural character.
- **10.** Byron's residents should be able to enjoy hiking, biking, and equestrian access to regional parks through a connected trail network.

POLICIES

- Encourage commercial development that supports a full range of services for residents and is tailored to Byron's small-town character, ideally celebrating the historic and agricultural roots of the community.
- 2. Encourage creative, compatible residential and commercial development on vacant parcels within Byron's existing footprint.
- 3. Support efforts to organize community events downtown.
- **4.** Maintain effective code enforcement and implement strategies to curb illegal dumping and littering.
- **5.** Encourage reuse of the previously developed portion of the Byron Hot Springs property in a way that is compatible with operations at Byron Airport, rehabilitates historic buildings, attracts regional tourists, and is not growth inducing.
- **6.** Support agriculture, including animal keeping and raising, as an important part of Byron's history and character.
- **7.** Encourage CCTA to prioritize the completion of the Vasco Road-Byron Highway Connector.
- **8.** Address traffic conflicts and safety concerns around U-Pick areas, including along Marsh Creek Road, Vasco Road, and Walnut Boulevard, with consideration given to agricultural equipment on roads.
- 9. Ensure that new development does not conflict with potential alignments for the Vasco Road-Byron Highway Connector and State Route 239 projects, as shown in Figure TR-4, Roadway Classifications, in the Transportation Element. Work with project applicants avoid placing permanent buildings and structures within the potential alignments.
- **10.** Support community-led efforts to establish a community services district to provide basic services to Byron.

ACTIONS

- 1. Work with local businesses and community groups to establish an economic development strategy for Byron that includes guidance for on-going coordination of economic development efforts in the community. As part of this process, create a unique branding identity for Byron to support agricultural tourism.
- 2. Adopt zoning regulations that provide more flexibility for downtown development, including relaxing parking requirements when street parking is available and expanding allowed uses to include light manufacturing for businesses that manufacture and sell products on-site.
- 3. Install sidewalks and bikeways with signage and crosswalks that connect downtown Byron to Byron Park and Saint Anne Church.
- 4. Install and maintain street trees in downtown Byron to support walkability and provide a more vibrant atmosphere.
- 5. Study the feasibility and need for traffic calming along Byron's major roadways.
- 6. Upon completion of the Vasco Road-Byron Highway Connector, designate a truck route to separate truck traffic from other modes of transportation, including around U-Pick agricultural areas, such as along Marsh Creek Road, Vasco Road, and Walnut Boulevard.
- 7. Work with local and regional stakeholders, such as East Bay Regional Park District, to develop a trails plan that provides local and regional trail connections for Byron, including trails that connect to local destinations like Byron Hot Springs and trails that provide regional connections to recreational and commute destinations. As part of the planning process, consider potential recreational reuse along railroad rights-of-way as well as strategies to effectively communicate trail information to the public.

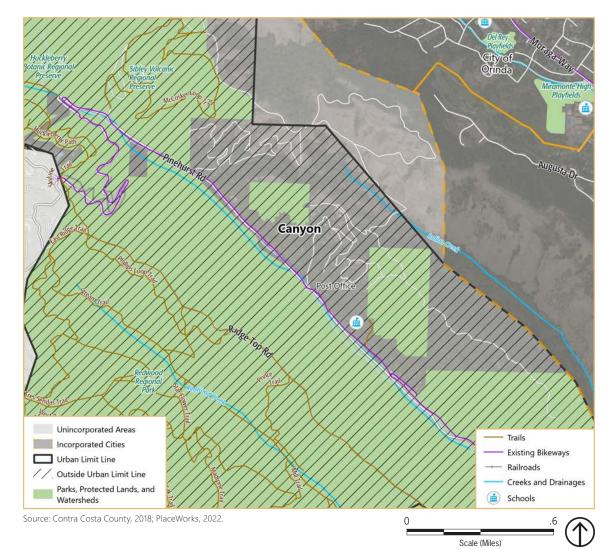
Canyon, one of the oldest communities in the East Bay, is hidden among stands of second-growth redwoods, oaks, and madrone on the eastern slopes of the Oakland/ Berkeley Hills in western Contra Costa County. The earliest known construction in the area was a logging camp built in the 1850s. At the time California became a state, there were more registered voters in Canyon than in other East Bay precincts. Several subdivisions were planned in Canyon between 1912 and 1926.

Canyon Elementary School was established in 1918, Canyon Post Office and General Store in 1922. Associations were formed to cooperatively maintain the private roads and water supplies. The Canyon Community Association was organized in 1924 as the town's governing body and provides locally elected leadership to the present day.

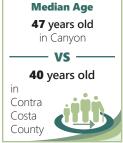
The population of Canyon rose in the 1930s and 1940s as urban families occupied their summer homes permanently. In the 1950s, East Bay Municipal Utility District (EBMUD) acquired much of the land for watershed protection and tore down many homes. The remaining homes are accessible by narrow private roads and trails. Many households are intergenerational, with strong support for older residents. Canyon School serves as a vibrant community center and continues to provide an excellent K-8 curriculum with a small-school focus on environmental education and the arts. Pinehurst Road, the only public thoroughfare in and out of Canyon, remains one of the only east-west access routes over the Oakland/Berkeley Hills.

Canyon residents maintain good relationships with EBMUD, and collaborate extensively with the Moraga-Orinda Fire Department on fire mitigation goals.

Land use in Canyon includes residential, a small number of public uses, watershed, and open space. Canyon residents value their riparian environment, with a firm commitment to the health of the local watershed and protected species.



WHO LIVES IN CANYON?



Average Life Expectancy

no data in Canyon

Contra Costa



Median Household Income

\$129,167 in Canyon

— VS — \$103,997

Contra Costa County

Race & Ethnicity

- ▶ **70%** White
- ▶ **17%** Asian
- ▶ 2% Hispanic or Latino
- ▶ **0%** Black or African American



The information on this page presents a summary of hazards and vulnerabilities in Canyon based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities.

HAZARDS



Drought



Extreme heat





Human health hazards



Landslides



Seismic hazards



Severe storms



Wildfire

MAJOR VULNERABILITIES

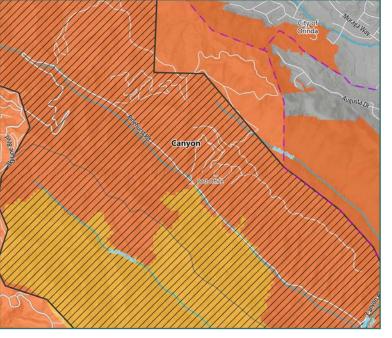
The entire community is on a single-access road (Pinehurst Road), and thus is vulnerable to landslides and wildfire. These vulnerabilities are exacerbated by limited cell phone coverage, which can inhibit emergency response and communication during a Public Safety Power Shutoff or other event that results in a loss of power to the community.

Children and seniors are vulnerable to extreme heat, human health hazards, and wildfire.

Cost-burdened households are vulnerable to drought, extreme heat, landslides, seismic hazards, severe storms, and wildfire.

Canyon Elementary School and the US Post Office are vulnerable to landslides, seismic hazards, severe storms, and wildfire.

San Leandro Creek, an aquatic habitat, is vulnerable to drought, extreme heat, and landslides.



WILDFIRE Wildfire Severity Zones Very High High Moderate Unincorporated Areas Incorporated Cities Urban Limit Line // Outside Urban Limit Line Railroads Creeks and Drainages Scale (Miles

LANDSLIDES

Landslides

Mapped landslides

Few large mapped landslides, but contains scattered small landslides and questionablyidentified larger landslides

Source: CAL FIRE, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

Areas of gentle slope at low elevation that have little or no potential for landslides

Incorporated Cities

Urban Limit Line

///, Outside Urban Limit Line

Regional Faults

Railroads

Creeks and Drainages



Source: California Geologic Survey, 2008; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Canyon are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. The community is planned for continued residential and agricultural use at existing densities, surrounded by protected watersheds and regional parkland.





GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Canyon community members:

- 1. Canyon is one of the oldest established communities in the East Bay. Its evolution has been organic and much of its growth occurred prior to current development regulations. The community's rich history, including the various phases of its development, should be understood and appreciated.
- 2. Residents identify their undeveloped surroundings as one of the most valuable assets of this area. Preservation of the natural setting, including scenic ridgelines, hillsides, creeks, trees, and wildlife habitat, should be prioritized.
- **3.** Residents enjoy informal trails through the redwood trees and value their direct access to open space. Trails and walking paths should be preserved and protected.
- **4.** Canyon's steep topography, secluded location, and singular access via Pinehurst Road expose the community to potentially severe impacts from wildfires, landslides, and earthquakes. These hazards should be mitigated through proper planning and emergency response efforts.
- **5.** Canyon's small-town character, independence, and creativity should be celebrated. The unique history of many homes, the Canyon School, and Post Office buildings should be acknowledged and cultivated for future generations.
- **6.** Canyon's community-mindedness, relative affordability, and family-friendliness should be supported.

POLICIES

- Respect legally established parcels, roads and access trails, and setbacks for homes and accessory buildings. Work collaboratively with the community to address issues specific to individual parcels, ingress/egress options, and applicability of and conformance with current development standards.
- 2. Protect the environment in Canyon by prohibiting development and land uses that disrupt its natural surroundings or negatively impact wildlife habitat.
- 3. Support new residential development that preserves and aligns with Canyon's character and history, which includes varying lot sizes and setbacks and innovative and often hand-built architecture. Respect Canyon's historical development pattern and unique natural characteristics, including its topography and dense tree cover, when processing variances and other discretionary permits.
- **4.** Support establishment of reliable community-wide internet access and telecommunication services.
- 5. Improve public roadway infrastructure in a way that balances public safety and the needs of users with the desire to maintain Canyon's rural character and privacy.

ACTIONS

- 1. Improve communication and outreach so that Canyon residents can be more engaged in decisions affecting their community.
- 2. Coordinate with the Canyon community and public safety and health agencies to create a comprehensive emergency response plan, including establishing evacuation routes and procedures and an emergency refuge, possibly at the Canyon Elementary School.

ACTIONS (CONTINUED)

- 3. Establish consistency between the General Plan and zoning in Canyon by rezoning the portion of the community designated R-20 Single-Family Residential District to A-3 Heavy Agricultural District or its successor zoning district. If possible in the future, amend the General Plan land use designation and zoning to accurately represent and respect Canyon's unique topographical characteristics and historical development pattern, including existing and historical uses, buildings, structures, lot sizes, roadways, and open spaces, while protecting public health, safety, and general welfare. This may include adoption of Planned Unit District zoning with tailored development and design regulations that reflect and facilitate existing and anticipated land uses in Canyon and support the unique, historic community's rural residential character.
- **4.** Work with the Canyon community to ensure that future development and land uses minimize impact on wildlife habitat and natural surroundings.
- **5.** Address stormwater drainage issues and illegal dumping concerns, particularly along Pinehurst Road.
- 6. Work with transit providers to expand public transportation to include Canyon.
- 7. Add Canyon to the Contra Costa Historic Resources Inventory.
- 8. Develop long-term solutions to address traffic congestion and vehicle speed on Pinehurst Road, particularly "cut-through" rush hour traffic. Maintain and enforce speed limits in school zones and improve Pinehurst Road to minimize road hazards.
- **9.** Develop turnarounds needed by emergency vehicles along Pinehurst Road and Canyon Road.
- **10.** Work with the Central Contra Costa Solid Waste Authority (RecycleSmart) to incorporate Canyon into its service area.

Clyde is located 3 miles from downtown Concord on the east side of the Port Chicago Highway, north of Highway 4. The community is entirely within the County's Urban Limit Line and the City of Concord's Sphere of Influence. Clyde is also included in the Concord General Plan, though Concord has no plans for annexation.



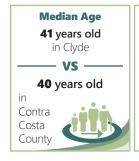




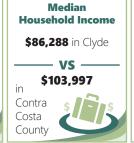
The community was founded in 1917 as a company town for the Pacific Coast Shipbuilding Company. In the waning years of World War I, worker housing was needed to support the Port Chicago shipyards a few miles to the north. Bernard Maybeck was the supervising architect; he oversaw the design of 140 of the initial homes as well as a 176-room hotel. Clyde was designed along a rectangular grid roughly two blocks wide and four blocks long, with north-south alleys between the blocks. The town was named for the River Clyde in Scotland, a place renowned for its shipyards.

Clyde's future was imperiled by the 1944 Port Chicago explosion and subsequent decline of the Port Chicago community. Following the closure of the shipyards, Clyde became a residential enclave surrounded by industrial and military uses. While these uses isolated Clyde from Concord and Bay Point, they also contributed to its strong sense of identity. The community added about 70 homes during the 1990s in the Clyde Commons subdivision, but otherwise has remained static. There are a few small parks, a community center, and roughly 370 homes. County Service Area M-16 maintains Clyde's parks, recreation areas, and landscaping.

WHO LIVES IN CLYDE?







Race & Ethnicity > 37% White > 31% Hispanic or Latino > 16% Black or African American > 11% Asian

Parks. Protected Lands, and

Watersheds



Scale (Miles

The information on this page presents a summary of hazards and vulnerabilities in Clyde based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.

HAZARDS

- Air quality
- Coastal flooding
- Drought
- Extreme heat
- Flooding
- Muman health hazards
- Severe storms
- Sea level rise
- Wildfire

MAJOR VULNERABILITIES

The entire community is on a single-access road, and thus is vulnerable to coastal flooding, flooding, severe storms, and wildfire.

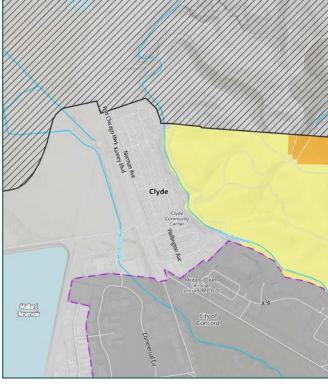
Persons with chronic illnesses are vulnerable to poor air quality, extreme heat, and human health hazards such as potentially contaminated soil.

Cost-burdened households and low-income households are vulnerable to all hazards in the community.

Public safety and emergency medical response are vulnerable to coastal flooding, flooding, severe storms, and wildfire.

Water and wastewater services are vulnerable to coastal flooding, drought, flooding, and sea level rise.





FLOOD ZONES

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.



A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year



WILDFIRE

Source: CAL FIRE, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

Wildfire Severity Zones

Very High

High Moderate

Unincorporated Areas

Incorporated Cities
Urban Limit Line

// Outside Urban Limit Line

Creeks and Drainages



IMPACTED COMMUNITY

The County has identified Clyde as an Impacted Community under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages in these communities.

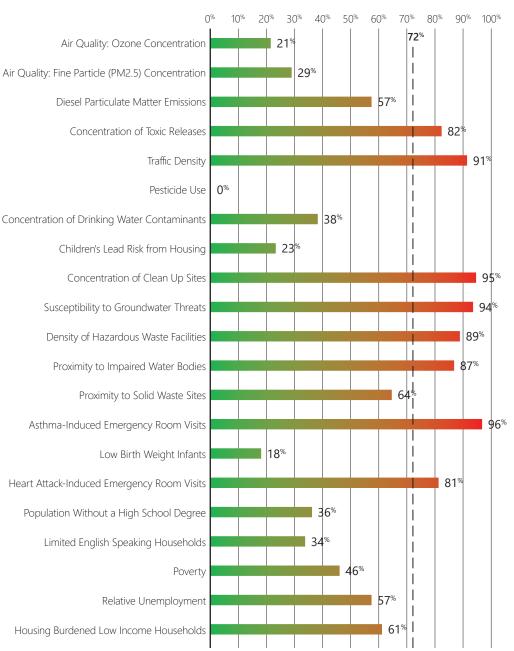
The 21 indicators that contribute to Clyde's identification as an Impacted Community are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how the Census tract encompassing Clyde ranks for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher.

Clyde has been close to heavy industrial land uses since its founding. Chemical pollutants from these industries have contaminated the surrounding soil and water, and there is a high concentration of clean-up sites near the community. The community also has high rates of asthma-related hospital visits compared to the rest of the state; this is often associated with proximity to heavy industry and traffic.

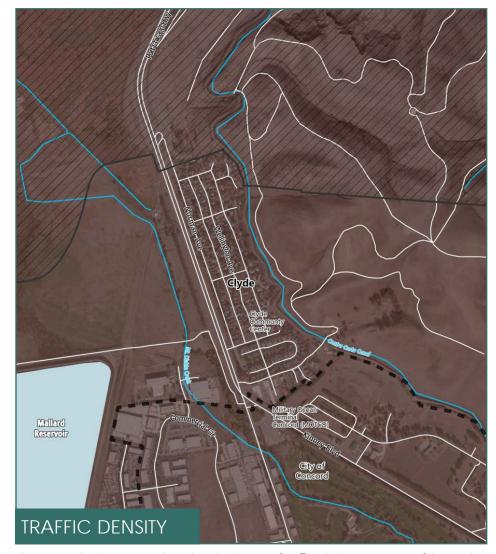
Major industrial facilities near Clyde include the Marathon Refinery, Contra Costa Hazardous Materials disposal facility, and Military Ocean Terminal – Concord (MOTCO). Residents have raised concerns about foul odors coming from the refinery along with poor air quality caused by heavy industrial land uses. Also among the top concerns for residents are the lack of affordable housing in the area and the resulting increase in homelessness, lack of access to nearby open space, and poor drainage near Port Chicago, resulting in standing water and associated health risks, including mosquitos.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in Clyde Relative to the State



Scale (Miles)



This map ranks Census tracts based on the density of traffic, which is a measure of the number of vehicles on the roads in an area. Traffic density is associated with poor air quality. Parts of Clyde are ranked at 91 percent, meaning that the area has a traffic density that is worse than 91 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.



This map ranks Census tracts based on the concentration of hazardous waste facilities and generators, considering each facility's type and permit status and generator activities. Parts of Clyde are ranked at 89 percent, meaning that the area has a concentration of hazardous waste facilities and generators that is worse than 89 percent of the state.



PLANNED LAND USE

Land use designations for Clyde are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element This community is primarily residential, with a handful of light industrial parcels at its southern edge. Most of the community is planned for continued residential use at a density consistent with existing development. A greenway and Port Chicago Highway separate Clyde from light industrial lands immediately to the west. A wide area designated for resource conservation provides additional buffer from heavy industrial uses farther west; this buffer is intended to remain undeveloped. Directly east of Clyde are the Contra Costa Canal and large parcels owned by the United States government and private landowners. These lands, characterized primarily by undeveloped rolling hills, are planned to remain in public and agricultural use.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Clyde community members:

- Clyde is a quiet and cohesive community. Its small-town community-mindedness, relative affordability, and family-friendly amenities should be preserved and supported.
- 2. Residents enjoy Clyde's central location within Contra Costa County and the Bay Area. Quality access to local and regional destinations via multiple transportation modes and major highways should be maintained and enhanced.
- **3.** The rolling hills adjacent to Clyde provide an inviting natural backdrop to the community and should be maintained in a generally undeveloped state.
- **4.** Clyde residents should be safe and healthy while living adjacent to heavy industry and MOTCO. Risks from industrial or military accidents and exposure to air pollutants and odors should be monitored and mitigated.

POLICIES

- **1.** Prioritize the health and safety of Clyde residents living adjacent to heavy industry and MOTCO.
- 2. Expand access to local and regional parks and recreational facilities, such as the Delta de Anza Regional Trail and Thurgood Marshall Regional Park.
- 3. Require new residential development to be compatible with existing architecture to the extent possible, and to plant trees while preserving views of the bay and other natural landscapes.

ACTIONS

- 1. Establish a comprehensive, long-term strategy that coordinates efforts from various regulatory agencies to mitigate the impacts of surrounding uses on the community, both acute and long-term.
- 2. Improve pedestrian and community safety, including closing sidewalk gaps and incorporating better lighting.
- 3. Coordinate with East Bay Regional Park District and Contra Costa Water District to enhance Clyde's bicycle and pedestrian connections to local and regional trails and open spaces. This may include a bikeway along Port Chicago Highway connecting to the countywide bicycle network or a bicycle and pedestrian path along the Contra Costa Canal that provides a future connection to Thurgood Marshall Regional Park.
- 4. Work to improve maintenance of County parks in the vicinity of Clyde.
- **5.** Encourage tree planting and beautification projects.

CONTRA COSTA CENTRE - CONTEXT - 1

Situated between Pleasant Hill, Walnut Creek, and Concord, and divided among the Spheres of Influence of each, Contra Costa Centre is a bustling transit center adjacent to the Pleasant Hill/ Contra Costa Centre BART station. The community has a diverse mix of land uses ranging from low-density single-family homes to very high-density multi-family homes and BART-oriented mixed-use. The community's vision is to be a cutting edge, mixed-use neighborhood that serves all types of households and provides convenient services, safe outdoor public spaces, and multiple transportation choices. In particular, residents support more transit-oriented infill development that is concentrated and sustainable, addressing the growing need for regional transit. The community enjoys living within walking distance of restaurants and outdoor gathering spaces and parks, and would like its walkable, mixed-use character to be enhanced.



The Iron Horse Trail runs north-south through Contra Costa Centre and provides opportunities for high-quality outdoor recreation. Residents use this trail for a variety of trips ranging from active commutes to family outings. Connecting parks, schools, and transit with a network of trails is a high priority for Contra Costa Centre residents. Traffic safety is also a primary concern. Residents support changing the streetscape to slow traffic while enhancing transportation options.

WHO LIVES IN CONTRA COSTA CENTRE?



Average Life Expectancy **85** years old in Contra Costa Centre

81 years old Contra

Median **Household Income** \$114,929 in

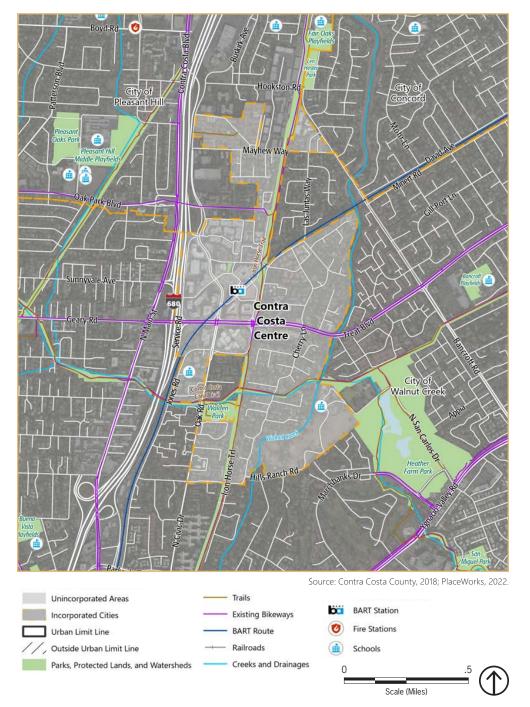
Contra Costa Centre

VS \$103,997

Contra Costa County

Race & **Ethnicity**

- ▶ **64%** White
- ▶ **19%** Asian
- ▶ 11% Hispanic or Latino
- ▶ 1% Black or African American



CONTRA COSTA CENTRE - CONTEXT - 2

Hazards



Air quality



Drought



Extreme heat



Flooding



Human health hazards



Seismic hazards



Severe storms



Wildfire

Major Vulnerabilities

Seniors, including those living alone, and children are vulnerable to poor air quality, extreme heat, human health hazards, and wildfire.

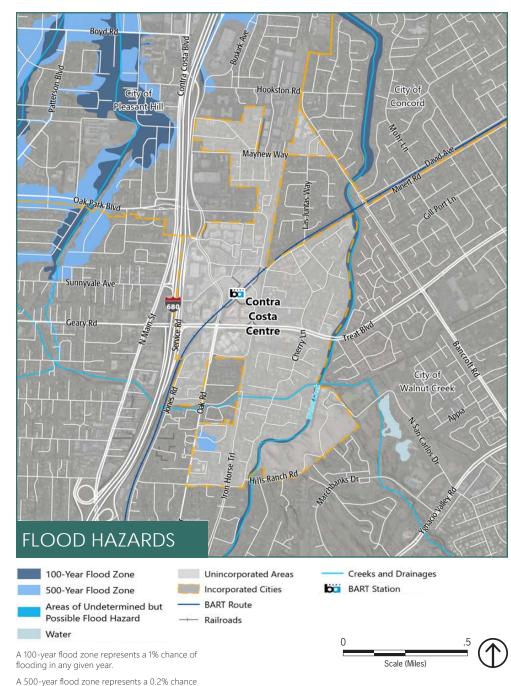
Low-income persons, renters, and cost-burdened households are vulnerable to drought, extreme heat, flooding, seismic hazards, severe storms, and wildfire.

Interstate 680, Treat Boulevard, N. Civic Drive, and Cherry Lane are vulnerable to seismic hazards and fallen trees from severe storms.

Seven Hills School and medical centers in the community are vulnerable to flooding, seismic hazards, severe storms, and wildfire.

Safety and medical responses and public transit access are vulnerable to flooding, seismic hazards, severe storms, and wildfire.

The information on this page presents a summary of hazards and vulnerabilities in Contra Costa Centre based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.



of flooding in any given year.

PLANNED LAND USE

Land use designations for Contra Costa Centre are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Contra Costa Centre aims to be a model for mixed-use, transit-oriented neighborhoods, while maintaining and enhancing its identity as a safe, family-friendly, walkable community. The new and expanded Mixed-Use High Density designation provides more opportunities for innovative infill development and further improves connectivity to BART and nearby trails. Residential uses will continue at varying densities beyond the mixed-use area.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Contra Costa Centre community members:

- 1. Residents of Contra Costa Centre enjoy convenient access to public transit through the BART Station and numerous bus routes. This access to public transit provides an easy alternative to automobile travel and access to the rest of the Bay Area from within their own neighborhood.
- 2. Residents also enjoy convenient access to outdoor recreation, including the Iron Horse Trail and Contra Costa Canal Trail. Access to outdoor recreation should be preserved, and connections to surrounding parks and open spaces should be expanded.
- 3. Contra Costa Centre's mixed land uses provide opportunities to live, work, and shop within the community. This mixed-use environment should be maintained in future development.
- 4. The family-friendly atmosphere should be preserved.
- **5.** Major roads and freeways, such as Treat Boulevard, Oak Road, and Interstate 680, pass through and are adjacent to Contra Costa Centre. Traffic safety and roadway enhancements should be prioritized.
- **6.** Walkability in Contra Costa Centre is unique in the unincorporated county. This asset should be preserved and enhanced with future development.

POLICIES

- 1. Expand and improve bicycle network connectivity to increase safety and access to public transit and minimize collisions with automobiles.
- 2. Prioritize local-serving retail and community-focused land uses, such as restaurants and farmers' markets.
- **3.** Encourage installation of facilities that support sustainability, such as zero-emission vehicle charging and fueling infrastructure, bike repair stations, and other green amenities.
- **4.** Encourage open spaces within higher-density areas, such as rooftop gardens, outside gathering spaces near office buildings, outdoor dining areas, and pedestrian-focused amenities.
- 5. Increase the concentration of high-intensity employment uses and affordable housing in the area to better utilize the regional transit accessibility provided by BART.
- **6.** Promote a station area appearance that projects a positive image and has high regional and local identity.

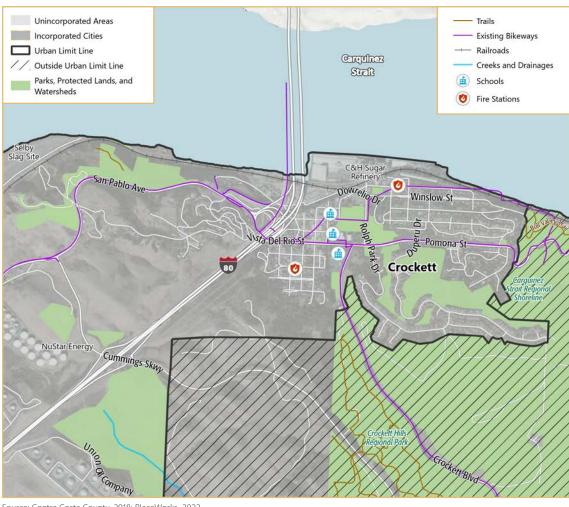
ACTIONS

- 1. Evaluate traffic signal operations at the intersection of Las Juntas Road and Oak Road and correct any deficiencies.
- 2. Update the Pleasant Hill BART/Contra Costa Centre Specific Plan and consider expanding the Specific Plan area to include all land within one-half mile of the BART property.

Crockett is located on the south side of the Carguinez Bridge, at the mouth of the Carquinez Strait. The town has a colorful history and eclectic character. It is best known as the home of the C&H Sugar Refinery, which has been in operation since 1906. Crockett was a "company town" during the refinery's boom years in the early and mid-1900s. Today, the town is home to about 3,000 residents. Its picturesque waterfront setting and relative affordability have attracted a large population of artists. Crockett is home to museums, two regional parks, a middle school and high school, and a historic downtown business district. In hillside residential neighborhoods, quaint homes on small lots boast sweeping views of the strait. The community is also close to and affected by heavy industrial uses west of Interstate 80, including the Phillips 66 Refinery and NuStar Energy storage facility.

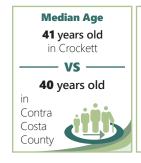
While nearby communities like Vallejo and Martinez experienced substantial growth during the late 1900s, Crockett remained isolated. More than half of the community's housing stock was built before 1940. Recent improvements to Interstate 80 and the Carquinez Bridge have made Crockett more accessible, and the town's historic charm is attracting a growing number of visitors and new residents. Committed, civic-minded residents are involved in various local organizations like the Crockett Community Foundation, strengthening this tight-knit community. Crockett seeks to preserve its relative affordability, diversity, and history while attracting new investment, sustaining a more vibrant downtown business district and connecting to its waterfront. Residents also seek to address long-standing concerns about hazards and toxins, ensuring a safe future and healthy environment for all.





Source: Contra Costa County, 2018; PlaceWorks, 2022.

WHO LIVES IN CROCKETT?



Average Life Expectancy 78 years old in Crockett

81 years old Contra

Median **Household Income**

\$73.296 in Crockett

\$103,997

Contra Costa County

- ▶ **71%** White
- ▶ 19% Hispanic or Latino

Race &

Ethnicity

- ▶ 5% Black or African American
- ► 3% Asian

(Community-submitted photo.)





CROCKETT - CONTEXT - 2

The information on this page presents a summary of hazards and vulnerabilities in Crockett based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities.

HAZARDS

Coastal flooding



Extreme heat



Human health hazards



Landslides and debris flows



Sea level rise



Seismic hazards



Wildfire

MAJOR VULNERABILITIES

People and facilities throughout Crockett face significant risks of wildfire, including threats of injury, property loss, and high air pollution from smoke.

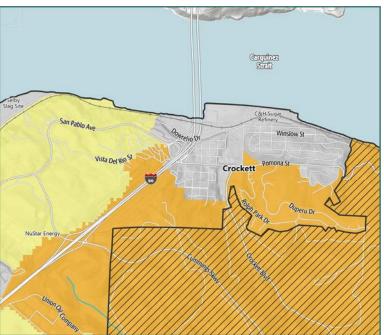
Cost-burdened households and households in poverty are vulnerable to landslide and debris flows.

Households in poverty are among the most vulnerable to seismic hazards.

Crockett Library is vulnerable to coastal flooding and sea level rise by 2100.

Crockett Cogen powerplant is vulnerable to sea level rise, landslides, and debris flows.

C&H Sugar Factory and commercial buildings are vulnerable to sea level rise.





WILDFIRE

Wildfire Severity Zones

Very High

High

Moderate

Unincorporated Areas

Urban Limit Line

// Outside Urban Limit Line

Railroads

Creeks and Drainages



Source: CalFire, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

SEA LEVEL RISE

Sea Level Rise 2050 with 100-Year Storm Severity

Water Depth (feet)

0-2

6-8

8-10

10-12 12+

Unincorporated Areas

Urban Limit Line

//, Outside Urban Limit Line

Source: San Francisco Bay Conservation and Development Commission, 2017; Contra Costa County, 2018; PlaceWorks, 2022.

IMPACTED COMMUNITY

The County has identified Crockett as an Impacted Community under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment, with the result that today they are struggling with both a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages.

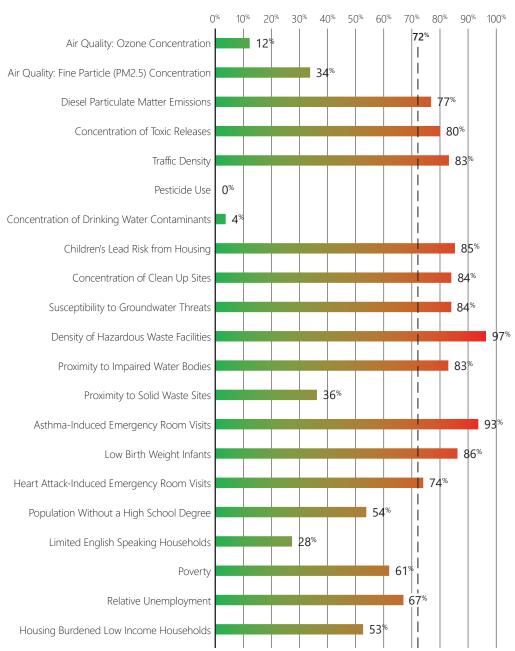
The 21 indicators that contribute to Crockett's identification as an Impacted Community are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how Crockett ranks for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher. While there are multiple Census tracts that make up Crockett, this chart presents only the most-impacted Census tract in the community.

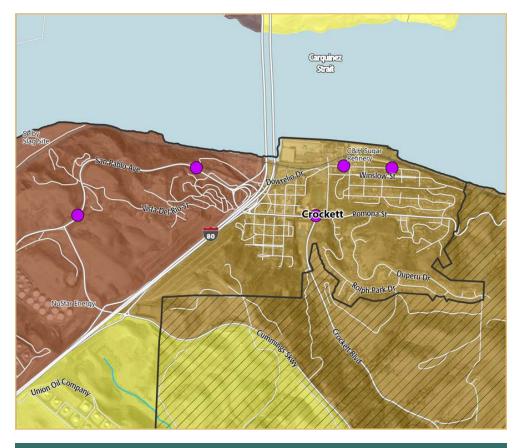
Some of the factors that contribute to Crockett's identification as an Impacted Community relate to its industrial roots – past and present. The Selby Smelting and Lead Company, operated as a metal smelting and refining plant into the 1970s, polluted land and accompanying groundwater with slag that contains arsenic, lead, cadmium, and other compounds. Remedial efforts in previous decades protected residents from direct site exposure but did not fully prevent slag from leaching into San Pablo Bay. Full remediation plans, overseen by the California Department of Toxic Substances Control, are underway to protect groundwater, preserve aquatic habitats, and prevent human exposure to these toxic substances.

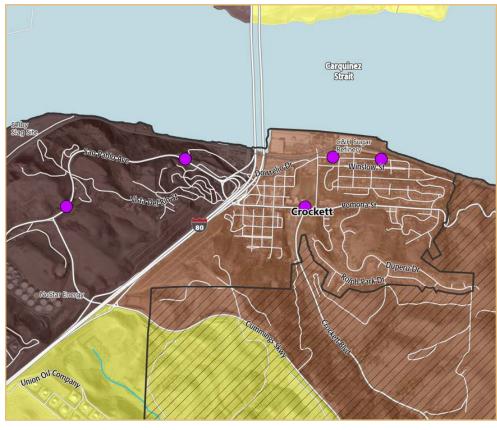
Near the Selby site, NuStar Energy leases land previously owned by the Wickland Oil Company, where petroleum products were released through the 1980s. The site currently stores petroleum products from nearby refineries before transfer to gas stations and other consumers. Fires at the storage facility in 2019 required Crockett residents to "shelter in place" and put the community at risk of evacuation and toxic airborne particulates.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in Crockett Relative to the State







CLEAN UP SITES

Generators of Hazardous Waste

Census Tract Ranking

> 90 to 100%

> 80 to 90%

> 70 to 80%

> 60 to 70%

> 50 to 60%

Urban Limit Line

Railroads

Creeks and Drainages

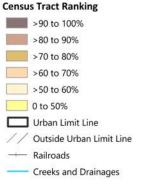
This map ranks Census tracts based on the concentration of clean up sites, which are sites undergoing clean up actions by governmental authorities or property owners due to environmental degradation from hazardous substances (e.g., the Selby slag site). The ranking also considers the nature and magnitude of the threat and the site type and status. Parts of Crockett are ranked at 84 percent, meaning that the area has a concentration of clean up sites that is higher than 84 percent of the state.

Scale (Miles)

Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022

HAZARDOUS WASTE

Generators of Hazardous Waste



This map ranks Census tracts based on the density of hazardous waste facilities and generators (e.g., the Phillips 66 Refinery and NuStar Energy), considering each facility's type and permit status and generator activities. Parts of Crockett are ranked at 97 percent, meaning that the area has a density of hazardous waste facilities and generators that is higher than 97 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Crockett are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. The heart of Crockett is the downtown business district along and north of Pomona Street. This area wraps around John Swett High School and connects to a secondary business district extending east along Loring Avenue facing the waterfront. These areas are designated Mixed-Use Community-Specific Density in recognition of the historic mix of ground floor commercial uses, upper story apartments, and small multiple-family residential, office, and civic buildings. Residential neighborhoods are planned for densities ranging from 3 to 60 units per net acre, which is consistent with the existing development pattern. Density is highest adjacent to the mixed-use areas and decreases as distance from downtown and elevation increase. New development is planned to follow this development pattern. Areas around the base of the Carquinez Bridge are designated Light Industry and Commercial Recreation in recognition of existing uses and to revitalize the marina area and improve access to the waterfront.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Crockett community members:

- 1. Crockett should be a resilient community, with residents who are informed and well-prepared for emergencies, and property that is safe from sea-level rise impacts, wildfire hazards, and the acute and long-term risks of nearby industrial uses.
- The rich history, heritage, creativity, and quirkiness of Crockett and its residents should be celebrated, cultivated, and leveraged to improve the community's economic wellbeing.
- New development should preserve Crockett's character, which includes small lots, varying setbacks, and quaint architecture. Zoning regulations should reflect realworld conditions.
- **4.** Downtown Crockett should return to its role as a bustling and self-sustaining town center by infusing it with historic building renovations, new independent businesses, restaurants, and pedestrian improvements.
- **5.** Crockett residents should have access to a variety of transportation modes that provide convenient connections to the areas where they need to travel.
- 6. Crockett should remain a relatively affordable place to find a home and a community with residents of all incomes and ages.
- 7. Public facilities and amenities in Crockett, including regional parkland, local parks and open spaces, schools, and the Crockett Community Center, should be preserved and enhanced. Open spaces should be inviting, clear of trash and debris, support community health and wellness, and serve as classrooms for outdoor education.
- 8. Crockett residents should enjoy convenient access to the shoreline and nearby open space.
- 9. Crockett's artists should be celebrated and sustained.
- 10. Parking issues in the community should be proactively addressed and managed.

POLICIES

- 1. In mixed-use areas, support development of a thriving and diverse local economy with neighborhood-scale businesses to serve the daily needs of the community while promoting new residential development.
- 2. Respect Crockett's historic context and maintain its unique character while removing barriers to economic vitality, making the housing stock more resilient and sustainable, and creating new and diverse housing opportunities.
- **3.** Coordinate with the C&H Sugar Refinery to ensure that plans for future use of its properties are consistent with the community's vision for long-term growth.
- **4.** Support community beautification and safety through graffiti removal, litter reduction, street and sidewalk maintenance, abatement of illegal dumping, and effective code enforcement.
- 5. Encourage Caltrans to beautify and maintain their rights-of-way in Crockett, particularly along pedestrian pathways.
- **6.** Encourage preservation, sensitive rehabilitation, and adaptive reuse of older buildings, particularly those identified as local historic places, and recognize Crockett's authentic character, walkable scale, and inventory of historic buildings as assets and amenities to attract businesses, visitors, and investment to the community.
- 7. Acknowledge that Crockett's historic development pattern may preclude compliance with various zoning regulations, such as setback and off-street parking requirements, and enforce such regulations accordingly.
- 8. Support efforts to elevate Crockett's role in the Bay Area as a regional hub for arts and culture, and strongly encourage galleries, artists housing, performance space, special events, and other activities that support the arts as an important part of local identity.
- **9.** Maintain public views of Carquinez Strait, San Pablo Bay, and other defining natural elements of the local landscape to the greatest extent possible. Encourage new construction that enriches scenic quality of the community.
- **10.** Protect and preserve the scenic quality of the Carquinez Strait, and encourage access for fishing, boating, hiking, cycling, and other recreational activities.

POLICIES (CONTINUED)

- **11.** Support long-term preservation of hillsides, ridgelines, and canyons around Crockett, which are essential to the community's scenic beauty and character and serve as green infrastructure that supports stormwater management, water quality, and climate change strategies. Prohibit extreme topographic modification, such as filling in canyons and removing hilltops.
- **12.** Partner with East Bay Regional Park District (EBRPD) and other large landowners to improve non-motorized trails in the Crockett area, including a potential bike trail to Port Costa, and provide better access for hikers from Crockett to the Bull Valley Staging Area and Carquinez Strait Regional Shoreline Park.

ACTIONS

- 1. Assist a community-led process to develop design guidelines for Crockett that complement the County's Objective Design and Development Standards and are tailored to the unique setting, historic fabric, lot patterns, design character, and mix of uses in the community.
- 2. Update the Historic Resources Inventory to include Crockett's historically significant buildings and sites. Include information on nearby legacy communities such as Selby and Tormey.
- 3. Work with the community to develop an economic development strategy aimed at attracting retail, restaurants, grocers, services, and locally-owned and independent businesses.
- **4.** Work with the State Lands Commission, EBRPD, and Union Pacific Railroad to improve waterfront access, including lateral access along the shoreline itself, provide new amenities along the shoreline, improve pedestrian and bicycle crossings of the railroad, and encourage water-oriented business and commercial activities that enhance Crockett's identity as a waterfront community.

CROCKETT - GUIDANCE - 7



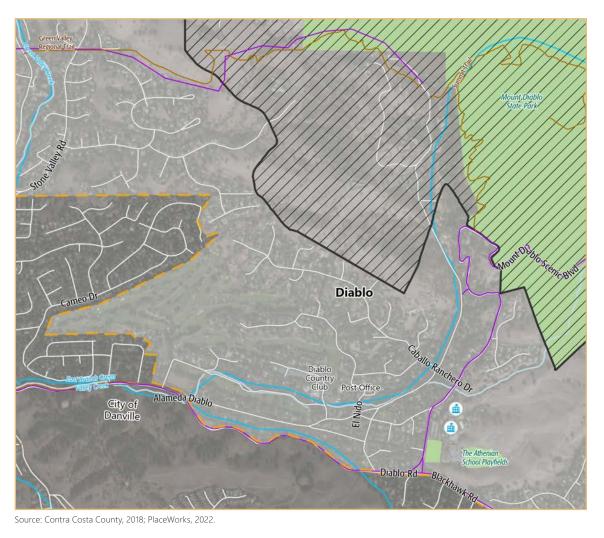
- 5. Work with the community to develop a communitywide parking management plan that addresses downtown parking and residential street parking.
- 6. Close sidewalk gaps throughout downtown and around schools.
- 7. Maintain truck routes to limit industrial traffic on Crockett streets and enable safer, more efficient road operations.
- 8. Work with the West Contra Costa Transit Authority, Caltrans, and Amtrak to improve transit connections between Crockett and other communities, potentially including a rail stop on the Amtrak/Capitol Corridor.
- 9. Study the feasibility of providing bicycle lanes between Crockett and Rodeo.

Diablo is located on the western slopes of Mount Diablo, east of Alamo and northeast of Danville. It has long been considered one of the county's most desirable residential communities and is known for its elegant homes, large lots, stately oak trees, and the historic Diablo Country Club. In 2024, the average home price in Diablo was \$3.18 million, making it among the most expensive ZIP codes in the United States and the East Bay.

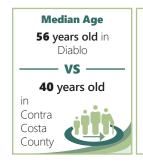
Diablo began as the Oakwood Park Stock Farm, a ranch owned by California's "Big Four" (Leland Stanford, Charles Crocker, Mark Hopkins, and Collis P. Huntington, with a fifth partner, David Colton, who built the Central Pacific Railroad) in the late 1800s. Robert Noble Burgess purchased the property in 1912 from David Colton and transformed the Farm into a family-oriented, parklike community of summer homes. The country club dates to 1914, and about 60 of the early homes in the community are included on the county's historic resources inventory. Diablo post office was established in 1916 and remains a crossroads of community life. Today there are about 400 homes in Diablo, representing a variety of architectural styles.

Community spirit is bolstered by several civic organizations. Local affairs are managed by the Diablo Property Owners Association, the Diablo Municipal Advisory Council (DMAC), and the Diablo Community Services District (DCSD). The DCSD was formed in 1969 to provide security services and to maintain roads, bridges, drainage facilities, and equestrian paths. Diablo is strongly committed to retaining its autonomy and preserving the characteristics that make it a special place today.





WHO LIVES IN DIABLO?







Race & **Ethnicity** ▶ **93%** White ▶ 5% Asian ▶ 0% Black or African American ▶ 0% Hispanic or

Latino





(Community-submitted photo.)



HAZARDS

*

Drought



Extreme heat



Flooding



Human health hazards



Seismic hazards

Landslides and debris flows



Severe storms



Wildfire

MAJOR VULNERABILITIES

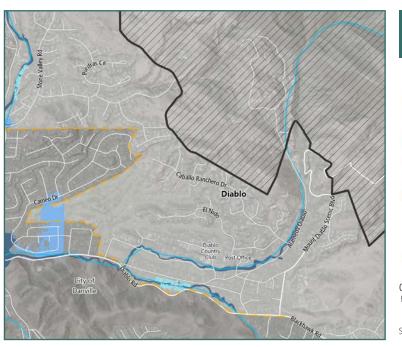
Seniors, especially seniors living alone, and cost-burdened households are vulnerable to poor air quality, extreme heat, flooding, landslides, seismic hazards, and wildfire.

Persons without access to lifelines and persons living on single-access roads are vulnerable to wildfire, landslides, and flooding.

Energy delivery, solid waste removal, and water and wastewater services are vulnerable to landslides, flooding, seismic hazards, and wildfire.

Woodland and riparian woodland areas are vulnerable to agricultural pests and diseases, drought, and wildfire.

The information on this page presents a summary of hazards and vulnerabilities in Diablo based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.



FLOOD ZONES

Flood Hazard Areas

100-

100-Year Flood Zone

500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Possit

Water

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

Railroads

Creeks and Drainages

___.5

A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

Predias Cr Cameo Dr Diablo Ranchero Dr Diab

WILDFIRE

Wildfire Severity Zones

Very High

High Moderate

Unincorporated Areas

Incorporated Cities

Urban Limit Line

/// Outside Urban Limit Line

--- Railroads

Creeks and Drainages



Source: CAL FIRE, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Diablo are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Diablo is planned to preserve its rural character with continued residential use at densities consistent with existing development. The large area designated Commercial Recreation supports continued operation of the Diablo Country Club, while the area designated Public and Semi-Public supports the Athenian School. The County's Urban Limit Line, along with Agricultural Lands, Parks and Recreation, and Resource Conservation land use designations protect lands under the County's jurisdiction on the north and east sides of the community.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Diablo community members:

- 1. Diablo's rural, harmonious feel, where people know and care about each other, should be preserved.
- 2. Diablo's unique charm, historic character, and safe and quiet ambiance should be preserved.
- 3. Diablo's primarily low-density residential development pattern should be maintained.
- **4.** The local post office serves as a community meeting place, and should be supported in that role.
- 5. Public safety and low levels of crime should be maintained.

POLICIES

- 1. Support efforts to maintain Diablo's mature trees, natural setting, and limited sidewalks and streetlights, all of which add to its rural character.
- 2. Coordinate with the community to increase opportunities for input into planning processes and projects, especially related to historic designations and regulations.
- 3. Discourage land uses that detract from Diablo's low-density residential character, such as large commercial and high-density residential projects.
- **4.** Support efforts to improve wildfire safety through management of the Wildland-Urban Interface around Diablo.

ACTIONS

- 1. Work with the Town of Danville to address issues with traffic and speeding along Diablo Road.
- 2. Coordinate with local agencies to establish a plan for responding to natural disasters, especially wildfires and earthquakes, that may include a shelter-in-place plan for the community.

Discovery Bay is a relatively new community in eastern Contra Costa County, created as a planned community in 1964 on agricultural land previously known as the "Byron Tract." The original development was envisioned as a recreational community, with a network of excavated bays and residential lots connected to Delta waterways. In the 1990s the County approved "Discovery Bay West," a 2,000-home project built around a new elementary school and four artificial lakes. Newer subdivisions have further expanded the community. Today, Discovery Bay has grown into a full-service town with a community services district (CSD) that coordinates water, sewer, and recreation services. The CSD also fulfills the role of a municipal advisory council and advises the County on planning, infrastructure, public safety, and other policy matters.



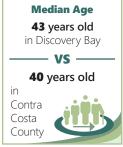




Residents enjoy many outdoor amenities in their small community, including the golf course at the Discovery Bay Country Club, Discovery Bay Marina, several parks, and surrounding agricultural and open space land. Discovery Bay is primarily comprised of residential land uses along the bays, with pockets of commercial and office spaces that fulfill some daily service needs. Commercial uses include a shopping center at the corner of Highway 4 and Bixler Road that is anchored with a major grocery store. However, it has been difficult to attract commercial and office development to the community and some commercially zoned properties in town remain vacant. Residents cite their isolation from other cities as a challenge for access to employment and education opportunities. Residents are interested in improving pedestrian and bicycle safety along routes to schools and would like a high school to be established in Discovery Bay.

The network of bays that provides recreational and aesthetic benefits also hinders emergency access. Residents are concerned with ingress and egress in the event of a disaster. Furthermore, the community's close proximity to the water increases the risk of inundation from sealevel rise.

WHO LIVES IN DISCOVERY BAY?



Average Life Expectancy 81 years old in Discovery Bay

81 years old

Contra Costa County



Median Household Income

\$133,191 in Discovery Bay

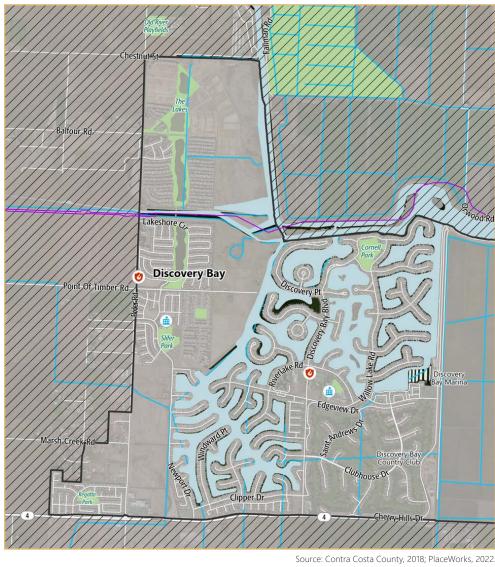
— VS — \$103,997

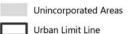
Contra Costa County



Race & Ethnicity

- ► **68%** White
- ► 17% Hispanic or Latino
- ► 6% Asian
- ► **5%** Black or African American





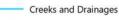
/ Outside Urban Limit Line

Parks, Protected Lands, and Watersheds

Source. Contra Costa County, 2016, Flat



Existing Bikeways











The information on this page presents a summary of hazards and vulnerabilities in Discovery Bay based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities.

HAZARDS

Coastal flooding





Extreme heat



Flooding



Human health hazards



Seismic hazards (liquefaction)



Sea level rise



Severe storms

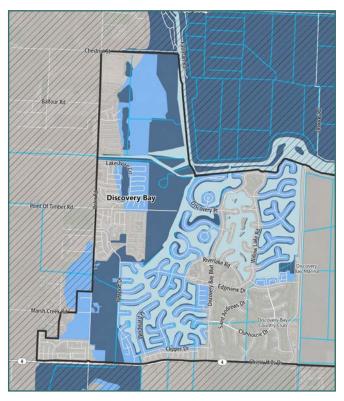
MAJOR VULNERABILITIES

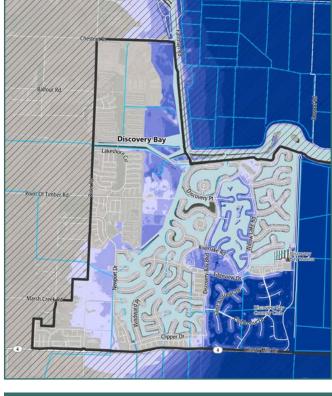
Costburdened households, households in poverty, and persons with chronic illnesses are vulnerable to coastal flooding.

Households in poverty, costburdened households, and lowincome households are vulnerable to sea level rise.

Persons living on single-access roads are vulnerable to coastal flooding, seismic hazards, and severe storms.

Discovery Bay Elementary School, All God's Children Christian School, and Timber Point Elementary School are vulnerable to coastal flooding either now or under future sea level rise scenarios.





FLOOD ZONES

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.



A 100-year flood zone represents a 1% chance of flooding in any given year. A 500-year flood zone represents a 0.2% chance of flooding in any given year.

SEA LEVEL RISE

Source: Adapting to Rising Tides, 2017 and 2019; Contra Costa County, 2018; PlaceWorks, 2022

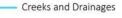
















PLANNED LAND USE

Land use designations for Discovery Bay are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Discovery Bay has been planned to maintain the existing pattern of residential land uses along the bays, with pockets of commercial uses along Discovery Bay Boulevard and Highway 4. While the former Cecchini property is designated Agricultural Lands, it is inside the County's Urban Limit Line (ULL) and may be redesignated to allow urban uses in the future. The area designated Mixed-Use Community-Specific Density at Discovery Bay Boulevard above Sand Point Road/Willow Lake Road is intended to facilitate creation of a town center and encourage development of a variety of uses that would complement and energize existing commercial areas.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Discovery Bay community members:

- 1. Discovery Bay's character and history are tied to the waterfront. The community's unique access to water and opportunities for boating and other water recreation activities should be maintained and encouraged.
- 2. Discovery Bay residents want a thriving community operating at its full potential. Developing vacant and unmaintained properties should be a priority.
- 3. The farmland surrounding Discovery Bay acts as a community buffer and should be maintained.
- **4.** Residents of Discovery Bay want resilient, reliable infrastructure to safeguard their community. They should be protected from inundation due to dam and levee failures.
- **5.** Parents want their children to attend all grade levels at local schools. Discovery Bay needs a local high school.

POLICIES

- 1. In mixed-use areas, support development and retention of new commercial uses and local-serving businesses to meet the daily needs of the community while promoting new residential development.
- 2. Coordinate with East Bay Regional Park District to enhance access and connections to regional parks and open space.
- 3. Encourage development of job-generating uses.
- **4.** Require development of the southern portion of the former Cecchini Ranch property to include a fire station, sports fields, and substantial acreage set aside as light industrial/flex space to accommodate job-generating uses.
- **5.** Support development of a senior housing project in the vicinity of Point of Timber Road.

ACTIONS

- 1. Study the feasibility of adding another access road into the community to improve safety and disaster response.
- 2. Support implementation of a Safe Routes to School Program and provide adequate pedestrian and bicycle infrastructure to all Discovery Bay schools and Excelsior Middle School.
- **3.** Work with the Town of Discovery Bay CSD to determine the feasibility of providing bathrooms at Slifer Park.
- **4.** Move the approximately 520.7-acre northern portion of the former Cecchini Ranch, which is under an agricultural conservation easement, outside the ULL.

EAST RICHMOND HEIGHTS - CONTEXT - 1

Situated in the Berkeley Hills near El Cerrito and Richmond, and within the Spheres of Influence of both cities, East Richmond Heights is a primarily residential community of about 3,600 residents. Adjacent open space in Wildcat Canyon provides respite and outdoor recreation. Given East Richmond Heights' location, the community has panoramic views of San Francisco Bay, Mount Tamalpais, and beyond. Residents cite access to open space and views as important community assets that should be preserved for generations to come. East Richmond Heights is also home to two schools, Crestmont School and Mira Vista Elementary School, which contribute to the area's family-oriented character. Interstate 80 and the El Cerrito Del Norte BART Station provide regional transportation access, and Arlington Boulevard serves as the major north-south thoroughfare.







Despite the small-town community feel, residents are concerned about safety and formed the East Richmond Heights Neighborhood Watch team to prevent crime, enhance emergency preparedness, and improve neighborhood communication. Residents would like more street lighting and new and expanded community facilities and events. Residents are also concerned about fire hazards from vegetation in Wildcat Canyon Regional Park and throughout the neighborhood, particularly from dead, standing trees. The community would like to enhance fire protection services and evacuation preparedness to ensure resident safety in the event of a natural disaster.

WHO LIVES IN EAST RICHMOND HEIGHTS?

Median Age 49 years old in East Richmond Heights VS 40 years old in Contra Costa County

Average Life Expectancy 84 years old in East Richmond Heights VS

81 years old in Contra

y Sy

Median Household Income

\$101,172 in East Richmond Heights

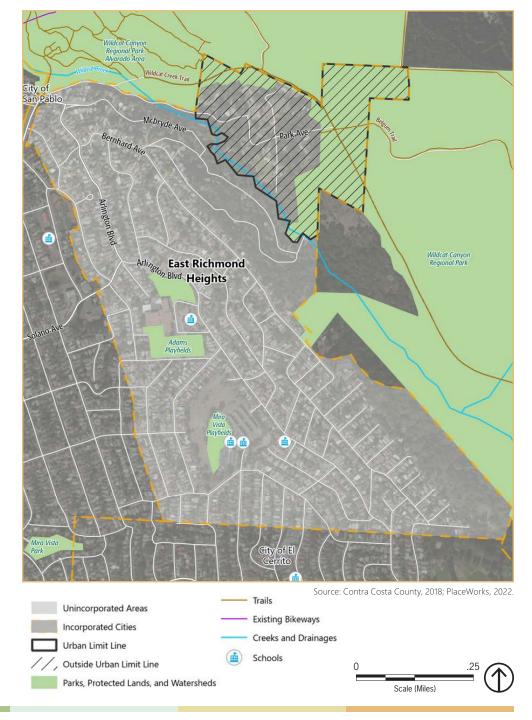
----- VS ---\$103,997

Contra Costa County



Race & Ethnicity

- ▶ **52%** White
- ► 17% Hispanic or Latino
- ▶ **14%** Asian
- ► 11% Black or African American



EAST RICHMOND HEIGHTS - CONTEXT - 2

HAZARDS

Air Quality

Drought

Extreme Heat

Flooding

Human Health Hazards

Landslides

Seismic Hazards

Severe Weather

Wildfire

MAJOR VULNERABILITIES

Persons living on single-access roads and seniors living alone are vulnerable to flooding, landslides, seismic hazards, and wildfire.

Cost-burdened households and renters are vulnerable to extreme heat, flooding, landslides, seismic hazards, severe storms, and wildfires.

Persons with chronic illnesses and seniors (including those living alone) are vulnerable to air guality, extreme heat, human health hazards, and wildfire.

Single-access roads are vulnerable to damage from flooding, landslides, seismic hazards, and wildfire.

Electricity transmission and distribution lines are vulnerable to landslides, wind from severe storms, and wildfire.

Mira Vista Elementary, Adams Middle School, and Crestmont School are vulnerable to landslides, seismic hazards, and wildfires.

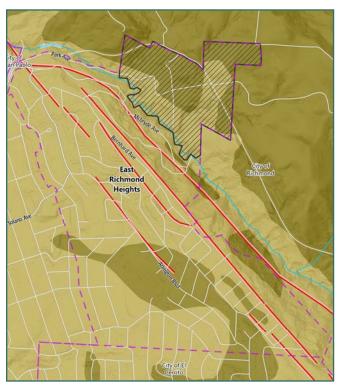
Public safety and emergency medical response are vulnerable to earthquakes, landslides, severe storms, and wildfire.

Woodland habitat in the eastern area of the community is vulnerable to drought, severe storms, and wildfire.

WILDFIRE HAZARD SEVERITY ZONES

East Richmond Heights Wildfire Severity Zones Very High High Moderate Unincorporated Areas Incorporated Cities Urban Limit Line // Outside Urban Limit Line Creeks and Drainages

SEISMIC HAZARDS



The information on this page presents a summary of hazards and vulnerabilities in East Richmond Heights based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.

L 🧻 Incorporated Cities

Urban Limit Line

Outside Urban Limit Line
Regional Faults

Creeks and Drainages

Landslides

Mapped landslides

Few large mapped landslides, but contains scattered small landslides

and questionably-identified larger landslides

Areas of gentle slope at low elevation that have little or no potential for landslides



Source: CalFire, 2024; Contra Costa County, 2018; PlaceWorks, 2020. Source: US Geological Survey, 2018; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for East Richmond Heights are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. East Richmond Heights is planned for continued medium density residential uses. The community has two existing small commercial pockets that are intended to support neighborhood-serving businesses. The Adams Middle School site, designated Mixed-Use Low Density, is envisioned to attract neighborhood-serving commercial and service uses, affordable housing, and alternative dwelling types, while supporting and encouraging more community events. Adjacent areas designated Parks and Recreation, Resource Conservation, and Agricultural Lands will continue to preserve access to outdoor recreational opportunities and open space.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by East Richmond Heights community members:

- 1. East Richmond Heights has a small community feel because of its diverse housing stock, moderate densities, and compact form. Residents know their neighbors, and care for each other and the community. This tightly knit, small community feel should be preserved.
- 2. East Richmond Heights' panoramic views of San Francisco Bay, bridges, cities, and natural landscapes should be preserved.
- **3.** Existing public services, such as the Contra Costa County Sheriff's Office and Fire Protection District, should be supported and enhanced to ensure a safe community.
- **4.** Because East Richmond Heights is proximate to Wildcat Canyon Regional Park and the Hayward Fault, it is exposed to wildfires and earthquakes. The community should be protected from these hazards through proper planning and emergency response.
- 5. A variety of housing types should be encouraged to ensure housing opportunities for residents of all ages, incomes, and abilities.

POLICIES

- 1. Prioritize mitigation of wildfire and earthquake exposure when reviewing new development proposals.
- 2. Ensure new development provides reasonable protection for existing residences regarding views, design compatibility (including building mass, height, and mechanical devices), adequate parking, privacy, and access to sunlight.
- **3.** When reviewing new development proposals, ensure views of scenic natural features (e.g., San Francisco Bay, distant mountains) and the developed environment (e.g., bridges, San Francisco skyline) are substantially preserved.
- **4.** Condition new development projects to minimize impacts on neighbors and local roads, which may be compounded by existing small lots and narrow, winding roadways.
- 5. Improve pedestrian and roadway infrastructure in a manner that balances the needs of users with the desire to retain East Richmond Heights' small community feel.
- **6.** Promote local-serving commercial uses to encourage small business growth, create retail shopping near residents, and provide opportunities for residents to conduct business within their own community.
- **7.** Emphasize affordable housing as a community asset and encourage alternative dwelling types such as co-housing.
- **8.** Consider the impacts of each project, individually and cumulatively, on emergency access and response to the neighborhood and immediate project area. New projects should not negatively impact access or response by emergency service providers.
- **9.** Determine on a project-by-project basis whether a traffic impact analysis is warranted, considering factors beyond peak-hour trip generation, such as individual and cumulative impacts on pedestrian safety and neighborhood-scale evacuation plans.
- **10.** For new developments, encourage building scale, massing, architectural style, and materials to provide harmonious scale transitions and blend with the surrounding existing residential neighborhood.

POLICIES (CONTINUED)

- 11. Encourage a mix of unit types and densities in new housing projects to diversify the housing stock and better serve residents of all ages, incomes, and abilities. To achieve the required density, encourage development of greater numbers of smaller-scaled buildings that are harmonious with surrounding areas and contain fewer units per building, instead of large-scale buildings containing higher numbers of units.
- **12.** Provide pedestrian-friendly streetscape improvements with large-canopied street trees, open spaces, ground cover, and flowering plants where opportunities exist.
- **13.** Encourage new development on large parcels, such as the Adams Middle School site, to closely follow the natural slope of the site with grading and building forms and heights.
- 14. Encourage seamless integration of new development on large parcels into the surrounding street pattern and evaluate opportunities to reestablish historic street patterns. For example, Loring Avenue and Rosalind Avenue, which are shown as through streets on historic Assessor's maps, were interrupted by consolidation of the Adams Middle School site and may be appropriate for extension.

EAST RICHMOND HEIGHTS - GUIDANCE - 5

ACTIONS

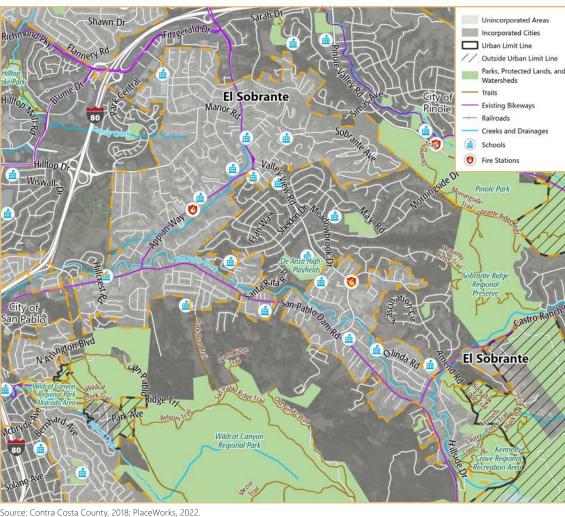
- Work with East Bay Municipal Utility District and Contra Costa County Fire Protection
 District to determine whether additional fire hydrants are necessary within the
 community.
- 2. Upgrade pedestrian and roadway infrastructure on Arlington Boulevard and in the North Arlington neighborhood, with emphasis on improving pedestrian safety.
- 3. Study the feasibility of constructing a community library.
- 4. Conduct community workshop(s) to explore options for future development at the Adams Middle School site. Concepts and direction developed at the workshop(s) would provide community preferences and guidance to the County, local officials, property owner, prospective developer, and design team. The site should be a model for sustainable, green development that meets the housing (including workforce housing), retail, recreational, and service needs of the community while mitigating impacts to the surrounding area. Such workshops should also be conducted for projects requiring General Plan amendments or rezonings in East Richmond Heights.
- **5.** Redesignate the western, downslope portion of the Mira Vista Elementary School property, between Zinn Street and Hazel Avenue, to Parks and Recreation should it ever be redeveloped with a non-public use.

El Sobrante is entirely within the Spheres of Influence for the cities of Richmond and Pinole, but has its own distinct identity shaped by its history, landscape, people, and built environment. The community originated as part of the Rancho San Pablo and Rancho El Sobrante Spanish land grants in 1841, with its name literally translated as "the remaining area." The Ranchos were subdivided into smaller ranches during the late 1800s and early 1900s. Many of these ranches were subdivided again in the mid to late 20th century, giving El Sobrante a semi-rural character. Today, the community includes a mix of ranchettes, residential subdivisions, and multiplefamily residential developments. Roughly 75 percent of the community's housing stock was built between 1940 and 1979. Important natural features such as San Pablo Ridge, Sobrante Ridge, San Pablo Creek, open hillsides, and oak woodlands provide visual beauty, plant and animal habitat, and opportunities for recreation.

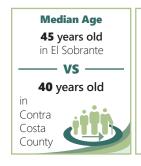
El Sobrante is oriented along three major thoroughfares. San Pablo Dam Road, the backbone of the community, extends from Interstate 80 east and south toward San Pablo Reservoir and Orinda and is home to many of El Sobrante's commercial uses. Appian Way is a commercial and residential corridor that extends north/northeast from San Pablo Dam Road to Interstate 80 in Pinole, passing through the "triangle" area at the intersection with Valley View Road. Valley View Road is a residential corridor that extends southeast from the "triangle" to San Pablo Dam Road, passing De Anza High School. Most of the community is accessed via these three roads.

Several plans have been developed for El Sobrante over the years and remain generally applicable today, including a 2001 Transportation and Land Use Plan for the downtown business district (along San Pablo Dam Road and Appian Way) and P-1 Zoning and Design Guidelines adopted in 2013. Both documents strive to enhance El Sobrante's small town, rural residential, and vintage character, while creating new opportunities for housing, businesses, and civic uses in the heart of the community





WHO LIVES IN EL SOBRANTE?



Average Life Expectancy 80 years old in El Sobrante 81 years old

Contra

Median **Household Income**

\$96.429 in El Sobrante

\$103,997

Contra Costa County

Race & Ethnicity

- ▶ **36%** White
- ▶ **25%** Hispanic or Latino
- ▶ 21% Asian
- ▶ 12% Black or African American

(Community-submitted photo.)







The information on this page presents a summary of hazards and vulnerabilities in El Sobrante based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.

Hazards





Human health hazards



Seismic hazards

Wildfire

Major Vulnerabilities

Persons experiencing chronic illnesses, homeless persons, and households in poverty are vulnerable to extreme heat and human health hazards.

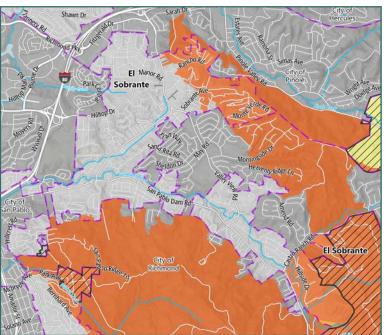
The community is vulnerable to dam-related flooding if San Pablo Dam were to be compromised by landslides or seismic hazards. San Pablo Dam was upgraded in 2010 to reduce the risk of failure, decreasing the potential for dam-related flooding.

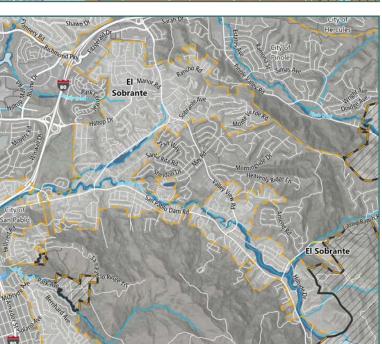
Homes are vulnerable to landslides and debris flows, seismic hazards, and wildfire.

Single-access roads and neighborhoods are vulnerable to landslides and wildfire

San Pablo Dam Road is vulnerable to landslides, seismic hazards, and wildfire.

Public transit access, water and wastewater services, energy delivery services, and solid waste removal services are vulnerable to multiple hazards.





WILDFIRE

Wildfire Severity Zones

Very High

High Moderate

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

--- Railroads

Creeks and Drainages





Source: CAL FIRE, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

FLOOD ZONES

Flood Hazard Areas

100-Year Flood Zone

500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Incorporated Cities

Urban Limit Line

Outside Urban Limit Line

Railroads
Creeks and Drainages

0 1 Scale (Miles)



A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for El Sobrante are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Planned land uses in El Sobrante include mixed- use and commercial corridors along San Pablo Dam Road and Appian Way, with residential neighborhoods and open space comprising the rest of the community. Residential areas span a range of densities, from large lot single-family homes to higher density multiple-family apartments and condominiums.

New development will generally consist of infill projects on vacant or mostly vacant properties along San Pablo Dam Road and Appian Way that have been previously "passed over." Hillsides and ridgelines are primarily designated for open space, protecting El Sobrante's visual context and avoiding urban sprawl. Areas along San Pablo Dam Road and Appian Way that serve as downtown El Sobrante are designated Mixed-Use Low Density and Mixed-Use Community-Specific Density, recognizing the existing mix of multiple-family residential and commercial properties, as well as the desire for new projects that combine these uses, either vertically or horizontally. As noted in the following section, zoning regulations provide more prescriptive design standards for the downtown areas. The Public and Semi-Public designation identifies community assets, including Juan Crespi Middle School, Harbour Way Elementary School, De Anza High School, and the El Sobrante Library, as well as utilities such as an East Bay Municipal Utility District water filtration plant. Open spaces along the San Pablo Creek corridor, and other locations where topography or natural hazards preclude safe development, are designated Resource Conservation. Sites along the creek will be considered for a potential community park.









DOWNTOWN EL SOBRANTE PLANNED LAND USES

The Downtown El Sobrante P-1 Zoning and Design Guidelines cover the area shown in the map on the following page. Downtown El Sobrante includes three mixed-use areas; the text below describes the vision for each area. The Downtown El Sobrante P-1 Zoning and Design Guidelines should be consulted for more specific direction related to long-range planning decisions in this area.

Each of the three mixed-use areas shares a common set of design principles intended to create a more walkable, pedestrian-friendly environment. Key principles include allowing varied setbacks and encouraging new buildings to be located close to the street frontage. Windows and entries should face the street, with surface parking to the rear of the building rather than in the front. Mixed-use development is strongly encouraged, although all three districts allow projects that are entirely commercial or residential. Interesting and innovative architecture is encouraged throughout each mixed-use area, but it should be harmonious in scale so that each area is perceived and functions as a cohesive district.

APPIAN WAY MIXED-USE AREA

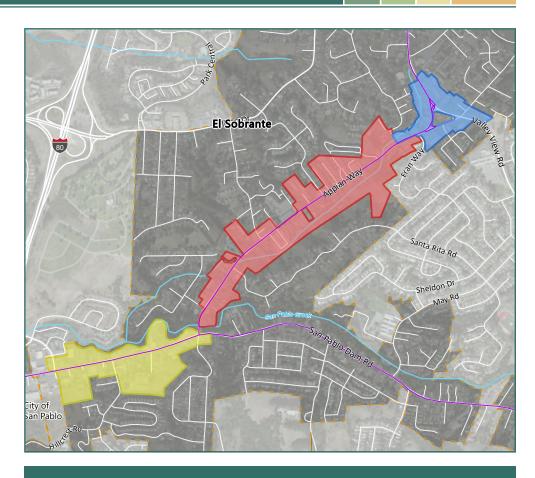
The Appian Way Mixed-Use Area is intended to facilitate development of the Appian Way corridor as a unified, well-designed, walkable neighborhood, including new mixed-use development and improved services, shopping, offices, and restaurants. Neighborhood-scale commercial uses are allowed on all parcels. Residential-only projects and mixed residential-commercial projects are permitted but not required, and residential uses may be integrated into existing commercial developments. The P-1 Guidelines provide direction for Appian Way itself, including development of a landscaped median, new storm drains, on-street parking bays, lighted pedestrian crossings, improved sidewalks and bus bays, and retention of bike lanes. Traffic signalization and vehicle flow improvements are encouraged. The Guidelines also support development of open space and parks, preservation of mature trees, and streetscape and frontage planting in this area.

TRIANGLE MIXED USE AREA

The El Sobrante "Triangle" is formed by the intersection of Valley View Road, Appian Way, and Sobrante Avenue. Like the Appian Way Mixed-Use Area, this area is envisioned as a distinct neighborhood retail district. Allowable uses are similar to those in the Appian Way area. Mixed-use projects are preferred, though projects that are entirely commercial are permitted on all parcels, subject to P-1 standards and use limitations. The same building design, streetscape, and parking guidelines that apply in the Appian Way area apply in the Triangle area. The Triangle differs from the Appian Way area in that it is far more compact and offers an opportunity to create a walkable activity node that anchors the northern end of the community. The community has expressed a desire for an arts district in this area, further emphasizing its potential as a cultural and commercial hub.

SAN PABLO DAM ROAD MIXED USE AREA

The mixed-use area in downtown El Sobrante applies to San Pablo Dam Road between El Portal and Appian Way. This is the core of the downtown area. The intent is to create a more unified and vibrant district by creating a town square, improving San Pablo Dam Road, and encouraging new multiple-family residential, offices, retail, and mixed-use projects. The town square is envisioned on the Mechanics Bank property on the south side of the block between Hillcrest Avenue and Pitt Way or other centrally located parcel. Consolidation of existing small parcels is encouraged to create more viable development sites. The mass, height, and shape of buildings should preserve views and be compatible with community character. Potential improvements to San Pablo Dam Road include new bike lanes (possibly separated), wider sidewalks, new pedestrian crossings, and more attractive and coordinated signage. New buildings should complement the streetscape improvements and create a more pedestrian-friendly environment.



MIXED-USE AREAS

Source: Contra Costa County, 2018; PlaceWorks, 2023.

San Pablo Dam Road Mixed-Use Area

Appian Way Mixed-Use Area

Triangle Mixed-Use Area
Unincorporated Areas

Incorporated Cities

meor porateu

—— Trails

Existing Bikeways

Creeks and Drainages





GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by El Sobrante community members:

- 1. El Sobrante should remain independent and eclectic, with commonsense land use regulations that respond to the community's varied development and building patterns.
- Change should be managed to enhance El Sobrante's unique semi-rural/small-town character, sustain its agricultural heritage, and preserve its scenic environment and open spaces.
- 3. Although new amenities are desired, the costs and benefits of improvements should be compared and disclosed to the public before investments are made. Where feasible, existing facilities should be improved before new facilities are developed.
- 4. Growth and economic development should:
 - a. Conserve and strengthen established neighborhoods.
 - **b.** Meet local needs and fulfill the desire to be a complete community.
 - c. Improve visual and architectural quality.
 - d. Provide a range of economic opportunities.
 - e. Revitalize the commercial core with local-serving and locally owned businesses.
 - **f.** Enhance the quality of life for residents.
- 5. El Sobrante's built environment should be designed and developed at a human scale, incorporating healthy community concepts that provide for walking, bicycling, and other non-motorized transportation; recreation; access to healthy foods; and energy-and resource-efficient buildings and development.
- **6.** El Sobrante should be a model for sustainable development and sustainable living, including local food and energy production, zero waste, and green building construction.
- **7.** Because the cities of Richmond, San Pablo, and Pinole surround El Sobrante on three sides, coordination is essential and the County should work proactively to address the effects of decisions by Richmond, San Pablo, and Pinole on the quality of life in El Sobrante.

GUIDING PRINCIPLES (CONTINUED)

- **8.** Transportation options should be improved, particularly public transit connections to BART and bicycle facilities along major thoroughfares.
- **9.** Long-term solutions should be developed to address traffic safety and congestion, particularly to prevent "cut-through" traffic on local streets and congestion on San Pablo Dam Road.
- **10.** San Pablo Dam Road and Appian Way should be safer and more attractive for walking and cycling and communicate a positive and cohesive image of El Sobrante.
- **11.** Stronger, more vibrant, and walkable centers should be created, providing community gathering places and destinations with new opportunities for housing, businesses, and open space.
- **12.** Greater housing choices should be provided, including affordable housing, livework spaces, and alternative dwelling types such as tiny homes.
- **13.** El Sobrante should be a culturally diverse and inclusive community with amenities and services for people of all ages, incomes, abilities, and backgrounds.
- **14.** San Pablo Creek and its tributaries should be protected as accessible open spaces, wildlife corridors, and natural amenities that add beauty, character, and ecological value to the community.
- **15.** Access to local hospitals, health care, and social services is critically important and should be improved.
- **16.** El Sobrante should become more resilient and better prepared for disasters, particularly wildfires, floods, and earthquakes.
- **17.** Local businesses should act as gathering places for residents and contribute to El Sobrante's sense of community and cultural diversity.

POLICIES

- 1. In mixed-use areas, support development and retention of commercial uses and local-serving businesses in mixed-use areas to meet the daily needs of the community while promoting new residential development.
- Continue improving downtown El Sobrante to create a stronger sense of this area as a town center and destination for residents, using the Downtown El Sobrante Planned Unit Development (P-1) Zoning and Design Guidelines to guide land use and development decisions.
- **3.** Encourage development of small and locally-owned businesses, especially markets offering healthier food choices.
- 4. Encourage the combining of adjacent narrow parcels along San Pablo Dam Road, Appian Way, and Valley View Road to facilitate infill development and limit the number of potential streets and driveways entering these major thoroughfares.
- 5. Improve the pedestrian and bicycle environment, particularly along major thoroughfares, by closing gaps in the sidewalk system, widening sidewalks, discouraging "drive-through" businesses, and enforcing speed limits and traffic safety rules.
- 6. Increase local park acreage, including pocket parks within new development and preserve open space along San Pablo Creek with the goal of creating a trail along San Pablo Creek between Appian Way and El Portal.
- **7.** Encourage new commercial and mixed-use projects to incorporate safe, well-maintained open areas or gathering places.
- **8.** Encourage multiple-family residential projects to provide on-site recreational facilities for residents.
- **9.** Partner with East Bay Regional Park District to maintain and improve access to regional open spaces and parks on the perimeter of El Sobrante.
- 10. Partner with community organizations to conserve and restore portions of San Pablo Creek as a community open space, natural resource, and visual amenity, and conserve the natural elements of other local creeks, such as Appian Creek and Wilkie Creek.

POLICIES (CONTINUED)

- 11. Encourage the City of Richmond to preserve the visual character and natural qualities of San Pablo Ridge, the hillside area that defines the southern edge of El Sobrante, by supporting land use decisions that protect areas above the 400-foot elevation contour as open space and maintain trail access to Wildcat Canyon Regional Park.
- **12.** Work with neighboring jurisdictions to ensure that the impacts of development on the El Sobrante community are addressed and mitigated.
- **13.** Deny applications for entitlements to establish new automotive uses (auto/body repair, oil change, gas stations, etc.) in El Sobrante.

ACTIONS

- 1. Continue to work with residents, businesses, property owners, and other stakeholders on improvement and beautification plans for San Pablo Dam Road, including the addition of Class II bike lanes, pedestrian crossings, lighting, and other design changes that better accommodate bicycles, pedestrians, and transit users. Consider similar improvements on other local streets.
- 2. Implement a road diet for San Pablo Dam Road between Appian Way and Castro Ranch Road and identify funding to build a dedicated bike lane through this corridor.
- **3.** Reconstruct Appian Way as an attractively landscaped thoroughfare, with improved storm drainage, redesigned travel lanes, parking and curb improvements, new streetscape features, trees, and landscaping.
- **4.** Improve drainage infrastructure to reduce local flooding problems, especially along portions of Appian Way and San Pablo Dam Road that still have open roadside ditches.
- **5.** Consider alternatives and identify an approach for financing community beautification, such as a landscape and lighting assessment district, a business improvement district, or similar measures.

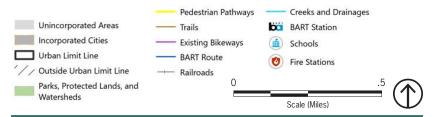
EL SOBRANTE - GUIDANCE - 7

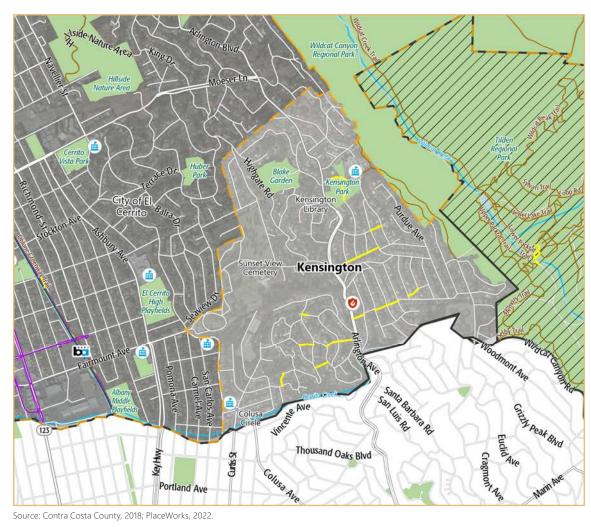
ACTIONS (CONTINUED)

- **6.** Work with public transit agencies to improve local service, restore BART feeder lines, and better connect El Sobrante to regional transit and community services such as hospitals.
- **7.** Develop a façade improvement and beautification program to assist El Sobrante businesses.
- 8. Implement a community wayfinding and signage program that creates a unified and positive impression of El Sobrante, identifies community gateways, and helps orient and direct travelers in and around the community.
- 9. Increase the supply of off-street parking available along San Pablo Dam Road to meet business, customer, and resident needs. Parking should be clearly identified with directional signage and located and managed in a way that does not interfere with traffic flow and safety.
- **10.** Pursue development of a full-service community center that can accommodate meetings, events, recreational, cultural, and educational activities.
- **11.** Periodically evaluate traffic flow and speeds on Appian Way between Valley View Road and the Pinole city limit to determine appropriate traffic calming and improvement strategies. Periodically consider traffic management improvements along other major streets in the community.
- **12.** Continue assessing the feasibility of a creekside boardwalk, trail, or path along the segment of San Pablo Creek between Appian Way and El Portal Boulevard and pursue development of a neighborhood downtown park along San Pablo Creek.
- **13.** Amend page 18 of the land use matrix in the *Downtown El Sobrante Planned Unit District Zoning and Design Guidelines* to disallow automotive uses.

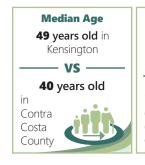
Situated near the University of California, adjacent to the City of Berkeley and within El Cerrito's Sphere of Influence, Kensington has been a desirable neighborhood for academics, students, urban professionals, and families for decades. Kensington residents enjoy the community's panoramic views, mature trees, walkable scale, easy access to El Cerrito Plaza BART and other transit options, and proximity to regional parks. Although there is very limited potential for growth, there is significant construction activity to upgrade and expand existing homes, most of which date from the 1940s and earlier.

Kensington is located along Arlington Avenue ("the Arlington"), a winding thoroughfare that connects to Berkeley on the south and El Cerrito on the north. There is a small commercial district on the Arlington just north of the Berkeley city limit. A second commercial district is on Colusa Circle in the lower part of Kensington, near the border with El Cerrito. Almost all the homes in Kensington are single-family and densities for that style of development are relatively high. Features that are important to the community include Kensington Park, Sunset View Cemetery, the University's Blake Garden, the Kensington Library, Kensington Elementary School, and public pedestrian paths. Unlike most unincorporated communities, Kensington has jurisdiction over many of its local services, including police, fire, parks, and waste collection. Many of the planning and development issues in Kensington relate to view preservation, design compatibility and scale, parking, hillside protection, ingress/egress, and emergency access given the community's proximity to the Hayward Fault and designated fire hazard zones.





WHO LIVES IN KENSINGTON?



Average Life Expectancy 86 years old in Kensington VS 81 years old in Contra



Median

Race & Ethnicity

- ► **71%** White
- ▶ **10%** Asian
- ▶ 8% Hispanic or Latino
- ▶ **2%** Black or African American



The information on this page presents a summary of hazards and vulnerabilities in Kensington based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities.

HAZARDS

Drought

Extreme Heat

Human Health Hazards





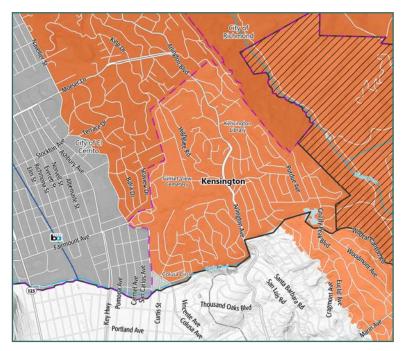
Seismic Hazards



Severe Weather



Wildfire



WILDFIRE HAZARD SEVERITY ZONES

Wildfire Severity Zones

Very High

High

Moderate

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

BART Route

Railroads

Creeks and Drainages

BART Station

Source: CalFire, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

MAJOR VULNERABILITIES

Seniors, especially seniors living alone, are vulnerable to extreme heat, human health hazards, and wildfire due to limited mobility.

The homes of cost-burdened households and renters are vulnerable to landslides, wildfire, seismic hazards, and severe weather.

Sunset View Cemetery, Tilden Regional Park, Kensington Park, and general outdoor recreation are vulnerable to drought, landslides, severe weather, and wildfire.

The Kensington Community Center, Kensington Library, and commercial centers along Colusa Avenue and Arlington Avenue are vulnerable to damage from landslides, seismic hazards, severe weather, and wildfire.

Public health and safety response, water and wastewater infrastructure, and public transit access are vulnerable to obstruction and delay from landslides, severe weather, and wildfire.



LANDSLIDES

Landslides

Mapped landslides

Few large mapped landslides, but contains scattered small landslides and questionablyidentified larger landslides

Areas of gentle slope at low elevation that have little or no potential for landslides

Incorporated Cities

Urban Limit Line

/// Outside Urban Limit Line

Regional Faults

BART Route Railroads

Creeks and Drainages

BART Station

Source: US Geological Survey, 2018; Contra Costa County, 2018; PlaceWorks, 2022

PLANNED LAND USE

Land use designations for Kensington are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Kensington is planned for continued residential use at a density consistent with existing development, with small pockets of mixed use, commercial and office uses, public/institutional uses, and abundant parks and recreational land. Kensington's two small commercial areas will continue to serve as the primary centers of local business for Kensington residents. The commercial area at Colusa Circle is intended to maintain the community-serving uses already in place while accommodating mixed-use development on vacant and underutilized parcels. Kensington's proximity to Tilden and Wildcat Canyon Regional Parks provides premier outdoor recreational opportunities for residents. As such, wide swaths of land beyond the developed area continue to be designated for public/semi-public and park and recreation uses.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Kensington community members:

- 1. Kensington residents care deeply about their community. The friendly, safe, quiet, and close-knit community feel should be preserved.
- 2. Kensington's panoramic views of San Francisco Bay, bridges and cities, and natural landscapes are a defining characteristic that should be preserved.
- 3. Kensington residents enjoy easy access to regional parks, trails, and open spaces. Bicycle and pedestrian access to these amenities should be enhanced.
- **4.** To remain a safe and complete community, enhancements to the existing public services and facilities, such as the Kensington Fire Protection District and Police Department facilities, Kensington Library and Community Center, the pedestrian path network, and local schools, should be supported.
- 5. Because Kensington is proximate to Wildcat Canyon and Tilden Regional Parks and the Hayward Fault, it is exposed to potentially severe wildfires and earthquakes. Parts of the community fall within Very High, High, and Moderate Fire Hazard Severity Zones. The community should be protected from these hazards through proper planning, mitigation, and emergency preparedness and response.
- **6.** A variety of housing types, including small multiple-family developments, duplexes, and accessory dwelling units, should be encouraged to diversify the housing stock and better serve residents of all ages and abilities.
- 7. New housing should be compatible with the existing community character and be designed to minimize negative impacts on roads, emergency response capacity, and infrastructure.

POLICIES

- 1. Prioritize mitigation of wildfire and earthquake exposure when reviewing new development proposals.
- 2. Prioritize evacuation preparedness when making decisions affecting the Kensington community.
- **3.** Ensure new development provides reasonable protection for existing residences regarding views, design compatibility (including building mass, height, and mechanical devices), adequate parking, privacy, and access to sunlight.
- **4.** When reviewing new development proposals, ensure views of scenic natural features (e.g., San Francisco Bay, distant mountains) and the developed environment (e.g., bridges, San Francisco skyline) are substantially preserved.
- **5.** For new developments, encourage building scale, massing, architectural style, and materials to provide harmonious scale transitions and blend with the surrounding existing residential neighborhood.
- **6.** Encourage new development on large parcels to closely follow the natural slope of the site with grading and building forms and heights.
- 7. Encourage a mix of unit types and densities in new housing projects to diversify the housing stock and better serve residents of all ages, incomes, and abilities. To achieve the required density, encourage development of greater numbers of smaller-scaled buildings that are harmonious with surrounding areas and contain fewer units per building, instead of large-scale buildings containing higher numbers of units.
- 8. Promote local-serving commercial uses to encourage small business growth, create retail shopping near residents, and provide opportunities for residents to conduct business within their own community.
- **9.** Improve pedestrian and roadway infrastructure in a way that balances the needs of users with the desire to maintain Kensington's character.
- **10.** Provide pedestrian-friendly streetscape improvements with large-canopied street trees, open spaces, ground cover, and flowering plants where opportunities exist.

POLICIES (CONTINUED)

- **11.** Prioritize approval of projects that incorporate community-serving medical facilities and services.
- **12.** Support replacement of police and fire facilities with modern facilities that meet Kensington's long-term needs.
- **13.** Condition new development projects to minimize impacts on neighbors and local roads, which may be compounded by existing small lots and narrow, winding roadways.
- **14.** Determine on a project-by-project basis whether a traffic impact analysis is warranted, considering factors beyond peak-hour trip generation, such as individual and cumulative impacts on pedestrian safety and neighborhood-scale evacuation plans.

ACTIONS

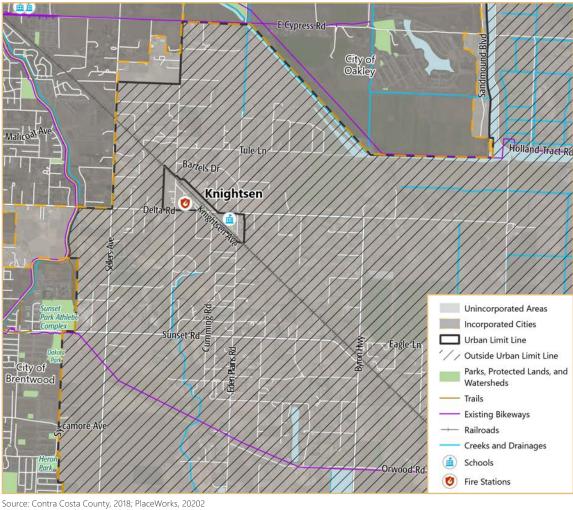
- Improve pedestrian safety and roadway infrastructure with features such as designated paths, illuminated crossings, stop signs, traffic calming measures, on-street parking spaces along Arlington Avenue and Colusa Circle, and ADA facilities.
- 2. Complete sidewalk gaps throughout Kensington, prioritizing gaps near schools and transit stops.
- 3. Review County Ordinance Code Chapters 84-74 Kensington Combining District and 816-2 Tree Obstruction of Views Combining District and amend as necessary to ensure issues related to view blockage by trees and vegetation are addressed.
- **4.** Explore options for funding maintenance and improvement of Kensington's public pedestrian path system, working with the Kensington Police Protection and Community Services District.
- 5. Improve local drainage infrastructure.

Knightsen has a long history as an East County farming community, with early settlers planting almond trees and establishing dairies in the early 1880s. A decade later, the Santa Fe Railroad was constructed through Knightsen, connecting Stockton to San Francisco and solidifying Knightsen's presence as an independent community. Construction of the first buildings, a station house, railroad station, grocery store, and post office, soon followed; the Knightsen Farm Bureau was established in 1918. The community is listed in the County's Historic Resources Inventory.

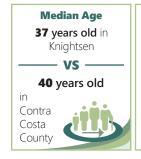
Despite more than a century of activity, Knightsen has remained a small, caring community. Residents are proud of its agricultural character and prefer to maintain the community's small size. This is reinforced by the Urban Limit Line (ULL), which prevents growth outside of the existing community boundary and preserves the surrounding agricultural land for farming. Knightsen's agricultural identity and local economy is supported by a small agritourism industry, with U-pick farms and produce stands advertising fresh fruit and vegetables to residents and visitors alike.

Knightsen has been proactive in addressing its service and utility needs, starting in 1920 with establishment of the Knightsen Irrigation District, which was quickly absorbed by the East Contra Costa Irrigation District. From 2005-2023 the Knightsen Town Community Services District worked to enhance flood control and improve water quality, both topics of significant concern given Knightsen's position in a low elevation area that receives substantial runoff. Today, residents remain concerned about water quality and water service, and they would like increased code enforcement to support community health and safety.





WHO LIVES IN KNIGHTSEN?



Average Life Expectancy **82** years old in Knightsen

Contra

81 years old

Median **Household Income**

\$85,228 in Knightsen

\$103,997

Contra Costa County

Race & **Ethnicity**

- ▶ 39% Hispanic or Latino
- ▶ **36%** White
- ▶ 9% Asian
- ▶ 8% Black or African American

(Community-submitted photo.)







KNIGHTSEN - CONTEXT - 2

HAZARDS

Agricultural pests and diseases



Air quality



Coastal flooding



Drought



Extreme heat



Flooding Fog



Human health hazards



Severe storms

MAJOR VULNERABILITIES

Outdoor workers are vulnerable to agricultural pests and diseases, poor air quality, extreme heat, and human health hazards.

Agricultural operations are vulnerable to agricultural pests and diseases, drought, extreme heat, flooding, and severe storms.

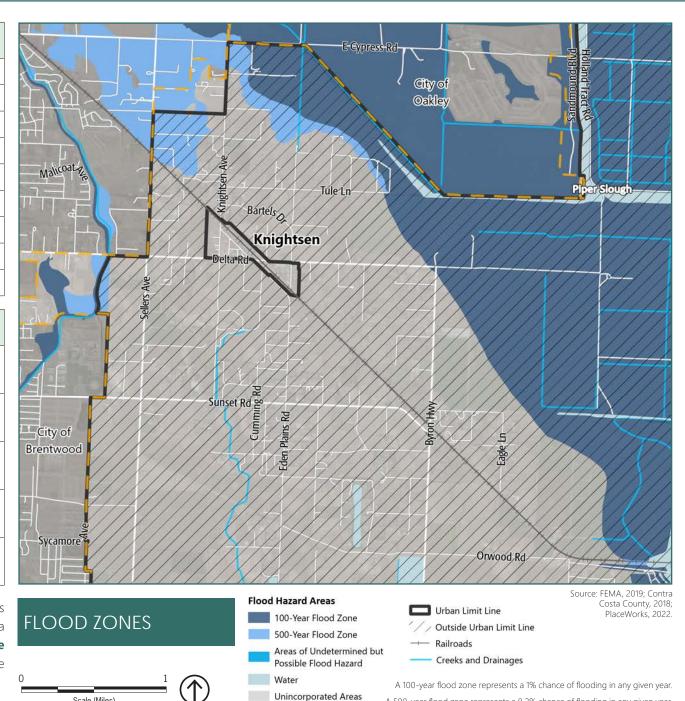
Delta Road, Sellers Road, and the Burlington Northern Santa Fe Railroad are vulnerable to extreme heat, flooding, and severe storms.

Water and wastewater systems are vulnerable to coastal flooding and flooding, as they are prone to overflow when inundated with water.

Knightsen Elementary School is vulnerable to damage by flooding and severe weather.

The information on this page presents a summary of hazards and vulnerabilities in Knightsen based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities.

Scale (Miles)



A 500-year flood zone represents a 0.2% chance of flooding in any given year.

PLANNED LAND USE

Land use designations for Knightsen are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Knightsen has been planned to retain its existing character as an agricultural community and preserve the agricultural nature of the surrounding area. Most residences are constructed on agricultural parcels. Residential density increases as it approaches the community's commercial core within the Urban Limit Line. The existing commercial core will be retained to attract locally-serving businesses and serve as the heart of the community.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Knightsen community members:

- 1. Knightsen's rural, tight-knit, family-oriented, and agricultural character should be preserved.
- 2. Agricultural operations should be protected.
- 3. Development should embrace and be compatible with the community's historic, rural character.
- **4.** Roadways should be safe for all users, including pedestrians, bicyclists, drivers, and agricultural operators.
- 5. Knightsen's quietness and isolation should be maintained.

POLICIES

- 1. Support agriculture as an important part of Knightsen's character, including crop cultivation and animal keeping and raising.
- 2. Encourage re-use and rehabilitation of historic buildings.
- **3.** Provide adequate sidewalks and shoulder space to protect pedestrians and accommodate horses.
- **4.** Encourage small business development that provides a full range of services for residents and is tailored to Knightsen's small-town character.
- 5. Facilitate community events in the commercial core.
- **6.** Address concerns regarding pesticide exposure for both people and biological resources.
- 7. Support efforts to protect the quality of well water.
- 8. Continue improving code enforcement and public health and safety services.
- 9. Prevent light pollution from interfering with views of the night sky.
- 10. Prohibit cannabis businesses in Knightsen.

ACTIONS

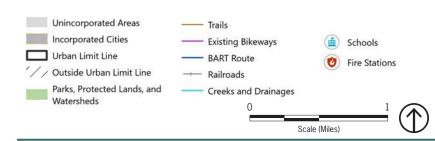
- 1. Install and maintain street trees and street lighting in the commercial core to support walkability and beautify the area.
- 2. Increase coordination between Code Enforcement and the Sheriff's Office to combat nuisances such as illegal dumping, large unpermitted parties, and unpermitted firearm shooting.
- **3.** Support implementation of a Safe Routes to School Program and provide adequate pedestrian and bicycle infrastructure to Knightsen Elementary and Old River Elementary.
- 4. Implement measures to slow traffic and limit traffic impacts from local agritourism.

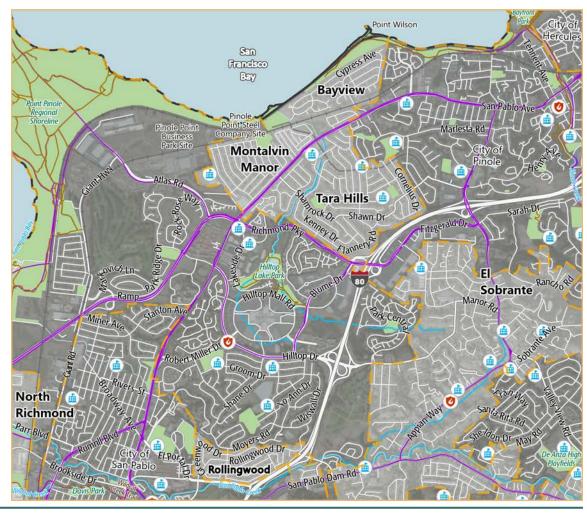
MONTALVIN MANOR, TARA HILLS, BAYVIEW, AND ROLLINGWOOD - CONTEXT - 1

Situated near the cities of San Pablo and Pinole, and within the Spheres of Influence of both, these four communities are made up of single-family neighborhoods with some multiple-family homes and small commercial areas. Residents enjoy spectacular views of San Pablo Bay and easy highway access to regional job centers in Richmond, Oakland, and beyond. Residents also appreciate the relatively modest home prices in this area.

Montalvin Manor, Tara Hills, Bayview, and Rollingwood offer recreational opportunities in pocket parks, along trails, and at the Montara Bay ballfields/community center. Residents would like to enhance the trail network along the shoreline to connect two existing segments of the Bay Trail near Garrity Creek. The historic Union Pacific Railroad runs along this shoreline, creating challenges for safe and convenient access to San Pablo Bay.

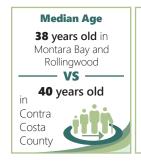
Interstate 80 skirts the eastern edge of Tara Hills, and traffic congestion and related air pollution during peak commute hours impact residents. Surface streets can be severely congested, and pedestrian and bicycle infrastructure is limited, impeding access to local amenities. Many of the neighborhood-serving commercial spaces in these communities have become vacant over time, limiting local service options and attracting illegal dumping.





WHO LIVES IN MONTALVIN MANOR, TARA HILLS, BAYVIEW, AND ROLLINGWOOD?

Source: Contra Costa County, 2018; PlaceWorks, 2022.



Average Life Expectancy 80 years old in Montara Bay and Rollingwood VS 81 years old in Contra Costa County Median Household Income \$87,838 in Montara Bay and Rollingwood VS \$103,997 in Contra Costa County





The information on this page presents a summary of hazards and vulnerabilities in Montalvin Manor, Tara Hills, Bayview, and Rollingwood based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities. For information on tsunami hazards, see Figure HS-5, Tsunami Hazard Areas, in the Health and Safety Element.

HAZARDS

Air quality from increased ozone and diesel particulate matter



Coastal flooding



Extreme heat



Flooding



Human health hazards



Landslide and debris flow



Seismic hazards

MAJOR VULNERABILITIES

Persons experiencing chronic illnesses, homeless persons, and households in poverty are vulnerable to poor air quality, extreme heat, and human health hazards.

Homes in Bayview are vulnerable to sea level rise and coastal flooding.

Amtrak and freight rail lines that run through Montalvin Manor are vulnerable to coastal flooding and sea level rise.

Homes and schools in Tara Hills are vulnerable to landslides and debris flows.

Public transit access, water and wastewater services, energy delivery services, and solid waste removal services are vulnerable to multiple hazards.



FLOOD ZONES

Flood Hazard Areas

100-Year Flood Zone

500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Water

Incorporated Cities

Urban Limit Line

Outside Urban Limit Line

Creeks and Drainages

Scale (Miles)

A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.



LANDSLIDES

Landslides

Mapped landslides

Few large mapped landslides, but contains scattered small landslides and questionablyidentified larger landslides

Areas of gentle slope at low elevation that have little or no potential for landslides

Incorporated Cities

Urban Limit Line

//, Outside Urban Limit Line

Regional Faults

Railroads

Creeks and Drainages

Source: US Geological Survey, 2018; Contra Costa County, 2018; PlaceWorks, 2022.

IMPACTED COMMUNITY

The County has identified Montalvin Manor, Tara Hills, Bayview, and Rollingwood as Impacted Communities under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages in these communities.

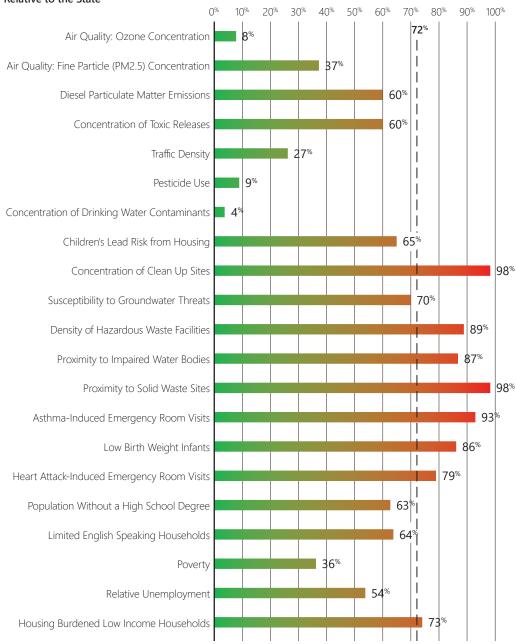
The 21 indicators that contribute to Montalvin Manor, Tara Hills, Bayview, and Rollingwood's identification as Impacted Communities are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how Montalvin Manor, Tara Hills, Bayview, and Rollingwood rank for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher. While there are multiple Census tracts that make up Montalvin Manor, Tara Hills, Bayview, and Rollingwood, this chart presents only the most-impacted Census tract among these communities.

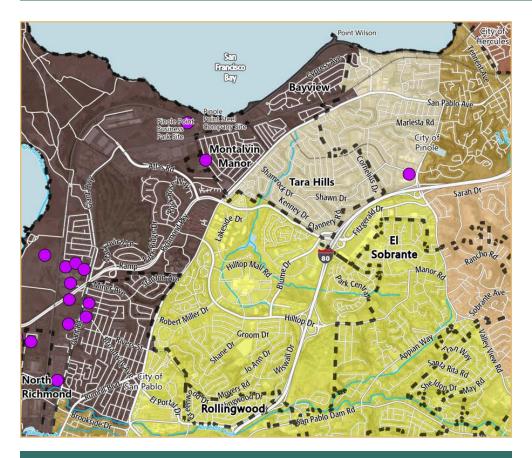
There are multiple brownfield sites in the area, some of which remain vacant due to high clean-up costs or risk of contact with hazardous substances. In the decade prior to 1975, the nearby Pinole Point Steel Company discharged toxins into an on-site pond, which is now monitored with land use restrictions to prevent contamination. Clean up of hazardous materials has also been required at the Pinole Point Business Park and former Chevron facilities, and other remediation efforts are ongoing within the community. Other nearby industrial and manufacturing facilities in Richmond, Hercules, and Pinole impact the human and environmental health of local residential neighborhoods.

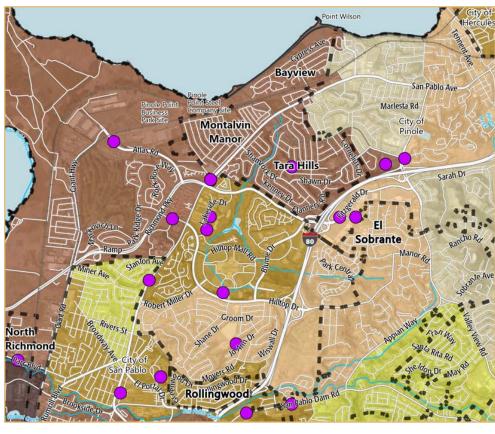
In addition, the car-oriented landscape constrains active transportation such as walking and bicycling, which may be a contributing factor to high rates of cardiovascular disease, asthma, and low birth weight infants, as shown in the chart. Access to emergency services and hospitals is of significant concern in these four communities. Residents must travel to Richmond on congested roads to reach the nearest hospital.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in Montalvin Manor, Tara Hills, Bayview, and Rollingwood Relative to the State







CLEAN UP SITES

Census Tract Ranking > 90 to 100% > 80 to 90% > 70 to 80% > 60 to 70% > 50 to 60% 0 to 50% Incorporated City Urban Limit Line Railroads

Creeks and Drainages

This map ranks Census tracts based on the concentration of clean up sites, which are sites undergoing clean up actions by governmental authorities or property owners due to environmental degradation from hazardous substances. The ranking also considers the nature and magnitude of the threat and the site type and status. Parts of Montalvin Manor, Tara Hills, Bayview, and Rollingwood are ranked at 98 percent, meaning that the Census tract has a concentration of clean up sites that is higher than

98 percent of the state.

Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

HAZARDOUS WASTE



This map ranks Census tracts based on the density of hazardous waste facilities and generators, considering each facility's type and permit status and generator activities. Parts of Montalvin Manor, Tara Hills, Bayview, and Rollingwood are ranked at 89 percent, meaning that the Census tract has a density of hazardous waste facilities and generators that is worse than 89 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Montalvin Manor, Tara Hills, Bayview, and Rollingwood are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Montalvin Manor, Tara Hills, Bayview, and Rollingwood are planned primarily for low-medium and medium-density residential uses with small pockets of mixed use, commercial, higher-density residential, public/institutional, and parks and recreation land uses. There are two small commercial areas located along San Pablo Avenue, at Tara Hills Drive and Richmond Parkway. Both sites are planned for community-serving businesses that are walkable and accessible by multiple transportation modes.

The area designated Mixed-Use Community-Specific Density at the intersection of San Pablo Avenue and Tara Hills Drive is intended to serve as a town center and commercial core planned for a range of neighborhood shopping, residential, and office uses that will stimulate improvements and reinvestment. In Rollingwood, high-density residential and commercial uses are concentrated at the southwest end of Rollingwood Drive; one parcel in the eastern part of the community is planned for commercial use and is accessible via El Portal Drive.

Montalvin Manor and Bayview border the shoreline of San Pablo Bay, providing residents with beautiful views and valued access to nature. As such, access to shoreline and trail connections will be preserved through the Park and Recreation land use designation.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Montalvin Manor, Tara Hills, Bayview, and Rollingwood community members:

- 1. The diverse and distinctive character of these communities should be preserved and promoted.
- 2. Sweeping views of San Pablo Bay and Mount Tamalpais provide a beautiful backdrop for the area and should be preserved.
- 3. Residents value their access to wildlife habitat, open spaces, and nature along the shoreline and at Garrity Creek. Trail access to these areas should be preserved and increased.
- **4.** Water-oriented recreation uses along the shoreline should be encouraged, and shoreline access should be improved.
- 5. Local retail and commercial centers, particularly at the intersection of San Pablo Avenue and Tara Hills Drive, should be revitalized with new neighborhood-serving businesses and community gathering places within walking distance of residential uses.
- 6. Residents should have access to a comprehensive transportation system that is safe, functional, and meets the need of multiple user groups.
- 7. The variety of the existing housing stock should be maintained and enhanced.
- 8. Residents should have local access to quality medical care and emergency services.
- 9. Residents should be protected from adverse health impacts, especially those associated with traffic congestion and emissions along Interstate 80.
- **10.** Neighborhoods should be beautified to attract businesses and improve community pride.

MONTALVIN MANOR, TARA HILLS, BAYVIEW, AND ROLLINGWOOD - GUIDANCE - 6

GUIDING PRINCIPLES (CONTINUED)

- 11. Residents who lack housing should be treated with dignity and respect and have access to quality programs and services that facilitate access to secure and stable housing. Residents who are at risk of losing housing should be protected from displacement.
- **12.** Residents should feel safe in their communities with quality law enforcement services and a built environment that deters crime.

POLICIES

- 1. Require the intersection of San Pablo Avenue and Tara Hills Drive to be developed as a town center that includes a community gathering space and incorporates unified design elements to provide a sense of identity. Encourage high-quality neighborhood-serving businesses and a mix of residential unit types.
- **2.** Encourage development of neighborhood-scale commercial uses throughout the four communities.
- **3.** Prioritize preservation of scenic views and access to natural lands, open spaces, and trails.
- 4. Require new development to protect on-site habitat areas whenever possible.
- **5.** Require the massing and scale of new development to be consistent with the community's character whenever possible.
- 6. Address parking problems by implementing parking management strategies.
- **7.** Prioritize approval of projects that incorporate community-serving medical facilities and services.
- 8. Coordinate with the cities of Richmond, San Pablo, and Pinole on decisions that affect Montalvin Manor, Tara Hills, Bayview, and Rollingwood.

POLICIES (CONTINUED)

- **9.** Support beautification of the four communities and shoreline through physical improvements such as urban greening, effective code enforcement, and efforts to address graffiti, illegal dumping, and abandoned vehicles.
- 10. Support urban agriculture uses to encourage community cohesion and health.

ACTIONS

- 1. Evaluate the necessity of conducting a study to analyze and address circulation deficiencies, opportunities, and constraints along San Pablo Avenue, Tara Hills Drive, and nearby neighborhood streets.
- 2. Provide crosswalks, sidewalks, bike lanes, landscaping, and other essential pedestrian and bicycle infrastructure along San Pablo Avenue and Tara Hills Drive.
- 3. Assist a community-led effort to develop a communitywide parking management plan that addresses the lack of on-street parking.
- **4.** Work with local transit providers to increase connections to BART stations and construct additional transit stop shelters.
- 5. Work with ABAG/MTC and East Bay Regional Park District to improve and increase connections to wildlife habitat, open spaces, and trails along the shoreline and Garrity Creek.
- **6.** Assist a community-led process to improve youth programming at the Montara Bay Park Community Center and other recreation spaces throughout the four communities.
- 7. Study the feasibility of developing additional opportunities for recreation and access to nature, including a conveniently located dog park and playground.
- 8. Identify funding to upgrade existing park facilities and do so.

NORTH RICHMOND - CONTEXT - 1

Surrounded almost entirely by the City of Richmond, North Richmond was a guiet, rural area until World War II attracted workers to the nearby Kaiser Shipyards. Due to housing and lending discrimination, Black and other minority workers found it challenging to find housing closer to the ports and railyards, forcing them to relocate to North Richmond. North Richmond became a pocket of affordable, accessible housing for minority households, but with little neighborhood infrastructure. Following the war, many residents stayed to work in the petroleum, railroad, and shipping industries in Richmond, and the community continued to grow.

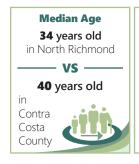


(Community-submitted photo.)

Today, North Richmond is primarily residential south of Wildcat Creek. Industrial uses dominate north of the creek. Housing is relatively affordable compared to the rest of the Bay Area, but the housing stock is aging and many households grapple with high housing cost burdens and poor infrastructure. These factors, combined with North Richmond's proximity to job centers and its location on the Interstate 80 corridor, place the community at risk of gentrification and displacement. The risk is highest for renters, who comprise a majority of the community. While the Contra Costa County Housing Authority offers housing choice vouchers to eligible applicants, residents would like more affordable housing incorporated into new development. There is a strong and growing local urban farming movement that has transformed vacant lots into community gardens, improving access to fresh, healthy, and affordable food.

North Richmond residents are actively engaged in local planning and advocate for their community through Urban Tilth, Community Housing Development Corporation of North Richmond, the Watershed Project, Verde Elementary School, and other community organizations and initiatives. Planning is complicated by jurisdictional boundaries, with part of the neighborhood being within the Richmond city limit. Given its proximity to heavy industrial uses, including the Chevron Richmond Refinery, residents are very concerned about community health, along with other issues like crime and illegal dumping. There are regulations in place to mitigate emissions from new industrial users, and the community has worked with the Bay Area Air Quality Management District (BAAQMD) to develop the Richmond-North Richmond-San Pablo Community Emissions Reduction Plan. In addition, while there have been levee, streetscape, and sidewalk improvements, community members would like additional roadway infrastructure and transit improvements that ensure safe, equitable, and affordable transportation access for all modes. North Richmond is within the planning area of the 2020 Richmond Area Community-Based Transportation Plan, a plan developed by the Contra Costa Transportation Authority to address the community's mobility needs.

WHO LIVES IN NORTH RICHMOND?



Average Life Expectancy 77 years old in North Richmond VS

81 years old Contra



Median **Household Income** \$59.312 in

▶ 68% Hispanic or North Richmond Latino

VS \$103,997

Contra Costa County

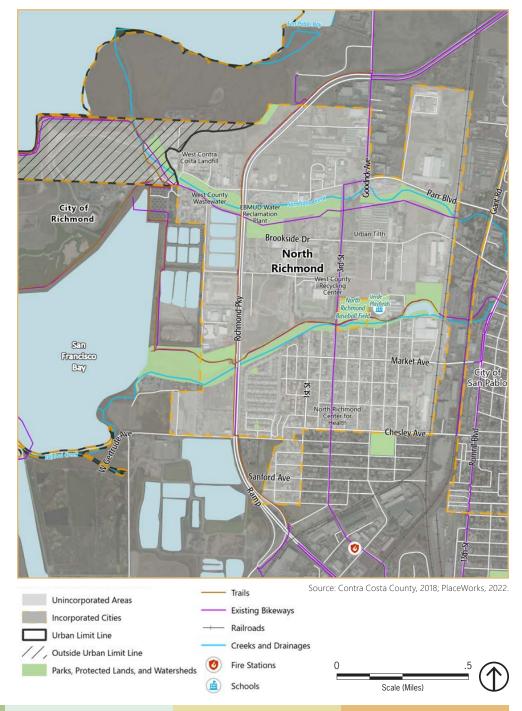


▶ 21% Black or African American

Race &

Ethnicity

- ► 6% Asian
- ▶ 3% White



The information on this page presents a summary of hazards and vulnerabilities in the North Richmond community based on the Contra Costa County Vulnerability Assessment; please see the Health and Safety Element for more information about tsunami hazards and the online Vulnerability Assessment for a full description of the other hazards and vulnerabilities.

HAZARDS



Air quality from increased ozone and diesel particulate matter



Coastal flooding



Sea level rise



Extreme heat



Flooding



Human health hazards



Seismic hazards

MAJOR VULNERABILITIES

Cost-burdened households and households in poverty are vulnerable to coastal flooding and seismic hazards.

Persons experiencing chronic illnesses, homeless persons, and households in poverty are vulnerable to air quality, extreme heat, and human health hazards.

Levees located in North Richmond are vulnerable to coastal flooding.

The West County Wastewater treatment plant and the recycling center in North Richmond are vulnerable to coastal flooding.

Public transit access, water and wastewater services, energy delivery services, and solid waste removal services are vulnerable to multiple hazards

TSUNAMI HAZARD MAP

Unincorporated Areas

Outside Urban Limit Line

Creeks and Drainages

Incorporated Cities

Urban Limit Line

Railroads





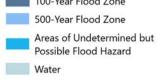
Source: California Department of Conservation, 2022; California Geological Survey (CGS), 2022; California Office of Emergency Services (CalOES), 2022; Contra Costa County, 2018; PlaceWorks, 2022.

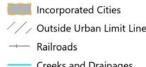
Water

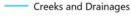
Tsunami Hazard Area

FLOOD ZONES











A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.



Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

IMPACTED COMMUNITY

The County has identified North Richmond as an Impacted Community under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages in these communities.

The 21 indicators that contribute to North Richmond's identification as an Impacted

Community are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how North Richmond ranks for each indicator compared to the rest of the state. The County identifies

Impacted Communities as those where the combined ranking for all factors is 72 percent or higher.

Concentration of Drinking Water Contaminants or higher.

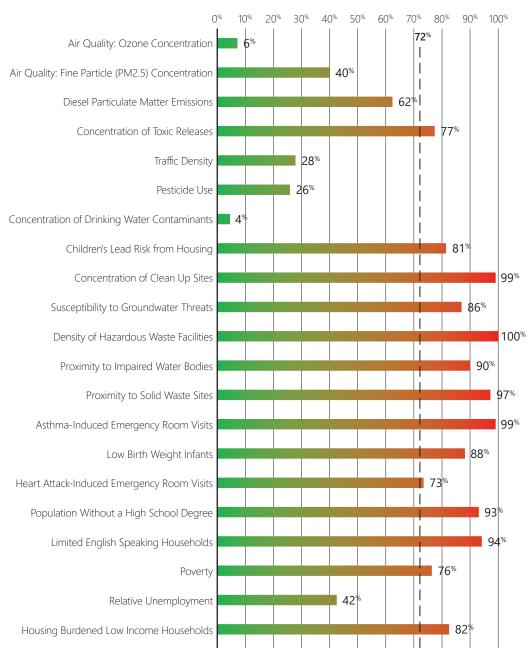
North Richmond experiences high levels of diesel particulate matter due to industrial uses, refineries, chemical plants, highways, truck traffic, rail yards, shipping ports, and marine terminals located within and near the community. Exposure to air pollution and chemicals contributes to eye, throat, and nose irritation, along with heart and lung disease. As shown in the chart, North Richmond residents visit the emergency room for asthma conditions at a rate that is among the highest rate in the state. There are frequent violations of air quality rules from facilities in and around North Richmond, and air testing has found unsafe levels of industrial pollutants inside residents' homes.

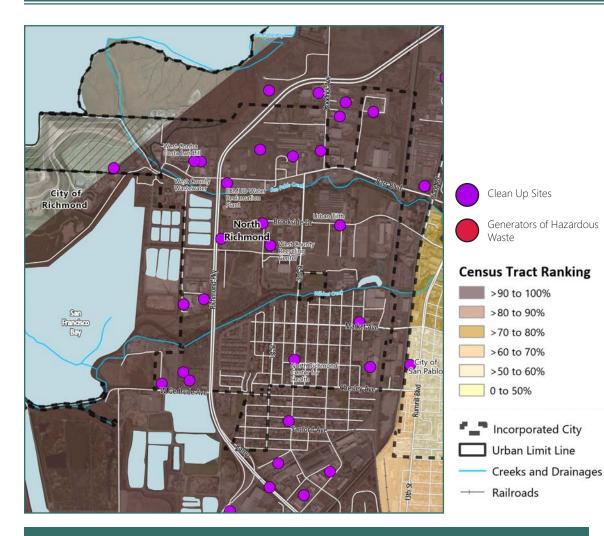
There are also many hazardous waste facilities and generators that affect North Richmond, including the Chevron Refinery, chemical companies, and Superfund sites. Beyond the acute risks to human and environmental health, these sources also raise concerns about odors and increased freight traffic.

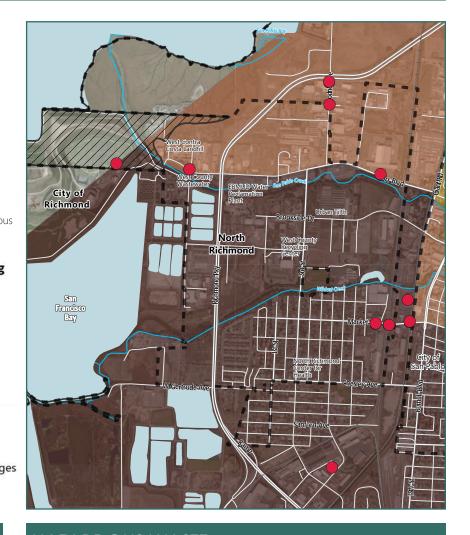
The community is also burdened by historical and perceived high rates of crime. In addition to safety concerns, outdoor recreation and active transportation are hampered by a lack of maintenance and the need for more connected walking and biking infrastructure. Limited access to active recreation and transportation, coupled with limited access to stores that sell fresh and healthy food, contribute to poor health outcomes for local residents. However, a strong and growing urban agriculture movement is helping to bring healthy food options to North Richmond.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in North Richmond Relative to the State







CLEAN UP SITES

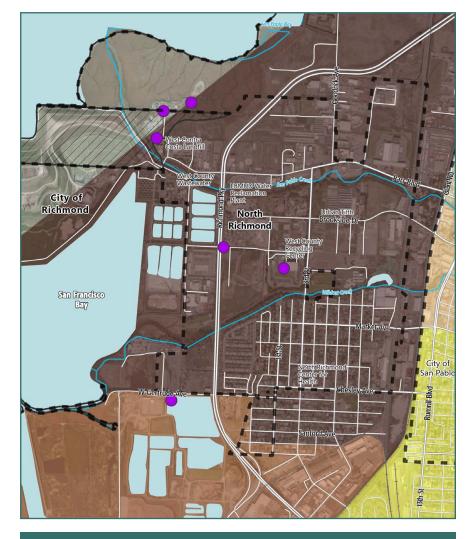
This map ranks Census tracts based on the concentration of clean up sites, which are sites undergoing clean up actions by governmental authorities or property owners due to environmental degradation from hazardous substances. The ranking also considers the nature and magnitude of the threat and the site type and status. The North Richmond Census tract is ranked at 99 percent, meaning that the area has a concentration of clean up sites that is higher than 99 percent of the state. In addition, some of the clean up sites in North Richmond are within the 100 year and 500 year flood zones (see map on page 2), posing risk of further contamination during a flood event.

HAZARDOUS WASTE

This map ranks Census tracts based on the density of hazardous waste facilities and generators (e.g., the Chevron Refinery), considering each facility's type and permit status and generator activities. The North Richmond Census tract is ranked at 100 percent, meaning that it has a density of hazardous waste facilities and generators that is among the

highest in the state.







(Credit: Urban Tilth.)



(Credit: Urban Tilth.)

(Credit: Urban Tilth.)

O .5
Scale (Miles)

SOLID WASTE

This map ranks Census tracts based on the proximity to solid waste sites and facilities, considering each facility's type, proximity to nearby communities, reported odor complaints, and more. The North Richmond Census tract is ranked at 97 percent, meaning that the area is more exposed to solid waste hazards than 97 percent of the state.



>80 to 90%

>70 to 80%

>50 to 60%

0 to 50%

Incorporated City
Urban Limit Line

/// Outside Urban Limit Line

--- Railroads

Creeks and Drainages

PLANNED LAND USE

Land use designations for North Richmond are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Most of North Richmond is planned for continued light industrial, public, and resource conservation uses. The area south of Wildcat Creek is the heart of the community and is planned for continued residential use at various densities, supported by local-serving commercial development. The mixed-use designations along Fred Jackson Way, Market Avenue, and Chesley Avenue are intended to create a combination of affordable, multiple-family homes and ground-level retail, service, and office uses. The former Las Deltas campus is designated Residential Medium-High Density. The 11.38-acre site is an opportunity for innovative development that addresses a range of housing needs. The North Richmond Design Guidelines provide detailed design guidance.







GUIDING PRINCIPLES

In 2019, Healthy Richmond published the Quality of Life (QOL) Plan, which was developed with robust community engagement under the direction of the North Richmond Leadership Team, a group of North Richmond residents dedicated to organizing and voicing the aspirations and concerns of the North Richmond community. The QOL Plan informed the creation of guiding principles, policies, and actions in this community profile.

The following guiding principles articulate the values, priorities, and aspirations for the future shared by North Richmond community members:

- 1. Affordable rental and ownership housing opportunities should be expanded and integrated into market rate developments. A range of housing types should be available to meet extremely-low, very-low, and low-income levels, and existing community members should be prioritized for available housing.
- 2. Achievement of housing development goals should be balanced with maintaining quality of life, parking availability, circulation, and property values for current residents.
- 3. North Richmond residents who lack housing should have access to quality services and be treated with dignity and respect. Vital, easy-to-access community programs related to homelessness, rehabilitation, education and training, youth, and elderly services should be available.
- **4.** Industrial uses in and around North Richmond should transition to renewable energy, zero-emission, and other clean industries that do not pose health risks to the neighborhood.
- 5. North Richmond residents should have better access to Wildcat Creek, the shoreline, and other parks and green spaces. Students at Verde Elementary should be able to access open spaces via a safe and connected trail network.
- North Richmond should provide a healthy and safe environment, where vacant lots have transitioned into vibrant community assets like community gardens and playgrounds.
- 7. Streets should be made more inviting by repairing and adding sidewalks, increasing street lighting, planting trees, improving parking, and eliminating illegal dumping. Public infrastructure, including green infrastructure, should be upgraded and well-maintained, and the design of the built environment should contribute to crime prevention.

GUIDING PRINCIPLES (CONTINUED)

- 8. North Richmond should be a safe place for people of all abilities to walk, bike, and drive. Speeding and cut-through traffic should be eliminated as much as possible, negative impacts from truck traffic should be mitigated, and conflicts at rail crossings should be addressed, possibly through grade separations.
- 9. North Richmond residents should have access to affordable and reliable public transportation, with more frequent bus connections to the BART station and bus stops that provide amenities to increase safety and comfort, such as shelters, benches, lighting, and landscaping.
- **10.** North Richmond residents should enjoy easy access to affordable, healthy, and fresh food, including grocery stores, farmers markets, and community gardens.
- **11.** New mixed-use and commercial development that benefits local residents and the community should be encouraged. The local economy should offer diverse employment opportunities that promote social mobility and self-sufficiency.

POLICIES

- Coordinate with the West Contra Costa Unified School District, City of Richmond, and residents, particularly youth, to enhance existing open spaces, including Shields-Reid Park, Verde Elementary School, and Lucky A's Field, to provide the fullest civic, educational, social, and recreational benefits for the community.
- 2. Coordinate with local non-profits to celebrate the history of diversity in North Richmond through community events, public art, and music.
- 3. Prohibit construction of large walls or gates that divide the community.
- **4.** Require that new industrial development pay special attention to upgrading the visual appearance and unity of the area through quality architectural and landscape design and utility undergrounding.
- 5. Buffer sensitive uses like schools, senior housing, and childcare facilities from heavy industrial uses.
- **6.** Support continued air quality monitoring through air quality sensors installed as part of the Community Air Protection Program.

POLICIES (CONTINUED)

- Impose land use conditions on new commercial and industrial development which transitions vehicles/equipment to zero-emission faster than State transition requirements.
- 8. Require that new development incorporate green infrastructure solutions to minimize flooding and environmental pollution, such as bioswales, detention or retention ponds, and cisterns that capture rainwater for irrigation.
- **9.** Support the North Richmond Living Levee Project to provide protection and resiliency to sea level rise and flooding.
- 10. Support efforts to restore creeks with native plants, including possibly planting an urban forest near Wildcat Creek east of Verde Elementary School, and consider partnering with local non-profit organizations to maintain vegetation along the creek.
- **11.** Support the Safe Routes to School Program by providing adequate pedestrian and bicycle infrastructure around Verde Elementary.
- **12.** Support implementation of the 2020 Richmond Area Community-Based Transportation Plan.
- **13.** Encourage new mixed-use and commercial development that provides neighborhood-scale businesses.
- 14. Support development of a neighborhood serving grocery store.
- **15.** Encourage community engagement, social cohesion, and restorative practices in support of community safety and crime prevention objectives.
- **16.** Encourage residential projects that offer paths to home ownership and exceed the affordability requirements of the County's Inclusionary Housing Ordinance.
- **17.** Support workforce development and wealth-building programs for residents and locally-owned businesses, cooperatives, and other uses offering benefits to the community, such as grocery stores, community kitchens, and childcare facilities.
- 18. Continue to support vibrant urban agriculture operations.

ACTIONS

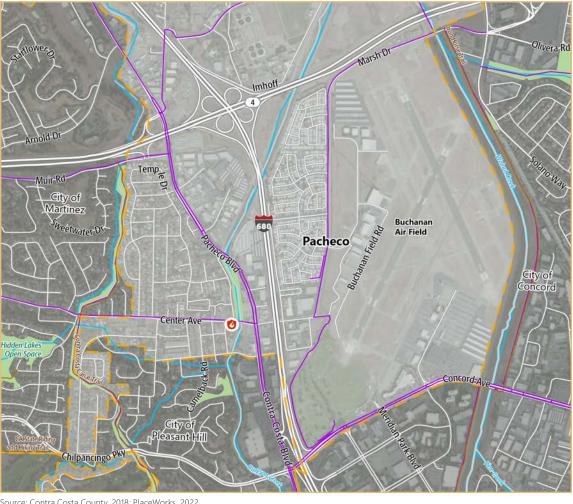
- 1. Seek funding to construct a new community and cultural center that serves youth and families, and support programming that promotes employment opportunities and workforce development.
- 2. Study the feasibility of partnering with community organizations to establish a social impact bond to provide funds for renovation of homes, ideally by the local labor force.
- 3. Work with East Bay Regional Park District to improve connections between the Bay Trail and community, including a potential Wildcat Creek Trail crossing over Richmond Parkway, and install amenities such as educational signs, bathrooms, water fountains, and benches.
- 4. Evaluate the effectiveness of installing cameras to deter illegal dumping.
- 5. Work with the community to prepare and implement a street corridor and gateway beautification plan that celebrates the unique historical identity of North Richmond and instills civic pride and a sense of unity among residents.
- **6.** Update the North Richmond Specific Plan to encompass the entire community and integrate goals and concepts from planning efforts such as the 2019 Quality of Life Plan and 2018 Priority Resilience Plan developed as part of the Bay Area Resilient by Design Challenge.
- 7. Designate truck routes to minimize impacts on schools and homes.

PACHECO - CONTEXT - 1

Pacheco sits immediately north of Pleasant Hill and east of Martinez in central Contra Costa County. Portions of Pacheco are within the Spheres of Influence of both cities. It was once a prosperous shipping center for grain exports, but fires, floods, and earthquakes in the mid-19th century resulted in much of its population relocating to Concord. Today it includes residential, commercial, office, entertainment, and light industrial uses. Residents take pride in being part of a neighborly, self-sufficient community with easy access to nature. The community enjoys its proximity to the Iron Horse Trail and Contra Costa Canal Trail, which connect Pacheco to other locations in the region. Residents seek improved connections to these trails and the Benicia Bridge to increase walking and biking options for commuting and recreation.

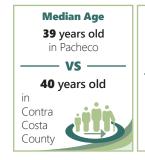
Commercial uses line Pacheco Boulevard and Center Avenue near Interstate 680, with surrounding areas consisting primarily of single- or multiple-family residences. The community appreciates the relatively affordable homes in the area and seeks to create additional affordable housing options, including mobile homes and teacher housing. The community would also like to reinvigorate its commercial core by strengthening businesses along the main thoroughfares. It's also important to residents that a buffer be maintained between residential areas and active commercial areas. In addition, residents are concerned about illegal dumping and homeless encampments and would like to beautify streets, minimize flooding, and support the homeless population with better services.





Source: Contra Costa County, 2018; PlaceWorks, 2022.

WHO LIVES IN PACHECO?



Average **Life Expectancy 81** years old in Pacheco

81 years old Contra

Median **Household Income** \$80,229

in Pacheco VS

\$103,997 Contra Costa County

Race & **Ethnicity**

- ► **41%** White
- ▶ 28% Hispanic or Latino
- ▶ 21% Asian
- ▶ 5% Black or African American







The information on this page presents a summary of hazards and vulnerabilities in Pacheco based on the Contra Costa County Vulnerability Assessment; please see the online Vulnerability Assessment for a full description of these hazards and vulnerabilities.

HAZARDS



Air quality from increased ozone and diesel particulate matter



Extreme heat



Flooding



Human health hazards



Seismic hazards

MAJOR VULNERABILITIES

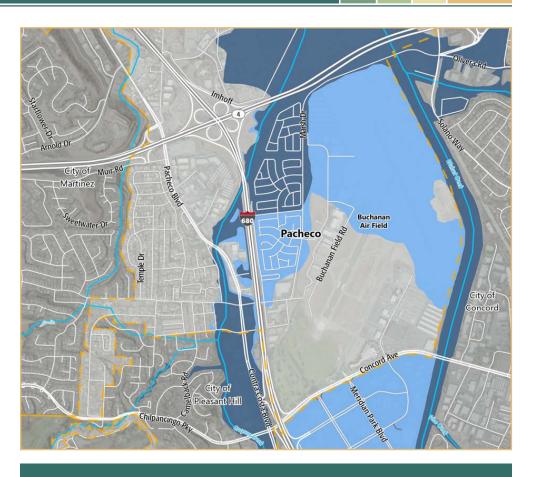
Households in poverty, persons experiencing homelessness, and persons with chronic illnesses are vulnerable to air quality, extreme heat, and human health hazards.

Highway 680 and Pacheco Boulevard are vulnerable to flooding.

Rancho Diablo, Concord Cascade, and Sun Valley Village mobile home parks are vulnerable to flooding, extreme heat, and seismic hazards.

Commercial buildings and homes are vulnerable to seismic hazards.

Public transit access, water and wastewater services, energy delivery services, and solid waste removal services are vulnerable to multiple hazards.



FLOOD ZONES

Flood Hazard Areas

100-Year Flood Zone

500-Year Flood Zone Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Incorporated Cities

Urban Limit Line

Outside Urban Limit Line Railroads

Creeks and Drainages

Source: Contra Costa County, 2018; PlaceWorks, 2022.





A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

IMPACTED COMMUNITY

The County has identified Pacheco as an Impacted Community under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportion- ate social and economic disadvantages in these communities.

The 21 indicators that contribute to Pacheco's identification as an Impacted Community are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how the Census tract encompassing Pacheco ranks for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher. While there are multiple Census tracts that make up Pacheco, this chart presents only the most-impacted Census tract in the community.

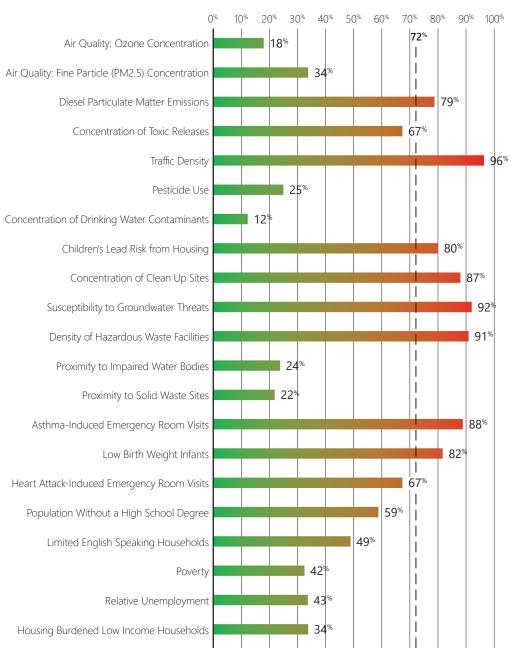
Children's Lead Risk from Housing

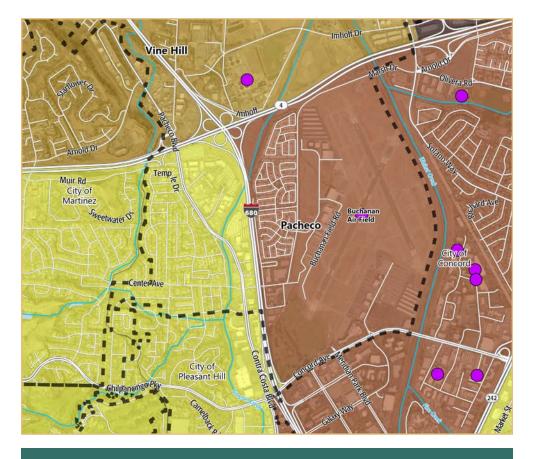
Pacheco is adjacent to the intersection of Highway 4 and Interstate 680. Due to proximity to major freeways and Buchanan Field Airport, residents in the eastern part of Pacheco face health risks associated with poor air quality and have higher rates of asthma-induced emergency room visits than people in other parts of the state. Like other Impacted Communities in the county, there is a high number of cleanup sites in Pacheco. Chemicals from these sites can move through the air or groundwater, placing nearby residents at a greater risk of exposure.

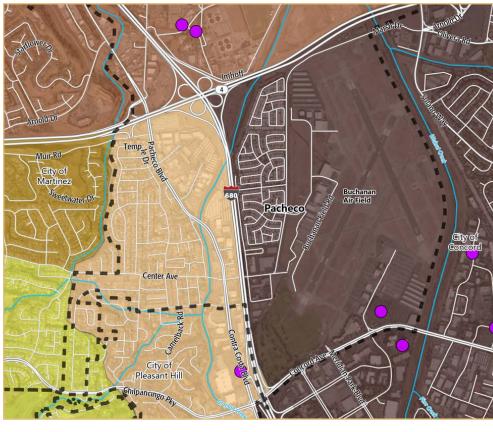
Pacheco residents have raised concerns about increasing traffic congestion along Interstate 680 and Highway 4, as well as air quality and noise issues from the airport. They are also concerned about homeless encampments under overpasses in the community. In addition, Pacheco residents have limited access to recreation. While Grayson Creek runs through the community, residents are concerned about the lack of creek maintenance; they would also like better maintenance of Pacheco Creekside Park, along with more entrances to the park.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in Pacheco Relative to the State







CLEAN UP SITES

Clean Up Sites

Census Tract Ranking

> 90 to 100%

> 80 to 90%

> 70 to 80%

> 60 to 70%

> 50 to 60%

0 to 50%

Incorporated City

Urban Limit Line

Creeks and Drainages

This map ranks Census tracts based on the concentration of clean up sites, which are sites undergoing clean up actions by governmental authorities or property owners due to environmental degradation from hazardous substances. The ranking also considers the nature and magnitude of the threat and the site type and status. Parts of Pacheco are ranked at 87 percent, meaning that the Census tract has a concentration of clean up sites that is higher than 87 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

HAZARDOUS WASTE



This map ranks Census tracts based on the density of hazardous waste facilities and generators, considering each facility's type and permit status and generator activities. Parts of Pacheco are ranked at 91 percent, meaning that the Census tract has a density of hazardous waste facilities and generators that is worse than 91 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Pacheco are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Pacheco's residential areas are located on both sides of Interstate 680. Residential uses west of 680 consist of single-family and multiple-family homes, while residences east of 680 consist of mobile homes. No changes are planned for these residential areas. Pacheco's mixed-use and industrial areas begin at the intersection of Pacheco Boulevard and 2nd Avenue South and extend north along Pacheco Boulevard past Highway 4. This corridor is planned to remain the central hub of local business and industry. Applying the Mixed-Use Community Specific Density designation along the southern portion of Pacheco Boulevard and Aspen Drive is intended to create a town center to revitalize the area and take advantage of the visual quality and access to Grayson Creek. Infill development on vacant and underutilized parcels in this area is encouraged to promote development of community-serving uses and new residential options. Pacheco is proximate to local and regional trails, such as the Pacheco Creekside Park path, Contra Costa Canal Trail, Iron Horse Trail, and Bay Trail over the Benicia Bridge. As such, stretches of land designated Resource Conservation and Parks and Recreation will be retained to preserve access.





GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Pacheco community members:

- 1. Pacheco is a strong, friendly, and family-oriented community. The diverse, independent culture that distinguishes it from nearby cities should be preserved and cultivated.
- 2. The variety of the existing housing stock should be maintained and enhanced.
- **3.** Pacheco's convenient location should be maximized to support and enhance the diverse business community and promote economic development.
- 4. Pacheco's rich history and heritage should be celebrated.
- **5.** Buchanan Field Airport is integral to the community's identity and should be supported.
- **6.** Pacheco's wildlife habitat, open spaces, and connections to nature should be preserved and expanded.







- 1. Coordinate with the cities of Martinez, Pleasant Hill, and Concord to achieve land use harmony across jurisdictional boundaries.
- 2. Encourage development of additional affordable housing to maintain and enhance Pacheco's diversity.
- **3.** Encourage establishment and growth of locally-serving businesses that fulfill the needs of residents, as well as larger commercial and light industrial businesses to provide job opportunities to the community.
- **4.** Support development around the intersection of Pacheco Boulevard and Center Avenue as a town center with unified design elements.
- 5. Preserve Pacheco's historic buildings.
- 6. Work with agencies such as East Bay Regional Park District and Contra Costa Water District to improve connections to local and regional trails, such as the Pacheco Creekside Park path, Contra Costa Canal Trail, Iron Horse Trail, and Bay Trail over the Benicia Bridge.

ACTIONS

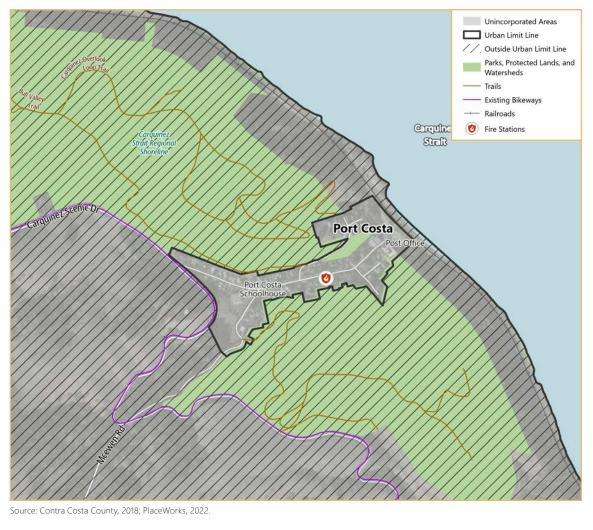
- 1. Identify suitable locations for additional park facilities, including kid-friendly amenities such as play structures, and an expanded community gathering space.
- 2. Improve pedestrian safety and roadway infrastructure by completing sidewalk gaps and installing continuous street lighting, illuminated crossings, landscaping, and ADA facilities.
- 3. Install safe bike routes and infrastructure including painted bike lanes along local roads.
- **4.** Update the Historic Resources Inventory to include Pacheco's historically significant buildings and sites.

Situated among along the Carquinez Strait, Port Costa is a small town of approximately 250 people. Originally founded in 1879 as a deep-water shipping port, the community had an important role in the export of wheat and was a stop on the transcontinental railroad. Upon completion of a railroad bridge between Martinez and Benicia in 1930, Port Costa diminished in size and regional significance. The small community now prides itself on its rich heritage and natural surroundings, preserving a small historic downtown amidst rolling hills, trails, and ranches. The community is close-knit and enjoys a friendly, engaged dynamic.

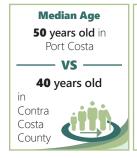
Port Costa is fairly isolated, with only two narrow, winding access roads. Carquinez Scenic Drive connects to Crockett and Interstate 80 to the west, and McEwen Road connects to Highway 4 to the south. The predominant land use is single-family housing, with a small downtown area consisting of a few businesses and a post office near the water and railroad. The railroad is in active use, which impedes public access to the waterfront, a major concern among residents. Residents are generally content to travel outside the community for daily goods and services, preferring to preserve the small-town charm of Port Costa, but there is some interest in modest business growth to sustain economic vitality.

Residents act as stewards of the historic assets in Port Costa. They are also passionate about protecting the surrounding open space and preserving a healthy watershed to ensure a sustainable future.





WHO LIVES IN PORT COSTA?



Average Life Expectancy **76** years old in Port Costa

81 years old Contra



Median **Household Income**

\$88.009 in Port Costa

\$103,997

Contra Costa County

Race & **Ethnicity**

- ▶ 28% Hispanic or Latino
- **≥ 25%** White
- ▶ 20% Black or African American
- **17%** Asian



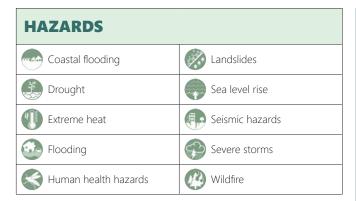




(Community-submitted photo.)



PORT COSTA - CONTEXT - 2



MAJOR VULNERABILITIES

Low-income households, households in poverty, and cost-burdened households are vulnerable to unhealthy living conditions or destruction of homes from coastal flooding, flooding, landslides, seismic hazards, severe storms, and wildfire.

Persons with chronic illnesses and low-income households may have less financial stability to pay for medical costs or increased housing costs due to drought, extreme heat, flooding, human health hazards, and wildfire smoke.

The entire built environment is vulnerable to coastal flooding, flooding, landslides, sea level rise, and wildfire, especially the residents and businesses along Canyon Lake Drive and Prospect Avenue.

Carquinez Strait Regional Shoreline Park and outdoor recreation that support the economy are vulnerable to coastal flooding, extreme heat, flooding, landslides, severe storms, and wildfire.

The Union Pacific Railway, Port Costa Schoolhouse, and the US Post Office are vulnerable to coastal flooding, flooding, and sea level rise.

The information on this page presents a summary of hazards and vulnerabilities in Port Costa based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.



FLOOD ZONES

Flood Hazard Areas

100-Year Flood Zone

500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Urban Limit Line

// Outside Urban Limit Line

--- Railroads

0 .25 Scale (Miles) A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.



WILDFIRE

Wildfire Severity Zones

Very High

High

Moderate

Unincorporated Areas

Urban Limit Line

// Outside Urban Limit Line

--- Railroads



Source: CAL FIRE, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Port Costa are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Most of the community is planned for continued residential use at a density consistent with existing development. The mixed-use area at the eastern end of Canyon Lake Drive serves to recognize the area's historic character of residences over street-level businesses, as well as to encourage and attract additional development that will complement existing businesses and take advantage of visual access to the waterfront. The lands surrounding the community are outside the Urban Limit Line and protected from intense development through Parks and Recreation, Resource Conservation, Agricultural Lands designations.





GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Port Costa community members:

- 1. Port Costa should be a resilient community that has planned for and is safe from sea-level rise, wildfire hazards, and the acute and long-term risks associated with nearby industrial uses.
- 2. The rich history and unique heritage of Port Costa and its residents should be celebrated and cultivated for future generations.
- 3. Port Costa should remain an affordable place to find a home.
- **4.** Public facilities and amenities, including regional parkland, local parks and open spaces, and schools, should be preserved and enhanced. Open spaces should be inviting and clear of trash and debris.
- 5. Port Costa residents should enjoy convenient access to the shoreline.

POLICIES

- 1. Maintain Port Costa's unique character while supporting economic vitality, emergency preparedness and safety, and improvement of the housing stock.
- 2. Support continued development of Carquinez Strait Regional Shoreline Park and regional trails, including a potential bike trail connection to Crockett.
- **3.** Encourage development of small-scale specialty and neighborhood retail shops and discourage establishment of automobile-oriented uses.
- **4.** Encourage preservation, sensitive rehabilitation, and adaptive reuse of Port Costa's older buildings, particularly those identified in the Historic Resources Inventory. Recognize Port Costa's authentic character and historic buildings as assets and amenities to attract businesses, visitors, and local investment to the community.
- **5.** Protect and preserve the scenic quality of the shoreline while encouraging wateroriented commercial and recreational activities that enhance Port Costa's identity as a waterfront community.

ACTIONS

- 1. Assist a community-led process to develop design guidelines that complement the County's Objective Design and Development Standards and are tailored to the unique setting, historic fabric, lot patters, design character, and mix of uses in the community.
- 2. Update the Historic Resources Inventory to include Port Costa's historically significant buildings and sites.
- 3. Work with the State Lands Commission and Union Pacific Railroad to improve waterfront access, including lateral access along the shoreline itself, provide new amenities along the shoreline, and mitigate limitations on access from the railroad tracks.

Rodeo has grown from an agrarian ranching settlement to an industrial hub at the intersection of a railroad line and shipping port to the close-knit community it is today. Located on San Pablo Bay north of Hercules, this community values its downtown, neighborly atmosphere, and access to open space and water-related recreational activities. Rodeo maintains close ties to its industrial and ranching roots with the Phillips 66 Refinery and agricultural land to the north and east. Community members are active in the Rodeo Citizens Association and other local organizations, devoting their time and resources to address local health, safety, and environmental concerns.







(Community-submitted photo.)

Parker Avenue is the heart of Rodeo, physically and commercially. Many residents would like to see existing businesses augmented to revitalize downtown and the marina. The community's waterfront location has long been constrained by the railroad tracks that hug the shoreline, but increased infrastructure and view preservation efforts along the waterfront have increased accessibility. This has also created opportunities to expand aquatic recreation and other waterfront commercial uses. Congestion on Interstate 80, coupled with the lack of a BART station or ferry terminal nearby, create circulation constraints at peak commute times.

The Phillips 66 Refinery, established in 1896, occupies over 1,100 acres in the northern part of Rodeo. The Rodeo Refinery has been converted into a renewable fuels plant. However, many residents remain concerned about potential refinery impacts, such as air quality and safety.

WHO LIVES IN RODEO?

Median Age 37 years old in Rodeo VS 40 years old in Contra Costa County

Average Life Expectancy 81 years old in Rodeo VS

81 years old in Contra Costa County

Median Household Income

\$78,890 in Rodeo

VS — \$103,997

Contra Costa County

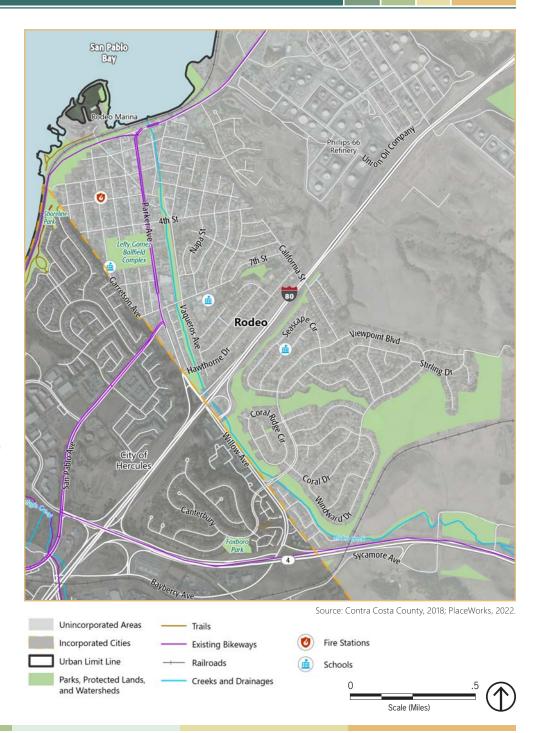
23% Hispanic or Latino► 12% Asian

▶ **45%** White

▶ **8%** Black or African American

Race &

Ethnicity



The information on this page presents a summary of hazards and vulnerabilities in the Rodeo community based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities. For information on tsunami hazards, see Figure HS-5, Tsunami Hazard Areas, in the Health and Safety Element.

HAZARDS	
Air Quality	Human Health Hazards
Coastal Flooding	Landslides
Drought	Seismic Hazards
Extreme Heat	Severe Storms
Flooding	Wildfires

MAJOR VULNERABILITIES

Cost-burdened and low-income households are vulnerable to coastal flooding, drought, extreme heat, flooding, human health hazards, severe storms, and wildfire.

Persons with chronic illnesses are vulnerable to air quality, extreme heat, and human health hazards.

Railways, including the Capitol Corridor Amtrak line, are vulnerable to coastal flooding, flooding, landslides, and seismic hazards.

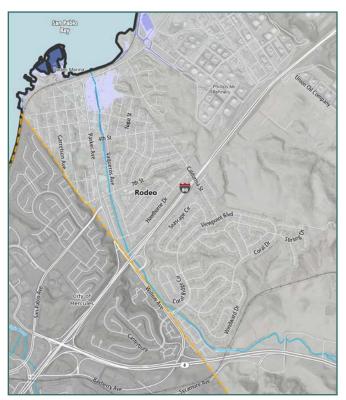
Wastewater treatment plants and services are vulnerable to coastal flooding, flooding, landslides, seismic hazards, and severe storms.

Government and commercial buildings are vulnerable to coastal flooding, flooding, landslides, seismic hazards, severe storms, and wildfires.

The Phillips 66 oil Refinery is vulnerable to coastal flooding, flooding, landslides, and wildfires.

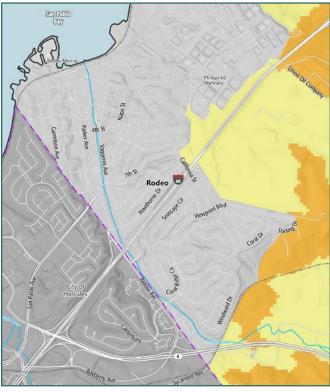
Public safety response, public transit access, and solid waste removal are vulnerable to coastal flooding, flooding, landslides, severe storms, and wildfires.

SEA-LEVEL RISE



Source: San Francisco Bay Conservation and Development Commission, 2017; Contra Costa County, 2018; PlaceWorks 2022.

WILDFIRE



Source: CalFire, 2024; Contra Costa County, 2018; PlaceWorks, 2022.

Sea Level Rise 2050 with 100-Year Storm Severity

Water Depth (feet)

0-2

2-4

19

Incorporated Cities

🛮 Urban Limit Line

- Railroads

Creeks and Drainages

Unincorporated Areas





IMPACTED COMMUNITY

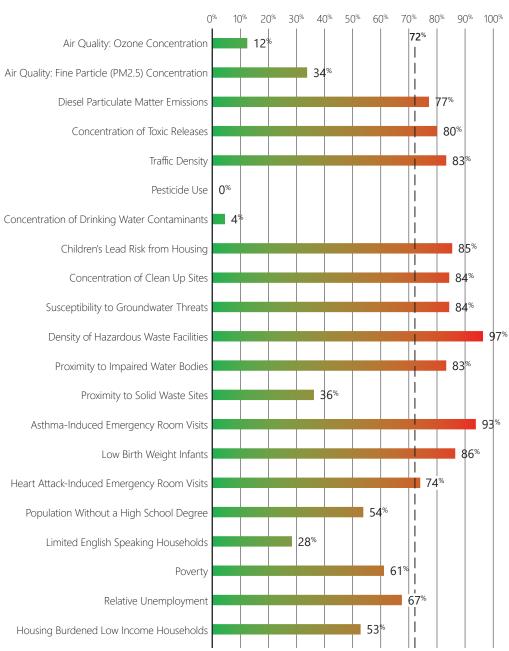
The County has identified Rodeo as an Impacted Community under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages in these communities.

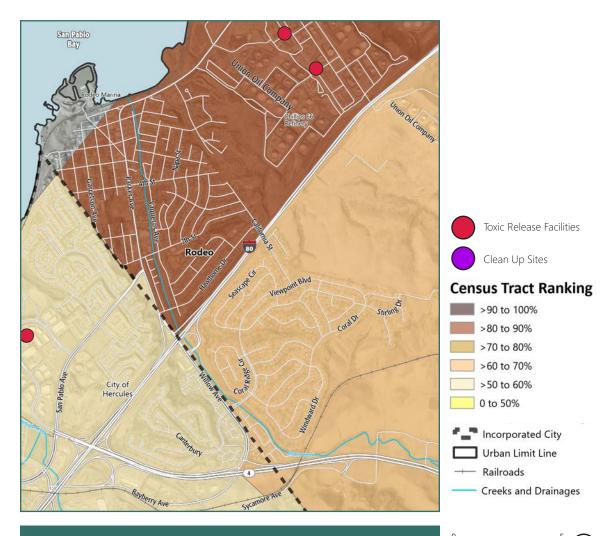
The 21 indicators that contribute to Rodeo's identification as an Impacted Community are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how Rodeo ranks for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher. While there are multiple Census tracts that make up Rodeo, this chart presents only the most-impacted Census tract in the community.

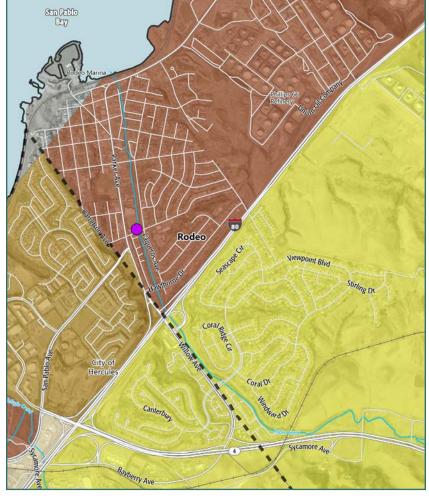
Past activities at the refinery have impacted community and environmental health. Multiple hazardous waste facilities and incidents have resulted in clean-up sites, impaired water bodies, and air pollution. In the past 15 years, industrial activities in and around Rodeo businesses have emitted numerous hazardous gases, ignited fires, contaminated soil, and spilled crude oil into San Pablo Bay. In addition to pollution in San Pablo Bay, Rodeo Creek is impacted by urban runoff and storm sewers, impairing aquatic life, fishing, and other beneficial uses. Meanwhile, rates of emergency room visits from heart attacks and asthma are higher in Rodeo than most other communities in California. Despite these health issues, the closest hospitals are at least 15 minutes away in Vallejo or Martinez. Residents are concerned about access to medical care in emergencies, especially considering industrial hazards and sensitive health conditions.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in Rodeo Relative to the State







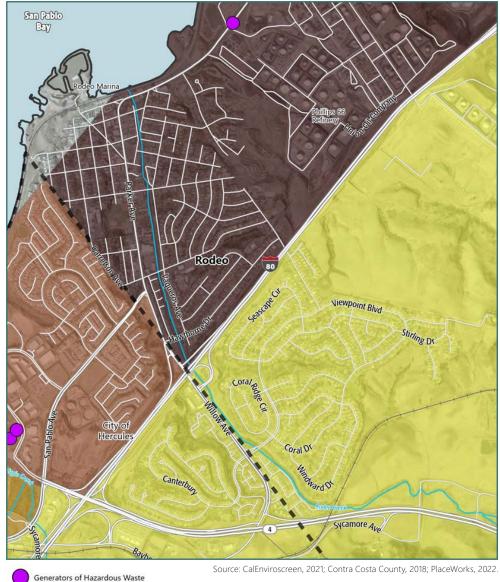
TOXIC RELEASES

This map ranks Census tracts based on the concentration of toxic chemical releases from industrial facilities (e.g., the Phillips 66 Refinery). Parts of Rodeo are ranked at 80 percent, meaning that the area has a concentration of toxic releases that is worse than 80 percent of the state.

CLEAN UP SITES

Scale (Miles

This map ranks Census tracts based on the concentration of clean up sites, which are sites undergoing clean up actions by governmental authorities or property owners due to environmental degradation from hazardous substances. The ranking also considers the nature and magnitude of the threat and the site type and status. Parts of Rodeo are ranked at 84 percent, meaning that the area has a concentration of clean up sites that is higher than 84 percent of the state.



Census Tract Ranking

>90 to 100%

>80 to 90%

>70 to 80% >60 to 70%

>50 to 60%

0 to 50%







HAZARDOUS WASTE

This map ranks Census tracts based on the density of hazardous waste facilities and generators (e.g., the Phillips 66 Refinery), considering each facility's type and permit status and generator activities. Parts of Rodeo are ranked at 97 percent, meaning that the area has a density of hazardous waste facilities and generators that is higher than 97 percent of the state.





PLANNED LAND USE

Land use designations for Rodeo are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. The majority of Rodeo is planned for a mixture of residential uses at various densities. North of the community, the Phillips 66 Refinery and nearby facilities continue to be designated for industrial use. They are adjacent to areas designated Agricultural Lands and Resource Conservation that serve as a buffer and protect local open space. Rodeo includes a Mixed-Use Community-Specific Density designation along Parker Avenue from Seventh Avenue to the waterfront and along Pacific Avenue. This is intended to facilitate creation of a town center, encouraging revitalization of downtown Rodeo by concentrating retail, entertainment, and service uses and developing townhomes, multiple-family residential buildings, and living units above street-level businesses. The marina is designated Commercial Recreation to promote revitalization there. The Rodeo Waterfront/ Downtown Specific Plan and Rodeo Redevelopment Area Planned Unit Development Zoning Code and Design Guidelines provide more detailed guidance for this area.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Rodeo community members:

- 1. Rodeo residents know their neighbors and care about their community. Connectedness among community members should be preserved and enhanced.
- 2. Rodeo should have a bustling downtown core energized through infill development, beautification, historic preservation, community facilities, walking and biking amenities, affordable and connected housing, and regular events that bring people together.
- 3. Rodeo should remain a full-service community with amenities like a fire station and grocery store. Services should expand so that residents do not need to travel outside the community for daily or weekly needs.
- **4.** Rodeo residents should have the amenities necessary to make healthy lifestyle choices, including community gardens, farmers markets, parks, and medical facilities.
- 5. Rodeo's waterfront should serve as a focal point for the community, with easy access to the shoreline, waterfront parks and open space, and a mixture of multiple-family residential, retail, and commercial recreational land uses.
- 6. Creeks and waterways should serve as multi-use linear parks through Rodeo.
- **7.** Rodeo residents should be kept safe and healthy by mitigating risks from heavy industrial accidents, exposure to air pollutants, and other health hazards.
- **8.** Rodeo should be protected from sea-level rise with adequate monitoring and mitigation.
- 9. Rodeo residents should be able to safely walk around all parts of the community.
- **10.** People living or working in Rodeo should be able to get around the community easily without needing to drive.
- 11. All Rodeo residents should have access to safe, secure, and affordable housing.

POLICIES

- 1. Encourage infill development that is flexible, varied in type and appearance, includes residential, commercial, and civic uses, and reflects Rodeo's character.
- 2. Require new development to adhere to the Rodeo Waterfront/ Downtown Specific Plan goals, policies, and design standards and guidelines, which support a vision for a visually cohesive, economically viable, and people-oriented downtown and waterfront area.
- **3.** Partner with civic organizations to market downtown Rodeo and the waterfront to new businesses that are consistent with the vision of the Rodeo Waterfront/Downtown Specific Plan.
- **4.** Support and enable consolidation of parcels along Parker Avenue to facilitate flexible mixed-use development.
- **5.** Require major new development to provide or contribute to recreational amenities for community enhancement.
- **6.** Support community-led efforts to develop a pool at the site of the former Rodeo Swim Club.
- **7.** Promote development of water-oriented commercial, recreation, mixed-use, and transportation uses along the waterfront.
- 8. Maximize public access to San Pablo Bay.
- 9. Support implementation of a Safe Routes to School Program and provide adequate pedestrian and bicycle infrastructure.
- **10.** Use distinct signage and streetscape design elements on both sides of Interstate 80 to create a better sense of cohesiveness throughout the community.
- 11. Design new public spaces to celebrate the community's historic and cultural diversity.
- **12.** Support efforts by civic organizations to hold community gatherings, such as food truck events
- **13.** Support beautification and walkability through effective code enforcement and implementation of strategies to curb illegal dumping.
- 14. Prioritize the safety and health of residents living adjacent to industrial uses.

POLICIES (CONTINUED)

- **15.** Prioritize approval of projects that incorporate community-serving medical facilities and services.
- **16.** Continue efforts to avoid and mitigate the effects of industrial traffic on downtown streets.
- 17. Coordinate with the City of Hercules on decisions likely to affect Rodeo residents.
- **18.** Partner with civic organizations to expand opportunities for community members to engage in the planning process.
- **19.** Support the East Bay Regional Park District's efforts to complete the San Francisco Bay Trail along the waterfront.

ACTIONS

- 1. Complete the Implementation Tasks identified in Chapter 5 of the Rodeo Waterfront/
 Downtown Specific Plan, including development of a linear park along the Rodeo
 Creek Trail and a waterfront promenade.
- 2. Actively seek a developer of a new community market or grocery store, ideally one that reflects the community's ethnic and cultural diversity.
- **3.** Partner with community groups to create a plan to construct and operate civic facilities, such as a community center, youth center, new senior center, sports center, town plaza, dog park, and parks and open spaces..
- **4.** Eliminate sidewalk gaps on San Pablo Avenue, Willow Avenue, Pacific Avenue, and Vaqueros Avenue, especially near transit stops.
- **5.** Improve safety and comfort on the Rodeo Creek Trail by installing pedestrian-scale lighting and other amenities, and improving maintenance, especially in the area just north of Seventh Street.
- 6. Partner with the community to organize creek clean-ups.

SARANAP AND PARKMEAD - CONTEXT - 1

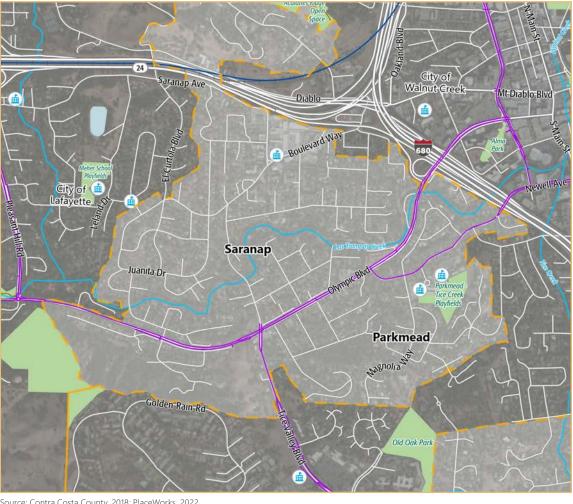
Saranap and Parkmead are residential areas located west of Interstate 680 and south of Highway 24 between Walnut Creek and Lafayette. They are split between the Spheres of Influence of both cities. Saranap traces its origins to 1911, when it became a stop on the Oakland, Antioch, and Eastern Railroad line between Oakland and Sacramento. The railroad ran along what is now Olympic Boulevard, with the station located at the current intersection with Tice Valley Boulevard. Saranap is named for Sara Naphthaly, mother of railroad vice president Samuel Naphthaly. Parkmead is located southeast of Saranap. Despite their proximity to downtown Walnut Creek, these two communities have retained unique identities valued by their residents.

Saranap became popular as a summer getaway in the early 1900s, with cottages located among fruit and walnut orchards. Much of the area was developed during the 1950s, though development continued throughout the 60s, 70s, and 80s. Multi-family homes and businesses were developed along Boulevard Way and Saranap Avenue near the Interstate 680/Highway 24 interchange. Today, about one-quarter of the housing units in Saranap are apartments and condominiums.

Parkmead, which is located in unincorporated Contra Costa County and the City of Walnut Creek, was primarily developed during the 1950s, with community life focused around Tice Creek School and Parkmead Elementary School. The community consists almost entirely of single-family residences.

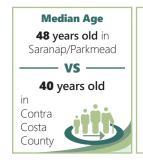
While most of Saranap and Parkmead are built out, the existing commercial and light industrial area along Boulevard Way has potential for redevelopment, as does the south side of Olympic Boulevard. - Trails





Source: Contra Costa County, 2018; PlaceWorks, 2022.

WHO LIVES IN SARANAP AND PARKMEAD?



Average Life Expectancy **82** years old in Saranap/Parkmead

81 years old Contra

Median **Household Income \$134,315** in Saranap/Parkmead

\$103,997 Contra

Costa



Race & **Ethnicity**

▶ **71%** White

▶ 13% Asian

▶ 9% Hispanic or Latino

▶ 3% Black or African American







HAZARDS

Drought



Extreme heat



Flooding



Human health hazards



Landslides



Seismic hazards



Severe storms



Wildfire

MAJOR VULNERABILITIES

Seniors (including seniors living alone), persons experiencing homelessness, and children are vulnerable to extreme heat, human health hazards, and wildfire.

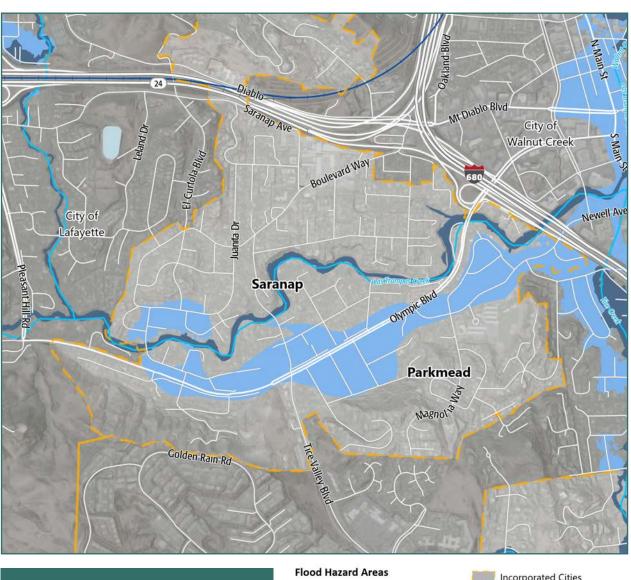
Renters and cost-burdened households are vulnerable to increased housing costs from drought, extreme heat, flooding, landslides, seismic hazards, severe storms, and wildfire.

Interstate 680, Highway 24, and Olympic Boulevard are vulnerable to flooding, landslides, severe storms, and wildfire.

Parkmead Elementary School and Tice Creek Elementary school are vulnerable to flooding, severe storms, and wildfire.

Safety and medical responses and public transit access is vulnerable to flooding, seismic hazards, severe storms, and wildfire.

The information on this page presents a summary of hazards and vulnerabilities in Saranap and Parkmead based on the Contra Costa County Vulnerability Assessment; please see the online **Vulnerability Assessment** for a full description of these hazards and vulnerabilities.



FLOOD ZONES

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.



100-Year Flood Zone 500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Incorporated Cities

BART Route --- Railroads

Creeks and Drainages

A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

PLANNED LAND USE

Land use designations for Saranap and Parkmead are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Saranap and Parkmead are planned primarily to maintain and enhance the existing residential uses while accommodating new development to revitalize existing commercial areas. Aside from enhanced neighborhood amenities, no changes are planned for the existing lower-density residential areas. New development is planned to occur in mixed-use areas along major roads, incorporating a range of neighborhood-serving commercial uses and multiple-family dwellings. Mixed-use projects that incorporate affordable housing are highly encouraged. The mixed-use area along Boulevard Way will create a more unified and vibrant urban center offering medium- to high-density housing choices. The Saranap Village project, which includes 196 housing units, along with retail businesses and services, will anchor the west end of the mixed-use area along Boulevard Way. The mixed-use area along Olympic Boulevard is envisioned as a revitalized, well-designed corridor, with new residential and commercial development and improved services.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Saranap and Parkmead community members:

- 1. The harmonious mix of single-family and multiple-family dwellings, offices, and commercial uses in Saranap and Parkmead should be preserved.
- 2. Further development of Saranap and Parkmead should be thoughtfully planned to enhance the communities.
- **3.** The commercial area along Boulevard Way should be revitalized through development of mixed-use projects offering neighborhood-serving businesses and a wider variety of housing choices.
- **4.** The communities should be enhanced with new pedestrian and bicycle facilities that connect residential and commercial areas, and development of a neighborhood park and community meeting space.

POLICIES

- 1. In mixed-use areas, preserve adequate square footage of commercial uses to meet the daily needs of the community. Support retention of active commercial uses and neighborhood-serving businesses while promoting new multiple-family residential development, especially affordable units.
- 2. Maintain public views of Mount Diablo and surrounding scenic ridges to the greatest extent feasible.
- **3.** Protect the undeveloped hillside and ridge south of Olympic Boulevard and west of Tice Valley Boulevard.
- 4. Preserve views and access to sunlight along Boulevard Way and Saranap Avenue by incorporating standardized "step back" requirements for the upper floors (third story and above) of multi-story buildings and encouraging small landscape buffers and setbacks.
- 5. Maintain the single-family residential development pattern outside of the mixed-use areas along Boulevard Way and Olympic Boulevard.
- **6.** Discourage roof heights exceeding 40 feet and architectural features (such as parapets) exceeding 45 feet.
- **7.** Require building scale, massing, architectural style, materials, and signage to be harmonious with the surroundings and contribute to a visually pleasing streetscape, particularly along Boulevard Way and Saranap Avenue.
- **8.** Require installation of street and sidewalk amenities of a consistent character that foster a cohesive "district" appearance along Boulevard Way.

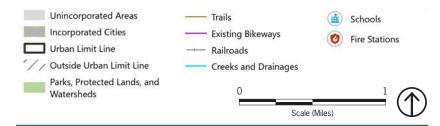
ACTIONS

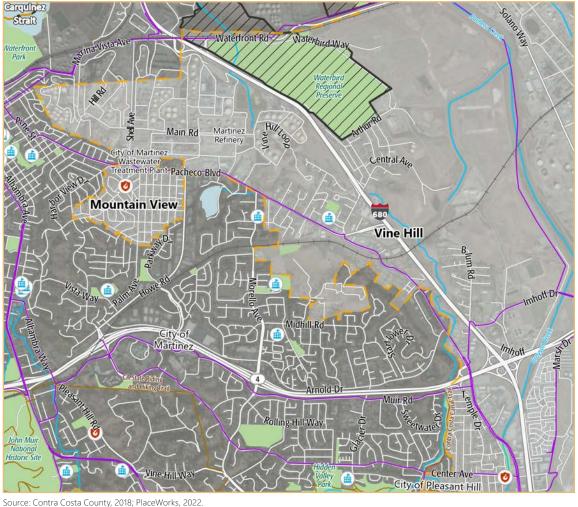
- 1. Evaluate and improve pedestrian and bicycle infrastructure where possible, particularly along the full length of Boulevard Way.
- 2. Identify a location for a local park or other community facility/space within Saranap that may include a playground, lawn area, dog run/park, picnic area, exercise equipment, and community garden. Require future development projects to contribute their fair share towards its establishment.
- 3. Reconfigure and enhance the Boulevard Way right-of-way, from its intersection with Saranap Avenue east to the City of Walnut Creek border, as follows:
 - a. Reduce width to two lanes.
 - **b.** Install diagonal parking and Class II or Class III bicycle facilities along both sides.
 - c. Install traffic-calming devices and crosswalks where necessary.
 - d. Install parklets.
 - e. Widen sidewalks.
 - f. Install street trees, landscaping, decorative streetlights, street furniture, water features, public artwork, and other desired amenities.

VINE HILL AND MOUNTAIN VIEW - CONTEXT - 1

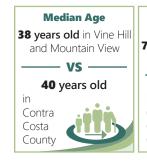
Vine Hill and Mountain View are small unincorporated communities located on the northern border of Martinez and within its Sphere of Influence. The communities consist primarily of single-family homes and pockets of commercial uses along Pacheco Boulevard, Howe Road, and Arthur Road, and are situated adjacent to the Martinez Refining Company and other industrial uses. Interstate 680 runs through Vine Hill and Highway 4 runs just south of the two communities, providing regional access to other parts of the Bay Area. Many residents travel to Martinez or beyond for education, work, services, and amenities. The Burlington Northern Santa Fe Railroad runs east-west through Vine Hill, transporting cargo to and from Bay Area ports.

Residents appreciate the relatively affordable cost of housing in their communities, as well as its access to nature and the Contra Costa Canal Trail. Residents are also proud of their independent, self-sufficient nature, and recognize that the communities are distinct from Martinez and Concord. Community members have noted that the friendly, neighborly feeling cultivated in these communities would be enhanced with improved public safety and beautification, and that sidewalks, trail connections, and public transit could be expanded. Residents also cite parking as an issue in their neighborhoods and would like to increase parking availability near their homes.





WHO LIVES IN VINE HILL AND MOUNTAIN VIEW?



Average Life Expectancy **79** years old in Vine Hill and Mountain View 81 years old



Median **Household Income** \$105.946 in Vine Hill and Mountain View \$103,997

Costa

Contra County

Race & **Ethnicity**

- ▶ **60%** White
- ▶ 23% Hispanic or Latino
- ▶ **9%** Asian
- 2% Black or African American







VINE HILL AND MOUNTAIN VIEW - CONTEXT - 2

The information on this page presents a summary of hazards and vulnerabilities in Vine Hill and Mountain View based on the Contra Costa County Vulnerability Assessment; please see the **online Vulnerability Assessment** for a full description of these hazards and vulnerabilities.

HAZARDS	
Air quality	Landslides
Coastal flooding	Sea level rise
Drought	Seismic hazards
Extreme heat	Severe weather
Flooding	Wildfire
Human health hazards	

Manna Waterichi Ra Waterind Waterichi Ra Waterind Waterin

SEA LEVEL RISE Sea Level Rise 2050 with 100-Year Storm Severity Water Depth (feet) 0-2 2-4 4-6 6-8 8-10 10-12 12+ Unincorporated Areas

0 .5 Scale (Miles)



Source: San Francisco Bay Conservation and Development Commission, 2017; Contra Costa County, 2018; PlaceWorks, 2022.

MAJOR VULNERABILITIES

Cost-burdened households and low-income households are vulnerable to coastal flooding, drought, flooding, landslides, seismic hazards, severe weather, and wildfire.

Persons experiencing homelessness, persons with chronic illnesses, and children are vulnerable to poor air quality, extreme heat, human health hazards, and wildfire.

Interstate 680, Highway 4, and their bridges are vulnerable to damage from coastal flooding, flooding, landslides, sea level rise, seismic hazards, and severe storms.

The Martinez Refinery, wastewater treatment plant, and Waterbird Regional Preserve are vulnerable to inundation from sea level rise, coastal flooding, and flooding.

Wetlands and aquatic habitats are vulnerable to damage from coastal storms, drought, sea level rise, and severe weather.



FLOOD ZONES

Incorporated Cities
Urban Limit Line
//, Outside Urban Limit Line
Creeks and Drainages

Flood Hazard Areas

100-Year Flood Zone

500-Year Flood Zone

Areas of Undetermined but Possible Flood Hazard

Water

Unincorporated Areas

Incorporated Cities

Urban Limit Line

// Outside Urban Limit Line

RailroadsCreeks and Drainages

Creeks and Dramag

.5 lle (Miles) A 100-year flood zone represents a 1% chance of flooding in any given year.

A 500-year flood zone represents a 0.2% chance of flooding in any given year.

Source: FEMA, 2019; Contra Costa County, 2018; PlaceWorks, 2022.

IMPACTED COMMUNITY

The County has identified Vine Hill and Mountain View as Impacted Communities under Senate Bill (SB) 1000, which requires the County to integrate environmental justice into the General Plan. This law is based on the understanding that some communities have experienced a combination of historic discrimination, neglect, and political and economic disempowerment. Often, this has resulted in a disproportionate burden of pollution and health impacts and disproportionate social and economic disadvantages in these communities.

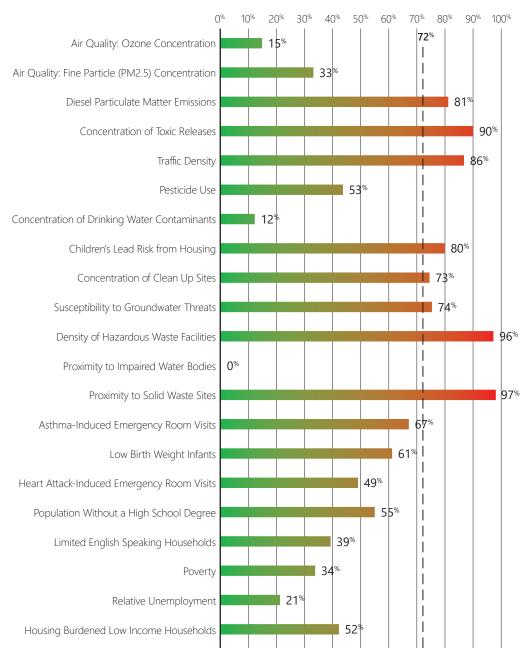
The 21 indicators that contribute to Vine Hill and Mountain View's identification as Impacted Communities are highlighted in the chart to the right, with additional details provided in the maps that follow, based on State data from **CalEnviroScreen**. The chart shows how Vine Hill and Mountain View rank for each indicator compared to the rest of the state. The County identifies Impacted Communities as those where the combined ranking for all factors is 72 percent or higher. While there are multiple Census tracts that make up Vine Hill and Mountain View, this chart presents only the most-impacted Census tract among these communities.

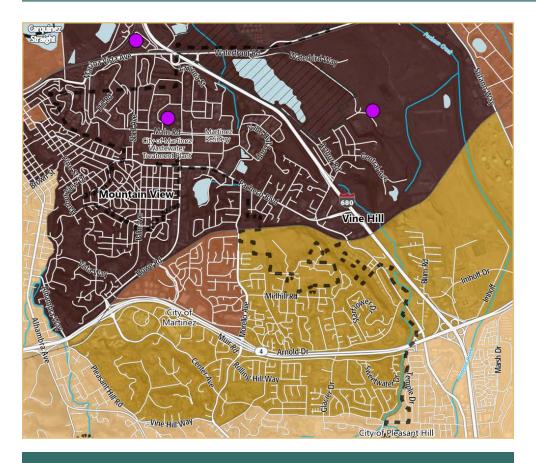
Given the communities' close proximity to a refinery and other heavy industrial and manufacturing operations, residents may be at higher risk of exposure to harmful substances in the air, water, and land. Hazardous waste disposal facilities and domestic landfills, officially termed the Vine Hill Complex, are also located just east of these communities. These sites have undergone clean up but are subject to ongoing maintenance to prevent releases of hazardous substances.

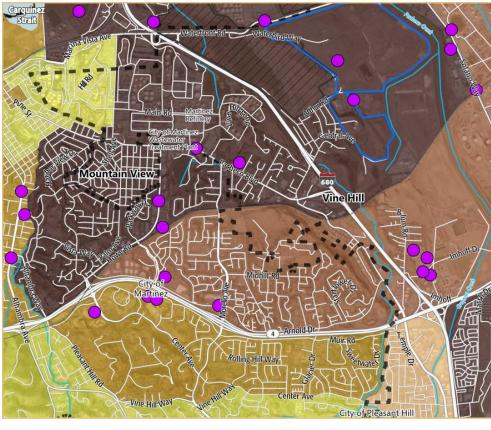
There have been violations of air quality standards in recent years, including a release of nearly 20 tons of gases during a power outage in 2016. High levels of air pollution can induce asthma, especially in vulnerable populations such as children and seniors. State data indicates that Vine Hill and Mountain View residents visit the emergency room for asthma conditions at a rate that is 67 percent higher than other communities in California.

IMPACTED COMMUNITY INDICATORS (2021)

Ranking of Most Impacted Census Tract in Vine Hill and Mountain View Relative to the State







TOXIC RELEASES

Census Tract Ranking

>90 to 100%

>80 to 90%

>70 to 80%

>60 to 70%

>50 to 60%

0 to 50%

Incorporated City

Urban Limit Line

// Outside Urban Limit Line

--- Railroads

Creeks and Drainages

This map ranks Census tracts based on the concentration of toxic chemical releases from industrial facilities. Parts of Vine Hill and Mountain View are ranked at 90 percent, meaning that the area has a concentration of toxic releases that is worse than 90 percent of the state.

Toxic Release Facilities



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

HAZARDOUS WASTE

Census Tract Ranking

>90 to 100%

>80 to 90%

>70 to 80%

>60 to 70%

>50 to 60% 0 to 50%

Incorporated City

Urban Limit Line

Creeks and Drainages

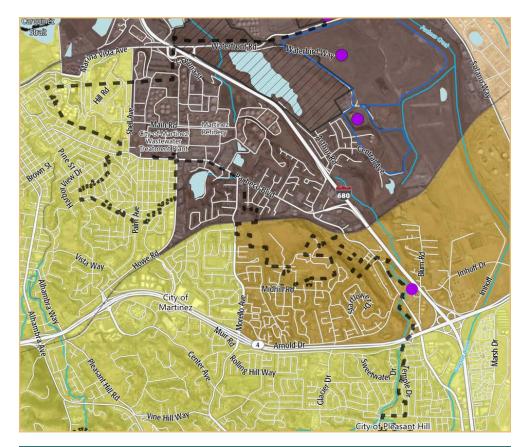
This map ranks Census tracts based on the density of hazardous waste facilities and generators (e.g., the Martinez Refinery Company), considering each facility's type and permit status and generator activities. Parts of Vine Hill and Mountain View are ranked at 96 percent, meaning that the area has a density of hazardous waste facilities and generators that is higher than 96 percent of the state.

Generators of Hazardous Waste

Permitted Hazardous Waste
Storage Facilities



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.







SOLID WASTE



// Outside Urban Limit Line

--- Railroads Creeks and Drainages

Census Tract Ranking

>90 to 100%

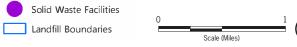
>80 to 90%

>70 to 80%

>60 to 70% >50 to 60%

>0 to 50%

This map ranks Census tracts based on the proximity to solid waste sites and facilities, considering each facility's type, proximity to nearby communities, reported odor complaints, and more. Parts of Vine Hill and Mountain View are ranked at 97 percent, meaning that the area is exposed to more solid waste hazards than 97 percent of the state.



Source: CalEnviroscreen, 2021; Contra Costa County, 2018; PlaceWorks, 2022.

PLANNED LAND USE

Land use designations for Vine Hill and Mountain View are shown on Figure LU-1, General Plan Land Use Map, and defined in Table LU-1 in the Land Use Element. Most of the land in these communities is designated for continued residential, industrial, and conservation uses, with the commercial pockets also remaining. No major developments or changes are planned, except along a portion of Pacheco Boulevard where the Mixed-Use Community-Specific Density designation is applied. This area is envisioned as a community core that provides an array of uses to support residents while stimulating reinvestment in the community at large. Community-serving businesses that are walkable and conveniently accessed by alternative transportation modes are highly desired.









GUIDING PRINCIPLES

The following guiding principles articulate the values, priorities, and aspirations for the future shared by Mountain View and Vine Hill community members:

- 1. Mountain View and Vine Hill's rich history and heritage should be celebrated.
- 2. The independent culture that separates Mountain View and Vine Hill from surrounding cities should be preserved and the friendly, neighborly atmosphere should be maintained.
- 3. Mountain View and Vine Hill residents identify the surrounding wetlands, open spaces, and connections to nature as some of the most valuable assets of this area. Preservation, natural resource restoration efforts, and support for local wildlife should be expanded.
- **4.** Roadways should be safe for all users, including pedestrians, bicyclists, and drivers. Sidewalks and bike lanes should be added.
- 5. The affordability and variety of the existing housing stock should be maintained and enhanced.
- **6.** Residents should be protected from adverse health impacts associated with traffic congestion along Highway 4 and Interstate 680.
- **7.** Mountain View and Vine Hill residents should live in a healthy environment safe from short- and long-term air quality and health hazards associated with industrial facilities in and near the community.

POLICIES

- 1. Maximize opportunities to protect and enhance Vine Hill Creek.
- 2. Support community beautification and safety. Encourage improved community appearance through graffiti removal, litter reduction, street and sidewalk maintenance, abatement of illegal dumping, and code enforcement.
- **3.** Encourage economic investment, especially commercial and mixed-use development, along Pacheco Boulevard.

ACTIONS

- 1. Install improvements along Pacheco Boulevard to enhance pedestrian and bicycle safety, community appearance, and traffic flow.
- 2. Address local flooding problems.
- **3.** Close sidewalk gaps and improve pedestrian infrastructure, especially in the vicinity of Las Juntas Elementary School.
- **4.** Study the feasibility of creating secondary roadway access to and from the portion of Vine Hill east of Interstate 680.

LAND USE ELEMENT

Land use patterns in Contra Costa County play an important role in defining the county's character and that of its individual communities. Approximately 46 percent of the unincorporated land is set aside for conservation, recreation, and watershed protection purposes. Another 38 percent is devoted to rural and agricultural uses, such as grazing land, row crops, orchards, and vineyards. The remaining area includes public and institutional facilities, like schools, hospitals, fire stations, and airports; neighborhoods of condominiums, apartments, townhomes, mobile homes, and single-family residences; commercial development ranging from urban shopping centers to riverside restaurants; and industrial uses, such as refineries, small- and mid-size manufacturers, and distribution centers. Many of these land uses are expected to evolve over the coming decades as new housing types, business models, and energy sources emerge. As this occurs, the policy guidance in this Element will also evolve to build on community assets, address opportunities and challenges, and improve quality of life for everyone through thoughtful land use planning.

The Land Use Element is divided into the following four sections:

- The Land Use Designations and Map section establishes regulations and standards for development in each land use designation shown on the General Plan Land Use Map.
- The Orderly, Well-Planned Growth section includes policy guidance to balance development and conservation.

- The Specific Land Uses section includes policy guidance tailored to residential, commercial, mixed-use, industrial, rural, agricultural, and open space uses.
- The Land Use Element Performance Measures describe how the County will track its progress in achieving some of the major objectives expressed in this Element.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.



Community Health



Environmental Justice



Economic Development



Sustainability

LAND USE DESIGNATIONS AND MAP

State planning law requires the Land Use Element to designate the general distribution, location, and extent of the various land uses covered by this General Plan. Table LU-1 lists the 22 land use designations the County uses in its land use planning. Each designation is generally described and the standards for allowed residential density and intensity of nonresidential use

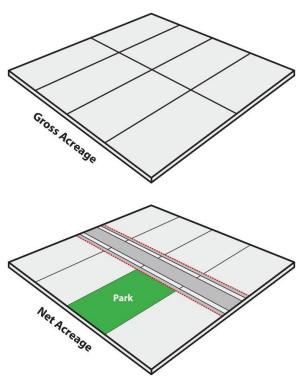
are stated. The land use designation descriptions are not intended to be exhaustive. Communities and uses evolve and it is not possible to anticipate every use that could be proposed over the life of this General Plan. The key factor in determining whether a particular land use is appropriate or allowable in a particular designation is whether the use supports or conflicts with the designation's overarching intent.

Table LU-1 also defines the relationship between the land use designations in this General Plan and the zoning districts enumerated in the County Zoning Ordinance (County Ordinance Code Title 8). Each land use designation categorizes various zoning districts as "consistent" or "potentially consistent." Those categorized as "consistent" are presumed to be compatible with the land use designation because the permittable uses and development standards (lot sizes, height limitations, setbacks, parking ratios, landscaping requirements, etc.) align with the designation's intent and purpose. Zoning districts categorized as "potentially consistent" may be compatible with the General Plan designation depending on location, the nature of projects being proposed, and other considerations. Properties may only be zoned or rezoned to districts that are consistent or potentially consistent with the underlying land use designation.

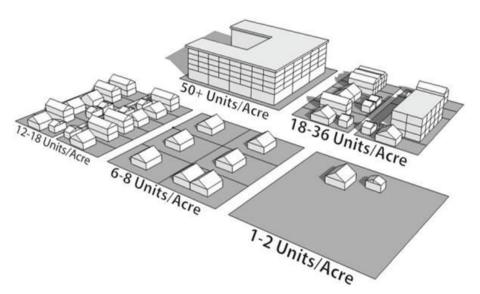
Standards for allowed residential density and intensity of nonresidential uses are described below. These standards reference gross acreage, which is the acreage of the entire parcel designated for the use, and net acreage, which is the area remaining after land is dedicated for rights-of-way, easements, and other public or common uses.

• Residential densities are expressed in terms of dwelling units per net acre, which is the area remaining within a project site after land is dedicated for rights-of-way, easements, and other public or common uses. As a rule of thumb, the County assumes net acreage to be 75

percent of the gross for sites with residential designations up through Residential Low-Medium Density, 80 percent of the gross for sites with denser residential or mixed-use designations, and 95 percent of the gross for sites with agricultural designations. A project's actual density is calculated during the development review process. Actual density must fall within the density range for the applicable land use designation unless State laws, such as Density Bonus, or policies within this General Plan allow for higher or lower densities.

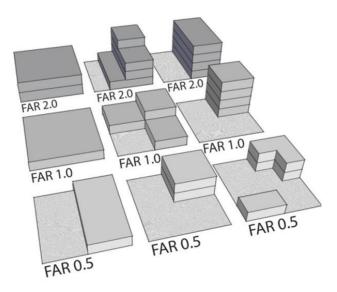


This illustration shows the difference between gross and net acreage



This illustration shows different densities for residential development on similarly sized lots. This graphic is intended only to show the relative differences between residential developments at various densities and does not represent a density standard for this General Plan.

• Development intensities for nonresidential uses are expressed in terms of floor area ratio (FAR), which is the ratio of gross building floor square footage to gross land area, expressed as a decimal number. When a building's square footage is equal to the area of the parcel it occupies, the FAR is 1.0. FARs are lower in suburban areas, where buildings are shorter and often surrounded with parking and landscaping, than in urban areas, where buildings are taller and occupy more of their respective parcels. Nonresidential development cannot exceed the FAR for the applicable land use designation.



This illustration shows how various building configurations represent different FARs on similarly sized lots. This graphic is intended only to show the relative differences in FAR and does not represent an intensity standard for this General Plan.

The General Plan Land Use Map is presented in Figure LU-1. This map shows the distribution of the land use designations listed in Table LU-1. In most cases the designations reflect uses already in existence. However, in some places the designations are aspirational or intended to be catalysts for change. A prime example is the application of mixed-use designations to aging, single-use commercial areas. In these instances, the designation is intended to promote more efficient use of the land and encourage reinvestment by increasing residential density and expanding options for development. The land use map is not meant to be static; amendments are expected in response to evolving community priorities and needs, shifting economic trends, technological advances, and other societal changes affecting land use.

ORDERLY, WELL-PLANNED GROWTH

Balanced Development and Conservation

Contra Costa County was an early implementer of smart growth and compact development principles, embodied in the 65/35 Land Preservation Standard (65/35 Standard) and Urban Limit Line (ULL). These land use controls, which are integral to long-range planning in the county, were established by voter approval of Measure C-1990 and their necessity was reaffirmed through voter approval of Measure L-2006. Contra Costa residents continue to recognize the importance of balancing development to meet the community's housing, jobs, and service needs with protection of the county's natural environment and resources.

65/35 Land Preservation Standard

One of two fundamental components of Measures C-1990 and L-2006 is the 65/35 Standard, which limits the footprint of urban development by restricting urban land use designations to no more than 35 percent of the land in the county and requiring at least 65 percent of the land to be designated for non-urban uses. Table LU-2 indicates which County land use designations are urban and non-urban. The 65/35 Standard does not regulate land use intensity. All urban land use designations count equally against the 35 percent limit regardless of how, or even if, the land to which they are applied is developed. Likewise, all non-urban designations count equally toward the 65 percent requirement regardless of development. The 65/35 Standard operates on a countywide basis, accounting for urban and non-urban designations within the 19 cities as well as the unincorporated county. As of 2024, approximately 28 percent of the land countywide has been designated for urban uses.

TABLE LU-1 LAND USE DESIGNATIONS

RESIDENTIAL VERY-LOW DENSITY RVL Appropriate for transitions between urban development and agricultural/rural areas. Also appropriate for constrained sites where reduced densities are justified. Typically includes detached single-family units on lots 1 acre or larger and small-scale agricultural activities. Consistent Zoning: R-100, R-65, R-40, HE-C Potentially Consistent Zoning: All A- districts, P-1	Density ≤1 FAR N/A
RESIDENTIAL LOW DENSITY RL Appropriate for low-density, predominantly single-family residential development. Typically includes detached single-family units on lots approximately 15,000 square feet to 1 acre in size and limited nonresidential uses that serve and support nearby homes. Small-scale agricultural activities may be compatible on larger lots. Consistent Zoning: R-40, R-20, R-15, R-12, HE-C Potentially Consistent Zoning: P-1	Density 1-3 FAR N/A
RESIDENTIAL LOW-MEDIUM DENSITY RLM Appropriate for moderate-density, predominantly single-family residential development. Typically includes detached single-family units on lots approximately 6,000 to 15,000 square feet and limited nonresidential uses that serve and support nearby homes. Duplexes and triplexes may also be compatible. Consistent Zoning: R-12, R-10, R-7, R-6, F-1, HE-C Potentially Consistent Zoning: P-1	Density 3-7 FAR N/A
RESIDENTIAL MEDIUM DENSITY RM Appropriate for higher-density single-family and low-density multiple-family residential development. Typically includes single-family units on lots approximately 2,500 to 6,000 square feet, duplexes, triplexes, townhouses, condominiums, apartments, and mobile home parks. Also includes limited nonresidential uses that serve and support nearby homes. Consistent Zoning: R-6, F-1, D-1, M-6, M-9, M-17, HE-C Potentially Consistent Zoning: P-1	Density 7-17 FAR N/A
RESIDENTIAL MEDIUM-HIGH DENSITY RMH Appropriate for the highest-density single-family and medium-density multiple-family residential development. Typically includes single-family units on lots smaller than 2,500 square feet, tiny homes, fourplexes, townhouses, condominiums, apartments, and assisted living facilities. Also includes limited nonresidential uses that serve and support nearby homes. Consistent Zoning: M-17, M-29, HE-C Potentially Consistent Zoning: P-1	Density 17-30 FAR N/A
RESIDENTIAL HIGH DENSITY RH Appropriate for higher-density, multiple-family development. Typically includes condominiums, apartments, and assisted living facilities. Also includes limited nonresidential uses that serve and support nearby homes. Consistent Zoning: HE-C Potentially Consistent Zoning: P-1	Density 30-60 FAR N/A
RESIDENTIAL VERY-HIGH DENSITY RVH Appropriate near transit stations, employment centers, and other locations where providing exceptionally high density is a priority. Typically includes condominiums, apartments, and micro-units. Also includes limited nonresidential uses that serve and support nearby homes. Consistent Zoning: HE-C Potentially Consistent Zoning: P-1	Density 60-125 FAR N/A

RESIDENTIAL MAXIMUM DENSITY RX Reserved for unique projects providing the highest densities in the unincorporated county. Typically includes condominiums, apartments, and micro-units. Density is determined on a project-by-project basis. Also includes limited nonresidential uses that serve and support nearby homes. Consistent Zoning: None Potentially Consistent Zoning: P-1	Density 126≤ FAR N/A
COMMERCIAL and OFFICE CO Allows for a full range of commercial and office uses. Typical uses include retail (neighborhood, community, and regional scale), personal and business services, lodging and hospitality services, entertainment venues, event spaces, shared co-workspaces, commercial kitchens, workforce training centers, and all kinds of medical, business, and professional offices. Consistent Zoning: C, C-B, N-B, R-B, A-O, O-1 Potentially Consistent Zoning: P-1	Density N/A FAR 1.0 Commercial 2.5 Office
LIGHT INDUSTRY LI Allows for a range of low- to moderate-intensity industrial uses that when properly designed and operated may be established in proximity to residences and other sensitive receptors without sacrificing human health and safety or resulting in significant environmental impacts. Typically uses include light manufacturing, fabrication/assembly, processing, machinery repair, warehousing and storage, distribution, research and development, laboratories, incubators, workforce training centers, and ancillary or supportive retail and office uses. Consistent Zoning: L-I, C-M Potentially Consistent Zoning: A-O, P-1	Density N/A FAR 1.5
HEAVY INDUSTRY HI Allows for the most intense industrial land uses. Heavy industrial uses typically require significant acreage and direct access to deep water channels, rail lines, or freeways. Operations are often characterized by transport, storage, and use of large quantities of hazardous or noxious materials; significant emissions of pollutants, odors, noise, vibration, and light; and inherent risks to human health and safety and the environment. Typical uses include heavy manufacturing and processing (e.g., petroleum refining, chemical manufacturing, steel production), tank farms, marine terminals, rail yards, and fossil fuel-fired power plants. Light industrial uses are also allowed within this designation. Consistent Zoning: H-I, L-I, C-M, W-3 Potentially Consistent Zoning: A-O, P-1	Density N/A FAR 0.67 Heavy Industry 1.5 Light Industry
MIXED-USE LOW DENSITY MUL Allows for various housing types, including tiny homes, townhouses, condominiums, apartments, studios, live-work units, and micro-units, along with a wide range of neighborhood-serving retail, personal service, office, entertainment, and public uses. This designation is applied where a modest level of mixed-use development is appropriate, such as pedestrian-scale corridors, neighborhood nodes, and individual or small groups of parcels generally encompassing less than 1 acre. Consistent Zoning: N-B, C-B, R-B, A-O, O-1, M-6, M-9, M-17, M-29, HE-C Potentially Consistent Zoning: P-1	Density 10-30 FAR 1.0
MIXED-USE MEDIUM DENSITY MUM Allows for various housing types, including townhouses, condominiums, apartments, studios, live-work units, and micro-units, along with a wide range of retail, personal service, office, hospitality, entertainment, and public uses sized to serve nearby neighborhoods or the surrounding community. This designation is applied where moderate- to large-scale mixed-use development is appropriate, such as existing commercial or mixed-use cores of established communities, transitioning commercial areas (e.g., obsolete shopping centers), and individual or groups of parcels encompassing several acres. Consistent Zoning: N-B, C-B, R-B, A-O, O-1, HE-C Potentially Consistent Zoning: P-1	Density 30-75 FAR 2.0

MIXED-USE HIGH DENSITY | MUH

Allows for high-density residential complexes of all types, office towers, large hotels, convention spaces, and accompanying retail, personal service, entertainment, and public uses. This designation is applied where intense, urban-scale mixed-use development is appropriate, such as transit villages and Density 75-125 FAR 4.0

Consistent Zoning: N-B, C-B, R-B, A-O, O-1, HE-C Potentially Consistent Zoning: P-1

MIXED-USE COMMUNITY-SPECIFIC DENSITY | MUC

Allows for various housing types, including tiny homes, townhouses, condominiums, apartments, studios, live-work units, and micro-units, along with a wide range of neighborhood- and community-serving retail, personal service, office, hospitality, entertainment, and public uses. Densities and FARs are specific to the communities where this designation is applied, as follows:

Alamo 22-40 du/net acre, 1.75 FAR Montalvin Manor 17-35 du/net acre, 1.75 FAR Bay Point 22-40 du/net acre, 1.75 FAR North Richmond 17-35 du/net acre, 2.0 FAR Crockett 17-27 du/net acre, 2.0 FAR Pacheco 22-40 du/net acre, 1.75 FAR Discovery Bay 17-35 du/net acre, 1.5 FAR Rodeo 17-35 du/net acre, 2.0 FAR El Sobrante 17-35 du/net acre, 1.75 FAR Saranap 22-40 du/net acre, 1.75 FAR

Vine Hill 22-35 du/net acre, 1.75 FAR

Variable FAR Variable

Density

Additional policy guidance related to the MUC designation may appear in the Community Profiles for these communities.

Consistent Zoning: N-B, C-B, R-B, A-O, O-1, M-17, M-29, HE-C Potentially Consistent Zoning: P-1

PUBLIC and SEMI-PUBLIC | PS

Appropriate for uses and facilities owned or operated by public entities or private entities serving the public. These include law enforcement and fire stations, schools, libraries, hospitals, water and sewage treatment plants, landfills, cemeteries, airports, and military installations. Also includes high-volume public and private transportation corridors (e.g., freeways, BART, railroads) and utility corridors.

Density N/A

> FAR N/A

Consistent Zoning: All districts Potentially Consistent Zoning: None

AGRICULTURAL CORE | AC

Applied to approximately 11,900 acres between Brentwood, Discovery Bay, and Byron composed primarily of soils rated Class 1 or 2 per the National Resources Conservation Service (NRCS) Land Capability Classification. Much of the area under this designation is prime agricultural land that is actively farmed with intensive row crops, orchards, and vineyards. Agricultural production is the primary use in areas with this designation and takes precedent over other uses. Limited agricultural tourism activities that support the agricultural economy are consistent with this designation. "Ranchette" or estate-style residential development, and any other use that interferes with agricultural activities, is inconsistent with this designation.

Density 1 unit/40 acres

> **FAR** N/A

Consistent Zoning: A-4, A-40, A-80 Potentially Consistent Zoning: P-1

AGRICULTURAL LANDS | AL

Applied to agricultural areas composed primarily of soils rated Class 3 or lower per the National Resources Conservation Service (NRCS) Land Capability Classification. Most areas with this designation are non-irrigated, rural lands that may support grazing and dryland farming, though it also includes non-prime, productive agricultural lands. Other types of agricultural, open space, and non-urban uses are consistent with this designation when conducted in accordance with the County's policies pertaining to agricultural areas. These include limited opportunities for recreation, lodging (farm stays, bed and breakfasts, etc.), food services (farm-to-table dining, farm stands, etc.), special events, and similar activities that support the county's agricultural economy.

Density 1 unit/10 acres 1 unit/20 acres within DPZ

Some land with this designation is within the Delta Primary Zone (DPZ) and may be used for recreation and other nonagricultural activities that are consistent with the Delta Protection Commission's Land Use and Resource Management Plan for the Delta and the Delta Stewardship Council's Delta Plan.

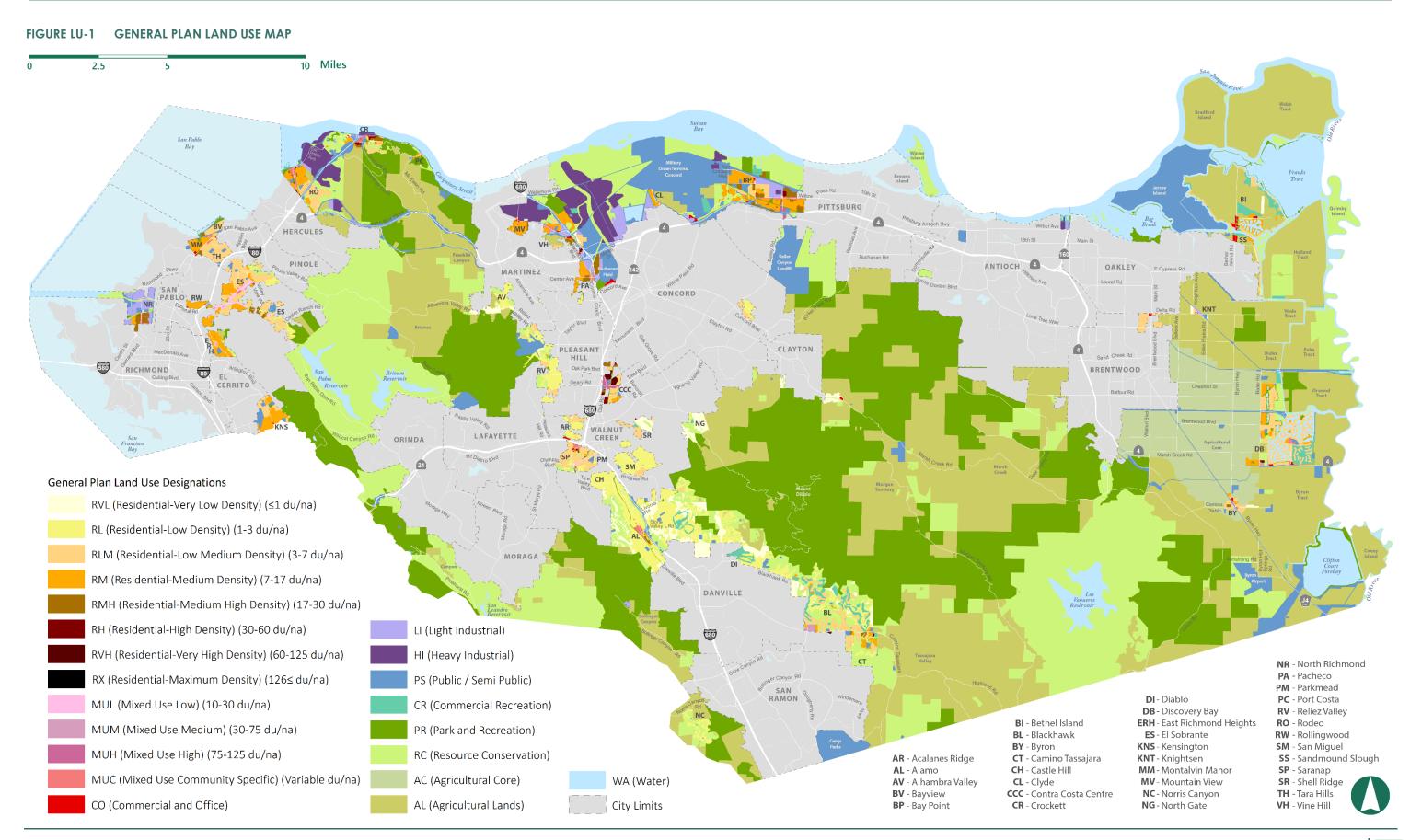
FAR N/A

Consistent Zoning: All A- districts Potentially Consistent Zoning: P-1

PARKS and RECREATION PR Applied to publicly- and privately-owned parks and similar outdoor spaces. Includes local parks in urban areas as well as federal, State, and regional parks and historic sites that are managed primarily for conservation purposes and provide active or passive recreational activities. Ancillary amenities such as visitor centers, event spaces, amusements/rides, and eateries that support or enhance the primary recreational use are consistent with this designation. Consistent Zoning: All R-, M-, and A- districts Potentially Consistent Zoning: P-1	Density 0.0 FAR N/A
COMMERCIAL RECREATION CR Appropriate for privately-owned recreational uses where the primary activity is conducted outdoors, such as golf courses, recreational vehicle campgrounds, hunting clubs, and marinas. Ancillary commercial and service uses, as well as an on-site residential unit for a caretaker, harbor master, etc., are consistent with this designation. Consistent Zoning: A-2, A-3 Potentially Consistent Zoning: C, R-B, P-1	Density 0.0 FAR N/A
RESOURCE CONSERVATION RC Applied to the watersheds of reservoirs owned by public utilities, mitigation banks, habitat restoration sites, ecologically significant or environmentally sensitive areas that are not within publicly-owned parkland, and hazardous or otherwise constrained areas that are unsuitable for development. Resource management, low-intensity agriculture, low-intensity recreation, and similar activities are consistent with this designation when conducted in a way that is not damaging to the resources being protected. Construction of public and semi-public infrastructure, and one single-family residence on an existing legal lot under private ownership, is consistent with this designation. All types of urban development and subdivisions that increase density are prohibited. Consistent Zoning: All A- districts Potentially Consistent Zoning: P-1	Density 0.0 FAR 0.0
WATER WA Applied to approximately 41.5 square miles of water including the portions of San Francisco Bay, San Pablo Bay, and the Sacramento-San Joaquin River Delta that are within the county, large inland reservoirs, and other water bodies large enough to warrant designation. Typical uses include ferry terminals, shipping facilities associated with adjacent industry (marine terminals, wharves, etc.), docks, water-oriented recreation uses, and aquaculture. Consistent Zoning: None Potentially Consistent Zoning: All districts	Density 0.0 FAR N/A

Notes on Mixed-Use Designations

- 1. Single-use residential and single-use nonresidential projects are allowed in areas with mixed-use designations; however, policies elsewhere in this General Plan may encourage or require mixed-use projects at specific locations.
- 2. The densities stated in each mixed-use designation apply only when a project includes a residential component; they do not compel residential development in otherwise nonresidential projects.
- 3. The FAR for each mixed-use designation is inclusive of residential and nonresidential development; density and FAR are not additive.
- 4. Mixed-use projects may be horizontal, meaning residential and non-residential uses exist in the same site, or vertical, meaning residential and non-residential uses exist in the same building.





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TABLE LU-2 URBAN AND NON-URBAN LAND USE DESIGNATIONS

Urban Land Use Designations	Non-Urban Land Use Designations			
Residential Very-Low Density	Public and Semi-Public			
Residential Low Density	Agricultural Core			
Residential Low-Medium Density	Agricultural Lands			
Residential Medium Density	Parks and Recreation			
Residential Medium-High Density	Commercial Recreation			
Residential High Density	Resource Conservation			
Residential Very-High Density	Water			
Residential Maximum Density				
Commercial and Office				
Light Industry				
Heavy Industry				
Mixed-Use Low Density				
Mixed-Use Medium Density				
Mixed-Use High Density				
Mixed-Use Community-Specific Density				

Urban Limit Line

The ULL, shown in Figure LU-2, is the second fundamental component of Measures C-1990 and L-2006. It prevents sprawl by establishing a boundary beyond which no urban land uses can be designated. The ULL and 65/35 Standard together ensure that urban development occurs within established communities where infrastructure and services already exist or are planned.

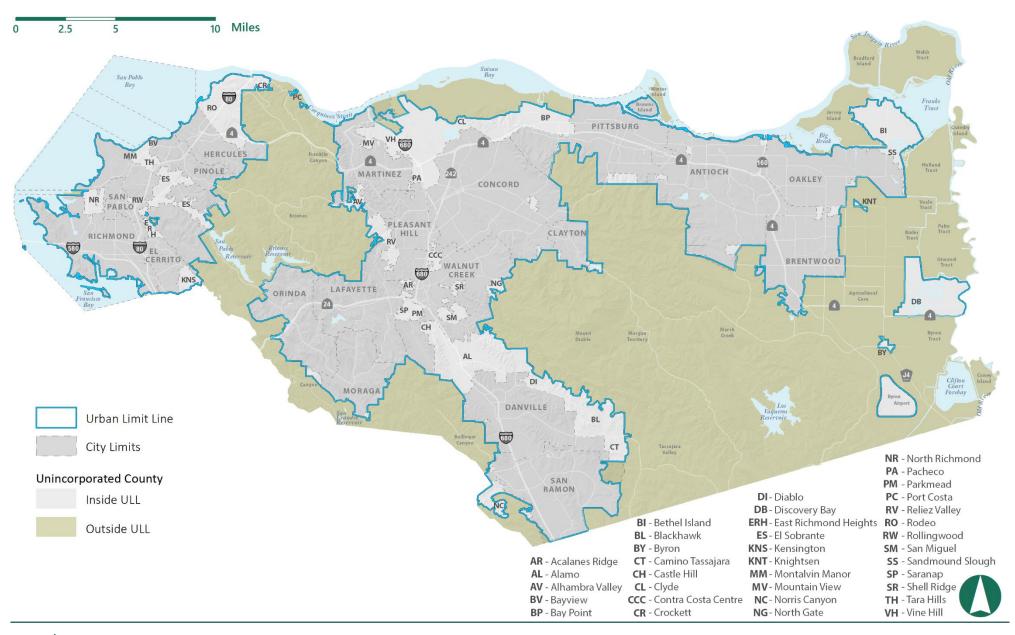
In addition to Measures C-1990 and L-2006, the voter-approved Measure J-2004 Growth Management Program administered by the Contra Costa Transportation Authority requires the County and each city in the county to adopt a voter-approved ULL or equivalent. Sixteen of the 19 cities adopted the County's 2006 voter-approved ULL as their own. Antioch, Pittsburg, and San Ramon adopted their own voter-approved ULLs (known as the Urban

Growth Boundary [UGB] in San Ramon). The County and cities are solely responsible for administering their respective ULLs/UGBs, which together contain approximately 47 percent of the total land area within Contra Costa County. Because the 65/35 Standard limits urban land use designations to no more than 35 percent of the county's total land area, the County and cities must work cooperatively to ensure that over 60,000 acres within the ULLs/UGBs remain under non-urban land use designations. Fortunately, a significant portion of this acreage already is permanently protected as local parks, regional parks and open spaces, reservoirs, and other public facilities. Examples of protected lands within the ULLs/UGBs include several regional parks within Richmond's city limits (4,000 acres), Lafayette Reservoir and its surrounding recreation area (900 acres), Thurgood Marshall Regional Park (2,500 acres), Lime Ridge Open Space (1,200 acres), and Big Break Regional Shoreline (1,600 acres).



The Urban Limit Line prevents sprawl and preserves valuable agricultural land.

FIGURE LU-2 **URBAN LIMIT LINE**



The County considered several criteria and factors when establishing the initial ULL location in 1990. Factors which contributed to properties being located outside the ULL included:

- Land which qualifies for rating as Class I and Class II in the National Resource Conservation System (NRCS) Land Capability Classification.
- Major open space, park, and recreation areas.
- Lands with slopes of 26 percent or greater.
- Wetlands.
- Other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors.

No single criterion was necessarily determinative of whether a property was located inside or outside of the ULL. Where properties had characteristics that would locate them either inside or outside the ULL, the County weighed the competing characteristics and determined the most appropriate approach for the property. This resulted in the ULL cutting across properties in some instances.

Properties that are located outside the ULL may not obtain General Plan amendments that would redesignate them for urban land use. In addition, properties outside the ULL may be subject to various agricultural and open space preservation measures identified elsewhere in this General Plan. These measures could include:

• Encouraging dedication of open space and conservation easements.

- Implementing a transfer of development rights (TDR) program.
- Requiring payment of an agricultural mitigation fee for conversion of agricultural land.
- Promoting non-urban "preservation" agreements between the County and cities to prevent annexation by cities of certain appropriate properties.
- Encouraging clustering of development.
- Establishing an "agricultural soils trust fund" to fund possible purchase of easements or title to agricultural or open space lands.

In general, the purpose of these measures is to preserve agricultural lands and open space and contribute to the continued economic viability of agricultural property.

Changes to the Urban Limit Line

The following text is from Measure L-2006, which requires specific language to be included in the Land Use Element and is why the 2016 ULL review conducted by the Board of Supervisors is discussed in future tense:

There shall be no change to the ULL that would violate the 65/35 Land Preservation Standard. There will be no change to the ULL except in the manner specified herein. There will be no change to the ULL unless the Board of Supervisors first holds a public hearing at which it approves the change or changes, by a four-fifths vote, after making one or more of the following findings based on substantial evidence in the record:

(a) A natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the ULL

- (b) An objective study has determined that the ULL is preventing the County from providing its fair share of affordable housing or regional housing as required by State law, and the Board of Supervisors finds that a change to the ULL is necessary and the only feasible means to enable the County to meet these requirements of State law.
- (c) A majority of the cities that are party to a preservation agreement and the County have approved a change to the ULL affecting all or any portion of the land covered by the preservation agreement.
- (d) A minor change to the ULL will more accurately reflect topographical characteristics or legal boundaries.
- (e) An objective study has determined that a change to the ULL is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either mitigate adverse aviationrelated environmental or community impacts attributable to Buchanan Field, or further the County's aviation-related needs.
- A change is required to conform to applicable California or federal law; or
- A five-year cyclical review of the ULL has determined, based on the criteria and factors for establishing the ULL set forth above, that new information is available (from city or County growth management studies or otherwise) or circumstances have changed, warranting a change to the ULL.

Any General Plan amendment that would expand the ULL by more than 30 acres shall require voter approval of the proposed General Plan amendment, following the public hearing and the four-fifths vote of the Board of Supervisors approving the General Plan amendment and making one or

more of the findings set forth in subsections (a) through (g) above. Notwithstanding the foregoing, a proposed General Plan amendment to expand the ULL by more than 30 acres does not require voter approval if, after a public hearing, the Board of Supervisors by a four-fifths vote approves the General Plan amendment and makes either of the following findings based on substantial evidence in the record: (i) the expansion of the ULL is necessary to avoid an unconstitutional taking of private property; or (ii) the expansion of the ULL is necessary to comply with State or federal law. Expansions of the ULL totaling 30 acres or less do not require voter approval.

The Board of Supervisors may conduct a cyclical review of the ULL every five years.

The Board of Supervisors will review the boundary of the ULL in the year 2016. The purpose of the year 2016 review is to determine whether a change to the boundary of the County's Urban Limit Line Map is warranted, based on facts and circumstances resulting from the County's participation with the cities in a comprehensive review of the availability of land in Contra Costa County sufficient to satisfy housing and jobs needs for 20 years thereafter. This review of the ULL is in addition to any other reviews of the ULL the Board of Supervisors may conduct.

Any change to the ULL proposed as a result of any review authorized by this section must be adopted pursuant to the procedures set forth in this section. These provisions are effective until December 31, 2026.

Goal LU-1

Coordinated and effective planning over the life of this General Plan.

Policies

LU-P1.1

The General Plan Update Environmental Impact Report (EIR) assumes the following maximum development projections for the year 2045:

- (a) 23,200 new dwelling units.
- 1.2 million square feet of new commercial and office space.
- 5 million square feet of new industrial space.

If new development approved within the unincorporated county reaches the maximum number of residential units and commercial/office and industrial square feet projected in the General Plan EIR, require that environmental review conducted for any subsequent development project address growth impacts that would occur from development exceeding the General Plan EIR's projections.*

Actions

LU-A1.1

Track growth to ensure it does not exceed the development projections analyzed in the General Plan EIR and described in Policy LU-P1.1 without subsequent environmental review.*

LU-A1.2

Review County Ordinance Code Titles 7 – Building Regulations, 8 – Zoning, 9 – Subdivisions, and 10 – Public Works and Flood Control at least once every five years and update as necessary to maintain consistency with State law and newly adopted or revised planning documents

(General Plan, Specific Plans, etc.); address emerging issues; and respond to economic, technological, and social trends.

LU-A1.3

Biennially review and update the General Plan Land Use Map to ensure major land use changes, such public land acquisitions, are accurately reflected.

LU-A1.4

Quantify the acreage designated for urban land uses at least once every five years to ensure continued compliance with the 65/35 Land Preservation Standard.

Goal LU-2

Growth and conservation that are balanced to preserve and enhance the quality of life, protect the environment and public safety, and benefit all those who live or work in Contra Costa County.

Policies

LU-P2.1

Continue implementing the 65/35 Land Preservation Standard, using the County ULL to focus future development in the county's established urban and suburban communities while preserving agricultural land, rangeland, natural habitats, watersheds, and open space.*

LU-P2.2

Enhance the ULL's effectiveness by supporting efforts to acquire and permanently protect land along the ULL boundary.*

LU-P2.3

Limit development outside the ULL to non-urban uses, such as agriculture, mineral extraction, wind and solar energy production, natural carbon sequestration, other resourcebased uses, and essential infrastructure.*

LU-P2.4

Deny applications for major subdivisions outside the ULL and successive minor subdivisions of lots outside the ULL that were created through previous subdivisions.*

LU-P2.5



Encourage infill development.

LU-P2.6



Encourage clustering of allowable densities to reduce development footprints; protect scenic resources, natural features, and open spaces; and avoid hazardous areas (e.g., floodplains).

LU-P2.7



In areas with a Residential land use designation, relate singlefamily residential density to the availability of utility services as follows:

- (a) Require a 5-acre minimum lot size where no public water or sanitary sewer service is available.
- Require a 1-acre minimum lot size where either public water or sanitary sewer service is available, but not both.

Where public water and sanitary sewer services are available, allowable density will be based on the General Plan Land Use Map designation, as well as drainage, health, safety, and other applicable standards.

LU-P2.8

Discourage extension of water and sanitary sewer lines into areas outside the ULL, except to serve public and semipublic uses that are not growth inducing, or when such extension is necessary to address a declared public health emergency. When lines are extended outside the ULL, they should be designed to service the intended use only, and not allow for additional future service connections.

LU-P2.9

Consistently advise the Contra Costa County Local Agency Formation Commission (LAFCO) to support the 65/35 Land Preservation Standard and County ULL when considering requests for annexation to water and wastewater districts and extension of services.

LU-P2.10



When considering development proposals and land use changes, treat susceptibility to hazards and threats to health and safety as primary considerations.

Actions

LU-A2.1

Amend the County Ordinance Code to require the following prior to approval of a tentative map for subdivision in areas designated Agricultural Lands or Agricultural Core:

- Evidence of adequate groundwater supply to support intended uses, considering the cumulative, long-term demand.
- Demonstration that each parcel is suitable for an onsite wastewater treatment system.
- Satisfactory road and street access, particularly for emergency vehicles.
- (d) Adequate regional drainage capacity, includina downstream natural watercourses.
- Detailed site plans for each lot indicating building locations, driveways, well and leach field locations, energy-efficient and -conserving features, location of hazards such as landslides and floodplains, necessary flood and stormwater management improvements, and fencing.
- Other information that may be required to confirm the safe use of each lot for its intended purpose.

See the Land Use, Infrastructure, and Transportation Coordination section of this Element and the Public Facilities and Services Element for additional policies and actions on urban services and infrastructure. See the Conservation, Open Space, and Working Lands Element for additional policies and actions on agricultural areas, resource-based uses, and open space management.

Sustainable Growth and Quality Design

The County's 65/35 Standard and ULL provide a framework for sustainable growth countywide by containing sprawl and preserving natural spaces. Inside the ULL, certain development patterns and design approaches promote sustainability at the community level. Infill development, for example, occurs within existing communities and utilizes existing infrastructure networks to accommodate new residents and businesses. thereby eliminating environmental and fiscal impacts associated with extending roads, utilities, and services into undeveloped areas. Infill projects make use of vacant or underutilized spaces and contemporary designs tend to be more human-scaled than projects of the past, with priority given to the needs and comfort of people instead of the movement of vehicles.

Locating jobs and housing near transit and other services is another sustainable growth strategy. There is a jobs-housing imbalance in the county, with considerably more employed residents than jobs. Countywide, as of 2020, there are only 0.9 jobs for every home, leading to substantial outcommuting as Contra Costa residents drive to other parts of the Bay Area and beyond for work. Ideally, there would be 1.4 jobs for every home in the county since there are about 1.4 employed residents per home. Balancing the number of jobs and housing units across the county and individual communities, and locating these types of uses near transit and other services, can reduce commute times and daily travel distances (i.e., vehicle miles traveled, or VMT), which in turn reduces air pollution and greenhouse gas emissions and improves quality of life. When developing these uses near each other, superior design becomes even more critical to ensure that the uses are complementary.



Vacant lots, like the one above in Saranap, are opportunities for infill development such as the proposed Saranap Village project, below.



Quality, thoughtful design also supports achievement of sustainability goals. For example, careful consideration of solar orientation and shading when designing site plans, buildings, and landscaping can maximize exposure for

solar panels and gardens while reducing energy use for heating and cooling. Low Impact Development, a stormwater management strategy, uses green roofs, bioswales, rain gardens, and similar features to mimic natural processes for removing pollutants from runoff before it reaches creeks, rivers, and bays. Designs that incorporate the principles of a circular economy aim to reduce consumption and benefit the environment by accounting for the full life cycle of buildings and materials, including manufacture, construction, maintenance, reuse, and disposal, and striving to eliminate waste and pollution. The County supports these and other environmentally-conscious design approaches.

Goal LU-3

A range and distribution of compatible and sustainable land uses that meet the county's social and economic needs and allow for balanced housing and job growth.

Policies

LU-P3.1



Support regional efforts to achieve a jobs-housing balance within the county and within subregions of the county by maintaining an adequate supply of developable land designated for job-generating uses. For any General Plan amendment proposing to convert commercial, industrial, or office land uses to residential or non-urban land uses. evaluate the project's effect on the local and countywide jobs-housing balance.





Encourage residential development in or near existing employment centers, and development of job-generating uses near areas that are primarily residential. Where largescale residential or commercial development is planned, encourage a mix of housing and employment opportunities unless doing so would exacerbate a severe jobs-housing imbalance in the area.

LU-P3.3





Encourage extremely high-density, mixed-use development that combines employment, housing, and services near major transit facilities. Such development should be planned and designed to encourage walking, micromobility, and transit use; shorter commutes; and reduced dependency on single-occupant vehicles.

LU-P3.4



Encourage conversion of existing commercial areas to mixed-use nodes and corridors.

LU-P3.5



Encourage development of housing that meets the needs of the local workforce and living-wage jobs that maximize the education, skills, and talents of county residents.

LU-P3.6

Encourage incorporation of childcare, adult daycare, and similar beneficial uses into new development. To maximize accessibility, encourage childcare facilities in residential neighborhoods, employment centers, schools, public

libraries, hospitals, religious facilities, and parks, as well as near transit stops.

LU-P3.7



Welcome development that supports the countywide goal of reducing VMT, thus reducing greenhouse gas emissions, to meet climate change targets. Require projects that do not support the County's VMT-reduction goals to incorporate necessary changes (e.g., design, land use mix) to ensure they support those goals.

See the Stronger Communities Element for additional policies and actions about economic development and the Transportation Element for additional policies and actions about VMT.

Actions

LU-A3.1





Evaluate financial strategies and tools, such as Enhanced Infrastructure Financina Districts, to attract housing to employment areas and create new employment centers near residential areas.

LU-A3.2

Develop and maintain an inventory of County-owned surplus lands with residential development potential and post the inventory on the County's website.

Goal LU-4

Sustainable and high-quality design.

Policies

LU-P4.1



Embrace the principles of a circular economy as they relate to development and encourage all projects to utilize ecologically sustainable practices and materials.

LU-P4.2

Continuously improve community appearance by requiring high-quality designs and materials that complement their surroundings, with emphasis on enhancing public spaces and historic and cultural resources.*

LU-P4.3

Encourage smooth transitions between new and existing or planned development.

LU-P4.4

Require site and building reconfigurations, setback increases, landscaping enhancements, screening, or other design solutions wherever necessary to minimize potential conflicts between uses.

LU-P4.5

Require shadow and solar access studies for new multiplefamily residential, mixed-use, commercial, and industrial projects greater than three stories in height or with obvious potential to significantly shade parks, commercial nurseries, residential yards, solar arrays, and other uses that are sensitive to loss of sunlight.*

LU-P4.6

Require commercial and mixed-use projects to create inviting, pedestrian-oriented streetscapes wherever possible.

LU-P4.7

Encourage residential and mixed-use buildings over four stories tall to incorporate setbacks or other massing changes on upper floors to create more human-scale and comfortable pedestrian environments.

Actions

III-A4.1



Amend the County Ordinance Code to include requirements for Low Impact Development, use of lowcarbon concrete, water and energy conservation, reclaimed water, renewable energy use, green building, and other measures that reduce the environmental impacts of development, based on the best available science.

See the Conservation, Open Space, and Working Lands Element for additional policies and actions about sustainable design.

Land Use, Infrastructure, and **Transportation**

The breadth of uses and activities in the county must be supported by infrastructure such as utilities, roadways, railroads, pipelines, and drainage facilities. Most of the infrastructure and utility services in the county are provided by other agencies and private entities. The Contra Costa Local Agency Formation Commission (LAFCO) regulates the jurisdictional boundaries and spheres of influence of all cities and all special districts who provide infrastructure and services, like water, wastewater, and fire districts. By coordinating changes to local governmental boundaries, LAFCO helps to ensure that current and projected service needs will be met while discouraging sprawl and preserving agricultural and open space lands.

The County also has a responsibility to ensure that the pace and pattern of development can be supported by the infrastructure and transportation networks, promotes fiscal health, aligns with regional plans, and represents community values. Focusing on higher-density infill development maximizes the efficiency of transportation and other infrastructure and reduces upfront construction and long-term maintenance costs.

Goal LU-5

Coordinated land use, transportation, and infrastructure decisions so that growth occurs in locations where capacity and services are available or committed.

Policies

LU-P5.1

Allow development only where requisite community services, facilities, and infrastructure can be provided.*

LU-P5.2

Coordinate with LAFCO to ensure that city annexations and related land use decisions do not:

- (a) Interfere with attainment of the County's land use goals as expressed in this General Plan.
- Include Housing Element inventory sites unless provisions have been made to transfer the site's assigned units to the receiving city's Regional Housing Needs Allocation (RHNA).
- Create new unincorporated "islands" (i.e., developed areas substantially surrounded by incorporated cities).

LU-P5.3

Encourage cities to annex unincorporated "islands," such as the Rollingwood (San Pablo), Ayers Ranch (Concord), and San Miguel (Walnut Creek) neighborhoods.

LU-P5.4

Consider the potential locations of planned public infrastructure projects (e.g., transit lines, roadways, drainage improvements) when evaluating development proposals and deny development applications that would interfere with implementation of such projects.

Actions

LU-A5.1



In 2025 and at least once every five years thereafter, evaluate the County's off-street parking standards to ensure their continued applicability in light of changing conditions, trends, and technologies. Each evaluation should assess the appropriateness of reducing or eliminating parking minimums, taking off-site impacts and the variations in parking needs between communities into account, and recommend strategies for reducing parking demand.

LU-A5.2

Work with LAFCO and utility service providers to:

- (a) Annex lands planned for urban development by this General Plan into their service areas.
- Detach private lands, especially agricultural or rural lands, from district boundaries if they are not planned for urban development and are not currently served.

See the Public Facilities and Services Element for additional policies and actions about infrastructure and services, and the Transportation Element for additional policies and actions about transportation infrastructure.

Intergovernmental Coordination

The County's jurisdiction on land use matters is limited to unincorporated areas and the County itself doesn't provide many of the utilities and services upon which its residents and businesses depend. County staff and officials regularly work with cities, special districts, and other agencies to ensure that the County's planning decisions support achievement of regional goals.

Important regional partners in land use planning include the Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC); Delta Protection Commission and Delta Stewardship Council, which have authority over land use within the Primary Zone of the Delta and Legal Delta, respectively (see Figure LU-3); and US military, which must be consulted on projects proposed near its facilities (see Figure LU-4) to ensure new development does not conflict with operations or pose safety risks.

An important component of long-range regional planning in the Bay Area is designation of Priority Development Areas (PDAs). PDAs are proximate to public transit and planned for concentrated development of new homes, jobs, services, and community amenities. PDAs are envisioned as walkable areas that provide the necessities of daily living, thereby allowing residents to be less automobile dependent. ABAG/MTC offers grants and other assistance to develop and implement PDA plans. While PDAs are a regional planning tool, they are under the jurisdiction of the cities and counties where they are located. Over 30 PDAs have been designated in Contra Costa County, six of which are entirely or partially within the unincorporated area, as shown on Figure LU-5 and described in Table LU-3.

Another regional planning tool supported by ABAG/MTC is Transit-Oriented Communities (TOCs). TOCs are similar to PDAs in that their purpose is to create walkable communities near public transit. However, TOCs specifically aim to provide high residential densities within one-half mile of high-quality transit facilities like BART stations and ferry terminals, whereas PDAs may have lower average densities and extend farther out. A TOC therefore may exist within a larger PDA. In Contra Costa County there are 14 locations (12 BART stations, one Amtrak station, and one ferry terminal) that could qualify for designation as a TOC. As shown on Figure LU-5, these include unincorporated areas near the Pleasant Hill/Contra Costa Centre and Pittsburg/Bay Point BART Stations.

TABLE LU-3 PRIORITY DEVELOPMENT AREAS IN UNINCORPORATED CONTRA COSTA COUNTY

Baile aithe Bassalannana	Households			Jobs				
Priority Development Area	2010	2040	Projected 2010- 2040 Growth	% Growth	2010	2040	Projected 2010- 2040 Growth	% Growth
San Pablo Avenue Corridor - Unincorporated County	1,586	4,784	3,198	202%	847	1,087	240	28%
North Richmond	1,080	4,304	3,224	299%	1,797	2,400	603	34%
Downtown El Sobrante	559	784	225	40%	1,030	1,127	97	9%
Contra Costa Centre	354	623	269	76%	4,441	5,888	1,447	33%
Pittsburg/ Bay Point BART Station	847	1,460	613	72%	838	1,959	1,121	134%
Brentwood Boulevard	3,400	4,700	1,300	39%	3,400	4,100	700	20%

Source (for all but Brentwood Boulevard PDA): 2017 Contra Costa PDA Investment and Growth Strategy. Contra Costa Transportation Authority. The Brentwood Boulevard PDA was designated after these growth projections were calculated. The estimates for the Brentwood Boulevard PDA shown in this table are based on Plan Bay Area 2040 population and employment projections by traffic analysis zone, available at https://opendata.mtc.ca.gov/datasets/45b03dc6844c4d668016f5c512ecc3db_0/explore?filters=eyJ6b25laWQi0lsxMTlwLDExOTldfQ%3D%3D and $https://opendata.mtc.ca.gov/datasets/5fbf382d70264987a9bf60c5afcf6116_0/explore?filters=eyJ6b25laWQiOlsxMTY3LDEyMDNdfQ%3D\%3D.$

FIGURE LU-3 SACRAMENTO-SAN JOAQUIN DELTA

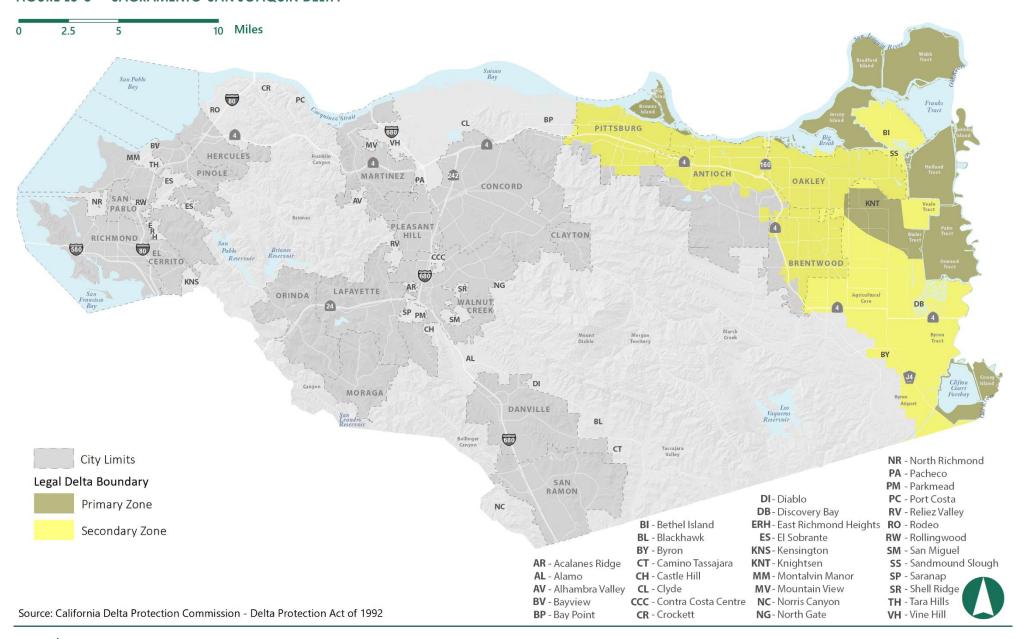


FIGURE LU-4 **MILITARY OPERATIONS AREAS**

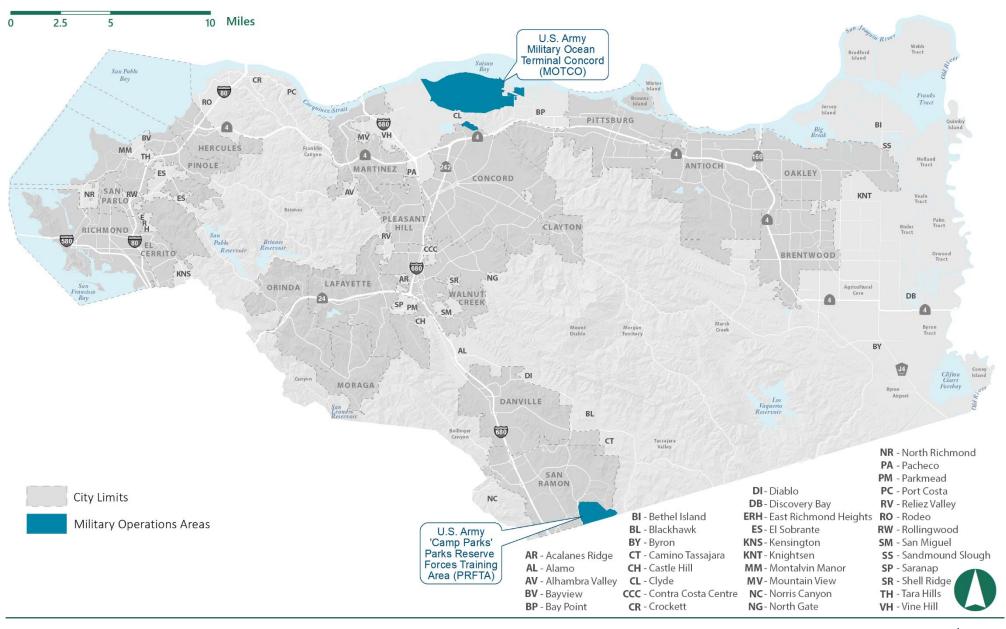
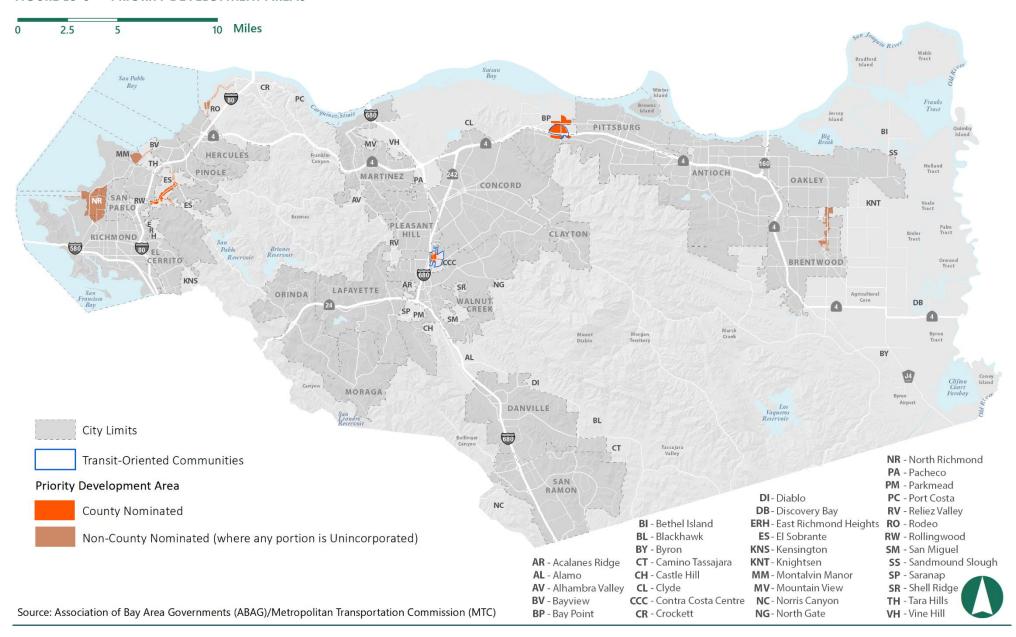


FIGURE LU-5 **PRIORITY DEVELOPMENT AREAS**



Goal LU-6

Effective coordination with other agencies to ensure orderly planning and consistent service delivery.

Policies

LU-P6.1

Ensure that County projects and decisions on private development and land use activities within the Legal Delta are consistent with the following plans:

- (a) Land Use and Resource Management Plan for the Primary Zone of the Delta adopted by the Delta Protection Commission.
- Delta Plan adopted by the Delta Stewardship Council.

In addition, screen proposed General Plan amendments affecting the Primary Zone for consistency with Public Resources Code Section 29763.5, including a specific analysis of consistency with each subsection thereof.

LU-P6.2

Maintain Priority Development Area and Transit-Oriented Community designations in support of Plan Bay Area and other regional planning initiatives sponsored by ABAG/MTC.

LU-P6.3

Work collaboratively with cities and special districts (e.g., East Bay Regional Park District and utility service providers) to address regional issues of mutual concern and coordinate on decisions and actions that affect residents of nearby unincorporated areas.

LU-P6.4

When a project is within the sphere of influence of a city within Contra Costa County, or adjacent to a city located in a neighboring county, refer the project to the city for review and comment.

LU-P6.5

Coordinate with the Department of Defense to ensure new development near military installations does not interfere with military readiness or operations.

Actions

LU-A6.1

Review and comment on major projects proposed within cities to avoid conflicts with County land use goals and policies.

See the Conservation, Open Space, and Working Lands Element for additional policies and actions about the Delta.

SPECIFIC LAND USES

Although located in the San Francisco Bay Area, one of America's most populated metropolitan areas, the vast majority of the land in the unincorporated county is devoted to agriculture, parks, and other forms of open space, supported by the 65/35 Standard and ULL discussed previously. Communities in West and Central County include a full range of urban and suburban uses. In East County, the dominant land uses are agriculture and open space with a handful of distinct unincorporated communities that are primarily residential, supported by limited commercial, industrial, and public uses.

As described in the Land Use Designations and Map section of this Element, the General Plan Land Use Map (Figure LU-1) designates each parcel of land in the unincorporated county for a type of land use. A parcel's designation usually reflects an existing use that will continue. However, in some cases the designation is intended to encourage a land use change that is consistent with the vision for the community's future. The policy guidance in this section supports development of those planned land uses in alignment with the overarching goals of this General Plan.

Goal LU-7

A variety of residential neighborhood types that provide housing opportunities and desirable living environments for all residents.



Multiple-family homes, like these in Bay Point, fill an important housing need.

Policies

LU-P7.1

Plan for a variety of housing types. Encourage innovative, nontraditional designs and layouts in response to evolving housing trends and needs.

LU-P7.2

Provide housing opportunities for all economic segments of the population, ensuring that affordable housing is distributed throughout the county and is not concentrated in traditionally lower-income areas. Promote development of affordable housing near public transit and essential services whenever possible.

LU-P7.3

Maintain objective design standards for residential and mixed-use development to provide a streamlined approval process and ensure architectural compatibility for future infill development.

LU-P7.4



Protect residential neighborhoods from incompatible uses and activities that adversely affect public health and safety.

LU-P7.5





Require new residential development to be planned, designed, and constructed in a way that promotes health, minimizes hazard exposure for future residents, and mitigates potential adverse effects on natural resources and the environment.

LU-P7.6



In hazard-prone areas, such as slopes exceeding 15 percent, mapped floodplains, High and Very High Fire Hazard Severity Zones, and Alquist-Priolo Earthquake Fault Zones, allow for decreased residential density, including below the minimum density requirement for the applicable land use designation, as the severity of risk increases.*

LU-P7.7





Require new residential projects to provide convenient access/connections to public transit, local destinations. and multi-use trails.*

LU-P7.8

Within the ULL, allow properties with existing legally established residential development that exceeds the maximum density ranges specified in Table LU-1 to retain those densities in the event the existing development must be reconstructed for any reason.

Actions

LU-A7.1

Evaluate the appropriateness of amending County Ordinance Code Title 8 - Zoning to allow sale of an ADU as a condominium separate from the primary residence, pursuant to AB 1033 and Government Code Section 66342.

See the Health and Safety Element for additional policies and actions related to residential development in areas vulnerable to hazards (e.g., wildfire, flooding); see the Stronger Communities Element for additional policies and actions related to safe housing; see the Community Profiles in the Stronger Communities Element for guiding principles, policies, and actions about future land uses in individual unincorporated communities; and see the Housing Element for additional policy guidance related to housing in general.

Goal LU-8

A variety of well-located commercial and mixed-use areas that provide jobs and services, create civic gathering places and community focal points, accommodate higher-density housing, and contribute to the tax base of the County.



Mixed-use development in Contra Costa Centre makes efficient use of the land by providing homes above commercial services.

Policies

LU-P8.1



Plan for a sufficient quantity, variety, and distribution of commercial uses to meet the basic daily needs of residents in communities throughout the county.

LU-P8.2





Support development of neighborhood-serving commercial services in and adjacent to residential areas where they can be accessed easily using multiple modes of transportation.

LU-P8.3



Encourage adaptive reuse of aging commercial buildings and sites.

LU-P8.4



Support rehabilitation of commercial centers, encouraging improvements that enhance appearance, sustainability, and non-motorized (pedestrian, bicycle, etc.) access and safety.

LU-P8.5

Emphasize the importance of commercial centers as civic spaces. Whenever feasible, require plans for commercial and mixed-use projects to include safe, well-maintained open areas, gathering places, and public amenities that create a strong sense of place.

LU-P8.6

Discourage new strip commercial development, allowing it only when alternative layouts are infeasible at the project site.

LU-P8.7



Encourage growth of the county's hospitality sector, including heritage tourism, waterfront amenities, farm-totable restaurants, other dining and entertainment establishments, commercial recreation, various types of accommodations, and visitor services.

LU-P8.8



Accommodate a variety of land uses at Buchanan Field and Byron Airports, consistent with the master plan for each facility. A range of commercial aviation functions, including fixed-base operators, aviation businesses, and passenger facilities and services, should be allowed, as well as ancillary uses that support the economic viability of each airport.

LU-P8.9



Plan land uses and activities in the vicinity of harbors to optimize their use for commerce and recreation while accounting for forecasted sea level rise by 2100 under a medium-high risk aversion scenario, subsidence, and groundwater threats.

Actions

LU-A8.1



Monitor shifts in the office and retail markets to determine whether General Plan, zoning, and other regulatory changes that facilitate conversion of vacant or obsolete space to new uses are warranted.

See the Stronger Communities Element for additional policies and actions related to economic development.

Goal LU-9

Industrial areas that support advanced manufacturing, research and development, production and distribution, repair, and other sectors that anchor the county's economy.



Industrial uses along the Northern Waterfront provide local jobs and boost the economy.

Policies

LU-P9.1



Actively seek out industries that create living-wage jobs and career advancement opportunities for county residents while minimizing environmental degradation, pollution exposure, hazardous conditions, and adverse public health impacts.

LU-P9.2



Welcome new businesses that improve supply chains for core local industries, including agriculture and food.

LU-P9.3

Designate industrial land adjacent to major transportation infrastructure (i.e., freeways, rail lines, ports) and in other locations where the impacts of industrial traffic on neighborhoods and commercial areas can be minimized.

LU-P9.4



Prioritize industrial land along the Bay and Delta shoreline for uses requiring deep-water access or large quantities of raw water for their processes (e.g., cooling), and discourage siting of other industrial uses that could be accommodated elsewhere. Continue partnering with regional agencies to ensure reliable deep-water access to industrial sites.

LU-P9.5



Plan industrial uses and districts to be harmonious with nearby areas, reduce the potential for off-site impacts, and limit potential exposure to environmental health hazards and pollutants.

Actions

LU-A9.1



Maintain formal "Priority Production Areas" designation of key industrial areas by ABAG/MTC, confirming their longterm importance to the region and facilitating future investment. Pursue coordinated economic development funding for these areas.

LU-A9.2





Monitor shifts in industrial markets resulting from the transition from fossil fuels and evaluate the County's industrial land supply for opportunity zones or innovation districts that can accommodate industries such as advanced manufacturing, prefabricated housing production, biomedical/biotech, logistics and mobility hubs and transportation technology, clean technology, and maker spaces. Consider General Plan, zoning, and other regulatory changes that facilitate conversion of vacant or obsolete space to new uses as warranted.

LU-A9.3





Amend the County Ordinance Code and/or procedures to streamline the permitting process for businesses and industries that provide living-wage jobs, invest in the community, hire from the local workforce, and embrace sustainability.

See the Conservation, Open Space, and Working Lands Element for additional policies and actions that support the agriculture industry. See also the Stronger Communities Element for additional policies and actions related to a potential transition from fossil fuel industries to renewable and sustainable industries that offer living-wage jobs, and for additional policies and actions about economic development. See the Health and Safety Element for additional policies and actions related to hazardous materials.

Goal LU-10

Rural, agricultural, and open space areas that provide scenic value, support Delta ecosystem health, and meet the needs of the agricultural industry.



Agricultural buildings, like this barn in Tassajara Valley, enhance the character of rural areas.

Policies

LU-P10.1

Encourage consolidation of agricultural parcels not meeting the minimum acreage requirement for the applicable zoning district.

LU-P10.2

Ensure all former Williamson Act parcels are rezoned from Agricultural Preserve District to an agricultural zoning district appropriate for the area.

LU-P10.3

Preserve the rural character of the following areas, which are displayed in Figure LU-6:

- (a) Alhambra Valley/Briones
- Tassajara Valley
- Delta Primary Zone
- (d) Agricultural Core between Brentwood and Discovery Bay
- (e) Crockett Hills between Crockett and State Route 4
- Franklin Canyon/State Route 4 corridor between Hercules and Martinez
- Bollinger Canyon Road corridor between Las Trampas Regional Wilderness and Crow Canyon Road
- (h) Norris Canvon Road corridor between San Ramon and the Alameda County line

- Marsh Creek Road corridor between Clayton and Byron Highway
- Kirker Pass Road corridor
- Morgan Territory Road corridor
- Deer Valley Road corridor

Pay special attention to potential aesthetic impacts in these areas and ensure such impacts are adequately mitigated.

LU-P10.4

Maintain agricultural preserves in the Briones Hills and Tassajara Valley areas through agreements with adjacent cities to retain these areas for agricultural, open space, and other non-urban uses.*

Actions

LU-A10.1

Amend County Ordinance Code Title 8 – Zonina related to development of homes and associated buildings and structures on agricultural properties to require clustering of such improvements to protect agricultural vitality and sustainability.

LU-A10.2

Continue working with agricultural stakeholders to minimize the complexity, time, and expense of County permitting requirements for agricultural properties and maximize focus on meeting the objectives of the regulations.

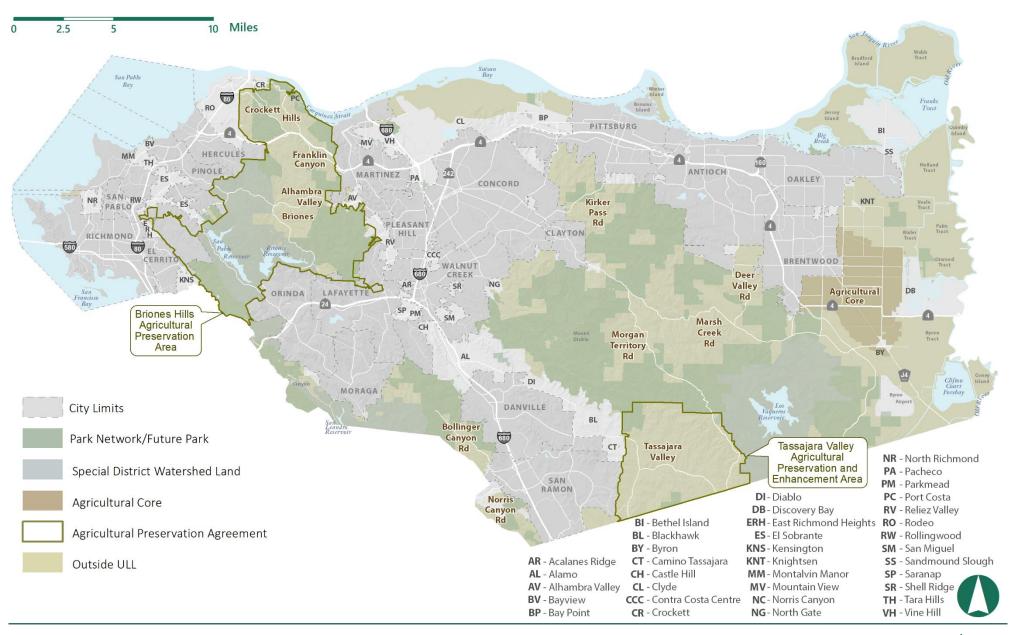
See the Conservation, Open Space, and Working Lands Element for additional policies and actions related to open space management, agricultural resource conservation, and the agricultural industry.

LAND USE ELEMENT PERFORMANCE **MFASURFS**

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- Cumulative numbers of single-family and multiple-family units and square footages of commercial and industrial development approved since General Plan adoption that stay within the development projections listed in Policy LU-P1.1, unless additional environmental review is conducted.
- Increased acreage of permanently protected open space.
- Improved balance between the number of employed residents and jobs to reduce the need for people to commute outside the county.
- Increased ratio of multiple-family units to single-family units.
- Increased percentage of households that are within a half-mile of a neighborhood-serving commercial service.

FIGURE LU-6 **RURAL AND AGRICULTURAL AREAS**





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TRANSPORTATION ELEMENT

Transportation is a fundamental part of our daily lives. The diversity and availability of transportation options, the conditions in which they exist, and how we ultimately choose to travel—to jobs, schools, homes, healthcare providers, stores, and leisure activities—have major implications for quality of life, public health, climate resilience, sustainability, and the environment.

Contra Costa County has excellent regional access by road, passenger and freight rail, water, and air. The county includes dense urban neighborhoods served by local and express bus service, sprawling suburbs connected to the Bay Area's larger employment centers by Bay Area Rapid Transit (BART) and major freeways, and rural and agricultural communities served by a network of two-lane highways and roads. Multi-use trails found throughout the county serve pedestrians, cyclists, and micromobility. Reducing the need for single-occupant vehicle trips, improving travel times for transit and carpools, and providing multiple connections and options for travel between neighborhoods and destinations in Contra Costa County are key considerations for the future. Closing gaps in the multi-use trail network, improving the pedestrian realm, expanding transit access, and extending the range of efficient, safe, and easy options for getting around will enhance the quality of life for all community members. This Element focuses on providing people with a variety of high-quality transportation options, strengthening transportation connections to the rest of the Bay Area and beyond, and improving transportation within communities.

The Transportation Element sets forth goals and policies describing the overall mobility program for the county and identifies the general location of

existing and proposed major transportation routes, terminals, and facilities, as required by the California Government Code. The Transportation Element is divided into the following seven sections that address the needs of the Contra Costa community:

- The Coordinated Planning section includes policy guidance to support the County's role in regional transportation projects that involve other agencies locally and across the Bay Area.
- The Safe and Sustainable Transportation section includes policy guidance to improve safety for all roadway users and reduce greenhouse gas (GHG) emissions and other environmental harms through expanded opportunities for active transportation, public transit, and zero-emission vehicles (ZEVs).
- The Multimodal Roadway Network section defines roadway classifications and includes policy guidance to enhance mobility and connectivity for all roadway users.
- The Active Transportation section defines bikeway types and includes policy guidance to expand opportunities for active transportation, which includes walking, biking, or other rolling forms of travel that support active lifestyles and health.
- The Goods Movement section includes policy guidance to support rail, port, and truck facilities that bolster the economy, while reducing GHG emissions and protecting public health and safety.

- The Air Mobility section includes policy guidance to provide safe and viable general and commercial aviation in the county.
- The Transportation Element Performance Measures describe how the County will track its progress in achieving some of the major objectives expressed in this Element.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.



Community Health



Environmental Justice



Economic Development



Sustainability

COORDINATED PLANNING

Contra Costa County is part of a regional transportation network. Residents and workers have access to a variety of transportation options for intracounty and regional travel.

The Contra Costa Transportation Authority (CCTA) serves as the Congestion Management Agency (CMA) for the county and distributes sales tax revenue to the County, cities, and transit agencies for projects and programs like freeway improvements, local road maintenance, public transit enhancements, and Safe Routes to School. CCTA prepares and implements the Countywide Transportation Plan (CTP) and its associated voter-approved Expenditure Plan to guide development of the future transportation system in Contra Costa County.

To distribute transportation funding equitably and appropriately, CCTA divides the county into five subregions, each administered by a Regional Transportation Planning Committee. Unincorporated Contra Costa County is spread among all five subregions:

- The West County subregion is administered by the West Contra Costa Transportation Advisory Committee (WCCTAC).
- The Central County subregion is administered by the Transportation Partnership and Cooperation Committee (TRANSPAC).
- The Lamorinda and Tri Valley subregions are administered by the Southwest Area Transportation Committee (SWAT).
- The **East County** subregion is administered by the TRANSPLAN Committee.

Due to the county's diverse physical and demographic landscape, each subregion is governed by an Action Plan tailored to address its distinct transportation needs. The Action Plans and CTP also set quantifiable Regional Transportation Objectives (RTOs) to meet goals on Routes of Regional Significance, which are shown in Figure TR-1. Over time, the County implements projects and programs in the unincorporated areas to improve the transportation network and ultimately contribute to achieving the RTOs.

For the larger Bay Area region, the Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) coordinate transportation planning and financing and administer regional plans that promote sustainable growth, including the Regional Transportation Plan/Sustainable Communities Strategy, known as Plan Bay Area 2050, and guide funding and policy decisions for the region.

FIGURE TR-1 ROUTES OF REGIONAL SIGNIFICANCE 10 Miles 2.5 San Pablo PITTSBURG **SR-4 Corridor** HERCULES ANTIOCH Alhambra Valley Corridor Alhambra Ave Corridor CONCORD OAKLEY Central County Amtrak San Joaquin Service TRANSPAC CLAYTON WCCTAC I-580 Corridor BRENTWOOD Ygnacio Valle East ORINDA LAFAYETTE 58-24 Corridor County WALNUT TRANSPLAN Marsh Creek Rd Corridor Lamorinda City Limits **SR-4 Corridor** SWAT Regional Transportation MORAGA Planning Committee Boundaries DANVILLE **Transit Station** Sycamore Valley / Camino 7 BART Station Reservoir Routes of Regional Significance **Multimodal Corridors** Amtrak Station Rail NR - North Richmond Proposed Rail Station Tri Valley PA - Pacheco Bus **SWAT** Transit Hub PM - Parkmead CR - Crockett Freeway PC - Port Costa DI - Diablo Proposed Transit Hub RV - Reliez Valley **DB** - Discovery Bay Surface Streets RO - Rodeo Ferry Terminal **ERH** - East Richmond Heights BI - Bethel Island RW - Rollingwood ES - El Sobrante **Active Transportation** Potential Ferry Terminal **BL** - Blackhawk SM - San Miguel KNS - Kensington AR - Acalanes Ridge BY - Byron SS - Sandmound Slough KNT - Knightsen Source: Contra Costa Transportation Authority (CCTA) AL - Alamo CT - Camino Tassajara MM - Montalvin Manor SP - Saranap 2022 Countywide Routes of Regional Significance Multimodal Corridor Map. The corridors shown in this map are

generalized to show multimodal conditions where they exist, and therefore include multiple facilities and routes

within one corridor. The map also shows desired future conditions, meaning some facilities and routes shown are

not yet complete and may not have an adopted plan.

CCC - Contra Costa Centre NG - North Gate

MV - Mountain View

NC - Norris Canyon

CH - Castle Hill

CL - Clyde

AV - Alhambra Valley

BV - Bayview

BP - Bay Point

SR - Shell Ridge

TH - Tara Hills

VH - Vine Hill

Goal TR-1

Transportation facilities and services that are planned, funded, built, and maintained in a coordinated, cooperative, and effective manner.

Policies

TR-P1.1

Maintain an inclusive and orderly approach to interagency, interdepartmental, and stakeholder coordination on longrange capital planning and the design of specific transportation projects, including consultation with affected community and stakeholder organizations and appropriate commissions and committees.

TR-P1.2





Coordinate planning, construction, and maintenance of streets, transit infrastructure, non-motorized rights-of-way and associated facilities, the countywide bicycle network, and Pedestrian Priority Areas with neighboring jurisdictions and CCTA.*

TR-P1.3



Partner with cities, CCTA, and the San Francisco Bay Area Water Emergency Transportation Authority (WETA) to plan and implement ferry service that benefits unincorporated county residents.

TR-P1.4

Work with project applicants and property owners to establish community facilities districts or other funding mechanisms to pay for construction, operation, and maintenance of new transportation infrastructure and programs without creating an undue financial burden on existing residents, businesses, or the County. Consider that new, innovative infrastructure may cost more to maintain than facilities installed in the past, and that the increase in ongoing maintenance costs is a potential reason to deny a development application.

TR-P1.5

Pursue federal, State, and regional funding to augment locally generated funds to construct and maintain transportation infrastructure.

Actions

TR-A1.1





Coordinate with Caltrans, neighboring jurisdictions, CCTA, and the Regional Transportation Planning Committees to plan, design, and implement Complete Streets concepts on Routes of Regional Significance.

TR-A1.2

Partner with CCTA, neighboring and regional agencies, and stakeholders to explore and implement options for transportation system funding, including assessment districts, county service areas, impact fees, tax revenue, and other funding sources.

TR-A1.3

Continue updating the County's Area of Benefit impact fee programs as a mechanism to collect fair-share contributions from new development and fund needed transportation improvements.

See the Public Facilities and Services Element for policies and actions related to general infrastructure and infrastructure funding.

SAFE AND SUSTAINABLE TRANSPORTATION

We all use some form of transportation to reach our daily destinations. The mode of transportation people choose is affected by convenience, cost, comfort, perceived safety, travel time, and availability of options such as transit and bikeways.

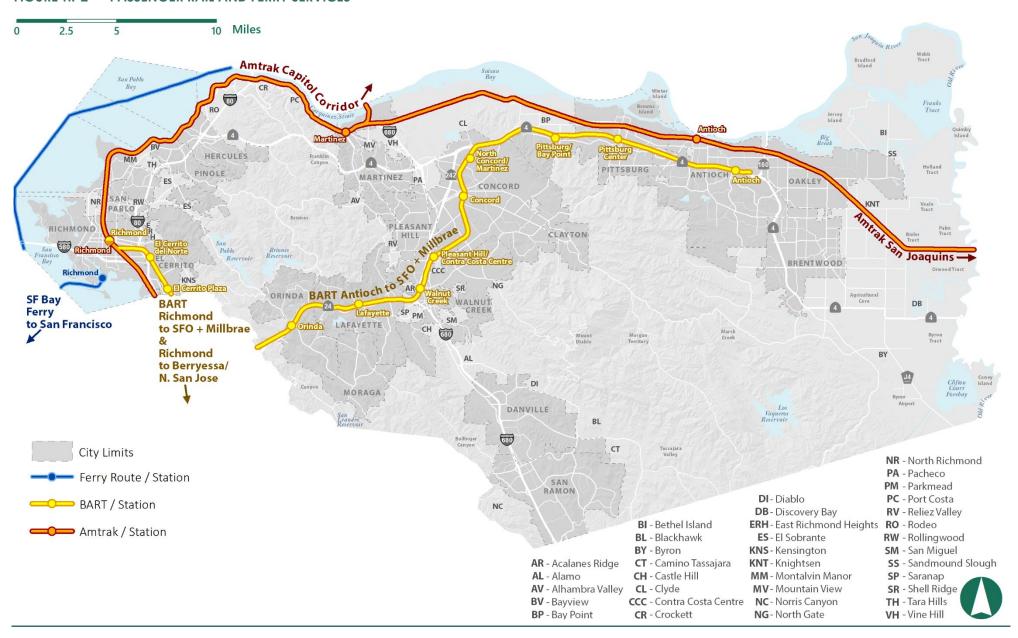
Since World War II, the transportation system in Contra Costa County has been focused on the automobile. The Public Works Department spends the majority of gasoline tax revenue on road maintenance primarily to ensure safe passage for cars. However, roadways that originally were designed to move cars as efficiently as possible can be redesigned to encourage walking, biking, and micromobility by making them safer and more comfortable through the provision of sidewalks, crosswalks, protected bike lanes, lighting, and shade. In addition, there is a range of public transit available that expands transportation options, including two BART lines, Amtrak's Capitol Corridor and San Joaquins routes, local and express buses operated by several transit agencies, and ferry service (see Figure TR-2).

The County plays an active role in promoting safe and sustainable transportation. Its Transportation Demand Management (TDM) program encourages developers to devise creative and effective ways to reduce car trips and associated impacts from new development. The County also maintains the Transportation Analysis Guidelines that establish a uniform approach to preparing traffic analyses and ensuring that County decisions support State, regional, and local goals, such as reducing vehicle miles traveled (VMT) and improving safety for pedestrians, cyclists, and other vulnerable users. Through these and other approaches, the County also aims to reduce air pollution and GHG emissions from the transportation sector.



Separated and protected bicycle facilities increase the usage and safety of bicycles as a mode of transport, helping to shift trips away from automobiles.

PASSENGER RAIL AND FERRY SERVICES FIGURE TR-2



Despite efforts to reduce vehicle trips, cars are and will continue to be the dominant mode choice for years to come. This section promotes sustainability by supporting ZEVs. In 1990, the State initiated efforts to promote transitioning to ZEVs, and regulations have been strengthened over the years as technology has evolved to enable greater emissions reductions. The County is preparing for a future with ZEVs through the Contra Costa Electric Vehicle (EV) Readiness Blueprint, which identifies the best locations for EV charging infrastructure, provides local agencies with guidance to encourage EVs, addresses maintenance of EVs and charging infrastructure, and identifies areas where energy distribution improvements are needed to support charging infrastructure.

To support safety on our roadways, the County adopted the Vision Zero Action Plan in 2022, which recognizes that fatalities and major injuries on roadways are preventable. Vision Zero is founded on the five elements of a Safe System Approach: safe road users, safe vehicles, safe speeds, safe roads, and post-crash care. The County supports programs and physical improvements aimed at reducing deaths on our roadway network to zero. To monitor progress, the Vision Zero Plan commits the County to ongoing tracking of collision data. Figure TR-3 shows corridors with high incidence of serious collisions between pedestrians, bicyclists, and automobiles.

Managing transportation safely and sustainably into the future will mean operating within available funding levels while positioning Contra Costa County to take advantage of current and future innovations. Such innovations could include alternative fuels, car sharing, micromobility, private transportation network services, autonomous vehicle technology, and other advances still to come. Through all of this, the County will need to ensure its actions and practices support its safety, equity, and sustainability goals.

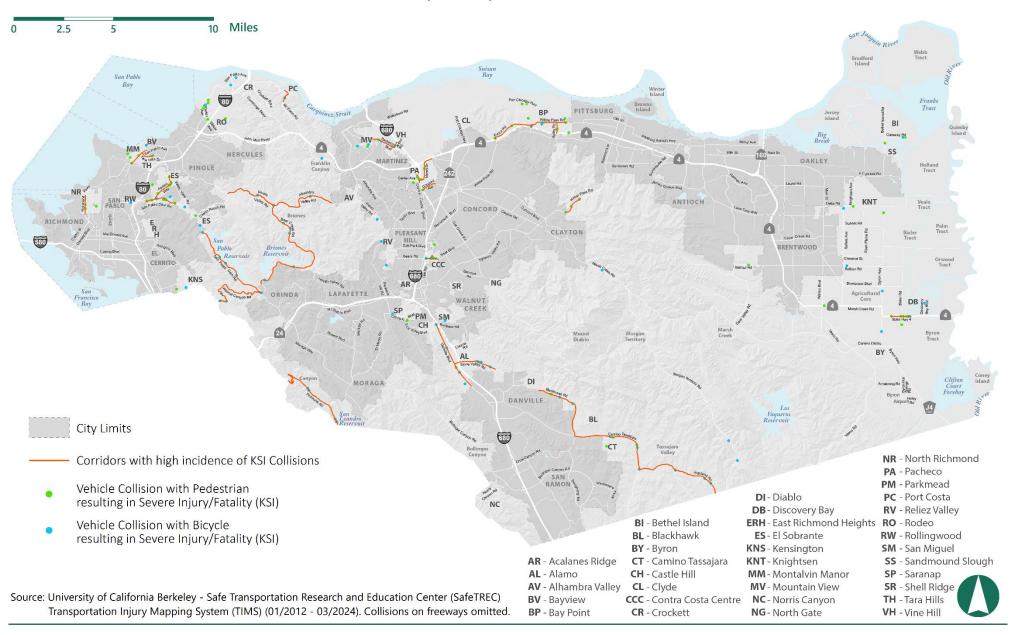


The Pleasant Hill/Contra Costa Centre BART station provides an alternative to commuting by car.

Goal TR-2

A transportation system that promotes active transportation, supports effective and equitable provision of transit services, and reduces GHGs and other environmental harm.

FIGURE TR-3 CORRIDORS WITH HIGH INCIDENCE OF PEDESTRIAN, BICYCLE, AND AUTOMOBILE COLLISIONS



Policies

TR-P2.1



In addition to any required California Environmental Quality Act (CEQA) review, evaluate the traffic operations effects of proposed projects in accordance with the County's Transportation Analysis Guidelines and other appropriate policy supplements and transportation plans, and best practices. When operational deficiencies are identified, the treatments to address those deficiencies should first prioritize reducing the project's vehicular trips and collision risks, and may secondarily consider adding vehicular capacity so long as the safety and movement of active modes are not compromised. Exceptions to the level of service (LOS) operational standards presented in the Transportation Analysis Guidelines may be granted if the treatments necessary to address operational deficiencies would conflict with other priorities in this General Plan and if the project is otherwise consistent with this Plan.

TR-P2.2





Prioritize expansion of bicycle, micromobility, and pedestrian infrastructure (e.g., Class IV separated bikeways) to address the significant latent demand for these active transportation modes.

TR-P2.3





Ensure emerging transportation technologies and travel options, such as autonomous and ZEVs and transportation network companies, support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.

TR-P2.4



practices), and support for public transit.*



TR-P2.5

Ensure new highways constructed outside the Urban Limit Line are not growth-inducing through land-use controls, access limitations, and other appropriate measures.

TR-P2.6

Partner with the Contra Costa Transportation Authority (CCTA) and California Department of Transportation (Caltrans) to better manage traffic operations on the State highway system in Contra Costa County through the application of ramp metering, construction of highoccupancy toll (HOT)/Express or other managed lanes, and other capacity-management techniques.

TR-P2.7



Leverage the County's position as a major employer to demonstrate leadership in enhancing workforce commute options.

TR-P2.8





Support improvement and expansion of passenger and commuter rail service countywide, with emphasis on transformative projects such as the Hercules Intermodal Transit Center and BART extensions in the I-80 corridor toward Crockett and SR 4 corridor toward Brentwood.







Support public transit and encourage transit use by advocating for increased funding with enhanced governance, high-frequency service, and expansion of firstmile/last-mile programs.

TR-P2.10





Enhance multimodal access to all transit stops, prioritizing stops which serve vulnerable and mobility-impaired populations.

TR-P2.11





Support transitioning all on-road vehicles, including personal vehicles and business, government, and public transit fleets, to electric power from renewable sources or other emissionfree fuels.

TR-P2.12





Continue to improve ZEV charging/fueling infrastructure within new development and public rights-of-way, incorporating new technologies whenever possible.

TR-P2.13





Require designs for new parking facilities to incorporate ZEV charging/fueling infrastructure and maximize opportunities for adaptive reuse.*

Actions





Develop and promote mobility alternatives to singleoccupancy vehicles, including but not limited to public transit, micromobility, carbon-free rideshare strategies, and nonmotorized modes.

TR-A2.2



Review and update County Ordinance Code Chapter 82-32 - Transportation Demand Management and the County's Transportation Demand Management Guidelines at least once every five years to incorporate current best practices.

TR-A2.3

Update the Contra Costa County Transportation Analysis Guidelines on an as-needed basis.

TR-A2.4





Implement programs to encourage transit use, bicycling, walking, telecommuting, and use of alternative vehicle fuels by County employees.

TR-A2.5





Conduct a survey to identify gaps in public transit and the active transportation network within one mile of County offices and facilities, and pursue funding for projects and programs that will fill those gaps and improve the availability of alternative transportation options for County employees.







Partner with transit agencies and CCTA to develop "Safe Routes to Transit" guidance that could be applied in new development areas and existing neighborhoods.

TR-A2.7





Partner with transit providers, cities, and CCTA to develop a countywide transit stop program that takes a holistic approach to transit stop planning and construction. Encourage the program to address right-of-way adequacy (i.e., sufficient space for bus pullouts and amenities), amenities (e.g., shelters, seating, bicycle racks and lockers), and improvements around stops to increase accessibility (e.g., curb ramps, sidewalk widening).

TR-A2.8





Work with transit agencies to provide convenient ways for residents to report transit shelters and other amenities (e.g., lighting, seating) that are in disrepair. Encourage and promote reporting countywide, especially in Impacted Communities.

TR-A2.9





Pursue funding and other resources to implement the Accessible Transportation Services Strategic Plan and similar plans and initiatives that expand the hours of operation, operational boundaries, convenience, and auality of accessible transit to improve mobility for seniors, people with disabilities, and other vulnerable populations.

TR-A2.10



Support establishment of a Bay Area-wide transit fare equity program that includes free or means-based transit passes for qualifying residents of Impacted Communities.

TR-A2.11





Coordinate with CCTA and other local and regional agencies to implement the Contra Costa Electric Vehicle Readiness Blueprint and related policies and apply best practices in ZEV charging/fueling infrastructure requirements.

TR-A2.12





Update the County Ordinance Code as necessary to support advances in ZEV charging/fueling infrastructure.

TR-A2.13

Advocate for legislation requiring micromobility and other transportation technology providers to accept responsibility for and mitigate the unique physical, operational, and financial impacts of their services, such as abandoned mobility devices, upon local jurisdictions.

See also the Health and Safety Element for policies and actions related to GHG emissions, air quality, and parking lot shading.

Goal TR-3

A transportation system that protects human life.

Policies





Pursue the priorities identified in the County's Vision Zero and other safety programs, through prioritization of safety projects and incorporation of safety considerations into all transportation planning efforts.

TR-P3.2



Minimize conflicts between vehicles and people who walk, bike, or use micromobility through careful site planning, paying particular attention to driveway locations and internal pedestrian circulation, and prioritizing safety for active modes of travel.

TR-P3.3





Provide or require new projects to install energy-efficient street lighting to improve public safety and comfort in urbanized areas. Prioritize installation in Impacted Communities, particularly at parks, transit stops, alleyways, bike and pedestrian paths, trails, and other high-need areas, consistent with community preferences.

Actions

TR-A3.1



Maintain a Vision Zero Working Group to regularly review collision data and evaluate the effectiveness of Vision Zero and other safety strategies.

TR-A3.2







Identify and address neighborhood-specific issues and needs in Impacted Communities, prioritizing installation of sidewalks, enhanced crosswalks, street lighting, street trees, bicycling infrastructure, transit stop amenities, traffic calming, and other safety and comfort improvements, especially in residential areas and near schools, libraries, and recreational facilities. Explore innovative methods to ensure these facilities are maintained. Engage school districts, neighborhood groups, and the local Safe Routes to School Program in implementing this action.

TR-A3.3

Coordinate with the California Public Utilities Commission and railroads to design and implement projects that address safety concerns and conflicts from at-grade rail crossings.

See the Health and Safety Element for policies and actions related to evacuation.

MULTIMODAL ROADWAY NETWORK

The local transportation system needs to serve all users and modes of transportation, with a focus on safety, accessibility, and convenient, efficient travel between origins and destinations in Contra Costa County, Enhancing mobility and connectivity for transit, bicycles, and pedestrians will also help reduce traffic congestion and pollution and promote public health.

As interest in safe and sustainable transportation systems has grown, communities throughout California have been changing the transportation planning paradigm from a vehicle-centered exercise to a Complete Streets approach, in which all travel modes are accommodated in a balanced way based on the particular street's location, land use context, and function within the circulation network. In 2016, Contra Costa County adopted its Complete Streets Policy that includes Complete Streets principles and implementation guidelines. The policy focuses on context-sensitive planning, the importance of considering user diversity (i.e., different user abilities and modes of travel), and a holistic approach that expects all involved County departments and all projects to include a Complete Streets focus.

Roadway classifications help define the function of various street types in the transportation network, based on the level of traffic volume that can be served. Classifying roadways allows the County to monitor performance and plan for improvements needed to accommodate changes in traffic, as well as pedestrian and bicycle volumes over the life of this General Plan. Classifications are also necessary to ensure the County is eligible for roadway maintenance and improvement funding.

This General Plan defines the County's roadway network based on traditional categories recognized by regional, State, and federal transportation agencies. The roadway classifications included in the roadway network are described below and shown on Figure TR-4.

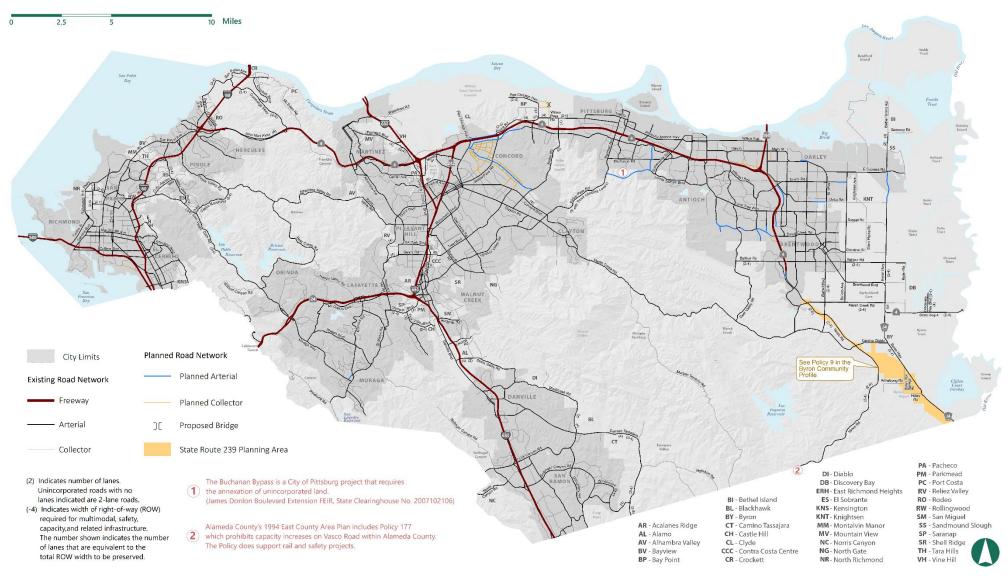
- Freeways are high-speed facilities that move inter-city or regional traffic. Freeways that provide regional access to, from, and within Contra Costa County include Interstate (I-) 80, I-680, I-580, State Route (SR) 4, SR 24, SR 242, and SR 160.
- Arterials are relatively high-volume facilities that connect the regional roadway network to the local roadway network. Limited access is provided to abutting parcels in many cases. Arterial streets generally

- serve between 10,000 and 40,000 vehicles per day; some minor arterials serve fewer than 10,000 vehicles per day. Most intersections along arterials are signalized, often with a coordinated and interconnected signal system. Some of the primary arterials in Contra Costa County include Richmond Parkway, San Pablo Avenue, San Pablo Dam Road, Kirker Pass Road, Danville Boulevard/San Ramon Valley Boulevard, Camino Tassajara, Vasco Road, and Byron Highway.
- Collectors connect residential and local-serving commercial areas with the arterial system. Collector streets serve as principal traffic arteries within residential and commercial areas. These streets typically carry up to 10,000 vehicles per day, although some collectors may carry more vehicle traffic for short segments as they convey traffic between arterial streets and local residential streets. Collectors are often important segments of bikeway networks.
- Local roads provide circulation within neighborhoods and between adjacent land uses. They are typically low-speed, low-volume streets with design features that discourage through traffic to be more compatible with residential needs.



San Pablo Dam Road in El Sobrante is classified as an arterial.

FIGURE TR-4 **ROADWAY CLASSIFICATIONS**



The roadway network in the southeastern part of the county will be significantly expanded with the planned SR 239 project, which will provide a direct connection between SR 4 and the I-580/I-205 corridor in Alameda and San Joaquin Counties. Although SR 239 has been a legislatively designated route since 1959, development of the facility didn't begin gaining momentum until 2005, with the County receiving several federal earmarks. As of Fall 2023 the project is in design and environmental review. SR 239 is a large, multiphase project that is anticipated to take some time to build out. The Vasco Road - Byron Highway Connector, which among other things would enhance access to Byron Airport, is being planned as the first phase.

The County plans for roadway improvements and maintenance through the Capital Road Improvement and Preservation Program (CRIPP), which is updated every two years to identify the status, estimated cost, funding source, and schedule for roadway projects anticipated over the next seven years. Similar to the Zoning Code, the CRIPP must be consistent with the General Plan. California Government Code Section 65401 requires portions of capital improvement plans and programs such as the CRIPP to be reviewed annually for General Plan consistency. This review is conducted by the County's Transportation, Water, and Infrastructure Committee, a subcommittee of the Board of Supervisors.

Goal TR-4

A roadway network that accommodates multimodal travel options for all county residents, businesses, and visitors, regardless of age, ability, race, culture, or economic status.

Policies





Plan, design, and maintain improvement projects involving County roadways in accordance with the County's adopted Complete Streets Policy, other applicable policies (e.g., Vision Zero and other safety initiatives), planning documents such as the County ATP and CCTA Countywide Bicycle and Pedestrian Plan, and best practices (e.g., Caltrans, American Association of State and Highway Transportation Officials, and National Association of City Transportation Officials auidance).*

TR-P4.2





Require transportation infrastructure serving new development to be designed using best practices, contemplating existing and planned land uses, roadways, bicycle and pedestrian facilities, transit facilities, and connections to adjoining areas.*

TR-P4.3





Create connections between unincorporated communities and neighborhoods and adjacent jurisdictions to improve multimodal access to local destinations, such as schools, parks, shopping, health services, and workplaces.

TR-P4.4



Manage access points along arterial and collector roadways to minimize the number of new driveway or streettype intersections. Consolidate existing street and driveway intersections to limit conflict points as opportunities arise.

TR-P4.5

Require installation of, or provide, wayfinding signage (accessible to persons who are vision impaired) to aid navigation where necessary or desirable.

TR-P4.6





Enhance streetscapes in nonresidential areas, making them more pedestrian-friendly and inviting by reducing setback and off-street parking requirements and augmenting trafficcalming measures.

TR-P4.7





Encourage walkability and safety by streamlining implementation of traffic-calming measures through the Neighborhood Traffic Management Program.

TR-P4.8

Minimize speeding through residential neighborhoods by implementing appropriate roadway design standard, trafficcalming, and other holistic solutions, as well as enforcement.

TR-P4.9

Protect residential neighborhoods from outside or cutthrough traffic by implementing appropriate design solutions aimed at keeping through traffic on arterials and collectors.

TR-P4.10



Design roadway infrastructure, including traffic-calming and Complete Streets features, to accommodate emergency response vehicles while maintaining the safety of vulnerable road users.*

Actions

TR-A4.1

Review the County Standard Plans at least once every five years for relevance and applicability and update as necessary to reflect best practices in context sensitivity, Complete Streets, travel safety, and environmental sustainability.

TR-A4.2

Ensure that the CRIPP:

- (a) Reflects current and best transportation planning practices.
- (b) Implements adopted transportation and land development policies.
- Complies with public review requirements.
- Presents planned transportation system improvements with an implementation schedule.

TR-A4.3



Develop guidance for managing curb space in ways that are sensitive to the land use context, with considerations for active transportation use, users with limited mobility, transportation network companies, outdoor dining, freight deliveries, parking, and other curb uses that may emerge.

ACTIVE TRANSPORTATION

Active transportation modes – i.e., walking, biking, micromobility, and other rolling forms of travel – support active lifestyles, which in turn support community health. Neighborhoods with safe and convenient walking and biking connections to parks, jobs, and schools provide residents with a healthier alternative to driving.

The pedestrian network generally consists of sidewalks and multiuse trails. Sidewalks are provided in many neighborhoods, especially those developed since the 1960s, and commercial areas, but there are gaps throughout the network and older neighborhoods sometimes have no sidewalks at all. The bicycle network, which is shown on Figure TR-5 and includes a range of bikeway types, is less developed countywide. These networks are inclusive of "rolling" transportation, in which people may use a wheelchair, skate, ride a scooter, or push a stroller. Geographic barriers such as waterways, railways, and freeways pose challenges to pedestrian and bicycle/rolling circulation and connectivity. Expanding the pedestrian and bicycle network will enhance opportunities for active transportation and reduce dependency on the car. In 2022 the County adopted its Active Transportation Plan (ATP), which serves as a roadmap to enhancing active transportation safety and mode share by providing a comprehensive look at the County's active transportation needs and opportunities. The ATP outlines investments in new bicycle facilities, upgraded crossings, enhanced trail connections, and improved walkways.

Adopted by CCTA in 2018, the Contra Costa Countywide Bicycle and Pedestrian Plan (CBPP) identifies a network of "low-stress" routes that are comfortable for most pedestrians or bicyclists. Once developed, this network will allow people of all ages and abilities to connect across the county by

walking or bicycling. Future bicycle connections planned by the CBPP are shown on Figure TR-5. The CBPP also identifies Pedestrian Priority Areas, shown on Figure TR-6, which are places where greater numbers of people are expected to walk and safety issues are most acute, indicating a need to prioritize investments in pedestrian improvements like walkways, curb ramps, and intersection improvements.

With support from MTC, CCTA has also prepared Community Based Transportation Plans (CBTPs) covering the unincorporated communities of North Richmond, Tara Hills, Bayview, Rollingwood, and Bay Point that intend to improve mobility and safety for low-income and underserved residents. Each CBTP recommends a series of projects and programs aimed at expanding active transportation options, increasing the quality of public transit services, and providing safe non-motorized routes between peoples' homes and local schools.



The Robert I. Schroder Overcrossing along the Iron Horse Trail is part of an important nonmotorized regional connection between Pleasanton and Concord.

Local bikeways are classified based on traditional categories recognized by federal, State, and regional transportation agencies. Each bikeway class is intended to provide bicyclists with safe and convenient riding conditions. Different bikeway designs offer various levels of separation from traffic based on traffic volume, speed, and other factors. There are four types:

- Class I bikeways (bike paths) provide completely separate facilities from automobiles and are designated for the exclusive use of bicyclists and pedestrians with minimal cross-flow automobile traffic. In Contra Costa County, these types of paths are often along creeks, canals, utility corridors, and former rail lines. Class I bikeways are often used for recreational and commute trips.
- Class II bikeways (bike lanes) provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bike lanes may be enhanced with painted buffers between vehicle lanes and parking, and green paint along the bike lane or at conflict zones (such as driveways or intersections).
- Class III bikeways (bike routes) provide enhanced conditions for bicyclists through signage, striping, and traffic-calming treatments, and provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike paths or bike lanes, or along lowvolume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes by encouraging slow speeds and discouraging non-local vehicle traffic, often through use of trafficcalming features. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.

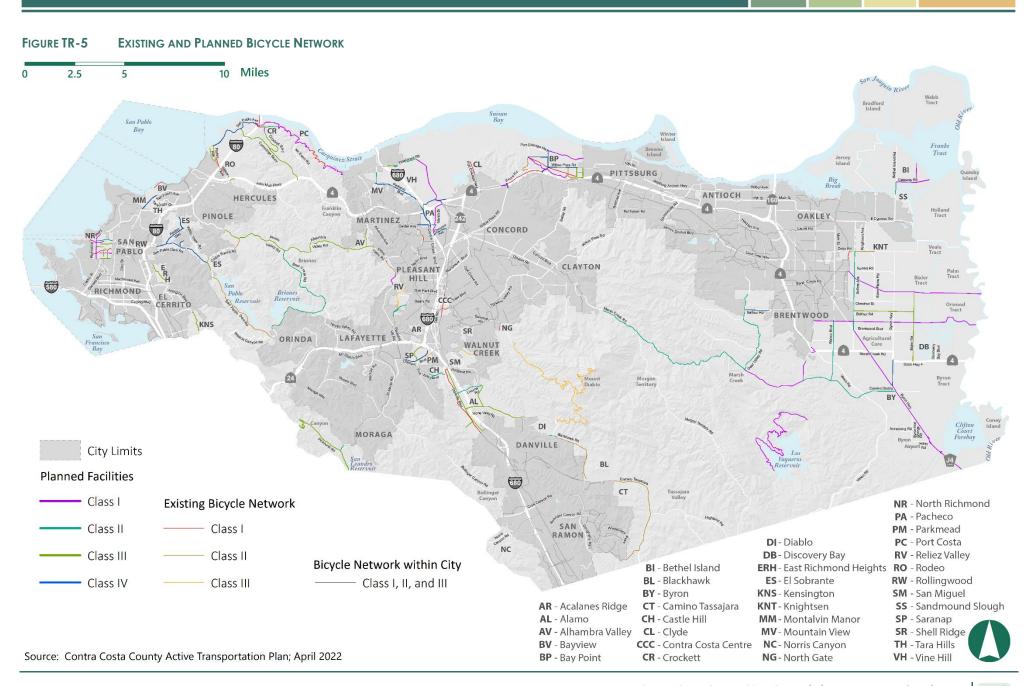
• Class IV bikeways (separated or protected bikeways), also referred to as cycle tracks, are bikeways for the exclusive use of bicycles, which are physically separated from vehicle traffic with a vertical element. Types of separation may include grade separation, plastic delineator posts, concrete dividers, or on-street parking.



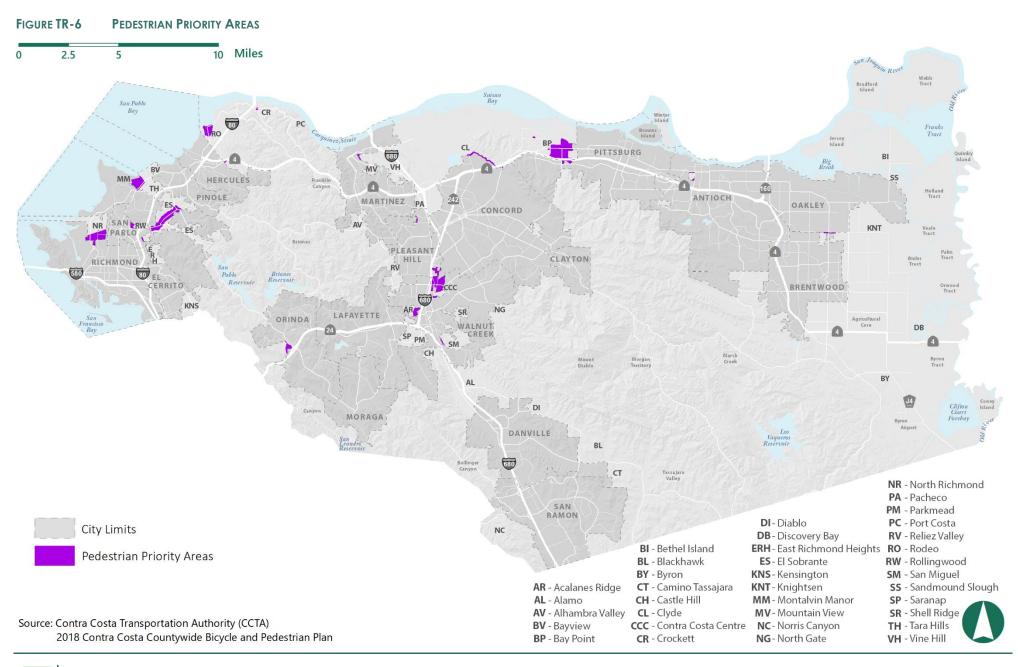
Pedestrian infrastructure such as signals, sidewalks, and crosswalks enhance safety.

Goal TR-5

Support people who walk, bike, roll, or use mobility devices by creating safe, equitable, connected, and comfortable facilities for all ages and abilities.







Policies

TR-P5.1





Plan, design, construct, and maintain facilities for walking, bicycling, and rolling to serve people of all ages, abilities, and income levels, including children, seniors, families, and people with limited mobility.

TR-P5.2



Coordinate with Caltrans to provide safe and comfortable highway interchange crossings for people of all ages and abilities who walk, bike, or use micromobility.

TR-P5.3



Prioritize construction of capital improvement projects identified in the County's ATP.

TR-P5.4

Ensure that fee programs include active transportation facilities, and require new development to contribute funds. right-of-way, and/or provide active transportation facilities themselves.*

TR-P5.5



Maintain pedestrian and active transportation facilities to the same standard as roads and other transportation infrastructure, including repair and cleanup of all bikeway types and shared-use pathways.

TR-P5.6

Support use of temporary, quick-build, demonstration, and pilot pedestrian and bicycle improvements to test their effectiveness and promote active transportation strategies to the public.

TR-P5.7





Encourage walking, bicycling, and micromobility as the travel modes of choice for short to medium-length trips, such as trips to schools, parks, transit stops, local shopping areas, and neighborhood services.

TR-P5.8





Partner with neighboring jurisdictions, transit agencies, community members, and business organizations to plan and construct sustainable streets in business and commercial areas. Consider forming community facilities districts or business improvement districts to help fund and maintain improvements.

TR-P5.9



Consider proposals for temporary and permanent reorientation of public space towards increased outdoor activity, such as walking, bicycling, rolling, dining, and other social uses.

TR-P5.10





Support micromobility options such as bike-, e-bike-, and escooter-share.



TR-P5.11





Require generous parking for bicycles and other mobility devices at key destinations, such as shopping centers, parks, schools, employment centers, transit stations, and multiplefamily housing. This parking should be conveniently located near entrances, include charging infrastructure, and accommodate cargo bikes when appropriate for the land use.

Actions

TR-A5.1





Partner with CCTA and neighboring jurisdictions to build out the countywide bicycle and pedestrian network, prioritizing completion of the Low-Stress Countywide Bicycle Network and pedestrian safety improvement projects in the County's Pedestrian Priority Areas, as described in the Countywide Bicycle and Pedestrian Plan.

TR-A5.2





Construct innovative bicycle and pedestrian facilities, including Class IV separated and protected bikeways, bicycle superhighways, and other low-stress facility types, as described in the Countywide Bicycle and Pedestrian Plan and in contemporary, best-practice transportation planning and engineering guidance. Use contextually appropriate green infrastructure and landscaping to separate vehicular lanes from bicycle and pedestrian facilities whenever feasible.

TR-A5.3





TR-A5.4





Review the scoring formula for active transportation projects at least once every five years to ensure continued prioritization of projects in Impacted Communities.

TR-A5.5



Partner with the cities, EBRPD, and CCTA to develop uniform guidance to manage active micromobility services.

TR-A5.6





Evaluate the feasibility and appropriateness of the following when updating the ATP and CRIPP:

- (a) Installing bikeways along all segments of Routes of Regional Significance within the County's iurisdiction.
- (b) Restriping arterials and collectors to include bikeways whenever major maintenance occurs.
- Installing bikeways and sidewalks along arterials and collectors to the limits of adjacent jurisdictions.
- Installing bicycle detection systems, bicycle signals, bicycle boxes, and pavement markings at new and retrofitted traffic signals.
- (e) Installing crosswalks at all legs of signalized intersections.

See the Public Facilities and Services Element for additional policies and actions related to the countywide trail network.

GOODS MOVEMENT

Industry and commercial enterprises in Contra Costa County are served by a goods movement system that includes rail, port, truck, and air facilities. As shown on Figure TR-7, all freeways in the county are designated as State truck routes. I-80 and I-680 are the principal north-south corridors and connect to neighboring industrial hubs, while SR 4 is the principal east-west transportation corridor serving the industrial areas of the 55-mile Northern Waterfront. Two major transcontinental railroads, Burlington Northern Santa Fe (BNSF) and Union Pacific Railroad (UPRR), follow the county's western and northern shorelines, connecting the Northern Waterfront to the rest of the county, and serving ports and major rail facilities in Oakland and Richmond. The Port of Richmond, within the Richmond city limits, is a deep-water port that connects the county to markets regionally and farther afield. Deepwater shipping channels along the Northern Waterfront connect to the Ports of Sacramento and Stockton. Finally, Buchanan Field Airport in Concord is capable of handling small cargo aircraft.

While goods movement is an essential component of daily life and the economy, it can cause severe health and quality of life impacts for residents who are exposed to air pollution, noise, and the potential for accidents from nearby trains, ships, trucks, and planes. In Contra Costa County, heavy-duty truck emissions at industrial facilities and on local roads and freeways is a significant contributor to health disparities, especially in Impacted

Communities. Given these and other concerns, goods movement is heavily regulated by federal and State agencies, including the California Air Resources Board, which restricts idling times for heavy-duty trucks to minimize localized air pollution.



Contra Costa County is part of the global shipping economy through various local ports, marine terminals, and railroads.

Goal TR-6

Safe and efficient movement of goods consistent with the County's goals to reduce emissions, protect public safety, and support economic development, local access, and circulation.

FIGURE TR-7 **GOODS MOVEMENT FACILITIES** 10 Miles 2.5 5 Bradford Island 200 MV VH PITTSBURG HERCULES PINOLE MARTINEZ PA ANTIOCH OAKLEY ES CONCORD Buchanan PABLO Field PLEASANT HILL RICHMONE CLAYTON ccc BRENTWOOD CERRITO KNS AR LAFAYETTE ORINDA WALNUT SP PM CH Morgan Territory State Truck Network Byron = DI Airport MORAGA Railroad DANVILLE Railroad (non operational) Airport NR - North Richmond PA - Pacheco Port of Richmond SAN PM - Parkmead RAMON DI - Diablo PC - Port Costa NC Marine Terminal **DB**-Discovery Bay RV - Reliez Valley BI - Bethel Island ERH - East Richmond Heights RO - Rodeo Deep Water Ship Channel **BL** - Blackhawk ES - El Sobrante RW - Rollingwood BY - Byron KNS - Kensington SM - San Miguel City Limits AR - Acalanes Ridge CT - Camino Tassajara KNT - Knightsen SS - Sandmound Slough AL - Alamo CH - Castle Hill MM - Montalvin Manor SP - Saranap AV - Alhambra Valley CL - Clyde MV - Mountain View SR - Shell Ridge

BV - Bayview

BP - Bay Point

CCC - Contra Costa Centre NC - Norris Canyon

NG-North Gate

CR - Crockett

TH - Tara Hills

VH - Vine Hill

Policies

TR-P6.1



Partner with neighboring jurisdictions, CCTA, and the MTC to manage regional movement of goods through unincorporated areas, minimizing impacts on residents and other sensitive receptors.

TR-P6.2



Support roadway improvements that facilitate regional goods movement, such as construction of SR 239 and the Vasco Road-Byron Highway Connector near Byron, and replacement of the Old River Bridge near Discovery Bay.

TR-P6.3



Work with ABAG/MTC to improve resilience, speed, and reliability of goods movement through expansion of smaller ports-of-entry which will increase redundancy, thereby limiting exposure to disruptive events at larger congested ports.

TR-P6.4



Use all available policy tools to ensure that trucks use designated truck routes.

TR-P6.5



Work with railroads to preserve non-operational contiguous railroad rights-of-way, and highly encourage construction of grade-separated railroad crossings along active lines to support current and future rail operations and ensure the long-term viability of these rail corridors. When no longer in

operation, maintain options for future use of the corridors for trails or other public purposes.

TR-P6.6





Support development of short-line railroad infrastructure and operations in industrial areas to facilitate rail access to Class I railroad lines, attract potential businesses seeking rail-served properties, ease traffic congestion caused by goods movement on regional highways, and reduce GHG emissions.

TR-P6.7



Support deepening and ongoing maintenance of the deepwater ship channels between San Francisco Bay and Stockton and continued deep-water access to the county's Northern Waterfront.

TR-P6.8



Support continued operation, maintenance, and further development of ports and terminals consistent with federal, State, and County environmental policies and economic priorities.

Actions

TR-A6.1





Develop a program to establish and maintain truck routes, with the goal of minimizing impacts on residents and other sensitive receptors. This program will provide engineering and policy solutions to divert trucks from Impacted Communities and establish criteria for designating weight limits on certain routes and installing physical barriers and signage.





Facilitate enforcement of idling restrictions by promoting community-based reporting to enforcement agencies.

TR-A6.3

Amend County Ordinance Code Title 9 – Subdivisions to require new multiple-family residential, commercial, and mixed-use developments to designate areas adequate for package and goods deliveries and passenger loading and unloading.

TR-A6.4





Develop regulations responding to technological advancements in freight movement, such as autonomous vehicles, robotics, and drone deliveries, while supporting the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.

See the Health and Safety Element for policies and actions related to protecting the transportation network, including rail, from sea level rise.

AIR MOBILITY

Contra Costa County has two public County-owned airports: Buchanan Field Airport near Concord and Byron Airport, south of Byron. Buchanan Field Airport provides general aviation, recreation, emergency response, law enforcement, passenger, cargo, and charter services. The airport is surrounded by urban development, which limits its potential for expansion. Byron Airport serves general aviation functions and is a popular base for skydivers, gliders, and other recreational flight activities. Byron Airport also serves as a testing ground for new aviation technologies.

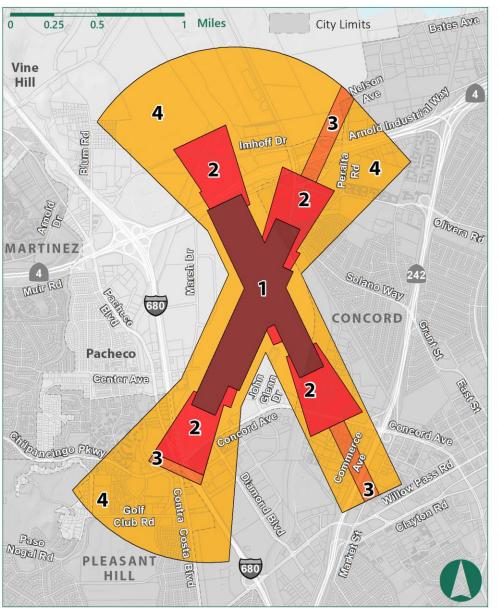
Airports influence surrounding land uses for up to three miles from the runways, affecting unincorporated and incorporated areas. To protect public safety and the long-term operations of the airports, the County's Airport Land Use Commission adopted the Airport Land Use Compatibility Plan (ALUCP), which regulates the location of land uses near both airports through the designation of Airport Land Use Compatibility Zones (see Figure TR-8). Specifically, the ALUCP seeks to protect the public from adverse effects of aircraft noise, ensure people and facilities are not concentrated in areas susceptible to aircraft accidents, and ensure no structures or activities adversely affect navigable airspace.

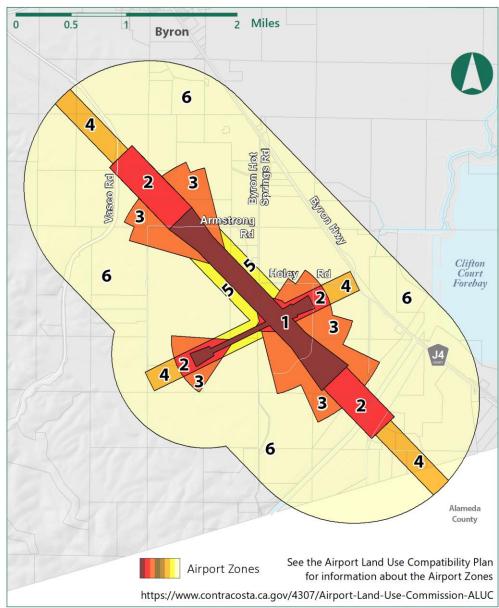
Emerging technologies will influence future air mobility, including vertical takeoff and landing aircraft that can expand air mobility options for people and cargo to places that had previously lacked air access. Such aircraft can be served by vertiports that are specifically designed for this technology and take up smaller spaces than traditional airports.



Buchanan Field is one of two general aviation airports in Contra Costa County.

FIGURE TR-8 **BUCHANAN FIELD AIRPORT AND BYRON AIRPORT COMPATIBILITY ZONES**





Goal TR-7

Safe and viable general and commercial aviation activities in Contra Costa County.

Policies





Partner with other agencies to obtain funding for planning, development, improvement, operation, and maintenance of general and commercial aviation facilities.

TR-P7.2



Work with the Federal Aviation Administration and aviation operators to minimize conflicts with residential areas and other sensitive receptors.

TR-P7.3



Regulate the location of private airfields and heliports to protect public safety and minimize impacts on nearby residents and sensitive receptors.*

TR-P7.4



Protect the County's airports from encroachment by incompatible uses and minimize the public's exposure to safety hazards and excessive noise by ensuring that all future development within each Airport Influence Area is consistent with the Contra Costa County ALUCP.*

TR-P7.5



Partner with the cities of Concord and Pleasant Hill in making land use decisions that support Buchanan Field Airport's ongoing viability while protecting public safety, consistent with the Airport Master Plan and ALUCP.

TR-P7.6



Enhance Byron Airport's viability by protecting it from incompatible urban encroachment, such as large-scale residential development, and providing infrastructure that supports existing and planned airport activities, consistent with the Airport Master Plan and ALUCP.

TR-P7.7



Embrace emerging aviation-related technologies, such as drones, electric-powered aviation, and vertical takeoff and landing aircraft, to promote economic development and support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.

Actions

TR-A7.1



Update the ALUCP every 5 to 10 years to maintain consistency with applicable federal and State requirements, regional plans, and this General Plan, and to achieve the County's goals for Buchanan Field Airport and Byron Airport.

TR-A7.2

Switch to sale of unleaded aviation gasoline at Countyowned airports as soon as there is a commercially viable and safe drop-in replacement for leaded fuel.

TRANSPORTATION ELEMENT PERFORMANCE MEASURES

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- Reduced per-capita VMT.
- Reduced single-occupant vehicle mode share.
- Increased bicycle and pedestrian trips.
- Reduced average commute time for county residents.
- Increased ZEV charging and fueling infrastructure.
- Reduced number of roadway collisions involving fatalities and serious injuries.



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CONSERVATION, OPEN SPACE, AND **WORKING LANDS ELEMENT**

Contra Costa County encompasses a large geographic area containing diverse species, habitats, open spaces, working lands, and natural and cultural resources. This Element promotes conservation, preservation, and enhancement of these critical assets. It is organized around the following nine sections:

- The Open Space Framework section includes policy guidance to conserve open space throughout the county to protect ecological resources, provide recreation opportunities, and improve resilience to climate change-related impacts.
- The Agricultural Resources and Working Lands section includes policy guidance to protect agricultural lands from conversion to urban uses and support a thriving agricultural economy.
- The Ecological Resources and Natural Systems section includes policy guidance to preserve and enhance important ecological resources, including creeks, wetlands, riparian areas, and upland habitat.
- The Water Resources section includes policy guidance to sustainably manage surface water and groundwater resources, and protect and enhance the Sacramento-San Joaquin River Delta and shoreline areas.
- The Historic and Cultural Resources section includes policy guidance to support identification and preservation of archaeological, historic, and tribal resources in the county, and underscores a commitment to consult and collaborate with local tribes throughout the planning process.

- The Scenic Resources section includes policy guidance to protect the abundant scenic resources in the county, including scenic routes, scenic ridges, and other natural features with scenic value.
- The Mineral Resources section includes policy guidance to support mineral extraction operations, which are an important part of the regional economy, while avoiding land use conflicts and negative environmental impacts.
- The Energy Resources section includes policy guidance to conserve energy and support a transition to carbon-free energy sources, such as wind and solar.
- The Conservation, Open Space, and Working Lands Element Performance Measures describe how the County will track its progress in achieving some of the major objectives expressed in this Element.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.







Environmental Justice



Sustainability

OPEN SPACE FRAMEWORK

Contra Costa County is a unique place where the greater San Francisco Bay Area, Delta, and Central Valley meet. Well over a third of the county's unincorporated area is designated for resource conservation, open space, and parks and recreation uses.



EBRPD manages numerous recreational open spaces, including Briones Regional Park.

Major open space landowners operating at the local level in Contra Costa County include:

- East Bay Regional Park District (EBRPD), which owns and manages over 65,000 acres of parkland in the county.
- East Bay Municipal Utility District (EBMUD), which owns and manages almost 27,000 acres of watershed land in the areas around San Pablo. Briones, and San Leandro Reservoirs.
- Contra Costa Water District (CCWD), which owns and manages approximately 20,000 acres of watershed land surrounding Los Vaqueros Reservoir.

Among the State agencies owning land in Contra Costa County, the California Department of Parks and Recreation (CDPR) owns the most. The 20,000-acre Mount Diablo State Park, surrounding the iconic 3,849-foot peak of Mount Diablo, is the most well-known State park in the county. In addition, land trusts like Save Mount Diablo, John Muir Land Trust, and Agricultural-Natural Resources Trust work in tandem with the local community to conserve open space.

These open spaces are diverse in size and character, ranging from the wetlands and marshes at the gateway to the Delta, to the rugged and wooded 2,800-acre Wildcat Canyon Regional Park, nestled in the Berkeley Hills. Each open space area is defined by a combination of resources, habitats, and agency jurisdiction that require different approaches to preservation, rewilding, and interagency coordination. These open spaces comprise an integrated natural network supporting the county's livability and resiliency to climate change, and are important recreational and scenic resources highly valued by the community. The County therefore partners with other agencies, such as those discussed above and the Contra Costa Resource Conservation District (RCD), and non-profit organizations to ensure that these resources are protected.



Delta waterways are an important open space feature in East County.

Goal COS-1

Preserved open space for environmental protection, resource management and production, recreation, scenic value, and climate resilience and adaptation.

Policies





Support efforts by public agencies and nonprofit organizations to acquire and permanently protect open space areas containing important ecological or scenic resources and areas that connect protected lands to form a cohesive system of open space. Plan infrastructure to avoid interfering with such acquisitions whenever possible.

COS-P1.2





Pursue opportunities for permanent open space dedication for habitat, scenic, or passive recreation benefits as part of future development approvals and major capital improvement projects.

COS-P1.3





Discourage conversion of land designated Resource Conservation or Parks and Recreation to urban uses. If such conversion is to occur, require mitigation through permanent protection of other open space or park lands for habitat, scenic, or recreation benefits at a ratio to be determined based on the biological, scenic, or recreational value of the land, but not less than 3:1.*

COS-P1.4



Require new projects adjacent to protected open space areas, such as EBRPD lands, to establish buffers on their properties as necessary to minimize conflicts and protect the open space. If conflicts arise between protected open spaces and other uses, prioritize maintaining the viability of the open space functions.*

Actions

COS-A1.1

Convene an annual staff-level meeting with conservation agencies, such as the East Contra Costa County Habitat Conservancy and EBRPD, and conservation organizations (land trusts, watershed stewardship groups, etc.) to review current and planned efforts to protect and maintain open space and habitat.

See the Land Use Element for additional policies and actions related to the Urban Limit Line and open space uses.

AGRICULTURAL RESOURCES AND WORKING **LANDS**

Agricultural Resource Areas

There are approximately 254,500 acres of agricultural land mapped by the State in Contra Costa County, most of it in the unincorporated area. The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) maps land by agricultural production potential using the following categories:

- Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. Prime Farmland has the soil quality, growing season, and moisture supply needed to produce sustained high yields.
- Farmland of Statewide Importance is similar to Prime Farmland, but with minor shortcomings, such as steeper slopes or less ability to store soil moisture.
- Unique Farmland consists of lesser-quality soils used for producing the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards, as found in some climatic zones in California
- Farmland of Local Importance consists of dryland grains and irrigated pastures not meeting the definitions of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.
- Grazing Land is land on which the existing vegetation is suited to the grazing of livestock.

These categories are used to determine impacts to agricultural land under the California Environmental Quality Act (CEQA). Figure COS-1 shows agricultural land in the unincorporated county as mapped by the FMMP.

In addition to the FMMP, the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) maps prime productive agricultural soils, which are classified as Class I and 2 soils and considered the very best soils for farming. As shown in Figure COS-2, these soils are primarily in East County.



Agricultural land and farmworker labor yield valuable crops in Contra Costa County.

Agricultural lands provide additional benefits outside the traditional crop and agricultural product yield. These lands can provide natural habitats and support ecological functions, while sequestering carbon to support climate stability. Agricultural lands, when managed appropriately, can also serve as strategic wildfire resilience assets by acting as a buffer between fire-prone landscapes and communities.

FIGURE COS-1 AGRICULTURAL LAND

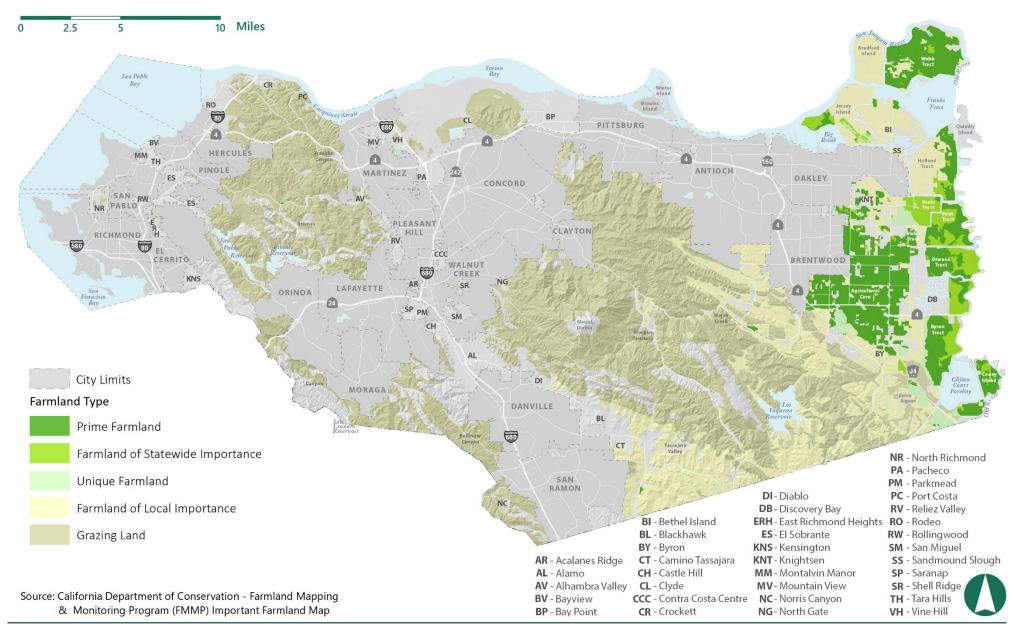


FIGURE COS-2 PRIME PRODUCTIVE AGRICULTURAL SOILS



The County realizes the multiple benefits of agriculture and has implemented various programs and regulations to support agricultural land conservation. These include the Agricultural Land Conservation Ordinance, which implements the Williamson Act by allowing property owners to receive a reduced property tax rate in exchange for keeping land in agricultural production, and the Right-to-Farm Ordinance, which protects farms from nuisance complaints. The County also promotes integrated pest management (IPM) strategies to support healthy crops while reducing use of harmful chemicals and associated impacts to the environment.



Grazing goats can eliminate weeds and reduce wildfire risks as an IPM strategy. Photo credit: Contra Costa Health Integrated Pest Management

Goal COS-2

A thriving and resilient agricultural sector based on resource conservation and sustainability practices.

Policies

COS-P2.1



Preserve large, contiguous areas of the county for agricultural production. Deny applications for projects that would lead to fragmentation of agricultural areas.*

COS-P2.2

Preserve and protect productive agricultural land from conversion to urban uses, especially land designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland on the Important Farmland Map prepared by the California Department of Conservation; land containing Class 1 or Class 2 soils; and land designated Agricultural Core.*

COS-P2.3

Require a 40-acre-minimum parcel size for subdivisions of prime productive agricultural land (i.e., Class 1 and Class 2 soils).

COS-P2.4

Consult with the Delta Protection Commission to identify mitigation strategies as relevant, if a change in land use that converts agriculture would significantly affect the sustainability of the Delta agricultural economy.





Require new projects adjacent to agriculture to establish buffers on their properties as necessary to minimize conflicts and protect agriculture. Determine appropriate buffers in consultation with the County Agricultural Commissioner.*

COS-P2.6



When resolving conflicts between agricultural uses and urban uses, prioritize maintaining the viability of the agricultural uses.

COS-P2.7



Require deed disclosures for new residential development in or adjacent to areas designated or zoned for agricultural use. The disclosures must explain the potential disturbances associated with agricultural operations (e.g., dust, noise, odors, and use of pesticides) and reference the Right-to-Farm Ordinance, which protects agricultural operations from nuisance complaints and unreasonable restrictions.*

COS-P2.8



Encourage owners of qualifying agricultural land to participate in the Williamson Act (Agricultural Preserve) Program.

COS-P2.9



Support public infrastructure projects and programs that will increase, enhance, and protect agricultural land and its production capabilities.

COS-P2.10





Coordinate with Byron-Bethany Irrigation District and East Contra Costa Irrigation District to facilitate water conservation, efficient use of agricultural irrigation water, and implementation of emerging water reuse technologies and practices.

COS-P2.11



Support soil conservation and restoration programs. Encourage agricultural landowners to work with agencies such as the USDA's NRCS and Contra Costa RCD to reduce erosion and soil loss

COS-P2.12



Support efforts to protect, maintain, and improve soil health as a carbon sequestration tool.

COS-P2.13





Partner with the agricultural community and University of California Cooperative Extension (UCCE) to support regenerative agriculture practices that maintain agricultural viability.

COS-P2.14





Encourage IPM practices that reduce the use of agricultural pesticides and minimize pesticide drift, and discourage farming practices that may expose residents, water resources, and the environment to fine particulates and harmful chemicals.

Actions

COS-A2.1

Review each update of the California Department of Conservation FMMP data and report to the Board of Supervisors on the quantity of land in the county converted to and from agricultural use.

COS-A2.2

Work with the agricultural community, Contra Costa LAFCO, and cities to establish programs and mechanisms to protect agricultural resources, such as preservation agreements, conservation easements, an agricultural soils trust fund, and agricultural mitigation fees.

COS-A2.3

Conduct a study of potential Transfer or Purchase of Development Rights (TDR/PDR) programs to address development pressures and preserve agricultural land. The study should determine:

- (a) Overall feasibility and usefulness toward implementing the County's agricultural preservation goals.
- Specific mechanisms that could be used.
- Geographic areas where these mechanisms could be used.
- Organizational and administrative requirements.
- Cost to the County and potential revenue sources.

COS-A2.4





Amend County Ordinance Code Title 8 – Zoning to include development standards, and possibly adopt accompanying design guidelines, for urban land uses that interface with agricultural uses, addressing, at minimum:

- Setbacks on urban properties to provide a buffer for agricultural uses.
- (b) Location and arrangement of buildings, structures, and uses on urban properties.
- Lighting, fencing, screening, and appropriate landscaping/vegetation.

COS-A2.5

Review the Williamson Act Program to identify potential areas for improvement, such as:

- Expanding the range of allowable uses to include wildlife habitat areas.
- (b) Increasing enforcement of non-compliant properties.
- Ensuring agricultural conservation commitments are adequate to justify inclusion in the Program.
- Creating a mechanism to ensure rezoning of properties no longer under a Williamson Act contract.

See the Land Use Element for additional policies and actions related to agricultural areas and the Health and Safety Element for additional policies related to soil health in support of carbon sequestration.

Agricultural Economy

Contra Costa County's rich soils, climate, and reliable water supplies have allowed generations of farmers to produce an array of outstanding crops. Contra Costa farmers have grown a wide variety of food for the Bay Area and beyond since the Gold Rush, from vast winter wheat fields in the 1880s to sweet corn, stone fruits, vegetables, olives, wine grapes, and beef today. East County has a long history of agricultural tourism, including U-pick farms going back to the 1970s. The unique combination of world-class growing conditions, proud farming tradition, and proximity to major metropolitan areas makes agriculture one of the county's most important assets.



Peppers are harvested in East Contra Costa County. (Community-submitted photo)

As of 2021, Contra Costa County ranked 36th out of California's 58 counties in total agricultural production, with a \$109.4 million value, despite being 51st in land mass. Cattle and calves, sweet corn, tomatoes, grapes, and cherries are the highest-grossing agricultural yields in the county. Future economic opportunities for Contra Costa County agriculture include:

- Demand for organic products.
- Demand for locally-grown, healthy, and sustainably produced food.
- Potential to expand value-added food processing, manufacturing, coprocessing, and co-packing across the county.
- Expanded agricultural tourism.



U-pick farms offer opportunities to experience agriculture firsthand and support the local farming community.

The Contra Costa County Department of Conservation and Development (DCD) and Department of Agriculture, Weights, and Measures seek to promote and protect the county's agricultural industry, crops, and rangelands. The future of the county's agricultural economy is supported by local agriculturalists introducing innovative approaches to farming and seeking creative ways to reintroduce farming culture and recapture earnings.

Goal COS-3

A thriving, sustainable, and competitive agricultural economy.

Policies





Support development of public and private infrastructure and services needed to support agriculture.

COS-P3.2





Support efforts to promote and market locally grown and value-added agricultural products.

COS-P3.3



Enable farmers to showcase farm products grown on-site and elsewhere within the county and offer on-site farm experiences, such as culinary classes, farm-to-table meals, tastings, and special events, while maintaining the character and integrity of the surrounding agricultural landscape.

COS-P3.4



Enable farmers and ranchers to provide small-scale, shortterm quest accommodations in a manner that is nondisruptive to the rural setting.

COS-P3.5



Assist the agricultural community through the County's economic development programs.

COS-P3.6



Support the Contra Costa RCD in carrying out its mission to assist farmers and ranchers through programs that conserve natural resources and build a strong farming community.

COS-P3.7





Support rural property owners who apply to the Contra Costa LAFCO to detach agricultural land outside the Urban Limit Line (ULL) from special districts that provide urban services.

COS-P3.8



Allow farmworker and farm family housing in agricultural areas to meet the needs of locally employed seasonal and permanent farmworkers.

Actions

COS-A3.1

Establish a mitigation program to offset conversion of working lands (irrigated and intensively cultivated agricultural lands

and rangeland) to nonagricultural uses. The program will define the types of land conversions requiring mitigation. mitigation ratios, acceptable mitigation locations, allowable conservation instruments, and use of in-lieu fees.*

COS-A3.2



Partner with the agricultural community and agencies such as the Delta Protection Commission to obtain funding for design, installation, and ongoing maintenance of proper signage promoting agriculture in the county, including wayfinding signage for agricultural tourism (e.g., U-pick, lodging, food service, winery) uses.

COS-A3.3



Designate a staff position in DCD to serve as a point of contact to guide members of the agricultural community in understanding the processes at DCD, help DCD staff understand the particular needs of the agricultural community, and coordinate with other agencies, such as the Contra Costa RCD, USDA NRCS, UCCE, County Department of Agriculture, Weights, and Measures, and County Environmental Health Division.

COS-A34





Work with the agricultural community and UCCE to promote education, training, information-sharing programs, and networking opportunities for farmers, ranchers, and agricultural agencies to increase agriculture's resilience to climate change hazards.

COS-A3.5





Coordinate with the Contra Costa RCD, USDA NRCS, UCCE, Contra Costa Mosquito and Vector Control District, County Department of Agriculture, Weights, and Measures, and County Environmental Health Division to support sustainable and resilient agricultural operations through vegetation and pest management programs, best management practices, technical assistance related to soil health, funding opportunities for efficient irrigation infrastructure, and information about alternative crop types that are drought-, heat-, and severe weather-resistant.

See the Land Use Element for additional policies and actions on the Urban Limit Line and agricultural lands.

FCOLOGICAL RESOURCES AND NATURAL **SYSTEMS**

Ecological Resource Areas

Ecological resource areas contain the county's most important biological resources and cultivate biodiversity. The County partners with a variety of public agencies to manage and protect these and other natural resources.

The East Contra Costa County Habitat Conservancy oversees implementation of the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), which provides regional conservation and development guidelines to protect natural resources while improving and streamlining the permit process for projects that will impact endangered species and sensitive habitat. The HCP/NCCP

allows local agencies to authorize endangered species permitting for activities and projects in the region, while providing comprehensive species, wetlands, and ecosystem conservation and contributing to the recovery of endangered species in northern California.

The area covered by the HCP/NCCP totals over 174,000 acres and is shown in Figure COS-3. The HCP/NCCP mainly offsets ecological impacts by conserving and restoring lands in a Preserve System. The Preserve System ultimately will encompass between 23,800 and 30,300 acres that will be acquired and managed to benefit the 28 plant and animal species covered by the HCP/NCCP, as well as the natural communities that they, and hundreds of other species, depend on for habitat. During the first 15 years of HCP/NCCP implementation, 43 properties were acquired for the Preserve System, totaling over 14,400 acres. All but one of the acquisitions were completed in partnership with EBRPD.

In addition to the HCP/NCCP, the Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) have identified Priority Conservation Areas (PCAs) throughout the county and region. These areas, for which there is broad consensus on the need for long-term protection given the ecological resources present and urban development pressures, are eligible for conservation grants through the One Bay Area Grant Program. PCAs in Contra Costa County total over 135,000 acres and are shown on Figure COS-4.

Goal COS-4

Preserved and enhanced ecological resources and wildlife habitat.

Policies

COS-P4.1



Maintain ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in and near these areas to compatible lowintensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas. Prohibit projects that would lead to fragmentation of ecologically significant resource areas.*

COS-P4.2



Support land conservation and restoration consistent with the HCP/NCCP and discourage development in areas where such conservation is planned, as shown on Figure COS-3. Support actions to preserve land and resources within PCAs mapped by ABAG, as shown on Figure COS-4.

COS-P4.3

Require a biological resources assessment prepared according to State and federal protocols for projects with the potential to impact rare, threatened, endangered, or special-status species or their habitat, and implement appropriate mitigation for identified impacts, preferably near the impact and within the county.*

COS-P4.4



Protect wildlife migration corridors, including natural and channelized creeks providing habitat in urban settings, and support projects that enhance these areas.*

FIGURE COS-3 EAST CONTRA COSTA COUNTY HABITAT CONSERVATION PLAN/NATURAL COMMUNITY CONSERVATION PLAN AREA

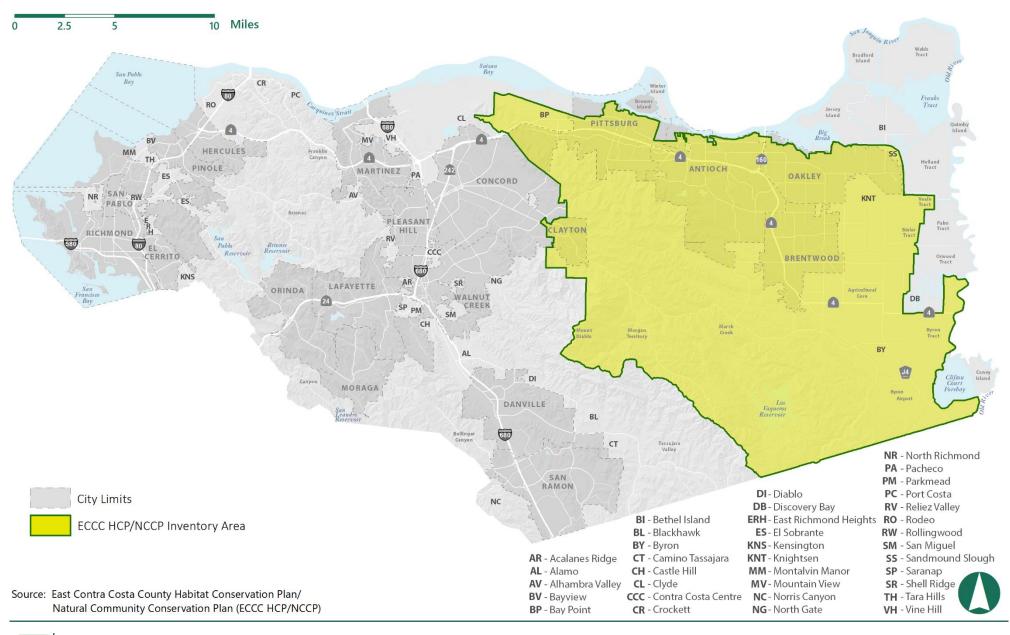
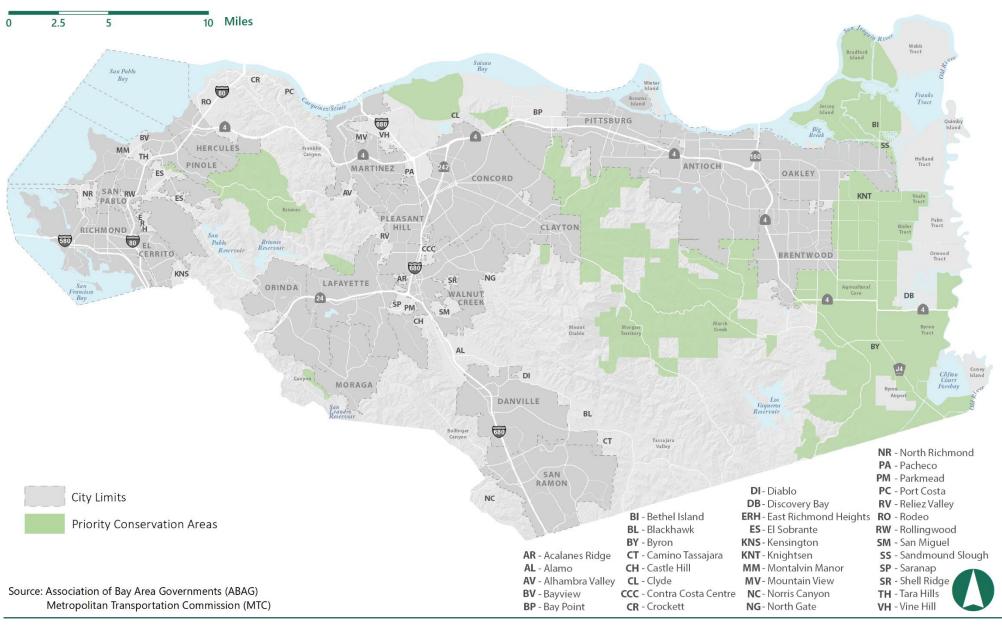


FIGURE COS-4 PRIORITY CONSERVATION AREAS







Discourage use of fencing that poses risks to wildlife.*

COS-P4.6



Require projects impacting Pacific Flyway habitat in the Delta Primary Zone to incorporate mitigation that ensures no net loss of habitat function, including temporal loss. Impacts to Pacific Flyway habitat will be determined based on best available information at the time of environmental review.

COS-P4.7



Require projects near sensitive habitat areas to minimize lighting in general and mitigate light pollution by incorporating best practices for wildlife-friendly lighting.

COS-P4.8

Require appropriately-timed, comprehensive floristic and vegetation surveys prepared according to State and federal protocols when development is proposed on land with potentially suitable habitat for special-status plant species, sensitive natural plant communities, or locally rare plants, including areas mapped by the California Native Plant Society as Botanical Priority Protection Areas.*

COS-P4.9

Require avoidance and protection of sensitive ecological resources not approved for disturbance or removal during project entitlement, and require restitution in exceedance of standard mitigation ratios for deliberate or inadvertent damage to these resources.*

COS-P4.10



Require majority use of California native plant species in large landscaped areas in new developments, and require construction practices that avoid spread of invasive plant species by minimizing surface disturbance; seeding and mulching disturbed areas with certified weed-free native mixes; disinfecting/decontaminating equipment; and using native, noninvasive, drought-resistant species in erosioncontrol plantings.*

COS-P4.11

Support preservation, enhancement, and reestablishment of native and sport fisheries. Assist conservation agencies and organizations with identifying and addressing barriers to fish passage and other challenges to fish survival in natural watercourses.

Actions

COS-A4.1

For the portion of the county not covered by the HCP/NCCP, prepare and maintain a similarly detailed inventory of ecologically significant resource areas, including unique natural areas, wetlands, floodplains, riparian resources, and the habitat of rare, threatened, endangered, and other uncommon and protected species.*

COS-A4.2



Amend County Ordinance Code Title 8 – Zoning to include development standards, and possibly adopt accompanying design guidelines, for urban land uses that interface with ecologically significant resource areas and other protected conservation lands, addressing, at minimum:

- Setbacks on urban properties to provide a buffer for resource areas.
- Clustering of development to maximize ecological and conservation benefits.
- Lighting, fencing, screening, and landscaping/ vegetation that support, and do not interfere with, wildlife migration and other conservation purposes.*

COS-A4.3



Work with conservation agencies to identify appropriate locations and methods for incorporating wildlife crossings into future road projects.

See the scenic resources section of this Element for policies and actions related to conservation of hillsides and steep slopes.

Wetlands, Natural Watercourses, and Riparian Areas

Contra Costa County hosts abundant aquatic habitat in the form of coastal salt and freshwater marshes, mud flats, inland wetlands, creeks and streams, and riparian vegetation. Wetlands, especially marshes scattered along the shoreline, are among the most important habitat resources within the county and have substantial legal and policy protection. They are critical for climate resilience, as they offer flood and storm surge protection during storm events by absorbing excess water and reducing erosion and the height of flooding. Wetlands also intercept water runoff and remove pollutants, improving water quality.



Wetlands in Radke Martinez Regional Shoreline Park provide valuable wildlife habitat along the Carquinez Strait. (Community-submitted photo)

As illustrated in Figure COS-5 and Figure COS-6, many creeks, streams, and other drainages extend throughout the county and ultimately drain into San Francisco Bay, San Pablo Bay, Suisun Bay, and the Delta. Outside the urbanized parts of the county, creeks and streams tend to be in a natural or mostly undisturbed state, supporting diverse plant and animal life. The riparian ecosystems along creek banks provide permanent homes and migratory pathways for many species, while also offering recreational opportunities for people to connect with nature. Creeks and other freshwater bodies also store water and help to recharge groundwater basins, which increases resiliency to drought conditions. However, many creeks within urbanized areas have been heavily modified to support flood control, often by rerouting them into concrete channels or culverts. Recognizing the importance of creeks in supporting ecological, recreational, and flood-control goals, in 2009 the County adopted an outline of a 50-year plan to convert creeks back to their natural state.

FIGURE COS-5 WATERBODIES AND NATURAL WATERCOURSES

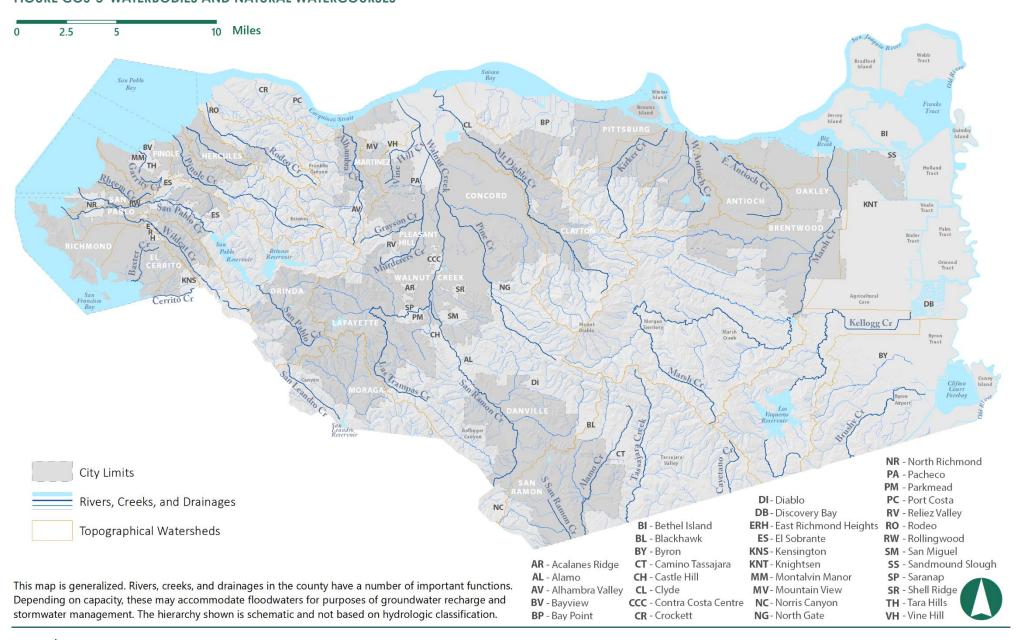
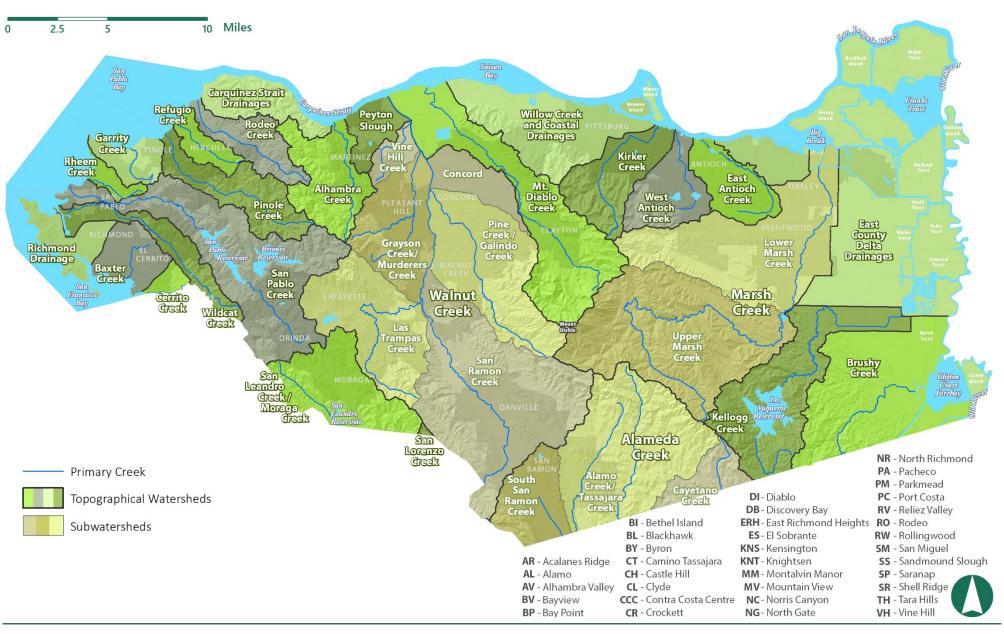


FIGURE COS-6 WATERSHEDS



Goal COS-5

Protected and restored natural watercourses, riparian corridors, and wetland areas that improve habitat, water quality, wildlife diversity, stormwater flows, and scenic values.

Policies

COS-P5.1





Support protection, restoration, and enhancement of wetlands, marshes, sloughs, tidelands, natural watercourses, and riparian corridors, and emphasize the role of these features in climate change resilience, air and water quality, and wildlife habitat.

COS-P5.2



Require public infrastructure and private development projects to preserve, and whenever possible restore and enhance, natural watercourses, floodplains, and riparian habitat.*

COS-P5.3



Require avoidance, minimization, and/or compensatory mitigation for development that would impact a wetland, wetland species, or adjacent upland habitat areas. Where feasible, compensation shall be in-kind (i.e., the same type of habitat), provided on-site, and based on a ratio that provides a margin of safety reflecting the expected degree

of success and accounting for the relative functions and values of the lost and created wetlands.*

COS-P5.4



Require new buildings and structures on private property be set back at least 75 feet from the edge of any wetland area, unless a peer-reviewed, site-specific evaluation indicates that a different setback is appropriate for protecting the wetland and adjacent upland habitat areas. Allow encroachment into a required wetland setback area only when a parcel would otherwise be rendered unbuildable or impacts have been adequately mitigated.*

COS-P5.5

Acquire deeded development rights to setback areas surrounding wetlands, floodplains, and natural watercourses to ensure preservation of the resource and protect adjacent improvements.*

COS-P5.6

Identify and pursue funding opportunities to acquire, protect, and maintain open space around existing flood control channels to facilitate implementation of the County's 50-Year Plan "From Channels to Creeks."

COS-P5.7



Work with conservation agencies and organizations to:

(a) Increase public awareness about threats to water quality and prepare and implement watershed restoration plans throughout the county.

(b) Acquire, protect, restore, and maintain areas adjacent to natural watercourses and riparian corridors.

COS-P5.8



Discourage ornamental landscaping within setback areas along natural watercourses and require use of California native plant species when revegetating those areas.

COS-P5.9



Require increased setbacks for animal-handling uses whenever necessary to protect natural watercourses, wetlands, riparian habitat, or erosion-prone soils. Setback increases can be applied to all components of the use, such as manure storage or parking areas, and are not limited to buildings and structures.*

COS-P5 10



Allow encroachments into required setback areas along natural watercourses and wetlands for the purpose of constructing low-impact public improvements or publicserving amenities, such as footbridges, trails, and nature viewing areas, provided a qualified biologist confirms that the improvements/amenities are compatible with protection of ecological values.

COS-P5.11



Prohibit direct runoff of pollutants and siltation into marsh, creek, and wetland areas from outfalls serving urban development.*

Actions

COS-A5.1



Inventory wetlands, floodplains, marshlands, natural watercourses, riparian corridors, and adjacent lands that could potentially support climate adaptation (through flood management, filtration, or other beneficial ecosystem services) and mitigation (e.g., carbon sequestration).*

COS-A5.2

Amend the County Ordinance Code to include the wetland setback requirement described in Policy COS-P5.4.*

COS-A5.3

Amend County Ordinance Code Chapter 914-14 - Rights-of-Way and Setbacks to make the setback requirements for unimproved earth channels applicable to all projects, not just subdivisions.*

COS-A5.4

With input from watershed stewardship groups, evaluate the setback requirements in County Ordinance Code Chapter 914-14 - Rights-of-Way and Setbacks to determine appropriate setbacks for maximizing the natural function of natural watercourses and allowing for future restoration.

COS-A5.5

Review the Contra Costa County Watershed Atlas to determine whether an update is necessary.

See the Health and Safety Element for policies and actions about flooding and sea level rise

Uplands

The upland areas of Contra Costa County support grasslands, shrublands, woodlands, and forests. These natural communities are important because they provide carbon sequestration, nutrient cycling, forage and homes for wildlife, erosion control, and recreation, while also supporting agriculture and other working lands. Oak trees, an iconic part of the landscape in the county and throughout the state, are recognized by State law with special protections for oak woodlands.



Oak trees dot the natural landscape in upland areas throughout Contra Costa County. (Community-submitted photo)

Goal COS-6

Preserved and enhanced native upland habitat, including woodlands, grasslands, and rangelands.

Policies

COS-P6.1



Preserve natural woodlands and significant trees, particularly mature native species, intact coastal scrub and chaparral, and grasslands, especially those with native grass and wildflower populations.*

COS-P6.2



Encourage planting and propagation of California native trees and habitat-supporting native shrubs, forbs, and grasses throughout the county to enhance the natural landscape, provide shade (especially in riparian areas), sustain wildlife, absorb stormwater, and sequester carbon.

COS-P6.3



Support protection of native trees, especially oaks, in foothill woodlands and agricultural areas by encouraging voluntary installation of fencing around individuals or clusters of trees to prevent grazing and promoting replanting of native species.

COS-P6.4



Support removal of invasive, non-native trees, shrubs, and grassland weeds, especially those that are ecologically harmful or pose threats to public safety.

COS-P6.5



Encourage revegetation with local or regional ecotypes of native species in areas that were previously converted for agriculture but are no longer in production.

Actions

COS-A6.1



Update County Ordinance Code Chapter 816-6 - Tree Protection and Preservation to enhance tree protections and strengthen mitigation requirements/restitution for removal commensurate with the benefits the tree provides.*

COS-A6.2



Develop an Oak Woodland Conservation Program that establishes special mitigation ratios for removal of oak trees, along with specific tree replacement and planting standards to ensure long-term growth and survival. Amend the County Ordinance Code as needed to implement the program.*

WATER RESOURCES

Surface and Groundwater Resources

Supporting the life-sustaining properties of water as a natural resource is a complex challenge. Water is dynamic, contested, and increasingly scarce. Maintaining the quality of the county's water supply requires protecting surface water and groundwater from the impacts of past and future development. An important tool for protecting water quality is the National Pollutant Discharge Elimination System (NPDES), which requires a permit to discharge water or wastewater into surface waters. The County supports the efforts of outside regulatory agencies who protect water quality, and actively monitors regional, State, and federal programs that could affect water quality and water supply safety in the county.

As discussed in the Public Facilities and Services Element, there are two major water service providers in the county that rely on surface water resources from the Mokelumne River and Delta: EBMUD and CCWD. These utilities own the watershed lands around their storage reservoirs, as shown in Figure COS-7, and they actively manage the land to protect the quality of the East Bay's water supply.

Figure COS-8 shows Census tract rankings for impaired waterbodies in the county. This data ranks Census tracts based on the number of pollutants found in all waterbodies within the Census tract that are designated as impaired relative to Census tracts in the rest of the state. As shown in the figure, the highest rankings for impaired waterbodies are in East County where pesticide use from agricultural operations harms water quality. Some Census tracts on the north and west sides of the county also rank high, mainly due to discharge from industrial uses.

State data also demonstrates threats to groundwater quality, as shown in Figure COS-9. This data ranks Census tracts based on activities that pose threats to groundwater quality, such as uses involving hazardous chemicals, gasoline or diesel, solvents, heavy metals, or pesticides. These threats are most significant along the Northern Waterfront where there is a high concentration of heavy industrial uses.

The Sustainable Groundwater Management Act (SGMA), enacted in 2015, provides a framework of priorities and requirements to facilitate sustainable groundwater management throughout the state. Groundwater Sustainability Agencies (GSAs) and other local public agencies help manage groundwater in high- and medium-priority groundwater basins to ensure it is maintained within its sustainable yield. Groundwater Sustainability Plans (GSPs) are adopted and implemented by GSAs and other agencies to be consistent with the SGMA.

FIGURE COS-7 UTILITY DISTRICT WATERSHED LANDS

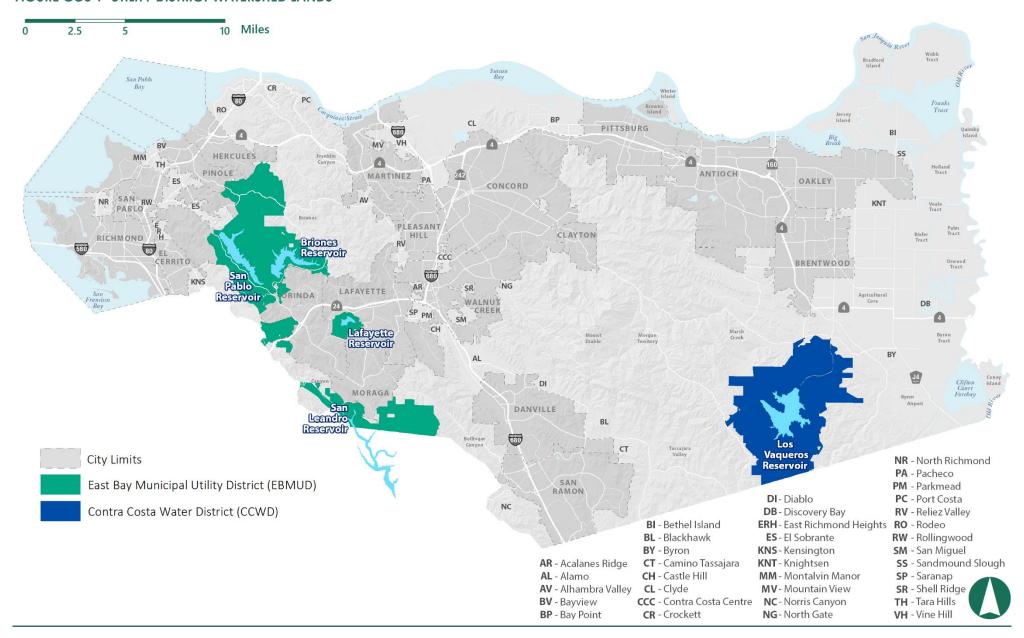


FIGURE COS-8 IMPAIRED WATERBODIES RANKINGS RELATIVE TO THE STATE

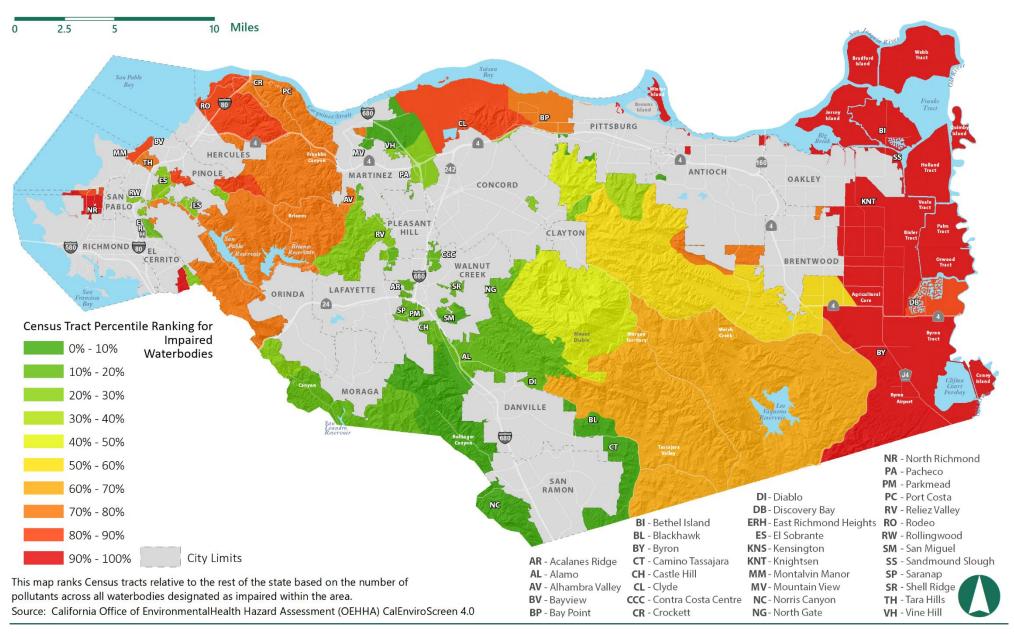
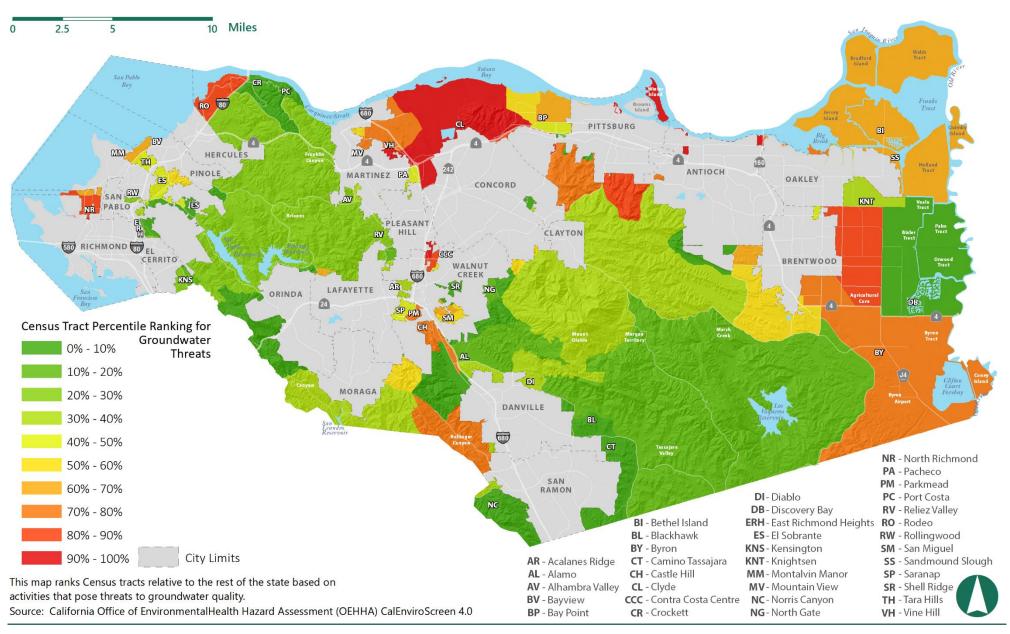


FIGURE COS-9 GROUNDWATER THREAT RANKINGS RELATIVE TO THE STATE



Groundwater basins in the county are shown in Figure COS-10. Three of these are medium-priority: East Contra Costa, East Bay Plain, and Livermore Valley. In eastern Contra Costa County, seven local agencies, including the County, are GSAs. These agencies signed a memorandum of understanding agreeing to prepare a single GSP for the East Contra Costa Subbasin, which was adopted by the County in December 2021.

Goal COS-7

Sustainable surface and groundwater resource management.

Policies





Partner with water and wastewater service providers, GSAs, irrigation districts, and private well owners to increase participation in water conservation programs countywide.

COS-P7.2

Consult applicable GSPs and local GSAs before making land use decisions that could impact groundwater resources.*

COS-P7.3



For projects in areas without a water service provider, require proof of adequate on-site groundwater during the development review process. In addition to requiring compliance with the County's well regulations related to water quality and flow rate, require documentation that the proposed project will not have a significant cumulative

impact on the aguifer or negatively affect development that already relies on the same groundwater supply.*

COS-P7.4



Prohibit new development that would create or significantly aggravate groundwater overdraft conditions, land subsidence, or other "undesirable results," as defined in Section 354.26 of the California Water Code.*

COS-P7.5



Support multipurpose water storage options that incorporate water supply, flood control, surface and groundwater storage, groundwater management, and ecosystem components.

COS-P7.6



Require new development to reduce water consumption through use of water-efficient devices and technology, drought-tolerant landscaping strategies, and treated recycled water where available.*

COS-P7.7



Require landscaping for new development to filter and retain runoff, and support flood management and groundwater recharge.*

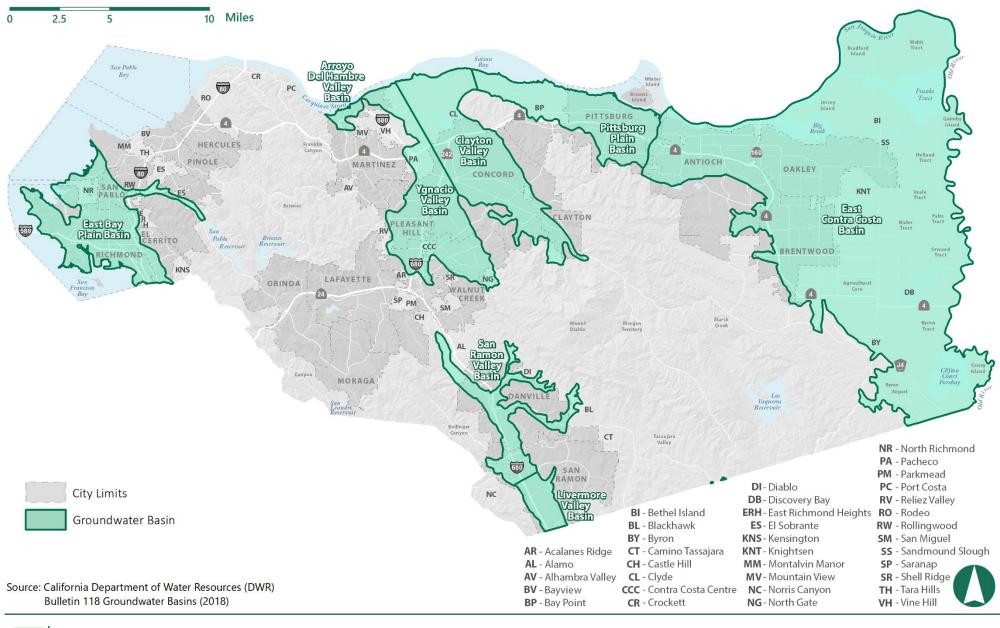
COS-P7.8





Promote installation of drought-tolerant green infrastructure, including street trees, in landscaped public areas.

FIGURE COS-10 GROUNDWATER BASINS







Support wastewater reclamation and reuse programs that maximize use of treated recycled water.

Actions

COS-A7.1

Update County Ordinance Code Chapter 414-4, Water Supply, to be consistent with adopted GSPs.*

COS-A7.2





For areas that are not covered by an adopted GSP, amend the County Ordinance Code to include sustainability indicators, defined by the SGMA, as a guide for development to maintain and protect the quality and quantity of groundwater supplies within the county.*

COS-A73



Evaluate the feasibility and necessity of amending the County Ordinance Code to promote rainwater harvesting, installation of dual plumbing (purple pipe), and water reuse.

COS-A7.4



Publish information on the DCD website about alternative sources of water for irrigation and other non-potable needs, such as greywater, rainwater, air conditioning condensation, and foundation drainage.

Goal COS-8

Protected quality of surface water and groundwater resources.

Policies

COS-P8.1





Protect public water supplies by denying applications for projects that would introduce significant new pollution sources in groundwater basins and watersheds feeding major reservoirs, and support efforts to acquire and permanently protect reservoir watersheds.*

COS-P8.2





Coordinate with other agencies to control point and nonpoint sources of water pollution and maintain water quality standards.*

COS-P8.3





Support development and implementation of a long-term, area-wide integrated vegetation management program to control invasive weeds in a way that reduces pesticide use and preserves water quality.

COS-P8.4





Require new development to retain natural vegetation and topography whenever feasible and require projects involving erosion-inducing activities to use best management practices to minimize erosion.*

COS-P8.5



Require groundwater monitoring programs for all large-scale commercial and industrial facilities that use wells and prohibit discharge of hazardous materials through injection wells.*

COS-P8.6



Support ongoing remediation of the Mount Diablo Mercury Mine.

See the Public Facilities Element for policies and actions on water and wastewater service, drainage, and stormwater management. See the Health and Safety Element for policies and actions on flood control.

Delta and Shoreline Resources

Encompassing 738,000 acres, the Delta is the largest estuary on the West Coast and the confluence of California's two longest rivers: the Sacramento River and San Joaquin River. East County is home to a large portion of the western Delta where unique plant and animal communities flourish. The Delta is one of the county's greatest natural resources, and its health is critical to the county's physical, societal, and economic well-being.

A healthy Delta requires sufficient high-quality water to provide habitat for fish and other native aquatic, terrestrial, and avian species, both migratory and year-round. The Delta needs proper management, including through

partnerships between federal, State, and local agencies, to protect people and land with strong levees, comprehensive emergency response, and fresh water. The Delta also promotes the economic health of the region through recreation, industrial and maritime commerce, and agriculture.

The Delta provides a portion of the water supply for 30 million people and over 6 million acres of agriculture. However, the Delta's health has declined in recent decades due to wetland loss, diversions of water for export to other regions, increased salinity from diversions and drought, pollution from urban run-off and agricultural pesticide use, and invasive species, which threatens our health, safety, and welfare. Without continued improvements to the ecosystem through conservation and restoration efforts and sustainable land use practices, the Delta is at risk of further decline. Understanding this need, the County adopted its Delta Water Platform in 2014 to guide decisions, actions, and advocacy in a way that supports the Delta's health and sustainability.



The Delta is an extensive network of waterways stretching from East Contra Costa County to Sacramento and Stockton. (Credit: California Department of Water Resources)

Goal COS-9

Protected, preserved, and enhanced scenic quality, recreational value, and natural resources of the San Francisco Bay/Sacramento-San Joaquin Delta estuary system and shoreline.

Policies

COS-P9.1

Advocate for increased freshwater flow into, through, and from the Delta into San Francisco Bay, and support other efforts to protect and improve Delta water quality.

COS-P9.2



Support continued maintenance and improvement of Delta levees to protect water quality, ecosystems, agricultural land, and at-risk communities.

COS-P9.3

Oppose all efforts to construct an isolated conveyance, such as a peripheral canal or tunnel, or any other water diversion system that reduces Delta water flows unless and until it can be conclusively demonstrated that such a system would protect, preserve, and enhance water quality and fisheries of the San Francisco Bay/Delta estuary system.

COS-P9.4

Work with the Delta Protection Commission to advise agencies undertaking habitat restoration projects within the Delta Primary Zone of their obligation to comply with California Constitution Article XIII D, Section 4, which requires public projects to continue paying benefit assessments unless the project demonstrates that it would not receive the relevant services.

COS-P9.5



Plan for land uses along shorelines that do not pose a threat to Bay or Delta resources, including water quality and shoreline and marshland habitats.*

COS-P9.6



Support efforts to expand and enhance public access to the Bay shoreline and Delta.

COS-P9.7

Prohibit private development on tule islands, sand dunes, and levee remnants.

COS-P9.8

Evaluate cumulative impacts on boating safety when reviewing applications for new or expanded marinas and docks.

COS-P9.9

Require design excellence for new development along Bay and Delta waterways to enhance the visual quality of these areas.

Actions

COS-A9.1



Amend County Ordinance Code Title 8 – Zoning to incorporate the following requirements for new or expanded marinas and docks:

- Adequate channel width and depth, as defined by the State Harbors and Navigation Code.
- Adequate public fire protection services.
- Adequate public vehicular access.
- Adequate supply of potable water.
- Adequate on-site facilities for sewage and solid waste disposal.
- Compatibility with nearby agricultural uses.
- Compatibility with nearby conservation/habitat (g)lands.
- Designed to avoid inundation from projected sea level rise, as shown on Figures HS-6 through HS-9 (Sea Level Rise Projection Maps) in the Health and Safety Element.*

HISTORIC AND CULTURAL RESOURCES

Archaeological and Historic Resources

Although the Spanish explored Contra Costa County as early as 1772, significant European settlements were not established until the nineteenth century. In 1822, the newly independent Mexican government began issuing land grants, called ranchos, to its citizens in California. Sixteen ranchos

existed in what is now Contra Costa County, and most of the land was used for grazing or growing wheat. One rancho was later purchased by a settler named John Marsh in 1837. It became known as Marsh's Landing, near present day Antioch, and grew into an important commercial center along the San Joaquin River during the California Gold Rush. The success of Marsh's Landing encouraged other American immigrants to purchase land in the area, and permanent communities began to take shape. Following the Gold Rush, agriculture was the economic driver in the region, boosted by the Southern Pacific Railroad's expansion into the area in the late nineteenth century.



South of Brentwood, the John Marsh House was built by Dr. Marsh in 1856. (Communitysubmitted photo)

Industrial development and associated residential development to house workers shaped the western portions of Contra Costa County from the early twentieth century. In 1906, the C&H Sugar Factory was established in

Crockett, taking advantage of cargo ship access via the Carquinez Strait. Petroleum refineries were also developed during the late 1800s and early 1900s. World War II brought rapid expansion of industrial development to support war efforts, including the famous Kaiser Richmond Shipyards.

Over centuries, people have immigrated to the region from other cities, states, and countries, and the diverse population forms the unique fabric of modern-day Contra Costa County. This history is represented in the almost 400 historic sites, buildings, and other structures that have been identified in Contra Costa County's Historic Resources Inventory. They range from historic buildings that were part of the early industrialization of the western county, like the C&H Sugar Factory, to historic ranches and homes, like the home of John Muir, which is part of the John Muir National Historic Site in Martinez.

In 2019, the United States Congress established the Sacramento-San Joaquin Delta National Heritage Area (NHA), which runs from the east side of San Pablo Bay through the Carquinez Strait to the Delta. The Delta NHA is recognized as a cohesive, nationally significant landscape arising from patterns of human activity shaped by the Delta's geography. The Delta Protection Commission is drafting a Management Plan to promote historic preservation, cultural conservation, education and interpretation, development of recreational assets, nature conservation, tourism, and economic development throughout the Delta NHA. The draft Management Plan will be submitted for review and approval by the United States Department of the Interior in the first quarter of 2024.

Other State and federal laws and programs help to protect historic and archaeological resources, including the California Historical Building Code, which preserves California's architectural heritage by ensuring historic buildings are maintained and rehabilitated in accordance with historically sensitive construction techniques. In addition, the Mills Act, enacted in 1976, provides a property tax incentive to owners of qualified, owner-occupied,

historical properties to maintain and preserve the historic property in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The National Historic Preservation Act coordinates public and private efforts to identify, evaluate, and protect historic and archaeological resources across the nation. The Act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Goal COS-10

Archaeological, cultural, and historic resources that are identified and preserved.

Policies

COS-P10.1

Prioritize preservation and adaptive reuse of buildings, sites, and areas having identifiable archaeological, cultural, or historic significance. Require new construction and renovation projects in historic areas to incorporate compatible and high-quality design that protects the overall historic integrity of the area and adjacent historic resources.*

COS-P10.2

Encourage sensitive restoration and adaptive reuse of historic resources following the Secretary of the Interior's Standards for the Treatment of Historic Properties, including additions and alterations to buildings that do not diminish historic integrity.

COS-P10.3

Encourage owners of historic properties to make use of the State of California Historic Building Code to protect and rehabilitate historic resources.

COS-P10.4

Encourage owners of eligible historic properties to apply for State and federal designation as historic properties and participate in tax incentive programs, such as allowed under the Mills Act, for historic preservation.

COS-P10.5

When a project involves a resource that is listed in the County's Historic Resources Inventory, or as otherwise necessitated by the CEQA process, require applicants to engage a qualified consultant to prepare an evaluation of potential and previously identified archaeological, cultural, and historic resources that may be present on the project site.*

COS-P10.6

Upon discovery of significant historic or prehistoric archaeological artifacts or fossils during project construction, require ground-disturbing activities to halt within a 50-foot radius of the find until its significance can be determined by a qualified historian, archaeologist, or paleontologist and appropriate protection and preservation measures developed.*

COS-P10.7

Require significant historic, archaeological, and paleontological resources to be either preserved onsite or adequately documented as a condition of removal. Any documentation of historic resources shall be conducted in accordance with Historic American Building Survey (HABS)

Level III standards, as defined by the US Secretary of the Interior.*

COS-P10.8

Emphasize native people, immigrant populations, and the environmental and cultural heritage of the region as significant themes related to historic preservation. Consider natural, agricultural, ranching, mining, commercial, industrial, residential, political, transportation, recreation, education, maritime, and military themes when evaluating the significance of historic resources.

COS-P10.9

Ensure new cultural/historic resource evaluations consider potential social and cultural significance of resources in addition to architectural significance.

COS-P10.10

Coordinate with cities and special districts to identify and preserve archaeological, cultural, and historic resources countywide.

COS-P10.11

Partner with other agencies, culturally affiliated tribes, private entities, and nonprofit organizations to establish programs and funding mechanisms to preserve, restore, and enhance cultural, historic, and archaeologic sites.

Actions

COS-A10.1

Beginning in 2024, then every five years thereafter, review and update the County's Historic Resources Inventory and Archaeological Sensitivity Map in consultation with culturally

affiliated tribes to ensure these remain useful tools for evaluating potential cultural resources impacts and auiding preservation efforts. As part of the 2024 update to the Historic Resources Inventory, create a map of the listed historic resources, and update the map upon each update to the Historic Resources Inventory. Ensure tribal cultural resources identified through these updates remain confidential.

COS-A10.2

Evaluate and implement one or more measures to protect and preserve historic and cultural resources, such as a historic and cultural resources ordinance, overlay district, and/or design guidelines.

COS-A10.3

Prepare a historic context statement that provides necessary background information about historic, archaeological, and cultural resources and a framework for identifying and evaluating historic resources. The context statement should include the overarching significance themes described in Policy COS-P10.8.

COS-A10.4

Partner with the Delta Protection Commission to support preparation and implementation of the management plan for the Delta NHA.

Tribal Communities

Contra Costa County is in an area where traditional territories of three Native American tribal communities - the Bay Miwok, Delta Yokuts, and Ohlone converged, as shown in Figure COS-11.

The Bay Miwok inhabited the inner Coast Range, with territory stretching through eastern Contra Costa County, from Mount Diablo into the Delta. The Bay Miwok were politically organized by tribelet, which consisted of one or more villages and camps within a defined territory.

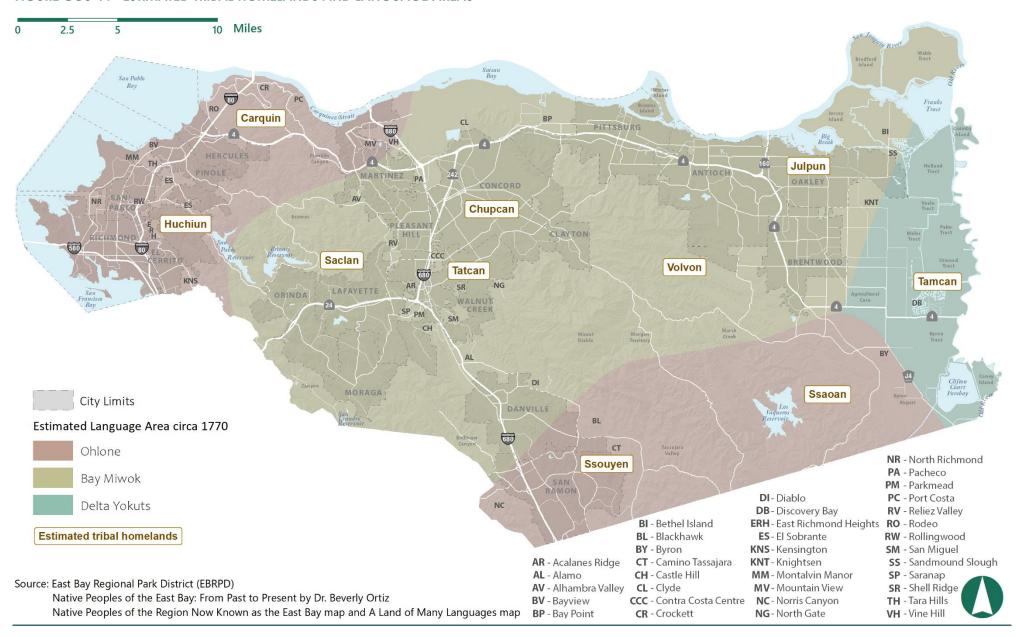
The Delta Yokuts are the historical occupants of the central and northern San Joaquin Valley, and their territory extended into eastern Contra Costa County. Their main settlements were built atop low mounds on or near the banks of large watercourses for protection against flooding. Each subtribe was autonomous with a headman, and populations averaged around 300 individuals.

The territory of the Ohlone people extended along the coast from the Golden Gate south to just below Carmel, as well as along several inland valleys that led from the coastline. The Ohlone were also politically organized by tribelet, with each having a designated territory.

All of these tribal communities were primarily hunter-gatherers; they hunted animals like mule deer, tule elk, pronged antelope, mountain lions, whales, and waterfowl. They would travel seasonally into the foothills or plains to gather specific plant resources, such as acorns, buckeye nuts, hazelnuts, and pine nuts, as well as seeds, roots, and berries. These and other resources likely supported hundreds of individual villages throughout what is now Contra Costa County.

Despite the violence and displacement that accompanied European and Mexican settlement of this area and decimated indigenous communities, the indigenous inhabitants of the land are still present. Today, there are several Ohlone nations in Contra Costa, Alameda, Solano, Napa, and San Joaquin Counties, each with its own culture and language, including the Lisjan (Ohlone), Karkin (Ohlone), Bay Miwok, Plains Miwok, Delta Yokut, and Napian (Patwin).

FIGURE COS-11 ESTIMATED TRIBAL HOMELANDS AND LANGUAGE AREAS



This rich tribal history and living tribal culture are reflected in a range of tribal cultural resources throughout the county. Tribal cultural resources often are less tangible than an object or a site itself. For example, sometimes the importance is tied to views of or access to a sacred site. Therefore, consultation with culturally affiliated Native American tribes is key to identifying tribal cultural resources, as required by Assembly Bill 52.

CEQA requires that local agencies evaluate and mitigate to the extent feasible a project's potential impacts to tribal cultural resources. In addition, Section 7050.5 of the California Health and Safety Code 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 the remains are determined to be Native American, the Coroner must contact the California Native American Heritage Commission (NAHC) to determine appropriate treatment (as prescribed in Public Resources Code Section 5097 et seq.). Construction or excavation activity must remain stopped until lawful removal of the remains for reinternment or cremation.

Pursuant to Senate Bill 18, the County notified and consulted with local tribes throughout the General Plan update process. The policies and actions in this section reflect that consultation and commit the County to continuing a collaborative relationship through implementation of this General Plan.

Goal COS-11

Robust tribal collaboration to preserve, restore, and enhance tribal cultural resources.

Policies

COS-P11.1

Respect and protect tribal cultural resources, including historic, cultural, and sacred sites; cultural landscapes; views of or access to resources; and objects with cultural value to California Native American tribes.*

COS-P11.2

Establish and maintain collaborative relationships with local Native American tribal representatives to facilitate tribal consultation and preservation of tribal cultural resources.*

COS-P11.3

Consult with culturally affiliated tribes on General Plan and Specific Plan amendments with potential to impact tribal cultural resources. If an amendment redesignates a tribal cultural resource site on private land for open space purposes, evaluate the appropriateness of developing a treatment and management plan for tribal cultural resources in the affected area.*

COS-P11.4

Consult with culturally affiliated tribes to identify and appropriately address tribal cultural resources through the discretionary development review process.*

COS-P11.5

Consult with culturally affiliated tribes to assess the sensitivity of sites and protect recorded and unrecorded tribal cultural resources.*

COS-P11.6

Encourage voluntary landowner efforts to protect tribal cultural resources, including voluntary relinquishment of tribal cultural resources to affiliated tribes.

COS-P11.7

Support tribal acquisition of conservation easements on terms mutually satisfactory to the tribe and landowner for purposes of protecting tribal cultural resources.

COS-P11.8

Encourage special districts, such as EBRPD, to consult with culturally affiliated tribes when pursuing land acquisitions for recreation or other public purposes to ensure tribal access to tribal cultural resources.

COS-P11.9

Avoid impacts of development on Native American archaeological resources and tribal cultural resources whenever possible. When impacts cannot be avoided, mitigate to the maximum feasible extent.*

COS-P11.10

Consult with culturally affiliated tribes when developing mitigation measures to avoid or minimize impacts on tribal cultural resources. Mitigation could include, but is not limited to, a cultural resources treatment agreement between the developer and affected tribe(s) that addresses the treatment and disposition of cultural resources and human remains and tribal monitoring during earth-disturbing activities.*

COS-P11.11

Upon discovery of a burial, human remains, or suspected human remains, require immediate halt to ground-disturbing activities such as excavation and grading, protection of the area surrounding the find, notification of the County Coroner, and compliance with the provisions of California Health and Safety Code Section 7050.5, including California Public Resources Code Section 5097.98, if applicable. If human remains are determined to be Native American, require the applicant to consult with the Most Likely Descendants list to determine appropriate treatment, as prescribed in Public Resources Code Section 5097 et seq.*

COS-P11.12

Encourage landowners to relinquish ownership of Native American cultural artifacts found on project sites to the culturally affiliated tribe for proper treatment and disposition.

Actions

COS-A11.1

In consultation with local Native American tribes, prepare informational materials about living Native American culture in the region, the history of Native Americans in what is now Contra Costa County, and how the County's relationship with local Native American tribes has evolved. Make these materials easily accessible to the public, project applicants, and County staff.

COS-A11.2

Work with local Native American tribes to establish programs and secure funding to implement actions aimed at preserving tribal cultural resources.

SCENIC RESOURCES

With its vast open spaces, estuary system, and rolling hills, Contra Costa County encompasses an outstanding variety of scenic natural vistas, water resources, and landscapes. Many of these scenic resources, including the open spaces and Delta, are discussed in earlier sections of this Element. This section focuses on scenic routes and scenic ridges:

- Scenic routes are public roadways that pass through picturesque natural landscapes. These roads tend to offer sweeping views of particularly beautiful areas or prominent features, such as valleys and mountain ranges.
- Scenic ridges are ridges that contribute to the scenic quality and character of a community or locale. In many areas, visually prominent ridges offer a striking and welcome contrast to the urban environment.



Unobstructed ridgelines are an important component of the county's scenic landscape.

Figure COS-12 shows scenic routes and ridges as designated by the County through this General Plan. Also shown are State-designated Scenic Highways along State Route (SR) 24 and a portion of Interstate 680, as well as portions of SR 4 and SR 160 that are eligible for State designation. The State and County designate scenic resources to highlight their significance within the landscape and maintain their aesthetic quality through policy protections.

Goal COS-12

Protected natural features with high scenic value, such as visual landmarks, major ridges, prominent hillsides, and stands of mature trees.

Policies

COS-P12.1

Deny applications for development that would destroy unique and irreplaceable natural features, such as distinctive rock formations.*

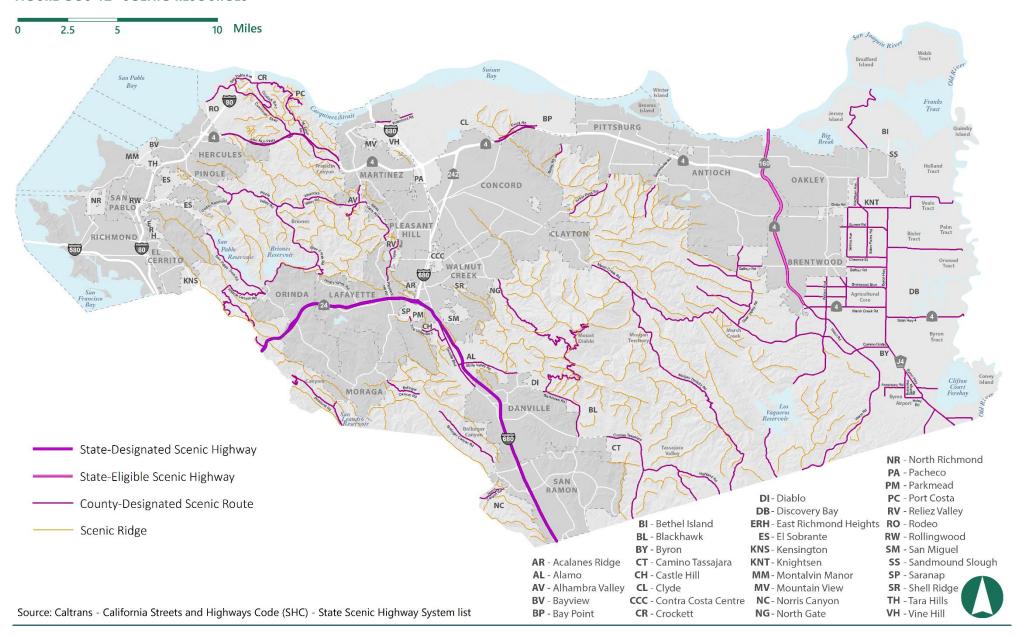
COS-P12.2

Require redesign of project components that negatively impact viewsheds or the visual quality of the area.*

COS-P12.3

Prohibit development within 100 vertical feet of the top of designated scenic ridges and within 50 vertical feet of other visually prominent ridgelines. Exceptions may be considered on existing legal lots where no other feasible building sites exist, and for infrastructure that requires high-elevation siting, such as wind turbines, communications towers, and water

FIGURE COS-12 SCENIC RESOURCES



tanks. When siting buildings or infrastructure on or near ridges is unavoidable, require appropriate measures, such as screening, undergrounding, or camouflaging to mitigate visual impacts.*

COS-P12.4

Preserve the scenic qualities of hillsides by encouraging designs that are sensitive to a site's topography and prohibiting unnecessary grading and vegetation removal.

COS-P12.5

Require restoration of natural contours and vegetation after grading and other land disturbances.*

COS-P12.6

Prohibit extreme topographic modification, such as filling canyons or removing prominent hilltops. Exemptions may be considered for landfills, mining operations, and public or semi-public projects that necessitate such modifications.*

COS-P12.7

Support preservation and enhancement of natural and human-made features that contribute to the scenic quality of the landscape and viewshed along designated scenic routes, and discourage projects that interfere with public views of those features.

COS-P12.8

Require a visual impact analysis for projects with potential to significantly impact public views along designated scenic routes.*

COS-P12.9

Enable flexibility in the design of projects along scenic routes and support innovative solutions to protect views and visual auality.

Actions

COS-A12.1

Amend County Ordinance Code Division 814 – Slope and Hillside Development to convert the requirements from being a combining district to design and development standards related to building envelopes, building massing, colors, materials, grading, draining, and erosion control.

COS-A12.2

Adopt design guidelines to preserve views, vistas, and defining natural features along designated scenic routes.

MINERAL RESOURCES

Mining in Contra Costa County dates to the 1850s, when coal fields were discovered north of Mount Diablo. Today, mining activities focus on construction aggregate (crushed rock, sand, and sandstone). Two rock quarries near Clayton and a sand quarry near Byron annually produce hundreds of thousands of tons of construction aggregate that is used for public infrastructure and private construction projects throughout Northern California. High-quality sand from Byron is also used in glass manufacturing, including bottles for California wineries. Mineral extraction in Contra Costa County therefore is an important component of the regional economy.



Contra Costa County quarries are a significant source of construction material for the region.

Conflicts between mining and urban uses throughout California led to passage of the Surface Mining and Reclamation Act of 1975 (SMARA). SMARA established policies for conservation and development of mineral lands and contains specific provisions for the classification of mineral lands by the State Geologist. SMARA requires all cities and counties to incorporate mapped designations approved by the State Mining and Geology Board (SMGB) in their general plans. These designations include lands categorized as Mineral Resource Areas (MRAs), the most significant of which contain mineral resources of regional or statewide significance. The county contains regionally significant MRAs, which are shown in Figure COS-13.

Goal COS-13

Continued economic viability of mineral extraction operations while minimizing land use conflicts and environmental impacts.

Policies

COS-P13.



Protect valuable mineral resources by prohibiting incompatible projects and land uses (i.e., those that would directly or indirectly interfere with extraction, processing, or transportation of mineral resources) within the MRAs identified in Figure COS-13.

COS-P13.2

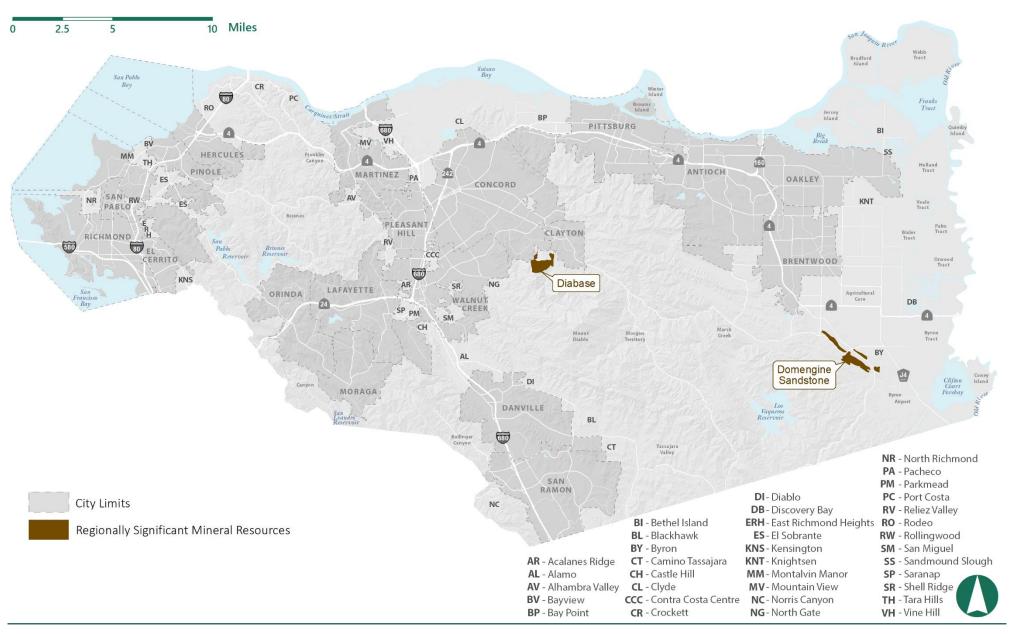
Encourage compact design and layout for mineral resource processing areas, preserving as much land as possible for buffering between these areas and adjacent land uses.

COS-P13.3



For residential subdivisions within one mile of the MRAs depicted in Figure COS-13, require deed disclosures indicating the presence of the mineral resource and explaining potential disturbances (e.g., noise, dust, heavy truck traffic) associated with mineral extraction activities.*

FIGURE COS-13 MINERAL RESOURCE AREAS



COS-P13.4

Require applications for new or expanded quarrying operations adjacent to Mount Diablo State Park to include an analysis of potential impacts to the park's natural features, including viewsheds, and operations.*

COS-P13.5

Ensure that quarry reclamation plans, including bonding requirements, are maintained in compliance with SMARA.

Actions

COS-A13.1

Update County Ordinance Code Chapter 88-11 – Surface Mining and Reclamation, as necessary to maintain consistency with SMARA.

ENERGY RESOURCES

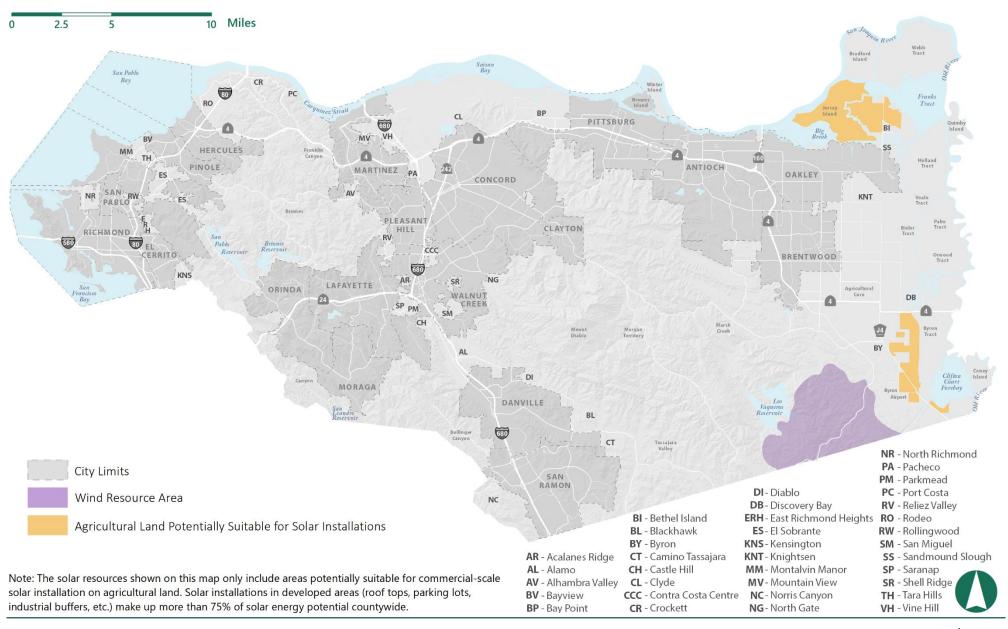
Contra Costa County has long been an energy producer. Coal mining began in the 1850s, as indicated previously. The first petroleum refinery in the Bay Area opened in Rodeo in 1896 and the county has historically been home to a small oil and natural gas production industry. However, energy production in Contra Costa County is evolving as reliance on fossil fuels decreases and the State enacts more aggressive policies to combat climate change, including increased support for a transition to cleaner-burning biofuels through investments in technology, infrastructure, and production. Biofuels, including biomethane, biodiesel, and gasoline and diesel fuels derived from renewable sources instead of petroleum, can reduce reliance on traditional fuel sources, improve air quality, and reduce greenhouse gas (GHG) emissions. Embracing the future, two former petroleum refineries in the

county converted their operations from refining crude oil to processing cleaner biofuels.

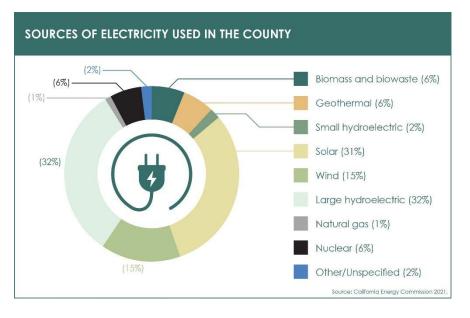
Today, most of the electricity generated in the county is from renewable sources, like wind and solar. The California Energy Commission designated the Altamont Pass area, including the Byron Hills portion of eastern Contra Costa County, as an area with high wind potential, as shown in Figure COS-14. In the early 1980s the private sector responded to that designation and federal and State tax incentives by moving rapidly into the wind energy business as a secondary use on agricultural land. Those first windfarms, which were inefficient and environmentally destructive, have since disappeared. Two modern windfarms with a generating capacity of 116.2 megawatts (MW) now operate in the county.

In 2017, the County received a grant from the California Strategic Growth Council to study the potential for renewable energy generation within its jurisdiction. The study estimated that 2,600 to 4,600 MW could be generated, with solar accounting for the vast majority (up to 4,410 MW, more than 75 percent of which is in existing urban areas). In 2020 the County adopted its Solar Energy Facilities Ordinance and designated rural areas in East County as potentially suitable for large-scale commercial solar energy development, as shown on Figure COS-14. The Solar Energy Facilities Ordinance regulates commercial solar energy facilities (i.e., facilities generating electricity for off-site use, usually for sale on the wholesale energy market) and provides a simplified permitting process for facilities on rooftops and parking canopies in commercial and industrial areas. The County also supports installation of solar energy systems generating electricity for on-site use through a low-cost, expedited permit process.

WIND AND SOLAR ENERGY RESOURCE AREAS IN RURAL AREAS



Pacific Gas and Electric Company (PG&E) and MCE are the primary electricity providers for Contra Costa County. Most of the electricity consumed in the county is generated from large hydroelectric, solar, and wind sources, as indicated in the following graph.



The State and Contra Costa County are moving towards reducing or eliminating natural gas use in existing and new buildings and transitioning to a clean energy economy. The County adopted an all-electric building ordinance in 2022, but enforcement was suspended following a federal court ruling in January 2024. Later in 2024 the County adopted a replacement ordinance that supports high levels of energy efficiency and low levels of GHG emissions for new construction.



Wind turbines generate power in East Contra Costa County near Byron.

The County, regional utilities, and community choice energy providers also provide rebates and programs to help make homes and businesses more resource efficient through energy audits, building retrofits, and opportunities to transition to a renewable electricity provider. The County continues to pursue opportunities for reducing overall energy use and increasing reliance on renewable sources, such as converting municipal and other wastes to energy resources (e.g., methane).

In November 2024 the County adopted its Climate Action and Adaptation Plan (CAAP), the successor to the 2015 Climate Action Plan. The CAAP is the County's strategic approach to reducing GHG emissions from sources throughout the unincorporated area. The CAAP identifies County programs and actions to decrease energy use, improve energy efficiency, develop renewable energy, reduce vehicle miles traveled, increase multi-modal travel options, expand green infrastructure, reduce waste, and improve the efficiency of government operations. The CAAP also forecasts the County's GHG emissions and sets reduction targets and strategies. As a document that is integral to implementation of the General Plan, the CAAP and General Plan must remain consistent and compatible.

Goal COS-14

Increased generation of and reliance on renewable, sustainable, and carbon energy and reduced energy use.

Policies

COS-P14.1



Implement Climate Action and Adaptation Plan strategies to improve energy efficiency and conservation, promote carbon-free energy sources, and reduce energy-related GHG emissions.*

COS-P14.2



Partner with State and regional agencies (e.g., California Public Utilities Commission, California Energy Commission, and ABAG/MTC) to support energy efficiency and renewable energy planning efforts.

COS-P14.3



Support distributed electricity generation, including development of microarids, renewable energy sources, storage capacity, and associated technologies. Encourage

these throughout urban areas, and in nonurban areas when significant environmental impacts can be avoided or successfully mitigated.

COS-P14.4

For residential subdivisions within two miles of the wind resource area depicted in Figure COS-14, require deed disclosures indicating the presence of the wind resource area and explaining potential disturbances (e.g., noise, shadow/flicker) associated with wind turbines.

COS-P14.5



Support development of energy recovery projects (e.g., methane recovery from landfills and wastewater treatment plants).

COS-P14.6



Support efforts to convert existing buildings to be low-carbon or carbon neutral.

COS-P14.7



Encourage installation of battery storage systems in new and existing buildings, especially buildings with solar energy systems and buildings that provide essential community services.

COS-P14.8



Design and construct new County facilities to be zero-net energy to the extent feasible.*





Work with energy service providers and the Bay Area Regional Energy Network to encourage property owners to participate in weatherization, education, rate incentive, and other programs and measures to improve energy efficiency in existing buildings.

Actions

COS-A14 1





Amend County Ordinance Code Chapter 88-14 – Oil and Gas Drilling and Production to:

- (a) Prohibit new and expanded oil and gas production wells in the following:
 - Sensitive ecological areas, such as wetlands and habitat for rare, threatened, endangered, or special-status species.
 - Areas subject to 100-year flood hazards or sea level rise, as shown in Figures HS-2 and HS-6 through HS-9.
 - Areas within 3,200 feet of sensitive receptors or urban land use designations unless projectspecific exceptions are granted by the California Department of Conservation, Geologic Energy Management Division.
- Restrict oil and gas drilling operations to agricultural zoning districts only.
- Require a land use permit for all new and expanded oil and aas wells.
- Require a reclamation plan for oil and gas well sites that includes bonding for site clean-up.

Include performance standards related to surface water and aroundwater quality and quantity, air quality, odors, noise, and aesthetics.

In parallel, study the feasibility of amending the County Ordinance Code to prohibit development of new oil and gas wells and phase out existing oil and gas well operations.

COS-A14.2

Amend County Ordinance Code Division 88 – Special Land Uses to consolidate Chapters 88-3 and 88-30 governing wind energy conversion systems and solar energy facilities. respectively, into a new renewable energy chapter, with added provisions related to microgrids, community solar projects, and battery energy storage systems. Simultaneously review the boundaries of the Solar Energy Generation Combining District to determine whether opportunities exist for increasing solar energy generation without encroachina upon HCP/NCCP priority acquisition areas, aesthetically sensitive areas, or other lands that are inappropriate for solar energy development.

COS-A14.3



Amend County Ordinance Code Chapter 88-3 – Wind Energy Conversion Systems to require that decommissioned wind farms be returned to a condition consistent with the natural environment in the area at the time of decommissioning, rather than a return to pre-project condition. The following issues must be specifically addressed:

- (a) Unnecessary and poorly constructed roads that are sources of erosion.
- (b) Remaining turbine foundations/footings and underground conduit.

(c) Abandoned equipment yards, turbine components, and other debris.

COS-A14.4



Adopt new or modified reach codes that exceed the California Building Standards Code, as the State updates the Building Code every three years, to require use of lowcarbon intensive energy sources, achieve higher levels of energy performance, and achieve lower levels of GHG emissions.

COS-A14.5



Maintain, update, and publicize County ordinances and programs requiring new residential buildings, hotels, offices, and retail to be more energy efficient, with low levels of GHG emissions. Evaluate the feasibility of including other building types as appropriate.

COS-A14.6



Create a County policy or program to facilitate making existing residential and nonresidential buildings more energyefficient and powered by carbon-free energy.

COS-A14.7



Create a detailed County roadmap to convert existing homes and businesses to use low-carbon or carbon-free appliances. The roadmap should include steps to support converting buildings to rely on low-carbon or carbon-free energy using an equitable framework that minimizes the risk of displacement or significant disruptions to existing tenants.

COS-A14.8



Evaluate options for incentivizing and requiring additions and alterations to be energy efficient and to achieve the lowest feasible levels of GHG emissions, including upgrades to the building electric panel as needed.

COS-A14.9





Ensure County-led and supported retrofit programs incentivize and prioritize conversion of buildings built before 1980 and emphasize assistance to owners of properties that are home to very low-, low-, and moderate- income residents or located in Impacted Communities, as permitted by available funding.

COS-A14.10



Provide educational and technical resources to advance the adoption of heat pump water heater and heat pump space heating in buildings in support of BAAQMD Regulation 9, Rule 4, and Regulation 9, Rule 6, which will mandate that replacement and new water heaters (2027 and 2031) and space heaters (2029) are zero NOx.

COS-A14.11





Support legislative efforts to establish a green bank able to equitably finance sustainability projects, including renewable energy, energy efficiency, and green infrastructure, for residential and commercial customers.

See the Transportation Element for policies and actions to reduce energy consumption in the transportation sector and the Health and Safety Element for policies and actions related to climate change and power line infrastructure and planned power shutoffs in relation to wildfire hazards.

CONSERVATION, OPEN SPACE, AND WORKING LANDS ELEMENT PERFORMANCE **MEASURES**

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- Increased acreage of land designated Resource Conservation or Parks and Recreation.
- Increased gross value of agricultural production.
- Increased acreage of land acquired for conservation of ecological resources.
- Reduced per-capita water consumption.
- Reduced per-capita electricity and natural gas consumption.
- Increased renewable energy generation and storage.

PUBLIC FACILITIES AND SERVICES ELEMENT

Contra Costa County is committed to providing a high quality of life for its residents. This commitment includes providing public services, infrastructure, and facilities that are accessible to and benefit all county residents, while also working with outside service providers to accomplish those same goals. Although the Public Facilities and Services Element is not explicitly required by State law, the topics addressed here are an integral part of the County's overall planning strategy and a basic consideration in setting growth and development policy.

The following nine sections are included in this Element:

- The General Public Facilities and Services section includes policy guidance to support coordination, financing, and equitable distribution of public facilities and services that promote the economic, social, physical, and environmental wellbeing of residents.
- The Water and Wastewater section includes policy guidance to provide safe, resilient, and environmentally responsible water and wastewater services to meet existing and future needs.
- The Drainage and Flood Risk section includes policy guidance to support effective and resilient natural drainage systems and flood-risk management infrastructure.
- The Sheriff, Fire, and Emergency Medical Service section includes policy guidance to provide efficient and effective public safety and emergency services, with emphasis on improvements to the physical environment that support a safe and accessible public realm.

- The Solid Waste Management section includes policy guidance aimed at reducing waste, providing equitable and sustainable waste management services, and reducing illegal dumping.
- The Parks and Recreation section includes policy guidance to develop an integrated and accessible park and trail system with a focus on improving access to parks for Impacted Communities.
- The Schools section includes policy guidance to support a strong and diverse education system from primary school through higher education facilities.
- The Libraries section includes policy guidance to expand library services to support access to information and educational opportunities for residents of all ages.
- The Public Facilities and Services Element Performance Measures describe how the County will track its progress in achieving some of the major objectives expressed in this Element.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.



Community Health



Environmental Justice



Economic Development



Sustainability

GENERAL PUBLIC FACILITIES AND SERVICES

Coordinated Facilities and Services



The Crockett Community Services District provides bocce courts at Rithet Park.

A complex array of County departments and districts and outside agencies serve the diverse needs of Contra Costa residents and businesses. In addition to the County and incorporated cities and towns, this includes:

- Community services districts providing police, recreation, water, wastewater, and solid waste services.
- Fire protection districts.
- Healthcare districts.
- Park and recreation districts.
- School districts and a community college district.
- Water districts, irrigation districts, and sanitary sewer districts providing water and wastewater services.
- Reclamation districts and a municipal improvement district providing flood protection and levee and drainage maintenance services.

The Contra Costa Local Agency Formation Commission (LAFCO) regulates the jurisdictional boundaries of all cities and special districts, affecting which agencies provide services to a given area. Properties inside city limits receive certain services from the incorporated city, such as law enforcement. Fire protection, parks and recreation, and various other services may be provided by the city or a special district, or a combination of both. Other countywide services, like health and human services, hazardous materials response, and criminal justice, are provided by the County. As such, the County operates at many levels, simultaneously providing mandated countywide services and local services to unincorporated areas, and coordinating with the activities of State agencies, cities, and regional and local special districts.

The County adopts a new budget annually that sets priorities and addresses operating costs. In September 2022, the Board of Supervisors adopted the Capital Facilities Master Plan, outlining a 20-year vision for transforming County facilities to improve customer service delivery and support County

employees providing those services, and guiding future capital facilities budgeting and planning decisions.

Through Senate Bill (SB) 244, State law requires that general plans identify Disadvantaged Unincorporated Communities (DUCs) and evaluate and address any infrastructure or fire service deficiencies in those communities to support public health and safety. For counties, DUCs are defined as an inhabited community with 10 or more dwelling units in close proximity, or where 12 or more registered voters reside, that is located outside of a city sphere of influence and has an annual median household income that is 80 percent or less of the statewide median. The County conducted a DUC analysis in 2023 and found that parts of Rodeo, Crockett, and Bethel Island meet the DUC criteria. Policy guidance related to infrastructure and service needs in these communities is provided in the respective Community Profiles, located in the Stronger Communities Element.

Goal PFS-1

Coordinated public facilities and services that support the economic, social, health, and environmental wellbeing of the county and its residents.

Policies

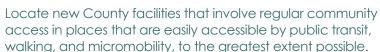
PFS-P1.1



Consider potential effects on the physical, social, cultural, and recreational needs of the surrounding community when developing new County facilities.

PFS-P1.2





PFS-P1.3

Encourage, and whenever possible require, public agencies to locate, design, construct, and operate their facilities in a manner that complements and avoids conflict with adjacent land uses.

PFS-P1.4

Encourage, and whenever possible require, co-location and undergrounding of new utility infrastructure, such as transmission and distribution lines, fiber-optic cables, and pipelines, in existing rights-of-way to minimize visual, operational, and environmental impacts on the community.

Actions

PFS-A1.1

Streamline processes for special districts to establish new facilities that support their core mission and are consistent with General Plan goals and policies.

PFS-A1.2



Update the Capital Facilities Master Plan, Capital Road Improvement and Preservation Program, Parks Capital Improvement Program, and similar plans and programs as needed to maintain consistency with this General Plan, particularly its provisions related to environmental justice.

PFS-A1.3

Notify and request comments from utility service providers on development applications.*

PFS-A1.4

Upon each update to the Housing Element, perform an analysis of infrastructure needs and deficiencies in DUCs and explore funding mechanisms that could make extension of needed services and facilities feasible.*

Just and Equitable Facilities and Services

An uneven distribution of amenities along race and class lines reflects long legacies of racism and discrimination in how public facilities and services are provided. Environmental justice efforts seek equitable access to community investments, and SB 1000 requires that local agencies prioritize public investments in Impacted Communities, as discussed further in the Stronger Communities Flement

Figure PFS-1 shows the locations of existing community facilities countywide in relation to Impacted Communities. The policy guidance in this section seeks to combat historic discrimination by promoting equitable distribution of and access to public facilities and services, and prioritizing improvements in Impacted Communities. This includes the types of facilities shown on Figure PFS-1, as well as technological resources like broadband internet to promote success in the Information Age and equitable code enforcement to promote healthy and safe neighborhoods.

Goal PFS-2

Public facilities, infrastructure, and services that meet the needs of, and are accessible to, residents of Impacted Communities.

Policies

PFS-P2.1





Ensure County facilities and services meet the needs of all users, regardless of age, ability, race, ethnicity, culture, language, gender identity, or economic status.

PFS-P2.2



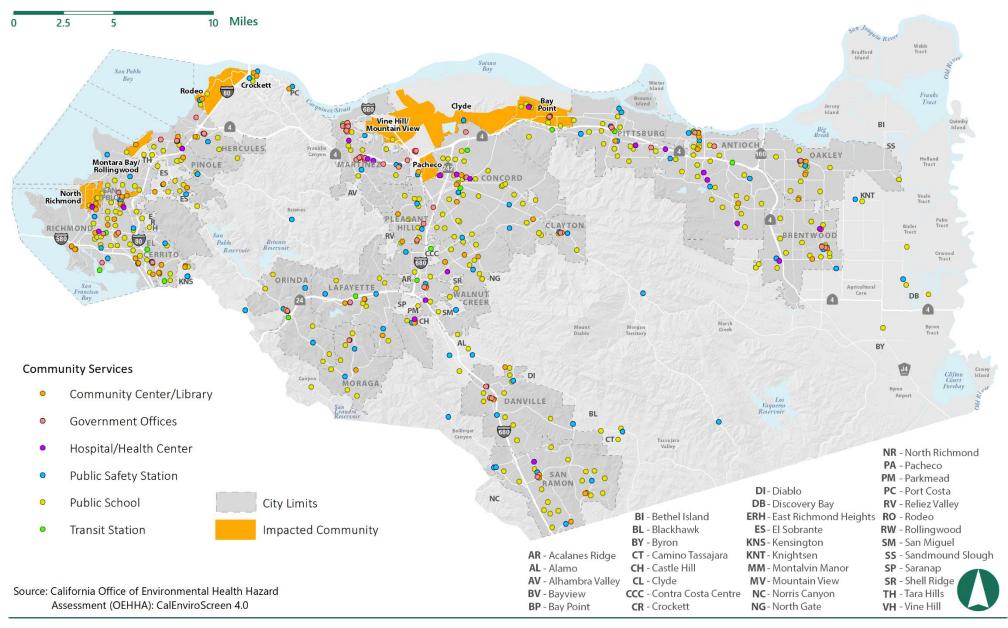
Pursuant to SB 1000, as part of the County's annual budgeting process, prioritize investments in public facilities, infrastructure, and services that benefit Impacted Communities and respond to their needs, particularly those needs identified in their Community Profiles.

PFS-P2.3



Coordinate with service providers (e.g., water, wastewater, transit, and recreation districts) and advocate for proper planning, maintenance, and implementation of services and infrastructure to ensure efficient service delivery in Impacted Communities.

FIGURE PFS-1 **COMMUNITY SERVICES FOR IMPACTED COMMUNITIES**



PFS-P2.4

Continue to provide contact information for the Code Enforcement Section of the Department of Conservation and Development (DCD) on the front page of the DCD website. Maintain clear, simple lines of communication for residents to reach the County regarding code enforcement and nuisance complaints, and ensure equitable, prompt responses.

PFS-P2.5





Continue to prioritize and adequately fund code enforcement and clean-up of illegal dumping on public and private property in Impacted Communities.

Actions





Establish funding and financing mechanisms in Impacted Communities to provide and maintain community-desired public facilities and services. These could be County- or community-initiated, and include business improvement districts, green benefit districts, and similar mechanisms.

PFS-A2.2



Establish an entity within the County tasked with ensuring that County services and facilities in Impacted Communities are coordinated, prioritized, and delivered efficiently and effectively.

PFS-A2.3





Implement and maintain urban greening and green infrastructure, such as sustainable/green street projects, in Impacted Communities.

PFS-A2.4





Regularly assess Code Enforcement responses and Public Works maintenance practices to ensure equitable implementation. Prioritize resources to keep Impacted Communities safe and clean, emphasizing enforcement actions on issues identified in Community Profiles.

PFS-A2.5

Work with the Contra Costa Crisis Center to provide Code Enforcement contact information through the 211 Contra Costa information service.

PFS-A2.6



Pursue public-private partnerships that improve access to reliable, fast, and affordable internet in Impacted Communities.

Funding Services and Infrastructure

Financing capital improvements and public services within Contra Costa County is complex, given the large number of agencies involved. As urban growth continues throughout the county, demands for public services and infrastructure will increase, which can place higher fiscal burdens on service providers. Meanwhile, many service providers lack adequate funding for

ongoing maintenance and eventual replacement of existing infrastructure, much of which was constructed in the decades immediately following World War II.

Special financing mechanisms may be required to support major new development. These could include County Service Areas, community facilities districts, or other benefit assessment districts that fund services through a special tax on properties within the service area. New development is also subject to the County's impact fee programs, which apply fees to development projects proportionate to the cost of providing public facilities and services to the development.



Streetscape improvements like this project along Fred Jackson Way in North Richmond are provided by the County's Public Works Department.

Goal PFS-3

Adequate, fair, and cost-effective funding for public facilities, infrastructure, and services.

Policies

PFS-P3.1

Coordinate with LAFCO, infrastructure and service providers, and cities to ensure infrastructure and services are reliable and provided in a cost-effective and equitable manner.*

PFS-P3.2

Require new development to pay its fair share of public improvement costs for infrastructure, facilities, maintenance, and services based on the proportionate cost of serving the project.*

PFS-P3.3

When new development cannot adequately be served by existing infrastructure and facilities or through the County's impact fee programs, require a public facilities financing plan that identifies the necessary public improvements and establishes an equitable plan to pay for and develop the required improvements.*





When communities request levels of County services that exceed the countywide standard, require creation of (or annexation into) a County Service Area, community facilities district, or equivalent mechanism to fund the supplemental service costs. Allow exceptions for enhanced services in Impacted Communities if alternative funding sources can be identified.*

PFS-P3.5

When new development needs ongoing infrastructure maintenance that exceeds County standards or existing funding levels, require creation of or annexation to a County service area, community facilities district, benefit assessment district, or other special funding unit to pay for those maintenance activities.*

PFS-P3.6





When adopting, amending, and imposing impact fees, community benefits agreements, and developer exactions, consider the effects of such fees and exactions upon individual project economics, housing supply, economic development, and the County's broad goals and objectives related to overall community development. If gap funding can be identified, consider fee reductions or exemptions for projects in Impacted Communities that are consistent with the community objectives identified in their Community Profile.

Actions

PFS-A3.1

Implement an equitable and standardized approach to property tax sharing with cities during the annexation process.

PFS-A3.2

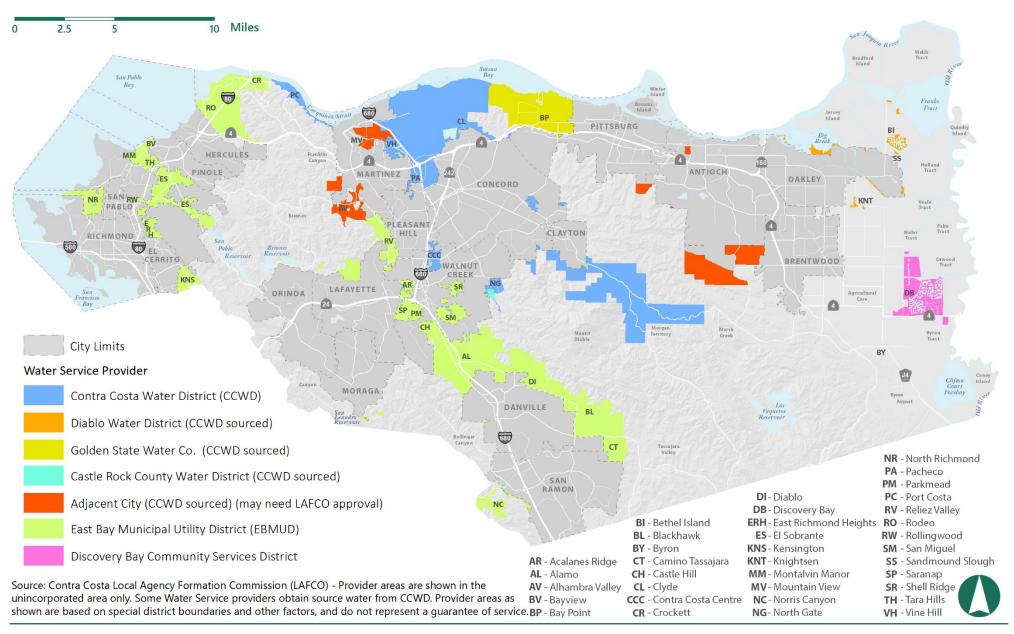
Regularly update development impact fees to ensure new development pays its fair share of infrastructure and service costs.*

WATER AND WASTEWATER

Water service consists of transmission of raw water from its source to a treatment facility, treatment, and then distribution through a network of pressurized pipes. Water service in unincorporated urban parts of Contra Costa County is provided by special districts and some cities, as shown in Figure PFS-2. The major water service providers in the unincorporated county are East Bay Municipal Utility District (EBMUD) and Contra Costa Water District (CCWD).

• EBMUD provides treated water to approximately 1.4 million people in western Contra Costa County and portions of Central County. EBMUD brings water from the Mokelumne River watershed in the Sierra Nevada through three 81-mile aqueducts to the East Bay. Water is stored in a network of reservoirs, including Briones, Lafayette, San Pablo, and San Leandro in Contra Costa and Alameda Counties prior to treatment.

FIGURE PFS-2 WATER SERVICE PROVIDERS





Los Vaqueros Reservoir is integral to the county's water supply.

• CCWD provides treated and untreated water to approximately 500,000 people in central and northeastern Contra Costa County. Customers include municipalities, industrial facilities, businesses, and residences. CCWD's water is sourced from the Sacramento-San Joaquin Delta via the 48-mile Contra Costa Canal. CCWD also stores water at Los Vagueros Reservoir in East County, southwest of Byron, before it is delivered via the Contra Costa Canal.

Properties outside of a water service district rely on individual groundwater wells or private water systems. East Contra Costa Irrigation District and Byron-Bethany Irrigation District also make additional raw water available to properties in East County.

Wastewater service consists of transmission of wastewater to a treatment facility, treatment, and then disposal of the wastewater and residual waste solids. As shown in Figure PFS-3, many special districts are responsible for wastewater service in unincorporated Contra Costa County. The largest wastewater service providers include Central Contra Costa Sanitary District (CCCSD), which serves most of Central County, and the West Contra Costa Sanitary District (WCCSD), which serves much of West County. Rural areas outside district boundaries rely on on-site wastewater treatment systems to treat sewage.

Goal PFS-4

Water and wastewater services that meet current and future needs in a safe, resilient, and environmentally responsible manner.

Policies

PFS-P4.1



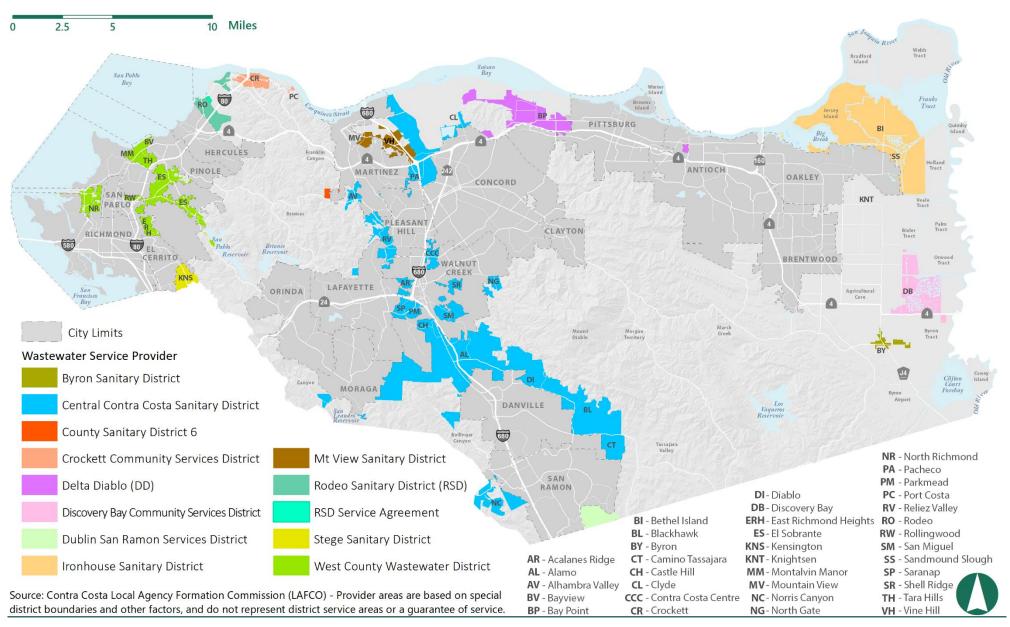
Support the goal of regional self-sufficiency as part of new water system planning efforts, where all regions in the state are required to implement a variety of local water supply options and institute conservation and reuse programs to reduce reliance on exports from the Delta.

PFS-P4.2



Encourage water service providers to require separate service connections and meters for recycled water use or where large quantities of water are used for special purposes, such as landscape irrigation.

WASTEWATER SERVICE PROVIDERS



PFS-P4.3

Support the State Water Resources Control Board's efforts to eliminate small public water systems in new development. Allow such systems only for projects that cannot feasibly be connected to a public water system.*

PFS-P4.4



Partner with water service providers to ensure continuity of service and provide financial relief to Impacted Communities if prices rise during drought conditions.

PFS-P4.5



Require new development to demonstrate the availability of a safe, sanitary, and environmentally sound water delivery system with adequate capacity.*

PFS-P4.6



Require new development to demonstrate the availability of a safe, sanitary, and environmentally sound wastewater treatment system with adequate capacity.*

PFS-P4.7

Support CCWD's planned Phase 2 Expansion of Los Vaqueros Reservoir.

PFS-P4.8

Partner with water service providers to protect water conveyance infrastructure, such as aqueducts and canals, from encroachment and pollution.

PFS-P4.9

Deny applications to establish private wastewater treatment facilities within the Delta Primary Zone that would serve areas outside the Primary Zone.

Actions

PFS-A4.1

Establish a standing drought and water shortage task force to facilitate drought and water shortage preparedness for State small water systems and domestic wells within the County's jurisdiction.

PFS-A4.2

Develop a plan to address potential drought and water shortage risk, including interim and long-term solutions for State small water systems and domestic wells.

See the Conservation, Open Space, and Working Lands Element for policies and actions related to water quality, conservation, and management.

DRAINAGE AND FLOOD RISK

Unlike engineered domestic water and sanitary sewer systems, the pattern of stormwater drainage is determined by water's natural tendency to flow downhill. Consequently, much of the drainage system serving the county consists of natural drainage swales, ditches, and watercourses. Water ultimately drains into San Francisco and San Pablo Bays, or the Delta.

Flood control infrastructure includes levees, drainage channels, and other structures designed to prevent creeks, the Delta, and other water bodies throughout Contra Costa County from overflowing their banks and causing floods. Conventional flood control infrastructure often incorporates concrete and riprap lined channels, detention basins, and other highly engineered solutions. Increasingly, communities and agencies are transitioning to "green infrastructure," which focuses on using natural drainage swales, permeable pavement, and rain gardens to filter and absorb stormwater.

The Contra Costa County Flood Control and Water Conservation District (CCCFCWCD), which is a dependent special district governed by the County Board of Supervisors, is responsible for regional flood control projects. Incorporated cities and the CCCFCWCD have developed regional drainage plans in many areas to guide developers in implementing new drainage systems as part of development projects, and to provide the basis for local and federal flood control projects. On-site drainage infrastructure is provided and/or improved by developers as part of the land development process.

Levees are especially important components of the county's flood control infrastructure. Figure PFS-4 depicts Contra Costa's levee system, most of which is owned and operated by public agencies such as reclamation districts. Similar to dams, levees hold back water and protect lower-lying areas from inundation. In Contra Costa County, many of these areas are at or below sea level. Levees protect critical infrastructure, including water intake and conveyance facilities, highways, railroads, natural gas pipelines and storage fields, and electrical transmission lines, as well as thousands of acres of private property.

Strengthening Delta levees is vitally important to safeguarding the lives and livelihoods of county residents and are equally important components of the county's flood control infrastructure. In addition to protecting property from flooding, Delta levees form the backbone of the regional road system, ensure the continued existence of Delta towns and communities, and protect habitat for wildlife, including threatened and endangered species. They form a network of channels that entice boaters to explore the Delta and support a longstanding tradition of hunting and fishing. They also carry fresh water to

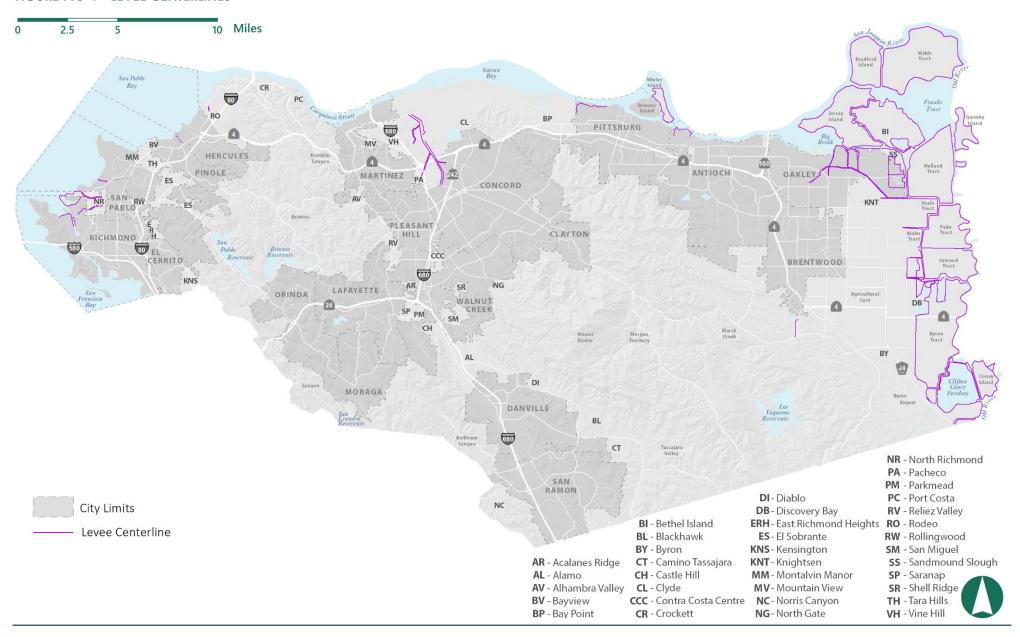
the pumps that supply water to the farmers of the San Joaquin Valley and residents of the Bay Area and Southern California. Local levee-maintaining agencies have managed the financing and ongoing maintenance, rehabilitation, and repair of Delta levees, and have improved levee integrity, reducing overall Delta flood risk. Much remains to be accomplished, however, as sea level rise, increased storm frequency and intensity, and higher flows from greater rainfall and less snowfall as a result of climate change will continue to threaten levee stability and effectiveness.

The California Department of Water Resources (DWR) implements the Central Valley Flood Protection Plan (CVFPP) to improve flood risk management in the Central Valley and the Delta. The CVFPP seeks to integrate and improve ecosystem functions concurrently with flood management investments and projects. It also calls for local agencies to protect urban communities (defined as communities with at least 10,000 residents) in the Central Valley from a 200-year flood, which is a flood that has a 0.5-percent probability (1 in 200) of occurring in any year. In unincorporated Contra Costa County, only Discovery Bay meets the criteria for 200-year flood protection.



The capacity of Grayson Creek in Pacheco has been increased to protect against flooding.

FIGURE PFS-4 LEVEE CENTERLINES



Goal PFS-5

Natural systems and flood-risk management infrastructure that can handle stormwater year-round and adapt to new and changing conditions.

Policies

PFS-P5.1

Support public and private efforts to improve protection against flooding, subsidence, and inundation, especially projects that achieve 200-year flood protection or better, factoring in anticipated sea level rise, in areas of the county covered by the CVFPP.

PFS-P5.2

Partner with responsible parties, public and private, to ensure ongoing funding exists for maintenance and rehabilitation of flood management facilities and structures (e.g., levees, pump stations, canals, channels, and dams), particularly those that do not meet adopted State or federal floodprotection standards.*

PFS-P5.3

Allow for future height increases to private levees protecting inland areas from tidal flooding and sea level rise by requiring rights-of-way and setbacks to be sufficiently wide on the levee's upland side and prohibiting new structures from being constructed on top of or immediately adjacent to the levee.

PFS-P5.4

Support material stockpiling and equipment staging for emergency repair of Delta levees by:

- (a) Consulting with reclamation districts to identify storage sites within the Delta Primary Zone.
- Denying entitlements to convert identified storage sites to uses that would preclude storage unless the affected reclamation district(s) identify suitable alternative sites or determine sites to be converted are no longer needed.
- Denying entitlements for mining/extraction uses that would remove from the Primary Zone those materials deemed essential for levee repair.

PFS-P5.5

Evaluate projects involving water impoundment or conveyance to ensure they will not create a risk of seepage onto adjacent properties. Such projects must conclusively demonstrate that unacceptable seepage will not occur.

PFS-P5.6

Require projects with potential to significantly impact natural watercourses to establish or participate in programs that ensure ongoing maintenance of the watercourses to maintain their flood carrying capacity and habitat values.

PFS-P5.7





When developing new or revised regional drainage and flood management plans, including plans to protect against sea level rise, incorporate adequate setbacks and alternative drainage system improvements that provide aesthetic, recreational, and environmental benefits. Improvements should avoid structural modifications to

watercourses and preserve riparian habitat and floodplains, and convert enaineered drainage systems to more natural systems, when and where possible. In areas at risk of temporary or permanent inundation from sea level rise, ensure that improvements can continue to provide adequate protection for the projected level of inundation by 2100 or the expected operational life of the project, whichever is later.*

PFS-P5.8





Incorporate green infrastructure into new and retrofitted flood-control and streetscaping projects, including replacing existing asphalt and other hardscapes with green infrastructure, as feasible.*

PFS-P5.9





Work with developers of properties along transit corridors or in commercial or mixed-use areas to combine required C.3/stormwater treatment facilities with green infrastructure on the adjoining public right-of-way to enhance the value and sizing of these facilities.

PFS-P5.10

Encourage public participation in design processes for major flood control and sea level-rise resiliency projects to ensure that these facilities are context-sensitive and provide multiple public benefits whenever possible.

Actions

PFS-A5.1

Identify existing developed areas where drainage maintenance issues exist and coordinate with each affected community to consider creating a benefit assessment district or similar local funding mechanism to pay for improvement and maintenance needs.*

PFS-A5.2



Coordinate with responsible parties, public and private, to develop a flood risk management plan for the levee systems protecting the unincorporated county that:

- (a) Identifies the entities responsible for operation and maintenance of the levees.
- (b) Determines the anticipated flood levels in the adjacent waterways and the level of protection offered by the existing levees along the waterways.
- Establishes a long-term plan to upgrade the system as necessary to provide at least a 100-year level of flood protection, and 200-year level of flood protection where required.
- (d) Considers the worst-case situations of high tides coupled with sea level rise and storm-driven waves.
- (e) Protects beneficial uses of San Francisco Bay and the Delta and their water
- Prioritizes designs that foster riparian habitat while containing floodwaters, such as by using more natural materials, landforms, and vegetation, rather than concrete channels and other conventional flood-control infrastructure.
- Encourages multipurpose flood-management projects that, where feasible, incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of waterways.

- Takes a holistic approach to flood-risk management so that new infrastructure does not simply transfer flooding impacts from one property or location to another.
- Considers flood and tidal impacts to existing brownfields, especially adjacent to shorelines.
- Includes provisions for updates to reflect future State- or federally mandated levels of flood protection.

PFS-A5.3





Develop watershed management plans incorporating best management practices that slow, spread, and sink water runoff to flatten the hydrograph (i.e., water flow over time) where erosion is a concern, while also enhancing wildlife habitat and recreation opportunities where feasible.*

PFS-A5.4



Establish programs for development projects alongside natural watercourses that ensure regular maintenance of the waterway, including debris removal, erosion control, and conservation and restoration of native species.*

PFS-A55



Coordinate with the Contra Costa County Mosquito and Vector Control District to identify and remedy areas with ongoing drainage problems to reduce disease risk from stagnant water.

See the Health and Safety Element for policies and actions related to flood hazards and sea level rise and the Parks and Recreation section later in this Element for policies and actions related to secondary recreational uses of floodcontrol infrastructure.

SHERIFF, FIRE, AND EMERGENCY MEDICAL **SERVICE**

Law enforcement services in Contra Costa County are provided by several agencies at various levels of government. In the unincorporated county, community policing is provided primarily by the Contra Costa County Sheriff's Office, with special districts like the Kensington Police Protection and Community Services District providing service in certain areas.

Beyond police services, careful design of the built environment can also help prevent crime and increase the sense of safety. Research has shown that the certainty of being caught is a highly effective deterrent to criminal activity. Design elements that enhance visibility of public spaces, such as adequate lighting and windows and porches that encourage residents to have "eyes on the street," can create safer environments. The policy guidance in this section emphasizes improvements to the physical environment that support an accessible and visible public realm. Additional policy guidance in the Stronger Communities Element addresses engagement with Impacted Communities to ensure the designs for public realm improvements allow residents and visitors to feel safe and welcomed

Fire protection services in Contra Costa County are provided by six fire protection districts and three city fire departments that adequately cover the entire county except for Jersey Island, Bradford Island, Quimby Island, Webb

Tract, and the Marathon Refinery near Martinez, as shown in Figure PFS-5. All fire protection agencies within the county have signed mutual-aid agreements to provide assistance to neighboring agencies. The firefighting capabilities of these agencies are further augmented by personnel and equipment from the California Department of Forestry and Fire Protection.



The Contra Costa County Fire Protection District operates this station in Discovery Bay.

Contra Costa County Health Services contracts with the Contra Costa Fire Protection District, Moraga-Orinda Fire Protection District, San Ramon Valley Fire Protection District, and American Medical Response to provide emergency ambulance service. Emergency response calls for the unincorporated county are fielded by the Office of the Sheriff's Communications Center

Public safety response time standards provide a means to ensure that the community will remain safe as the county develops. The County strives to achieve the following public safety standards:

• Sheriff Response Times: Average law enforcement response time of five minutes or less for Priority 1 calls (where a threat to people may exist).

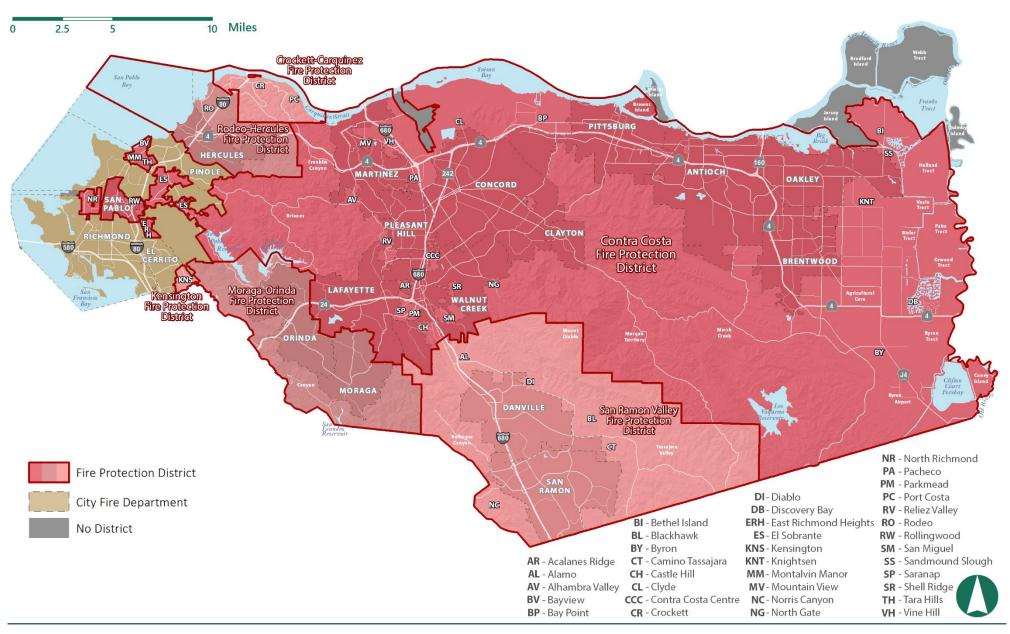
Fire Response Times:

- o Four minutes or less response time for the arrival of the first engine company at a fire suppression incident, 90 percent of the time.
- o Six minutes or less response time for the arrival of the second engine company at a fire suppression incident, 90 percent of the time.
- o Eight minutes or less response time for an initial full alarm assignment at a fire suppression incident that does not involve a high-rise building, 90 percent of the time.
- o Ten minutes and 10 seconds or less response time for an initial full alarm assignment at a fire suppression incident that involves a highrise building, 90 percent of the time.

• Emergency Medical Services Response Times:

- o Four minutes or less response time for the arrival of a unit with a first responder, 90 percent of the time.
- o Eight minutes or less response time for the arrival of an advanced life support company, 90 percent of the time.

FIGURE PFS-5 FIRE PROTECTION DISTRICTS



Goal PFS-6

Efficient and effective law enforcement, fire, and emergency medical services for all communities.

Policies

PFS-P6.1

Require new development to support effective law enforcement and fire protection by providing a safe and accessible public realm for all.

PFS-P6.2

Design, improve, and maintain public spaces to maximize visibility and safety through appropriate lighting and landscaping.

PFS-P6.3

During the discretionary review process for projects with potential to increase demand on fire protection services, consult with the applicable fire district to identify any upgrades to fire protection facilities, infrastructure, and equipment needed to reduce fire risk and improve emergency response.*

PFS-P6.4

Encourage multi-jurisdictional and mutual-aid disaster response training between all agencies providing emergency services within the county.

Actions

PFS-A6.1

Engage community members, law enforcement, and local leaders, and amend the County Ordinance Code to incorporate standards for new development that support a safe, accessible public realm for all through environmental desian.*

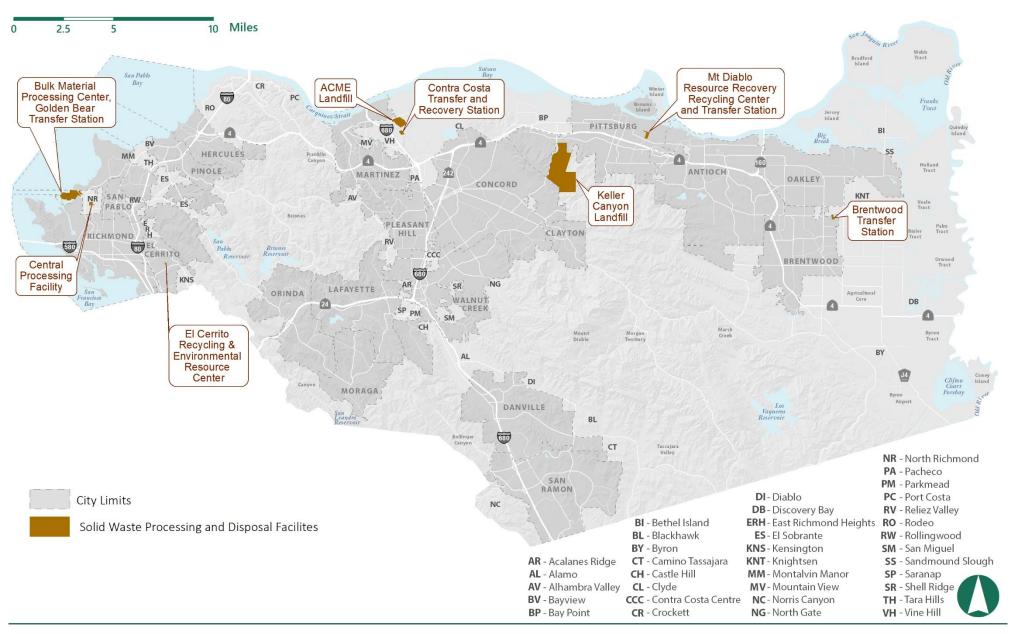
See the Health and Safety Element for policies and actions related to wildfire hazards and emergency response and the Transportation Element for policies and actions related to safe streets.

SOLID WASTE MANAGEMENT

In Contra Costa County, the private sector is mainly responsible for solid waste collection and disposal, and the County is responsible for planning, administration, and facility approval. The County, Joint Powers Authorities (IPAs), and certain special districts enter into franchise agreements with private waste haulers to provide collection services. The County oversees solid waste management for about half of the unincorporated population, which is currently serviced by four different franchise agreements. Disposal facilities, which are shown in Figure PFS-6, are privately owned. Given the many entities involved, public and private, effective solid waste management requires significant coordination.

Reducing waste in the first place, along with repairing or reusing items and materials, are important strategies for overall sustainability. The California Integrated Waste Management Act (CIWMA) requires cities and counties to adopt and implement waste diversion programs for source reduction, recycling, and composting, and requires that each county adopt a Countywide Integrated Waste Management Plan (ColWMP); the County's.

FIGURE PFS-6 SOLID WASTE PROCESSING AND DISPOSAL FACILITIES



ColWMP was adopted in May 1993. In addition to the CIWMA, the State continues to enact laws addressing solid waste and recycling. The County reports to the State annually regarding compliance with existing laws, including diversion goals and waste reduction measures.

Waste that is not diverted is deposited into landfills, where it breaks down slowly and emits methane, a potent greenhouse gas (GHG), contributing to climate change. Methane emissions from landfills are a major source of the GHG emissions generated in the county. Landfill operators already capture a large proportion of this methane, which can be used to generate energy or converted to a liquid fuel that can be used to power vehicles and other equipment. There are opportunities for landfill operators to expand the methane collection infrastructure at the county's landfills, capturing more methane and reducing the county's GHG emissions.

Illegal dumping is a large-scale pervasive problem in Contra Costa County and a high-priority issue because of its immediate and long-term adverse effects on health and safety, community assets, community pride, economic development, and natural habitats. Illegal dumping hot spots are widespread throughout the county, occurring on rural roads and agricultural land, in suburban neighborhoods, and in urban environments affecting many communities regardless of socio-economic status. However, Impacted Communities are disproportionately affected by illegal dumping. In 2018, the County formed an interdepartmental team and began implementing strategies to combat illegal dumping as part of the Contra Costa County Illegal Dumping Initiative. Strategies are grouped into four categories: educate, prevent, clean up, and enforce; they include a public outreach campaign to educate residents about dumping, street signs placed near dumping zones with information on how to report dumping activity, removal of abandoned recreation vehicles, and dedicated law enforcement to investigate dumping crimes



Illegal dumping in Bay Point harms community character, health, economy, and natural resources.

Goal PFS-7

Safe, efficient, and environmentally responsible solid waste diversion and reduction practices and management.

Policies

PFS-P7.1

Coordinate with private solid waste collection and disposal companies, cities, and other appropriate agencies to plan solid waste management facilities that are safe, effective, and efficient.*

PFS-P7.2

Coordinate with other jurisdictions to ensure that solid waste management, including solid waste resource recovery (e.g., reduce, reuse, recycle, compost, and waste-to-energy), is carried out in accordance with the ColWMP and meets strict environmental standards.*

PFS-P7.3

Strive to provide equivalent solid waste collection services and rates across each unincorporated community under County franchise control.

PFS-P7.4

Ensure that new development complies with the requirements of the ColWMP.*

PFS-P7.5

Require new residential and commercial uses to provide adequate space for trash, recycling, and organics collection, as well as edible food recovery when applicable.*

PFS-P7.6



Encourage new technologies for organics processing consistent with SB 1383, the Short-Lived Climate Pollutants Reduction Strategy of 2016.

PFS-P77



Support expansion of recycling programs and efforts to locate convenient, accessible recycling centers in Impacted Communities.

PFS-P7.8



Consistently use a multiprong approach (i.e., educate, prevent, clean up, enforce) to combat illegal dumping.

PFS-P7.9



Prohibit new landfills in ecologically sensitive areas, and require that new landfills be located, designed, and operated to avoid adverse impacts to surrounding land uses, including by limiting the area of landfill activities; limiting hours of operation; providing safe and appropriate transportation routes; maintaining site security; identifying associated off-site feeder transfer stations; grading to blend the landfill disturbance area with surrounding topography; covering refuse daily; and mitigating noise, odor, litter, and visual impacts.*

PFS-P7.10



Require that new landfills provide the following:

- (a) An appropriate leachate collection and recovery system.
- (b) An approved erosion-control and drainage plan.
- (c) Geotechnical studies, including stability analysis, to determine the most appropriate engineering design.
- (d) A habitat enhancement plan that provides for at least a 3:1 replacement for lost significant habitat.*





Require new landfills to be designed and operated so that upon decommissioning they can be repurposed for other uses, such as renewable energy facilities, recycling and organics recovery operations, outdoor recreation facilities, and open space.

PFS-P7.12



Require that new and expanded landfill operations significantly reduce GHG emissions to meet or exceed State targets to the extent feasible, and work toward carbonneutral landfills.

PFS-P7.13



Extend the life of landfills by continually striving to:

- Reduce the amount of solid waste generated.
- Reuse and recycle as much solid waste as possible.
- Utilize the energy and nutrient value of solid waste (i.e., waste-to-energy and composting).
- Properly dispose of remaining solid waste.*

PFS-P7.14

Discourage direct public access to landfills and instead direct the public to transfer stations. Base the need for new or expanded transfer stations on economics, the need to mitigate traffic impacts, and the need to inspect refuse for hazardous materials and recyclables.

PFS-P7.15



Ensure transfer stations provide adequate capacity to accommodate recovery of recyclables and organic materials and encourage organics processing.*

PFS-P7.16

Include a condition of approval in land use permits for solid waste facilities requiring review for compliance with permit conditions every three to five years.*

Actions

PFS-A7.1

Study the potential benefits of combining the County's solid waste collection franchise agreements, or adjusting the boundaries of franchise service areas, to improve efficiency and consistency.

PFS-A7.2



Streamline the permitting process for composting, organics processing, and repair/reuse facilities.

PFS-A7.3





Partner with community organizations and solid waste franchise collection haulers to maximize participation in community clean-up days and residential on-call garbage pick-ups in Impacted Communities. Encourage community participation by holding these events in conjunction with other community events whenever possible.

PFS-A7.4



Work with other counties, cities, and community members to establish public/private partnerships to combat illegal dumping.

PFS-A7.5





Install signage and increase education, monitoring, enforcement, and rapid cleanup to discourage illegal dumping, especially in Impacted Communities and rural areas.

PFS-A7.6



Use the County's legislative platform process and partner with other public agencies throughout the state to propose and support legislation to combat illegal dumping.

PARKS AND RECREATION

Contra Costa County is an outdoor enthusiast's delight. Whether it is a peaceful nature walk through Carquinez Strait Regional Shoreline, an exciting hike around historic Black Diamond Mines Regional Preserve, fishing at a nearby reservoir, or a fun day out with family and friends at a local park, the county offers something for residents of all ages and abilities. In this region, one can explore the beautiful landscapes, appreciate breathtaking views, enjoy outdoor activities, and learn about the local flora and fauna. This wide variety of activities encourages physical activity, learning, and socialization, while also providing opportunities for people to connect with nature and enjoy the outdoors. Quality parks and recreational opportunities can also contribute to economic development by attracting visitors and promoting tourism. Overall, parks and recreation are essential to creating healthy, vibrant communities where individuals and families thrive.



The Carquinez Strait Regional Shoreline provides trail recreation opportunities for residents and visitors. (Community-submitted photo)

Most county residents are fortunate to have access to a variety of parks and trails in unincorporated areas, as shown on Figures PFS-7 and PFS-8:

• State and regional parks provide a broad range of recreational opportunities, such as hiking, bicycling, horseback riding, fishing, swimming, camping, group sports, and ecological and cultural education. This category includes Mount Diablo State Park and Marsh Creek State Historic Park, which are owned and managed by the California Department of Parks and Recreation, as well as many regional parks owned and managed by the East Bay Regional Park District (EBRPD). In addition, EBMUD and CCWD offer recreational opportunities, such as hiking and fishing, as secondary uses within the watersheds of their reservoirs. The US National Park Service also operates the Port Chicago Naval Magazine National Memorial at Military Ocean Terminal Concord, John Muir National Historic Site in Martinez, and Eugene O'Neill National Historic Site just outside Danville.

FEDERAL, STATE, REGIONAL, AND LOCAL RECREATION LANDS

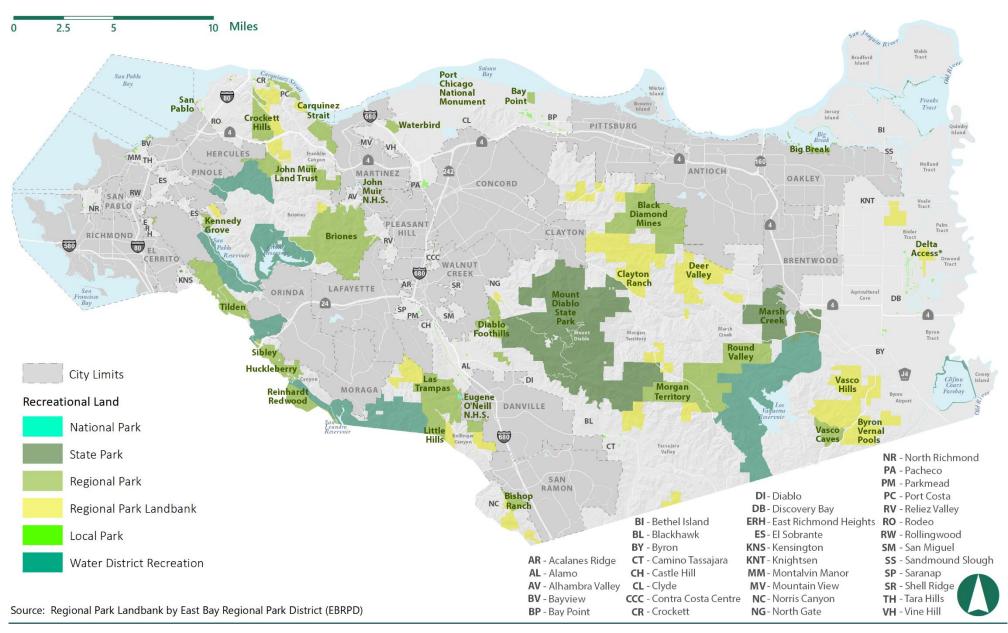
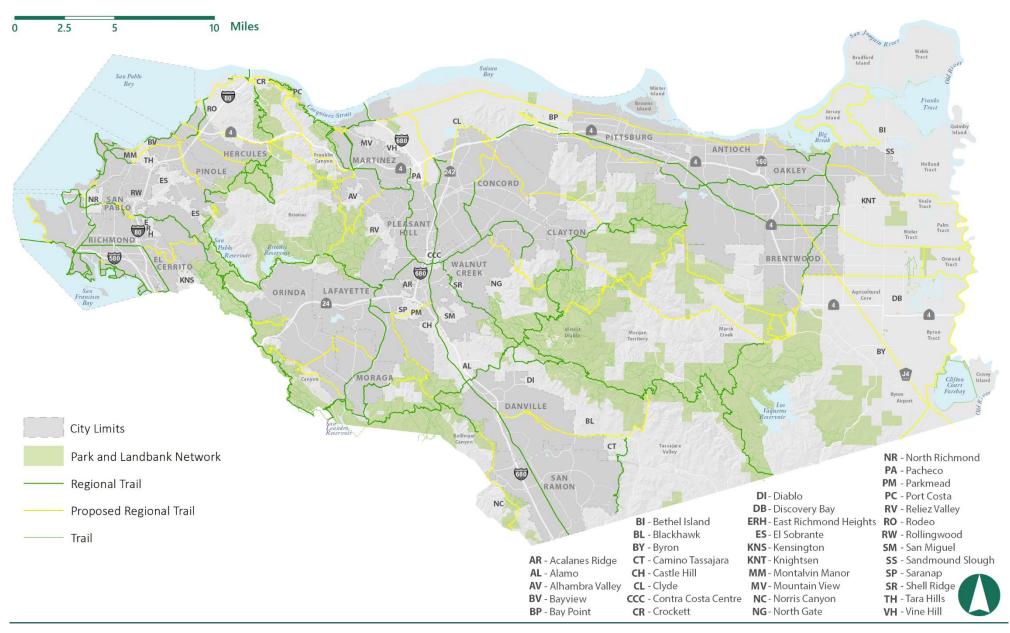


FIGURE PFS-8 TRAILS NETWORK



- Local parks are indispensable elements of our neighborhoods and communities. They serve as focal points where people can exercise and enjoy leisure time together, and include a variety of amenities such as sports courts, community centers, swimming pools and splash pads, playgrounds, ballfields, picnic areas, community gardens, and gathering spaces. Local parks in unincorporated areas are typically owned and maintained by the County or a special district, such as a recreation and park district or community services district. The local park system is often augmented by similar facilities on school campuses. In some areas, private organizations such as homeowners' associations maintain parks for their communities, sometimes allowing public access.
- Trails are essentially linear parks that provide safe connections between residential neighborhoods, parks, schools, and other destinations. Because of their connectivity, they also act as alternative commute routes in some communities, though typically they're restricted to pedestrian, bicycle, and micromobility use. Major regional trails in Contra Costa County include portions of the San Francisco Bay Trail, a 500-mile network of trails along San Francisco and San Pablo Bays that is managed collaboratively by several agencies, including the Metropolitan Transportation Commission/Association of Bay Area Governments, and EBRPD; portions of the 50-mile Carquinez Strait Scenic Loop Trail that is managed by the Bay Area Ridge Trail Council; and the 26-mile Iron Horse Regional Trail, 13.5-mile Contra Costa Canal Regional Trail, and 19-mile Delta de Anza Regional Trail managed by EBRPD. The county is also crisscrossed by innumerable smaller, local trails, many of which are unpaved and informal.

While not shown on Figure PFS-7, numerous parks within incorporated cities and towns are also available to residents of unincorporated areas.

The County coordinates with agencies at all levels of government to provide and maintain parks and recreational programs in unincorporated communities. The County administers and regularly updates the Parks Capital Improvement Program, which allocates funding to park projects and maintenance based on community priorities and budget availability. Park acquisition and development are also funded in part through the County's Parks Impact Fee, which is a fee charged to new residential projects. The fee amount is based on the project size, location, and type(s) of housing proposed.

Access to parks and open space is an important environmental justice issue. Impacted Communities, which are described in the Stronger Communities Element, often lack access to the range and quality of facilities that support a high quality of life and positive public health outcomes. This can be a significant driver of poor physical and mental health. It is important to correct this inequity by investing in Impacted Communities and ensuring that each resident has access to space for outdoor physical activity.



Ambrose Park provides play areas for children in Bay Point.

Park standards provide a means to ensure that parks and recreation facilities are provided as the county develops. The County strives to provide 3 acres of local parks per 1,000 residents. This standard is an important tool for requiring new development to provide facilities when parks to serve new residents are lacking nearby.

Goal PFS-8

An easily accessible, integrated system of high-quality parks and trails to meet the needs of all residents.

Policies





Support development of a variety of local amenities that meet a diverse range of recreational needs, such as ballfields, all-abilities playgrounds, tot lots, spraygrounds, adult fitness courses, gymnasiums, swimming pools, sport courts, passive parks, pocket parks, urban gardens, and trails.

PFS-P8.2



Provide a local park within a safe 10-minute walk for all residents in urban communities or within a 5-minute drive for residents in suburban communities, as indicated in Figures PFS-9 and PFS-10.*

PFS-P8.3



Expand access to diverse, high-quality parks, green spaces, recreational facilities, trails, and natural environments for residents of Impacted Communities, including by facilitating multiple transportation modes. Partner with other agencies and non-governmental organizations to obtain funding, and design and maintain these facilities to offer a safe and comfortable environment for users of all ages and abilities.

PFS-P8.4





Prioritize and promote recreational activity programs and opportunities in Impacted Communities.

PFS-P8.5



Require projects subject to the Park Dedication or Park Impact Fee Ordinances to develop parks and recreation amenities identified in, or proposed for addition to, the County's Park Capital Improvement Plan. Park Impact fees or in-lieu fees should be assessed only when the County determines developer improvements are not feasible.*

PFS-P8.6





Support expanded access to recreation opportunities by working with other agencies to co-locate parks and trails with public facilities, such as schools and utility easements, prioritizing Impacted Communities.

FIGURE PFS-9 PUBLIC PARK AND OPEN SPACE WALKABILITY FOR URBAN COMMUNITIES

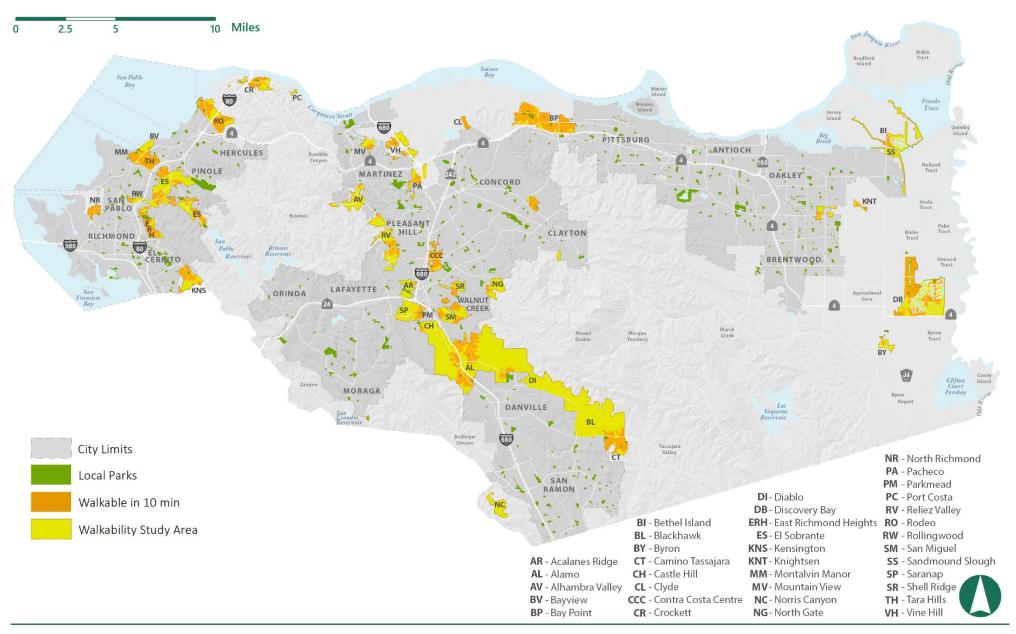
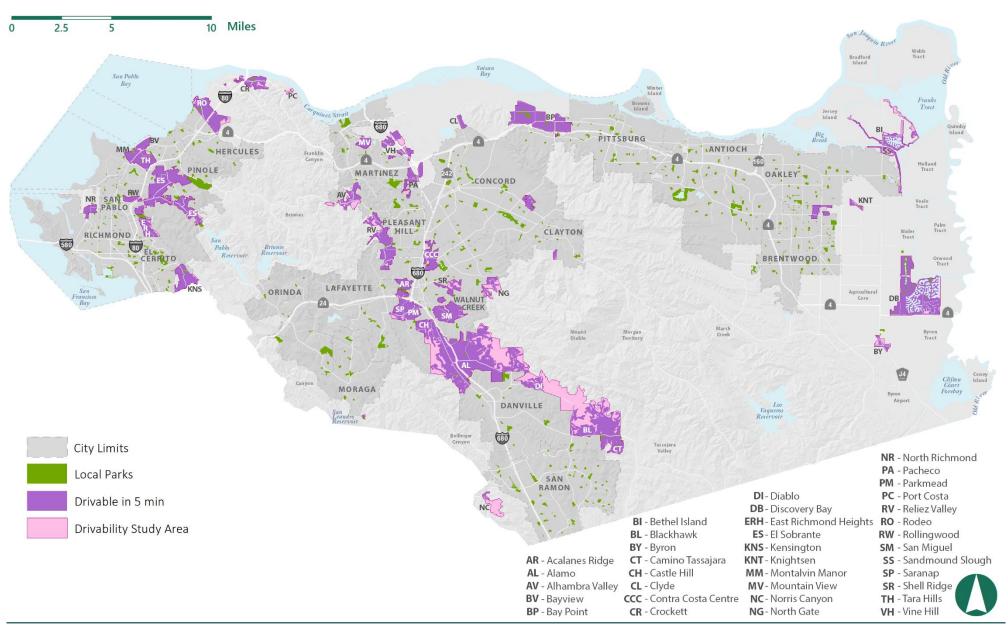


FIGURE PFS-10 DRIVE TIMES TO PUBLIC PARKS AND OPEN SPACE FOR SUBURBAN COMMUNITIES







Design recreational facilities to complement the natural features of the area, including topography and vegetation, whenever appropriate.

PFS-P8.8



Support expanded public access to the waterfront and development of water-related recreational opportunities, such as fishing and boating.

PFS-P8.9



Support development of a comprehensive and interconnected network of trails, including intra- and interregional trails like the San Francisco Bay Trail, Carquinez Strait Scenic Loop Trail, Great California Delta Trail, and Marsh Creek Corridor Trail, that provides public access to shorelines, ridges, and other scenic areas, connects residents with open space and nature, and links urban areas with parks and other recreational facilities

PFS-P8.10



Encourage use of abandoned railroad rights-of-way for trails or other public purposes and participate in collaborative planning processes to determine the best use of abandoned rail corridors.

PFS-P8.11





Support local community groups and volunteer organizations in efforts to improve and maintain local parks, trails, and other public spaces, such as through an Adopt-A-Park/Trail program, especially in Impacted Communities.

Actions

PFS-A8.1



Create an internal County entity that works across departments and non-County agencies to coordinate planning and funding of unincorporated local parks, recreational facilities, and trails.

PFS-A8.2





Coordinate with recreation and park districts and cities to prepare a parks and open space needs assessment for all unincorporated communities, prioritizing Impacted Communities. Integrate the results of the assessment into a Parks Master Plan and the Parks Capital Improvement Program and implement improvements that address barriers to outdoor physical activity, such as inadequate infrastructure and safety concerns.

PFS-A8.3



Annually update park dedication and in-lieu fee requirements based on the Consumer Price Index for All Customers, All Items for the San Francisco-Oakland-San Jose Metropolitan Area to accommodate for increases or decreases in development costs. Conduct a fee study at least once every 10 years to reflect changes in the cost of land, local park and recreational needs, and development conditions.*

PFS-A8.4



Maintain up-to-date maps showing quarter-mile and halfmile walking distances and five-minute driving times to public parks.

PFS-A8.5

Study the feasibility of developing an equestrian trail network throughout the county's rural areas.

SCHOOLS

Good schools are the building blocks of vibrant, healthy communities. Communities with good schools are great places to raise families, and a good education system not only attracts new residents, but also encourages young people to remain in the community as they start their own families. Good schools are also economic development drivers, as businesses are attracted to communities where employees will have access to quality education for their families. The 18 school districts providing K-12 public education that serve Contra Costa County are shown on Figure PFS-11.



Verde Elementary School in North Richmond is one of many schools operated by the West Contra Costa Unified School District.

Colleges and universities also play an important role in community life. Aside from the direct contributions they make to the local economy as large employers, post-secondary educational institutions provide critical workforce development and training through partnerships with local businesses and community groups. Post-secondary public education in Contra Costa County is offered at California State University, East Bay – Concord Campus and three community colleges operated by the Contra Costa Community College District: Contra Costa College in San Pablo; Diablo Valley College in Pleasant Hill, with a satellite campus in San Ramon; and Los Medanos College in Pittsburg. Numerous public and private colleges and universities, including prestigious institutions like the University of California, Berkeley and Stanford University, are also within 50 miles of Contra Costa County, providing county residents with extraordinary opportunities to pursue higher education.

Goal PFS-9

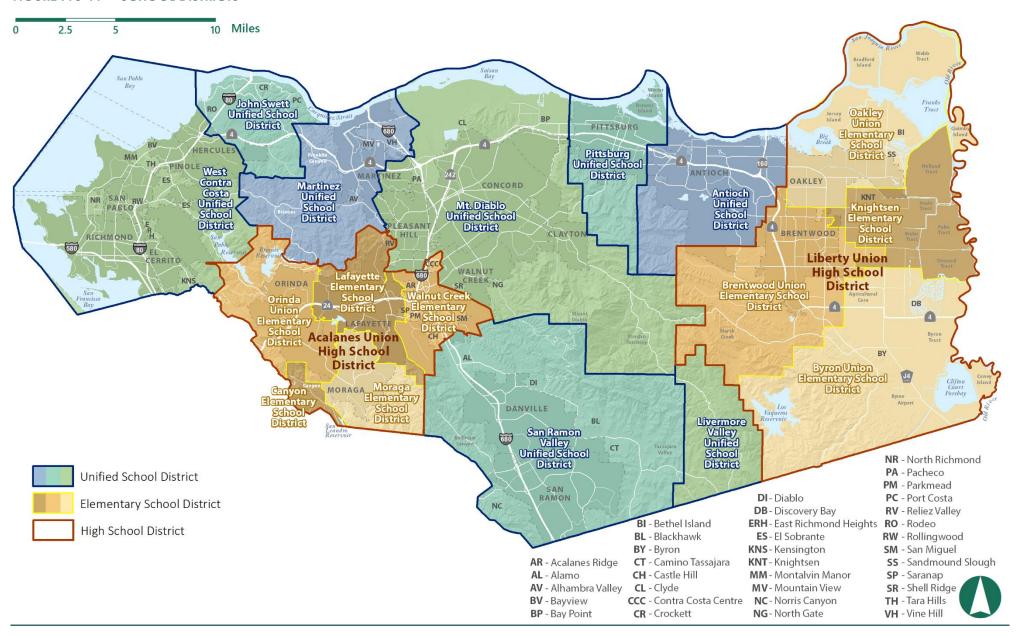
Primary, secondary, and higher education facilities that serve the varied educational needs of all county residents.

Policies

PFS-P9.1

When reviewing new development proposals, coordinate with affected school districts to ensure adequate school capacity is or will be available, school sites are designated or dedicated if necessary, and adequate access is provided.*

FIGURE PFS-11 **SCHOOL DISTRICTS**



PFS-P9.2

Encourage dedication of school sites through density transfer of the dedicated acreage or other incentives.

PFS-P9.3



Encourage school districts to use school sites for multiple community purposes, such as recreation, and to locate new schools in conjunction with and/or adjacent to parks and trails.

PFS-P9.4

Oppose efforts by school districts to locate new schools outside the Urban Limit Line.

PFS-P9.5

Support efforts to enhance and expand access to higher education.

Actions

PFS-A9.1

Amend County Ordinance Code Title 8 – Zoning and Title 10 - Public Works and Flood Control to regulate public school siting and construction of off-site improvements related to public schools, to the extent allowable under Government Code Sections 53094 and 53097. Ensure these amendments include requirements for roadway improvements, including Complete Streets and multimodal roadway conditions.

See the Stronger Communities Element for policies and actions related to workforce development.

LIBRARIES

Libraries are some of the oldest and most important public institutions. They provide access to knowledge and enhance public literacy. The Contra Costa County Library works in partnership with the incorporated cities and towns to operate 26 libraries across the county, offering robust programming for all ages, preschool to adults, including English as a Second Language (ESL), Science, Technology, and Mathematics (STEM) courses for kids, technology and computer help, interactive educational performances, arts and crafts events, book clubs, free lunches for children, and other programs. Residents can also reserve group study rooms and meeting rooms for educational, cultural, and community-related meetings, programs, and activities.



Local libraries provide access to numerous education resources and programs.

Goal PFS-10

Library services that meet the informational and social needs of county residents.

Policies





Prioritize expansion of library services in Impacted Communities.

PFS-P10.2



Locate and design library facilities to provide access to the greatest number of people. Ensure they are sited in areas with broadband internet and close to public transit.

PFS-P10.3

Provide adequate funding for maintaining and improving library operations.*

Actions

PFS-A10.1

Develop library service and facility standards, identify standards not being met, and seek necessary resources to achieve those standards.*

PFS-A10.2

Adopt a library impact fee to ensure new development mitigates its impact on library services.*

PUBLIC FACILITIES AND SERVICES FLEMENT PERFORMANCE MEASURES

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- More dollars invested per capita on public improvements in Impacted Communities than in other parts of the county.
- Fire suppression incidents responded to with the first engine company within four minutes or less, with the second engine company within six minutes or less, and with the initial full alarm assignment within eight minutes or less (or 10 minutes and 10 seconds if it involves a high-rise building), 90 percent of the time. Emergency medical service incidents responded to with a unit with a first responder within four minutes or less and with an advanced life support company within eight minutes or less, 90 percent of the time.
- Increased percentage of homes within a 10-minute walk of a local park.
- At least 3 acres of local parkland per every 1,000 residents.
- Reduced number of illegal dumping incidents.

HEALTH AND SAFETY ELEMENT

State law requires every general plan in California to address natural and human-caused hazards and dangers and identify the potential risk of death, injuries, property damage, and economic and social dislocation from fires, floods, earthquakes, and other events. Contra Costa County is at risk from a number of natural and human-caused hazards, and climate change is likely to make many of these more damaging for people, buildings and structures, ecosystems, and other important community assets.

This Element focuses on improving public health and safety and reducing the risk of hazards. It is organized into the following 11 sections:

- The Air Quality section includes policy guidance supporting clean air and promoting community and environmental health equitably throughout the county.
- The Greenhouse Gases section includes policy guidance to reduce greenhouse gas (GHG) emissions in Contra Costa County in support of statewide carbon neutrality and other GHG emissions reduction goals.
- The Climate Change, Resilience, and Adaptation section includes policy guidance promoting community resilience to climate change hazards.
- The Flood Hazards and Sea Level Rise section includes policy guidance to mitigate flood and sea level rise hazards.
- The Wildfire Hazards section includes policy guidance to minimize wildfire risks to residents, infrastructure, and natural resources.

- The Extreme Heat section includes policy guidance supporting resilience to an increasing number of extreme heat events per year.
- The Management of Hazardous Materials and Hazardous Waste section includes policy guidance to protect communities from past and present activities involving the use of hazardous materials and hazardous waste.
- The Seismic and Geologic Hazards section includes policy guidance to protect residents, property, and infrastructure from seismic and geologic hazards, including earthquakes, liquefaction, and landslides.
- The Emergency Preparedness, Response, and Evacuation Routes section includes policy guidance to maintain emergency response and recovery procedures, including effective evacuation capacity and capability, that protect human life and allow communities and economies to function during emergencies.
- The Noise and Vibration section includes policy guidance to maintain an acceptable level of noise and vibration in communities.
- The Health and Safety Element Performance Measures describe how the County will track its progress in achieving some of the major objectives expressed in this Element.

Appendix B provides additional information about many of these hazards.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.



Community Health



Environmental Justice



Economic Development



Sustainability



Delta flooding, as occurred on Bradford Island in 1983, is a significant hazard in Contra Costa County. (Credit: California Department of Water Resources)

AIR QUALITY

Countywide Air Quality

As basic and critical as it is to healthy living, clean air is not guaranteed in any community. Air quality in Contra Costa County is primarily affected by ozone pollution from vehicle exhaust and particulate matter from industrial centers and diesel trucks. Higher temperatures can increase surface ozone concentrations, which is associated with negative health outcomes, including reduced lung function, pneumonia, asthma, cardiovascular diseases, and premature death. Ozone concentrations are projected to increase in most places that already experience high levels, such as East County, by 2040. During cooler months, near-ground particulate matter is trapped in the air for longer periods of time due to an inversion layer, especially in the northern and eastern parts of the county where particulate matter rates are already high. Higher rates of particulate matter increase the likelihood of cardiovascular and asthma-related health complications.

Contra Costa County is committed to protecting human health and the environment by meeting State of California and federal standards for all air pollutants. The California and National Ambient Air Quality Standards (CAAQS and NAAQS, respectively) are the air quality levels considered to provide a margin of safety to protect public health and welfare. The California Air Resources Board (CARB) regulates and enforces air quality laws, rules, and regulations set by the State. Local air districts are delegated the authority to regulate local stationary sources of air pollution to improve air quality. The local air district in the San Francisco Bay Area is the Bay Area Air Quality Management District (BAAQMD).

For over 60 years, BAAQMD has been tasked with improving air quality in the Bay Area and reducing exposure to air pollution, including "criteria air pollutants" like ozone, particulate matter, and toxic air contaminants (TACs), all of which are dangerous to human health. BAAQMD monitors and reduces air pollution throughout the region to achieve the air quality standards established by the State and federal governments. As of 2023, the San Francisco Bay Area Air Basin, which encompasses Contra Costa County and the rest of the Bay Area, is not meeting the State and federal standards for ozone and particulate matter.

Improving air quality requires constant oversight and can involve significant expenditures and changes in behavior. Since the late 1980s, BAAQMD has required major stationary sources of air pollution (e.g., petroleum refineries and other heavy industrial sources) to reduce emissions to the maximum achievable level. In 2004, BAAQMD initiated its Community Air Risk Evaluation (CARE) program to reduce TAC exposure from stationary and mobile sources (i.e., cars, trucks, trains, and airplanes) in the Bay Area, and has more recently provided related planning assistance through its *Planning* Healthy Places guidebook. The Planning Healthy Places guidance maps communities with higher concentrations of air pollution, shares best practices to reduce health risks associated with air pollution, and encourages jurisdictions to address and minimize potential local air pollution issues early in the land use planning process, with technical guidance for implementation.

Additionally, BAAQMD's 2017 Clean Air Plan, prepared in cooperation with the Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC), includes several control strategies for reducing air pollution from new and existing stationary sources and vehicle travel.



Freeways and other high-traffic roads, such as State Route 4, are a major source of air pollution. (Community-submitted photo)

Goal HS-1

Air quality that supports community and environmental health.

Policies

HS-P1.1



Coordinate air quality planning efforts with State and regional agencies, such as CARB, BAAQMD, and ABAG/MTC.





Prioritize participation in emission and exposure reduction, public education, engagement, outreach, and other programs that promote improved air quality, focusing on Impacted Communities.

HS-P1.3





Require new development to adhere to BAAQMD's Planning Healthy Places guidance when local conditions warrant.*

HS-P1.4





Require new industrial development to locate significant pollution sources at the maximum distance possible from sensitive receptors.*

HS-P1.5



Require new sources of air pollution that will generate significant new air quality impacts or expose sensitive receptors to substantial increases in harmful emissions of TACs to prepare a Health Risk Assessment that identifies appropriate mitigation consistent with BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines, based on the findings of the Health Risk Assessment.*

HS-P1.6





Require that any mitigation of air quality impacts occur onsite to the extent feasible to provide the greatest benefit to residents in neighboring communities most impacted. For mitigation that relies on offsets, require that the offsets be obtained from sources as near to the project site as possible or from sources that would improve air quality in an

Impacted Community. If the project site is within or adjacent to an Impacted Community, require offsets/mitigation within that community unless determined infeasible by the County.*

HS-P1.7

Encourage modernization projects at existing industrial facilities that support State energy and climate goals and achieve all of the following:

- Improved community and worker health and safety.
- Enhanced environmental protection.
- Significant reductions in criteria pollutants, TACs, and GHGs.
- Timely remediation of preexisting and future on- and off-site contamination as a component of the project or through a fully funded work program that restores the site to a condition suitable for commercial or industrial use, or to a higher standard when determined necessary and feasible on a case-by-case basis.

HS-P1.8







Require new or expanded commercial and industrial projects resulting in 25,000 square feet or more of gross habitable floor area, such as warehouses and other large enclosed buildings, to be near zero-emission operations, including the facilities themselves and the associated fleets. Require all necessary measures, such as the following, to achieve near zero emissions:

Reduce on-site energy consumption and increase on-site energy generation and energy storage.

- Provide adequate on-site zero-emission-vehicle parking for all anticipated truck traffic to prevent idling and off-site queuing.
- Provide electrified loading docks with receptacles allowing plug-in of refrigerated trailers.
- Use heavy-duty trucks that are model year 2014 or later and expedite a transition to zero-emission trucks by establishing a clear timeline for electrification of trucks as they become commercially available. Ensure contracts with motor carriers include air quality incentives or requirements, such as providing incentives to fleets that meet United States Environmental Protection Agency (EPA) SmartWay standards or requiring use of zero-emission or near-zero-emission trucks.
- Use a "clean fleet" of delivery vehicles as they become commercially available, but no later than 2025.
- Use zero-emission yard equipment, such as forklifts, pallet trucks and jacks, and stackers.
- Implement practices to control and remove fugitive dust and other contaminants from paved areas.

Uses with fewer than five vehicles domiciled on-site are exempt from this policy.*

HS-P1.9



Require construction activities that involve large grading operations to implement additional construction measures identified in BAAQMD's CEQA Guidelines to reduce air pollutant emissions.*

HS-P1.10



Prohibit nonessential diesel engine idling countywide and nonessential idling of all vehicles within 100 feet of sensitive receptors.*

HS-P1.11



Support efforts to provide HVAC upgrades and portable clean air filters to persons who live in Impacted Communities and other areas burdened by disproportionate exposure to poor air quality.

HS-P1.12



Encourage installation of upgraded HVAC systems at schools, childcare centers, and similar uses located proximate to industrial facilities.

Actions

HS-A1.1



Consult with BAAQMD and community stakeholders and prepare an Air Quality Community Risk Reduction Plan that applies to areas with high levels of cancer risk, providing a comprehensive strategy to protect community members from the negative health effects of air pollution.

HS-A1.2





Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 8 – Zoning to create an Air Pollution Exposure Overlay Zone around freeways that requires new construction in these areas to install enhanced

ventilation systems and other strategies to protect people from respiratory, heart, and other health effects associated with breathing polluted air.

HS-A1.3





Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 8 – Zoning to include an Industrial-Sensitive Receptor Interface Overlay Zone applied to areas where residential land uses and other sensitive receptors interface or directly abut heavy industrial land uses. In the overlay zone, require industrial uses to reduce pollution and employ strategies to mitigate air quality, noise, vibration, odor, light, visual, and safety impacts on nearby sensitive receptors. In addition, require new sensitive receptors to install enhanced ventilation systems and implement other strategies, paid for by neighboring sources of pollution to the extent possible, to protect residents from health and quality of life impacts.

HS-A1.4





Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 7 - Building Regulations to include a clean construction ordinance that requires projects to implement extra measures to reduce emissions at construction sites in or near places that are already overburdened by air pollution, such as Impacted Communities.

HS-A1.5







Adopt an ordinance at least as stringent as the State's maximum idling law, and coordinate with CARB and law enforcement to achieve compliance.

HS-A1.6



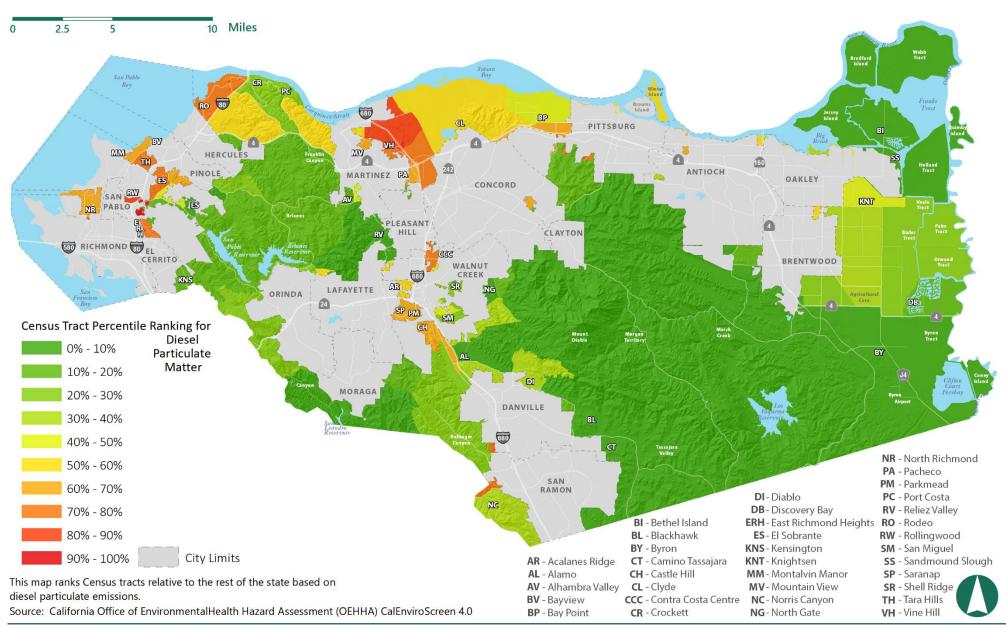
Develop a plan to provide convenient and accessible clean air refuges during times when outdoor air quality is deemed unhealthy.

See the Transportation Element for policies and actions related to air quality associated with vehicular emissions.

Air Quality in Impacted Communities

Poor air quality tends to disproportionately affect vulnerable populations, such as children and people who are elderly, chronically ill, unsheltered, or on a limited income. Often these populations live in proximity to high-volume transportation corridors (e.g., freeways, railroads) or stationary sources of toxic air emissions. Despite the federal, State, and BAAQMD air quality standards and requirements discussed above, there are still communities in the Bay Area that are exposed to significantly more air pollution than others, and these communities are often home to higher-than-average proportions of vulnerable populations, low-income households, and people of color. As explained in the Stronger Communities Element, Impacted Communities are unincorporated communities that are disproportionately impacted by pollution and negative health outcomes. In Contra Costa County, they are located near refineries and other large industrial facilities, major freeways and high-traffic roads, distribution centers, and railroad lines. Figure HS-1 displays rates of diesel particulate matter emissions, or exhaust from diesel engines, in unincorporated Census tracts relative to the rest of the state, and demonstrates how communities near heavy industry and freeways experience the highest rates of diesel particulate matter pollution.

FIGURE HS-1 DIESEL PARTICULATE MATTER RANKINGS RELATIVE TO THE STATE



CARB recently established the Community Air Protection Program in response to Assembly Bill (AB) 617, through which BAAQMD must implement community air monitoring and community emissions reduction programs for communities most affected by air pollution. As of Fall 2023, BAAQMD, in partnership with community members in Richmond, San Pablo, and portions of unincorporated Contra Costa County, is completing the AB 617 Path to Clean Air (PTCA) Community Emissions Reduction Plan (CERP) to reduce emissions and exposure for people in these communities. Additional communities in the county may benefit from this program in future years.



Emissions from heavy industrial facilities disproportionately affect Impacted Communities. (Credit: California Department of Water Resources)

Goal HS-2

Healthy air quality for all communities, so no community bears the disproportionate burden of environmental hazards and health risks.

Policies

HS-P2.1





When evaluating health risk impacts of projects in Impacted Communities, use an excess cancer risk of 6.0 per million and a non-cancer (acute and chronic) hazard index greater than 1.0 as thresholds for finding that the project could cause a cumulatively considerable contribution and a significant impact.*

HS-P2.2







Increase the tree canopy on public property, especially in Impacted Communities and areas with a high heat index, by prioritizing funding for new street tree planting and maintenance.

HS-P2.3







Support protection, restoration, and enhancement of natural landscapes in and near Impacted Communities to improve air quality and community health.

Actions









Partner with community members and regulatory agencies such as BAAQMD to conduct data collection and monitoring of pollution exposure, prepare a communityscale plan for reducing and mitigating air pollutant emissions and industrial hazards, such as pipeline risks, accidents, potential water or soil contamination, and impacts to sensitive ecological resources for each Impacted Community, or group of Impacted Communities, as appropriate. Require future projects to demonstrate consistency with those plans.

HS-A2.2





Coordinate with community members, BAAQMD, and other regulatory agencies to facilitate AB 617 citizen-led programs, including data collection, monitoring of pollution exposure, and identification and implementation of solutions in Impacted Communities. Consider future General Plan and Zoning Code amendments as needed to support BAAQMD in meeting AB 617 objectives.

HS-A2.3





Conduct a housing condition survey in Impacted Communities to identify units likely requiring upgrades to provide adequate protection from toxic releases. Based on the survey's findings, target outreach to provide information about weatherization and similar improvement programs.

HS-A2.4





Coordinate with BAAQMD to determine where to focus a targeted permit inspection program in Impacted Communities to help ensure enforcement of air quality permits.

HS-A2.5







Prepare a tree master plan for the county that emphasizes planting of low-maintenance native tree species and includes quantified goals and tracking methods, including mapping the tree canopy, and prioritizes planting in Impacted Communities and along safe routes to schools.

See the Extreme Heat section of this Health and Safety Element and the Conservation, Open Space, and Working Lands Element for additional policies and actions related to tree preservation and planting.

GREENHOUSE GASES

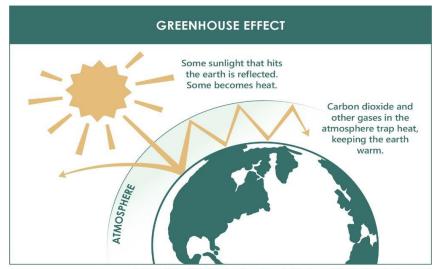
Scientific consensus is that human activity involving the use of fossil fuels has resulted in an ever-accelerating increase in the concentration of heattrapping gases, known as GHGs, in Earth's atmosphere (termed the "greenhouse effect"). In California, communities are now adapting to the resulting climate change stressors: warmer annual average temperatures, changes in precipitation patterns, sea level rise, and a reduction in snowpack. Recognizing the numerous threats posed by climate change, the State has set ambitious GHG emission reduction targets:

 Reduce statewide GHG emissions by 40 percent from 1990 levels by 2030.

• Reduce statewide GHG emissions by at least 85 percent from 1990 levels by 2045 and be on a path to support statewide carbon neutrality by 2045.

Since 2005, the County has implemented various measures to address climate change, including efforts to quantify GHG emissions, prioritize climate change adaptation in local government, and use nature-based solutions to achieve GHG emissions reductions. In 2020, the Board of Supervisors declared that climate change "threatens the long-term economic and social well-being, health, safety, and security of the county, and that urgent action by all levels of government is needed to immediately address this climate emergency."

To support State efforts related to climate change and its own GHG emissions reduction goals, the County strives for carbon neutrality through a conscientious transition to renewable and carbon-free fuels, resource conservation, sustainable practices, and other approaches.



Source: State of Washington Department of Ecology, "What is Climate Change," www.ecv.wa.gov/climatechange/whatis.htm



Solar panels help reduce reliance on natural gas and electricity providers and increase resilience for homeowners.

The goals, policies, and actions in this section focus on reducing GHG emissions throughout the county. The County's Climate Action and Adaptation Plan, one of the tools for implementing this General Plan, provides more specific strategies and actions to achieve Contra Costa County's GHG emission reduction goals.

Goal HS-3

Communities that reduce existing and anticipated GHG emissions in support of statewide carbon neutrality goals and other GHG reduction targets.

Policies





Prioritize implementation of the Contra Costa County Climate Action and Adaptation Plan to reduce GHG emissions from community-wide sources and adapt to changing climate conditions.

HS-P3.2







Facilitate carbon-neutral development projects and communities that support a circular economy, zero-emission modes of transportation, reliable and renewable energy resources, energy-efficient buildings, zero waste, water efficiency and conservation, green infrastructure, soil conservation, and a system of natural and working lands that support natural carbon sequestration and climate resilience.

HS-P3.3



Require new development projects using the Contra Costa County Climate Action and Adaptation Plan to streamline their environmental review of GHG emissions, as permitted by CEQA Guidelines Section 15183.5, to demonstrate consistency with the Climate Action and Adaptation Plan and incorporate applicable GHG reduction and climate change adaptation measures.*

Actions

HS-A3.1



Update the Contra Costa County Climate Action and Adaptation Plan as needed to maintain consistency with CEQA Guidelines Section 15183.5(b), other State and

regional guidance, and best practices. Future updates must include:

- (a) Inventories of GHG emissions in the unincorporated county.
- (b) GHG reduction targets for 2030 and 2045 at a minimum.
- (c) Forecasts of GHG emissions for the unincorporated county consistent with growth assumptions of this General Plan.
- GHG reduction strategies with quantifiable outcomes.
- Climate adaptation and resilience strategies to ensure the county's communities can respond to changing climate conditions.
- An implementation and monitoring program to track the County's progress toward achievement of the GHG reduction targets.
- A community and stakeholder engagement program for Climate Action and Adaptation Plan preparation and implementation.

HS-A3.2



Study the feasibility of establishing a low-carbon concrete requirement for all new construction and retrofit activities and consider additional strategies to reduce embedded carbon in construction materials. The intent is to determine what the County can and should do to support or exceed State requirements for net-zero emissions for cement use by 2045.





Regularly review and revise the County's purchasing and contracting programs as necessary to ensure consistency with the County's sustainability and GHG reduction goals.

Every Element of this General Plan includes policies and actions that will contribute to reduced GHG emissions and a more sustainable future.

CLIMATE CHANGE, RESILIENCE, AND **ADAPTATION**

According to the California Climate Action Team—a committee of State agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency—even if actions could be taken to immediately curtail GHG emissions, the potency and long atmospheric lifetimes of emissions that have already built up, combined with the inertia of the Earth's climate system, could still produce significant additional climate change hazards. Consequently, some effects from climate change are now considered unavoidable. To sustain the quality of life communities have come to expect, the County now must consider how to counteract potential threats to public health, buildings and infrastructure, economic drivers, biological resources, and key community services.

In 2020, the County released the Contra Costa County Vulnerability Assessment, which analyzes how the changing climate can harm residents, buildings, ecosystems, natural resources, and more. Table HS-1 lists climate change-related hazards of concern identified in the Vulnerability Assessment

The goals, policies, and actions in this section address climate change through a resilience and adaptation lens. Individual hazards are addressed through policy guidance in subsequent sections of this Element.

Goal HS-4

Resilient communities that are prepared for, responsive to, and recover from hazards created or worsened by climate change.

Policies

HS-P4.1



Address the effects of climate change, particularly the increased frequency and intensity of hazards, during review of new development applications.

HS-P4.2

Discourage new below-market-rate housing in High and Very High Fire Hazard Severity Zones, the Wildland-Urban Interface, and Alquist-Priolo Fault Zones. If below-market-rate housing must be constructed within these zones, require it to be hardened or make use of nature-based solutions to ensure it remains habitable to the greatest extent possible.*

HS-P4.3



Prioritize efforts to protect Impacted Communities and other vulnerable populations from the impacts of climate change, including through improving community capacity and meaningfully involving community members in decision making.

TABLE HS-1 CLIMATE CHANGE HAZARDS OF CONCERN IN CONTRA COSTA COUNTY

Hazard	Climate Change-Induced Impacts
Agricultural Pests and Diseases	Disease-carrying pests are most active during warmer months, so the threat of infection or infestation rises with temperatures, thereby harming crops and rangelands.
Air Quality	Higher temperatures can increase surface ozone and particulate matter concentrations, which are associated with reduced lung function, pneumonia, asthma, cardiovascular diseases, and premature death. In addition, smoke from wildfires can increase air pollution levels, which can exacerbate many of the same health conditions as extreme heat.
Bay Shoreline Flooding	Rising sea levels mean that shoreline flooding from high tides and wave run-up can be more severe and frequent, damaging buildings, infrastructure, and important economic and environmental assets located in low-lying areas.
Drought	Changes in precipitation patterns are expected to cause more frequent and intense droughts statewide, reducing water supplies for homes, businesses, industrial centers, and agriculture.
Extreme Heat	The number of extreme heat days is expected to increase dramatically due to increases in annual average temperature, which can cause heat stress in humans, animals, and plants not adapted to these conditions. Power lines, roadways, and other infrastructure also may fail under higher temperatures.
Flooding	The frequency and intensity of floods is expected to increase with climate change, damaging buildings and infrastructure, and disrupting local economies and services. Floods can also exacerbate the growth of mold in indoor environments, threatening human health.
Fog	Tule fog (in East County) and coastal fog (in West County) are expected to decrease, which further increases temperatures and may have harmful effects on local ecosystems.
Human Health Hazards	Diseases carried by animals that are considered pests, such as mice and rats, mosquitos, and ticks are likely to increase, causing negative health outcomes for residents and visitors.
Landslides and Debris Flows	Landslides are expected to increase due to an increase in precipitation that can saturate the ground and wildfires that exacerbate slope instability.
Severe Storms	Severe storms, including heavy rainfall, high winds, and thunderstorms, may occur more often and become more intense than in the past.
Sea Level Rise	As temperatures rise, sea levels increase globally and locally as a result of melting ice and warmer waters. Higher sea levels threaten buildings and infrastructure that may be permanently inundated in the Bay shoreline and Delta areas. Without intervention, sea level rise could eventually necessitate movement and relocation of entire populations and communities.
Wildfire	Warmer temperatures, an increase in drought conditions, and greater prevalence of forestry pests and diseases are likely to create more ideal conditions for fires. Fire season is expected to occur at all times of the year, putting lives, buildings, and infrastructure at greater risk.

Source: Contra Costa County Vulnerability Assessment, 2020.

HS-P4.4



As climate conditions change, evaluate the feasibility of implementing adaptive land use strategies to help avoid repetitive threats to life and property.

Actions





Update the capital project planning and budgeting processes to account for anticipated effects of climate change hazards on County capital investments, including buildings and infrastructure, by integrating either the Contra Costa County Vulnerability Assessment or the best-available climate science data related to impacts, risks, sensitivities, adaptive capacities, and vulnerabilities.

See the Land Use Element for additional policies and actions related to development in hazard areas.

FLOOD HAZARDS AND SEA LEVEL RISE

Flood Hazards

Flooding occurs when the natural and built systems that normally contain water are overwhelmed or fail. Floods can be caused by heavy or prolonged rainfall, clogged drainage infrastructure, and in rare instances, a break in a dam, levee, water pipe, or water tank. The water can build up and wash into normally dry areas and cause significant harm to buildings, people, and habitats. Construction of impervious surfaces (e.g., buildings and pavement) and reclamation of Delta land dating back over a century has reduced natural stormwater absorption, increasing flooding potential.

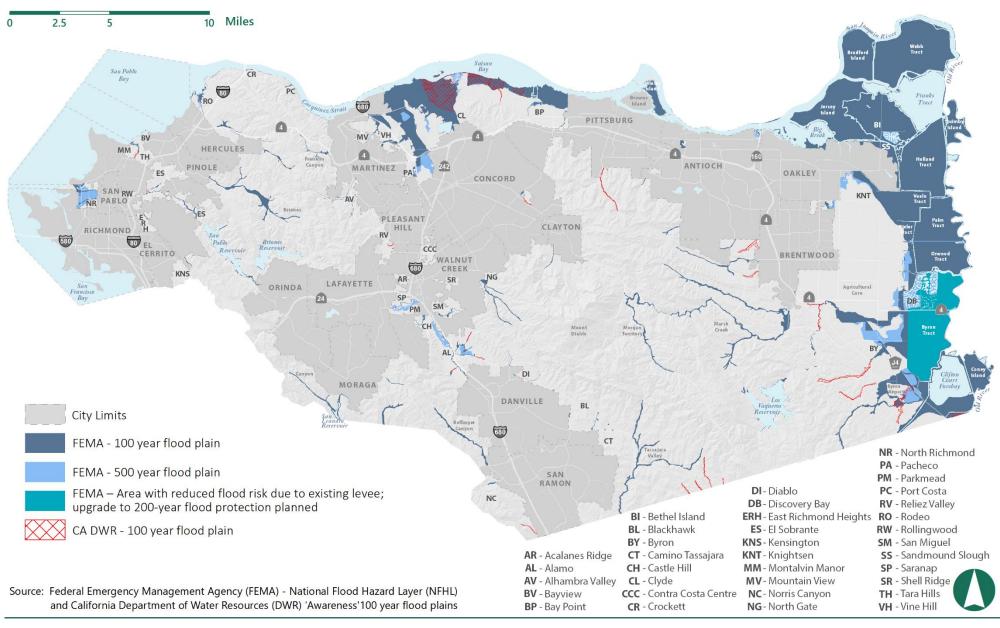
The Federal Emergency Management Agency (FEMA), California Department of Water Resources (DWR), and United States Army Corps of Engineers (USACE) map areas at risk of inundation from a 100-year flood, which has a 1 percent chance of occurring in any year, and a 500-year flood, where the risk of flooding is 0.2 percent annually, as shown in Figure HS-2. These areas are primarily located in northern and eastern Contra Costa County and along creeks throughout the county. They are mostly along what FEMA designates as a "regulatory floodway," which refers to the channel of a watercourse.

Climate change will likely enlarge the area of the county that is at risk of flooding. Further changes to these flood zones are likely as land use patterns shift and improvements are made to flood-control systems and channels. In Figure HS-3, these flood hazard zones are overlaid with existing development to illustrate how existing land uses are at risk of flooding.

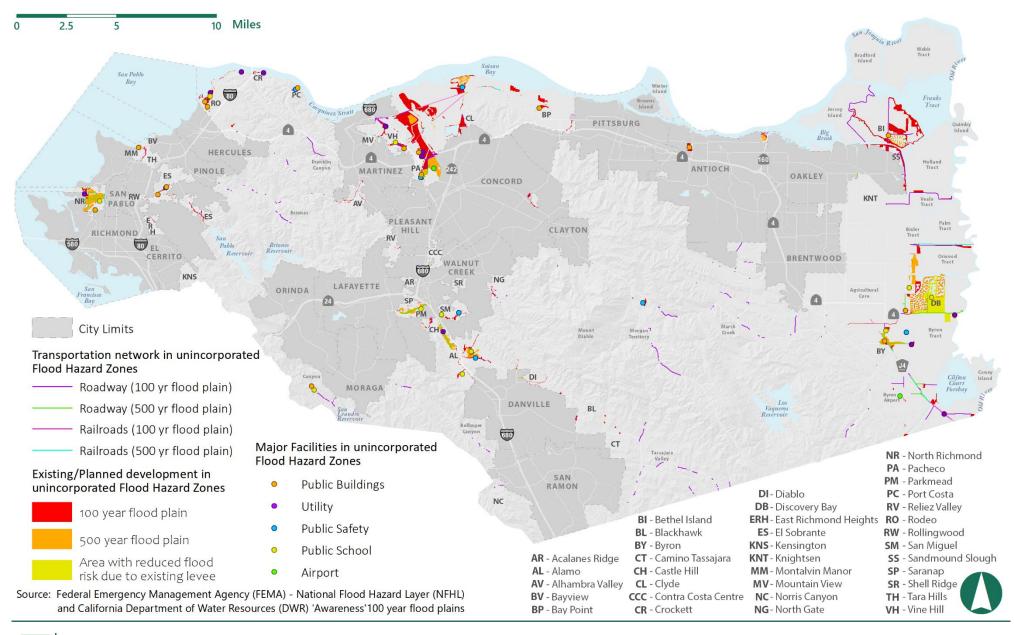
As discussed in the Public Facilities and Services Element, DWR implements the Central Valley Flood Protection Plan (CVFPP), which calls for local agencies to protect urban communities (defined as communities with at least 10,000 residents) in the Central Valley from a 200-year flood (i.e., a flood that has a 0.5-percent probability of occurring in any year). Discovery Bay is the only unincorporated community meeting the CVFPP threshold for 200-year flood protection. There are no mapped 200-year flood zones in unincorporated Contra Costa County, but the 500-year flood zone can be used as a proxy in low-lying portions of East County (i.e., areas mainly at risk of flooding from the Delta). DWR has developed Urban Levee Design Criteria to measure the level of flood protection in urban and urbanizing areas that is necessary to withstand a 200-year flood, as required by the CVFPP. Figure HS-2 displays areas with reduced flood risk because of levees.

As also discussed in the Public Facilities and Services Element, levees exist across the county, with many protecting agricultural and rural areas of East County. There are over 1,100 miles of earthen levees and revetments managed by the Contra Costa County Flood Control and Water Conservation

FIGURE HS-2 FLOOD HAZARD ZONES



EXISTING DEVELOPMENT IN FLOOD ZONES FIGURE HS-3



District and 13 reclamation districts in the county. Rudimentary levees along local creeks and streams, in many cases constructed by adjacent landowners, also protect small areas.



Wetlands absorb excess water and reduce flood risk. (Community-submitted photo)

Earthquakes or overtopping due to major storms can cause levees to fail. The county has historically faced flooding due to heavy precipitation events and levee failures. In 1973, 1980, 1982, 1983, 1986, 2004, and 2009, one or more Delta levees were breached or failed. Some islands in the Delta have been flooded two or three times since 1980, which will likely occur more frequently with stronger storm systems and higher tide levels.

Flooding can also be induced by dam failure, which is caused by structural failure or deficiency associated with intense rainfall, prolonged flooding, earthquakes, landslides, or equipment malfunction. There are over 20 dams of significant concern in Contra Costa County and another six dams outside the county that have inundation areas extending into the county. Figure HS-4 displays areas at risk of flooding because of a dam failure.

Although dam failures are very rare, they aren't unprecedented. Complete failure of the St. Francis Dam in 1928 killed over 400 people and destroyed several communities in Los Angeles and Ventura Counties. In 2017, over 180,000 people in several Northern California counties were evacuated when heavy rainfall caused partial failure of Oroville Dam's main spillway. Each dam is required to have a comprehensive emergency action plan approved by the Federal Energy Regulatory Commission, and USACE and the California Division of Safety of Dams conduct inspections of all dams.

Tsunamis, massive waves caused by offshore earthquakes, can severely damage property, take lives, disrupt emergency services, and obstruct roads through intense flooding. Figure HS-5 illustrates the areas that may be subject to tsunami inundation in Contra Costa County, which include shoreline areas along San Francisco Bay, San Pablo Bay, and a portion of the Carquinez Strait. Earthquakes with magnitudes below 6.5 are very unlikely to trigger tsunami, so it is a particularly rare phenomenon. The narrow opening of the Golden Gate Strait also protects much of the inner Bay Area shoreline from severe tsunami impacts. Nonetheless, the County considers susceptibility to tsunami when reviewing development proposals.

A seiche is a wave that can occur in an enclosed or partially enclosed body of water, such as a reservoir, bay, or harbor. Seiches can be caused by a variety of factors, including changes in atmospheric pressure, wind, and seismic or geologic activity. When a seiche occurs, it can cause water levels to rise and fall rapidly, which poses a risk to boats, docks, and other structures in the affected area. Seiches can generate waves that can inundate areas around the affected water body, similar to a tsunami. Additionally, seiches occurring in a reservoir can cause overtopping of a dam and result in regional flooding. While seiches are a risk associated with earthquakes and tsunamis, it is unlikely that one would occur in the San Pablo or San Francisco Bays or in the reservoirs in Contra Costa County.

FIGURE HS-4 **DAM INUNDATION AREAS**

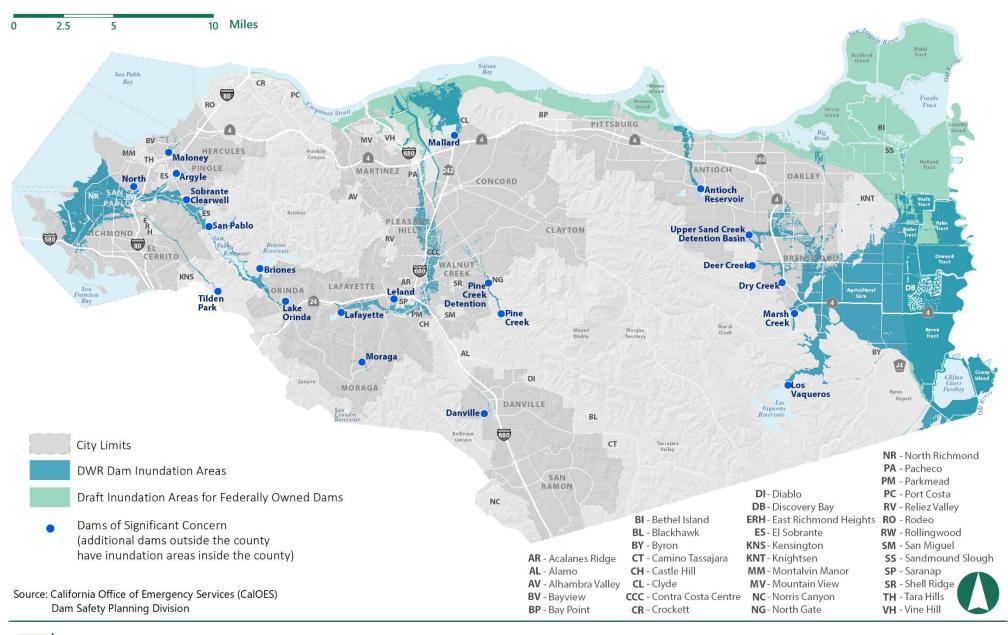
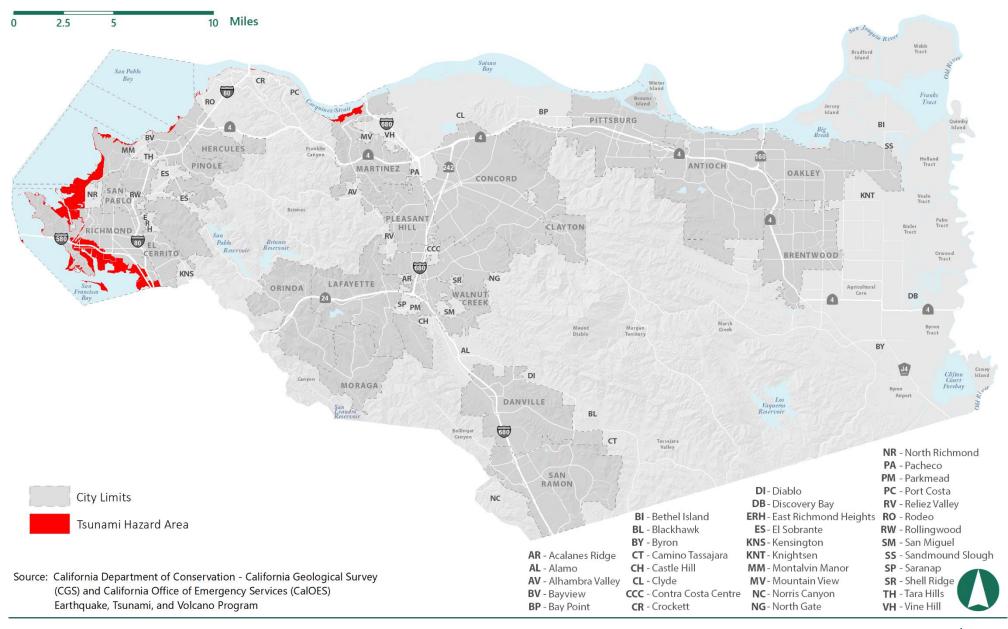


FIGURE HS-5 **TSUNAMI HAZARD AREAS**



Goal HS-5

Minimized risk of loss of life, injury, damage to property, and economic or social dislocations resulting from flood hazards.

Policies

HS-P5.1

Prohibit urban development in areas designated 100- or 200year (or 500-year when used as a proxy for the 200-year) floodplain, as shown on Figure HS-2, or in areas subject to increased flood hazards due to subsidence or other changes, unless appropriate mitigations to reduce flood risk to the standards of the Flood Disaster Protection Act of 1973 or above are implemented.*

HS-P5.2

Require flood-proofing of new and expanded buildings and structures in any area subject to flooding. Flood-proofing methods will be determined on a project-by-project basis by the Floodplain Manager, and may include, but not be limited to:

- (a) Anchoring to prevent flotation, collapse, or lateral movement.
- Using flood-resistant construction materials.
- Elevating building pads and habitable building floors above the base flood elevation plus required freeboard.

- (d) Providing adequate venting to allow for equalization of hydrostatic forces.
- Employing any other construction methods and practices appropriate to minimize flood damage.*

HS-P5.3

For any development project in a FEMA- or DWR-designated floodplain, require review by the Floodplain Manager to consider potential downstream flood damage that may result from the project.*

HS-P5.4

Evaluate development within the Sacramento-San Joaquin Valley for consistency with DWR's Urban Level of Flood Protection Criteria. Prohibit new single-family residences, density increases, subdivision maps, or development agreements for any property within a 200-year floodplain in an urban or urbanizing area, unless an adequate finding can be made pursuant to California Water Code Sections 9600 to 9603.

HS-P5.5

Prohibit permanent buildings and structures in designated floodways where such impediments could increase risks to human life or restrict the floodway's carrying capacity.

HS-P5.6



Prohibit construction of critical infrastructure in areas subject to flooding or sea level rise unless no feasible alternative exists.

HS-P5.7

Require new subdivisions within the inundation area of a levee or dam, as shown in Figure HS-4, to include a deed notification explaining to future owners that the property may be subject to flooding if the levee or dam were to fail or be overwhelmed.

HS-P5.8

Require new development in designated tsunami hazard zones to be designed to withstand anticipated tsunami forces, based on County-prepared studies conducted pursuant to Action HS-A5.4.

Actions

HS-A5.1

Review flooding policies and maps in this General Plan on an annual basis and incorporate best-available information regarding 100-, 200-, and 500-year floodplains and projected sea level rise due to climate change.

HS-A5.2



Establish countywide protection priorities for vulnerable communities and their populations identified to be at high risk of displacement from future flooding and sea level rise in the Contra Costa County Vulnerability Assessment or the best-available climate science data and use regional funding mechanisms to plan and implement protection measures in these locations or for these populations.

HS-A5.3

Amend the Floodplain Management Ordinance to address hazardous material storage.

HS-A5.4

Conduct a study of existing development within designated tsunami hazard zones to determine evacuation and emergency response needs prior to and during a tsunami event.*

HS-A5.5

Pursue a TsunamiReady designation and certification as a TsunamiReady Tier Two community.

See the Public Facilities and Services Element for policies and actions related to flood hazards and sea level rise; the Conservation, Open Space, and Working Lands Element for policies and actions related to floodplain management; the Land Use Element for additional policies and actions related to development in hazard areas; and the Sea Level Rise section of this Element for policies and actions related to adaptive management of rising tides.

Sea Level Rise

As global temperatures rise, glaciers and other land ice near the north and south poles melt, gradually raising sea levels. Higher temperatures also cause water to expand in oceans, further contributing to sea level rise. Along the Contra Costa County shoreline, sea levels are projected to rise up to about 2 feet (24 inches) by 2050 and 7 feet (84 inches) by 2100. However, it is possible that sea levels could rise faster than these projections, which has happened historically. Figures HS-6 and HS-8 display the expected depth of water that would inundate dry land in Contra Costa County in 2050 and 2100 based on the Bay Shoreline and East Contra Costa Shoreline models from the San Francisco Bay Conservation and Development Commission's (BCDC) Adapting to Rising Tides Program. Land that is below sea level could be inundated by water deeper than the sea level rise (e.g., 2 feet of sea level rise could expose land 2 feet below sea level to 4 feet of water). Rising sea levels

FIGURE HS-6 2050 SEA LEVEL RISE PROJECTION

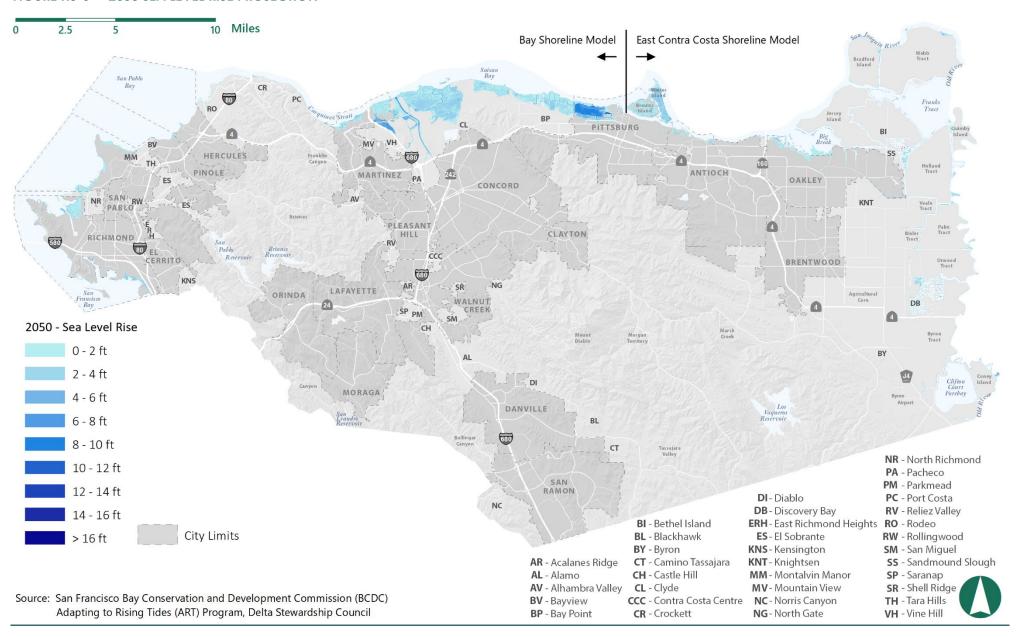


FIGURE HS-7 2050 SEA LEVEL RISE PROJECTION WITH BAYSHORE/DELTA FLOODING

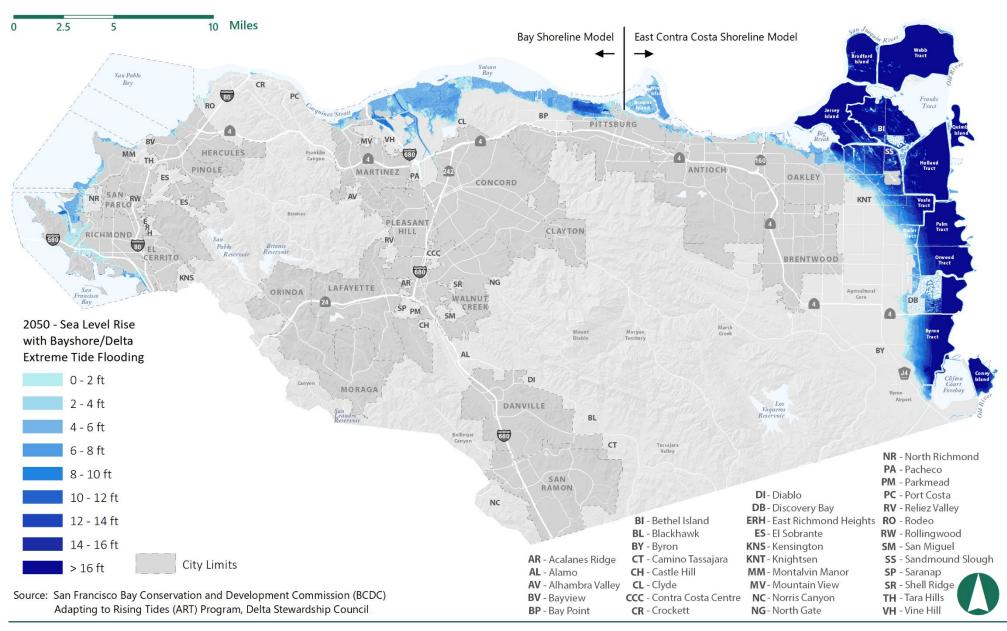
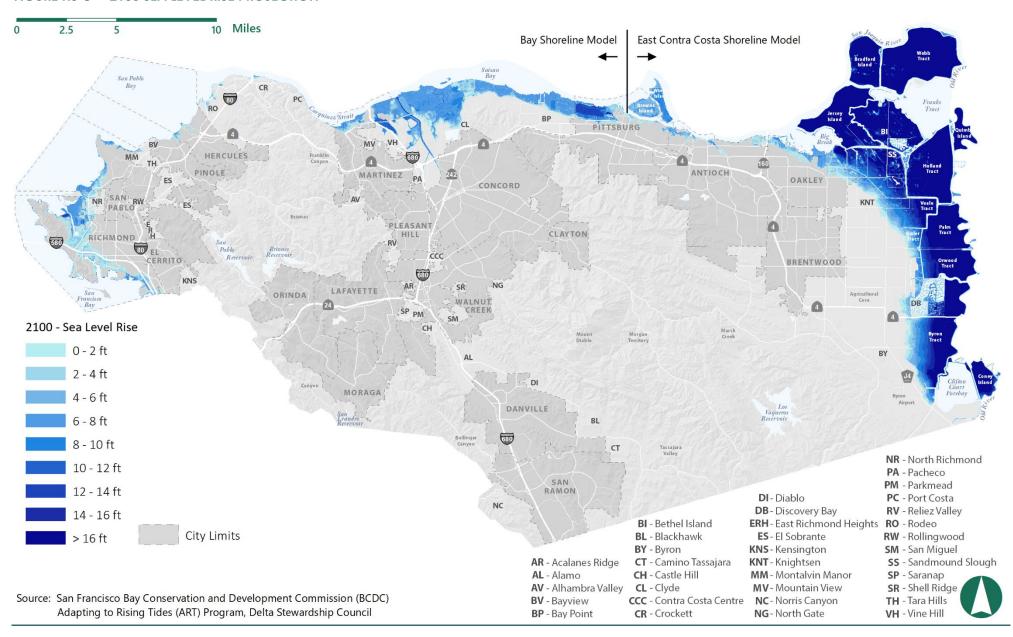


FIGURE HS-8 2100 SEA LEVEL RISE PROJECTION



can cause the shoreline to flood more frequently and severely during storms or king tide events. For example, a storm that has a one in five chance of occurring in a given year (known as a five-year storm) can create a temporary increase in sea levels of approximately 2 feet. Because sea level rise will cause ocean levels to be higher during normal conditions, shoreline floods will reach further onto land. Sea level rise projections in 2050 and 2100 with shoreline flooding are shown on Figures HS-7 and HS-9.

Rising seas increase the risk of flooding, storm surge inundation, erosion and shoreline retreat, and wetland loss. Rising sea levels also threaten a significant portion of prime agricultural land in the county, as low-lying areas could be subject to more frequent shoreline flooding and saltwater intrusion into groundwater basins could disrupt agricultural water supplies. Meanwhile, rising tides may increase groundwater levels, inundating contaminated soil and pushing toxins toward the surface. Given that some contaminated sites in Contra Costa County sit near the shoreline, rising groundwater may cause contaminated soils to leach into previously unaffected areas. Natural ecosystems in the Bay and Delta regions will be disrupted by the higher tide levels and intrusion of saltwater into freshwater systems. Historically, marshes have adapted to changes in sea level by building up sediment, increasing the height of the marsh to keep pace with the tide levels of San Francisco Bay, and by moving inland. However, sea level rise is expected to outpace the rate of marsh-level rise and development near wetlands will likely prevent marsh migration. Without substantial intervention, most tidal marshes in Contra Costa County are expected to convert to another habitat type, a process called "downshifting," which will lead to the establishment of different plant and animal species. Some wetlands may be altered while others are lost. The use of naturebased solutions, which combine natural buffers like wetlands or bluffs with traditional infrastructure to mitigate flooding risks, could be an opportunity to preserve existing ecological communities and protect natural habitats.

The goals, policies, and actions in this section focus on planning for a medium- to high-risk aversion (1-in-200 chance) scenario in 2100, which projects 84 inches of sea level rise by 2100 under State guidance prepared in 2018. This scenario uses a higher level of caution, which helps in planning for more vulnerable developments or populations that will have a harder time adapting to sea level rise and will experience more severe consequences from underestimating it.

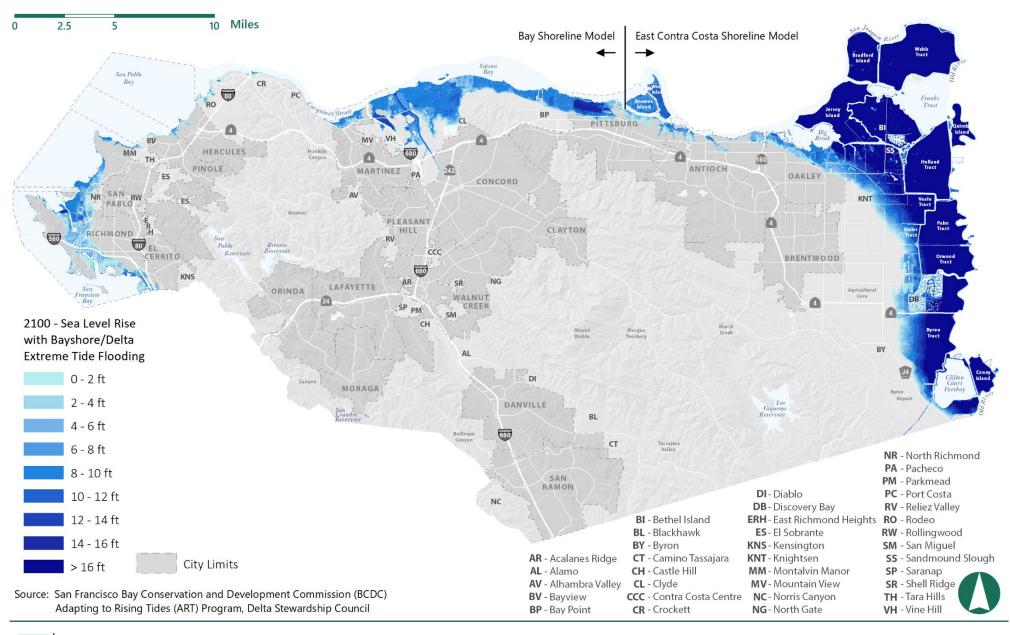


Sea level rise resulting from climate change will inundate marinas over the next century.

Goal HS-6

Resilient and thriving Bayshore and Delta communities that are safeguarded and adaptively managed for rising sea levels.

FIGURE HS-9 2100 SEA LEVEL RISE PROJECTION WITH BAYSHORE/DELTA FLOODING



Policies

HS-P6.1



Require new development to locate habitable areas of buildings above the highest water level expected, based on Figures HS-6 through HS-9, accounting for sea level rise and other changes in flood conditions, or construct natural and nature-based features, or a levee if necessary, adequately designed to protect the project for its expected life.*

HS-P6.2



Support tidal wetland restoration projects in a manner consistent with community needs of flood-risk reduction, habitat and biodiversity conservation, and water quality protection.

HS-P6.3



Work with transportation agencies and infrastructure owners, such as railroads, to increase the resilience of transportation networks against sea level rise and increases in flooding intensity, including emergent groundwater flooding.

HS-P6.4

Work with property owners in areas prone to emergent groundwater flooding to pre-emptively harden properties using methods that minimize erosion, subsidence, and structural damage from rising waters.*

Actions

HS-A6.1

Amend the Floodplain Management Ordinance to apply to areas subject to sea level rise under at least a medium-high risk aversion scenario by 2100, in accordance with State and regional guidance.*

HS-A6.2



Adopt a Sea Level Rise Overlay Zone with associated land use regulations for site planning and minimum construction elevations that reflects sea level rise data under at least a medium-high risk aversion scenario by 2100. Refer to BCDC policy guidance when developing this overlay zone.

HS-A6.3





Coordinate with BCDC, Delta Stewardship Council, Caltrans, cities, and other affected agencies, organizations, and stakeholders to prepare and adopt a community-driven countywide sea level rise adaptation and resilience plan addressing increased flooding and sea level rise that provides unique adaptation options for the entire county shoreline and identifies funding mechanisms for implementation. Use Figures HS-6 through HS-9 or the bestavailable climate science data to identify where sea level rise hazards are likely to occur and lead efforts to:

- (a) Maximize awareness and disclosure to property owners and the public.
- (b) Assess and address impacts to future development, including promoting the Adaptation Pathways model to respond to uncertainty and evolving conditions.

- Plan for resiliency projects and adaptation measures to protect existing development and infrastructure. emphasizing nature-based solutions.
- Partner with the Adapting to Rising Tides Program, property owners, and community-based organizations to conduct a study of opportunities and costs for shifting development away from areas at risk from inundation.
- Inform governance, funding, and financing decisions about short-term and long-term resiliency and adaptation projects.
- Ensure that the disproportionate impacts on vulnerable populations and Impacted Communities are addressed.

HS-A6.4



Partner with cities and CCTA to develop and fund a countywide plan to increase the resiliency of roads that will be impacted by sea level rise and tsunamis to ensure emergency responders can get to those in need and that community members, including those that rely on public transit, can continue to reach services.

HS-A6.5

Work with State and regional agencies to conduct improved modeling of the areas at risk from emergent groundwater flooding to better understand the threat this hazard poses to Contra Costa County.

HS-A6.6

Incorporate Figures HS-6 through HS-9 into the County's geographic information system for use as a publicly accessible tool for tracking flooding and sea level rise.

WILDFIRE HAZARDS

Wildfires are a regular feature of the landscape in much of California and can be sparked by lightning, malfunctioning equipment, carelessness, and other causes. In addition to direct fire impacts on people and property, wildfires remove stabilizing vegetation from hillsides, increasing the likelihood of future landslides and erosion. When wildfires burn at very high temperatures, soils can become hydrophobic, preventing the ground from absorbing stormwater and causing flooding downslope. Wildfire smoke is also harmful and can impact people hundreds of miles from the fire itself. Particulate matter from smoke can cause respiratory illnesses, especially for those who spend substantial time outdoors during smoky conditions or whose homes are poorly sealed and allow smoke to penetrate.

The California Department of Forestry and Fire Protection (CAL FIRE) designates lands into responsibility areas based on who is financially responsible for fire protection services. Local Responsibility Areas (LRAs) include areas where local fire protection districts and fire departments are charged with fire protection. State Responsibility Areas (SRAs) include unincorporated areas and State lands where the State/CAL FIRE has financial responsibility for fire protection. CAL FIRE can also provide fire protection services by contract to cities and counties. Six fire protection districts and three city fire departments provide fire prevention and protection services that adequately cover the entire county except for Jersey Island, Bradford Island, Quimby Island, Webb Tract, and the Marathon Refinery near Martinez. The Contra Costa County Fire Protection District covers 553 square miles and is by far the largest local fire protection agency serving the county (see Figure PFS-5 in the Public Facilities and Services Element for a map of fire district service areas). All fire protection agencies within the county have signed mutual-aid agreements to provide assistance to neighboring agencies.

Within the responsibility areas, CAL FIRE designates Fire Hazard Severity Zones. CAL FIRE designates lands within SRAs as Moderate, High, and Very High Fire Hazard Severity Zones; in LRAs, at the time the General Plan was adopted, CAL FIRE only designates land within Very High Fire Hazard Severity Zones (with city and county approvals). CAL FIRE is expected to designate Moderate and High Fire Hazard Severity Zones in the LRAs in future updates to the Fire Hazard Severity Zone Maps. As shown in Figure HS-10, Very High Fire Hazard Severity Zones are mainly in the interior of Contra Costa County, in areas with dense forest, brush, or grassland vegetation and steep terrain that is difficult to access. Wildfires may start in natural areas but can easily spread to developed areas bordering wildlands; this area is called the Wildland-Urban Interface (WUI) and is mapped in Figure HS-11.

All Very High Fire Hazard Severity Zones in Contra Costa County are within the service area of a fire protection district. Information about the fire districts' capacities is provided in Appendix B. Fire districts serving rugged, hard to reach areas are usually equipped with tank trucks because such areas typically lack public water infrastructure. Properties designated for residential use in areas without public water service are required to maintain sufficient on-site water storage and new development must show that it has sufficient water pressure for firefighting purposes.

Within the SRAs and Very High Fire Hazard Severity Zones, there are existing homes, businesses, and public land uses, as well as associated infrastructure like major roadways (e.g., SR 24 and SR 4), electrical transmission lines, water and wastewater distribution systems, and communication facilities. Most of this development occurred prior to recent wildfire hazard mapping. The policies and actions in this section limit future residential development in High and Very High Fire Hazard Severity Zones and aim to protect existing buildings and infrastructure. Meanwhile, State law requires that homeowners in the WUI create and maintain defensible space around

homes and other structures, keep roofs clear of flammable material, and use spark arresters on chimneys.



Wildfires pose risks to residents and their homes and produce smoke that can impact the region. (Credit: University of California)

From 2010 to 2022, there were 24 wildfires in Contra Costa County, most burning over 100 acres each. Some burned considerably more acreage, most notably the 2020 Santa Clara Unit Complex Fire, which burned 396,824 acres in total (3,305 acres in Contra Costa County). Figure HS-12 shows the perimeters of wildfires from 1950 to 2022. Areas that have previously burned, regardless of their location within or outside of a Fire Hazard Severity Zone, are likely to burn again. Because of climate change, fire activity is projected to increase where development expands in the WUI, in addition to the dry hills around Mount Diablo.

FIGURE HS-10 FIRE HAZARD SEVERITY ZONES

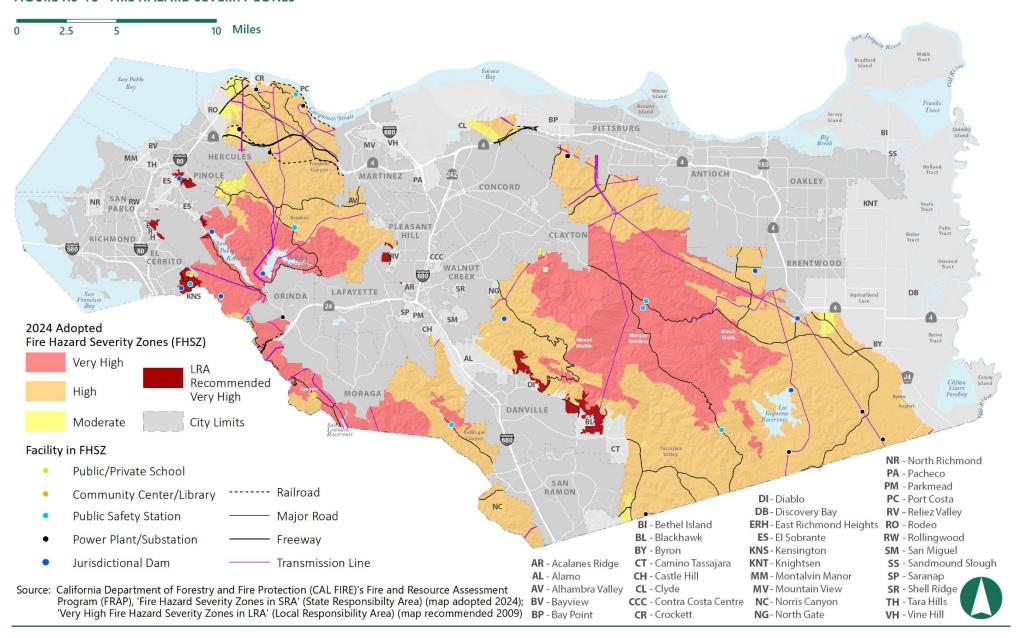


FIGURE HS-11 WILDLAND-URBAN INTERFACE DEVELOPMENT PATTERNS

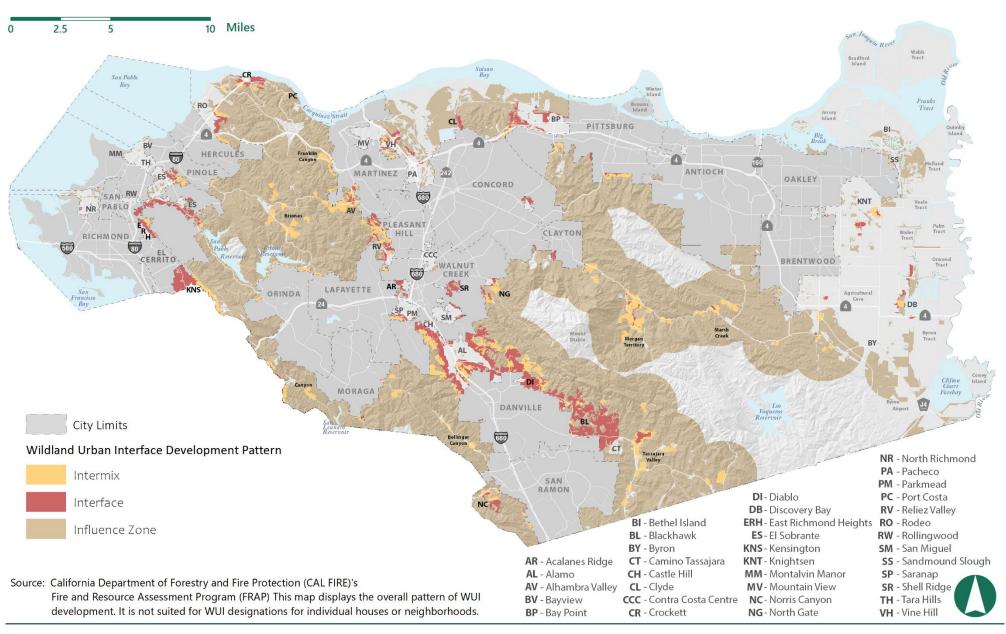
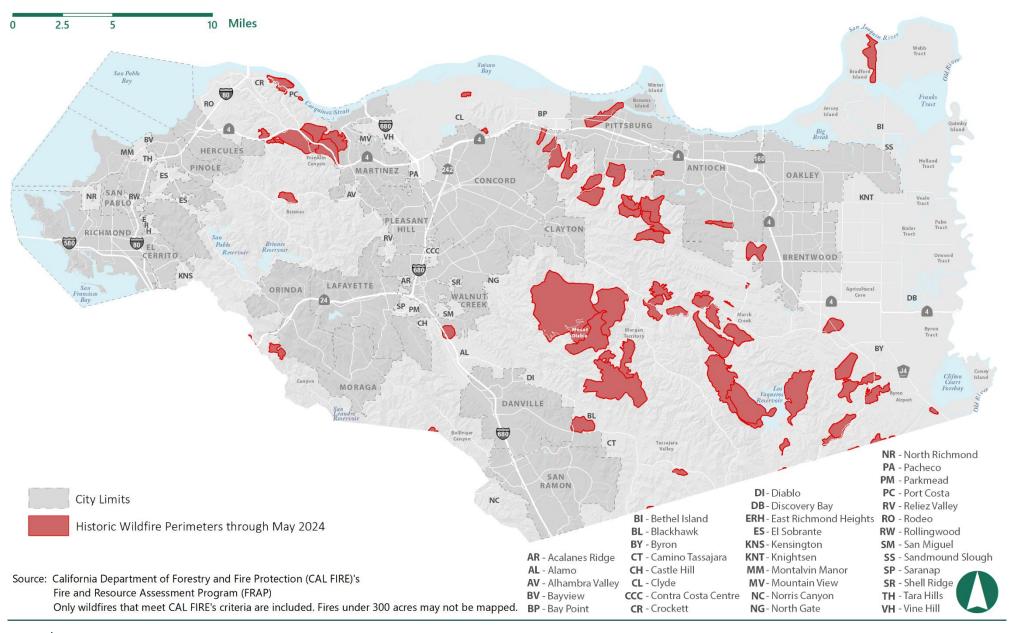


FIGURE HS-12 HISTORIC WILDFIRE PERIMETERS



Goal HS-7

Minimized injury, loss of life, and damage to property from wildfire hazards.

Policies

HS-P7.1

Deny entitlements for projects creating additional residential units (i.e., units not allowed by-right) in Very High Fire Hazard Severity Zones in the LRA or SRA. Discourage such projects in High Fire Hazard Severity Zones in the SRA and discourage them in the LRA unless adequate fire protection services are provided.*

HS-P7.2

Require any construction of buildings or infrastructure within a High or Very High Fire Hazard Severity Zone in the LRA or SRA, as shown on Figure HS-10, or in areas that may be designated as the WUI to incorporate fire-safe design features that meet the State Fire Safe Regulations and Fire Hazard Reduction Around Buildings and Structures Regulation for road ingress and egress, fire equipment access, and adequate water supply.*

HS-P7.3

Require new development within a Very High Fire Hazard Severity Zone in the LRA or SRA (as shown on Figure HS-10) or in areas that may be designated as the WUI, and on a residential parcel with evacuation constraints (as shown on Figure HS-21), to prepare a traffic control plan to ensure that construction equipment or activities do not block roadways

or interfere with evacuation plans during the construction period. Work with the appropriate fire protection district to review and approve the traffic control plan prior to issuance of building permits.*

HS-P7.4

Require subdivisions in the High Fire Hazard Severity Zone in the LRA or SRA and projects requiring a land use permit in the High or Very High Fire Hazard Severity Zone in the LRA or SRA, as shown in Figure HS-10, to complete a site-specific fire protection plan. Work with the appropriate fire protection district to review and revise the fire protection plans. The fire protection plan shall include measures for fire-resistant construction materials and modifying fuel loading, as well as a plan to maintain that protection over time. The fire protection plan shall include:

- A risk analysis
- Fire response capabilities
- Defensible space requirements
- Fire safety requirements for infrastructure
- Building ignition resistance
- Mitigation measures and design for non-conforming fuel modification
- Wildfire education
- Maintenance and limitations
- A plan for emergency preparedness, response, and evacuation*

HS-P7.5

Work with property owners in High or Very High Fire Hazard Severity Zones in the LRA or SRA, or in areas that may be designated as the WUI, to establish and maintain fire breaks and defensible space, vegetation clearance, emergency access roads, water supply and fire flow, signage, and firefighting infrastructure that meet adopted State, County, or community fire safety standards.

HS-P7.6

Coordinate with Caltrans and other agencies, local fire safe councils, and community organizations to ensure long-term maintenance of fire hazard reduction projects, including community fire breaks and public and private road clearance.

HS-P7.7

Promote installation of smoke detectors at the time of sale or lease agreement, and maintenance of smoke detectors in existing residences and commercial facilities that were constructed prior to the requirement for their installation.

HS-P7.8

Work with water service providers and fire protection districts to safeguard the long-term integrity of water supplies to meet firefighting needs and ensure that new and existing developments in high fire risk areas have suitable water delivery infrastructure.

HS-P7.9

Construct critical facilities, such as Office of Emergency Services facilities and other uses on the County's designated critical facilities list, with fire-resistant materials, defensible space, and fire-resistant landscaping that allows them to maintain structural integrity and ensure functional operation

to the greatest extent feasible. Avoid locating these facilities in high fire risk greas to the extent possible.*

HS-P7.10

Coordinate with energy service providers to underground power lines, especially in the WUI and High and Very High Fire Hazard Severity Zones.

HS-P7.11

Work with energy service providers to ensure an adequate power supply to vulnerable populations during planned power shutoffs.

HS-P7.12

Facilitate post-fire recovery by supporting efforts to stabilize slopes, control erosion, and replant with native species.

HS-P7.13

Support State legislative efforts to reduce fire insurance costs and address resident concerns about rising liabilities and risk of dropped policies.

Actions

HS-A7.1

Work with local fire safe councils, CAL FIRE Santa Clara Unit. and other fire protection agencies to update and implement the Community Wildfire Protection Plan for Contra Costa County.*

HS-A7.2



Support local fire protection agencies with efforts to seek funding for development and implementation of a continuous vegetation management program in fire hazard severity zones and WUI areas.

HS-A7.3

Update countywide fire hazard severity zone and WUI mapping as new data becomes available from the California Board of Forestry and Fire Protection.

HS-A7.4

Upon future updates to LRA mapping, as promulgated by CAL FIRE, identify and as necessary adopt a WUI zone.

HS-A7.5



Following a large fire, evaluate the feasibility and resilience of redevelopment, and consider changes to building or development standards to improve resilience.

HS-A7.6

Collaborate with local and regional fire safe councils, CAL FIRE Santa Clara Unit, and other fire protection agencies to develop a fire safe education program to provide information about State fuel modification, defensible space, access, water, signage, and other fire safe regulations.*

HS-A7.7



Pursue grants and other funding mechanisms to retrofit ventilation systems at County buildings to provide refuge for residents during periods of unhealthy air quality caused by excessive wildfire smoke.

See the Public Facilities and Services Element for policies and actions related to fire and emergency services and the Land Use Element for additional policies and actions related to development in hazard areas.

EXTREME HEAT

Extreme heat occurs when temperatures rise significantly above normal levels; it is defined as a daytime temperature that exceeds the 90th percentile of the historic average temperature for that date. Extreme heat is a relative term, and different temperatures in different parts of Contra Costa County qualify as extreme heat events because people and buildings accustomed to cooler average temperatures may be less prepared for extreme heat events. For example, an extreme heat day in Rodeo is when temperatures reach 93 degrees Fahrenheit (°F), while in Alamo it is 97°F, and in Knightsen it is 102°F.

Extreme heat can cause various heat-related illnesses, such as heat cramps, heat exhaustion, and heat stroke. Seniors (particularly those living alone), small children, outdoor workers, people with chronic illnesses, unsheltered persons, persons living in multiple-family housing without air conditioning, and those on certain medications are particularly susceptible to heat illnesses. Nursing homes and elder-care facilities are especially vulnerable to extreme heat events if power outages occur and air conditioning or electricity-powered medical devices are not available. In addition, when extreme heat days occur while the air is smokey from wildfires, residents may have to choose between opening windows to cool their homes, letting

in smoke, or keeping windows closed, causing dangerous indoor air temperatures.

Extreme heat has various other impacts. Some types of infrastructure, including power lines, communications equipment, railways, and roadways, are more prone to failure when temperatures are high. An example occurred in Contra Costa County in June 2022, when extreme heat buckled BART tracks causing a derailment. Very high temperatures increase demand for electricity, which can lead to outages and associated health and economic impacts. Extreme heat can also increase the risk of wildfires by drying out plants, exacerbating drought conditions, and harming wildlife that is not adapted to these conditions.



Extreme heat can exacerbate drought conditions. (Credit: National Park Service)

Historically, Contra Costa County has experienced an average of four extreme heat days a year. Figure HS-13 displays the projected average annual temperatures for 2070 through 2099. By the end of the century, the county is projected to experience an annual average of 18 to 30 extreme heat days per year.

Goal HS-8

Communities that can continue to function and thrive with an increase in average temperatures and extreme heat days.

Policies

HS-P8.1



Coordinate with public agencies, utilities, and communitybased organizations to provide community resilience centers in all regions of the county during extreme heat events, severe weather events, and other highly hazardous conditions. Work to ensure that these facilities are in highly accessible areas and that information about their availability is widely distributed, especially to vulnerable populations.

HS-P8.2



Work with energy service providers to promote programs encouraging reduced energy use during extreme heat events.

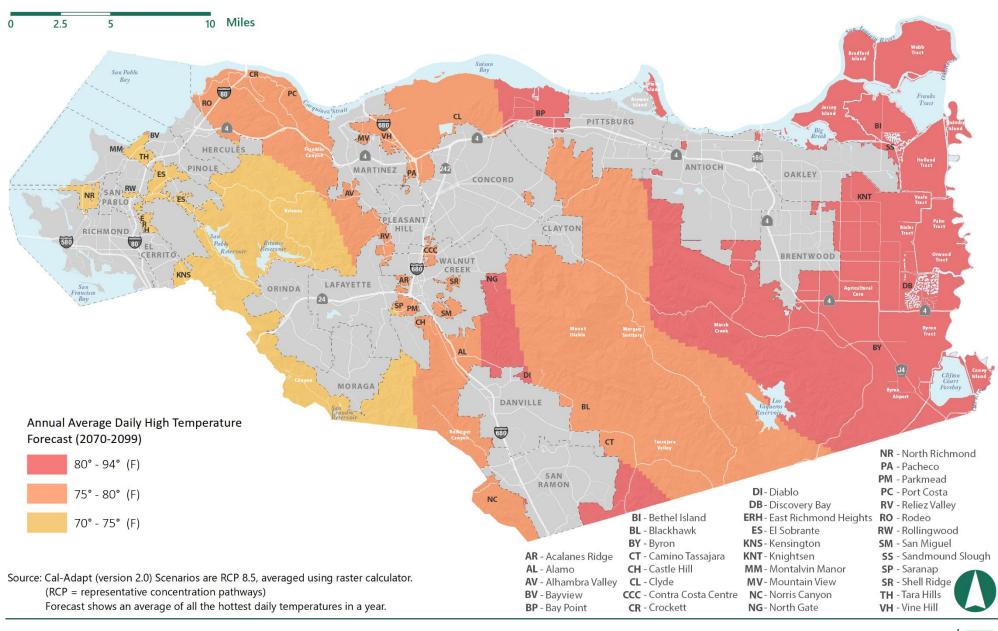
HS-P8.3





Require new commercial parking lots with 50 or more spaces to mitigate heat gain through installation of shade trees, solar arrays, or other emerging cooling technologies. Prioritize the use of solar arrays where feasible and appropriate.

FIGURE HS-13 TEMPERATURE FORECAST







Support efforts by East Bay Regional Park District and other local recreation agencies to provide outdoor recreation facilities with adequate shading and refillable water stations where appropriate.

HS-P8.5



Provide shade trees or shade structures at parks, plazas, and other outdoor spaces.

Actions

HS-A8.1





Amend County Ordinance Code Chapter 82-16 – Off-Street Parking to achieve consistency with Policy HS-P8.3.

See the Air Quality section of this Element and the Conservation, Open Space, and Working Lands Element for additional policies and actions related to tree preservation, planting, and air quality.

MANAGEMENT OF HAZARDOUS MATERIALS AND HAZARDOUS WASTE

Heavy industrial uses play a large role in the history of Contra Costa County, particularly along its west and north coasts, where historic and ongoing activities handle, store, and transport vast amounts of hazardous materials and hazardous waste. Land uses involving hazardous materials include Military Ocean Terminal Concord (MOTCO), petroleum and chemical processing plants, oil and gas wells, power plants, ammonia refrigeration facilities, and petroleum product and natural gas storage and pipelines.

Potential hazards include release of flammable materials that could cause an explosion or fire along with smoke and combustion byproducts, and chemical releases with various levels of chemical toxicity. Notwithstanding industrial safety procedures, the presence of hazardous materials in large quantities, especially close to or upwind of populated areas, poses a constant safety hazard.

Hazardous materials and hazardous waste facilities are heavily regulated by the State and federal governments, including the California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB). Preventing environmental releases of hazardous materials depends primarily on compliance with industrial safety requirements and procedures regulated by the DTSC. The California Fire Code also minimizes public safety risks by requiring a buffer between hazardous materials use areas and residential populations.



Pipelines transport crude oil through Rodeo and other communities.

Contra Costa Hazardous Materials Programs (CCHMP) is the Certified Unified Program Agency (CUPA) for all of Contra Costa County. As the CUPA, CCHMP administers the State's hazardous materials regulatory programs through routine inspections at sites that handle hazardous materials, as well as the County's Industrial Safety Ordinance and Unannounced Inspection, Green Business, and Pollution Prevention programs.

The County Office of Emergency Services (OES) is responsible for planning, outreach, and training related to disaster management and emergency preparedness. Hazardous materials releases are reported to OES to ensure a coordinated response by County emergency services, such as fire and medical units, and evacuation notification, if needed.

Sites that have been contaminated with hazardous materials or hazardous waste can be remediated to protect human health and the environment. Remediation typically occurs in three stages. In the first phase, the current or prospective property owner performs an environmental assessment in which they review records to determine if the potential exists for exposure to hazardous materials. If potential contamination is discovered, environmental samples are collected and a health risk assessment is prepared. If the assessment identifies significant contamination, DTSC implements Health and Safety Code requirements to perform necessary cleanup activities. DTSC or the SWRCB oversees the assessment and remediation process; the County has no role in cleanup and remediation of contaminated sites, although it is an issue of significant concern to county residents and is typically considered during development review processes.

Reducing community exposure to hazardous materials is crucial in Impacted Communities to address the health disparities caused by exposure to hazardous materials from historic and ongoing activities. As shown in Figures HS-14 through HS-16, there are higher concentrations of toxic releases, hazardous waste generators and facilities, and cleanup sites in and around Impacted Communities than many other parts of the county.

Goal HS-9

Communities that are protected from hazards associated with use, manufacture, transport, storage, treatment, and disposal of hazardous materials and hazardous waste, including from fossil fuels, chemical refining, and power plants, as well as pipelines, rail lines, and truck transportation.

Policies







Provide equitable inspection and enforcement of hazardous material and hazardous waste regulations throughout the county.

HS-P9.2

Ensure CCHMP staff have an opportunity to review and comment on all entitlement applications for projects involving use of hazardous materials or hazardous waste regardless of whether a land use permit is required pursuant to County Ordinance Code Chapter 84-63 - Land Use Permits for Development Projects Involving Hazardous Waste or Hazardous Material.

FIGURE HS-14 TOXIC RELEASES RANKINGS RELATIVE TO THE STATE

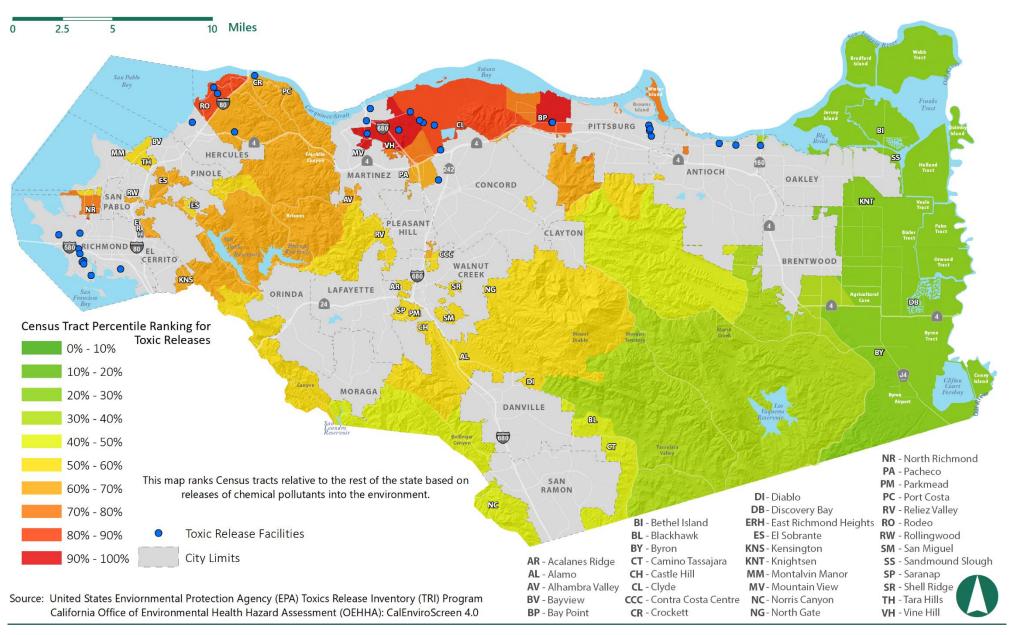


FIGURE HS-15 HAZARDOUS WASTE GENERATORS AND FACILITIES RANKINGS RELATIVE TO THE STATE

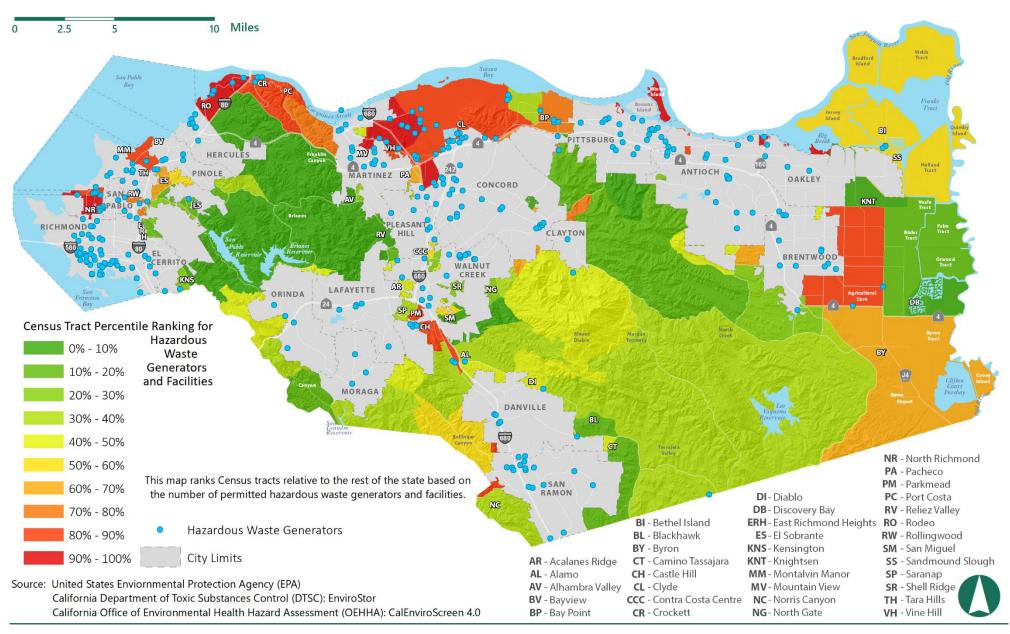
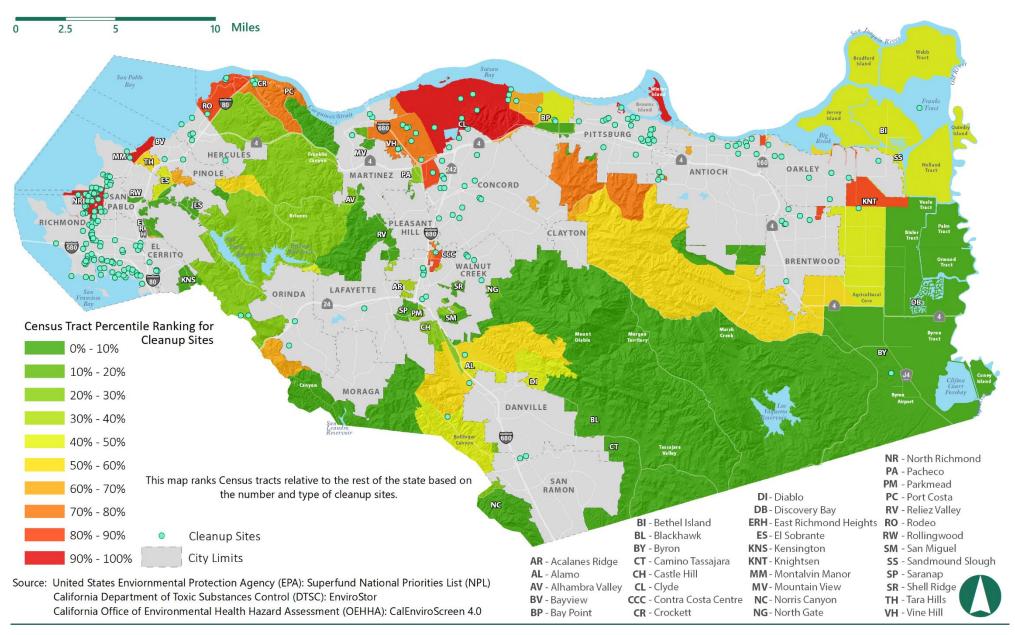


FIGURE HS-16 CLEAN-UP SITES RANKINGS RELATIVE TO THE STATE







Require new industrial development to reduce generation and disposal of hazardous materials to the maximum extent feasible by (listed in order of importance):

- Implementing operational source reduction strategies and replacing hazardous materials with less hazardous materials.
- Reducing generation of those wastes not amenable to source reduction or recycling.
- Recovering and recycling the remaining waste for reuse.
- Properly disposing of hazardous wastes and residuals generated from treatment of hazardous waste.*

HS-P9.4





Support development of alternative hazardous waste management technologies and methodologies that reduce the relative risk to human health and the environment.

HS-P9.5





Require industrial projects involving use, management, or generation of hazardous materials or waste, particularly those utilizing stationary or fixed storage tanks, in areas at risk from sea level rise, surface or emergent aroundwater flooding, or tsunami to incorporate best management practices to reduce risk and prepare plans for prevention and remediation of hazardous materials/waste releases resulting from inundation. Remediation plans must meet regulatory standards for protection of people and the environment in the event of permanent inundation and include financial assurances to guarantee implementation.*

HS-P9.6

Require transport of hazardous materials via the safest available method for each material, avoiding Impacted Communities, populated areas, and areas subject to natural hazards whenever possible.

HS-P9.7



Prioritize implementation of projects that reduce the risk of hazardous materials transportation accidents along hazardous material transportation corridors in Impacted Communities.

HS-P9.8





Require applicants for projects that involve hazardous materials or hazardous waste to provide clear information in plain language about potential hazards their projects pose to nearby communities at the beginning of the review process. Review and verify this information, make it available to residents, and encourage project applicants to host at least one community meeting to discuss potential hazards.

HS-P9.9





Deny entitlements for construction of new large-scale facilities that treat, store, or dispose of hazardous waste from off-site sources and negatively impact Impacted Communities.

HS-P9.10



Prohibit new hazardous waste facilities in the following areas:

(a) Watersheds of an existing or planned drinking water reservoir.

- Ecologically significant resource areas.
- Within 200 feet of an active or potentially active fault.
- Within a 100-year floodplain.
- Within a setback distance determined in accordance with DTSC guidance under SB 673, once final.*

HS-P9.11



Require design and operation of new or expanded hazardous waste facilities to adhere to the following criteria, as well as the permitting criteria established by the DTSC for vulnerable communities and cumulative impacts pursuant to SB 673, once final:

- (a) Minimize risk to the surrounding area in the case of a hazardous waste accident or spill.
- Ensure spills of waste will not reach the Bay, Delta, streams, creeks, reservoirs, or other bodies of water or environmentally sensitive resources by incorporating buffers as appropriate and/or using engineered structural design features (e.g., spill containment and monitoring devices).
- Avoid known or suspected groundwater recharge areas or areas where residential uses rely on wells. If located in such areas, facilities must provide properly engineered spill containment features, inspection measures, and other environmental protection controls.
- In areas with unstable soils, such as steep slopes and areas subject to liquefaction or subsidence, ensure structural stability through engineered design features.

- (e) Use access roads leading to major transportation routes that:
 - Do not traverse residential neighborhoods.
 - Minimize, buffer, or employ physical barriers to residential frontages.
 - Demonstrate road network safety through road design, construction, accident rates, and traffic flow.
- Minimize noise impacts on the surrounding area.*

HS-P9.12



Require hazardous waste facilities to prepare a cumulative risk assessment that analyzes, characterizes, and quantifies the combined risks to human health and the environment from the facility, in combination with other off-site hazardous materials risks. The assessment must consider risks in the absence of actions to control or mitigate a potential release and determine whether buffers or other mitigation is necessary to protect residential uses, immobile populations (e.g., schools, hospitals, behavioral health facilities, convalescent homes, and prisons), other places where people gather, environmentally sensitive resources, and other sensitive areas from adverse emissions or contamination. The assessment must also be guided by DTSC guidance for vulnerable communities and cumulative impacts pursuant to SB 673, once final. Require that project applicants fund the needed technical review for the assessment.*

HS-P9.13

Include a condition in entitlements for new and expanded hazardous waste facilities that requires periodic (i.e., every one to three years) permit review to ensure ongoing compliance with conditions of approval.

HS-P9.14







Encourage and facilitate establishment of adequate sites for collection of household hazardous waste (HHW), unused pharmaceuticals, and universal wastes, along with provisions for residents who are physically unable to deliver materials to a collection site.

Actions

HS-A9.1



Provide technical assistance to hazardous waste generators to encourage them to reduce their hazardous waste to the maximum extent feasible.

HS-A9.2



Update the Oil Spill Contingency Plan to protect the Bay and Delta shoreline areas in the event of an oil or other hazardous materials spill.

HS-A9.3





Provide information to county residents about less toxic alternatives to household products containing universal wastes and the safe handling, storage, and disposal of such products, including pharmaceuticals.

Goal HS-10

Communities that are protected from the impacts of historical hazardous waste releases.

Policies

HS-P10.1







Coordinate with other agencies in efforts to remediate or treat contaminated surface water, groundwater, and soils in or affecting Impacted Communities.

HS-P10.2



Require development of contaminated sites to comply with all clean-up plans, land use covenants, and deed restrictions imposed by the DTSC or Regional Water Quality Control Board (RWQCB).*

HS-P10.3







Require new, modified, or expanded industrial uses involving hazardous materials or wastes to provide sufficient funds, in the form of a financial instrument acceptable to the County, to guarantee site remediation, including removal of facilities, equipment, and structures, and ensure community safety and site reusability.

Actions

HS-A10.1



Support public access to the inventory of contaminated sites published by the DTSC and SWRCB by posting links to this information on the County's website.

SEISMIC AND GEOLOGIC HAZARDS

Contra Costa County is in a region of high seismicity. Underlying California are two tectonic plates, the Pacific Plate and North American Plate. Their primary boundary is the San Andreas Fault, which runs most of the length of the state. These plates move past each other at a rate of about two inches per year. Friction occasionally causes the plates to become stuck, resulting in stress and stored energy deep below Earth's surface. When the plates inevitably break loose, the stored energy is suddenly released in the form of an earthquake. Several significant (i.e., stronger than magnitude 5.0) earthquakes have impacted the county, including the 1906 San Francisco earthquake (magnitude 7.8), 1989 Loma Prieta earthquake (magnitude 6.9), and 2014 South Napa earthquake (magnitude 6.0).

Many smaller, active faults exist within the San Andreas Fault Zone. Faults are commonly considered "active" when they have ruptured the ground surface or otherwise produced evidence of seismic activity within the last 10,000 years, while "potentially active" faults are those formed during approximately the last 2 to 3 million years. There are five major active faults running through the county:

- Calaveras (North Central) Fault
- Concord-Green Valley Fault
- Greenville Fault

- Hayward Fault
- Mount Diablo Fault

Movement on any of these faults or other fault lines in the region could cause earthquakes and fault rupture. The Hayward Fault is particularly concerning, as it runs beneath densely populated sections of Contra Costa and Alameda Counties. A significant earthquake on the Hayward Fault is predicted to result in catastrophic damage to buildings and infrastructure and substantial loss of life.

The Alquist-Priolo Earthquake Fault Zoning Act is a State law enacted in 1972 that limits development along active faults in areas known as "Alquist-Priolo Fault Zones." The Alguist-Priolo Fault Zones are areas around active faults that are known to cause surface rupture, meaning that the surface of the ground is "pulled apart" during seismic activity. Structures within these zones are subject to specific building codes and regulations to ensure they can withstand the effects of earthquakes, as surface rupture can seriously damage buildings and other structures built on top of the fault. Figure HS-17 shows active and potentially active faults, Alguist-Priolo Fault Zones, and anticipated shaking levels based on State modeling data.

Earthquakes have secondary effects as well. One of these is liquefaction, which occurs when sandy or silty soil materials become saturated during ground shaking, losing strength, causing the ground to liquefy. This can rupture pipelines, buckle roads and railroad tracks, and damage or destroy building foundations. Figure HS-18a shows the susceptibility of land to liquefaction. Areas along the Bay shoreline and in the Delta are most susceptible. As explained in the Flood Hazards and Sea Level Rise section of this Element, earthquakes can also cause tsunami and seiche.

FIGURE HS-17 EARTHQUAKE HAZARDS

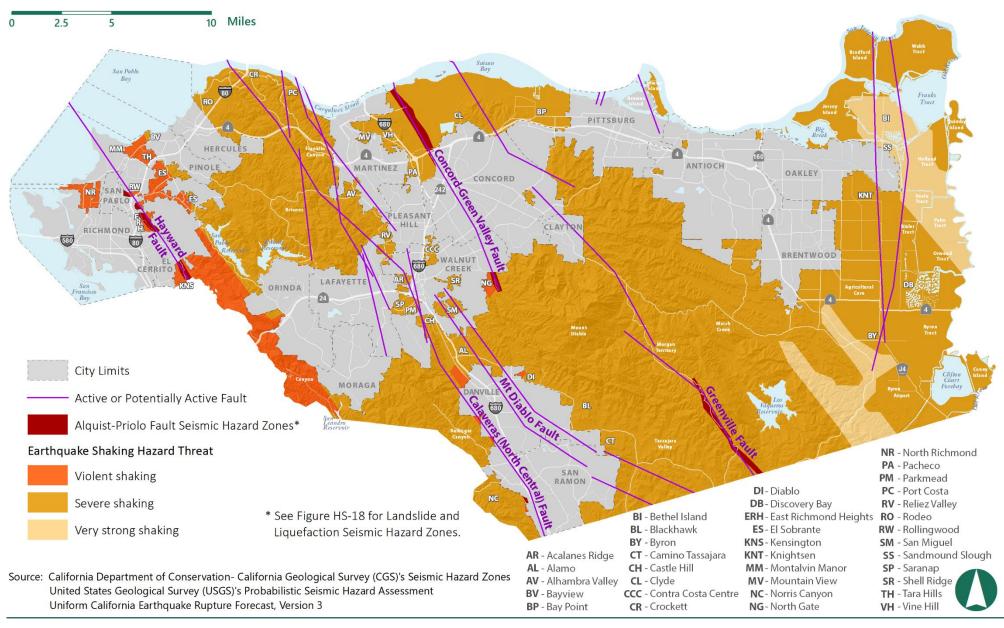


FIGURE HS-18 SEISMIC HAZARD ZONES

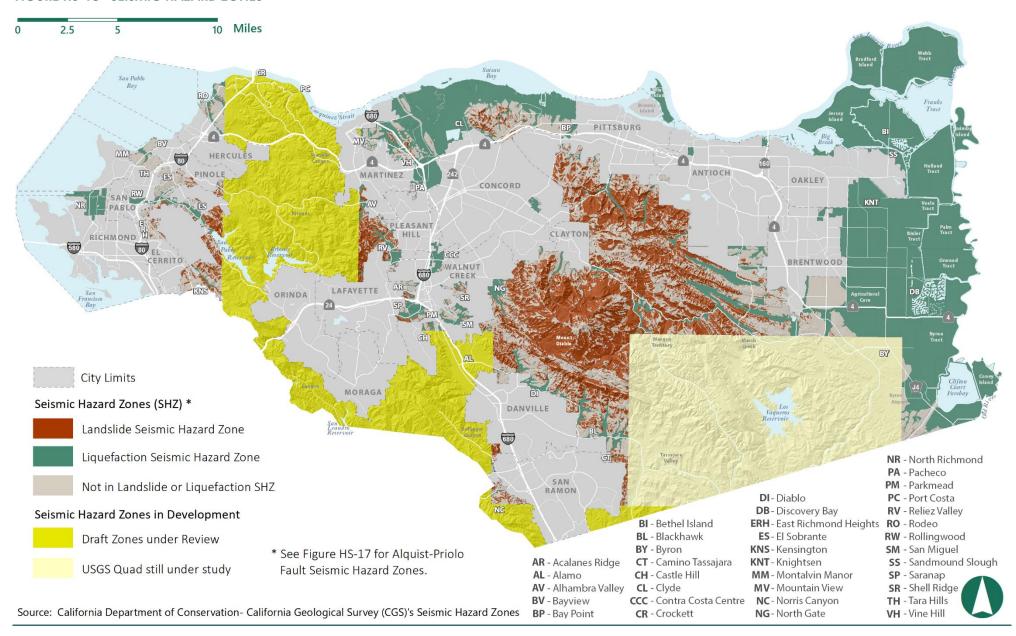
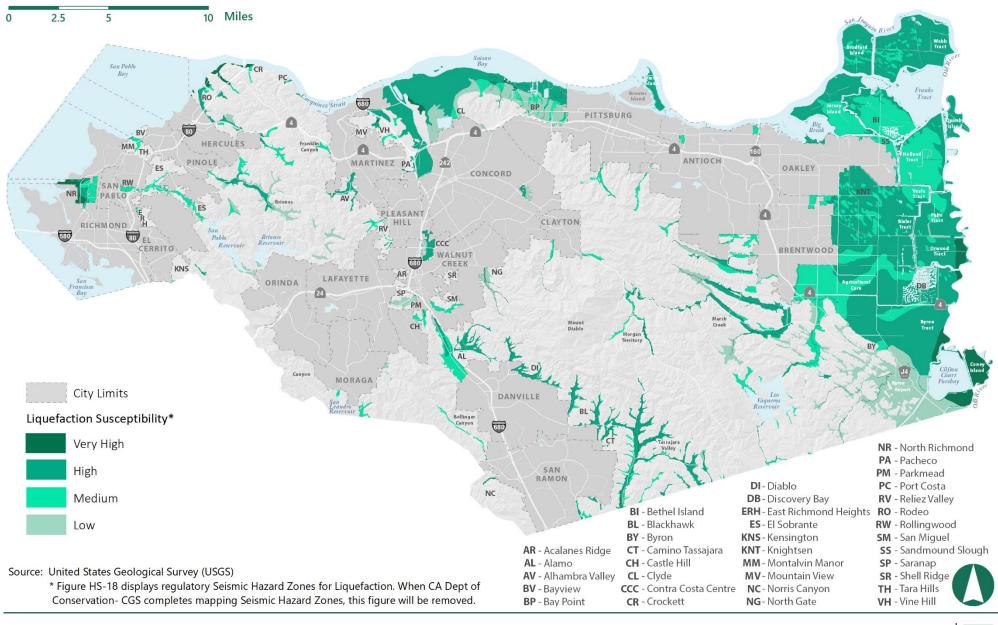


FIGURE HS-18A LIQUEFACTION SUSCEPTIBILITY



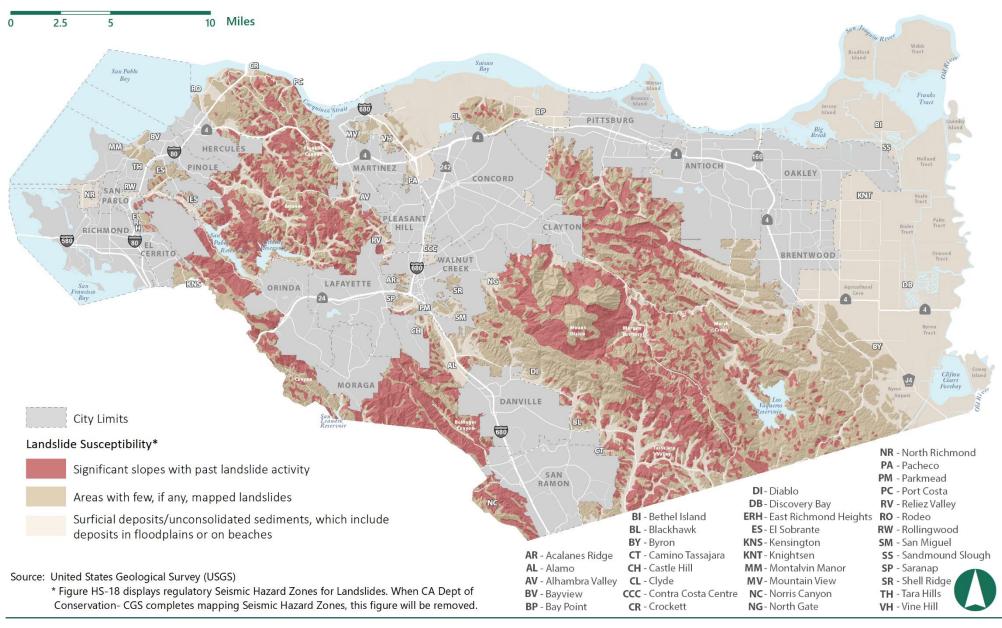
Other geologic hazards are landslides and erosion, which can occur gradually and continuously or very suddenly, often with disastrous results. In Contra Costa County, landslides are usually triggered by heavy rain, so the potential for landslides largely coincides with severe storms that saturate steep, loose soils. Earthquakes can also trigger landslides, with upland areas in Contra Costa County being highly susceptible, as shown in Figure HS-18b. Erosion, or the geological process in which earthen materials are worn away and transported by natural forces like water or wind, causes the soil to deteriorate. Highly erosive soils can damage roads, bridges, buildings, and other structures.

Liquefaction and landslide threats are addressed by the Seismic Hazards Zone (SHZ) Mapping Act of 1990, which closely resembles the Alquist-Priolo Act. The SHZ Act authorizes the California Geologic Survey to delineate seismic hazard zones (lands subject to lateral or vertical displacement under conditions of strong earthquake ground shaking) and provide guidelines and regulations for evaluating adverse conditions. Projects located in a SHZ, as shown on Figure HS-18, must conduct an investigation performed by a licensed geotechnical engineer or engineering geologist. When adverse conditions are confirmed present, effective mitigation must be provided to control/avoid the damage potential. Virtually all development applications that would lead to construction of buildings for human occupancy (i.e., rezonings, subdivisions, land use permits, development plans, building permits) are subject to the provisions of the SHZ Act.



Earthquakes can cause significant damage, especially to buildings that do not meet modern seismic safety standards.

FIGURE HS-18B LANDSLIDE HAZARDS



Goal HS-11

Communities and infrastructure that are protected from seismic and geologic hazards, including severe ground shaking, fault rupture, liquefaction, landslides, and unstable slopes.

Policies

HS-P11.1

For projects in Alquist-Priolo Earthquake Fault Zones or Seismic Hazard Zones (areas considered to be at risk of earthquake triggered liquefaction or landslide displacement) delineated by the California Geological Survey, as well as any other areas of steep slopes or areas of suspected ground failure known to the County, require submittal of appropriately detailed engineering geologic or geotechnical investigations. The reports must be compliant with State Guidelines and include:

- (a) A map showing the outline of any geologic or potentially hazardous soil condition and areas subject to inundation.
- Recommended means of mitigation of any adverse condition representing a hazard to improvements.
- Recommendations to assure proper implementation of mitigation measures during construction.*

HS-P11.2

Prohibit construction of buildings intended for human occupancy in areas where seismic and other geologic hazards (e.a., landslides, liquefaction, and fault lines) cannot be adequately mitigated.*

HS-P11.3

Discourage construction of critical facilities and buildings intended for human occupancy in Alauist-Priolo Fault Zones and encourage earthquake retrofitting where such development already exists. If there is no feasible alternative to siting critical facilities and buildings intended for human occupancy in the Fault Zones, buildings must be sited, designed, and constructed to withstand the anticipated seismic stresses.*

HS-P11.4

Refer geotechnical and engineering geologic reports to the County Peer Review Geologist for evaluation of their adequacy, as required by State Law for projects in Statedesignated hazard zones. Reports deemed inadequate will require further engineering analysis and revision until the findings/opinions of the Peer Review Geologist have been addressed to the County's satisfaction.

HS-P11.5

Discourage development on slopes exceeding 15 percent, and prohibit development on slopes of 26 percent or greater, to avoid slope instability, unnecessary grading, and extensive land disturbance, and facilitate long-term control of erosion and sedimentation. Exceptions may be considered for infrastructure projects and development on existing legal lots where no other feasible building sites exist.

HS-P11.6

Require projects to form a Geologic Hazard Abatement District (GHAD) or join an existing GHAD whenever necessary to adequately mitigate anticipated or residual geologic hazards.

HS-P11.7

Do not accept public road dedications or allow construction of private roads on unstable hillsides or in landslide hazard areas unless potential hazards have been mitigated to the County's satisfaction. All private roads constructed in such areas must be fully compliant with private road standards adopted by the County and fire protection district with iurisdiction.*

See the Land Use Element for additional policies and actions related to development in hazard areas.

EMERGENCY PREPAREDNESS, RESPONSE, AND EVACUATION ROUTES

Preparedness, Response, and Recovery

Contra Costa County is committed to preservation of life, property, and the environment during emergencies. The County prepared the most recent Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 and the Federal Emergency Management Agency's (FEMA) LHMP policy guidance. The County collaborated with local agencies, including 16 incorporated cities and towns and 25 special districts in the Contra Costa County planning area, to prepare the LHMP. Contra Costa County's LHMP process is one where hazards are identified and profiled, the people and facilities at risk are analyzed, and

mitigation actions are developed to reduce or eliminate hazard risk. Implementation of these mitigation actions, which include short- and longterm strategies, involves planning, policy changes, programs, projects, and other activities. Local governments are required to develop a hazard mitigation plan as a condition for receiving certain types of non-emergency disaster assistance.

The LHMP and Health and Safety Element address similar issues, but the Health and Safety Element provides a higher-level framework and set of policies that pertain to the long-term safety of the county, while the LHMP focuses on more specific mitigation actions to enable jurisdictions to better protect lives, property, and natural systems. The LHMP, certified by FEMA, is incorporated into the Health and Safety Element by reference, as permitted by California Government Code Section 65302.6, and can be accessed at www.contracosta.ca.gov/6415/Local-Hazard-Mitigation-Plan.

Multiple agencies within the county, along with State and federal agencies, are involved with emergency preparedness and response. The County has adopted the State of California Emergency Plan issued by the Governor's Office of Emergency Services (CAL OES). The State Plan outlines ways to prepare for and respond to various disasters, such as earthquakes, floods, and fires, and specifies which State-level department will be responsible for recovery efforts. Contra Costa County also participates in the California Disaster and Civil Defense Master Mutual-Aid Agreement, under which the State and local governments will work together to respond to emergencies. CAL OES Coastal Region (Mutual Aid Region II) serves the counties on the coast from Del Norte to Monterey and the counties surrounding San Francisco Bay.

The County has its own Emergency Operations Plan developed by the Sheriff's Office of Emergency Services in collaboration with emergency management partners (fire districts, law enforcement agencies, etc.), and has prepared additional plans addressing earthquake response, disaster debris

management, and airport emergencies. The County also maintains the Emergency Operations Center, which is activated as needed to communicate with emergency management partners and coordinate responses to incidents. In addition, the County and many of the incorporated cities offer Community Emergency Response Team (CERT) training to help residents be prepared for disasters. The intent of these plans and actions is to proactively safeguard life, property, and the environment, facilitate effective emergency response, and accelerate recovery when disasters happen.

Goal HS-12

Communities and local economies that continue to function during all hazards and have coordinated and effective response and recovery procedures.



The County's Emergency Operations Center monitors hazardous events as they unfold and coordinates the response.

Policies

HS-P12.1

Continue implementing the Contra Costa County Local Hazard Mitigation Plan, which was adopted by the Board of Supervisors and certified by FEMA and is incorporated by reference into this Health and Safety Element.

HS-P12.2

Locate facilities and uses on the County's designated critical facilities list outside of identified hazard areas whenever possible, accounting for how climate change may increase frequency and intensity of hazards. If critical facilities must be in hazard areas, ensure these facilities and their access routes are protected from the hazard risks inherent to each location.*

HS-P12.3



Coordinate with cities, school districts, recreation and park districts, and community-based organizations to ensure adequate emergency shelters, community resilience centers, and alternate care sites are available when natural disasters and other highly hazardous conditions, such as industrial accidents, occur.

HS-P12.4





Ensure there are adequate identified locations for alternate care sites, especially in Impacted Communities.

HS-P12.5

Ensure the designs for new and significantly renovated community-oriented County facilities allow for flexible uses and support multiple community purposes, including being used as community resilience centers.

HS-P12.6

Support residents' ability to safely shelter-in-place, with appropriate air exchange rates and protection from contaminants.

Actions

HS-A12.1

Update the Contra Costa County Local Hazard Mitigation Plan as necessary to remain compliant with State and federal laws and reflect changing climate conditions.

HS-A12.2

Incorporate the assessments and projections for future emergency service needs from the most recent Municipal Services Reviews into updates of the Contra Costa County Local Hazard Mitigation Plan.

HS-A12.3

At least once every eight years, evaluate the effectiveness of and update the public safety, preparedness, and hazard mitigation policies in this Health and Safety Element, with consideration given to changing climate conditions.

HS-A12.4

Identify and, as feasible, retrofit critical County-owned buildings and facilities in areas prone to flooding (including sea level rise and emergent flooding), seismic hazards, landslides and debris flows, tsunamis, or wildfires to maximize defensible space and outdoor fireproofing, improve drainage systems, stabilize nearby slopes, and take other actions as appropriate to minimize the hazard.

HS-A12.5



Identify and map existing community facilities, such as libraries, gymnasiums, community centers, and auditoriums, that can serve as community resilience centers and support people with access and functional needs during hazard events. Work with the owners of these facilities to identify and implement upgrades, prioritizing facilities in Impacted Communities.

HS-A12.6



Establish standardized triggers (temperature, air quality, etc.) for opening County-operated community resilience centers.

HS-A12.7



Conduct a comprehensive energy resilience needs assessment for critical County facilities and pursue funding opportunities to meet identified needs.

HS-A12.8

Install backup power and water resources at critical County facilities, emergency shelters, community resilience centers, and cooling centers.*

HS-A12.9



Coordinate with transit providers to identify and advertise ways for individuals with restricted mobility to reach resilience centers, cooling centers, and alternate care sites.

HS-A12.10

Partner with community-based organizations, homeowners associations, and neighborhood groups to communicate with community members about human-caused, natural, and climate change-induced hazards, how to prepare for them, and what to do when a shelter-in-place or evacuation order is issued. Make this information widely available in various formats and languages to all community members, with special effort aimed at reaching unsheltered people and people with special access and functional needs.

HS-A12.11

Continue to provide alerts about developing and ongoing emergency situations in languages and formats appropriate to affected county residents through the Joint Information Center.

HS-A12.12

Continue providing CERT training programs and encourage the Contra Costa CERT Coalition to provide updated training on hazards and related risks identified in the Contra Costa County Vulnerability Assessment or the best-available climate science data.

Evacuation Routes and Plans

With advanced warning, evacuation can be effective in reducing injury and loss of life during a catastrophic event. Figure HS-19 shows the evacuation routes throughout the county, which include highways and major surface streets. Preferred evacuation routes during any individual evacuation order will depend on the characteristics of the emergency. Contra Costa County has identified evacuation zones to support efficient communication with community members regarding evacuation warnings and orders.

Some parts of the county face evacuation constraints, particularly those far from major roadways. Some areas have only one viable evacuation route, which could be disastrous if it becomes blocked or congested. State law requires counties to identify evacuation constraints in hazard-prone residential areas. Figure HS-20 maps residential parcels with evacuation constraints. All areas identified are more than a half-mile from a major roadway and/or have access to only one emergency evacuation route. In most cases it is not feasible to retrofit existing neighborhoods to eliminate physical evacuation constraints such as lack of evacuation routes or insufficient roadway capacity. The County will nonetheless strive to improve peoples' ability to evacuate from these constrained areas.

Goal HS-13

Effective evacuation capacity and capabilities throughout the county in response to emergencies and major hazards of concern.

FIGURE HS-19 EVACUATION ROUTES

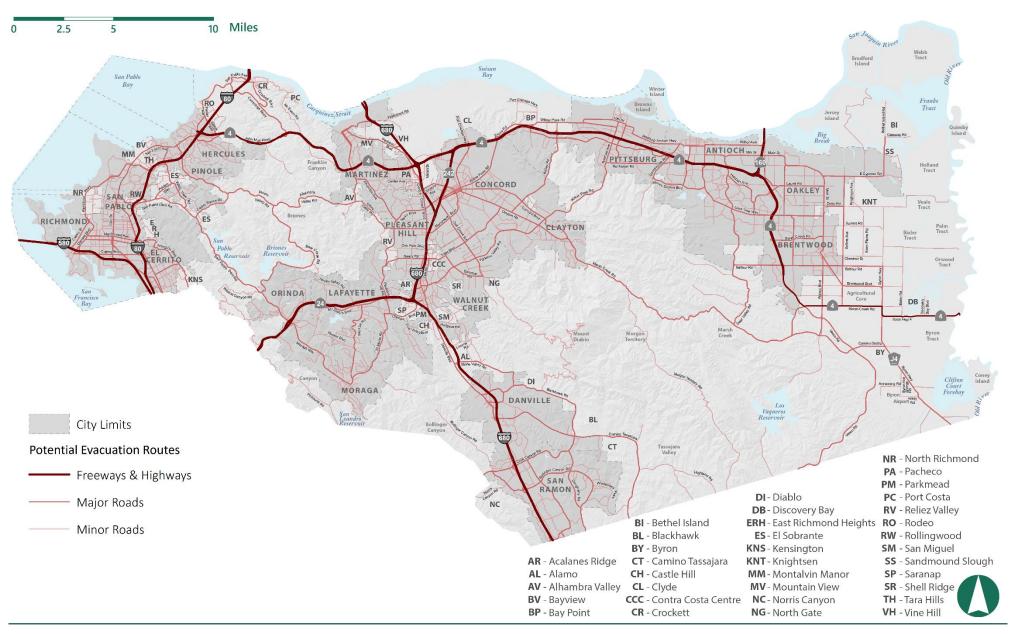
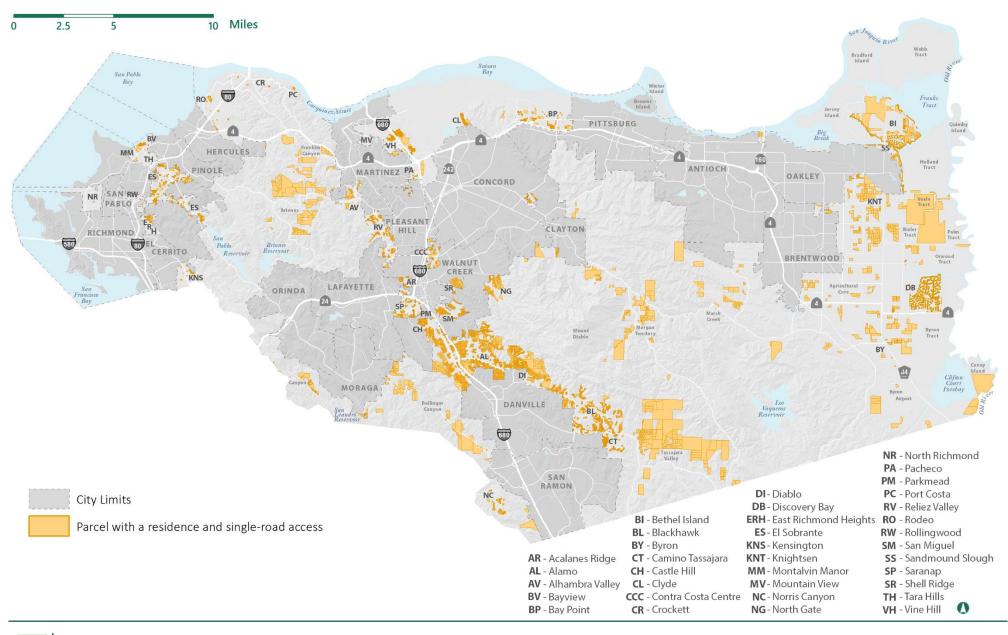


FIGURE HS-20 SINGLE-ACCESS ROAD RESIDENTIAL AREAS



Policies

HS-P13.1

Except for infill sites, require new development in High and Very High Fire Hazard Severity Zones, the WUI, and 100-year or 200-year floodplains to have access to at least two emergency evacuation routes, and encourage the same for existing development.*

HS-P13.2

Coordinate with transit agencies and community service and faith-based organizations to assist with evacuation efforts and ensure that evacuation services are made available to vulnerable people, including those with limited English proficiency or limited access to transportation, communication, and other lifeline resources and services.

Actions

HS-A13.1

Partner with cities and public protection agencies to delineate evacuation routes, identifying their capacity, safety, and viability under different hazard scenarios, as well as emergency vehicle routes for disaster response, and where possible, alternate routes where congestion or road failure might reasonably be expected to occur. Update as new information and technologies become available.

HS-A13.2

At least once every five years, update maps identifying neighborhoods with only one emergency evacuation route.*

HS-A13.3

Coordinate with local fire districts to develop and maintain minimum roadway, ingress, and earess standards for evacuation of residential areas in Very High Fire Hazard Severity Zones.*

HS-A13.4

Develop an evacuation education program to help inform community members about the Contra Costa County Community Warning System and recommended approaches to evacuation.

See the Public Facilities and Services Element for policies and actions related to emergency medical services.

NOISE AND VIBRATION

Sounds are disturbances created by a vibrating object, transmitted by pressure waves, that are capable of being detected by a human ear or microphone. Noise includes sounds that are unpleasant or unwanted. Like noise, vibration is transmitted in waves, but through the earth or solid objects. Unlike noise, vibration is typically felt rather than heard. Vibration can be natural, such as from earthquakes or landslides, or human-caused, such as from machinery or trains.

Noise and vibration can significantly impact peoples' lives. Depending on their source and intensity, noise and vibration can be painful, interrupt sleep, cause distraction or confusion, and physically damage the inner ear. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA (i.e., the A-weighted sound level, which correlates to how the human ear perceives sound). Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure, functions of the heart, and

the nervous system. Extended periods of noise exposure above 90 dBA can result in permanent hearing damage. When the noise level reaches 120 dBA, even short-term exposure causes a tickling sensation in the ear, called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation becomes painful, called the threshold of pain. Table HS-2 shows typical noise levels from familiar noise sources.

Some types of noise and vibration, such as from construction and maintenance activities, are temporary. While these types of noise and vibration can be long-term, they will end with completion of the activity. Other types of noise and vibration are permanent, including from mobile sources such as cars, trains, and planes, and stationary sources, like continual noise from machinery at an industrial site. These sources require the County to ensure that certain land uses, especially "sensitive receptors" like homes and schools, are not brought too close to the permanent source of noise and vibration without incorporating reduction measures like thicker walls and windows.

State law requires general plans to use the Community Noise Equivalent Level (CNEL) or the Day/Night Average Sound Level (DNL) to describe the community noise environment (in decibels, "dB") and its effects on the population. Contra Costa County land use compatibility standards for noise are shown in Table HS-3, and the future 2045 roadway noise conditions are depicted graphically on Figure HS-21.

TABLE HS-2 TYPICAL A-WEIGHTED SOUND LEVELS

Noise Source	A-Weighted Sound Level in Decibels	Noise Environment		
Near Jet Engine	140	Deafening		
Civil Defense Siren	130	Threshold of pain		
Hard Rock Band	120	Threshold of feeling		
Accelerating Motorcycle at a Few Feet Away	110	Very loud		
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very loud		
Ambulance Siren; Food Blender	95	Very loud		
Garbage Disposal	90	Very loud		
Freight Cars; Living Room Music	85	Loud		
Pneumatic Drill; Vacuum Cleaner	80	Loud		
Busy Restaurant	75	Moderately loud		
Near Freeway Auto Traffic	70	Moderately loud		
Average Office	60	Moderate		
Suburban Street	55	Moderate		
Light Traffic; Soft Radio Music in Apartment	50	Quiet		
Large Transformer	45	Quiet		
Average Residence Without Stereo Playing	40	Faint		
Soft Whisper	30	Faint		
Rustling Leaves	20	Very faint		
Human Breathing	10	Very faint		

TABLE HS-3 MAXIMUM ALLOWABLE NOISE EXPOSURE BY USE

	Noise Level, DNL (dB)						
Land Use Type	0-55	56- 60	61- 65	66- 70	71- 75	75- 80	>81
Residential a, b							
Urban Residential Infill							
Schools, Libraries, Hospitals, Religious Institutions, Extended Care Facilities							
Hotels, Motels							
Auditoriums, Concert Halls, Amphitheaters							
Playgrounds, Local Parks							
Sports Arenas, Outdoor Spectator Sports							
Golf Courses, Riding Stables, Water Recreation (e.g., water parks), Cemeteries							
Office, Commercial, and Professional Buildings (i.e., uses that are generally indoors and not noise sensitive)							
Industrial, Manufacturing, Mining, Utilities, Agriculture							

Normally Acceptable. Specified land use is satisfactory based on the assumption that any buildings involved are of normal, conventional construction, without any special noise insulation requirements.

Conditionally Acceptable. New construction or development should be undertaken only after a detailed analysis of the noise-reduction requirements is made and needed noise insulation features have been included in the design.

Unacceptable. New construction or development should not be undertaken.

Goal HS-14

An acceptable noise environment in all areas of the county.

Policies

HS-P14.1



Require projects that would locate noise-sensitive land uses in areas where the projected ambient noise level is greater than the "normally acceptable" noise level indicated in Table HS-3 to provide an acoustical analysis that recommends appropriate mitigation to meet the noise compatibility standards.*

HS-P14.2



Require new housing developments, hotels, and motels exposed to a DNL of 60 dB or greater to provide a detailed acoustical analysis describing how the project will provide an interior DNL of 45 dB or less.*

HS-P14.3



Require new nonresidential uses exposed to a DNL of 65 dB or greater to provide a detailed acoustical analysis describing how the project will provide an interior sound level of 50 Lea (1-hr).*

^a A DNL of 60 dB or less may not be achievable in all residential areas due to environmental, economic, or aesthetic constraints. One example is small balconies associated with multiple-family housing. In this case, second- and third-story balconies may be difficult to control to the standard. A common outdoor use area that meets the goal can be provided as an alternative.

^b If the primary noise source is passing trains, the standard for outdoor noise levels in residential areas is a DNL of 70 dB.

FIGURE HS-21 2045 ROADWAY NOISE CONTOURS







Require new residential development in areas exposed to a DNL in excess of 65 dB due to single events, such as train operation, to provide an acoustical analysis describing how indoor noise levels from these single events will not exceed a maximum A-weighted noise level of 35 dB in bedrooms and 55 dB in other habitable rooms. In areas exposed to a DNL in excess of 65 dB, use an indoor residential noise-level threshold of 45 dB CNFL.*

HS-P14.2



Protect noise-sensitive land uses listed in Table HS-3 from adverse noise impacts by requiring mitigation to the degree feasible for projects that would increase long-term noise in excess of the following thresholds, when measured at the sensitive use's property line:

- (a) Greater than 1.5 dBA DNL increase for ambient noise environments of 65 dBA DNL and higher.
- (b) Greater than 3 dBA DNL increase for ambient noise environments of 60 to 64 DNL.
- Greater than 5 dBA DNL increase for ambient noise environments of less than 60 dBA DNL.*

HS-P14.3



Design County projects to minimize long-term noise impacts on existing residents and follow best practices to minimize short-term impacts from construction noise.*

HS-P14.4



Condition entitlements to limit noise-generating construction activities to the following:

- (a) Weekdays and non-holidays unless site-specific conditions warrant exceptions.
- (b) Within 1,000 feet of noise-sensitive uses: 7:30 a.m. to 5:00 p.m.
- (c) Over 1,000 feet from noise-sensitive uses: 7:00 a.m. to 6:00 p.m.*

HS-P14.5



Require a traffic noise analysis for development projects where the project would generate more than 40 percent of daily trips over existing average daily traffic (ADT) on impacted roadway seaments. Projects below this threshold are assumed to have no significant traffic noise impact because they would increase noise levels by less than 1.5 dBA DNL, which is the most restrictive threshold for determining a significant traffic noise impact. This screening policy does not apply to projects involving a substantial number of new operational truck trips (e.g., warehouses).*

HS-P14.6



Require effective measures along major transportation facilities/corridors to reduce impacts on adjacent noisesensitive land uses.*

HS-P14.7



Require new development to evaluate noise impacts on the natural environment, including impacts on wildlife, whenever appropriate.





When reviewing proposals for new vibration-sensitive uses near an existing railroad or Bay Area Rapid Transit (BART) line, use Table HS-4 to evaluate whether the sensitive uses could be exposed to excessive groundborne vibration. Projects with sensitive uses within the screening distances identified in the table will require preparation of a groundborne vibration and noise evaluation that is consistent with Federal Transit Administration-approved methodologies.

TABLE HS-4: RAIL VIBRATION SCREENING DISTANCES

	Distance in Feet				
Type of Rail	Land Use Category 1	Land Use Category 2	Land Use Category 3		
Conventional Commuter Rail or Rapid Transit (BART)	600	200	120		

Land Use Category 1: Vibration-sensitive research and manufacturing, hospitals with vibrationsensitive equipment, universities conducting vibration-sensitive research, concert halls, TV and recording studios, and theaters.

Land Use Category 2: Residential, hotels/motels, and hospitals without vibration-sensitive equipment. Land Use Category 3: Institutional uses such as schools, churches, and medical offices without vibration-sensitive equipment.

Actions





Study the feasibility of adopting a noise ordinance establishing maximum exterior noise levels at sensitive receptors for noise generated by permanent and temporary stationary, non-transportation sources and construction sources.

HS-A14.2



Pursue federal Quiet Zone status for rail crossings that are a noise nuisance to nearby residential areas and other noisesensitive land uses.

HEALTH AND SAFETY ELEMENT PERFORMANCE MEASURES

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- Reduced rate of emergency department visits for asthma.
- Increased tree canopy on public property in Impacted Communities.
- Increased number of County facilities in hazard-prone areas that are retrofitted against hazards.
- Reduced number of people in hazard-prone areas that are constrained by having only one evacuation route.

GROWTH MANAGEMENT ELEMENT

The purpose of the Growth Management Element (GME) is to establish the goals, policies, and actions intended to manage and mitigate the impacts of future growth and development within unincorporated Contra Costa County. This Element also complies with the requirements of the Measure J-2004 Growth Management Program (GMP), which includes the Contra Costa Transportation Sales Tax Expenditure Plan administered by the Contra Costa Transportation Authority (CCTA).

To provide context for the goals, policies, and actions that follow, this GME is divided into the following sections:

- The Background section describes the regulatory context for this Element.
- The **Intent** section describes the overarching goals of this Element.
- The Authority section defines the County's ability to include this Element in the locally-adopted General Plan.
- The Relationship to Other General Plan Elements section describes how this Element supports and interacts with the other Elements in this General Plan.

BACKGROUND

The Measure J GMP, approved by the voters of Contra Costa County in November 2004, took effect on April 1, 2009, and requires the County to satisfy the following six requirements:

- (a) Adopt a development impact mitigation program.
- (b) Address housing options.
- (c) Participate in an ongoing cooperative, multi-jurisdictional planning process.
- (d) Adopt a voter-approved Urban Limit Line (ULL).
- (e) Develop a five-year capital improvement program.
- Adopt a Transportation Systems Management (TSM) Ordinance or Resolution (commonly known as Transportation Demand Management [TDM]).

The Measure | GMP is a 25-year extension (through March 31, 2034) of the previous Measure C Contra Costa Transportation Improvement and Growth Management Program approved by voters in 1988. Both programs include a 0.5 percent transportation and retail transactions and use sales tax intended to address existing major regional transportation problems. The Growth Management component of Measure J is intended to ensure that future residential, business, and commercial growth pays for the facilities required to meet the demands resulting from that growth.

Compliance with the GMP is linked to receipt of Local Street Maintenance and Improvement Funds and Transportation for Livable Communities Funds from the Contra Costa Transportation Authority (CCTA). Measure J eliminates the past Measure C requirements for local performance standards and levelof-service standards for nonregional routes.

INTENT

By adopting and implementing the GME, the County intends to establish a comprehensive, long-range planning program that will match the existing, emerging, and more dynamic demands for multi-modal transportation facilities, programs, and services generated by new development with plans, capital improvement programs, and development mitigation programs (e.g., impact fees paid by developers). The ULL is intended to promote compact development patterns and restrict extension of infrastructure into areas where urban development is neither planned nor desired.

AUTHORITY

The GME is adopted pursuant to the authority granted to each local jurisdiction by California Government Code Section 65303, which states:

The general plan may include any other elements or address any other subjects which, in the judgment of the legislative body, relate to the physical development of the county or city.

The GME is consistent with the requirements of Measure I, as amended by the CCTA.

RELATIONSHIP TO OTHER GENERAL PLAN **ELEMENTS**

The GME works closely in conjunction with the Land Use and Public Facilities and Services Elements to ensure that development proceeds in a manner that will not negatively affect facility and performance standards for existing land uses. New developments should be required to demonstrate compliance with these standards and recommend motorized and nonmotorized improvements to the transportation system when necessary.

By using the GME to responsibly manage new development proposals, the County ensures that each new development project bears its appropriate share of the burdens and impacts that they impose on public facilities, programs, and services. As a result, the GME must be carefully considered together with the Land Use Element and other Elements of this General Plan when assessing General Plan consistency.

The ULL and 65/35 Land Preservation Standard also work with the GME to ensure that growth occurs in a responsible manner and strikes appropriate balances between many competing values and interests, such as providing sufficient land for housing and jobs while preserving open spaces. By establishing an inter-jurisdictional land supply and development monitoring program, the GME coordinates implementation of this General Plan with the general plans of the county's 19 incorporated cities/towns.

Additionally, the GME contains programs for local implementation that encourage new development to promote the goals and objectives of the Conservation, Open Space, and Working Lands Element and Housing Element.

To carry out the goals and objectives of the Land Use and Transportation Elements of the General Plan, new development must demonstrate that the performance standards of the GME will be met to ensure the multi-modal transportation system can accommodate the new development. New growth will be required to remediate operational issues on the multi-modal transportation system through development fees and other exactions. Thus, the improvements needed to implement these Elements of the General Plan will in part be directly tied to, and dependent upon, locally led implementation of the GME.

Policies relating to this "Pay as you Grow" philosophy underpinning the GME can be found in the Transportation Element, Goal TR-1 and Policies TR-P1.1, TR-P1.2, TR-P1.4, and TR-P4.2. Related Land Use Element Goal LU-5 and

Policies LU-P2.5 and LU-P5.1 are also part of the policy framework that underlies the GME, and are integrally related to it.

Goal GM-1

New residential and nonresidential growth pay for the facilities required to meet the demands resulting from that growth.

Policies

GM-P1.1

Maintain in place a local program to mitigate development impacts on nonregional routes and other facilities to ensure that new growth pays its share of the costs associated with that estimated growth. Ensure revenue provided from this program is not used to replace private developer funding of any required improvements that have or would have been committed to any project.

GM-P1.2

Participate in a regional development mitigation program to establish fees, exactions, assessments, or other mitigation measures to fund regional or subregional transportation improvements needed to mitigate the impacts of planned or forecast development on the regional transportation system.

Actions

GM-A1.1

Require development projects to provide local mitigation or fees as established for proposed new development.

GM-A1.2

Require development projects to pay regional development mitigation fees established by the locally-applicable Regional Transportation Planning Committee(s) (RTPC) in accordance with the RTPC's adopted program and CCTA's policies.

- TRANSPAC (Central County): Subregional Transportation Mitigation Program (STMP)
- TRANSPLAN (East County): East Contra Costa Regional Fee and Financing Authority (ECCRFFA)
- SWAT (Southwest County): Lamorinda Transportation Improvement Program (LTIP)
- WCCTAC (West County): Subregional Transportation Mitigation Program (STMP)
- TVTC: Tri-Valley Transportation Development Fee Program (TVTDF)

GM-A1.3

Biennially prepare the seven-year Capital Road Improvement and Preservation Program (CRIPP) outlining capital projects sponsored by the County that are necessary to maintain and improve mobility and implement the transportation-related goals, policies, and actions of this

General Plan. The CRIPP must include approved projects and an analysis of the costs of the proposed projects as well as a financial plan, including funding sources, for providing the improvements.

Goal GM-2

Cooperative transportation and land use planning in Contra Costa County.

Policies

GM-P2.1

Participate in an ongoing and collaborative multijurisdictional planning process with other jurisdictions and agencies, the RTPCs, and the CCTA to create a balanced, safe, and efficient transportation system and manage the impacts of growth.

GM-P2.2

Work with the RTPCs and CCTA to develop, update, and implement Action Plans for the network of designated Routes of Regional Significance (Figure TR-1 in the Transportation Element), set Regional Transportation Objectives (RTOs) for those routes, and identify actions for achieving the RTOs. The Action Plans must also include a process for reviewing and monitoring the traffic impacts of proposed new developments.

GM-P2.3

Apply CCTA's travel demand forecasting model and Technical Procedures to the analysis of General Plan amendments affecting land use or circulation and development projects that generate more than 100 peakhour trips to determine their effects on the regional transportation system, and compliance with the applicable Action Plan Multimodal Transportation Service Objectives/Regional Transportation Objectives.

GM-P2.4

Circulate traffic impact analyses to affected jurisdictions and the RTPCs for review and comment and cooperate in assessment and mitigation of traffic impacts in neighboring jurisdictions resulting from County actions.

GM-P2.5

Work with the appropriate RTPCs to develop the mitigation program outlined in GM-A1.2.

GM-P2.6

Participate in preparation of the CCTA's Countywide Comprehensive Transportation Plan and the ongoing countywide transportation planning process.

GM-P2.7

Help maintain the CCTA's travel demand modeling system by providing information on proposed land uses, planned and approved development and transportation projects, and proposed improvements to the transportation system, including those projects the County has adopted as part of its seven-year CRIPP, and long-range plans relative to the Association of Bay Area Government's (ABAG's) projections for households and jobs within the unincorporated area.

Actions

GM-A2.1

Work with the RTPCs and CCTA to help develop other plans, programs, and studies to address transportation and growth management issues.

GM-A2.2

Participate in the CCTA's established conflict resolution process as needed to resolve disputes related to development and implementation of Action Plans and other programs described in the GME and other applicable General Plan Flements.

Goal GM-3

Land use patterns that make more efficient use of the transportation system.

Policies

GM-P3.1

Consider the impacts that the County's land use development policies have on the local, regional, and countywide transportation system, including the level of transportation capacity that can reasonably be provided.

GM-P3.2

Through the development review process, support accommodation of transit, bicycle, and pedestrian access for new development by applying the County

Transportation Analysis Guidelines, Complete Streets Policy, Active Transportation Plan, and related best practices.

GM-P3.3

Demonstrate reasonable progress in providing housing opportunities for all income levels and demonstrate reasonable progress in meeting housing goals.

GM-P3.4

Incorporate policies and standards into the development approval process that support transit, bicycle, and pedestrian access in new developments.

GM-P3.5

Promote carpools, vanpools, other ridesharing, and parkand-ride lots by maintaining in place and enforcing a TDM ordinance that reflects best practices and, at a minimum, conforms to the CCTA's adopted model TDM ordinance or resolution.

GM-P3.6

Provide housing opportunities for all income levels by implementing the programs contained in the Housing Element.

Actions

GM-A3.1

Submit a biennial report to the CCTA on implementation of actions outlined in the Housing Element as part of the biennial GMP Compliance Checklist. The report will demonstrate reasonable progress in providing housing opportunities for all income levels using one of the following methods:

- (a) Comparing the number of housing units approved, constructed, or occupied within the unincorporated county over the preceding five years with the number of units needed on average each year to meet the housing objectives established in the Housing Element; or
- Illustrating how the County has adequately planned to meet the existing and projected housing needs through adoption of land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development; or
- Illustrating how the County's General Plan and zoning regulations facilitate improvement and development of sufficient housing to meet those objectives.

GM-A3.2

Implement the County's TDM Ordinance consistent with the GMP.

Goal GM-4

Infill and redevelopment in existing urban and brownfield areas.

Policies

GM-P4.1

Maintain a voter-approved ULL as defined in the Principles of Agreement to the Measure J GMP (as amended by CCTA Ordinance 06-04), through March 31, 2034, the end of the

Measure J sales tax. Enforce the ULL as stipulated in the Land Use Element.

GLOSSARY

This glossary defines acronyms and abbreviations used in the General Plan and explains the technical terms used. Definitions come from several sources, including the California Office of Planning and Research; the California Institute for Local Government; and the American Planning Association Glossary of Zoning, Development, and Planning Terms.

ACRONYMS AND ABBREVIATIONS

Assembly Bill

Association of Bay Area Governments ABAG: ADA: Americans with Disabilities Act ALUC: Airport Land Use Commission (Contra Costa County) ALUCP: Airport Land Use Compatibility Plan (Contra Costa County) ARPD. Ambrose Recreation and Park District BAAQMD: Bay Area Air Quality Management District BART: Bay Area Rapid Transit

Black, Indigenous, and People of Color BIPOC:

BOS: Board of Supervisors BSD: Byron Sanitary District

AB:

BBID:

BUSD: Byron Union School District

California Department of Forestry and Fire Protection CAL FIRE:

Byron-Bethany Irrigation District

California Governor's Office of Emergency Services CAL OES:

CAO. County Administrator's Office

Climate Action and Adaptation Plan CAAP:

California Air Resources Board CARB:

CARE: Community Air Risk Evaluation

CCCD. Contra Costa Community College District

CCCOF. Contra Costa County Office of Education

CCCSD. Central Contra Costa Sanitary District

CCCSO: Contra Costa County Sheriff's Office

Contra Costa County Flood Control and Water Conservation CCCECWCD.

District

CCCFPD: Contra Costa County Fire Protection District

CCFPD: Crockett-Carquinez Fire Protection District

CCHS. Contra Costa Health Services Department

Contra Costa Health Services Hazardous Materials CCHMP:

Programs

CCWD: Contra Costa Water District

CDPR. California Department of Parks and Recreation

CEQA: California Environmental Quality Act

CERT: Community Emergency Response Team

CIP:	Capital Improvement Program	EPA:	Environmental Protection Agency (US)
CNEL:	Community Noise Equivalent Level	EV:	Electric Vehicle
CSA:	County Service Area	FAR:	Floor Area Ratio
CSD:	Community Services District or Canyon School District	FEMA:	Federal Emergency Management Agency
CUPA:	Certified Unified Program Agency	FHSZ:	Fire Hazard Severity Zone
dB:	Decibel	FMMP:	Farmland Mapping and Monitoring Program
dBA:	A-Weighted Sound Level	GHG:	Greenhouse Gas
DCD:	Department of Conservation and Development (Contra	GPA:	General Plan Amendment
	Costa County)	GSA:	Groundwater Sustainability Agency
DNL:	Day/Night Average Sound Level	GSP:	Groundwater Sustainability Plan
DOC:	Department of Conservation (State)	HCP/NCCP:	East Contra Costa County Habitat Conservation
DPC:	Delta Protection Commission		Plan/Natural Community Conservation Plan
DTSC:	Department of Toxic Substances Control (State)	HHW:	Household Hazardous Waste
du:	Dwelling Unit	HOV:	High-Occupancy Vehicle
du/acre:	Dwelling Units Per Acre	HUB Zone:	Historically Underutilized Business Zone
DWD:	Diablo Water District	l-;	Interstate
DWR:	Department of Water Resources (State)	IPM:	Integrated Pest Management
EBMUD:	East Bay Municipal Utility District	ISD:	Ironhouse Sanitary District
EBRPD:	East Bay Regional Park District	JSUSD:	John Swett Unified School District
ECCID:	East Contra Costa Irrigation District	KESD:	Knightsen Elementary School District
EIR:	Environmental Impact Report	KFPD:	Kensington Fire Protection District
EMS:	Emergency Medical Service	LAFCO:	Local Agency Formation Commission
EOC:	Emergency Operations Center (Contra Costa County)	LEED:	Leadership in Energy and Environmental Design
EOP:	Emergency Operations Plan (Contra Costa County)	Leg:	Equivalent Sound Level
du: du/acre: DWD: DWR:	Dwelling Unit Dwelling Units Per Acre Diablo Water District Department of Water Resources (State)	HOV: HUB Zone: I-: IPM:	Household Hazardous Waste High-Occupancy Vehicle Historically Underutilized Busi Interstate Integrated Pest Management

LHMP	Local Hazard Mitigation Plan	RTP:	Regional Transportation Plan
LOS:	Level of Service	RWQCB:	Regional Water Quality Control Board
LUHSD:	Liberty Union High School District	SB:	Senate Bill
MAC:	Municipal Advisory Council	SMARA:	Surface Mining and Reclamation Act (State)
MDUSD:	Mt. Diablo Unified School District	SMGB:	State Mining and Geology Board
MOA:	Military Operations Area	SOI:	Sphere of Influence
MOFD:	Moraga-Orinda Fire District	SR-:	State Route
MOTCO:	Military Ocean Terminal Concord	SRVFPD:	San Ramon Valley Fire Protection District
MOU:	Memorandum of Understanding	SSD:	Stege Sanitary District
MRA:	Mineral Resource Area	SWRCB:	State Water Resources Control Board
MTC:	Metropolitan Transportation Commission	TAC:	Toxic Air Contaminant
MVSD:	Mt. View Sanitary District	TDM:	Transportation Demand Management
NAHC:	Native American Heritage Commission	ULL:	Urban Limit Line
NHA:	National Heritage Area	USDA:	United States Department of Agriculture
NPDES:	National Pollutant Discharge Elimination System	USFWS:	United States Fish and Wildlife Service
OES:	Office of Emergency Services (Contra Costa County)	USGS:	United States Geological Survey
PCA:	Priority Conservation Area	VMT:	Vehicle Miles Traveled
PDA:	Priority Development Area	WCCUSD:	West Contra Costa Unified School District
PPA:	Priority Production Area	WCWD:	West County Wastewater District
PG&E:	Pacific Gas and Electric Company	ZEV:	Zero-Emissions Vehicle
RCD:	Resource Conservation District (Contra Costa County)		
RHNA:	Regional Housing Needs Allocation		

RHFPD:

RSD:

Rodeo-Hercules Fire Protection District

Rodeo Sanitary District

TERMINOLOGY

Accessory Dwelling Unit (ADU). A dwelling unit that provides complete independent living facilities and is located on the same lot as, and is subordinate to, a primary residence. ADUs include permanent provisions for living, sleeping, cooking and sanitation.

Acreage, Gross. The land area of a development site that exists prior to any dedications for public use, health, and safety purposes.

Acreage, Net. The portion of a development site that remains after dedication of land for public facilities, parks and open space, rights-of-way, and easements.

Action. A measure, procedure, or activity that helps the County achieve a specific goal. An action is something concrete that can and will be completed. (see "Goal")

Active Transportation Plan. A plan to enhance safety and mode share for active transportation, which comprises any self-propelled, human-powered travel, such as walking and bicycling.

Adaptation. Making changes in response to current or anticipated future conditions (such as the increased frequency and intensity of climate-related hazards), usually to reduce harm and take advantage of new opportunities.

Adapting to Rising Tides. A program of the San Francisco Bay Conservation and Development Commission to "provide staff support, guidance, tools, and information to help agencies and organizations understand, communicate, and begin to resolve complex climate change issues."¹

Adaptive Capacity. The "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."²

Adverse Impact. A negative consequence for the physical, social, or economic environment resulting from an action or project.

Agricultural Tourism. A form of tourism, also known as agritourism, that involves guests visiting working farms and ranches to observe, and sometimes participate in, farming practices and purchase locally grown products.

Air Quality Index. An index used by the US Environmental Protection Agency to report daily air quality for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide.

Archaeological Resource. Material evidence of past human activity found below the surface of ground or water, portions of which may be visible above the surface.

Asset. A valued feature of a community. Assets may include buildings and institutions, infrastructure, community services, ecosystems, and economic drivers

Benefit Assessment District. A financing mechanism established to provide public infrastructure to a defined area. Property owners within the district (i.e., the area that receives the benefit) pay an assessment to cover the cost of constructing and/or maintaining the public facility.

¹ Adapting to Rising Tides, "About Us," https://www.adaptingtorisingtides.org/about/, accessed June 15, 2023.

² Intergovernmental Panel on Climate Change, "Annex II: Glossary," ed. K. J. Mach, S. Planton, and C. von Stechow, in Climate Change 2014: Synthesis Report, ed. Core Writing Team, R. K. Pachauri, and L. A. Meyer (Geneva, Switzerland: IPCC, 2014), p. 117–130, https://www.ipcc.ch/report/ar5/syr/.

Bike Lane (Class II facility). A corridor for exclusive use by bicycles and micromobility devices, existing on a street or roadway in addition to vehicular lanes used by automobiles. Bicycle lanes are identified by signage and pavement markings.

Bike Path (Class I facility). A paved route, not on a street or roadway, expressly reserved for bicycles and micromobility devices traversing an otherwise unpaved area. Bicycle paths typically provide travel routes not provided by the road system.

Bike Route (Class III facility). A facility shared with automobiles and identified only by signage. Bicycle routes have no pavement markings.

Bikeway (Separated) (Class IV facility). A facility for exclusive use by bicycles and micromobility devices that is physically separated from vehicular lanes by islands, curbs, flexible or inflexible posts, on-street parking spaces, or other delineators.

Buffer. An area established between potentially conflicting land uses, which, depending on the potential impact, may use setbacks, landscaping, or structural barriers such as buildings to minimize the conflict.

Building. A type of structure with a roof supported by walls or columns that is permanently or semi-permanently attached to the ground and intended for shelter of people, animals, or property. (see "Structure")

Building Code. Standards adopted by the State of California governing construction, alteration, demolition, occupancy, or other use of buildings and structures. The State regulations are substantially the same as those contained in the most recent editions of the Uniform Building Code, Uniform Housing Code, Uniform Plumbing Code, Uniform Mechanical Code, and the National Electric Code. Local governments may adopt stricter standards under certain circumstances.

Buildout. Development of land to its full potential, or theoretical capacity, as permitted under current or proposed planning or zoning designations.

California Environmental Quality Act. Legislation and corresponding procedural components established in 1970 by the State of California to require environmental review for projects anticipated to result in adverse impacts to the environment. (see "Environmental Impact Report")

Capital Improvement Program. A program that schedules infrastructure improvements, usually over a minimum period of five years into the future, that fits the needs, priorities, and projected fiscal capability of the local jurisdiction. The program typically is reviewed on an annual basis for conformance to and consistency with the General Plan.

Carbon Neutral. Reducing greenhouse gas (GHG) emissions to zero, either by entirely eliminating all GHG emissions or by balancing out all remaining GHG emissions through carbon removal practices so that the "net" emissions are zero.

Carbon Sequestration. The process of storing carbon dioxide in locations other than the atmosphere, where it cannot contribute to climate change or ocean acidification. For the purposes of this plan, carbon sequestration refers to the storage of atmospheric carbon in vegetation, soils, woody products, and aquatic environments.

Class 1 Soil: Soil with slight limitations that restrict its use for agriculture, as defined by the U.S. Department of Agriculture Natural Resources Conservation Service Land Use Capability Classification. This ranking represents both irrigated and non-irrigated land, unless otherwise specified as such in the ranking.

Class 2 Soil: Soil with moderate limitations that reduce the choice of plants or require moderate conservation practices for agriculture, as defined by the U.S. Department of Agriculture Natural Resources Conservation Service Land

Use Capability Classification. This ranking represents both irrigated and nonirrigated land, unless otherwise specified as such in the ranking.

Clean Air Refuge. A building with efficient air filtration and improved air quality that is opened to community members during poor air quality days.

Climate Change. A change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. In the context of this plan, this term refers to changes brought on by human activities.

Climate Justice. The concept that no group of people should disproportionately bear the burden of climate change impacts or the costs of mitigation and adaptation.

Climate Sensitivity. The level to which a species, natural system, community, or government would be affected by changing climate conditions.

Community Facilities District. A special district established by a local agency to finance tax-exempt bonds for public services or the planning, design, acquisition, construction, and/or operation of public facilities. Special taxes levied within the district are used to repay the bonds.

Community Noise Equivalent Level. A 24-hour energy equivalent level derived from a variety of single-noise events, with weighting factors of 5 and 10 A-weighted decibels (dBA) applied to the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods, respectively, to allow for the greater sensitivity to noise during these hours.

Community Resource Centers. Pacific Gas and Electric Company (PG&E) facilities that are open to the public during Public Safety Power Shutoff events, offering air-conditioning or heating, ice, restrooms and hand-washing stations, medical equipment charging, device charging, Wi-Fi, bottled water, and snacks.

Community-Supported Agriculture. A community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or cooperatively, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or "share-holders" of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary.

Compatible. Capable of existing together without significant conflict or ill effects

Complete Street. A transportation facility that is planned, designed, constructed, operated, and maintained to provide comfortable and convenient mobility, and improve accessibility and connectivity to essential community destinations for all users and abilities, regardless of whether they are traveling as pedestrians, bicyclists, public transportation riders, or drivers. Complete streets are especially attuned to the needs of people walking, using assistive mobility devices, rolling, biking, and riding transit.

Conservation. The management and use of natural resources in a sustainable manner. Conservation results in land and water areas that are durably protected and managed to sustain functional ecosystems, whether intact and restored, and the diversity of life they support.

Conserve. To manage natural resources sustainably.

County Service Area. A special district in an unincorporated area formed to fund a public service that the County would not otherwise be able to fund through traditional sources, like property or sales tax. County Service Areas are governed by the County Board of Supervisors and funded by a direct assessment paid by property owners who benefit from the services provided.

Critical Facility. A facility whose continued functioning is necessary to maintain public health and safety following a disaster, and where damage or failure could pose hazards to life and property well beyond their immediate vicinity. Examples include hospitals, fire stations, and water treatment plants.

Cultural Resource. A historic, archaeological, tribal, or paleontological resource or human remains. Cultural resources include tribal cultural resources, as defined in California Public Resources Code Section 21074, regardless of whether a tribe is federally recognized.

Cumulative Impact. As used in CEQA, the total environmental impact resulting from the accumulated impacts of individual projects or programs over time.

Decibel. A unit used to express the relative intensity of a sound as it is heard by the human ear. The lowest volume a normal ear can detect under laboratory conditions is 0 decibel (dB), the threshold of human hearing. Since the decibel scale is logarithmic, 10 decibels are 10 times more intense, and 20 decibels are 100 times more intense, than 1 db.

dBA. The "A-weighted" scale for measuring sound in decibels, which weighs or reduces the effects of low and high frequencies to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness, even though the noise is actually 10 times more intense.

Dedication. Transfer of private land for public use. Dedications for roads, parks, school sites, or other public uses are often required by cities and counties as conditions for approval of development. (see "In-Lieu Fee")

Density. The number of permanent residential dwelling units per acre of land (du/acre). Densities specified in this General Plan are expressed in dwelling units per net acre, which excludes any land dedications, and not per gross acre. (see "Acreage, Gross," "Acreage, Net," and "Dedication")

Development Review; Design Review. The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting, and signs, in accordance with a set of adopted criteria and standards.

Development. The physical extension and/or construction of non-farmland uses. Development activities include subdivision of land; construction or alteration of buildings, structures, roads, utilities, and other facilities; installation of septic systems; grading; deposit of refuse, debris, or fill materials; and clearing of natural vegetative cover (with the exception of agricultural activities). Routine repair and maintenance activities are not considered development.

Duplex. A free-standing building divided into two separate living units or residences, usually having separate entrances. Duplexes are not synonymous with ADUs.

Dwelling Unit. The place of customary residence of a person or household, which is either considered to be real property under State law or cannot be easily moved.

Ecologically Significant Resource Area. Land containing unique, representative, and/or sensitive habitats, communities, or ecological processes.

Ecosystem. An interacting system formed by a biotic community and its physical environment.

Emergency Shelter. A facility that provides immediate short-term housing and supplemental services for homeless people. Supplemental services may include food, counseling, and access to other programs.

Enhanced Infrastructure Financing Districts. An economic development district that uses local property taxes to fund public and private projects that provide a benefit to the district. The district obtains funding for community projects through incremental tax. Tax increment financing works by "freezing tax revenues from a tax rate area in the interim base year and diverting forecasted tax revenue in future years (known as increment) to pay for improvements and/or pay back bonds."

Environmental Impact Report (EIR). A comprehensive study required pursuant to the California Environmental Quality Act that assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts. (see "California Environmental Quality Act")

Equity. The state in which each individual or group is allocated the resources needed to reach an equal outcome.

Evacuation Route. A roadway designated in the General Plan or a disaster/ emergency planning document as a potential recommended route to travel when evacuating from a hazardous condition.

Explosive. Any substance or combination of substances, the primary purpose of which is detonation or rapid combustion. (California Health and Safety Code)

Extreme Event. When a weather or climate variable exceeds the upper or lower thresholds of its observed range.

Extreme Heat. Temperatures that are hotter than 98 percent of the historical high temperatures for the area, as measured between the months of April and October during the period between 1961 and 1990. For Contra Costa

County the extreme heat threshold is 96.6 degrees Fahrenheit (°F), though it varies from 87.1°F in Kensington to 102.4°F in Byron.

Farmers Market. A mobile or non-mobile market: (1) operated by a local government agency, one or more certified producers, or a nonprofit organization; (2) certified by and operating in a location approved by the County Agricultural Commissioner; and (3) where farmers sell directly to consumers agricultural products or processed products made from agricultural products (also known as "value-added products") that the farmers grow themselves.

Fault. A fracture or zone of fractures in Earth's crust that forms a boundary between rock masses that have shifted.

Fee, Impact. A fee charged to a developer by a jurisdiction according to the proposed development project, typically by number of units, square footage, or acreage. The fee is often used to offset costs incurred by the agency for services and infrastructure such as schools, roads, police and fire protection, and parks.

Fee, In-Lieu. Payments that may be required of a property owner or developer as a substitute for a dedication of land for public use or construction of a public facility, usually calculated in dollars per lot, unit, or square foot. Also referred to as in-lieu contributions. (see "Dedication")

Fire Hazard Severity Zone. An area of significant fire hazard based on fuels, terrain, weather, and other relevant hazards. There are three levels of severity for these zones: Moderate, High, and Very High. CAL FIRE designates these zones, and local fire protection agencies may expand these zones or increase their severity within areas where they have responsibility for fire protection services (i.e., Local Responsibility Areas).

³ State of California, "Enhanced Infrastructure Financing Districts (EIFDs)," https://opzones.ca.gov/enhanced-infrastructure-financing-districts-eifds/, accessed June 15, 2023.

Flood, 100-Year. In any given year, a flood that has a 1 percent likelihood (a 1 in 100 chance) of occurring. Also known as the "base flood."

Flood, 200-Year. In any given year, a flood that has a 0.5 percent likelihood (a 1 in 200 chance) of occurring. Senate Bill 5 requires a 200-year level of flood protection for urban communities in the Central Valley.

Flood, 500-Year. In any given year, a flood that has a 0.2 percent likelihood (a 1 in 500 chance) of occurring.

Floodplain. The relatively level land area adjacent to a natural watercourse that is regularly subject to flooding.

Floodway. The part of the floodplain capable of conveying the 100-year flood with no more than a 1-foot rise in water. The floodway includes the natural watercourse itself and adjacent land areas.

Floor Area Ratio (FAR). The gross floor area of a building in square feet divided by gross land area, expressed as a decimal number. For example, a 60,000-square-foot building on a 120,000-square-foot parcel would have a floor area ratio of 0.50. The FAR is used in calculating the building intensity of nonresidential development.

Garden, Demonstration or Educational. Gardens operated by community organizations or educational institutions to serve an educational function, such as teaching school children about vegetables or agriculture, or assisting property owners with drought-tolerant or fire-resistant landscaping choices.

Gateway. A unique transition point in topography or land use that serves as an entrance to a region of the county or an individual community.

Greenhouse Gas (GHG) Emissions Inventory. A quantified list of a community's GHG emissions and sources.

Gleaning. Food recovery through collecting or harvesting of otherwise unused food for distribution to those in need.

Goal. A description of the general desired result sought by the County. Each goal has one or more policies and/or actions associated with the goal. (see "Policy" and "Action")

Graywater. Untreated wastewater that has not been affected by infectious, contaminated, or unhealthy bodily wastes and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes.

Green Benefit District. A special district that provides additional maintenance and capital improvements for a variety of neighborhood enhancements, such as parks and open space, beautification, and sidewalks, beyond what is already provided by the local agency. Green Benefit Districts are funded by a direct assessment paid by property owners who benefit from the services provided.

Green Infrastructure. Stormwater management systems that filter and absorb stormwater where it falls. These systems use plants, soil, and stormwater capture and reuse to store, infiltrate, or evapotranspirate stormwater and reduce flows to wastewater systems or surface waters.

Greenhouse Gas (GHG). A gas that allows sunlight to pass through but reflects heat radiated from the earth's surface, trapping heat in the lower atmosphere. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). They may be emitted by natural or human processes.

Groundwater. Water that exists beneath the earth's surface, typically found between saturated soils and rock, and is used to supply wells and springs.

Growth Management. Ensuring that future residential, commercial, and industrial growth pays for the facilities required to meet the demands resulting from that growth.

Habitat. The physical location or type of environment in which an organism or biological population lives or occurs.

Hazard. An event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural losses, damage to the environment, interruption of business, or other types of harm or loss.

Hazard Mitigation. Sustained action taken to reduce or eliminate the longterm risk to human life and property, by means of efforts that reduce hazards, exposure, and vulnerability.

Hazardous Material, Hazardous Waste: A substance or waste that, because of its physical, chemical, or other characteristics, may pose a risk of endangering human health or safety or degrading the environment. This does not include household hazardous waste, universal waste, or electronic waste, as they do not contain the quantity, concentration, and/or types of compounds significant enough to pose a substantial risk to human health and safety or the environment.

Hazardous Waste Facility. All contiguous land and structures, or other appurtenances, and improvements on land used for the treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous waste that require a Department of Toxic Substances Control (DTSC) permit for treatment, storage, and disposal facilities (i.e., treatment, storage, and disposal facility [TSDF] permit).

Health Equity. The state in which everyone has a fair and just opportunity to attain their highest level of health.4

Heat Wave. A weather event with five extreme heat days in a row.

Household. All persons occupying one dwelling unit. Persons comprising a household need not be related.

HUB Zone. A program that helps small businesses gain preferential access to federal supportive services and opportunities.

Impact, Climate. The effects (especially the negative effects) of a hazard or other condition associated with climate change.

Impacted Community. An area, typically low-income, that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation. This is the term Contra Costa County uses in place of "disadvantaged communities," as named in Senate Bill (SB) 1000. SB 1000 defines disadvantaged communities per Health and Safety Code Section 39711, specifying CalEnviroScreen as the primary screening method for identifying these communities. In this General Plan, Census tracts with a cumulative CalEnviroScreen score of 72 or higher are identified as Impacted Communities.

Impervious Surface. Surface through which water cannot penetrate, such as a roof, road, sidewalk, or paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

⁴ Centers for Disease Control and Prevention, "Health Equity," https://www.cdc.gov/healtheguity/whatis/index.html#:~:text=Health%20eguity%20is%20the%20state,health%20and%20health%20care%3B%20and, accessed June 15, 2023.

Implementation. Actions, procedures, programs, or techniques that carry out a plan.

Infill Development. Development that occurs on vacant or underutilized land within areas that are already largely developed.

Land Use. The occupation or use of an area of land for any human activity or purpose.

Land Use Designation. A land classification established by the General Plan Land Use Element that broadly determines the types and intensities of land uses that may exist on a given property.

Land Use Permit. A discretionary, usually conditional, permit issued to allow specific buildings or activities, at a specific location. Review of a land use permit application typically focuses on assessing the environmental impacts of a proposed land use and its compatibility with its surroundings.

Landslide. Movement of soil and/or rock down a slope, which typically occurs during an earthquake or following heavy rainfall.

Leadership in Energy and Environmental Design (LEED). A voluntary, consensus-based national standard for developing and rating highperformance, sustainable "green" buildings. LEED provides a complete framework for assessing building performance and meeting sustainability goals, such as water savings, energy-efficiency, materials selection, and indoor environmental quality. LEED standards are currently available or under development for new commercial construction and major renovation projects, existing building operations, commercial interiors projects, core and shell projects, and homes.

Leg, Equivalent Sound Level. The average of sound energy occurring over a specified period. The Leg is equivalent to the same average acoustical energy as the time-varying sound that actually occurs during a specified period.

Level of Service (Traffic). A scale that measures the amount of traffic that a roadway or intersection can accommodate, based on such factors as maneuverability, driver dissatisfaction, and delay.

Liquefaction. The transformation of loose, wet soil from a solid to liquid state, often as a result of ground shaking during an earthquake.

Local Agency Formation Commission (LAFCO). A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals.

Local Responsibility Area (LRA). Areas where a local government, such as a city, county, or district, has the primary financial responsibility of preventing and suppressing fires. (California Fire Code Section 4902.1)

Major Project. A General Plan amendment or rezoning to increase intensity of use, residential development exceeding 30 units, nonresidential development of 25,000 square feet or more, or a project requiring a land use permit pursuant to the Industrial Safety Ordinance.

Micromobility/Microtransit. Transportation via small, lightweight vehicles operated by the driver, such as electric scooters and bicycles. Vehicles typically do not exceed 15 miles per hour and are often available for rent for short-range travel within a defined area.

Military Operations Areas. A three-dimensional airspace designated for military training and transport activities that has a defined floor (minimum altitude) and ceiling (maximum altitude).

Mitigation. Modification to avoid, reduce, minimize, or eliminate a negative impact. There are various types of mitigation, including environmental impact mitigation, hazard mitigation, GHG emissions mitigation, and more.

Mixed Use. A type of development that combines different land uses, such as residential and commercial uses, within the same building (vertical mixed use) or site (horizontal mixed use).

Mobile Home. A structure, transportable in one or more sections, built on a permanent chassis and designed for use as a single-family dwelling unit and which: (1) has a minimum of 400 square feet of living space; (2) has a minimum width of 102 inches; (3) is connected to all available permanent utilities; and (4) is tied down (a) to a permanent foundation on a lot either owned or leased by the homeowner or (b) is set on piers, with wheels removed and skirted, in a mobile home park.

Mobile Home Park. Any area of land or property that has at least two mobile homes and/or lots that are held out for rent or lease for non-transient use.

Mode Share. The percentage of travelers using a certain type of transportation, such as walking, biking, taking transit, or driving a vehicle.

Municipality. An incorporated city or town.

Mutual-Aid Agreement. An agreement between two or more agencies to provide resources, facilities, and services in the event of a disaster or other emergency if the affected agency does not have the capability to adequately respond to the emergency with its own means.

Natural Watercourse. A naturally occurring body of water, such as a river, creek, or stream, flowing in a natural or artificial channel. Does not include canals, irrigation ditches, or similar structures built to convey water to or from a natural watercourse or other water body.

Natural and Working Lands. Lands not covered by buildings or structures, including forests, grasslands, shrublands, woodlands, rangelands, farmlands, wetlands, coastal areas, and the green spaces in urban and built environments. These lands provide food and fiber, clean air, water, and other resources and benefits.

Near Zero-Emissions. A building, vehicle, or other type of operation that uses zero-emission technologies, enables technologies that provide a pathway to zero-emissions operations, or incorporates other technologies that significantly reduce criteria pollutants, toxic air contaminants, and GHG emissions. (California Health and Safety Code Section 44258(c))

Neighborhood. A residential area defined by shared characteristics such as history, physical appearance (development pattern, architectural style, etc.), common facilities such as schools and parks, intangible characteristics (e.g., a psychological sense of place or cohesion), or clear physical boundaries like waterways or major roads.

Neighborhood Kitchen. A shared, commercial-scale kitchen space that is organized by a neighborhood or community group to facilitate safe food production by community members, such as for soup kitchens, community events, or small-scale cottage food industry operations.

Neighborhood-Serving Retail Use. A small-scale business providing goods and services necessary for the day-to-day maintenance of a household (e.g., corner markets, dry cleaners, coffee shops).

Noise Contours. Lines superimposed on a map that indicate various levels of average noise exposure as measured on the same scale.

Noise-Sensitive Use. A location where people reside or where the presence of unwanted sound could adversely affect the use of land, such as residences, schools, and hospitals.

Non-Conforming Use, Legal. A use that was established legally, but does not conform to subsequently adopted regulations.

Non-Essential Idling. Operation of a vehicle while it is stationary when none of the following circumstances are met: the vehicle is stuck in traffic; idling is necessary to inspect or service the vehicle; the vehicle is transferring power via a power-takeoff device; the vehicle can't move due to adverse weather conditions or mechanical failure; the vehicle is a bus with passengers on board. See California Code of Regulations, Title 13, Section 2485 for a full definition.

Offsets (emissions). Banked air emission reduction credits that compensate for cumulative increases in air emissions, as defined by BAAQMD Regulation 2 Rule 4.

On-Site Wastewater Treatment System. A multi-stage system that collects, treats, and disperses wastewater generated on an individual site. On-site wastewater treatment systems typically include a septic tank and disposal (leach) field.

Open Space. Natural habitat and other undeveloped areas that are usually protected from development by ownership, deed restrictions, conservation easements, land dedications, or other techniques.

Opportunity Zone. Economically distressed communities that have experienced a lack of investment for decades, defined by the federal government by Census tract. These areas may qualify for preferential tax treatment on new investments to incentivize investment in the community. Overlay. A land use or zoning designation that modifies the basic underlying designation or designations in some specific manner, usually by applying supplemental regulations.

Parcel. A unit of real property, commonly referred to as a "lot." Differs from an Assessor's parcel in that the latter is delineated by the County Assessor's Office solely for the purpose of assessing property taxes on a given area of land.

Planned Unit Development (PUD). A development approach that uses flexible zoning regulations to create projects that would otherwise be impermissible under standard zoning. PUDs often incorporate nontraditional development patterns and different types of residential buildings, and may include commercial, recreational, or public use components.

Pocket Park. A small park, typically less than a quarter acre in size.

Policy. A specific statement that guides decision making as the County works to achieve a goal. Policies represent statements of County regulation and set the standards used by decision makers when considering proposed development and actions. A policy is ongoing and requires no further action (see "Goal").

Reach Code. A local building code that exceeds the State Building Code requirements. A reach code must be at least as stringent as the State Code, cost-effective, approved by the California Energy Commission, and updated and re-adopted with each State Energy Code update.

Remediation. Restoration of contaminated areas to protect human health and the environment.

Resilience. The capacity of any entity—an individual, community, organization, or natural system—to prepare for disruptions, recover from shocks and stresses, and adapt and grow from a disruptive experience.

Community resilience is the ability of communities to withstand, recover, and learn from past disasters to strengthen future response and recovery efforts.

Resilience Center. A community-serving facility with year-round programming that also provides local communities with water and electricity during hazardous events or disasters.

Riparian. A habitat and vegetation zone that is associated with the banks and floodplains of a river, stream, or lake. Riparian trees and shrubs are typically phreatophytes, plants whose root systems are in constant contact with groundwater.

Risk. The potential for damage or loss created by the interaction of hazards with assets such as buildings, infrastructure, or natural and cultural resources.

Safe Routes to School (SRTS). Federal, State, and local programs that promote walking and bicycling to school through infrastructure improvements, safety education, enforcement, and incentives.

Sea Level Rise. The worldwide average rise in mean sea level, which may be due to a number of different causes, such as the thermal expansion of sea water and the addition of water to the oceans from the melting of glaciers, ice caps, and ice sheets.

Seniors. People 65 years of age or older.

Sensitive Receptor. A use that is highly sensitive to impacts from other uses, including homes, schools, playgrounds, sports fields, childcare centers, senior centers, hospitals, and long-term health care facilities.

Severe Ground Shaking. Intense ground movement resulting from transmission of seismic waves during an earthquake.

Sphere of Influence (SOI). The potential ultimate physical boundaries and service area of a municipality or special district, as determined by the Local Agency Formation Commission of the county. The SOIs for cities and towns include unincorporated land that could be annexed.

State Responsibility Area (SRA). The area where the State of California has primary financial responsibility for prevention and response to wildland fires as delineated on maps prepared by the State Fire Marshall.

Stationary Source. A fixed, non-mobile source of air pollution or noise.

Strip commercial. A linear pattern of retail businesses along a major roadway, usually characterized by single-story buildings with prominent parking lots visible from the roadway, multiple driveways, large signs, and a dependency on automobiles for access and circulation.

Structure. Anything constructed or erected on and permanently or semipermanently attached to land. (see "Building")

Subdivision. The division of any unit or units of real property, improved or unimproved, for the purpose of sale, lease, or financing. Major subdivisions yield five or more lots, while minor subdivisions yield four lots or fewer.

Substandard Housing. A residential building or living unit whose physical condition endangers the safety, property, or welfare of the occupants or general public.

Sustainability. Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable Streets. "Multimodal rights-of-way designed and operated to create benefits relating to movement, ecology, and community that together

support a broad sustainability agenda embracing the three Es: environment, equity, and economy."5

Townhouse/Townhome. A series of residences on individual parcels, typically two or three stories in height, that are connected side-by-side in a row, each having a separate street-level entrance.

Toxic Air Contaminant (TAC). An air pollutant that may cause or contribute to an increase in serious illness, or that may pose a present or potential hazard to human health, according to California Health and Safety Code Section 39655.

Traffic Calming. Measures designed to reduce motor vehicle speeds, increase safety, and encourage pedestrian use, including narrow streets, tight turning radii, sidewalk bulbouts, parking bays, and textured paving at intersections.

Triplex. A free-standing house divided into three separate living units or residences, usually having separate entrances.

Unincorporated Area. All land and water within a county that is outside the boundaries of incorporated cities and towns. Development in the unincorporated area is subject to County land use regulations.

Universal Waste. Common hazardous wastes that are widely generated by households and many different types of businesses, including batteries, pesticides, paints, lamps, and aerosol cans.

Unstable Slope. A slope that is susceptible to failure due to geologic hazards, steepness, lack of vegetation, or other adverse conditions.

Urban Agriculture/Farming. The practice of farming within an urban environment. Includes cultivation and small-scale processing of agricultural products.

Urban Heat Island. The phenomenon in which large urban areas experience higher temperatures, greater pollution, and more negative health impacts during hot months due to a combination of heat-absorptive surfaces, heatgenerating activities, and the absence of vegetation.

Urban Limit Line (ULL). A political boundary approved by Contra Costa County voters to limit urban development to defined areas of the county while preserving farmland, watersheds, and open space outside those areas.

Use. The purpose for which a lot, building, or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged in accordance with the County General Plan land use designations and corresponding zoning districts.

Utility Corridor. Rights-of-way or easements for utility lines on either publicly or privately owned property.

Vertiport. A facility or area designated for use by electric, hydrogen, or hybrid vertical take-off and landing (VTOL) aircraft.

Vulnerability. The degree to which natural, built, and human systems are susceptible "...to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt."6

Vulnerability Assessment. An analysis of how a changing climate may harm a community and which elements—people, buildings and structures, resources, ecosystems, and other assets—are most vulnerable to its effects

⁵ Greenberg, Ellen J., "Sustainable Streets: Foundations for an Emerging Practice," 2009, Washington, DC: Transportation Research Board 88th Annual Meeting.

⁶ Neil Adger, "Vulnerability," Global Environmental Change 16 (2006): 268-281, https://www.geos.ed.ac.uk/~nabo/meetings/glthec/materials/simpson/GEC_sdarticle2.pdf

based on an assessment of exposure, sensitivity, the potential impact(s), and the community's adaptive capacity.

Wastewater. Water that has been used in homes, businesses, industrial processes, or other applications. May contain pathogens, organic matter, and contaminants.

Wetland. An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Wildland-Urban Interface (WUI). An area that includes houses and wildland vegetation, creating a significant threat to human life or property from wildfires. The WUI is comprised of three distinct zones:

- 1. The intermix zone contains housing development or improved parcels interspersed in an area dominated by wildland vegetation subject to wildfire.
- 2. The interface zone contains dense housing next to vegetation that can burn in a wildfire, but is not dominated by wildland vegetation.
- 3. The influence zone contains wildfire-susceptible vegetation within 1.5 miles from the intermix and interface zones.

Xeriscape. Landscaping with an emphasis on water conservation and efficiency.

Zero Emission Vehicle/Transportation Device. A vehicle or transportation device (e.g., bicycle or scooter) that does not produce emissions when in operation, including battery-electric vehicles/devices and hydrogen fuel-cell electric vehicles

Zoning. Ordinances or other regulations adopted by the legislative body of a city or county that divide the jurisdiction into districts or zones that specify allowable uses for real property, impose standards for development (building setbacks, height limitations, landscaping requirements, etc.), and establish procedures for review and approval of development proposals. Zoning implements the land use policies of the General Plan.

SUMMARY OF POLICIES AND **ACTIONS BY THEME**

ENVIRONMENTAL JUSTICE



Neighborhood-serving retail uses that fill critical needs are exempt from this policy.

STRONGER COMMUNITIES ELEMENT

Policy SC-P1.1	In partnership with residents of Impacted Communities, affected workers, business/industry, environmental and environmental justice advocates, community colleges, workforce development and training entities, local government, and other involved agencies, support transition from highly polluting industries to a net-zero emission economy based on renewable and sustainable industries that provide living-wage jobs.
Policy SC-P1.2	Streamline permitting for new development, redevelopment, and rehabilitation projects that promote community objectives in Impacted Communities, especially as identified in the Community Profiles.
Policy SC-P1.3	Support creation of walkable districts by facilitating development of a range of neighborhood-serving retail and service uses, public amenities, and essential infrastructure (such as lighting) for residents of Impacted Communities within walking distance of their homes.
Policy SC-P1.4	Support cultural and community-driven events, such as art festivals, farmers' markets, and community service days, that support social connections, neighborhood identity, and environmental stewardship.
Policy SC-P1.5	Maintain a streamlined process to permit and facilitate partial and temporary street closures for community-sponsored amenities and activities, such as parklets, farmers' markets, arts and cultural events, and outdoor dining, and assist applicants through the permit process.
Policy SC-P1.6	For projects with potential to negatively affect an Impacted Community, support community benefits agreements (CBAs) negotiated with the project applicant to address the community's expressed needs. The primary objective of these CBAs is to mitigate project

impacts to the greatest extent possible, which could include mitigations exceeding the requirements of the California Environmental Quality Act (CEQA). Secondarily, to compensate for impacts that cannot be fully mitigated, these CBAs should secure community benefits that exceed inherent project benefits and support the community's objectives, especially as identified in the Community Profile.

Policy SC-P1.7

Should a community no longer meet the threshold for designation as an Impacted Community during the 5-year review called for in Action SC-A1.7, examine the factors that contributed to the redesignation and determine whether continued action is needed to support the community in retaining its non-Impacted Community status.

Action SC-A1.1

Partner with the stakeholders identified in Policy SC-P1.1 to develop and implement a plan to transition from highly polluting industries to renewable, sustainable, and clean industries that provide living-wage jobs. The plan should address site remediation responsibilities along with timelines and strategies to improve health, safety, infrastructure, job opportunities, and revenue opportunities during the transition toward a net-zero-emission economy, paying special attention to developing new opportunities for Impacted Communities to realize economic, health, educational, and other benefits, without placing a disproportionate economic burden on those with the least means.

Action SC-A1.2

Amend County Ordinance Code Chapter 84-63, Land Use Permits for Development Projects Involving Hazardous Waste or Hazardous Materials, to:

- Increase the hazard scores for projects with potential to adversely affect Impacted Communities to ensure more projects are subject to discretionary review.
- Address ambiguities and antiquated terminology that complicate administration of the ordinance.*
- Action SC-A1.3

With input from residents of Impacted Communities, amend County Ordinance Code Title 8 - Zoning to create an Impacted Communities Overlay Zone that applies to areas within and adjacent to Impacted Communities. Heavy industrial projects and commercial and light industrial projects resulting in 25,000 square feet or more of gross habitable floor area within the overlay zone will be required to satisfy additional discretionary permit findings that promote environmental justice, health, safety, and economic prosperity. Projects able to satisfy the required findings will:

- Provide benefits that support the community objectives, such as those identified in the Community Profile.
- Provide economic benefits, including jobs, for residents of the community.
- Avoid unwelcome permanent displacement of existing residents or businesses.
- Support community resiliency, cohesion, and safety.
- Positively impact health and quality of life within the community.

Create guidance for demonstrating consistency with these findings as part of the process to develop this ordinance.

Action SC-A1.4

Submit a report to the Board of Supervisors on the feasibility of creating or participating in a public bank, public-private partnerships, community land trusts, and other types of economic development and wealth-building tools to support local interests, community development, and long-term community ownership and housing affordability in Impacted Communities.

Action SC-A1.5	Establish a process for the County to assist community-based organizations and public-private partners with obtaining financing (e.g., grants) to implement physical improvements and beautification projects such as murals, vegetative buffers, and planting strips in Impacted Communities.
Action SC-A1.6	Dedicate staff in appropriate departments to assist applicants from Impacted Communities in navigating the project application and review process for projects in their communities
Action SC-A1.7	Upon each 5-year review of the General Plan, review health outcomes data for Impacted Communities and assess any updated information related to the delineation of Impacted Communities in Contra Costa County. Update the map of Impacted Communities (Figure SC-1) and environmental justice-related goals, policies, and actions accordingly.
Action SC-A1.8	As part of the annual General Plan progress report to the Board of Supervisors, describe specific efforts to implement the General Plan policies and actions related to environmental justice, highlighting efforts in each Impacted Community. Post this report in a visible location on the County website.
Action SC-A2.1	Study the feasibility of implementing an amortization process to relocate or eliminate non-conforming land uses, with a focus on public nuisances and uses that pose threats to public health and safety.
Policy SC-P3.4	Welcome establishment of medical clinics, behavioral health facilities, and pharmacies in Impacted Communities.
Action SC-A3.1	Streamline permitting processes for healthcare facilities to reduce barriers to their establishment in Impacted Communities.
Action SC-A4.2	Amend County Ordinance Code Title 8 – Zoning to add a requirement for certain projects to incorporate community gardens into the project design. As part of this process, identify a threshold for triggering this requirement, considering project type, size, and location, and establish standards for garden size and design. Consider the unique needs of Impacted Communities when developing these regulations.
Policy SC-P5.1	Increase access to fresh food in Impacted Communities by encouraging grocery stores, and urban agriculture, farmers' markets, and neighborhood kitchens on vacant or underutilized lands. Treat such uses as community benefits in and of themselves.
Policy SC-P5.2	Maximize multimodal access to fresh food in Impacted Communities, prioritizing micro-mobility and pedestrian access, by encouraging grocery stores, healthy corner stores, community gardens, and outdoor markets at key transit nodes and within transit-oriented developments.
Policy SC-P5.3	Provide temporary, and possibly permanent, access to County facilities and land for farmers' markets and community gardens, especially in Impacted Communities.
Action SC-A5.1	Inventory and map food deserts in the county. As part of the inventory, account for walking, micro-mobility, and transit access.

Action SC-A5.2	Amend the County Ordinance Code and/or procedures to streamline permitting processes for grocery stores and markets in Impacted Communities and food deserts.
Action SC-A5.3	Develop incentives to attract grocery stores, markets, and establishments selling fresh produce, preferably locally grown, in areas with poor access to fresh food.
Action SC-A5.4	Every five years beginning in 2025, review the Alcoholic Beverage Sales Commercial Activities Ordinance to ensure it protects Impacted Communities from experiencing disproportionate concentrations of, and impacts from, new bars and liquor stores. To support implementation of this ordinance, set up and maintain a shared data system between the Health Services and Conservation and Development departments that identifies the location of current establishments, along with information about public safety and health.
Action SC-A5.5	Study the feasibility of preventing fast-food restaurants from locating near schools, parks, and other places where children normally gather.
Policy SC-P6.1	Ensure that future improvements in Impacted Communities will not result in a net loss of affordable housing or significant preventable displacement of residents.
Policy SC-P6.2	Prompt owners of substandard housing units in Impacted Communities to repair and rehabilitate their buildings.
Policy SC-P6.3	Coordinate with residents of Impacted Communities, the Housing Authority of Contra Costa County, affordable housing developers, community land trusts, and housing advocates to transition vacant and underutilized land in Impacted Communities into affordable and transitional housing and shared equity models. This should include development of various types of innovative housing products and homeownership opportunities to help residents overcome past exclusionary practices and build intergenerational wealth.
Action SC-A6.1	Obtain additional funding for, and address barriers to participation in, the County's Weatherization Program and similar programs like the Contra Costa Asthma Initiative and Neighborhood Preservation Program for extremely low-, very low-, and low-income homeowners, seniors, landlords, and renters. Focus these efforts on homes in Impacted Communities, particularly rental and multiple-family housing.
Action SC-A6.2	Create a bulk buying program or revolving loan fund that allows people to purchase energy-efficient electric appliances (air conditioners, fans, air purifiers, heaters, stoves, ovens, etc.) and other items that increase building efficiency at wholesale prices or minimal cost, possibly with zero-percent interest financing, to increase energy efficiency and replace hazardous appliances. Work with volunteer groups that help people install and dispose of air conditioners and other electrical appliances if they are unable to do so themselves, focusing on Impacted Communities and other areas with high concentrations of vulnerable people. Consider augmenting energy-efficiency programs to reduce electricity use and help offset the cost of operating electrical appliances.

Action SC-A6.3	Partner with local solar energy providers to enact a solar group buy program to purchase solar panels and battery storage in bulk for installation in Impacted Communities, including establishment and subsidization of community solar programs that supply electricity to multiple consumers from a single photovoltaic solar location. The program should include an educational component to inform the community about the benefits and process of solar installation and give them the opportunity to enroll in the program at a discounted rate.
Action SC-A6.4	Expand the County's first-time homebuyer program to provide more information and assistance, prioritizing outreach in Impacted Communities to spread awareness of the program.
Policy SC-P7.1	Support development of cultural facilities and programs that are physically and financially accessible to all, with emphasis on bringing these to Impacted Communities.
Policy SC-P7.2	Pursue arts and cultural investments as a tool for economic development, especially in Impacted Communities.
Policy SC-P7.3	Support artists, community groups, and volunteer organizations in implementing temporary and permanent public art programs, especially in Impacted Communities.
Policy SC-P8.3	Welcome businesses, especially family-sustaining, locally hiring, sustainable businesses, that provide essential goods and services in Impacted Communities, including food stores with fresh produce, healthcare, childcare, pharmacies, and other retailers, while discouraging predatory lenders, liquor stores, tobacco and cannabis retail stores, dollar stores, and fast-food restaurants.
Policy SC-P8.4	Promote entrepreneurship, innovation, and locally owned businesses and enterprises, especially ethnic, immigrant, and Black, Indigenous, and people of color (BIPOC) entrepreneurship, for the purpose of improving economic self-sufficiency and stability, including through outreach efforts to local small business owners while minimizing permitting barriers.
Policy SC-P8.5	Encourage more daycares, preschools, and early childhood development centers to make childcare more accessible and affordable for working families.
Action SC-A8.1	Establish a First Source Hiring Program encouraging developers, contractors, and employers to make good-faith efforts toward employing the local workforce to construct and operate their facilities, with emphasis on residents of Impacted Communities and those who are economically disadvantaged.
Action SC-A8.2	Partner with school districts, community colleges, community organizations, large employers, trade associations, unions, and job training centers to support enhanced job-skills training, recruitment programs and services, and childcare services to support the county's workforce, especially workers in Impacted Communities. Work with experienced groups to ensure that programs will be properly staffed and funded. Training and intervention strategies should reduce barriers to employment for youth, formerly incarcerated residents, and residents with limited English proficiency, and should support a just transition from a fossil-fuel reliant economy by re-training displaced workers with skills for living-wage jobs in new, environmentally sustainable industries.

- Action SC-A8.3 Explore the feasibility of establishing a revolving loan fund, grant program, or business incubator that supports small business formation and expansion in Impacted Communities. Connect to industries such as advanced manufacturing, biomedical/biotech, food, transportation technology, and clean technology that support an economic transition from fossil fuels.
- Develop and sufficiently fund a program to offer one-on-one support to small businesses in Impacted Communities. Through this Action SC-A8.4 program, provide guidance related to available grants and other forms of financing, access to innovation, access to emerging industries and markets, and mentorship.
- Policy SC-P10.3 Expand opportunities to engage with County government. Provide residents with convenient access to information in the predominant languages spoken in their community.
- Policy SC-P11.1 Engage with residents of Impacted Communities in a genuine, meaningful, and respectful manner.
- Policy SC-P11.2 Notify and engage community members, organizations, and leaders when County planning decisions on major projects are being considered in or near Impacted Communities. Conduct meaningful outreach and engagement with Impacted Communities as follows:
 - Notify Impacted Communities of the existence of major projects early in the planning process.
 - Prepare public notices in the predominant language(s) spoken in the community and provide interpretation services at meetings as needed.
 - Make public notices and other important documents easy to understand and available in print at local libraries, community centers, or other gathering places.
 - Use a wide array of methods to inform community members of opportunities to participate, such as the County website, social media, texts, banners, mailers, and flyers.
 - Use supplemental outreach approaches that are appropriate for the participating community.
 - Schedule, format, and locate community workshops and meetings to be convenient for community members, both in person and online, whenever possible.
 - Use social media, virtual meeting platforms, recorded meetings, and other communication techniques to assist those without time or ability to attend public meetings.
 - Consider the economic, gender, age, and racial diversity of the affected population when developing outreach strategies.
 - Clearly explain potential adverse impacts of a proposed project in plain language that is easily understood by the participating community.

- Policy SC-P11.3 Provide community engagement and information access options for people in Impacted Communities without access to computers or internet. Use facilities such as public libraries and community centers as a resource for making information and technology available.
- Policy SC-P11.4 Strive for more diverse representation on County boards, commissions, committees, and similar bodies to better reflect the demographics and varying viewpoints of county residents, with greater efforts to engage under-represented populations.
- Action SC-A11.1 Designate staff in departments that routinely interact with residents of Impacted Communities, such as Conservation and Development, Public Works, and Health Services, as liaisons to each Impacted Community.
- Hold semi-annual public meetings in each Impacted Community, including the County Supervisor representing the community and Action SC-A11.2 representatives from the full spectrum of County departments, to hear from residents of these communities, and use that input to inform the County's annual budgeting process. Provide interpretation services at these meetings.
- Identify communities with a significant number of non-English-speaking households and develop resources and strategies for better Action SC-A11.3 engagement.
- Develop centralized outreach services to support all County departments with language interpretation, translation services for written Action SC-A11.4 documents, and sign language services for public meetings.
- Action SC-A11.6 Amend County Ordinance Code Title 2 – Administration to increase the public notification distance for hearings concerning refineries and other large stationary sources (i.e., any stationary source that emits, or has the potential to emit, 40 tons per year or more of nitrous oxides or sulfur dioxide; 15 tons per year of coarse particulate matter; 10 tons per year of fine particulate matter; and/or 200 tons per year of carbon dioxide) from 300 to 3,000 feet.

TRANSPORTATION ELEMENT

- Action TR-A2.8 Work with transit agencies to provide convenient ways for residents to report transit shelters and other amenities (e.g., lighting, seating) that are in disrepair. Encourage and promote reporting countywide, especially in Impacted Communities.
- Action TR-A2.9 Pursue funding and other resources to implement the Accessible Transportation Services Strategic Plan and similar plans and initiatives that expand the hours of operation, operational boundaries, convenience, and quality of accessible transit to improve mobility for seniors, people with disabilities, and other vulnerable populations.
- Action TR-A2.10 Support establishment of a Bay Area-wide transit fare equity program that includes free or means-based transit passes for qualifying residents of Impacted Communities.

- Policy TR-P3.3 Provide or require new projects to install energy-efficient street lighting to improve public safety and comfort in urbanized areas. Prioritize installation in Impacted Communities, particularly at parks, transit stops, alleyways, bike and pedestrian paths, trails, and other high-need areas, consistent with community preferences.
- Action TR-A3.2 Identify and address neighborhood-specific issues and needs in Impacted Communities, prioritizing installation of sidewalks, enhanced crosswalks, street lighting, street trees, bicycling infrastructure, transit stop amenities, traffic calming, and other safety and comfort improvements, especially in residential areas and near schools, libraries, and recreational facilities. Explore innovative methods to ensure these facilities are maintained. Engage school districts, neighborhood groups, and the local Safe Routes to School Program in implementing this action.
- Action TR-A5.4 Review the scoring formula for active transportation projects at least once every five years to ensure continued prioritization of projects in Impacted Communities.
- Develop a program to establish and maintain truck routes, with the goal of minimizing impacts on residents and other sensitive Action TR-A6.1 receptors. This program will provide engineering and policy solutions to divert trucks from Impacted Communities and establish criteria for designating weight limits on certain routes and installing physical barriers and signage.

CONSERVATION, OPEN SPACE, AND WORKING LANDS ELEMENT

Action COS-A14.9 Ensure County-led and supported retrofit programs incentivize and prioritize conversion of buildings built before 1980 and emphasize assistance to owners of properties that are home to very low-, low-, and moderate- income residents or located in Impacted Communities, as permitted by available funding.

PUBLIC FACILITIES AND SERVICES ELEMENT

- Action PFS-A1.2 Update the Capital Facilities Master Plan, Capital Road Improvement and Preservation Program, Parks Capital Improvement Program, and similar plans and programs as needed to maintain consistency with this General Plan, particularly its provisions related to environmental justice.
- Policy PFS-P2.1 Ensure County facilities and services meet the needs of all users, regardless of age, ability, race, ethnicity, culture, language, gender identity, or economic status.
- Policy PFS-P2.2 Pursuant to SB 1000, as part of the County's annual budgeting process, prioritize investments in public facilities, infrastructure, and services that benefit Impacted Communities and respond to their needs, particularly those needs identified in their Community Profiles.
- Policy PFS-P2.3 Coordinate with service providers (e.g., water, wastewater, transit, and recreation districts) and advocate for proper planning, maintenance, and implementation of services and infrastructure to ensure efficient service delivery in Impacted Communities.

Policy PFS-P2.5	Continue to prioritize and adequately fund code enforcement and clean-up of illegal dumping on public and private property in Impacted Communities.
Action PFS-A2.1	Establish funding and financing mechanisms in Impacted Communities to provide and maintain community-desired public facilities and services. These could be County- or community-initiated, and include business improvement districts, green benefit districts, and similar mechanisms.
Action PFS-A2.2	Establish an entity within the County tasked with ensuring that County services and facilities in Impacted Communities are coordinated, prioritized, and delivered efficiently and effectively.
Action PFS-A2.3	Implement and maintain urban greening and green infrastructure, such as sustainable/green street projects, in Impacted Communities.
Action PFS-A2.4	Regularly assess Code Enforcement responses and Public Works maintenance practices to ensure equitable implementation. Prioritize resources to keep Impacted Communities safe and clean, emphasizing enforcement actions on issues identified in Community Profiles.
Action PFS-A2.6	Pursue public-private partnerships that improve access to reliable, fast, and affordable internet in Impacted Communities.
Policy PFS-P3.4	When communities request levels of County services that exceed the countywide standard, require creation of (or annexation into) a County Service Area, community facilities district, or equivalent mechanism to fund the supplemental service costs. Allow exceptions for enhanced services in Impacted Communities if alternative funding sources can be identified.*
Policy PFS-P3.6	When adopting, amending, and imposing impact fees, community benefits agreements, and developer exactions, consider the effects of such fees and exactions upon individual project economics, housing supply, economic development, and the County's broad goals and objectives related to overall community development. If gap funding can be identified, consider fee reductions or exemptions for projects in Impacted Communities that are consistent with the community objectives identified in their Community Profile.
Policy PFS-P4.4	Partner with water service providers to ensure continuity of service and provide financial relief to Impacted Communities if prices rise during drought conditions.
Policy PFS-P7.7	Support expansion of recycling programs and efforts to locate convenient, accessible recycling centers in Impacted Communities.
Action PFS-A7.3	Partner with community organizations and solid waste franchise collection haulers to maximize participation in community clean-up days and residential on-call garbage pick-ups in Impacted Communities. Encourage community participation by holding these events in conjunction with other community events whenever possible.
Action PFS-A7.5	Install signage and increase education, monitoring, enforcement, and rapid cleanup to discourage illegal dumping, especially in Impacted Communities and rural areas.

Policy PFS-P8.3	Expand access to diverse, high-quality parks, green spaces, recreational facilities, trails, and natural environments for residents of
	Impacted Communities, including by facilitating multiple transportation modes. Partner with other agencies and non-governmental
	organizations to obtain funding, and design and maintain these facilities to offer a safe and comfortable environment for users of all
	ages and abilities.

- Policy PFS-P8.4 Prioritize and promote recreational activity programs and opportunities in Impacted Communities.
- Policy PFS-P8.6 Support expanded access to recreation opportunities by working with other agencies to co-locate parks and trails with public facilities, such as schools and utility easements, prioritizing Impacted Communities.
- Policy PFS-P8.11 Support local community groups and volunteer organizations in efforts to improve and maintain local parks, trails, and other public spaces, such as through an Adopt-A-Park/Trail program, especially in Impacted Communities.
- Action PFS-A8.2 Coordinate with recreation and park districts and cities to prepare a parks and open space needs assessment for all unincorporated communities, prioritizing Impacted Communities. Integrate the results of the assessment into a Parks Master Plan and the Parks Capital Improvement Program and implement improvements that address barriers to outdoor physical activity, such as inadequate infrastructure and safety concerns.
- Policy PFS-P10.1 Prioritize expansion of library services in Impacted Communities.

HEALTH AND SAFETY ELEMENT

- Policy HS-P1.2 Prioritize participation in emission and exposure reduction, public education, engagement, outreach, and other programs that promote improved air quality, focusing on Impacted Communities.
- Policy HS-P1.3 Require new development to adhere to BAAQMD's Planning Healthy Places guidance when local conditions warrant.*
- Policy HS-P1.4 Require new industrial development to locate significant pollution sources at the maximum distance possible from sensitive receptors.*
- Policy HS-P1.6 Require that any mitigation of air quality impacts occur on-site to the extent feasible to provide the greatest benefit to residents in neighboring communities most impacted. For mitigation that relies on offsets, require that the offsets be obtained from sources as near to the project site as possible or from sources that would improve air quality in an Impacted Community. If the project site is within or adjacent to an Impacted Community, require offsets/mitigation within that community unless determined infeasible by the County.*
- Policy HS-P1.8 Require new or expanded commercial and industrial projects resulting in 25,000 square feet or more of gross habitable floor area, such as warehouses and other large enclosed buildings, to be near zero-emission operations, including the facilities themselves and the associated fleets. Require all necessary measures, such as the following, to achieve near zero emissions:

- Reduce on-site energy consumption and increase on-site energy generation and energy storage.
- Provide adequate on-site zero-emission-vehicle parking for all anticipated truck traffic to prevent idling and off-site queuing.
- Provide electrified loading docks with receptacles allowing plug-in of refrigerated trailers.
- Use heavy-duty trucks that are model year 2014 or later and expedite a transition to zero-emission trucks by establishing a clear timeline for electrification of trucks as they become commercially available. Ensure contracts with motor carriers include air quality incentives or requirements, such as providing incentives to fleets that meet United States Environmental Protection Agency (EPA) SmartWay standards or requiring use of zero-emission or near-zero-emission trucks.
- Use a "clean fleet" of delivery vehicles as they become commercially available, but no later than 2025.
- Use zero-emission yard equipment, such as forklifts, pallet trucks and jacks, and stackers.
- Implement practices to control and remove fugitive dust and other contaminants from paved areas.

Uses with fewer than five vehicles domiciled on-site are exempt from this policy.*

- Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 8 Zoning to create an Air Pollution Action HS-A1.2 Exposure Overlay Zone around freeways that requires new construction in these areas to install enhanced ventilation systems and other strategies to protect people from respiratory, heart, and other health effects associated with breathing polluted air.
- Action HS-A1.3 Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 8 – Zoning to include an Industrial-Sensitive Receptor Interface Overlay Zone applied to areas where residential land uses and other sensitive receptors interface or directly abut heavy industrial land uses. In the overlay zone, require industrial uses to reduce pollution and employ strategies to mitigate air quality, noise, vibration, odor, light, visual, and safety impacts on nearby sensitive receptors. In addition, require new sensitive receptors to install enhanced ventilation systems and implement other strategies, paid for by neighboring sources of pollution to the extent possible, to protect residents from health and quality of life impacts.
- Action HS-A1.4 Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 7 – Building Regulations to include a clean construction ordinance that requires projects to implement extra measures to reduce emissions at construction sites in or near places that are already overburdened by air pollution, such as Impacted Communities.
- Adopt an ordinance at least as stringent as the State's maximum idling law, and coordinate with CARB and law enforcement to Action HS-A1.5 achieve compliance.
- Policy HS-P2.1 When evaluating health risk impacts of projects in Impacted Communities, use an excess cancer risk of 6.0 per million and a noncancer (acute and chronic) hazard index greater than 1.0 as thresholds for finding that the project could cause a cumulatively considerable contribution and a significant impact.*

- Policy HS-P2.2 Increase the tree canopy on public property, especially in Impacted Communities and areas with a high heat index, by prioritizing funding for new street tree planting and maintenance. Policy HS-P2.3 Support protection, restoration, and enhancement of natural landscapes in and near Impacted Communities to improve air quality and community health. Action HS-A2.1 Partner with community members and regulatory agencies such as BAAQMD to conduct data collection and monitoring of pollution exposure, prepare a community-scale plan for reducing and mitigating air pollutant emissions and industrial hazards, such as pipeline risks, accidents, potential water or soil contamination, and impacts to sensitive ecological resources for each Impacted Community, or group of Impacted Communities, as appropriate. Require future projects to demonstrate consistency with those plans. Action HS-A2.2 Coordinate with community members, BAAQMD, and other regulatory agencies to facilitate AB 617 citizen-led programs, including data collection, monitoring of pollution exposure, and identification and implementation of solutions in Impacted Communities. Consider future General Plan and Zoning Code amendments as needed to support BAAQMD in meeting AB 617 objectives. Action HS-A2.3 Conduct a housing condition survey in Impacted Communities to identify units likely requiring upgrades to provide adequate protection from toxic releases. Based on the survey's findings, target outreach to provide information about weatherization and similar improvement programs. Action HS-A2.4 Coordinate with BAAQMD to determine where to focus a targeted permit inspection program in Impacted Communities to help ensure enforcement of air quality permits. Action HS-A2.5 Prepare a tree master plan for the county that emphasizes planting of low-maintenance native tree species and includes quantified goals and tracking methods, including mapping the tree canopy, and prioritizes planting in Impacted Communities and along safe routes to schools. Policy HS-P4.3 Prioritize efforts to protect Impacted Communities and other vulnerable populations from the impacts of climate change, including through improving community capacity and meaninafully involving community members in decision making. Action HS-A6.3 Coordinate with BCDC, Delta Stewardship Council, Caltrans, cities, and other affected agencies, organizations, and stakeholders to prepare and adopt a community-driven countywide sea level rise adaptation and resilience plan addressing increased flooding and sea level rise that provides unique adaptation options for the entire county shoreline and identifies funding mechanisms for implementation. Use Figures HS-6 through HS-9 or the best-available climate science data to identify where sea level rise hazards are likely to occur and lead efforts to:
 - Maximize awareness and disclosure to property owners and the public.
 - Assess and address impacts to future development, including promoting the Adaptation Pathways model to respond to uncertainty and evolving conditions.

- Plan for resiliency projects and adaptation measures to protect existing development and infrastructure, emphasizing naturebased solutions.
- Partner with the Adapting to Rising Tides Program, property owners, and community-based organizations to conduct a study of opportunities and costs for shifting development away from areas at risk from inundation.
- Inform governance, funding, and financing decisions about short-term and long-term resiliency and adaptation projects.
- Ensure that the disproportionate impacts on vulnerable populations and Impacted Communities are addressed.
- Policy HS-P9.1 Provide equitable inspection and enforcement of hazardous material and hazardous waste regulations throughout the county.
- Policy HS-P9.7 Prioritize implementation of projects that reduce the risk of hazardous materials transportation accidents along hazardous material transportation corridors in Impacted Communities.
- Policy HS-P9.8 Require applicants for projects that involve hazardous materials or hazardous waste to provide clear information in plain language about potential hazards their projects pose to nearby communities at the beginning of the review process. Review and verify this information, make it available to residents, and encourage project applicants to host at least one community meeting to discuss potential hazards.
- Policy HS-P9.9 Deny entitlements for construction of new large-scale facilities that treat, store, or dispose of hazardous waste from off-site sources and negatively impact Impacted Communities.
- Policy HS-P9.14 Encourage and facilitate establishment of adequate sites for collection of household hazardous waste (HHW), unused pharmaceuticals, and universal wastes, along with provisions for residents who are physically unable to deliver materials to a collection
- Policy HS-P10.1 Coordinate with other agencies in efforts to remediate or treat contaminated surface water, groundwater, and soils in or affecting Impacted Communities.
- Policy HS-P10.3 Require new, modified, or expanded industrial uses involving hazardous materials or wastes to provide sufficient funds, in the form of a financial instrument acceptable to the County, to guarantee site remediation, including removal of facilities, equipment, and structures, and ensure community safety and site reusability.
- Policy HS-P12.4 Ensure there are adequate identified locations for alternate care sites, especially in Impacted Communities.
- Action HS-A12.5 Identify and map existing community facilities, such as libraries, gymnasiums, community centers, and auditoriums, that can serve as community resilience centers and support people with access and functional needs during hazard events. Work with the owners of these facilities to identify and implement upgrades, prioritizing facilities in Impacted Communities.

COMMUNITY HEALTH

STRONGER COMMUNITIES ELEMENT

- Policy SC-P1.1 In partnership with residents of Impacted Communities, affected workers, business/industry, environmental and environmental justice advocates, community colleges, workforce development and training entities, local government, and other involved agencies, support transition from highly polluting industries to a net-zero emission economy based on renewable and sustainable industries that provide living-wage jobs.
- Policy SC-P1.3 Support creation of walkable districts by facilitating development of a range of neighborhood-serving retail and service uses, public amenities, and essential infrastructure (such as lighting) for residents of Impacted Communities within walking distance of their homes.
- Policy SC-P1.4 Support cultural and community-driven events, such as art festivals, farmers' markets, and community service days, that support social connections, neighborhood identity, and environmental stewardship.
- Policy SC-P1.5 Maintain a streamlined process to permit and facilitate partial and temporary street closures for community-sponsored amenities and activities, such as parklets, farmers' markets, arts and cultural events, and outdoor dining, and assist applicants through the permit process.
- Action SC-A1.1 Partner with the stakeholders identified in Policy SC-P1.1 to develop and implement a plan to transition from highly polluting industries to renewable, sustainable, and clean industries that provide living-wage jobs. The plan should address site remediation responsibilities along with timelines and strategies to improve health, safety, infrastructure, job opportunities, and revenue opportunities during the transition toward a net-zero-emission economy, paying special attention to developing new opportunities for Impacted Communities to realize economic, health, educational, and other benefits, without placing a disproportionate economic burden on those with the least means.
- Action SC-A1.2 Amend County Ordinance Code Chapter 84-63, Land Use Permits for Development Projects Involving Hazardous Waste or Hazardous Materials, to:
 - Increase the hazard scores for projects with potential to adversely affect Impacted Communities to ensure more projects are subject to discretionary review.
 - Address ambiguities and antiquated terminology that complicate administration of the ordinance.*
- Action SC-A1.3 With input from residents of Impacted Communities, amend County Ordinance Code Title 8 - Zoning to create an Impacted Communities Overlay Zone that applies to areas within and adjacent to Impacted Communities. Heavy industrial projects and commercial and light industrial projects resulting in 25,000 square feet or more of gross habitable floor area within the overlay zone

will be required to satisfy additional discretionary permit findings that promote environmental justice, health, safety, and economic prosperity. Projects able to satisfy the required findings will:

- Provide benefits that support the community objectives, such as those identified in the Community Profile.
- Provide economic benefits, including jobs, for residents of the community.
- Avoid unwelcome permanent displacement of existing residents or businesses.
- Support community resiliency, cohesion, and safety.
- Positively impact health and quality of life within the community.

Create guidance for demonstrating consistency with these findings as part of the process to develop this ordinance.

- Action SC-A1.5 Establish a process for the County to assist community-based organizations and public-private partners with obtaining financing (e.g., grants) to implement physical improvements and beautification projects such as murals, vegetative buffers, and planting strips in Impacted Communities.
- Action SC-A1.7 Upon each 5-year review of the General Plan, review health outcomes data for Impacted Communities and assess any updated information related to the delineation of Impacted Communities in Contra Costa County, Update the map of Impacted Communities (Figure SC-1) and environmental justice-related goals, policies, and actions accordingly.
- Policy SC-P2.1 Welcome redevelopment and clean-up of undesirable uses and activities, such as highly polluting industries, and support uses that have a positive impact on community well-being.
- Policy SC-P2.2 Encourage development, preservation, and reinvestment that strengthen the unique character of each unincorporated community and advance community and neighborhood resilience. Ensure that future private and public projects provide infrastructure, parks and playgrounds, Complete Streets, trees and landscaping, streetscapes, signage, and sustainable building design that reflect and improve the character of the community, along with long-term maintenance mechanisms to ensure continued benefit from the improvements into the future.
- Policy SC-P2.3 Within established communities, complete construction of sidewalks and crosswalks and encourage neighborhood design and development that supports safe walking, biking, and other micro-mobility options, convenient access to services and transit, and opportunities for local shopping.
- Policy SC-P2.4 Provide functional civic space and well-maintained public amenities near high-volume transit hubs. Each hub area should project a positive visual image, a strong and unique identity, and a safe, inviting environment for pedestrians and passengers.
- Policy SC-P2.5 Promote creation of community focal points and gathering places.

Policy SC-P2.6	Leverage community-specific natural features, such as creeks, shorelines, and trails, to strengthen community identity and connect residents to nature.
Policy SC-P2.7	Encourage land uses and activities that reflect and enrich the history and cultural heritage of each unincorporated community.
Policy SC-P2.8	Stimulate investment in communities by using CEQA infill exemptions to expedite environmental review and reduce project costs.
Policy SC-P2.9	Implement principles of universal and barrier-free design so that people of all physical abilities can enjoy mobility and accessibility in their communities.
Policy SC-P2.10	Empower residents of all ages and abilities to volunteer toward improving conditions in Contra Costa County and maintain a culture within County government that supports and celebrates such volunteerism.
Action SC-A2.1	Study the feasibility of implementing an amortization process to relocate or eliminate non-conforming land uses, with a focus on public nuisances and uses that pose threats to public health and safety.
Policy SC-P3.1	Provide all communities with sufficient and equitable access to adequate healthcare and behavioral health facilities and services.
Policy SC-P3.2	Pursue feasible opportunities to co-locate healthcare services with other County services within new or substantially renovated County facilities.
Policy SC-P3.3	Support and encourage provision of paratransit, public transit, and other transportation services to neighborhood and regional healthcare facilities to meet identified gaps in service.
Policy SC-P3.4	Welcome establishment of medical clinics, behavioral health facilities, and pharmacies in Impacted Communities.
Action SC-A3.1	Streamline permitting processes for healthcare facilities to reduce barriers to their establishment in Impacted Communities.
Action SC-A3.2	Continue collaborating with neighboring jurisdictions to assess and address issues related to capacity and access to emergency, acute, and preventative/primary healthcare services, especially in the West County region.
Policy SC-P4.1	Encourage planting of home gardens and food-producing plants and trees on private property in urban areas. Encourage partnerships between property owners and gleaning and stewardship programs to harvest and maintain edible plantings. NZE
Policy SC-P4.2	Encourage all new residential development to incorporate community gardens into the project design and require incorporation of community gardens for projects that meet the criteria established through Action SC-A4.2.
Policy SC-P4.3	Encourage urban agriculture, including urban farms and community gardens with collectively shared and managed plots, and demonstration and educational gardens operated by community organizations and educational institutions. Allow associated, limited on-site sales, processing of value-added products, and complementary agricultural activities when compatible with adjacent uses.

Policy SC-P4.4 Support programs administered by water or wastewater service providers that increase the availability of recycled water for urban agriculture and landscaping through self-fill stations and similar facilities. Amend the urban agriculture provisions in County Ordinance Code Title 8 – Zoning to address the following: Action SC-A4.1 Zoning districts where urban agriculture is allowed. Permitting requirements. Development and performance standards. Environmentally safe and sustainable practices. Sale of crops and value-added products. Animal husbandry. Disposal of food waste and agricultural byproducts. Action SC-A4.2 Amend County Ordinance Code Title 8 - Zoning to add a requirement for certain projects to incorporate community gardens into the project design. As part of this process, identify a threshold for triggering this requirement, considering project type, size, and location, and establish standards for garden size and design. Consider the unique needs of Impacted Communities when developing these regulations. Amend County Ordinance Code Title 4 - Health and Safety to allow food trucks within certain designated areas and on private Action SC-A4.3 property with special permits under Title 8. Policy SC-P5.1 Increase access to fresh food in Impacted Communities by encouraging grocery stores, and urban agriculture, farmers' markets, and neighborhood kitchens on vacant or underutilized lands. Treat such uses as community benefits in and of themselves. Policy SC-P5.2 Maximize multimodal access to fresh food in Impacted Communities, prioritizing micro-mobility and pedestrian access, by encouraging grocery stores, healthy corner stores, community gardens, and outdoor markets at key transit nodes and within transitoriented developments. Policy SC-P5.3 Provide temporary, and possibly permanent, access to County facilities and land for farmers' markets and community gardens, especially in Impacted Communities. Inventory and map food deserts in the county. As part of the inventory, account for walking, micro-mobility, and transit access. Action SC-A5.1 Action SC-A5.2 Amend the County Ordinance Code and/or procedures to streamline permitting processes for grocery stores and markets in Impacted Communities and food deserts.

Action SC-A5.3	Develop incentives to attract grocery stores, markets, and establishments selling fresh produce, preferably locally grown, in areas with poor access to fresh food.
Action SC-A5.4	Every five years beginning in 2025, review the Alcoholic Beverage Sales Commercial Activities Ordinance to ensure it protects Impacted Communities from experiencing disproportionate concentrations of, and impacts from, new bars and liquor stores. To support implementation of this ordinance, set up and maintain a shared data system between the Health Services and Conservation and Development departments that identifies the location of current establishments, along with information about public safety and health.
Action SC-A5.5	Study the feasibility of preventing fast-food restaurants from locating near schools, parks, and other places where children normally gather.
Policy SC-P6.1	Ensure that future improvements in Impacted Communities will not result in a net loss of affordable housing or significant preventable displacement of residents.
Policy SC-P6.2	Prompt owners of substandard housing units in Impacted Communities to repair and rehabilitate their buildings.
Policy SC-P6.3	Coordinate with residents of Impacted Communities, the Housing Authority of Contra Costa County, affordable housing developers, community land trusts, and housing advocates to transition vacant and underutilized land in Impacted Communities into affordable and transitional housing and shared equity models. This should include development of various types of innovative housing products and homeownership opportunities to help residents overcome past exclusionary practices and build intergenerational wealth.
Policy SC-P6.4	Support voluntary removal of natural gas infrastructure and appliances from homes and replacement with electric appliances.
Action SC-A6.1	Obtain additional funding for, and address barriers to participation in, the County's Weatherization Program and similar programs like the Contra Costa Asthma Initiative and Neighborhood Preservation Program for extremely low-, very low-, and low-income homeowners, seniors, landlords, and renters. Focus these efforts on homes in Impacted Communities, particularly rental and multiple-family housing.
Action SC-A6.2	Create a bulk buying program or revolving loan fund that allows people to purchase energy-efficient electric appliances (air conditioners, fans, air purifiers, heaters, stoves, ovens, etc.) and other items that increase building efficiency at wholesale prices or minimal cost, possibly with zero-percent interest financing, to increase energy efficiency and replace hazardous appliances. Work with volunteer groups that help people install and dispose of air conditioners and other electrical appliances if they are unable to do so themselves, focusing on Impacted Communities and other areas with high concentrations of vulnerable people. Consider augmenting energy-efficiency programs to reduce electricity use and help offset the cost of operating electrical appliances.
Action SC-A6.3	Partner with local solar energy providers to enact a solar group buy program to purchase solar panels and battery storage in bulk for installation in Impacted Communities, including establishment and subsidization of community solar programs that supply electricity to multiple consumers from a single photovoltaic solar location. The program should include an educational component to inform

the community	about the	benefits and	l process of	solar	installation	and g	ive them	the o	opportunity	to enroll	in the p	orogram	at a
discounted rate													

- Action SC-A6.4 Expand the County's first-time homebuyer program to provide more information and assistance, prioritizing outreach in Impacted Communities to spread awareness of the program.
- Policy SC-P8.3 Welcome businesses, especially family-sustaining, locally hiring, sustainable businesses, that provide essential goods and services in Impacted Communities, including food stores with fresh produce, healthcare, childcare, pharmacies, and other retailers, while discouraging predatory lenders, liquor stores, tobacco and cannabis retail stores, dollar stores, and fast-food restaurants.
- Policy SC-P8.5 Encourage more daycares, preschools, and early childhood development centers to make childcare more accessible and affordable for working families.
- Action SC-A8.2 Partner with school districts, community colleges, community organizations, large employers, trade associations, unions, and job training centers to support enhanced job-skills training, recruitment programs and services, and childcare services to support the county's workforce, especially workers in Impacted Communities. Work with experienced groups to ensure that programs will be properly staffed and funded. Training and intervention strategies should reduce barriers to employment for youth, formerly incarcerated residents, and residents with limited English proficiency, and should support a just transition from a fossil-fuel reliant economy by re-training displaced workers with skills for living-wage jobs in new, environmentally sustainable industries.
- Action SC-A8.5 Explore use of existing federal and State government economic development programs, such as the "Opportunity Zone" program, "HUB Zone" program, and contracting designations, as a means to generate funding for transit, housing, and capital improvements, while attracting private investment.

LAND USE ELEMENT

Policy LU-P2.7 In areas with a Residential land use designation, relate single-family residential density to the availability of utility services as follows:

- Require a 5-acre minimum lot size where no public water or sanitary sewer service is available.
- Require a 1-acre minimum lot size where either public water or sanitary sewer service is available, but not both.

Where public water and sanitary sewer services are available, allowable density will be based on the General Plan Land Use Map designation, as well as drainage, health, safety, and other applicable standards.

Policy LU-P2.10 When considering development proposals and land use changes, treat susceptibility to hazards and threats to health and safety as primary considerations.

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Action LU-A5.1	In 2025 and at least once every five years thereafter, evaluate the County's off-street parking standards to ensure their continued applicability in light of changing conditions, trends, and technologies. Each evaluation should assess the appropriateness of reducing or eliminating parking minimums, taking off-site impacts and the variations in parking needs between communities into account, and recommend strategies for reducing parking demand.
Policy LU-P7.4	Protect residential neighborhoods from incompatible uses and activities that adversely affect public health and safety.
Policy LU-P7.5	Require new residential development to be planned, designed, and constructed in a way that promotes health, minimizes hazard

Encourage extremely high-density, mixed-use development that combines employment, housing, and services near major transit

Policy LU-P7.7 Require new residential projects to provide convenient access/connections to public transit, local destinations, and multi-use trails.*

exposure for future residents, and mitigates potential adverse effects on natural resources and the environment.

Policy LU-P9.5 Plan industrial uses and districts to be harmonious with nearby areas, reduce the potential for off-site impacts, and limit potential exposure to environmental health hazards and pollutants.

TRANSPORTATION ELEMENT

Policy TR-P1.2	Coordinate planning, construction, and maintenance of streets, transit infrastructure, non-motorized rights-of-way and associated
	facilities, the countywide bicycle network, and Pedestrian Priority Areas with neighboring jurisdictions and CCTA.*

Action TR-A1.1 Coordinate with Caltrans, neighboring jurisdictions, CCTA, and the Regional Transportation Planning Committees to plan, design, and implement Complete Streets concepts on Routes of Regional Significance.

Policy TR-P2.1 In addition to any required California Environmental Quality Act (CEQA) review, evaluate the traffic operations effects of proposed projects in accordance with the County's Transportation Analysis Guidelines and other appropriate policy supplements and transportation plans, and best practices. When operational deficiencies are identified, the treatments to address those deficiencies should first prioritize reducing the project's vehicular trips and collision risks, and may secondarily consider adding vehicular capacity so long as the safety and movement of active modes are not compromised. Exceptions to the level of service (LOS) operational standards presented in the Transportation Analysis Guidelines may be granted if the treatments necessary to address operational deficiencies would conflict with other priorities in this General Plan and if the project is otherwise consistent with this Plan.

Policy TR-P2.2 Prioritize expansion of bicycle, micromobility, and pedestrian infrastructure (e.g., Class IV separated bikeways) to address the significant latent demand for these active transportation modes.

Policy IU-P3 3

Policy TR-P2.3	Ensure emerging transportation technologies and travel options, such as autonomous and ZEVs and transportation network companies, support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.
Policy TR-P2.4	Reduce single-occupant vehicle usage and VMT by significantly enhancing the availability and safety of other travel modes through infrastructure investment, policy support (Vision Zero, TDM Ordinance, and other best practices), and support for public transit.*
Policy TR-P2.8	Support improvement and expansion of passenger and commuter rail service countywide, with emphasis on transformative projects such as the Hercules Intermodal Transit Center and BART extensions in the I-80 corridor toward Crockett and SR 4 corridor toward Brentwood.
Policy TR-P2.9	Support public transit and encourage transit use by advocating for increased funding with enhanced governance, high-frequency service, and expansion of first-mile/last-mile programs.
Policy TR-P2.10	Enhance multimodal access to all transit stops, prioritizing stops which serve vulnerable and mobility-impaired populations.
Policy TR-P2.11	Support transitioning all on-road vehicles, including personal vehicles and business, government, and public transit fleets, to electric power from renewable sources or other emission-free fuels.
Policy TR-P2.12	Continue to improve ZEV charging/fueling infrastructure within new development and public rights-of-way, incorporating new technologies whenever possible.
Policy TR-P2.13	Require designs for new parking facilities to incorporate ZEV charging/fueling infrastructure and maximize opportunities for adaptive reuse.*
Action TR-A2.1	Develop and promote mobility alternatives to single-occupancy vehicles, including but not limited to public transit, micromobility, carbon-free rideshare strategies, and nonmotorized modes.
Action TR-A2.2	Review and update County Ordinance Code Chapter 82-32 – Transportation Demand Management and the County's Transportation Demand Management Guidelines at least once every five years to incorporate current best practices.
Action TR-A2.4	Implement programs to encourage transit use, bicycling, walking, telecommuting, and use of alternative vehicle fuels by County employees.
Action TR-A2.5	Conduct a survey to identify gaps in public transit and the active transportation network within one mile of County offices and facilities, and pursue funding for projects and programs that will fill those gaps and improve the availability of alternative transportation options for County employees.
Action TR-A2.6	Partner with transit agencies and CCTA to develop "Safe Routes to Transit" guidance that could be applied in new development areas and existing neighborhoods.

Action TR-A2.7	Partner with transit providers, cities, and CCTA to develop a countywide transit stop program that takes a holistic approach to transit stop planning and construction. Encourage the program to address right-of-way adequacy (i.e., sufficient space for bus pullouts and amenities), amenities (e.g., shelters, seating, bicycle racks and lockers), and improvements around stops to increase accessibility (e.g., curb ramps, sidewalk widening).
Action TR-A2.8	Work with transit agencies to provide convenient ways for residents to report transit shelters and other amenities (e.g., lighting, seating) that are in disrepair. Encourage and promote reporting countywide, especially in Impacted Communities.
Action TR-A2.9	Pursue funding and other resources to implement the Accessible Transportation Services Strategic Plan and similar plans and initiatives that expand the hours of operation, operational boundaries, convenience, and quality of accessible transit to improve mobility for seniors, people with disabilities, and other vulnerable populations.
Action TR-A2.10	Support establishment of a Bay Area-wide transit fare equity program that includes free or means-based transit passes for qualifying residents of Impacted Communities.
Action TR-A2.11	Coordinate with CCTA and other local and regional agencies to implement the Contra Costa Electric Vehicle Readiness Blueprint and related policies and apply best practices in ZEV charging/fueling infrastructure requirements.
Action TR-A2.12	Update the County Ordinance Code as necessary to support advances in ZEV charging/fueling infrastructure.
Policy TR-P3.1	Pursue the priorities identified in the County's Vision Zero and other safety programs, through prioritization of safety projects and incorporation of safety considerations into all transportation planning efforts.
Policy TR-P3.2	Minimize conflicts between vehicles and people who walk, bike, or use micromobility through careful site planning, paying particular attention to driveway locations and internal pedestrian circulation, and prioritizing safety for active modes of travel.
Policy TR-P3.3	Provide or require new projects to install energy-efficient street lighting to improve public safety and comfort in urbanized areas. Prioritize installation in Impacted Communities, particularly at parks, transit stops, alleyways, bike and pedestrian paths, trails, and other high-need areas, consistent with community preferences.
Action TR-A3.1	Maintain a Vision Zero Working Group to regularly review collision data and evaluate the effectiveness of Vision Zero and other safety strategies.
Action TR-A3.2	Identify and address neighborhood-specific issues and needs in Impacted Communities, prioritizing installation of sidewalks, enhanced crosswalks, street lighting, street trees, bicycling infrastructure, transit stop amenities, traffic calming, and other safety and comfort improvements, especially in residential areas and near schools, libraries, and recreational facilities. Explore innovative methods to ensure these facilities are maintained. Engage school districts, neighborhood groups, and the local Safe Routes to School Program in implementing this action.

Policy TR-P4.1	Plan, design, and maintain improvement projects involving County roadways in accordance with the County's adopted Complete Streets Policy, other applicable policies (e.g., Vision Zero and other safety initiatives), planning documents such as the County ATP and CCTA Countywide Bicycle and Pedestrian Plan, and best practices (e.g., Caltrans, American Association of State and Highway Transportation Officials, and National Association of City Transportation Officials guidance).*
Policy TR-P4.2	Require transportation infrastructure serving new development to be designed using best practices, contemplating existing and planned land uses, roadways, bicycle and pedestrian facilities, transit facilities, and connections to adjoining areas.*
Policy TR-P4.3	Create connections between unincorporated communities and neighborhoods and adjacent jurisdictions to improve multimodal access to local destinations, such as schools, parks, shopping, health services, and workplaces.
Policy TR-P4.4	Manage access points along arterial and collector roadways to minimize the number of new driveway or street-type intersections. Consolidate existing street and driveway intersections to limit conflict points as opportunities arise.
Policy TR-P4.6	Enhance streetscapes in nonresidential areas, making them more pedestrian-friendly and inviting by reducing setback and off-street parking requirements and augmenting traffic-calming measures.
Policy TR-P4.7	Encourage walkability and safety by streamlining implementation of traffic-calming measures through the Neighborhood Traffic Management Program.
Policy TR-P4.10	Design roadway infrastructure, including traffic-calming and Complete Streets features, to accommodate emergency response vehicles while maintaining the safety of vulnerable road users.*
Action TR-A4.3	Develop guidance for managing curb space in ways that are sensitive to the land use context, with considerations for active transportation use, users with limited mobility, transportation network companies, outdoor dining, freight deliveries, parking, and other curb uses that may emerge.
Policy TR-P5.1	Plan, design, construct, and maintain facilities for walking, bicycling, and rolling to serve people of all ages, abilities, and income levels, including children, seniors, families, and people with limited mobility.
Policy TR-P5.2	Coordinate with Caltrans to provide safe and comfortable highway interchange crossings for people of all ages and abilities who walk, bike, or use micromobility.
Policy TR-P5.3	Prioritize construction of capital improvement projects identified in the County's ATP.
Policy TR-P5.5	Maintain pedestrian and active transportation facilities to the same standard as roads and other transportation infrastructure, including repair and cleanup of all bikeway types and shared-use pathways.
Policy TR-P5.7	Encourage walking, bicycling, and micromobility as the travel modes of choice for short to medium-length trips, such as trips to schools, parks, transit stops, local shopping areas, and neighborhood services.

- Policy TR-P5.8 Partner with neighboring jurisdictions, transit agencies, community members, and business organizations to plan and construct sustainable streets in business and commercial areas. Consider forming community facilities districts or business improvement districts to help fund and maintain improvements. Policy TR-P5.9 Consider proposals for temporary and permanent reorientation of public space towards increased outdoor activity, such as walking, bicycling, rolling, dining, and other social uses. Policy TR-P5.10 Support micromobility options such as bike-, e-bike-, and e-scooter-share. Policy TR-P5.11 Require generous parking for bicycles and other mobility devices at key destinations, such as shopping centers, parks, schools, employment centers, transit stations, and multiple-family housing. This parking should be conveniently located near entrances, include charging infrastructure, and accommodate cargo bikes when appropriate for the land use. Partner with CCTA and neighboring jurisdictions to build out the countywide bicycle and pedestrian network, prioritizing completion Action TR-A5.1 of the Low-Stress Countywide Bicycle Network and pedestrian safety improvement projects in the County's Pedestrian Priority Areas, as described in the Countywide Bicycle and Pedestrian Plan. Action TR-A5.2 Construct innovative bicycle and pedestrian facilities, including Class IV separated and protected bikeways, bicycle superhighways, and other low-stress facility types, as described in the Countywide Bicycle and Pedestrian Plan and in contemporary, best-practice transportation planning and engineering guidance. Use contextually appropriate green infrastructure and landscaping to separate vehicular lanes from bicycle and pedestrian facilities whenever feasible. Action TR-A5.3 Partner with CCTA, neighboring jurisdictions, and transit agencies to implement the Richmond Area and Pittsburg/Bay Point CBTPs. Review the scoring formula for active transportation projects at least once every five years to ensure continued prioritization of projects Action TR-A5.4 in Impacted Communities. Action TR-A5.5 Partner with the cities, EBRPD, and CCTA to develop uniform guidance to manage active micromobility services. Action TR-A5.6 Evaluate the feasibility and appropriateness of the following when updating the ATP and CRIPP: Installing bikeways along all segments of Routes of Regional Significance within the County's jurisdiction.
 - Restriping arterials and collectors to include bikeways whenever major maintenance occurs.
 - Installing bikeways and sidewalks along arterials and collectors to the limits of adjacent jurisdictions.
 - Installing bicycle detection systems, bicycle signals, bicycle boxes, and pavement markings at new and retrofitted traffic signals.
 - Installing crosswalks at all legs of signalized intersections.

Policy TR-P6.1	Partner with neighboring jurisdictions, CCTA, and the MTC to manage regional movement of goods through unincorporated areas, minimizing impacts on residents and other sensitive receptors.
Policy TR-P6.4	Use all available policy tools to ensure that trucks use designated truck routes.
Policy TR-P6.5	Work with railroads to preserve non-operational contiguous railroad rights-of-way, and highly encourage construction of grade-separated railroad crossings along active lines to support current and future rail operations and ensure the long-term viability of these rail corridors. When no longer in operation, maintain options for future use of the corridors for trails or other public purposes.
Policy TR-P6.6	Support development of short-line railroad infrastructure and operations in industrial areas to facilitate rail access to Class I railroad lines, attract potential businesses seeking rail-served properties, ease traffic congestion caused by goods movement on regional highways, and reduce GHG emissions.
Action TR-A6.1	Develop a program to establish and maintain truck routes, with the goal of minimizing impacts on residents and other sensitive receptors. This program will provide engineering and policy solutions to divert trucks from Impacted Communities and establish criteria for designating weight limits on certain routes and installing physical barriers and signage.
Action TR-A6.2	Facilitate enforcement of idling restrictions by promoting community-based reporting to enforcement agencies.
Action TR-A6.4	Develop regulations responding to technological advancements in freight movement, such as autonomous vehicles, robotics, and drone deliveries, while supporting the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.
Policy TR-P7.2	Work with the Federal Aviation Administration and aviation operators to minimize conflicts with residential areas and other sensitive receptors.
Policy TR-P7.3	Regulate the location of private airfields and heliports to protect public safety and minimize impacts on nearby residents and sensitive receptors.*
Policy TR-P7.4	Protect the County's airports from encroachment by incompatible uses and minimize the public's exposure to safety hazards and excessive noise by ensuring that all future development within each Airport Influence Area is consistent with the Contra Costa County ALUCP.*

CONSERVATION, OPEN SPACE, AND WORKING LANDS ELEMENT

Policy COS-P1.2 Pursue opportunities for permanent open space dedication for habitat, scenic, or passive recreation benefits as part of future development approvals and major capital improvement projects.

Policy COS-P1.3	Discourage conversion of land designated Resource Conservation or Parks and Recreation to urban uses. If such conversion is to occur, require mitigation through permanent protection of other open space or park lands for habitat, scenic, or recreation benefits at a ratio to be determined based on the biological, scenic, or recreational value of the land, but not less than 3:1.*
Policy COS-P2.14	Encourage IPM practices that reduce the use of agricultural pesticides and minimize pesticide drift, and discourage farming practices that may expose residents, water resources, and the environment to fine particulates and harmful chemicals.
Policy COS-P5.1	Support protection, restoration, and enhancement of wetlands, marshes, sloughs, tidelands, natural watercourses, and riparian corridors, and emphasize the role of these features in climate change resilience, air and water quality, and wildlife habitat.
Policy COS-P5.10	Allow encroachments into required setback areas along natural watercourses and wetlands for the purpose of constructing low-impact public improvements or public-serving amenities, such as footbridges, trails, and nature viewing areas, provided a qualified biologist confirms that the improvements/amenities are compatible with protection of ecological values.
Policy COS-P7.3	For projects in areas without a water service provider, require proof of adequate on-site groundwater during the development review process. In addition to requiring compliance with the County's well regulations related to water quality and flow rate, require documentation that the proposed project will not have a significant cumulative impact on the aquifer or negatively affect development that already relies on the same groundwater supply.*
Policy COS-P7.8	Promote installation of drought-tolerant green infrastructure, including street trees, in landscaped public areas.
Action COS-A7.2	For areas that are not covered by an adopted GSP, amend the County Ordinance Code to include sustainability indicators, defined by the SGMA, as a guide for development to maintain and protect the quality and quantity of groundwater supplies within the county.*
Policy COS-P8.1	Protect public water supplies by denying applications for projects that would introduce significant new pollution sources in groundwater basins and watersheds feeding major reservoirs, and support efforts to acquire and permanently protect reservoir watersheds.*
Policy COS-P8.2	Coordinate with other agencies to control point and non-point sources of water pollution and maintain water quality standards.*
Policy COS-P8.3	Support development and implementation of a long-term, area-wide integrated vegetation management program to control invasive weeds in a way that reduces pesticide use and preserves water quality.
Policy COS-P8.4	Require new development to retain natural vegetation and topography whenever feasible and require projects involving erosion-inducing activities to use best management practices to minimize erosion.*
Policy COS-P8.5	Require groundwater monitoring programs for all large-scale commercial and industrial facilities that use wells and prohibit discharge of hazardous materials through injection wells.*
Policy COS-P8.6	Support ongoing remediation of the Mount Diablo Mercury Mine.

- Policy COS-P9.6 Support efforts to expand and enhance public access to the Bay shoreline and Delta.
- Action COS-A9.1 Amend County Ordinance Code Title 8 – Zoning to incorporate the following requirements for new or expanded marinas and docks:
 - Adequate channel width and depth, as defined by the State Harbors and Navigation Code.
 - Adequate public fire protection services.
 - Adequate public vehicular access.
 - Adequate supply of potable water.
 - Adequate on-site facilities for sewage and solid waste disposal.
 - Compatibility with nearby agricultural uses.
 - Compatibility with nearby conservation/habitat lands.
 - Designed to avoid inundation from projected sea level rise, as shown on Figures HS-6 through HS-9 (Sea Level Rise Projection Maps) in the Health and Safety Element.*
- Action COS-A14.1 Amend County Ordinance Code Chapter 88-14 - Oil and Gas Drilling and Production to:
 - Prohibit new and expanded oil and gas production wells in the following:
 - i. Sensitive ecological areas, such as wetlands and habitat for rare, threatened, endangered, or special-status species.
 - ii. Areas subject to 100-year flood hazards or sea level rise, as shown in Figures HS-2 and HS-6 through HS-9.
 - iii. Areas within 3,200 feet of sensitive receptors or urban land use designations unless project-specific exceptions are granted by the California Department of Conservation, Geologic Energy Management Division.
 - Restrict oil and gas drilling operations to agricultural zoning districts only.
 - Require a land use permit for all new and expanded oil and gas wells.
 - Require a reclamation plan for oil and gas well sites that includes bonding for site clean-up.
 - Include performance standards related to surface water and groundwater quality and quantity, air quality, odors, noise, and aesthetics.

In parallel, study the feasibility of amending the County Ordinance Code to prohibit development of new oil and gas wells and phase out existing oil and gas well operations.

PUBLIC FACILITIES AND SERVICES ELEMENT

Policy PFS-P1.1	Consider potential effects on the physical, social, cultural, and recreational needs of the surrounding community when developing new County facilities.
Policy PFS-P1.2	Locate new County facilities that involve regular community access in places that are easily accessible by public transit, walking, and micromobility, to the greatest extent possible.
Policy PFS-P2.1	Ensure County facilities and services meet the needs of all users, regardless of age, ability, race, ethnicity, culture, language, gender identity, or economic status.
Policy PFS-P2.5	Continue to prioritize and adequately fund code enforcement and clean-up of illegal dumping on public and private property in Impacted Communities.
Action PFS-A2.3	Implement and maintain urban greening and green infrastructure, such as sustainable/green street projects, in Impacted Communities.
Action PFS-A2.4	Regularly assess Code Enforcement responses and Public Works maintenance practices to ensure equitable implementation. Prioritize resources to keep Impacted Communities safe and clean, emphasizing enforcement actions on issues identified in Community Profiles.
Policy PFS-P4.5	Require new development to demonstrate the availability of a safe, sanitary, and environmentally sound water delivery system with adequate capacity.*
Policy PFS-P4.6	Require new development to demonstrate the availability of a safe, sanitary, and environmentally sound wastewater treatment system with adequate capacity.*
Policy PFS-P5.7	When developing new or revised regional drainage and flood management plans, including plans to protect against sea level rise, incorporate adequate setbacks and alternative drainage system improvements that provide aesthetic, recreational, and environmental benefits. Improvements should avoid structural modifications to watercourses and preserve riparian habitat and floodplains, and convert engineered drainage systems to more natural systems, when and where possible. In areas at risk of temporary or permanent inundation from sea level rise, ensure that improvements can continue to provide adequate protection for the projected level of inundation by 2100 or the expected operational life of the project, whichever is later.*
Policy PFS-P5.8	Incorporate green infrastructure into new and retrofitted flood-control and streetscaping projects, including replacing existing asphalt and other hardscapes with green infrastructure, as feasible.*

- Policy PFS-P5.9 Work with developers of properties along transit corridors or in commercial or mixed-use areas to combine required C.3/stormwater treatment facilities with green infrastructure on the adjoining public right-of-way to enhance the value and sizing of these facilities.
- Coordinate with responsible parties, public and private, to develop a flood risk management plan for the levee systems protecting the Action PFS-A5.2 unincorporated county that:
 - Identifies the entities responsible for operation and maintenance of the levees.
 - Determines the anticipated flood levels in the adjacent waterways and the level of protection offered by the existing levees along the waterways.
 - Establishes a long-term plan to upgrade the system as necessary to provide at least a 100-year level of flood protection, and 200-year level of flood protection where required.
 - Considers the worst-case situations of high tides coupled with sea level rise and storm-driven waves.
 - Protects beneficial uses of San Francisco Bay and the Delta and their water.
 - Prioritizes designs that foster riparian habitat while containing floodwaters, such as by using more natural materials, landforms, and vegetation, rather than concrete channels and other conventional flood-control infrastructure.
 - Encourages multipurpose flood-management projects that, where feasible, incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of waterways.
 - Takes a holistic approach to flood-risk management so that new infrastructure does not simply transfer flooding impacts from one property or location to another.
 - Considers flood and tidal impacts to existing brownfields, especially adjacent to shorelines.
 - Includes provisions for updates to reflect future State- or federally mandated levels of flood protection.
- Action PFS-A5.3 Develop watershed management plans incorporating best management practices that slow, spread, and sink water runoff to flatten the hydrograph (i.e., water flow over time) where erosion is a concern, while also enhancing wildlife habitat and recreation opportunities where feasible.*
- Action PFS-A5.5 Coordinate with the Contra Costa County Mosquito and Vector Control District to identify and remedy areas with ongoing drainage problems to reduce disease risk from stagnant water.
- Policy PFS-P7.8 Consistently use a multiprong approach (i.e., educate, prevent, clean up, enforce) to combat illegal dumping.

Policy PFS-P7.9 Prohibit new landfills in ecologically sensitive areas, and require that new landfills be located, designed, and operated to avoid adverse impacts to surrounding land uses, including by limiting the area of landfill activities; limiting hours of operation; providing safe and appropriate transportation routes; maintaining site security; identifying associated off-site feeder transfer stations; grading to blend the landfill disturbance area with surrounding topography; covering refuse daily; and mitigating noise, odor, litter, and visual impacts.* Require that new landfills provide the following: Policy PFS-P7.10 An appropriate leachate collection and recovery system. An approved erosion-control and drainage plan. Geotechnical studies, including stability analysis, to determine the most appropriate engineering design. A habitat enhancement plan that provides for at least a 3:1 replacement for lost significant habitat.* Policy PFS-P7.11 Require new landfills to be designed and operated so that upon decommissioning they can be repurposed for other uses, such as renewable energy facilities, recycling and organics recovery operations, outdoor recreation facilities, and open space. Action PFS-A7.3 Partner with community organizations and solid waste franchise collection haulers to maximize participation in community clean-up days and residential on-call garbage pick-ups in Impacted Communities. Encourage community participation by holding these events in conjunction with other community events whenever possible. Work with other counties, cities, and community members to establish public/private partnerships to combat illegal dumping. Action PFS-A7.4 Install signage and increase education, monitoring, enforcement, and rapid cleanup to discourage illegal dumping, especially in Action PFS-A7.5 Impacted Communities and rural areas. Use the County's legislative platform process and partner with other public agencies throughout the state to propose and support Action PFS-A7.6 leaislation to combat illegal dumping. Policy PFS-P8.1 Support development of a variety of local amenities that meet a diverse range of recreational needs, such as ballfields, all-abilities playgrounds, tot lots, spraygrounds, adult fitness courses, gymnasiums, swimming pools, sport courts, passive parks, pocket parks, urban gardens, and trails.

Provide a local park within a safe 10-minute walk for all residents in urban communities or within a 5-minute drive for residents in

Policy PFS-P8.2

suburban communities, as indicated in Figures PFS-9 and PFS-10.*

Policy PFS-P8.3	Expand access to diverse, high-quality parks, green spaces, recreational facilities, trails, and natural environments for residents of Impacted Communities, including by facilitating multiple transportation modes. Partner with other agencies and non-governmental organizations to obtain funding, and design and maintain these facilities to offer a safe and comfortable environment for users of all ages and abilities.
Policy PFS-P8.4	Prioritize and promote recreational activity programs and opportunities in Impacted Communities.
Policy PFS-P8.5	Require projects subject to the Park Dedication or Park Impact Fee Ordinances to develop parks and recreation amenities identified in, or proposed for addition to, the County's Park Capital Improvement Plan. Park Impact fees or in-lieu fees should be assessed only when the County determines developer improvements are not feasible.*
Policy PFS-P8.6	Support expanded access to recreation opportunities by working with other agencies to co-locate parks and trails with public facilities, such as schools and utility easements, prioritizing Impacted Communities.
Policy PFS-P8.7	Design recreational facilities to complement the natural features of the area, including topography and vegetation, whenever appropriate.
Policy PFS-P8.8	Support expanded public access to the waterfront and development of water-related recreational opportunities, such as fishing and boating.
Policy PFS-P8.9	Support development of a comprehensive and interconnected network of trails, including intra- and inter-regional trails like the San Francisco Bay Trail, Carquinez Strait Scenic Loop Trail, Great California Delta Trail, and Marsh Creek Corridor Trail, that provides public access to shorelines, ridges, and other scenic areas, connects residents with open space and nature, and links urban areas with parks and other recreational facilities.
Policy PFS-P8.10	Encourage use of abandoned railroad rights-of-way for trails or other public purposes and participate in collaborative planning processes to determine the best use of abandoned rail corridors.
Policy PFS-P8.11	Support local community groups and volunteer organizations in efforts to improve and maintain local parks, trails, and other public spaces, such as through an Adopt-A-Park/Trail program, especially in Impacted Communities.
Action PFS-A8.1	Create an internal County entity that works across departments and non-County agencies to coordinate planning and funding of unincorporated local parks, recreational facilities, and trails.
Action PFS-A8.2	Coordinate with recreation and park districts and cities to prepare a parks and open space needs assessment for all unincorporated communities, prioritizing Impacted Communities. Integrate the results of the assessment into a Parks Master Plan and the Parks Capital Improvement Program and implement improvements that address barriers to outdoor physical activity, such as inadequate infrastructure and safety concerns.

- Annually update park dedication and in-lieu fee requirements based on the Consumer Price Index for All Customers, All Items for the Action PFS-A8.3 San Francisco-Oakland-San Jose Metropolitan Area to accommodate for increases or decreases in development costs. Conduct a fee study at least once every 10 years to reflect changes in the cost of land, local park and recreational needs, and development conditions.*
- Action PFS-A8.4 Maintain up-to-date maps showing quarter-mile and half-mile walking distances and five-minute driving times to public parks.
- Policy PFS-P9.3 Encourage school districts to use school sites for multiple community purposes, such as recreation, and to locate new schools in conjunction with and/or adjacent to parks and trails.
- Policy PFS-P10.2 Locate and design library facilities to provide access to the greatest number of people. Ensure they are sited in areas with broadband internet and close to public transit.

HEALTH AND SAFETY ELEMENT

- Policy HS-P1.1 Coordinate air quality planning efforts with State and regional agencies, such as CARB, BAAQMD, and ABAG/MTC.
- Policy HS-P1.2 Prioritize participation in emission and exposure reduction, public education, engagement, outreach, and other programs that promote improved air quality, focusing on Impacted Communities.
- Policy HS-P1.3 Require new development to adhere to BAAQMD's Planning Healthy Places guidance when local conditions warrant.*
- Policy HS-P1.4 Require new industrial development to locate significant pollution sources at the maximum distance possible from sensitive receptors.*
- Policy HS-P1.5 Require new sources of air pollution that will generate significant new air quality impacts or expose sensitive receptors to substantial increases in harmful emissions of TACs to prepare a Health Risk Assessment that identifies appropriate mitigation consistent with BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines, based on the findings of the Health Risk Assessment.*
- Policy HS-P1.6 Require that any mitigation of air quality impacts occur on-site to the extent feasible to provide the greatest benefit to residents in neighboring communities most impacted. For mitigation that relies on offsets, require that the offsets be obtained from sources as near to the project site as possible or from sources that would improve air quality in an Impacted Community. If the project site is within or adjacent to an Impacted Community, require offsets/mitigation within that community unless determined infeasible by the County.*
- Policy HS-P1.8 Require new or expanded commercial and industrial projects resulting in 25,000 square feet or more of gross habitable floor area, such as warehouses and other large enclosed buildings, to be near zero-emission operations, including the facilities themselves and the associated fleets. Require all necessary measures, such as the following, to achieve near zero emissions:
 - Reduce on-site energy consumption and increase on-site energy generation and energy storage.

- Provide adequate on-site zero-emission-vehicle parking for all anticipated truck traffic to prevent idling and off-site queuing.
- Provide electrified loading docks with receptacles allowing plug-in of refrigerated trailers.
- Use heavy-duty trucks that are model year 2014 or later and expedite a transition to zero-emission trucks by establishing a clear timeline for electrification of trucks as they become commercially available. Ensure contracts with motor carriers include air quality incentives or requirements, such as providing incentives to fleets that meet United States Environmental Protection Agency (EPA) SmartWay standards or requiring use of zero-emission or near-zero-emission trucks.
- Use a "clean fleet" of delivery vehicles as they become commercially available, but no later than 2025.
- Use zero-emission yard equipment, such as forklifts, pallet trucks and jacks, and stackers.
- Implement practices to control and remove fugitive dust and other contaminants from paved areas.

Uses with fewer than five vehicles domiciled on-site are exempt from this policy.*

- Policy HS-P1.9 Require construction activities that involve large grading operations to implement additional construction measures identified in BAAQMD's CEQA Guidelines to reduce air pollutant emissions.*
- Policy HS-P1.10 Prohibit nonessential diesel engine idling countywide and nonessential idling of all vehicles within 100 feet of sensitive receptors.*
- Policy HS-P1.11 Support efforts to provide HVAC upgrades and portable clean air filters to persons who live in Impacted Communities and other areas burdened by disproportionate exposure to poor air quality.
- Encourage installation of upgraded HVAC systems at schools, childcare centers, and similar uses located proximate to industrial Policy HS-P1.12 facilities.
- Action HS-A1.1 Consult with BAAQMD and community stakeholders and prepare an Air Quality Community Risk Reduction Plan that applies to areas with high levels of cancer risk, providing a comprehensive strategy to protect community members from the negative health effects of air pollution.
- Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 8 Zoning to create an Air Pollution Action HS-A1.2 Exposure Overlay Zone around freeways that requires new construction in these areas to install enhanced ventilation systems and other strategies to protect people from respiratory, heart, and other health effects associated with breathing polluted air.
- Action HS-A1.3 Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 8 - Zoning to include an Industrial-Sensitive Receptor Interface Overlay Zone applied to areas where residential land uses and other sensitive receptors interface or directly abut heavy industrial land uses. In the overlay zone, require industrial uses to reduce pollution and employ strategies to mitigate air quality, noise, vibration, odor, light, visual, and safety impacts on nearby sensitive receptors. In addition, require new

	sensitive receptors to install enhanced ventilation systems and implement other strategies, paid for by neighboring sources of pollution to the extent possible, to protect residents from health and quality of life impacts.
Action HS-A1.4	Consult with BAAQMD and community stakeholders and amend County Ordinance Code Title 7 – Building Regulations to include a clean construction ordinance that requires projects to implement extra measures to reduce emissions at construction sites in or near places that are already overburdened by air pollution, such as Impacted Communities.
Action HS-A1.5	Adopt an ordinance at least as stringent as the State's maximum idling law, and coordinate with CARB and law enforcement to achieve compliance.
Action HS-A1.6	Develop a plan to provide convenient and accessible clean air refuges during times when outdoor air quality is deemed unhealthy.
Policy HS-P2.1	When evaluating health risk impacts of projects in Impacted Communities, use an excess cancer risk of 6.0 per million and a non-cancer (acute and chronic) hazard index greater than 1.0 as thresholds for finding that the project could cause a cumulatively considerable contribution and a significant impact.*
Policy HS-P2.2	Increase the tree canopy on public property, especially in Impacted Communities and areas with a high heat index, by prioritizing funding for new street tree planting and maintenance.
Policy HS-P2.3	Support protection, restoration, and enhancement of natural landscapes in and near Impacted Communities to improve air quality and community health.
Action HS-A2.1	Partner with community members and regulatory agencies such as BAAQMD to conduct data collection and monitoring of pollution exposure, prepare a community-scale plan for reducing and mitigating air pollutant emissions and industrial hazards, such as pipeline risks, accidents, potential water or soil contamination, and impacts to sensitive ecological resources for each Impacted Community, or group of Impacted Communities, as appropriate. Require future projects to demonstrate consistency with those plans.
Action HS-A2.2	Coordinate with community members, BAAQMD, and other regulatory agencies to facilitate AB 617 citizen-led programs, including data collection, monitoring of pollution exposure, and identification and implementation of solutions in Impacted Communities. Consider future General Plan and Zoning Code amendments as needed to support BAAQMD in meeting AB 617 objectives.
Action HS-A2.3	Conduct a housing condition survey in Impacted Communities to identify units likely requiring upgrades to provide adequate protection from toxic releases. Based on the survey's findings, target outreach to provide information about weatherization and similar improvement programs.
Action HS-A2.4	Coordinate with BAAQMD to determine where to focus a targeted permit inspection program in Impacted Communities to help ensure enforcement of air quality permits.

Action HS-A2.5	Prepare a tree master plan for the county that emphasizes planting of low-maintenance native tree species and includes quantified goals and tracking methods, including mapping the tree canopy, and prioritizes planting in Impacted Communities and along safe routes to schools.
Policy HS-P3.2	Facilitate carbon-neutral development projects and communities that support a circular economy, zero-emission modes of transportation, reliable and renewable energy resources, energy-efficient buildings, zero waste, water efficiency and conservation, green infrastructure, soil conservation, and a system of natural and working lands that support natural carbon sequestration and climate resilience.
Policy HS-P4.4	As climate conditions change, evaluate the feasibility of implementing adaptive land use strategies to help avoid repetitive threats to life and property.
Action HS-A7.7	Pursue grants and other funding mechanisms to retrofit ventilation systems at County buildings to provide refuge for residents during periods of unhealthy air quality caused by excessive wildfire smoke.
Policy HS-P8.1	Coordinate with public agencies, utilities, and community-based organizations to provide community resilience centers in all regions of the county during extreme heat events, severe weather events, and other highly hazardous conditions. Work to ensure that these facilities are in highly accessible areas and that information about their availability is widely distributed, especially to vulnerable populations.
Policy HS-P8.3	Require new commercial parking lots with 50 or more spaces to mitigate heat gain through installation of shade trees, solar arrays, or other emerging cooling technologies. Prioritize the use of solar arrays where feasible and appropriate.
Policy HS-P8.4	Support efforts by East Bay Regional Park District and other local recreation agencies to provide outdoor recreation facilities with adequate shading and refillable water stations where appropriate.
Policy HS-P8.5	Provide shade trees or shade structures at parks, plazas, and other outdoor spaces.
Action HS-A8.1	Amend County Ordinance Code Chapter 82-16 – Off-Street Parking to achieve consistency with Policy HS-P8.3.
Policy HS-P9.1	Provide equitable inspection and enforcement of hazardous material and hazardous waste regulations throughout the county.
Policy HS-P9.3	Require new industrial development to reduce generation and disposal of hazardous materials to the maximum extent feasible by (listed in order of importance):
	(a) Implementing operational source reduction strategies and replacing hazardous materials with less hazardous materials.

Reducing generation of those wastes not amenable to source reduction or recycling.

- Recovering and recycling the remaining waste for reuse.
- Properly disposing of hazardous wastes and residuals generated from treatment of hazardous wastes.*
- Policy HS-P9.4 Support development of alternative hazardous waste management technologies and methodologies that reduce the relative risk to human health and the environment.
- Policy HS-P9.5 Require industrial projects involving use, management, or generation of hazardous materials or waste, particularly those utilizing stationary or fixed storage tanks, in areas at risk from sea level rise, surface or emergent groundwater flooding, or tsunami to incorporate best management practices to reduce risk and prepare plans for prevention and remediation of hazardous materials/waste releases resulting from inundation. Remediation plans must meet regulatory standards for protection of people and the environment in the event of permanent inundation and include financial assurances to guarantee implementation.*
- Policy HS-P9.8 Require applicants for projects that involve hazardous materials or hazardous waste to provide clear information in plain language about potential hazards their projects pose to nearby communities at the beginning of the review process. Review and verify this information, make it available to residents, and encourage project applicants to host at least one community meeting to discuss potential hazards.
- Policy HS-P9.9 Deny entitlements for construction of new large-scale facilities that treat, store, or dispose of hazardous waste from off-site sources and negatively impact Impacted Communities.
- Policy HS-P9.10 Prohibit new hazardous waste facilities in the following areas:
 - Watersheds of an existing or planned drinking water reservoir.
 - Ecologically significant resource areas.
 - Within 200 feet of an active or potentially active fault.
 - Within a 100-year floodplain.
 - Within a setback distance determined in accordance with DTSC guidance under SB 673, once final.*
- Policy HS-P9.11 Require design and operation of new or expanded hazardous waste facilities to adhere to the following criteria, as well as the permitting criteria established by the DTSC for vulnerable communities and cumulative impacts pursuant to SB 673, once final:
 - Minimize risk to the surrounding area in the case of a hazardous waste accident or spill.

- Ensure spills of waste will not reach the Bay, Delta, streams, creeks, reservoirs, or other bodies of water or environmentally sensitive resources by incorporating buffers as appropriate and/or using engineered structural design features (e.g., spill containment and monitoring devices).
- Avoid known or suspected groundwater recharge areas or areas where residential uses rely on wells. If located in such areas, facilities must provide properly engineered spill containment features, inspection measures, and other environmental protection controls.
- In areas with unstable soils, such as steep slopes and areas subject to liquefaction or subsidence, ensure structural stability through engineered design features.
- Use access roads leading to major transportation routes that:
 - Do not traverse residential neighborhoods.
 - Minimize, buffer, or employ physical barriers to residential frontages.
 - Demonstrate road network safety through road design, construction, accident rates, and traffic flow.
- Minimize noise impacts on the surrounding area.*
- Policy HS-P9.12

Require hazardous waste facilities to prepare a cumulative risk assessment that analyzes, characterizes, and quantifies the combined risks to human health and the environment from the facility, in combination with other off-site hazardous materials risks. The assessment must consider risks in the absence of actions to control or mitigate a potential release and determine whether buffers or other mitigation is necessary to protect residential uses, immobile populations (e.g., schools, hospitals, behavioral health facilities, convalescent homes, and prisons), other places where people gather, environmentally sensitive resources, and other sensitive areas from adverse emissions or contamination. The assessment must also be guided by DTSC guidance for vulnerable communities and cumulative impacts pursuant to SB 673, once final. Require that project applicants fund the needed technical review for the assessment.*

- Policy HS-P9.14
- Encourage and facilitate establishment of adequate sites for collection of household hazardous waste (HHW), unused pharmaceuticals, and universal wastes, along with provisions for residents who are physically unable to deliver materials to a collection site.
- Action HS-A9.1
- Provide technical assistance to hazardous waste generators to encourage them to reduce their hazardous waste to the maximum extent feasible.
- Action HS-A9.3
- Provide information to county residents about less toxic alternatives to household products containing universal wastes and the safe handling, storage, and disposal of such products, including pharmaceuticals.

Policy HS-P10.1	Coordinate with other agencies in efforts to remediate or treat contaminated surface water, groundwater, and soils in or affecting Impacted Communities.
Policy HS-P10.2	Require development of contaminated sites to comply with all clean-up plans, land use covenants, and deed restrictions imposed by the DTSC or Regional Water Quality Control Board (RWQCB).*
Policy HS-P10.3	Require new, modified, or expanded industrial uses involving hazardous materials or wastes to provide sufficient funds, in the form of a financial instrument acceptable to the County, to guarantee site remediation, including removal of facilities, equipment, and structures, and ensure community safety and site reusability.
Action HS-A10.1	Support public access to the inventory of contaminated sites published by the DTSC and SWRCB by posting links to this information on the County's website.
Policy HS-P12.3	Coordinate with cities, school districts, recreation and park districts, and community-based organizations to ensure adequate emergency shelters, community resilience centers, and alternate care sites are available when natural disasters and other highly hazardous conditions, such as industrial accidents, occur.
Policy HS-P12.4	Ensure there are adequate identified locations for alternate care sites, especially in Impacted Communities.
Action HS-A12.6	Establish standardized triggers (temperature, air quality, etc.) for opening County-operated community resilience centers.
Action HS-A12.9	Coordinate with transit providers to identify and advertise ways for individuals with restricted mobility to reach resilience centers, cooling centers, and alternate care sites.
Policy HS-P14.1	Require projects that would locate noise-sensitive land uses in areas where the projected ambient noise level is greater than the "normally acceptable" noise level indicated in Table HS-3 to provide an acoustical analysis that recommends appropriate mitigation to meet the noise compatibility standards.*
Policy HS-P14.2	Require new housing developments, hotels, and motels exposed to a DNL of 60 dB or greater to provide a detailed acoustical analysis describing how the project will provide an interior DNL of 45 dB or less.*
Policy HS-P14.3	Require new nonresidential uses exposed to a DNL of 65 dB or greater to provide a detailed acoustical analysis describing how the project will provide an interior sound level of 50 Leq (1-hr).*
Policy HS-P14.4	Require new residential development in areas exposed to a DNL in excess of 65 dB due to single events, such as train operation, to provide an acoustical analysis describing how indoor noise levels from these single events will not exceed a maximum A-weighted noise level of 35 dB in bedrooms and 55 dB in other habitable rooms. In areas exposed to a DNL in excess of 65 dB, use an indoor residential noise-level threshold of 45 dB CNEL.*

- Policy HS-P14.5 Protect noise-sensitive land uses listed in Table HS-3 from adverse noise impacts by requiring mitigation to the degree feasible for projects that would increase long-term noise in excess of the following thresholds, when measured at the sensitive use's property line:
 - Greater than 1.5 dBA DNL increase for ambient noise environments of 65 dBA DNL and higher.
 - Greater than 3 dBA DNL increase for ambient noise environments of 60 to 64 DNL.
 - Greater than 5 dBA DNL increase for ambient noise environments of less than 60 dBA DNL.*
- Policy HS-P14.6 Design County projects to minimize long-term noise impacts on existing residents and follow best practices to minimize short-term impacts from construction noise.*
- Policy HS-P14.7 Condition entitlements to limit noise-generating construction activities to the following:
 - Weekdays and non-holidays unless site-specific conditions warrant exceptions.
 - Within 1,000 feet of noise-sensitive uses: 7:30 a.m. to 5:00 p.m.
 - Over 1,000 feet from noise-sensitive uses: 7:00 a.m. to 6:00 p.m.*
- Policy HS-P14.8 Require a traffic noise analysis for development projects where the project would generate more than 40 percent of daily trips over existing average daily traffic (ADT) on impacted roadway segments. Projects below this threshold are assumed to have no significant traffic noise impact because they would increase noise levels by less than 1.5 dBA DNL, which is the most restrictive threshold for determining a significant traffic noise impact. This screening policy does not apply to projects involving a substantial number of new operational truck trips (e.g., warehouses).*
- Policy HS-P14.9 Require effective measures along major transportation facilities/corridors to reduce impacts on adjacent noise-sensitive land uses.*
- Policy HS-P14.11 When reviewing proposals for new vibration-sensitive uses near an existing railroad or Bay Area Rapid Transit (BART) line, use Table HS-4 to evaluate whether the sensitive uses could be exposed to excessive groundborne vibration. Projects with sensitive uses within the screening distances identified in the table will require preparation of a groundborne vibration and noise evaluation that is consistent with Federal Transit Administration-approved methodologies.
- Study the feasibility of adopting a noise ordinance establishing maximum exterior noise levels at sensitive receptors for noise generated Action HS-A14.1 by permanent and temporary stationary, non-transportation sources and construction sources.
- Action HS-A14.2 Pursue federal Quiet Zone status for rail crossings that are a noise nuisance to nearby residential areas and other noise-sensitive land uses.

ECONOMIC DEVELOPMENT



STRONGER COMMUNITIES ELEMENT

- Policy SC-P1.1 In partnership with residents of Impacted Communities, affected workers, business/industry, environmental and environmental justice advocates, community colleges, workforce development and training entities, local government, and other involved agencies, support transition from highly polluting industries to a net-zero emission economy based on renewable and sustainable industries that provide living-wage jobs.
- Policy SC-P1.2 Streamline permitting for new development, redevelopment, and rehabilitation projects that promote community objectives in Impacted Communities, especially as identified in the Community Profiles.
- Policy SC-P1.3 Support creation of walkable districts by facilitating development of a range of neighborhood-serving retail and service uses, public amenities, and essential infrastructure (such as lighting) for residents of Impacted Communities within walking distance of their homes.
- Action SC-A1.1 Partner with the stakeholders identified in Policy SC-P1.1 to develop and implement a plan to transition from highly polluting industries to renewable, sustainable, and clean industries that provide living-wage jobs. The plan should address site remediation responsibilities along with timelines and strategies to improve health, safety, infrastructure, job opportunities, and revenue opportunities during the transition toward a net-zero-emission economy, paying special attention to developing new opportunities for Impacted Communities to realize economic, health, educational, and other benefits, without placing a disproportionate economic burden on those with the least means.
- Action SC-A1.3 With input from residents of Impacted Communities, amend County Ordinance Code Title 8 - Zoning to create an Impacted Communities Overlay Zone that applies to areas within and adjacent to Impacted Communities. Heavy industrial projects and commercial and light industrial projects resulting in 25,000 square feet or more of gross habitable floor area within the overlay zone will be required to satisfy additional discretionary permit findings that promote environmental justice, health, safety, and economic prosperity. Projects able to satisfy the required findings will:
 - Provide benefits that support the community objectives, such as those identified in the Community Profile.
 - Provide economic benefits, including jobs, for residents of the community.
 - Avoid unwelcome permanent displacement of existing residents or businesses.
 - Support community resiliency, cohesion, and safety.
 - Positively impact health and quality of life within the community.

	Create guidance for demonstrating consistency with these findings as part of the process to develop this ordinance.
Action SC-A1.5	Establish a process for the County to assist community-based organizations and public-private partners with obtaining financing (e.g., grants) to implement physical improvements and beautification projects such as murals, vegetative buffers, and planting strips in Impacted Communities.
Policy SC-P2.8	Stimulate investment in communities by using CEQA infill exemptions to expedite environmental review and reduce project costs.
Action SC-A4.1	Amend the urban agriculture provisions in County Ordinance Code Title 8 – Zoning to address the following:
	(a) Zoning districts where urban agriculture is allowed.
	(b) Permitting requirements.
	(c) Development and performance standards.
	(d) Environmentally safe and sustainable practices.
	(e) Sale of crops and value-added products.
	(f) Animal husbandry.
	(g) Disposal of food waste and agricultural byproducts.
Policy SC-P5.1	Increase access to fresh food in Impacted Communities by encouraging grocery stores, and urban agriculture, farmers' markets, and neighborhood kitchens on vacant or underutilized lands. Treat such uses as community benefits in and of themselves.
Policy SC-P5.2	Maximize multimodal access to fresh food in Impacted Communities, prioritizing micro-mobility and pedestrian access, by encouraging grocery stores, healthy corner stores, community gardens, and outdoor markets at key transit nodes and within transit-oriented developments.
Policy SC-P5.3	Provide temporary, and possibly permanent, access to County facilities and land for farmers' markets and community gardens, especially in Impacted Communities.
Action SC-A5.2	Amend the County Ordinance Code and/or procedures to streamline permitting processes for grocery stores and markets in Impacted Communities and food deserts.
Action SC-A5.3	Develop incentives to attract grocery stores, markets, and establishments selling fresh produce, preferably locally grown, in areas with poor access to fresh food.
Policy SC-P7.2	Pursue arts and cultural investments as a tool for economic development, especially in Impacted Communities.

Policy SC-P8.1	Support schools, training programs, the WDB, and other institutions whose mission is to develop and enhance local workforce skills, including training and apprenticeship programs.
Policy SC-P8.2	Leverage opportunities to pursue workforce development, job training and re-training programs, and public-private partnerships that support economic growth. Support career pathway programs hosted by various County departments and encourage County staff to participate as mentors.
Policy SC-P8.3	Welcome businesses, especially family-sustaining, locally hiring, sustainable businesses, that provide essential goods and services in Impacted Communities, including food stores with fresh produce, healthcare, childcare, pharmacies, and other retailers, while discouraging predatory lenders, liquor stores, tobacco and cannabis retail stores, dollar stores, and fast-food restaurants.
Policy SC-P8.4	Promote entrepreneurship, innovation, and locally owned businesses and enterprises, especially ethnic, immigrant, and Black, Indigenous, and people of color (BIPOC) entrepreneurship, for the purpose of improving economic self-sufficiency and stability, including through outreach efforts to local small business owners while minimizing permitting barriers.
Policy SC-P8.5	Encourage more daycares, preschools, and early childhood development centers to make childcare more accessible and affordable for working families.
Action SC-A8.1	Establish a First Source Hiring Program encouraging developers, contractors, and employers to make good-faith efforts toward employing the local workforce to construct and operate their facilities, with emphasis on residents of Impacted Communities and those who are economically disadvantaged.
Action SC-A8.2	Partner with school districts, community colleges, community organizations, large employers, trade associations, unions, and job training centers to support enhanced job-skills training, recruitment programs and services, and childcare services to support the county's workforce, especially workers in Impacted Communities. Work with experienced groups to ensure that programs will be properly staffed and funded. Training and intervention strategies should reduce barriers to employment for youth, formerly incarcerated residents, and residents with limited English proficiency, and should support a just transition from a fossil-fuel reliant economy by re-training displaced workers with skills for living-wage jobs in new, environmentally sustainable industries.
Action SC-A8.3	Explore the feasibility of establishing a revolving loan fund, grant program, or business incubator that supports small business formation and expansion in Impacted Communities. Connect to industries such as advanced manufacturing, biomedical/biotech, food, transportation technology, and clean technology that support an economic transition from fossil fuels.
Action SC-A8.4	Develop and sufficiently fund a program to offer one-on-one support to small businesses in Impacted Communities. Through this program, provide guidance related to available grants and other forms of financing, access to innovation, access to emerging industries and markets, and mentorship.

Action SC-A8.5	Explore use of existing federal and State government economic development programs, such as the "Opportunity Zone" program, "HUB Zone" program, and contracting designations, as a means to generate funding for transit, housing, and capital improvements, while attracting private investment.
Policy SC-P9.1	Work collaboratively with cities and other local agencies to leverage Contra Costa County's competitive assets and elevate the county's role in the economic and cultural growth of the Bay Area and California.
Policy SC-P9.2	Position Contra Costa County to be a hub of production and employment for industries that spur economic growth and innovation in the transition toward a zero-emission economy.
Policy SC-P9.3	Support business retention, expansion, and attraction efforts that diversify and strengthen the economy with special emphasis on businesses and industries that provide living-wage jobs, invest in the community, hire from the local workforce, and embrace sustainability.
Policy SC-P9.4	Maintain a well-balanced regulatory environment that facilitates business investment and expansion while addressing community concerns about potential impacts.
Policy SC-P9.5	Continue to support and expand local tourism. Emphasize memorable experiences available in Contra Costa County, such as agritourism, and recreational opportunities offered by unique natural features such as the Delta and Mount Diablo.
Policy SC-P9.6	Recognize agriculture as an important part of the County's economy and maintain conditions that support its ongoing economic viability.
Policy SC-P9.7	Strengthen the viability of the Northern Waterfront as a dynamic economic asset and destination recreational area. Work with partner agencies to support beneficial, environmentally sustainable investment in this area.
Policy SC-P9.8	Support formation of the Green Empowerment Zone for the Northern Waterfront area and development of designated PPAs.
Policy SC-P9.9	Maximize Byron Airport's potential as a hub of aviation technology and innovation.
Action SC-A9.1	Adopt an Economic Development Strategy. The strategy should define a vision for the county's economy, identify and target suitable growth industries, and facilitate different types of economic development and employment growth in targeted areas.
Action SC-A9.2	Implement the Northern Waterfront Economic Development Initiative, including business attraction efforts aimed at biomedical and life science businesses, food and beverage processing, advanced materials and diversified manufacturing, advanced transportation technology, and clean technology.
Action SC-A9.4	Evaluate commercial and industrial regulations and permitting practices on an ongoing basis to ensure that they:
	(a) Address contemporary uses and activities.

- Promote compatibility between new and existing uses.
- Avoid creating unnecessary barriers that hinder economic prosperity, investment, and sustainable growth.
- Action SC-A9.5 Expand the Small Business Assistance Program, working collaboratively with technical assistance service providers.
- Action SC-A9.6 Explore the feasibility of establishing a small and micro-business fee-waiver program.
- Action SC-A9.7 Expand the County's participation in the State's Green Business Program.

LAND USE ELEMENT

- L	
Policy LU-P3.1	Support regional efforts to achieve a jobs-housing balance within the county and within subregions of the county by maintaining an adequate supply of developable land designated for job-generating uses. For any General Plan amendment proposing to convert commercial, industrial, or office land uses to residential or non-urban land uses, evaluate the project's effect on the local and countywide jobs-housing balance.
Policy LU-P3.2	Encourage residential development in or near existing employment centers, and development of job-generating uses near areas that are primarily residential. Where large-scale residential or commercial development is planned, encourage a mix of housing and employment opportunities unless doing so would exacerbate a severe jobs-housing imbalance in the area.
Policy LU-P3.5	Encourage development of housing that meets the needs of the local workforce and living-wage jobs that maximize the education, skills, and talents of county residents.
Policy LU-P3.5	Encourage development of housing that meets the needs of the local workforce and living-wage jobs that maximize the education, skills, and talents of county residents.
Action LU-A3.1	Evaluate financial strategies and tools, such as Enhanced Infrastructure Financing Districts, to attract housing to employment areas and create new employment centers near residential areas.
Policy LU-P8.1	Plan for a sufficient quantity, variety, and distribution of commercial uses to meet the basic daily needs of residents in communities throughout the county.
Policy LU-P8.2	Support development of neighborhood-serving commercial services in and adjacent to residential areas where they can be accessed easily using multiple modes of transportation.
Policy LU-P8.4	Support rehabilitation of commercial centers, encouraging improvements that enhance appearance, sustainability, and non-motorized (pedestrian, bicycle, etc.) access and safety.

Policy LU-P8.7	Encourage growth of the county's hospitality sector, including heritage tourism, waterfront amenities, farm-to-table restaurants, other dining and entertainment establishments, commercial recreation, various types of accommodations, and visitor services.
Policy LU-P8.8	Accommodate a variety of land uses at Buchanan Field and Byron Airports, consistent with the master plan for each facility. A range of commercial aviation functions, including fixed-base operators, aviation businesses, and passenger facilities and services, should be allowed, as well as ancillary uses that support the economic viability of each airport.
Policy LU-P8.9	Plan land uses and activities in the vicinity of harbors to optimize their use for commerce and recreation while accounting for forecasted sea level rise by 2100 under a medium-high risk aversion scenario, subsidence, and groundwater threats.
Action LU-A8.1	Monitor shifts in the office and retail markets to determine whether General Plan, zoning, and other regulatory changes that facilitate conversion of vacant or obsolete space to new uses are warranted.
Policy LU-P9.1	Actively seek out industries that create living-wage jobs and career advancement opportunities for county residents while minimizing environmental degradation, pollution exposure, hazardous conditions, and adverse public health impacts.
Policy LU-P9.2	Welcome new businesses that improve supply chains for core local industries, including agriculture and food.
Policy LU-P9.4	Prioritize industrial land along the Bay and Delta shoreline for uses requiring deep-water access or large quantities of raw water for their processes (e.g., cooling), and discourage siting of other industrial uses that could be accommodated elsewhere. Continue partnering with regional agencies to ensure reliable deep-water access to industrial sites.
Action LU-A9.1	Maintain formal "Priority Production Areas" designation of key industrial areas by ABAG/MTC, confirming their long-term importance to the region and facilitating future investment. Pursue coordinated economic development funding for these areas.
Action LU-A9.2	Monitor shifts in industrial markets resulting from the transition from fossil fuels and evaluate the County's industrial land supply for opportunity zones or innovation districts that can accommodate industries such as advanced manufacturing, prefabricated housing production, biomedical/biotech, logistics and mobility hubs and transportation technology, clean technology, and maker spaces. Consider General Plan, zoning, and other regulatory changes that facilitate conversion of vacant or obsolete space to new uses as warranted.
Action LU-A9.3	Amend the County Ordinance Code and/or procedures to streamline the permitting process for businesses and industries that provide living-wage jobs, invest in the community, hire from the local workforce, and embrace sustainability.

TRANSPORTATION ELEMENT

Policy TR-P6.2	Support roadway improvements that facilitate regional goods movement, such as construction of SR 239 and the Vasco Road-Byron Highway Connector near Byron, and replacement of the Old River Bridge near Discovery Bay.
Policy TR-P6.3	Work with ABAG/MTC to improve resilience, speed, and reliability of goods movement through expansion of smaller ports-of-entry which will increase redundancy, thereby limiting exposure to disruptive events at larger congested ports.
Policy TR-P6.6	Support development of short-line railroad infrastructure and operations in industrial areas to facilitate rail access to Class I railroad lines, attract potential businesses seeking rail-served properties, ease traffic congestion caused by goods movement on regional highways, and reduce GHG emissions.
Policy TR-P6.7	Support deepening and ongoing maintenance of the deep-water ship channels between San Francisco Bay and Stockton and continued deep-water access to the county's Northern Waterfront.
Policy TR-P6.8	Support continued operation, maintenance, and further development of ports and terminals consistent with federal, State, and County environmental policies and economic priorities.
Action TR-A6.4	Develop regulations responding to technological advancements in freight movement, such as autonomous vehicles, robotics, and drone deliveries, while supporting the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.
Policy TR-P7.1	Partner with other agencies to obtain funding for planning, development, improvement, operation, and maintenance of general and commercial aviation facilities.
Policy TR-P7.5	Partner with the cities of Concord and Pleasant Hill in making land use decisions that support Buchanan Field Airport's ongoing viability while protecting public safety, consistent with the Airport Master Plan and ALUCP.
Policy TR-P7.6	Enhance Byron Airport's viability by protecting it from incompatible urban encroachment, such as large-scale residential development, and providing infrastructure that supports existing and planned airport activities, consistent with the Airport Master Plan and ALUCP.
Policy TR-P7.7	Embrace emerging aviation-related technologies, such as drones, electric-powered aviation, and vertical takeoff and landing aircraft, to promote economic development and support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.
Action TR-A7.1	Update the ALUCP every 5 to 10 years to maintain consistency with applicable federal and State requirements, regional plans, and this General Plan, and to achieve the County's goals for Buchanan Field Airport and Byron Airport.

CONSERVATION, OPEN SPACE, AND WORKING LANDS ELEMENT

- Policy COS-P2.1 Preserve large, contiguous areas of the county for agricultural production. Deny applications for projects that would lead to fragmentation of agricultural areas.* Policy COS-P2.5 Require new projects adjacent to agriculture to establish buffers on their properties as necessary to minimize conflicts and protect agriculture. Determine appropriate buffers in consultation with the County Agricultural Commissioner.* Policy COS-P2.6 When resolving conflicts between agricultural uses and urban uses, prioritize maintaining the viability of the agricultural uses. Policy COS-P2.7 Require deed disclosures for new residential development in or adjacent to areas designated or zoned for agricultural use. The disclosures must explain the potential disturbances associated with agricultural operations (e.g., dust, noise, odors, and use of pesticides) and reference the Right-to-Farm Ordinance, which protects agricultural operations from nuisance complaints and unreasonable restrictions.* Policy COS-P2.8 Encourage owners of qualifying agricultural land to participate in the Williamson Act (Agricultural Preserve) Program. Policy COS-P2.9 Support public infrastructure projects and programs that will increase, enhance, and protect agricultural land and its production capabilities. Policy COS-P2.10 Coordinate with Byron-Bethany Irrigation District and East Contra Costa Irrigation District to facilitate water conservation, efficient use of agricultural irrigation water, and implementation of emerging water reuse technologies and practices. Policy COS-P2.13 Partner with the agricultural community and University of California Cooperative Extension (UCCE) to support regenerative agriculture practices that maintain agricultural viability. Action COS-A2.4 Amend County Ordinance Code Title 8 – Zoning to include development standards, and possibly adopt accompanying design guidelines, for urban land uses that interface with agricultural uses, addressing, at minimum: Setbacks on urban properties to provide a buffer for agricultural uses.
 - Location and arrangement of buildings, structures, and uses on urban properties.
 - Lighting, fencing, screening, and appropriate landscaping/vegetation.
- Policy COS-P3.1 Support development of public and private infrastructure and services needed to support agriculture.
- Policy COS-P3.2 Support efforts to promote and market locally grown and value-added agricultural products.

Policy COS-P3.3	Enable farmers to showcase farm products grown on-site and elsewhere within the county and offer on-site farm experiences, such as culinary classes, farm-to-table meals, tastings, and special events, while maintaining the character and integrity of the surrounding agricultural landscape.
Policy COS-P3.4	Enable farmers and ranchers to provide small-scale, short-term guest accommodations in a manner that is non-disruptive to the rural setting.
Policy COS-P3.5	Assist the agricultural community through the County's economic development programs.
Policy COS-P3.7	Support rural property owners who apply to the Contra Costa LAFCO to detach agricultural land outside the Urban Limit Line (ULL) from special districts that provide urban services.
Action COS-A3.2	Partner with the agricultural community and agencies such as the Delta Protection Commission to obtain funding for design, installation, and ongoing maintenance of proper signage promoting agriculture in the county, including wayfinding signage for agricultural tourism (e.g., U-pick, lodging, food service, winery) uses.
Action COS-A3.3	Designate a staff position in DCD to serve as a point of contact to guide members of the agricultural community in understanding the processes at DCD, help DCD staff understand the particular needs of the agricultural community, and coordinate with other agencies, such as the Contra Costa RCD, USDA NRCS, UCCE, County Department of Agriculture, Weights, and Measures, and County Environmental Health Division.
Action COS-A3.4	Work with the agricultural community and UCCE to promote education, training, information-sharing programs, and networking opportunities for farmers, ranchers, and agricultural agencies to increase agriculture's resilience to climate change hazards.
Action COS-A3.5	Coordinate with the Contra Costa RCD, USDA NRCS, UCCE, Contra Costa Mosquito and Vector Control District, County Department of Agriculture, Weights, and Measures, and County Environmental Health Division to support sustainable and resilient agricultural operations through vegetation and pest management programs, best management practices, technical assistance related to soil health, funding opportunities for efficient irrigation infrastructure, and information about alternative crop types that are drought-, heat, and severe weather-resistant.
Policy COS-P13.1	Protect valuable mineral resources by prohibiting incompatible projects and land uses (i.e., those that would directly or indirectly interfere with extraction, processing, or transportation of mineral resources) within the MRAs identified in Figure COS-13.
Policy COS-P13.3	For residential subdivisions within one mile of the MRAs depicted in Figure COS-13, require deed disclosures indicating the presence of the mineral resource and explaining potential disturbances (e.g., noise, dust, heavy truck traffic) associated with mineral extraction activities.*
Action COS-A14.11	Support legislative efforts to establish a green bank able to equitably finance sustainability projects, including renewable energy, energy efficiency, and green infrastructure, for residential and commercial customers.

PUBLIC FACILITIES AND SERVICES ELEMENT

Policy PFS-P3.6

When adopting, amending, and imposing impact fees, community benefits agreements, and developer exactions, consider the effects of such fees and exactions upon individual project economics, housing supply, economic development, and the County's broad goals and objectives related to overall community development. If gap funding can be identified, consider fee reductions or exemptions for projects in Impacted Communities that are consistent with the community objectives identified in their Community Profile.

HEALTH AND SAFETY ELEMENT

Policy HS-P3.2

Facilitate carbon-neutral development projects and communities that support a circular economy, zero-emission modes of transportation, reliable and renewable energy resources, energy-efficient buildings, zero waste, water efficiency and conservation, green infrastructure, soil conservation, and a system of natural and working lands that support natural carbon sequestration and climate resilience.

Policy HS-P10.3

Require new, modified, or expanded industrial uses involving hazardous materials or wastes to provide sufficient funds, in the form of a financial instrument acceptable to the County, to guarantee site remediation, including removal of facilities, equipment, and structures, and ensure community safety and site reusability.

SUSTAINABILITY 🚱

STRONGER COMMUNITIES ELEMENT

Policy SC-P1.1	In partnership with residents of Impacted Communities, affected workers, business/industry, environmental and environmental justice advocates, community colleges, workforce development and training entities, local government, and other involved agencies, support transition from highly polluting industries to a net-zero emission economy based on renewable and sustainable industries that provide living-wage jobs.
Policy SC-P1.3	Support creation of walkable districts by facilitating development of a range of neighborhood-serving retail and service uses, public amenities, and essential infrastructure (such as lighting) for residents of Impacted Communities within walking distance of their homes.
Action SC-A1.1	Partner with the stakeholders identified in Policy SC-P1.1 to develop and implement a plan to transition from highly polluting industries to renewable, sustainable, and clean industries that provide living-wage jobs. The plan should address site remediation responsibilities along with timelines and strategies to improve health, safety, infrastructure, job opportunities, and revenue opportunities during the transition toward a net-zero-emission economy, paying special attention to developing new opportunities for Impacted Communities to realize economic, health, educational, and other benefits, without placing a disproportionate economic burden on those with the least means.
Policy SC-P2.3	Within established communities, complete construction of sidewalks and crosswalks and encourage neighborhood design and development that supports safe walking, biking, and other micro-mobility options, convenient access to services and transit, and opportunities for local shopping.
Policy SC-P2.4	Provide functional civic space and well-maintained public amenities near high-volume transit hubs. Each hub area should project a positive visual image, a strong and unique identity, and a safe, inviting environment for pedestrians and passengers.
Policy SC-P2.6	Leverage community-specific natural features, such as creeks, shorelines, and trails, to strengthen community identity and connect residents to nature.
Policy SC-P4.4	Support programs administered by water or wastewater service providers that increase the availability of recycled water for urban agriculture and landscaping through self-fill stations and similar facilities.
Action SC-A6.1	Obtain additional funding for, and address barriers to participation in, the County's Weatherization Program and similar programs like the Contra Costa Asthma Initiative and Neighborhood Preservation Program for extremely low-, very low-, and low-income homeowners, seniors, landlords, and renters. Focus these efforts on homes in Impacted Communities, particularly rental and multiple-family housing.

- Create a bulk buying program or revolving loan fund that allows people to purchase energy-efficient electric appliances (air Action SC-A6.2 conditioners, fans, air purifiers, heaters, stoves, ovens, etc.) and other items that increase building efficiency at wholesale prices or minimal cost, possibly with zero-percent interest financing, to increase energy efficiency and replace hazardous appliances. Work with volunteer groups that help people install and dispose of air conditioners and other electrical appliances if they are unable to do so themselves, focusing on Impacted Communities and other areas with high concentrations of vulnerable people. Consider augmenting energy-efficiency programs to reduce electricity use and help offset the cost of operating electrical appliances.
- Action SC-A6.3 Partner with local solar energy providers to enact a solar group buy program to purchase solar panels and battery storage in bulk for installation in Impacted Communities, including establishment and subsidization of community solar programs that supply electricity to multiple consumers from a single photovoltaic solar location. The program should include an educational component to inform the community about the benefits and process of solar installation and give them the opportunity to enroll in the program at a discounted rate.
- Action SC-A7.2 Partner with recycling centers to establish artist-in-residence programs to support art education while encouraging residents to repurpose unwanted items and conserve natural resources.

LAND USE ELEMENT

- Policy LU-P2.5 Encourage infill development. Policy LU-P2.6 Encourage clustering of allowable densities to reduce development footprints; protect scenic resources, natural features, and open spaces; and avoid hazardous areas (e.g., floodplains). Policy LU-P3.3 Encourage extremely high-density, mixed-use development that combines employment, housing, and services near major transit facilities. Such development should be planned and designed to encourage walking, micromobility, and transit use; shorter commutes; and reduced dependency on single-occupant vehicles.
- Policy LU-P3.4 Encourage conversion of existing commercial areas to mixed-use nodes and corridors.
- Policy LU-P3.7 Welcome development that supports the countywide goal of reducing VMT, thus reducing greenhouse gas emissions, to meet climate change targets. Require projects that do not support the County's VMT-reduction goals to incorporate necessary changes (e.g., design, land use mix) to ensure they support those goals.
- Action LU-A3.1 Evaluate financial strategies and tools, such as Enhanced Infrastructure Financing Districts, to attract housing to employment areas and create new employment centers near residential areas.
- Policy LU-P4.1 Embrace the principles of a circular economy as they relate to development and encourage all projects to utilize ecologically sustainable practices and materials.

Action LU-A4.1	Amend the County Ordinance Code to include requirements for Low Impact Development, use of low-carbon concrete, water an energy conservation, reclaimed water, renewable energy use, green building, and other measures that reduce the environmental impacts of development, based on the best available science.	
Policy LU-P7.5	Require new residential development to be planned, designed, and constructed in a way that promotes health, minimizes hazard exposure for future residents, and mitigates potential adverse effects on natural resources and the environment.	
Policy LU-P7.6	In hazard-prone areas, such as slopes exceeding 15 percent, mapped floodplains, High and Very High Fire Hazard Severity Zones, and Alquist-Priolo Earthquake Fault Zones, allow for decreased residential density, including below the minimum density requirement for the applicable land use designation, as the severity of risk increases.*	
Policy LU-P7.7 Require new residential projects to provide convenient access/connections to public transit, local destinations, and multi-use transit.		
Policy LU-P8.2	cy LU-P8.2 Support development of neighborhood-serving commercial services in and adjacent to residential areas where they can be accesse easily using multiple modes of transportation.	
Policy LU-P8.3 Encourage adaptive reuse of aging commercial buildings and sites.		
Action LU-A9.2	Monitor shifts in industrial markets resulting from the transition from fossil fuels and evaluate the County's industrial land supply for opportunity zones or innovation districts that can accommodate industries such as advanced manufacturing, prefabricated housing production, biomedical/biotech, logistics and mobility hubs and transportation technology, clean technology, and maker spaces. Consider General Plan, zoning, and other regulatory changes that facilitate conversion of vacant or obsolete space to new uses as warranted.	
Action LU-A9.3	Amend the County Ordinance Code and/or procedures to streamline the permitting process for businesses and industries that provide living-wage jobs, invest in the community, hire from the local workforce, and embrace sustainability.	

TRANSPORTATION ELEMENT

Policy TR-P1.2	Coordinate planning, construction, and maintenance of streets, transit infrastructure, non-motorized rights-of-way and associated facilities, the countywide bicycle network, and Pedestrian Priority Areas with neighboring jurisdictions and CCTA.*
Policy TR-P1.3	Partner with cities, CCTA, and the San Francisco Bay Area Water Emergency Transportation Authority (WETA) to plan and implement ferry service that benefits unincorporated county residents.
Action TR-A1.1	Coordinate with Caltrans, neighboring jurisdictions, CCTA, and the Regional Transportation Planning Committees to plan, design, and implement Complete Streets concepts on Routes of Regional Significance

Policy TR-P2.2	TR-P2.2 Prioritize expansion of bicycle, micromobility, and pedestrian infrastructure (e.g., Class IV separated bikeways) to address th significant latent demand for these active transportation modes.	
Policy TR-P2.3	Ensure emerging transportation technologies and travel options, such as autonomous and ZEVs and transportation network companies, support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.	
Policy TR-P2.4	Reduce single-occupant vehicle usage and VMT by significantly enhancing the availability and safety of other travel modes through infrastructure investment, policy support (Vision Zero, TDM Ordinance, and other best practices), and support for public transit.*	
Policy TR-P2.7	Leverage the County's position as a major employer to demonstrate leadership in enhancing workforce commute options.	
Policy TR-P2.8	Policy TR-P2.8 Support improvement and expansion of passenger and commuter rail service countywide, with emphasis on transformative project such as the Hercules Intermodal Transit Center and BART extensions in the I-80 corridor toward Crockett and SR 4 corridor toward Brentwood.	
Policy TR-P2.9 Support public transit and encourage transit use by advocating for increased funding with enhanced governance, high-frequence, and expansion of first-mile/last-mile programs.		
Policy TR-P2.10 Enhance multimodal access to all transit stops, prioritizing stops which serve vulnerable and mobility-impaired populations.		
Policy TR-P2.11 Support transitioning all on-road vehicles, including personal vehicles and business, government, and public transit fleets, to electropower from renewable sources or other emission-free fuels.		
Policy TR-P2.12 Continue to improve ZEV charging/fueling infrastructure within new development and public rights-of-way, incorporating ne technologies whenever possible.		
Policy TR-P2.13 Require designs for new parking facilities to incorporate ZEV charging/fueling infrastructure and maximize opportunities for adaptive reuse.*		
Action TR-A2.4	Action TR-A2.4 Implement programs to encourage transit use, bicycling, walking, telecommuting, and use of alternative vehicle fuels by Countemployees.	
Action TR-A2.5	Conduct a survey to identify gaps in public transit and the active transportation network within one mile of County offices and facilities, and pursue funding for projects and programs that will fill those gaps and improve the availability of alternative transportation options for County employees.	
Action TR-A2.6	Partner with transit agencies and CCTA to develop "Safe Routes to Transit" guidance that could be applied in new development areas and existing neighborhoods.	

Action TR-A2.7	Partner with transit providers, cities, and CCTA to develop a countywide transit stop program that takes a holistic approach to transit	
	stop planning and construction. Encourage the program to address right-of-way adequacy (i.e., sufficient space for bus pullouts and amenities), amenities (e.g., shelters, seating, bicycle racks and lockers), and improvements around stops to increase accessibility (e.g., curb ramps, sidewalk widening).	
Action TR-A2.11	Coordinate with CCTA and other local and regional agencies to implement the Contra Costa Electric Vehicle Readiness Blueprint and related policies and apply best practices in ZEV charging/fueling infrastructure requirements.	
Action TR-A2.12	Update the County Ordinance Code as necessary to support advances in ZEV charging/fueling infrastructure.	
Action TR-A3.2	ldentify and address neighborhood-specific issues and needs in Impacted Communities, prioritizing installation of sidewalks, enhanced crosswalks, street lighting, street trees, bicycling infrastructure, transit stop amenities, traffic calming, and other safety and consimprovements, especially in residential areas and near schools, libraries, and recreational facilities. Explore innovative method ensure these facilities are maintained. Engage school districts, neighborhood groups, and the local Safe Routes to School Programming in implementing this action.	
Policy TR-P4.1	Plan, design, and maintain improvement projects involving County roadways in accordance with the County's adopted Complete Streets Policy, other applicable policies (e.g., Vision Zero and other safety initiatives), planning documents such as the County ATP and CCTA Countywide Bicycle and Pedestrian Plan, and best practices (e.g., Caltrans, American Association of State and Highway Transportation Officials, and National Association of City Transportation Officials guidance).*	
Policy TR-P4.2	Require transportation infrastructure serving new development to be designed using best practices, contemplating existing and planned land uses, roadways, bicycle and pedestrian facilities, transit facilities, and connections to adjoining areas.*	
Policy TR-P4.3	Create connections between unincorporated communities and neighborhoods and adjacent jurisdictions to improve multimo access to local destinations, such as schools, parks, shopping, health services, and workplaces.	
Policy TR-P4.6	Enhance streetscapes in nonresidential areas, making them more pedestrian-friendly and inviting by reducing setback and off-street parking requirements and augmenting traffic-calming measures.	
Policy TR-P4.7	Encourage walkability and safety by streamlining implementation of traffic-calming measures through the Neighborhood Traffi Management Program.	
Policy TR-P5.1	Plan, design, construct, and maintain facilities for walking, bicycling, and rolling to serve people of all ages, abilities, and income levels, including children, seniors, families, and people with limited mobility.	
Policy TR-P5.7	Encourage walking, bicycling, and micromobility as the travel modes of choice for short to medium-length trips, such as trips to schools, parks, transit stops, local shopping areas, and neighborhood services.	

- Policy TR-P5.8 Partner with neighboring jurisdictions, transit agencies, community members, and business organizations to plan and construct sustainable streets in business and commercial areas. Consider forming community facilities districts or business improvement districts to help fund and maintain improvements.
- Policy TR-P5.10 Support micromobility options such as bike-, e-bike-, and e-scooter-share.
- Policy TR-P5.11 Require generous parking for bicycles and other mobility devices at key destinations, such as shopping centers, parks, schools, employment centers, transit stations, and multiple-family housing. This parking should be conveniently located near entrances, include charging infrastructure, and accommodate cargo bikes when appropriate for the land use.
- Action TR-A5.1 Partner with CCTA and neighboring jurisdictions to build out the countywide bicycle and pedestrian network, prioritizing completion of the Low-Stress Countywide Bicycle Network and pedestrian safety improvement projects in the County's Pedestrian Priority Areas, as described in the Countywide Bicycle and Pedestrian Plan.
- Construct innovative bicycle and pedestrian facilities, including Class IV separated and protected bikeways, bicycle superhighways, Action TR-A5.2 and other low-stress facility types, as described in the Countywide Bicycle and Pedestrian Plan and in contemporary, best-practice transportation planning and engineering guidance. Use contextually appropriate green infrastructure and landscaping to separate vehicular lanes from bicycle and pedestrian facilities whenever feasible.
- Action TR-A5.3 Partner with CCTA, neighboring jurisdictions, and transit agencies to implement the Richmond Area and Pittsburg/Bay Point CBTPs.
- Evaluate the feasibility and appropriateness of the following when updating the ATP and CRIPP: Action TR-A5.6
 - Installing bikeways along all segments of Routes of Regional Significance within the County's jurisdiction.
 - Restriping arterials and collectors to include bikeways whenever major maintenance occurs.
 - Installing bikeways and sidewalks along arterials and collectors to the limits of adjacent jurisdictions.
 - Installing bicycle detection systems, bicycle signals, bicycle boxes, and pavement markings at new and retrofitted traffic signals.
 - Installing crosswalks at all legs of signalized intersections.

CONSERVATION, OPEN SPACE, AND WORKING LANDS ELEMENT

Policy COS-P1.1 Support efforts by public agencies and nonprofit organizations to acquire and permanently protect open space areas containing important ecological or scenic resources and areas that connect protected lands to form a cohesive system of open space. Plan infrastructure to avoid interfering with such acquisitions whenever possible.

Policy COS-P1.2 Pursue opportunities for permanent open space dedication for habitat, scenic, or passive recreation benefits as part of future development approvals and major capital improvement projects. Policy COS-P1.3 Discourage conversion of land designated Resource Conservation or Parks and Recreation to urban uses. If such conversion is to occur, require mitigation through permanent protection of other open space or park lands for habitat, scenic, or recreation benefits at a ratio to be determined based on the biological, scenic, or recreational value of the land, but not less than 3:1.* Policy COS-P1.4 Require new projects adjacent to protected open space areas, such as EBRPD lands, to establish buffers on their properties as necessary to minimize conflicts and protect the open space. If conflicts arise between protected open spaces and other uses, prioritize maintaining the viability of the open space functions.* Policy COS-P2.10 Coordinate with Byron-Bethany Irrigation District and East Contra Costa Irrigation District to facilitate water conservation, efficient use of agricultural irrigation water, and implementation of emerging water reuse technologies and practices. Policy COS-P2.11 Support soil conservation and restoration programs. Encourage agricultural landowners to work with agencies such as the USDA's NRCS and Contra Costa RCD to reduce erosion and soil loss. Policy COS-P2.12 Support efforts to protect, maintain, and improve soil health as a carbon sequestration tool. Policy COS-P2.13 Partner with the agricultural community and University of California Cooperative Extension (UCCE) to support regenerative agriculture practices that maintain agricultural viability. Policy COS-P2.14 Encourage IPM practices that reduce the use of agricultural pesticides and minimize pesticide drift, and discourage farming practices that may expose residents, water resources, and the environment to fine particulates and harmful chemicals. Action COS-A2.4 Amend County Ordinance Code Title 8 – Zoning to include development standards, and possibly adopt accompanying design guidelines, for urban land uses that interface with agricultural uses, addressing, at minimum: Setbacks on urban properties to provide a buffer for agricultural uses. Location and arrangement of buildings, structures, and uses on urban properties. Lighting, fencing, screening, and appropriate landscaping/vegetation. Policy COS-P3.2 Support efforts to promote and market locally grown and value-added agricultural products. Policy COS-P3.6 Support the Contra Costa RCD in carrying out its mission to assist farmers and ranchers through programs that conserve natural

resources and build a strong farming community.

Policy COS-P3.7	Support rural property owners who apply to the Contra Costa LAFCO to detach agricultural land outside the Urban Limit Line (U from special districts that provide urban services.	
Policy COS-P3.8	Allow farmworker and farm family housing in agricultural areas to meet the needs of locally employed seasonal and permane farmworkers.	
Action COS-A3.4	Work with the agricultural community and UCCE to promote education, training, information-sharing programs, and networking opportunities for farmers, ranchers, and agricultural agencies to increase agriculture's resilience to climate change hazards.	
Action COS-A3.5	COS-A3.5 Coordinate with the Contra Costa RCD, USDA NRCS, UCCE, Contra Costa Mosquito and Vector Control District, County Department of Agriculture, Weights, and Measures, and County Environmental Health Division to support sustainable and resilient agriculture operations through vegetation and pest management programs, best management practices, technical assistance related to shealth, funding opportunities for efficient irrigation infrastructure, and information about alternative crop types that are drought-, he , and severe weather-resistant.	
Policy COS-P4.1	Maintain ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in and near these areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas. Prohibit projects that would lead to fragmentation of ecologically significant resource areas.*	
Policy COS-P4.2	Support land conservation and restoration consistent with the HCP/NCCP and discourage development in areas where such conservation is planned, as shown on Figure COS-3. Support actions to preserve land and resources within PCAs mapped by ABAG, as shown on Figure COS-4.	
Policy COS-P4.4	Protect wildlife migration corridors, including natural and channelized creeks providing habitat in urban settings, and support project that enhance these areas.*	
Policy COS-P4.5	Policy COS-P4.5 Discourage use of fencing that poses risks to wildlife.*	
Policy COS-P4.6	Require projects impacting Pacific Flyway habitat in the Delta Primary Zone to incorporate mitigation that ensures no net loss of habitation, including temporal loss. Impacts to Pacific Flyway habitat will be determined based on best available information at the tim of environmental review.	
Policy COS-P4.7	Require projects near sensitive habitat areas to minimize lighting in general and mitigate light pollution by incorporating best practices for wildlife-friendly lighting.	
Policy COS-P4.10	Require majority use of California native plant species in large landscaped areas in new developments, and require construction practices that avoid spread of invasive plant species by minimizing surface disturbance; seeding and mulching disturbed areas with certified weed-free native mixes; disinfecting/decontaminating equipment; and using native, noninvasive, drought-resistant species in erosion-control plantings.*	

- Amend County Ordinance Code Title 8 Zoning to include development standards, and possibly adopt accompanying design Action COS-A4.2 guidelines, for urban land uses that interface with ecologically significant resource areas and other protected conservation lands, addressing, at minimum:
 - (a) Setbacks on urban properties to provide a buffer for resource areas.
 - Clustering of development to maximize ecological and conservation benefits.
 - Lighting, fencing, screening, and landscaping/vegetation that support, and do not interfere with, wildlife migration and other conservation purposes.*
- Action COS-A4.3 Work with conservation agencies to identify appropriate locations and methods for incorporating wildlife crossings into future road projects.
- Policy COS-P5.1 Support protection, restoration, and enhancement of wetlands, marshes, sloughs, tidelands, natural watercourses, and riparian corridors, and emphasize the role of these features in climate change resilience, air and water quality, and wildlife habitat.
- Policy COS-P5.2 Require public infrastructure and private development projects to preserve, and whenever possible restore and enhance, natural watercourses, floodplains, and riparian habitat.*
- Policy COS-P5.3 Require avoidance, minimization, and/or compensatory mitigation for development that would impact a wetland, wetland species, or adjacent upland habitat areas. Where feasible, compensation shall be in-kind (i.e., the same type of habitat), provided on-site, and based on a ratio that provides a margin of safety reflecting the expected degree of success and accounting for the relative functions and values of the lost and created wetlands.*
- Policy COS-P5.4 Require new buildings and structures on private property be set back at least 75 feet from the edge of any wetland area, unless a peer-reviewed, site-specific evaluation indicates that a different setback is appropriate for protecting the wetland and adjacent upland habitat areas. Allow encroachment into a required wetland setback area only when a parcel would otherwise be rendered unbuildable or impacts have been adequately mitigated.*
- Policy COS-P5.7 Work with conservation agencies and organizations to:
 - Increase public awareness about threats to water quality and prepare and implement watershed restoration plans throughout the county.
 - Acquire, protect, restore, and maintain areas adjacent to natural watercourses and riparian corridors.
- Policy COS-P5.8 Discourage ornamental landscaping within setback areas along natural watercourses and require use of California native plant species when revegetating those areas.

Policy COS-P5.9	Require increased setbacks for animal-handling uses whenever necessary to protect natural watercourses, wetlands, riparian hall or erosion-prone soils. Setback increases can be applied to all components of the use, such as manure storage or parking areas, are not limited to buildings and structures.*	
Policy COS-P5.11	Prohibit direct runoff of pollutants and siltation into marsh, creek, and wetland areas from outfalls serving urban development.*	
Action COS-A5.1	Inventory wetlands, floodplains, marshlands, natural watercourses, riparian corridors, and adjacent lands that could potentially support climate adaptation (through flood management, filtration, or other beneficial ecosystem services) and mitigation (e.g., carbon sequestration).*	
Policy COS-P6.1	Preserve natural woodlands and significant trees, particularly mature native species, intact coastal scrub and chaparral, and grasslands, especially those with native grass and wildflower populations.*	
Policy COS-P6.2	Encourage planting and propagation of California native trees and habitat-supporting native shrubs, forbs, and grasses throughout the county to enhance the natural landscape, provide shade (especially in riparian areas), sustain wildlife, absorb stormwater, and sequester carbon.	
Policy COS-P6.3	Support protection of native trees, especially oaks, in foothill woodlands and agricultural areas by encouraging voluntary installation of fencing around individuals or clusters of trees to prevent grazing and promoting replanting of native species.	
Policy COS-P6.4	Support removal of invasive, non-native trees, shrubs, and grassland weeds, especially those that are ecologically harmful or post threats to public safety.	
Policy COS-P6.5	Policy COS-P6.5 Encourage revegetation with local or regional ecotypes of native species in areas that were previously converted for agriculture but are no longer in production.	
Action COS-A6.1	tion COS-A6.1 Update County Ordinance Code Chapter 816-6 – Tree Protection and Preservation to enhance tree protections and strengthen mitigation requirements/restitution for removal commensurate with the benefits the tree provides.*	
Action COS-A6.2	Develop an Oak Woodland Conservation Program that establishes special mitigation ratios for removal of oak trees, along with specific tree replacement and planting standards to ensure long-term growth and survival. Amend the County Ordinance Code as needed to implement the program.*	
Policy COS-P7.1	Partner with water and wastewater service providers, GSAs, irrigation districts, and private well owners to increase participation in water conservation programs countywide.	
Policy COS-P7.4	Prohibit new development that would create or significantly aggravate groundwater overdraft conditions, land subsidence, or other "undesirable results," as defined in Section 354.26 of the California Water Code.*	

Policy COS-P7.5	Support multipurpose water storage options that incorporate water supply, flood control, surface and groundwater stor groundwater management, and ecosystem components.	
Policy COS-P7.6	Require new development to reduce water consumption through use of water-efficient devices and technology, drought-tolerant landscaping strategies, and treated recycled water where available.*	
Policy COS-P7.7	Require landscaping for new development to filter and retain runoff, and support flood management and groundwater recharge.*	
Policy COS-P7.8	Promote installation of drought-tolerant green infrastructure, including street trees, in landscaped public areas.	
Policy COS-P7.9	Support wastewater reclamation and reuse programs that maximize use of treated recycled water.	
Action COS-A7.2	For areas that are not covered by an adopted GSP, amend the County Ordinance Code to include sustainability indicators, defined by the SGMA, as a guide for development to maintain and protect the quality and quantity of groundwater supplies within the county.*	
Action COS-A7.3	Evaluate the feasibility and necessity of amending the County Ordinance Code to promote rainwater harvesting, installation of dual plumbing (purple pipe), and water reuse.	
Action COS-A7.4	Publish information on the DCD website about alternative sources of water for irrigation and other non-potable needs, such as greywater, rainwater, air conditioning condensation, and foundation drainage.	
Policy COS-P8.1	Protect public water supplies by denying applications for projects that would introduce significant new pollution sources in groundwater basins and watersheds feeding major reservoirs, and support efforts to acquire and permanently protect reservoir watersheds.*	
Policy COS-P8.2	Coordinate with other agencies to control point and non-point sources of water pollution and maintain water quality standards.*	
Policy COS-P8.3 Support development and implementation of a long-term, area-wide integrated vegetation management program to control invasive weeds in a way that reduces pesticide use and preserves water quality.		
Policy COS-P8.4	Require new development to retain natural vegetation and topography whenever feasible and require projects involving erosion-inducing activities to use best management practices to minimize erosion.*	
Policy COS-P9.2	Support continued maintenance and improvement of Delta levees to protect water quality, ecosystems, agricultural land, and at-risk communities.	
Policy COS-P9.5	Plan for land uses along shorelines that do not pose a threat to Bay or Delta resources, including water quality and shoreline and marshland habitats.*	
Policy COS-P14.1	Implement Climate Action and Adaptation Plan strategies to improve energy efficiency and conservation, promote carbon-free energy sources, and reduce energy-related GHG emissions.*	

- Policy COS-P14.2 Partner with State and regional agencies (e.g., California Public Utilities Commission, California Energy Commission, and ABAG/MTC) to support energy efficiency and renewable energy planning efforts. Policy COS-P14.3 Support distributed electricity generation, including development of microgrids, renewable energy sources, storage capacity, and associated technologies. Encourage these throughout urban areas, and in nonurban areas when significant environmental impacts can be avoided or successfully mitigated. Policy COS-P14.5 Support development of energy recovery projects (e.g., methane recovery from landfills and wastewater treatment plants). Policy COS-P14.6 Support efforts to convert existing buildings to be low-carbon or carbon neutral. Policy COS-P14.7 Encourage installation of battery storage systems in new and existing buildings, especially buildings with solar energy systems and buildings that provide essential community services. Policy COS-P14.8 Design and construct new County facilities to be zero-net energy to the extent feasible.* Policy COS-P14.9 Work with energy service providers and the Bay Area Regional Energy Network to encourage property owners to participate in weatherization, education, rate incentive, and other programs and measures to improve energy efficiency in existing buildings. Amend County Ordinance Code Chapter 88-14 - Oil and Gas Drilling and Production to: Action COS-A14.1
 - Prohibit new and expanded oil and gas production wells in the following:
 - i. Sensitive ecological areas, such as wetlands and habitat for rare, threatened, endangered, or special-status species.
 - ii. Areas subject to 100-year flood hazards or sea level rise, as shown in Figures HS-2 and HS-6 through HS-9.
 - iii. Areas within 3,200 feet of sensitive receptors or urban land use designations unless project-specific exceptions are granted by the California Department of Conservation, Geologic Energy Management Division.
 - Restrict oil and gas drilling operations to agricultural zoning districts only.
 - Require a land use permit for all new and expanded oil and gas wells.
 - Require a reclamation plan for oil and gas well sites that includes bonding for site clean-up.
 - Include performance standards related to surface water and groundwater quality and quantity, air quality, odors, noise, and aesthetics.

In parallel, study the feasibility of amending the County Ordinance Code to prohibit development of new oil and gas wells and phase out existing oil and gas well operations.

- Amend County Ordinance Code Chapter 88-3 Wind Energy Conversion Systems to require that decommissioned wind farms be Action COS-A14.3 returned to a condition consistent with the natural environment in the area at the time of decommissioning, rather than a return to pre-project condition. The following issues must be specifically addressed:
 - Unnecessary and poorly constructed roads that are sources of erosion.
 - Remaining turbine foundations/footings and underground conduit.
 - Abandoned equipment yards, turbine components, and other debris.
- Adopt new or modified reach codes that exceed the California Building Standards Code, as the State updates the Building Code Action COS-A14.4 every three years, to require use of low-carbon intensive energy sources, achieve higher levels of energy performance, and achieve lower levels of GHG emissions.
- Maintain, update, and publicize County ordinances and programs requiring new residential buildings, hotels, offices, and retail to be Action COS-A14.5 more energy efficient, with low levels of GHG emissions. Evaluate the feasibility of including other building types as appropriate.
- Create a County policy or program to facilitate making existing residential and nonresidential buildings more energy-efficient and Action COS-A14.6 powered by carbon-free energy.
- Create a detailed County roadmap to convert existing homes and businesses to use low-carbon or carbon-free appliances. The Action COS-A14.7 roadmap should include steps to support converting buildings to rely on low-carbon or carbon-free energy using an equitable framework that minimizes the risk of displacement or significant disruptions to existing tenants.
- Evaluate options for incentivizing and requiring additions and alterations to be energy efficient and to achieve the lowest feasible Action COS-A14.8 levels of GHG emissions, including upgrades to the building electric panel as needed.
- Action COS-A14.9 Ensure County-led and supported retrofit programs incentivize and prioritize conversion of buildings built before 1980 and emphasize assistance to owners of properties that are home to very low-, low-, and moderate- income residents or located in Impacted Communities, as permitted by available funding.
- Action COS-A14.10 Provide educational and technical resources to advance the adoption of heat pump water heater and heat pump space heating in buildings in support of BAAQMD Regulation 9, Rule 4, and Regulation 9, Rule 6, which will mandate that replacement and new water heaters (2027 and 2031) and space heaters (2029) are zero NOx.
- Support legislative efforts to establish a green bank able to equitably finance sustainability projects, including renewable energy, Action COS-A14.11 energy efficiency, and green infrastructure, for residential and commercial customers.

PUBLIC FACILITIES AND SERVICES ELEMENT

Policy PFS-P1.2	Locate new County facilities that involve regular community access in places that are easily accessible by public transit, walking, and micromobility, to the greatest extent possible.	
Action PFS-A2.3	Implement and maintain urban greening and green infrastructure, such as sustainable/green street projects, in Impacted Communities.	
Policy PFS-P4.1	Support the goal of regional self-sufficiency as part of new water system planning efforts, where all regions in the state are required to implement a variety of local water supply options and institute conservation and reuse programs to reduce reliance on exports from the Delta.	
Policy PFS-P4.2	Encourage water service providers to require separate service connections and meters for recycled water use or where large quantities of water are used for special purposes, such as landscape irrigation.	
Policy PFS-P5.7	P5.7 When developing new or revised regional drainage and flood management plans, including plans to protect against sea level rise incorporate adequate setbacks and alternative drainage system improvements that provide aesthetic, recreational, and environmenta benefits. Improvements should avoid structural modifications to watercourses and preserve riparian habitat and floodplains, and convert engineered drainage systems to more natural systems, when and where possible. In areas at risk of temporary or permanen inundation from sea level rise, ensure that improvements can continue to provide adequate protection for the projected level of inundation by 2100 or the expected operational life of the project, whichever is later.*	
Policy PFS-P5.8	Incorporate green infrastructure into new and retrofitted flood-control and streetscaping projects, including replacing existing asphalt and other hardscapes with green infrastructure, as feasible.*	
Policy PFS-P5.9	Work with developers of properties along transit corridors or in commercial or mixed-use areas to combine required C.3/stormwater treatment facilities with green infrastructure on the adjoining public right-of-way to enhance the value and sizing of these facilities.	
Action PFS-A5.3	Develop watershed management plans incorporating best management practices that slow, spread, and sink water runoff to flatten the hydrograph (i.e., water flow over time) where erosion is a concern, while also enhancing wildlife habitat and recreation opportunities where feasible.*	
Action PFS-A5.4	Establish programs for development projects alongside natural watercourses that ensure regular maintenance of the waterway, including debris removal, erosion control, and conservation and restoration of native species.*	
Policy PFS-P7.6	Encourage new technologies for organics processing consistent with SB 1383, the Short-Lived Climate Pollutants Reduction Strategy of 2016.	

- Policy PFS-P7.11 Require new landfills to be designed and operated so that upon decommissioning they can be repurposed for other uses, such as renewable energy facilities, recycling and organics recovery operations, outdoor recreation facilities, and open space.
- Policy PFS-P7.12 Require that new and expanded landfill operations significantly reduce GHG emissions to meet or exceed State targets to the extent feasible, and work toward carbon-neutral landfills.
- Policy PFS-P7.13 Extend the life of landfills by continually striving to:
 - Reduce the amount of solid waste generated.
 - Reuse and recycle as much solid waste as possible.
 - Utilize the energy and nutrient value of solid waste (i.e., waste-to-energy and composting).
 - Properly dispose of remaining solid waste.*
- Ensure transfer stations provide adequate capacity to accommodate recovery of recyclables and organic materials and encourage Policy PFS-P7.15 organics processing.*
- Action PFS-A7.2 Streamline the permitting process for composting, organics processing, and repair/reuse facilities.
- Policy PFS-P8.7 Design recreational facilities to complement the natural features of the area, including topography and vegetation, whenever appropriate.

HEALTH AND SAFETY ELEMENT

Policy HS-P1.8 Require new or expanded commercial and industrial projects resulting in 25,000 square feet or more of gross habitable floor area, such as warehouses and other large enclosed buildings, to be near zero-emission operations, including the facilities themselves and the associated fleets. Require all necessary measures, such as the following, to achieve near zero emissions:

- Reduce on-site energy consumption and increase on-site energy generation and energy storage.
- Provide adequate on-site zero-emission-vehicle parking for all anticipated truck traffic to prevent idling and off-site queuing.
- Provide electrified loading docks with receptacles allowing plug-in of refrigerated trailers.
- Use heavy-duty trucks that are model year 2014 or later and expedite a transition to zero-emission trucks by establishing a clear timeline for electrification of trucks as they become commercially available. Ensure contracts with motor carriers include air quality incentives or requirements, such as providing incentives to fleets that meet United States Environmental Protection Agency (EPA) SmartWay standards or requiring use of zero-emission or near-zero-emission trucks.

- Use a "clean fleet" of delivery vehicles as they become commercially available, but no later than 2025.
- Use zero-emission yard equipment, such as forklifts, pallet trucks and jacks, and stackers.
- Implement practices to control and remove fugitive dust and other contaminants from paved areas.

Uses with fewer than five vehicles domiciled on-site are exempt from this policy.*

- Action HS-A1.5 Adopt an ordinance at least as stringent as the State's maximum idling law, and coordinate with CARB and law enforcement to achieve compliance.
- Policy HS-P2.2 Increase the tree canopy on public property, especially in Impacted Communities and areas with a high heat index, by prioritizing funding for new street tree planting and maintenance.
- Policy HS-P2.3 Support protection, restoration, and enhancement of natural landscapes in and near Impacted Communities to improve air quality and community health.
- Action HS-A2.1 Partner with community members and regulatory agencies such as BAAQMD to conduct data collection and monitoring of pollution exposure, prepare a community-scale plan for reducing and mitigating air pollutant emissions and industrial hazards, such as pipeline risks, accidents, potential water or soil contamination, and impacts to sensitive ecological resources for each Impacted Community, or group of Impacted Communities, as appropriate. Require future projects to demonstrate consistency with those plans.
- Action HS-A2.5 Prepare a tree master plan for the county that emphasizes planting of low-maintenance native tree species and includes quantified goals and tracking methods, including mapping the tree canopy, and prioritizes planting in Impacted Communities and along safe routes to schools.
- Prioritize implementation of the Contra Costa County Climate Action and Adaptation Plan to reduce GHG emissions from community-Policy HS-P3.1 wide sources and adapt to changing climate conditions.
- Policy HS-P3.2 Facilitate carbon-neutral development projects and communities that support a circular economy, zero-emission modes of transportation, reliable and renewable energy resources, energy-efficient buildings, zero waste, water efficiency and conservation, green infrastructure, soil conservation, and a system of natural and working lands that support natural carbon sequestration and climate resilience.
- Policy HS-P3.3 Require new development projects using the Contra Costa County Climate Action and Adaptation Plan to streamline their environmental review of GHG emissions, as permitted by CEQA Guidelines Section 15183.5, to demonstrate consistency with the Climate Action and Adaptation Plan and incorporate applicable GHG reduction and climate change adaptation measures.*

- Update the Contra Costa County Climate Action and Adaptation Plan as needed to maintain consistency with CEQA Guidelines Action HS-A3.1 Section 15183.5(b), other State and regional guidance, and best practices. Future updates must include:
 - Inventories of GHG emissions in the unincorporated county.
 - GHG reduction targets for 2030 and 2045 at a minimum.
 - Forecasts of GHG emissions for the unincorporated county consistent with growth assumptions of this General Plan.
 - GHG reduction strategies with quantifiable outcomes.
 - Climate adaptation and resilience strategies to ensure the county's communities can respond to changing climate conditions.
 - An implementation and monitoring program to track the County's progress toward achievement of the GHG reduction targets.
 - A community and stakeholder engagement program for Climate Action and Adaptation Plan preparation and implementation.
- Action HS-A3.2 Study the feasibility of establishing a low-carbon concrete requirement for all new construction and retrofit activities and consider additional strategies to reduce embedded carbon in construction materials. The intent is to determine what the County can and should do to support or exceed State requirements for net-zero emissions for cement use by 2045.
- Action HS-A3.3 Regularly review and revise the County's purchasing and contracting programs as necessary to ensure consistency with the County's sustainability and GHG reduction goals.
- Policy HS-P4.1 Address the effects of climate change, particularly the increased frequency and intensity of hazards, during review of new development applications.
- Action HS-A4.1 Update the capital project planning and budgeting processes to account for anticipated effects of climate change hazards on County capital investments, including buildings and infrastructure, by integrating either the Contra Costa County Vulnerability Assessment or the best-available climate science data related to impacts, risks, sensitivities, adaptive capacities, and vulnerabilities.
- Prohibit construction of critical infrastructure in areas subject to flooding or sea level rise unless no feasible alternative exists. Policy HS-P5.6
- Action HS-A5.2 Establish countywide protection priorities for vulnerable communities and their populations identified to be at high risk of displacement from future flooding and sea level rise in the Contra Costa County Vulnerability Assessment or the best-available climate science data and use regional funding mechanisms to plan and implement protection measures in these locations or for these populations.

- Policy HS-P6.1 Require new development to locate habitable areas of buildings above the highest water level expected, based on Figures HS-6 through HS-9, accounting for sea level rise and other changes in flood conditions, or construct natural and nature-based features, or a levee if necessary, adequately designed to protect the project for its expected life.*
- Policy HS-P6.2 Support tidal wetland restoration projects in a manner consistent with community needs of flood-risk reduction, habitat and biodiversity conservation, and water quality protection.
- Policy HS-P6.3 Work with transportation agencies and infrastructure owners, such as railroads, to increase the resilience of transportation networks against sea level rise and increases in flooding intensity, including emergent groundwater flooding.
- Adopt a Sea Level Rise Overlay Zone with associated land use regulations for site planning and minimum construction elevations that Action HS-A6.2 reflects sea level rise data under at least a medium-high risk aversion scenario by 2100. Refer to BCDC policy guidance when developing this overlay zone.
- Coordinate with BCDC, Delta Stewardship Council, Caltrans, cities, and other affected agencies, organizations, and stakeholders to Action HS-A6.3 prepare and adopt a community-driven countywide sea level rise adaptation and resilience plan addressing increased flooding and sea level rise that provides unique adaptation options for the entire county shoreline and identifies funding mechanisms for implementation. Use Figures HS-6 through HS-9 or the best-available climate science data to identify where sea level rise hazards are likely to occur and lead efforts to:
 - Maximize awareness and disclosure to property owners and the public.
 - Assess and address impacts to future development, including promoting the Adaptation Pathways model to respond to uncertainty and evolving conditions.
 - Plan for resiliency projects and adaptation measures to protect existing development and infrastructure, emphasizing naturebased solutions.
 - Partner with the Adapting to Rising Tides Program, property owners, and community-based organizations to conduct a study of opportunities and costs for shifting development away from areas at risk from inundation.
 - Inform governance, funding, and financing decisions about short-term and long-term resiliency and adaptation projects.
 - Ensure that the disproportionate impacts on vulnerable populations and Impacted Communities are addressed.
- Action HS-A6.4 Partner with cities and CCTA to develop and fund a countywide plan to increase the resiliency of roads that will be impacted by sea level rise and tsunamis to ensure emergency responders can get to those in need and that community members, including those that rely on public transit, can continue to reach services.

Support local fire protection agencies with efforts to seek funding for development and implementation of a continuous vegetation Action HS-A7.2 management program in fire hazard severity zones and WUI areas. Following a large fire, evaluate the feasibility and resilience of redevelopment, and consider changes to building or development Action HS-A7.5 standards to improve resilience. Policy HS-P8.2 Work with energy service providers to promote programs encouraging reduced energy use during extreme heat events. Policy HS-P8.3 Require new commercial parking lots with 50 or more spaces to mitigate heat gain through installation of shade trees, solar arrays, or other emerging cooling technologies. Prioritize the use of solar arrays where feasible and appropriate. Action HS-A8.1 Amend County Ordinance Code Chapter 82-16 – Off-Street Parking to achieve consistency with Policy HS-P8.3. Policy HS-P9.3 Require new industrial development to reduce generation and disposal of hazardous materials to the maximum extent feasible by (listed in order of importance): Implementing operational source reduction strategies and replacing hazardous materials with less hazardous materials. Reducing generation of those wastes not amenable to source reduction or recycling. Recovering and recycling the remaining waste for reuse. Properly disposing of hazardous wastes and residuals generated from treatment of hazardous waste.* Policy HS-P9.4 Support development of alternative hazardous waste management technologies and methodologies that reduce the relative risk to human health and the environment. Policy HS-P9.5 Require industrial projects involving use, management, or generation of hazardous materials or waste, particularly those utilizing stationary or fixed storage tanks, in areas at risk from sea level rise, surface or emergent groundwater flooding, or tsunami to incorporate best management practices to reduce risk and prepare plans for prevention and remediation of hazardous materials/waste releases resulting from inundation. Remediation plans must meet regulatory standards for protection of people and the environment in the event of permanent inundation and include financial assurances to guarantee implementation.* Policy HS-P9.14 Encourage and facilitate establishment of adequate sites for collection of household hazardous waste (HHW), unused pharmaceuticals, and universal wastes, along with provisions for residents who are physically unable to deliver materials to a collection site. Action HS-A9.2 Update the Oil Spill Contingency Plan to protect the Bay and Delta shoreline areas in the event of an oil or other hazardous materials spill.

Action HS-A9.3	Action HS-A9.3 Provide information to county residents about less toxic alternatives to household products containing universal wastes and thandling, storage, and disposal of such products, including pharmaceuticals.	
Policy HS-P10.1	Coordinate with other agencies in efforts to remediate or treat contaminated surface water, groundwater, and soils in or affecting Impacted Communities.	
Action HS-A12.7	Conduct a comprehensive energy resilience needs assessment for critical County facilities and pursue funding opportunities to meet identified needs.	
Policy HS-P14.10	Require new development to evaluate noise impacts on the natural environment, including impacts on wildlife, whenever appropriate.	



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HEALTH AND SAFETY ELEMENT TECHNICAL APPENDIX

This is a technical appendix to the Health and Safety Element (Element), a State-mandated General Plan Element that must identify and plan for potential natural and human-created hazards that could affect Contra Costa County's residents, businesses, and services. This appendix provides additional technical details to augment the background information provided in the Health and Safety Element of the Contra Costa County 2045 General Plan. Figure references in this appendix are to the figures in the Health and Safety Element.

The Health and Safety Element contains the bulk of the General Plan's goals, policies, and actions to minimize hazardous situations and protect and improve public health in and around the county. Combined with the additional details provided in this technical appendix, it identifies the natural and human-caused hazards that affect existing and future development, describes present and expected future conditions, and sets policies and standards for improved public safety, including efforts to minimize harm to people, buildings, and infrastructure and reduce damage to local economic systems, community services, and ecosystems.

Some degree of risk is inevitable because the potential for many disasters cannot be eliminated completely, and the ability to predict such disasters is limited. However, the Health and Safety Element aims to reduce this risk by:

• Developing a framework for considering safety issues in the land use planning process.

- Facilitating identification and mitigation of hazards for new development and strengthening existing codes, project review, and permitting processes.
- Presenting policies directed at identifying and reducing hazards in existing development.
- Strengthening preparedness planning and post-disaster reconstruction policies for earthquakes, floods, dam inundation, wildfires, and other hazards.
- Identifying how natural and climate-related hazards are likely to increase in frequency and intensity in the future and providing policies to increase community resilience through preparedness and adaptation.

The Health and Safety Element addresses the topic of public health and safety following State requirements in Section 65302(g) of the California Government Code. State law requires that the Health and Safety Element contain background information and policies to address multiple natural hazards, analyze the vulnerabilities from climate change and establish policies to improve climate change resilience, and assess residential areas with evacuation constraints. The public safety issues in Contra Costa County include emergency preparedness and response, flood and inundation hazards, seismic and geologic hazards, fire hazards, hazardous waste and materials, and other climate-related hazards. The Health and Safety Element identifies goals, policies, and actions for each of these hazards.

RELATIONSHIP TO OTHER DOCUMENTS

The Health and Safety Element does not exist in a vacuum but is instead one of several plans that address community public safety and related topics. These other plans include the Contra Costa County Local Hazard Mitigation Plan (LHMP), Contra Costa County Emergency Operations Plan (EOP), and Contra Costa Countywide Community Wildfire Protection Plan (CWPP). The Health and Safety Element should be consistent with these other plans to ensure that the County has a unified strategy to address public safety issues. The Health and Safety Element incorporates information, technical analyses, and policies from these other documents where appropriate to help support this consistency.

The other Elements in the General Plan also provide policy guidance on related topics. The Health and Safety Element is consistent with and complementary to the other General Plan Elements.

Contra Costa County Local Hazard Mitigation Plan

The County prepared the most recent Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 and the Federal Emergency Management Agency's (FEMA) LHMP policy guidance. The County collaborated with local agencies, including 16 incorporated cities and towns and 25 special districts in the Contra Costa County planning area, to prepare the LHMP. Contra Costa County's LHMP process is one where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. Implementation of these mitigation actions, which include short- and long-term strategies, involves planning, policy changes, programs, projects, and other activities. Local governments are required to

develop a hazard mitigation plan as a condition for receiving certain types of non-emergency disaster assistance.

The LHMP and Health and Safety Element address similar issues, but the Health and Safety Element provides a higher-level framework and set of policies that pertain to the long-term safety of the county, while the LHMP focuses on more specific mitigation actions to enable jurisdictions to better protect lives, property, and natural systems. The LHMP, certified by FEMA, is incorporated into the Health and Safety Element by reference, as permitted by California Government Code Section 65302.6, and can be accessed at www.contracosta.ca.gov/6415/Local-Hazard-Mitigation-Plan.

Contra Costa County Emergency **Operations Plan**

The EOP describes the planned response to extraordinary emergency situations associated with natural disasters, technological (human-caused) emergencies, and war emergency operations in or affecting Contra Costa County. The EOP establishes an emergency management organization that will respond to any significant emergency or disaster affecting the county. The EOP is also the principal guide for the County and special districts who respond to and mitigate emergencies and disasters in the county. It is intended to facilitate multi-agency and multi-jurisdictional emergency operations and coordination, particularly between local governments in the operational area (i.e., county boundary), and addresses State and federal response upon request.

Contra Costa Countywide Community Wildfire Protection Plan

In collaboration with the Contra Costa County Fire Chiefs Association, Hills Emergency Forum, and stakeholder committee members, the Diablo Fire Safe Council prepared and published the 2019 Contra Costa CWPP. The goal of the plan is to reduce hazards through increased information and education about wildfires, hazardous fuels reduction, actions to reduce structure ignitability, and other recommendations to assist emergency preparedness and fire-suppression efforts. The Contra Costa CWPP complements local agreements and existing plans for wildfire protection for a coordinated effort in determining appropriate fire management actions.

CLIMATE CHANGE VULNERABILITY

Changes to the global climate system are expected to affect future occurrences of natural hazards in and around Contra Costa County. Many hazards are projected to become more frequent and intense in coming years and decades, and in some cases, these trends have already begun. Key climate change considerations that affect Contra Costa County include increasing temperatures, changes in precipitation, and sea level rise. Overall, precipitation levels are expected to increase slightly; however, there are likely to be more years of extreme precipitation events and droughts that last longer and are more severe. According to California's Fourth Climate Change Assessment, Contra Costa County can expect to experience the following climate-related hazard events:

• Sea level rise is a gradual process, taking place over years or decades. Along the Contra Costa County shoreline, sea levels are projected to rise approximately 24 inches by 2050 and 84 inches by 2100. However, it is possible that sea levels could rise faster than these projections. iii Rising

sea levels can also cause the shoreline to flood more frequently and severely during storms or king tide events. Because ocean levels are higher during normal conditions due to sea level rise. shoreline floods can reach further onto land.

• Although Contra Costa County is likely to experience only a slight

What is vulnerability?

Vulnerability is the degree to which natural, built, and human systems are susceptible to harm from exposure to stresses associated with environmental and social change and from the absence of a capacity to adapt.

Source: California Governor's Office of Emergency Services. 2020. California Adaptation Planning Guide.

- increase in overall annual precipitation levels from climate change, rainfall is expected to fall in fewer, more extreme precipitation events. Climate change is expected to also increase the frequency and severity of droughts that cause soil to dry out and condense. When precipitation does return, more water will run off the dry ground instead of being absorbed, potentially leading to more frequent flooding. Drought conditions will strain the water supplies derived from the Mokelumne River watershed and the Sacramento-San Joaquin Delta, causing water shortage contingency plans and demand reduction actions to go into effect more frequently.
- Severe weather events, such as lightning, hail, heavy rainfall, and high winds, may become more frequent and intense. Heavy rainfall may also contribute to an increased risk of landslides in the hills of Contra Costa County. Although the connection between climate change and severe weather is not as well established as it is for other hazards, severe winds such as the Diablo winds, which tend to be most frequent during the fall and winter months, may coincide more frequently with wildfire conditions

- Warmer temperatures are projected to cause an increase in extreme heat events. An extreme heat day is defined in Contra Costa County as a day when the high temperature is on average at least 96.6°F, although it varies by specific location. Extreme heat days are expected to rise from a historical annual average of 4 days per year to 20 days per year by the middle of the century (2035 to 2064) and to an average of 37 days per year by the end of the century (2070 to 2099). In addition to the increases in extreme heat events, Contra Costa County is expected to see an increase in warmer nights, which are defined in Contra Costa County as nights when the minimum temperatures stay above 63.2°F. The number of warm nights is expected to rise from a historical annual average of 5 nights per year to 36 nights per year by the middle of the century (2035 to 2064) and to an average of 88 nights per year by the end of the century (2070 to 2099).
- Wildfire risk in Contra Costa County is increasing, and hotter, drier weather resulting from climate change is expected to increase wildfires in the surrounding area and across the county. Continued dry conditions with above-normal temperatures through spring will leave fuel moisture levels lower than normal, increasing the potential for wildfire activity and an extended wildfire season. Across the region, more frequent and intense wildfires may also create poor air quality for Contra Costa County due to smoke.
- Climate change can increase the rates of infection for various diseases because many of the animals that carry diseases are more active during warmer weather. For example, mosquitos are more active during warmer and rainier conditions, and therefore can more easily spread diseases such as West Nile virus and Zika virus. Warmer temperatures earlier in the spring and later in the winter can cause these animals to

- be active for longer periods, increasing the time that these diseases can be transmitted.
- Due to its location along the Bay and Delta shorelines, floodplains, wildfire prone areas, and steep topography, Contra Costa County is in an area that can experience multiple, simultaneous natural hazards. These can also be called compounding hazards or cascading hazards. Compounding hazards could include a flood event that is followed by an earthquake, which are unrelated events that could compound to increase liquefaction in soils near floodplains or shorelines. Cascading hazards, on the other hand, occur one after the other. For example, an increase in extreme heat events and drought can dry out forests, leading to more fuel for wildfires, which can lead to faster moving and higher burning wildfires. The burn scar of a wildfire could then experience heavy rainfall, which could lead to landslides or debris flows. These hazards are discussed separately above, but when combined, they can cause more devastating consequences for county residents, visitors, and businesses.

Vulnerability Assessment

Under California law, the Health and Safety Element is required to include a vulnerability assessment that looks at how people, buildings, infrastructure, and other key community assets may be affected by climate change. The County conducted a Vulnerability Assessment to analyze its susceptibility to hazards, including those related to climate change, in accordance with the most recent available guidance in the California Adaptation Planning Guide published by the California Governor's Office of Emergency Services (OES). The Vulnerability Assessment looks at how 13 different hazards—agricultural pests and diseases, air quality, coastal flooding, drought, extreme heat, human health hazards, flooding, fog, landslides, sea level rise, seismic

hazards, severe storms, and wildfire—may affect 64 different population groups and community assets. Each population or asset received a score of V1 (minimal vulnerability) to V5 (severe vulnerability) for each hazard.

Overall, populations in Contra Costa County tend to be most vulnerable to inland flooding, extreme heat and warm nights, wildfire and smoke, and human health hazards, which directly affect health outcomes. Climate change could affect the transportation network and associated economic activity by creating strain on transportation infrastructure, resulting in impacts to personal travel behavior and goods movement. Transportation infrastructure such as roadways, bridges, and railways are all potentially at increased risk due to inland and shoreline flooding, landslides, and severe weather events. Disruption of transportation infrastructure could significantly limit the movement of goods and services, economic vitality of the community, ability to evacuate during an emergency, and livelihood of many businesses.

Countywide, energy delivery is also vulnerable to multiple hazards, including severe weather, such as high winds that can trigger public safety power shutoff (PSPS) events, extreme heat that reduces capacity and strains the system, and wildfires that damage the system, ultimately disrupting energy service. In particular, extreme heat can cause mechanical failure of grid equipment and heat damage to power lines, while also creating a high demand for electricity to power air conditioners, all of which places stress on the network and can lead to rolling blackouts.

Climate change is also expected to affect parts of the county that are considered prone to both inland and shoreline flooding, mainly because of sea level rise and stronger storm systems. As a result, agricultural land, homes, and businesses throughout the county will likely experience an increase in the frequency and magnitude of inland and shoreline flood events in future years.

Ecosystems throughout the county will likely shift and change due to rising temperatures and changes in precipitation patterns. Extreme temperatures and drought conditions can weaken woodlands and forests in the county, causing wildfires to spark more easily. Frequent wildfires in these ecosystems can cause specific composition to change as more fire-adapted species outcompete other species. Sea level rise may cause a similar phenomenon in marshland habitat along the shorelines of the county. As sea levels rise, marshland habitat will likely be slowly inundated by elevated high tide levels, causing marshes to shift to mudflat habitat types.

PUBLIC SAFETY ISSUES

Among other topics, the Health and Safety Element addresses:

- Air quality
- Flood and inundation hazards (also addressed in the Public Facilities and Services Element)
- Fire hazards (also addressed in the Public Facilities and Services Element)
- Hazardous materials and waste
- Seismic and geologic hazards
- Emergency preparedness and response
- Agriculture and ecosystem hazards (also addressed in the Conservation, Open Space, and Working Lands Element)
- Additional climate-related hazards such as drought, extreme heat, and severe weather (also addressed in the Conservation, Open Space, and Working Lands Element and Public Facilities and Services Element)

This section provides details pertaining to probable locations each hazard or issue is likely to occur (per availability of data), past notable events in and around Contra Costa County, agencies responsible for providing protection from these public safety issues, and other background information required by California Government Code Section 65302(g)(4). Goals, policies, and actions related to these hazards are provided in the Health and Safety Element.

The results of the Vulnerability Assessment are integrated into the discussions of hazards and other public safety issues.

Air Quality

Healthy air quality can be defined as the degree to which ambient air is pollution free. Although air pollution has been regulated for decades, California still has some of the worst air in the country. Air pollution can cause many serious health effects.

A significant pollutant of concern in Contra Costa County is diesel particulate matter (DPM), a toxic air contaminant (TAC). TACs are air pollutants that can cause serious health effects from exposure at extremely low levels—a safe level of exposure may not even exist. DPM is particulate matter from dieselfueled engines, such as those in on-road vehicles like diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

People exposed to DPM at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects, including damage to the immune system and neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems. 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. Long-term (chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammatory responses and may exacerbate existing allergies and asthma.

As illustrated in Figure HS-1, air pollution impacts from exposure to elevated concentrations of DPM is greatest in North Richmond, Montalvin Manor, Bayview, Tara Hills, Rollingwood, East Richmond Heights, El Sobrante, Rodeo, Crockett, Mountain View, Vine Hill, Pacheco, Baypoint, Contra Costa Centre, Saranap, Parkmead, and Castle Hill. In western and central Contra Costa County where these communities are located, major sources of DPM include I-80, SR-4, and I-680; the Richmond Parkway, which is a truck traffic thoroughfare; a bulk cargo port on Richmond Harbor; the Burlington Northern Santa Fe rail yard in Richmond; and petrochemical and other industrial complexes, many of which are near the Port of Richmond on Richmond Harbor. There are also several facilities emitting DPM along the northern waterfront areas of the county, including along the San Pablo Bay shoreline adjacent to Rodeo and the Suisun Bay shoreline adjacent to Vine Hill, Clyde, and Bay Point.

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature inversions interact with the physical features of the landscape to determine the movement and dispersal of air pollutant emissions and, consequently, their effect on air quality. Regardless, the impacts to local air quality from DPM will vary over time based on changes to the location and operation of emission sources as well as their overall contribution to emissions. As traffic increases in these areas, particularly along I-80, SR-4, I-680, and the Richmond Parkway, diesel emissions will increase. Operational increases in diesel-fueled engines, such as those in railyards and other industrial complexes, will also contribute to a greater concentration of DPM. Consequently, increases in DPM concentrations will lead to a greater health

risk for communities exposed to these emissions. Those most vulnerable from exposure to elevated concentrations of DPM include individuals with existing health conditions, children, and elderly populations.

Flood and Inundation Hazards

Flood and inundation hazards are addressed in the Public Facilities and Services Element, in addition to the Health and Safety Element.

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide, significantly threatening the health and life of community members and causing substantial damage to structures, landscapes, and utilities. Flooding can be extremely dangerous—even six inches of moving water with a strong current can sweep a person off their feet. Floodwaters can transport large objects downstream that can damage or even dislodge stationary structures, such as dam spillways. Saturated ground can lead to instability or collapse, and standing water can damage roads, building foundations, and electrical circuits. Floodwaters can also break utility lines and interrupt services. Other problems related to flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards (e.g., mold growth).

Flood events in Contra Costa County can occur from a river, creek, or canal overtopping its banks, a flash flood from intense precipitation in a targeted area, water pooling in low-lying areas and overwhelming drain systems, levee or dam failure, or waves and high water along coastal areas.

A large portion of developed and undeveloped lands in the county are subject to flooding as a result of heavy seasonal rainfall, dam inundation, and canal or levee failure. A majority of these flood-prone lands are subject to inundation specifically from heavy rainfall and resulting stream overflows.

Climate change will likely enlarge the area of the county that is at risk of flooding.

Flood Hazards

Areas at an elevated risk of flooding are divided into 100-, 200-, and 500-year flood zones. A 100-year floodplain has a 1 percent chance of experiencing a flood in any given year; a 200-year floodplain has a 0.5 percent chance of flooding in a given year; and a 500-year flood plain has a 0.2 percent chance of flooding in any given year. Figure HS-2 shows the 100- and 500-year floodplains in Contra Costa County. There are no 200-year flood zone maps for Contra Costa County, but the 500-year flood zone can be used as a proxy in low-lying portions of East County (i.e., areas mainly at risk of flooding from the Delta).

The floodplains in Contra Costa County include the areas along the shorelines of the San Francisco Bay, San Pablo Bay, Carquinez Strait, Suisun Bay, San Joaquin River, and Old River; tracts in the eastern portion of the county; and areas adjacent to inland tributaries. Floodplains can change over time, including through land development and the resulting reduction of pervious land, construction of bridges or culverts, or through building levees or other impoundment structures that control the flow in the watercourse.

The Contra Costa Flood Control and Water Conservation District (CCFCWCD) is the primary local flood control agency for the county. It constructs and maintains regional flood control facilities, including approximately 79 miles of channels, creeks, and other drainages and 30 detention basins and dams. CCFCWCD works to reduce flood risk, promote stormwater quality, and restore and enhance natural resources in an environmentally sensitive manner for communities throughout Contra Costa County.

Other agencies responsible for flood control in Contra Costa County include the United States Army Corps of Engineers (USACE), the Federal Insurance Administration (FIA), and the California Department of Water Resources (DWR).

Canal or Levee Failure

Canals and levees in Contra Costa County are maintained by CCFCWCD, USACE, 13 special reclamation districts, and private landowners. These levees and drainage systems protect agricultural and rural areas, critical infrastructure like highways, and important environmental resources. Levee or canal bank failures or overtopping can cause sudden and severe flooding in surrounding areas. There are over 1,100 miles of earthen levees and revetments managed by CCFCWCD and reclamation districts in the county. Rudimentary levees along many smaller streams and creeks also protect small areas of land. Many levees are old and were built under a different set of flood management goals and standards.

Using the best available data, DWR has identified areas in the Central Valley known as Levee Flood Protection Zones (LFPZ), which are places where flood waters would be three feet above base flood elevation or more if a levee were to fail. While there are no mapped LFPZs in Contra Costa County, FEMA has mapped areas in East County, such as Discovery Bay. that are at a reduced flood risk due to levees, as shown in Figure HS-2. Additionally, while not mapped, Bethel Island is below sea level and surrounded by levees. A levee failure would likely cause inundation of several feet throughout the island.

Dam Failure

A dam failure is an uncontrolled release of water from a reservoir through a dam because of structural failures or deficiencies in the dam, usually associated with intense rainfall or prolonged flooding, but it could also happen because of an earthquake, landslides, or equipment malfunction. Dam failures can range from minor to catastrophic and can potentially harm human life, property, ecosystems, and habitat downstream. Although dam failures are very rare, they are not unprecedented.

Dam inundation zones are based on the highly unlikely scenario of a total catastrophic dam failure in a very short period of time. According to the USACE's National Inventory of Dams, there are 21 dams of significant concern in Contra Costa County, and another 6 dams outside the county have inundation areas extending into the county.

The Federal Energy Regulatory Commission (FERC), as required by federal law, has reviewed and approved comprehensive emergency action plans (EAP) for each of these dams. The EAPs minimize the threat to public safety and the response time to an impending or actual sudden release of water from dams. The EAPs are also designed to provide emergency notifications when floodwater releases present the potential for major flooding.

As mandated by the National Dam Inspection Act, the USACE has the authority and responsibility for conducting inspections of all dams. The purpose of these inspections is to check the structural integrity of the dam and associated appurtenant structures, ensuring protection of human life and property. Periodic inspections disclose conditions that might disrupt operation or dam safety.

Figure HS-4 illustrates areas in the county that would be affected by inundation if any of these dams failed.

Tsunamis

Earthquakes can create tsunamis as a secondary hazard, and tsunamis have the potential to affect the shoreline areas of Contra Costa County. Tsunamis are typically caused by earthquakes generated in offshore subduction zones. The sudden movement displaces a large volume of water, creating a tsunami wave that can travel across the ocean at speeds up to 700 miles per hour. As the tsunami enters shallower water near coastal shorelines. it slows to about 20 to 30 miles per hour and the wave can increase to a height of 90 feet or more as it approaches the coastline and the water column compresses. Tsunamis can result in severe property damages and loss of life in affected areas near the coast. They can also disrupt emergency services and transportation routes. Tsunami waves can also diffract around land masses. Because tsunamis are not symmetrical, the waves may be much stronger in one direction than another, depending on the nature of the source and the surrounding geography.

Earthquakes of magnitudes below 6.5 are very unlikely to trigger a tsunami so it is a particularly rare phenomenon. The narrow opening of the Golden Gate Strait also protects much of the inner Bay Area shoreline from severe tsunami impacts. Nonetheless, the County considers susceptibility to tsunami when reviewing development proposals.

Figure HS-5 illustrates the areas that may be subject to inundation from tsunamis in Contra Costa County. The only areas of the county that are considered at risk from tsunamis are the shoreline areas along San Francisco Bay, San Pablo Bay, and a portion of the Carquinez Strait.

Seiche

A seiche is a wave that can occur in an enclosed or partially enclosed body of water, such as a reservoir, bay, or harbor. Seiches can be caused by a variety

of factors, including changes in atmospheric pressure, wind, and seismic or geologic activity. When a seiche occurs, it can cause water levels to rise and fall rapidly, which poses a risk to boats, docks, and other structures in the affected area. Seiches can generate waves that can inundate areas around the affected water body, similar to a tsunami. Additionally, seiches occurring in a reservoir can cause overtopping of a dam and result in regional flooding. While seiches are a risk associated with earthquakes and tsunamis, it is unlikely that one would occur in the San Pablo or San Francisco Bays or in the reservoirs in Contra Costa County.

Sea Level Rise and Shoreline Flooding

Sea level rise is a gradual increase in the ocean's surface height over years or decades. Sea level rise is a direct result of climate change and affects coastal communities as well as those along the San Francisco Bay and into the Sacramento/San Joaquin Delta region. Sea level rise has the potential to inundate homes, businesses, and infrastructure near the shorelines as well as cause erosion of coastal lands over time. Rising seas increase the risk of coastal flooding, storm surge inundation, coastal erosion and shoreline retreat, and wetland loss. The communities and infrastructure that line many coasts are already vulnerable to damage from storms, which will likely increase as the sea level continues to rise and inundate areas further inland. Finally, rising tides may increase groundwater levels, inundating contaminated soil and pushing toxins toward the surface. Given that some contaminated sites in Contra Costa County sit near the shoreline, rising groundwater may cause contaminated soils to leach into previously unaffected areas

Along the Contra Costa County shoreline, sea levels are projected to rise approximately 2 feet (24 inches) by 2050 and 7 feet (84 inches) by 2100. However, it is possible that sea levels could rise faster than these projections, which has happened historically. Projections for the expected

depth of water that would inundate dry land in the years 2050 and 2100 in Contra Costa County are shown in Figures HS-6 and HS-8, respectively. Land that is below sea level could be inundated by water deeper than the sea level rise (e.g., 2 feet of sea level rise could expose land 2 feet below sea level to 4 feet of water). Sea levels may increase enough by 2100 to permanently flood low-lying areas along the shorelines of the Carquinez Strait and Suisun Bay as well as large tracts of land in the eastern portion of the county adjacent to Old River.

Rising sea levels can cause the shoreline to flood more frequently and severely during storms or king tide events. For example, a storm that has a 1 in 5 chance of occurring in a given year (known as a 5-year storm) can create a temporary increase in sea levels of approximately 24 inches. Because ocean levels are higher during normal conditions due to sea level rise, shoreline floods can reach further onto land. This means that if sea levels rise by 24 inches during normal conditions, a 5-year storm event would create a temporary sea level rise of around 48 inches. Shoreline flooding projections for the years 2050 and 2100 in Contra Costa County are shown in Figures HS-7 and HS-9, respectively.

The San Francisco Bay Conservation and Development Commission (BCDC) requires that shoreline protection projects, such as levees and seawalls, be designed to withstand the effects of projected sea level rise and be integrated with adjacent shoreline protection.

Past Occurrences

Floods are a regular occurrence in California and cause the second-greatest number of disaster declarations in the state. Delta flooding has a long history in Contra Costa County and is a continuing hazard. Since construction of levees started in the early 1860s, every island in the Delta has been flooded at least once due to levee overtopping or failure. Approximately 110 levee

failures have occurred since 1900, including about 12 since 1980. Since 1969, 10 flood events in Contra Costa County have been declared federal disasters. These 10 floods caused over \$50 million in property damage.

There are several major floods in the county's history. In 1955, strong storms inundated almost 38,000 acres and caused about \$3.3 million in damage. The Delta area suffered permanent damage to a sizeable amount of agricultural land. Concurrent strong onshore winds generated high waves that threatened many islands.

In January and February 1969, high tides and adverse wave action in the Delta combined with large river inflow and rain-soaked levees to cause flooding of several islands; approximately 11,400 acres were flooded, totaling \$9.2 million in flood damage.

In mid-January 1980, severe rainstorms over central California precipitated high river outflow through the Delta that coincided with gale force winds and high tides, resulting in levee failure and flooding of two tracts, with approximately 9,600 acres under water. Continued high inflow to the Delta and wind-generated waves increased erosion on all Delta-area levees, necessitating temporary curtailment of boat traffic.

In June 2004, Jones Tract in San Joaquin County near the border with Contra Costa County experienced a levee breech. In August 2009, a bulk carrier ship stuck a levee at Bradford Island north of Bethel Island, also causing a serious breach.

More recently, communities in Contra Costa County report increased damage from king tide events, especially when paired with heavy rain, and community members are attributing these changes to sea level rise.

Potential Changes to Flood Risk in Future Years

Historically, extended heavy rains have resulted in floodwaters that exceed normal high-water boundaries and cause damage in Contra Costa County. Flooding has occurred within both the 100- and 500-year floodplains and in other localized areas. As land uses and climate conditions shift and as improvements are made to flood-control channels, the size of these flood zones is likely to change. Although climate change may not change average precipitation levels significantly, scientists expect that it will cause more events of extreme precipitation. That is, more years are likely to have particularly intense storm systems that drop enough precipitation over a short enough period to cause flooding. Because of this, floods are expected more often in Contra Costa County, and climate change may expand the parts of the county that are considered prone to flood. Climate change is also expected to increase the frequency and severity of droughts, which cause soil to dry out and harden. When precipitation does return, more water runs off the hardened surface than is absorbed into the ground, which can lead to floods.

Tsunamis depend on a seismic event. Major earthquakes are rare, but they are a possibility in the region and could generate tsunamis under some circumstances. A more likely instance is a tsunami triggered by a distant earthquake that could still be large enough to cause damage in Contra Costa County.

Sea levels have risen in San Francisco Bay and are expected to continue rising at an accelerated rate over the coming century. Sea level rise will occur slowly over time and increase impacts of other coastal hazards, such as shoreline erosion and the potential impact of tsunamis. Community assets and infrastructure that border the shoreline are vulnerable to damage from storms, which will likely increase as the sea level continues to rise and

inundate areas further inland. As sea levels rise, the area and number of people at risk because of flooding will also increase.

The potential for a dam failure event affecting Contra Costa County will remain a risk in future years, although the likelihood of such events is expected to remain very low.

Fire Hazards

The combination of complex terrain, Mediterranean climate, and productive natural plant communities, along with ample natural ignition sources, has created conditions for extensive wildfires in and around Contra Costa County, making this a hazard of high concern. Historically, the fire season extended from early summer through late fall during the hottest, driest months of the year, but it is becoming a hazard that can occur year-round. Wildfire conditions arise from a combination of high temperatures, lowmoisture content in the air and plant matter, an accumulation of vegetation, and high winds. They can be sparked by lightning, malfunctioning equipment, carelessness, and other causes There is also a risk of structural fires in Contra Costa County.

Three types of fires are of concern to Contra Costa County: (1) wildfires, (2) wildland-urban interface fires, and (3) structural fires.

Wildfires and Wildland-Urban Interface Fires

Wildfires occur on mountains, hillsides, and grasslands. Fuel, weather, and topography are primary factors that affect how wildland fires spread. In Contra Costa County, grassland and woodland habitat provide highly flammable fuel that is conducive to wildfires. These plant species are capable of regeneration after a fire, making periodic wildfires a natural part of the ecology of these areas. The climate of Contra Costa County keeps the grass

dry and more readily combustible during fire season. Seasonal drought conditions exacerbate fire hazards.

The wildfire potential for Contra Costa County is typically greatest when dry vegetation coexists with hot, dry winds, known as Diablo winds. Diablo winds come from the north and northeast, carrying extremely dry air at a high velocity, usually occurring in the San Francisco Bay Area. The name "Diablo wind" refers to the fact that the wind blows into the inner Bay Area from the direction of Mount Diablo in Contra Costa County. These hot, dry winds can quickly desiccate vegetation and other combustible materials and can push a fire down or up a slope at very high speeds. During these times, controlling a fire becomes far more difficult.

The wildland-urban interface (WUI) is an area where buildings and infrastructure mix with areas of flammable wildland vegetation. Wildfires are often most dangerous when they burn into this region because most people and structures in wildfire-prone areas are in the WUI. The WUI can be subdivided into the intermix zone (where houses and wildland vegetation directly mingle), the interface zone (housing adjacent to wildland vegetation, but not mingled with it), and the influence zone (areas of wildfire-susceptible vegetation surrounding the others). The interface and intermix zones are typically the areas of highest risk.

Increasing local and regional fire frequency can also create recurring air quality degradation events leading to respiratory health effects. Wildfire smoke consists of a mix of gases and fine particulate matter from burning vegetation and materials. The pollutant of most concern from wildfire smoke is fine particulate matter (PM_{2.5}). PM_{2.5} from wildfire smoke is damaging to human health due to its ability to deeply penetrate lung tissue and affect the heart and circulatory system. Although wildfire smoke presents a health risk to everyone, sensitive groups may experience more severe acute and chronic symptoms from exposure to wildfire smoke, including children, older adults, people with chronic respiratory or cardiovascular disease, people experiencing low socioeconomic status, or people who spend substantial time outdoors, such as agricultural workers..

Structural Fires

Contra Costa County is also at risk from structural fires. These fires occur in built-up environments, destroying buildings and other human-made structures. Structural fires are often due to faulty wiring or mechanical equipment, or human error, combined with combustible construction materials. Older buildings that lack modern fire safety features may face greater risk of damage from fires.

Fire Hazard Zones

The California Department of Forestry and Fire Protection (CAL FIRE) establishes Fire Hazard Severity Zones (FHSZ), designating moderate, high, or very high severity. Unincorporated areas are considered State Responsibility Areas (SRA). SRAs are areas where CAL FIRE has responsibility for fire protection. Local jurisdictions do not have financial responsibility for wildland fire protection in SRAs.

The highest areas at risk for fires are in western Contra Costa County and in the foothills and mountainous watershed areas around Mount Diablo and Los Vagueros. Grassland areas, especially in eastern Contra Costa County, also face wildfire risk. Figure HS-10 shows the FHSZs in Contra Costa County, and Figure HS-11 identifies the WUI.

Water Pressure and Supply

Insufficient water pressure and supply also contribute to wildfire danger. Most of the higher-risk wildfire areas in the county are not served by public water systems. Fire districts serving these areas are typically equipped with

tank trucks. Properties designated for residential use in areas without public water service are required to maintain sufficient on-site water storage, and new development must have sufficient water pressure for firefighting purposes.

Fire Protection

Fire protection service is addressed in the Public Facilities and Services Element. Six fire protection districts (the Contra Costa Fire Protection District, San Ramon Valley Fire Protection District, Moraga-Orinda Fire Protection District, Rodeo-Hercules Fire Protection District, Crockett-Carquinez Fire Protection District, and Kensington Fire Protection District) and three city fire departments provide fire prevention and protection services that adequately cover the entire county except for Jersey Island, Bradford Island, Quimby Island, Webb Tract, and the Marathon Refinery near Martinez. Other service providers include CAL FIRE and the Federal Fire Department Concord-US Army.

All agencies, including CAL FIRE, participate in mutual and automatic aid agreements to provide services outside of their bounds. Mutual aid agreements help ensure adequate response times in outlying areas. The County also has a contract with the State Office of Emergency Services.

The jurisdictional boundaries for these fire protection districts are illustrated in Figure PFS-5 in the Public Facilities Element.

Past Occurrences

From 2010 to 2022, there were 24 wildfires in Contra Costa County, most burning over 100 acres. Some burned considerably more acreage, most notably the 2020 Santa Clara Unit (SCU) Complex Fire. These events are illustrated in Figure HS-12; fires over 100 acres in size are listed in Table C-1.

TABLE C-1: FIRE SIZES AND DATES (100+ ACRES, 2010–2021)

Date	Fire Name	Size in Acres
June 11, 2010	Vista Fire	186
July 2, 2010	Bradford Fire	510
August 24-26, 2010	Curry Fire	375
December 1-2, 2011	Collier Fire	198
July 1, 2013	Kirker Fire	492
July 1, 2013	Concord Fire	274
September 8-14, 2013	Morgan Fire	3,111
June 24-25, 2015	Loma Fire	533
July 30, 2015	Vasco Fire	195
July 25-August 3, 2018	Marsh Fire	247
August 1-8, 2019	Marsh 3 Fire	340
August 1-8, 2019	Marsh 5 Fire	227
August 1-8, 2019	Marsh 6 Fire	174
August 17-October 1, 2020	Santa Clara Unit Complex Fire	396,824*
July 11, 2021	Diablo Fire	128
June 23, 2022	Scenic Fire	120
September 5, 2022	Franklin Fire	125

Sources: Contra Costa 2018 LHMP; California Fire Incident Database.

The SCU Complex Fire, which started on August 17, 2020, is by far the largest fire to burn in Contra Costa County in recent years. The fire burned approximately 396,824 acres across Santa Clara, Alameda, Contra Costa, San Joaquin, Stanislaus, and Merced counties and lasted 44 days, with 3,305 of those acres in Contra Costa County. The fire consisted of three zones: the Deer Zone in Contra Costa County; the Canyon Zone in Alameda, Santa Clara, and parts of Stanislaus counties; and the Calaveras zone in parts of Stanislaus, San Joaquin, and Merced counties. The SCU Complex Fire was one of several fire complexes burning in California during August and September 2020. The fire destroyed 222 structures, damaged 26 structures,

^{*} The SCU Complex Fire burned 3,305 acres within the borders of Contra Costa County.

and injured 6 people, although no fatalities were recorded. As of summer 2023, this fire was the fourth-largest wildfire in California's modern history.

Potential Changes to Fire Risk in Future Years

Wildfire is expected to continue being a high-risk hazard in Contra Costa County. Smoke impacts from local and regional wildfires are also likely to continue being problematic. Changing climate conditions are expected to increase the fire risk in and around Contra Costa County. Warmer temperatures brought on by climate change can exacerbate drought conditions. Droughts can kill or dry out plants, creating more fuel for wildfires. Warmer temperatures are also expected to increase the number of pest outbreaks, such as the pine beetle, creating more dead trees and increasing the fuel load. Hot, dry spells may also increase disease and insect infestations, resulting in higher fuel loads. Higher wind speeds cause more erratic fire behavior, making fires harder to contain. Warmer temperatures are also expected to extend the wildfire season from earlier in the year to later than it has been historically. Wildfires later or earlier in the year are more likely during Diablo wind events, which cause wildfires to move more quickly and increase the likelihood of burning in the WUI areas.

Hazardous Materials and Waste

Types of Hazardous Materials

Hazardous materials are materials that pose a significant risk to public safety or human or environmental health. Hazardous materials come from a variety of sources within the county. Some common categories are briefly discussed below to provide a framework for the policies and actions in the Health and Safety Element.

Hazardous materials include toxic chemicals, flammable or corrosive materials, petroleum products, and unstable or dangerously reactive materials. They can be released through human error, malfunctioning or broken equipment, or as an indirect consequence of other emergencies (e.g., if a flood damages a hazardous material storage tank). Hazardous materials can also be released accidentally during transportation (e.g., from vehicle accidents).

A release or spill of bulk hazardous materials could result in a fire, explosion, toxic cloud, or direct contamination of people, property, and the environment. The effects may involve a small site or many square miles. Health problems may be immediate, such as corrosive effects on skin and lungs, or gradual, such as development of cancer from a carcinogen. Damage to property could include immediate destruction by explosion or permanent contamination by a persistent hazardous material. Figure HS-14 shows the location of toxic release facilities and the toxic releases exposure rankings for census tracts in unincorporated Contra Costa County. As illustrated in Figure HS-14, exposure to toxic releases is greatest in Rodeo, Crockett, Mountain View, Vine Hill, Clyde, and Bay Point.

Transportation of Hazardous and Toxic Materials

Land use hazards associated with the transport of hazardous cargo exist in Contra Costa County. A number of major, interstate transportation routes pass through the county and a wide range of hazardous cargo is regularly transported along these routes by trucks, trains, and ships. The most vulnerable areas are considered freeway on-/off-ramps and interchanges. Types of hazardous cargo regularly transported out of, into, and through Contra Costa County include flammable liquids, corrosive materials, compressed and/or poisonous gases, explosives, and flammable solids.

Some potential exists for a highway, railway, or shipping mishap that could cause hazardous cargo to spill, contaminating surrounding areas. If flammable liquids were to ignite, they could quickly spread fire and poisonous fumes that could cause human casualties and/or property damage. Spilled liquids could also contaminate the Bay or nearby streams or drainage facilities, spreading the effects of an accident over a much larger area. Since 1970, 105 railway and 100 roadway hazardous materials incidents have occurred in Contra Costa County.

In addition, hundreds of miles of pipelines that transport natural gas, crude oil, and refined petroleum products traverse Contra Costa County, including through residential and commercial areas. Such pipelines cross areas with active fault lines, landslide deposits, unstable slopes, and areas underlain by soft mud and peat. Most pipelines containing flammable or hazardous materials are underground. Each type of pipeline operates under various pressures depending on the size of the pipe, material, and what is necessary to move the material through the pipes. Despite all precautionary measures, pipelines are at risk of leaking into the environment or releasing flammable material.

Agency Monitoring and Response

Hazardous materials and waste in Contra Costa County are managed by the Contra Costa Hazardous Materials Programs (CCHMP), which is the Certified Unified Program Agency (CUPA) for all of Contra Costa County. The CUPA consolidates, coordinates, and makes consistent the regulatory activities of several hazardous materials and hazardous waste programs, including Hazardous Materials Management, California Accidental Release Prevention, Hazardous Waste Management, Underground Storage Tanks, Aboveground Storage Tanks, and Emergency Response.

Several State agencies monitor hazardous materials and waste facilities. Figure HS-15 shows the location of hazardous waste generators and the hazardous waste exposure rankings for census tracts in unincorporated Contra Costa County. As illustrated on the figure, exposure to hazardous waste generators is greatest in North Richmond, Montalvin Manor, Bayview, Tara Hills, Rollingwood, El Sobrante, Rodeo, Crockett, Port Costa, Mountain View, Vine Hill, Clyde, Pacheco, Bay Point, Parkmead, Castle Hill, Alamo, Byron, Winter Island, and the Agriculture Core east of Brentwood.

Potential and known contamination sites are monitored and documented by the State Water Resources Control Board and the California Department of Toxic Substances Control (DTSC). Figure HS-16 shows the locations of cleanup sites and their ranking for census tracts in unincorporated Contra Costa County. As illustrated on the figure, exposure to cleanup sites is greatest in North Richmond, Montalvin Manor, Bayview, El Sobrante, Rodeo, Crockett, Port Costa, Vine Hill, Clyde, Bay Point, Contra Costa Centre, Knightsen, and Winter Island.

If a hazardous material spill poses an imminent public health threat, the County will support local regulating agencies in notifying the public. The transport of hazardous materials, wastes, and explosives through the county is regulated by the California Department of Transportation (Caltrans). I-80, I-580, I-680, SR-4, SR-24, SR-123, and SR-242 are open to vehicles carrying hazardous materials and wastes. Transporters of hazardous wastes are required to be certified by Caltrans, and manifests are required to track the hazardous material or waste during transport. The danger of hazardous materials and waste spills during transport does exist and can potentially increase as transportation of these materials increases on freeways and railways. The Contra Costa County Sheriff's Office, CAL FIRE, Contra Costa County Emergency Services Division, and Contra Costa County Division of Environmental Health are responsible for hazardous materials accidents at

all locations in the county. Depending on location, Contra Costa County fire protection districts will also respond to hazardous materials accidents.

Potential Changes to Hazardous Material Risk in Future Years

Although a hazardous material accident can occur almost anywhere, certain regions are more vulnerable. The potential for an accident increases in regions near roadways or railways that are frequently used for transporting hazardous material as well as those with agricultural or industrial facilities that use, store, handle, or dispose of hazardous material. Given that 205 hazardous materials incidents have happened in transport through the county in the past 50 years, it is likely a hazardous materials incident will occur in Contra Costa County every year. However, according to Caltrans, most incidents are related to releases of fluids from the transporting vehicles themselves and not the cargo; therefore, the likelihood of a significant hazardous materials release in the county is more limited and difficult to predict. Climate change is expected to cause increases in the frequency and intensity of natural hazards, such as floods, landslides, and severe storms. This may lead to a greater risk of hazardous materials releases during these events.

Seismic and Geologic Hazards

Seismic hazards include earthquakes and hazardous events caused by them. Geologic hazards are other hazards involving land movements that are not linked to seismic activity and are capable of inflicting harm to people or property.

Seismic Hazards

Seismic activity occurs along boundaries in the earth's crust, called faults. Pressure along the faults builds over time and is ultimately released, resulting in ground shaking. Earthquakes can also trigger other hazards, including surface rupture (cracks in the ground surface), liquefaction (causing loose soil to lose its strength), landslides, and subsidence (sinking of the ground surface). Earthquakes and other seismic hazards often damage or destroy property and public infrastructure, including utility lines, and falling objects or structures pose a risk of injury or death.

Earthquake risk is very high in Contra Costa County due to the presence of several active faults in the region: the Calaveras (North Central) Fault, Concord-Green Valley Fault, Greenville Fault, Hayward Fault, Mount Diablo Fault, and San Andreas Fault. Figure HS-17 shows the locations of regional faults.

- Calaveras (North Central) Fault: The Calaveras (North Central) Fault is a major branch of the San Andreas Fault. It extends 76 miles from the San Andreas Fault near Hollister to Danville at its northern end. The Calaveras (North Central) Fault is one of the most geologically active and complex faults in the Bay Area. According to the 2018 Contra Costa County LHMP, the probability of experiencing a magnitude 6.7 or greater earthquake along the Calaveras (North Central) Fault in the next 30 years (beginning from 2018) is 26 percent.
- Concord-Green Valley Fault: The Concord-Green Valley Fault, so named because it is under the city of Concord, is connected to the main Green Valley Fault. The fault extends from Mount Diablo to the Carquinez Strait. It is under high stress and has a 16 percent probability of experiencing a magnitude 6.7 or greater earthquake in the next 30 years (beginning from 2018).

- Greenville Fault: The Greenville Fault extends from northwest of Livermore Valley along the Marsh Creek and Clayton faults toward Clayton Valley.
- Hayward Fault: The Hayward Fault is a 45-mile-long fault that runs through some of the Bay Area's most populated areas, including San Jose, Oakland, and Berkeley. The Hayward Fault is becoming a hazard priority throughout the Bay Area because of its increased chance for activity and its intersection with highly populated areas and critical infrastructure. The probability of experiencing a magnitude 6.7 or greater earthquake along the Hayward Fault in the next 30 years (beginning from 2018) is 33 percent.
- Mount Diablo Fault: The Mount Diablo thrust fault runs from Walnut Creek to Livermore. It plays a role in the continued uplift of Mount Diablo.
- San Andreas Fault: The San Andreas Fault is a major fault in the Bay Area region that has created devastating seismic activity, most notably in the 1906 San Francisco Earthquake and 1989 Loma Prieta Earthquake. This fault is approximately 15 miles to the west of the western edge of Contra Costa County. The probability of experiencing a magnitude 6.7 or greater earthquake along the San Andreas Fault by 2050 is 72 percent and a magnitude 7.5 or greater in that same timeframe is 20 percent.^{iv}

Figure HS-17 shows the Alquist-Priolo Fault Zones in the county and the areas susceptible to shaking from a hypothetical major earthquake. The Alquist-Priolo Fault Zones are areas around active faults that are known to cause surface rupture, meaning that the surface of the ground is "pulled apart" during seismic activity. Structures within these zones are subject to specific building codes and regulations to ensure they can withstand the

effects of earthquakes, as surface rupture can seriously damage buildings and other structures built on top of the fault.

Potential shaking in Figure HS-17 is rated from very strong shaking to violent shaking. As illustrated on the figure, the western portions of the county are most susceptible to violent shaking; the communities of North Richmond, Montalvin Manor, Bayview, Tara Hills, Rollingwood, El Sobrante, East Richmond Heights, Kensington, and Canyon are most vulnerable.

Earthquakes have secondary effects and can cause urban fires, dam failures, tsunamis, seiches, and toxic chemical releases. A major earthquake along any fault could result in substantial casualties and damage from collapsed buildings; damaged roads, railroads, and bridges; fires; flooding; and other threats to life and property. Most of the loss of life and injuries from earthquakes are due to damage and collapse of buildings and structures.

Building codes for new construction have generally been made more stringent following damaging earthquakes. However, in Contra Costa County, structures built prior to enactment of these improved building codes have generally not been upgraded to current standards and are vulnerable in earthquakes. In Contra Costa County, approximately 36,050 homes, or 57 percent of all housing in the unincorporated areas of county, were constructed prior to 1980.^v

Liquefaction

In addition to the direct physical damage that can result from the motion of an earthquake, damage can result from liquefaction. Liquefaction occurs where water-logged soils near the ground surface lose compaction during strong ground motion, causing the soils to lose strength and behave as liquid. This can cause building foundations to shift and can result in significant structural damage. Soils susceptible to liquefaction are typically

found in areas of low-lying current or former floodplains. Areas with high liquefaction potential are shown on Figure HS-18.

Geologic Hazards

Other geologic hazards also exist within the county. These hazards, which include landslides and erosion, depend on the geologic composition of the area. Landslides and rock falls may occur in sloped areas, especially areas with steep slopes, and usually in areas of loose and fragmented soil. Landslides, rockfalls, and debris flows can be very slow, while others occur very suddenly, often with disastrous results. There are predictable relationships between local geology and landslides, rockfalls, and debris flows. Slope stability is dependent on many factors and interrelationships, including rock type, pore water pressure, slope steepness, and natural or human-made undercutting.

Landslides are usually triggered by other natural hazards like earthquakes, heavy rain, floods, or wildfires, so landslide frequency is often related to the frequency of these other hazards. The many types of landslides are categorized based on form and type of movement. They range from slowmoving rotational slumps and earth flows, which can distress structures over time but are less threatening to personal safety, to fast-moving rock avalanches and debris flows that are a serious threat to structures and have been responsible for most fatalities during landslide events. Many large landslides are complex and include a combination of more than one landslide type.

In Contra Costa County, landslides typically occur during and after severe storms, so the potential for landslides largely coincides with the potential for sequential severe storms that saturate steep, vulnerable soils. Landslides and mudslides are a common occurrence and have caused damage to homes, public facilities, roads, parks, and sewer lines.

Upland areas of the county are susceptible to landslides, land slips, mudflows, and debris flows. Triggered by an earthquake, heavy rainfall, or changes in ground conditions caused by development activity, these events can send large volumes of land cascading down hillsides, destroying property along the way. Figure HS-19 illustrates areas in Contra Costa County that are most susceptible to landslides.

Contra Costa County is also susceptible to hazards related to erosion, the geological process in which earthen materials are worn away and transported by natural forces such as water or wind, causing the soil to deteriorate. Eroded topsoil can be transported into streams and other waterways. Water erosion is the removal of soil by water and transport of the eroded materials away from the point of removal. The severity of water erosion is influenced by slope, soil type, the soil's capacity for water storage, nature of the underlying rock, vegetation cover, and rainfall intensity and duration. The impact of soil erosion on water quality can be significant, particularly with soil surface runoff. Highly erosive soils can damage roads, bridges, buildings, and other structures.

Past Occurrences

Contra Costa County is in a region of high seismicity with numerous local faults. A number of significant earthquakes (i.e., more than magnitude 5.0) have occurred in and near Contra Costa County over the last 35 years. The South Napa earthquake on August 24, 2014, was the most recent notable earthquake near Contra Costa County. It was on the West Napa Fault, and its epicenter was near the Napa Valley Marina. With a recorded magnitude of 6.0, it was the largest in the Bay Area in about 25 years. The South Napa Earthquake caused extensive damage through ground shaking and surface cracking. This earthquake resulted in one death and approximately 200 injuries in the affected region. Ground shaking was felt in Contra Costa County.

The magnitude 6.9 1989 Loma Prieta earthquake was on the San Andreas fault roughly 48 miles southwest of Contra Costa County and 10 miles northeast of Santa Cruz, near Mt. Loma Prieta in the Santa Cruz Mountains. Statewide, 18,306 houses were damaged and 963 were destroyed, and

Earthquake Magnitude Scale

Magnitude 3.0 or less: Usually not felt, but can be recorded by a seismograph.

Magnitude 3.0 to 4.0: Minor earthquake felt by humans.

Magnitude 4.0 to 5.0: Light earthquake with some property damage.

Magnitude 5.0 to 6.0: Moderate earthquake with property damage.

Magnitude 6.0 to 7.0: Strong earthquake with damage in the billions of dollars and loss of life.

Magnitude 7.0 to 8.0: Great earthquake with severe economic impact and large loss of life.

Magnitude 8.0 or greater: Largest recorded earthquakes, destruction over vast area, massive loss of life.

Source: Gavin Hayes and David Wald, USGS, Earthquake Magnitude, Energy Release, and Shaking Intensity,

https://www.usgs.gov/programs/earthquakehazards/earthquake-magnitude-energy-releaseand-shaking-intensity, accessed June 9, 2023.

2,575 businesses were damaged and 147 were destroyed. The most notable damage included the collapse of the elevated Cypress Structure section of I-880 in Oakland, the collapse of a section of roadbed on the Bay Bridge, and extensive damage to downtown Santa Cruz and San Francisco's Marina District. The Bay Bridge was unusable for a month. This earthquake resulted in an economic loss of approximately \$10 billion; 63 people died, 3,757 were reported injured, and 12,053 were displaced.

Though major earthquakes are rare in Contra Costa County, minor earthquakes occur more often. Small landslides are a common occurrence, generally on hillsides and in winter during high precipitation years.

Potential Changes to Geologic and Seismic Risk in Future Years

Earthquakes are likely to continue on an occasional basis and are likely to be small in most instances. Most are expected to cause no substantive damage and may not even be felt by most people. According to the California State Hazard Mitigation Plan, earthquakes large enough to cause moderate damage to structures—those of magnitude 5.5 or larger—occur three to four times a year statewide. Strong earthquakes of magnitude 6 to 6.9 strike an average of once every two to three years. Major earthquakes of magnitude 7 to 7.9 occur in California about once every 10 years.

A major earthquake along any regional fault could result in substantial casualties and damage, although the greatest risk in Contra Costa County is from the Hayward-Rodger's Creek Fault and the Concord-Green Valley Fault due to their location and high potential to cause a severe earthquake. A major earthquake on the Hayward Fault could damage or destroy primary evacuation routes and bridges, limiting access in and out of the community. Underground utility lines are also susceptible where they lack sufficient flexibility to accommodate the seismic ground motion.

Geologic risks, such as small landslides, are common occurrences in Contra Costa County. With significant rainfall, additional slope failures are likely in the community's landslide hazard areas, and minor to moderate landslides will likely continue to impact the area after heavy precipitation, as they have in the past. Heavy rainfall, which is expected to increase due to climate change, could cause an increase in the number of landslides or make landslides larger than in the past. Increased wildfire frequency can destabilize hillsides due to loss of vegetation and change in soil composition, which can contribute to greater runoff and erosion. The combination of a generally drier climate in the future, which will increase the chance of

drought and wildfires, and the occasional extreme downpour, is likely to cause more mudslides and landslides. Impacts from these conditions would compound landslide potential for the most susceptible locations.

Emergency Preparedness and Response

Community Warning Systems

The County uses the Contra Costa County Community Warning System (CWS) to notify residents and businesses within Contra Costa County that are impacted by, or are in danger of being impacted by, an emergency. The system provides basic information about incidents and what specific protective actions (e.g., shelter in place, lockdown, evacuate, or avoid the area) are necessary to protect life and health. The CWS is a partnership of the Contra Costa County Office of the Sheriff, Contra Costa Health Services, other government agencies, industry, news media, and the non-profit Community Awareness and Emergency Response organization. CWS notifications may include:

- Sirens in special safety zones
- Emergency Alert System (EAS) alerts on television and radio (KCBS 740 AM)
- Use of the Telephone Emergency Notification System
- Cell phone alerts
- National Oceanic and Atmospheric Administration (NOAA) weather radios
- Notices posted on Twitter and Facebook

Alerts are distributed via voice, text, and email messages through the CWS Telephone Emergency Notification System. This computerized system makes telephone calls to the known telephone numbers in the vicinity of the hazard based on the incident-specific issues.

Other systems include the EAS and the Emergency Digital Information System (EDIS). The EAS is a national public warning system commonly used by State and local authorities to deliver important emergency information to affected communities, such as weather and AMBER alerts. EAS participants include radio and television broadcasters, cable systems, satellite radio and television providers, and wireline video providers. FEMA, the Federal Communications System, and NOAA's National Weather Service (NWS) work collaboratively to maintain the EAS and Wireless Emergency Alerts, which are the two main components of the national public warning system and enable authorities at all levels of government to send urgent emergency information to the public. The EDIS is a wireless emergency and disaster information service operated by the Governor's Office of Emergency Services (OES) and is an enhancement to the EAS. These systems are available in multiple languages.

Emergency Evacuation

With advanced warning, evacuation can be effective in reducing injury and loss of life during a catastrophic event. Figure HS-20 shows the potential evacuation routes throughout the county, including highways and major surface streets, although the preferred evacuation routes in any individual evacuation order will depend on the emergency.

Some parts of the county may face challenges evacuating, particularly those far from major roadways. Additionally, some areas have only one viable route of evacuation, which could become blocked or congested. Figure HS-21 shows residential parcels with evacuation constraints. All parcels identified

as having evacuation constraints are at least a half mile from a major roadway and/or have access to only one emergency evacuation route. In most cases, it is not feasible to retrofit existing neighborhoods to eliminate physical evacuation constraints such as lack of evacuation routes or insufficient roadway capacity. The County will nonetheless strive to improve evacuation from these constrained areas.

All evacuation routes in Contra Costa County face a potential disruption from flooding, earthquake, wildfire, landslide, or hazardous materials release. An emergency event may block roadways, damage the roadway surface, or collapse bridges and overpasses. In the event of widespread disruption to local evacuation routes, remaining evacuation routes may become congested, slowing down evacuation of a community or specific neighborhoods. This issue may be compounded if the county's evacuation routes are also the evacuation routes for surrounding areas, and so potential disruptions may have regional effects.

In preparation for wildfires and other disasters, the County uses Zonehaven Aware, which is a comprehensive evacuation support system of the Contra Costa County CWS. Zonehaven Aware provides the community with critical evacuation updates, resources, and information on active incidents. In the event of an emergency, the Contra Costa County Sheriff's Office and Contra Costa County fire districts can issue evacuation warnings or evacuation orders for affected areas. The County's website has an interactive evacuation map lookup tool that enables residents to find possible evacuation routes based on their address and respective zone.

Disaster Preparedness

Disaster preparedness refers to coordinated efforts to respond to both natural and human-caused disasters. In recent years, Contra Costa County has expanded its emergency preparedness planning. The County is required under State law to prepare and maintain a Standardized Emergency Management System (SEMS) Multi-hazard Functional Plan. OES has extensive guidelines outlining the requirements of the Contra Costa County SEMS.

Contra Costa County also participates in the California Disaster and Civil Defense Master Mutual-Aid Agreement, under which the State and local governments will work together to respond to emergencies. The Governor's Office of Emergency Services Coastal Region (Mutual Aid Region II) serves the counties on the coast from Del Norte to Monterey and the counties surrounding San Francisco Bay. The County has its own Contra Costa County Emergency Operations Plan developed by the Sheriff's Office of Emergency Services in collaboration with emergency management partners (e.g., fire districts, law enforcement agencies,), and has prepared additional plans addressing earthquake response, disaster debris management, and airport emergencies. The County maintains an Emergency Operations Center, which is activated as needed to communicate with emergency management partners and coordinate responses to incidents.

Contra Costa County OES offers Community Emergency Response Team (CERT) training to residents and members of the business community to increase disaster awareness and emergency response capability through its CERT Coalition. The primary goal of the Contra Costa CERT Coalition is to promote the development, coordination, and advancement of all CERT programs in Contra Costa County, progressively improving the quality of CERT programs across jurisdictions. The CERT program educates volunteers about disaster preparedness for the hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. CERT offers consistent volunteer training and organization that professional responders can rely on during disaster situations, allowing them to focus on more complex tasks.

Agriculture and Ecosystem Hazards

Agriculture and ecosystem hazards are addressed in the Conservation, Open Space, and Working Lands Element, in addition to the Health and Safety Flement

Agricultural Pests

Agriculture in Contra Costa County encompasses approximately 34 percent of the land area. Thirteen crop categories exceeded \$1 million in value in 2020. These categories in descending order are cattle and calves, sweet corn, tomatoes, grapes, cherries, miscellaneous vegetable crops, miscellaneous field crops, rangeland, alfalfa hay, irrigated pasture, apricots, walnuts, and apiary (bee) products. Crop values vary from year to year due to factors like production, weather, and market conditions. Eighteen of the farms in Contra Costa County used organic production methods in 2020.

Contra Costa County is threatened by several insect pests that, under the right circumstances, can cause severe economic and environmental harm. Insects of concern to plants and crops include the Asian gypsy moth, rosy moth, nun moth, Siberian silk moth, Asian citrus psyllid, European grapevine moth, glassy-winged sharpshooter, Japanese beetle, Mediterranean fruit fly, melon fly, and Oriental fruit fly.

Aquatic Invasive Species

Introduction of nonnative species into county waters can cause significant and enduring economic and environmental impacts. One of the most widespread mechanisms of introductions is transport of ballast water in ships. Ballast water is taken on and released by a vessel during cargo loading and discharging operations to maintain the vessel's trim and stability.

Ships discharge ballast water that has been obtained from waters throughout the state, country, or world. This water might include nonnative organisms, untreated sewage, and other contaminants. Invasive species of concern in Contra Costa County include the New Zealand mud snail, zebra mussel, and guagga mussel. Once introduced, invasive species are likely to become a permanent part of an ecosystem and may flourish, creating environmental imbalances and wreaking economic havoc. The New Zealand mud snail can displace native aquatic insects that fish eat, but pass through the fish without being digested. Ultimately, this can result in reduced growth rates and lower populations of fish. Zebra and quagga mussels can also kill native freshwater mussels by either attaching to the shells of native species or by outcompeting them and other filter-feeding invertebrates for food.

Potential Changes to Agriculture and Ecosystems in Future Years

As long as severe weather events continue to be a concern for Contra Costa County, the potential for ecosystem and agricultural losses remains. The primary causes of agricultural losses are severe weather events, such as droughts, freezes, and insect infestations. These factors can also contribute to significant ecosystem loss, as can wildfire events. Many pests and organisms that carry diseases are most active during warmer months. Given that temperatures are expected to get warmer earlier in the year and remain warmer until later in the year due to climate change, there will be a wider window for pests and diseases to be active.

Climate change can also indirectly create a greater risk of agriculture and ecosystem pests and diseases. Many crop plants, trees, and livestock may be weakened by warmer temperatures and changes in precipitation. These weaker plants and animals may not be able to fend off infestations or infections as well as stronger plants or animals, causing pests and diseases

to affect more of the agricultural area or ecosystem. These pests and diseases can inhibit plant and animal growth, damage plants and animals such that their products are less appealing and harder to sell, or lead to mortality.

The rate of aquatic invasive species discoveries continues to increase. Due to the high number of incidents of invasive species in the Sacramento-San Joaquin Delta, it is likely that future infestations of aquatic pests will occur in Contra Costa County. The risks associated with aquatic invasive species exist, and if a breakout occurs, there may be potentially large economic impacts.

In aquatic ecosystems, climate change is expected to result in warmer water temperatures, altered streamflow patterns, increased salinization, and increased demand for water storage and conveyance structures. Due to these patterns, invasive aquatic species are expected to flourish, since cold temperatures or winter hypoxic conditions are what have traditionally prevented the establishment and survival of these species in this climate.

Drought

Drought is addressed in the Conservation, Open Space, and Working Lands Element and Public Facilities and Services Element, in addition to the Health and Safety Element.

A drought is an extended period when precipitation levels are well below normal. Drought is a normal part of the climate cycle. Drought may cause losses to agriculture; affect domestic water supply, energy production, public health, and wildlife; or contribute to wildfire. Like most of California and the western United States, Contra Costa County chronically experiences drought cycles. Drought impacts the county's water supply, which may in severe instances make less water available for people, businesses, and natural systems.

Less snow falling in mountainous areas causes water levels in lakes and reservoirs to drop. Local ecosystems that are not well adapted to drought conditions can be easily harmed. During drought events, the flow of water in creeks and streams is reduced, slowing water flow or creating standing water, which can concentrate sediment and toxins, harming plants and animals. Droughts can also indirectly lead to more wildfires, and the stress caused by water shortages can weaken plants, making them more susceptible to pests and diseases. Drought conditions can also increase the salinity of the Delta, threatening wildlife habitat.

The U.S. Drought Monitor recognizes a five-point scale for drought events: D0 (abnormally dry), D1 (moderate drought), D2 (severe drought), D3 (extreme drought), and D4 (exceptional drought). According to the U.S. Drought Monitor, the most intensive drought conditions in recent years were during most of 2014 and 2021, when all of Contra Costa County was classified in "extreme" drought. During severe drought conditions, water shortages are common and water restrictions may be imposed to meet essential community needs. When the County declares a water shortage emergency under the authority of the Water Code, the County will implement actions in the Contra Costa County 2020 Water Shortage Contingency Plan to implement and enforce regulations and restrictions for managing a water shortage.

The county has a diverse set of water supply options, including surface water and groundwater wells, to ensure that the community has adequate water, even after a period of dry years, through a combination of water supplies and water conservation measures.

The county is serviced by 11 purveyors of domestic and industrial water, most of which is through surface water supplies from the East Bay Municipal Utility District (EBMUD) and the Contra Costa Water District (CCWD). EBMUD provides drinking water for 1.4 million customers in Contra Costa and

Alameda counties over a 331-square-mile area. The EBMUD service area for drinking water in Contra Costa County covers western and central portions of the county, as shown on Figure PFS-2 in the Public Facilities and Services Element. CCWD provides treated and untreated water to a population of 500,000 in central and eastern Contra Costa County. In addition to EBMUD and CCWD, several smaller water providers serve the county, including incorporated communities, community services districts, and private suppliers.

Approximately 90 percent of EBMUD's water supply begins at the Mokelumne River watershed in the Sierra Nevada and extends 90 miles to the East Bay, passing through the Central Valley and Sacramento-San Joaquin Delta. The Mokelumne Aqueducts convey the Mokelumne River supply to local storage and treatment facilities in Contra Costa and Alameda counties. After treatment, water is distributed to the incorporated cities and unincorporated communities in the East Bay that EBMUD serves.

The primary source of water for CCWD is the Central Valley Project (CVP), a federally owned system of reservoirs and canals. The water supplied by the CVP originates from rivers in the Sierra Nevada and Klamath Mountains, primarily the American, Sacramento, Stanislaus, and Trinity Rivers. The water from these rivers flows into the Sacramento and San Joaquin Rivers, eventually finding its way into the Delta.

Other water providers in Contra Costa County purchase water from EBMUD or CCWD, source water from the Delta or other surface supplies using their own water rights, or pump groundwater.

Potential Changes to Drought in Future Years

Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically, affecting different sectors in

different ways and with varying intensities. Based on historical information, the occurrence of drought in California, including Contra Costa County, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future.

Although droughts are a regular feature of California's climate, scientists expect that climate change will lead to more frequent and intense droughts statewide. Overall, precipitation levels are expected to stay similar, and may even increase in some places. However, the state's current data say that there will be more years with extreme levels of precipitation, both high and low, as a result of climate change. This is expected to cause more frequent and intense droughts compared to historical norms. Higher air temperatures are expected to increase evaporation, causing more water loss from lakes and reservoirs, exacerbating drought conditions. Reduced winter precipitation levels and warmer temperatures have greatly decreased the size of the Sierra Nevada snowpack (i.e., the volume of accumulated snow), which in turn makes less fresh water available for communities throughout California, including the imported water supply for EBMUD and CCWD. Continued decline in the Sierra Nevada snowpack volume is expected, which may lead to lower volumes of available imported water. More precipitation is expected to fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. How much snowpack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under wetter climate projections, the loss of snowpack would pose potential water shortage issues and exacerbate drought conditions.

As the population in the county continues to grow, so will the demand for water. However, EBMUD and CCWD both consider their water supplies adequate to meet projected water needs through the year 2045.

Extreme Heat

Extreme heat occurs when temperatures rise significantly above normal levels; it is defined as a daytime temperature that exceeds the 90th percentile of the historic average temperature for that date. Extreme heat is a relative term, and different temperatures in different parts of Contra Costa County qualify as extreme heat events because people and buildings accustomed to cooler average temperatures may be less prepared for extreme heat events. For example, an extreme heat day in Rodeo is when temperatures reach 93 degrees Fahrenheit (°F), while in Alamo it is 97°F, and in Knightsen it is 102°F.

Health impacts are the primary concern with this hazard, though economic impacts are also an issue. The Centers for Disease Control and Prevention (CDC) recognize extreme heat as a substantial public health concern. Historically, NOAA data indicate that about 175 Americans die from summer heat each year, although this number has increased in recent years. From 2004 to 2018, studies by the U.S. Department of Health and Human Services indicate that there is an average of 702 deaths annually that are directly or indirectly linked to extreme heat. Following a record-breaking heat wave in 2006, over 16,000 emergency room visits, more than 1,100 hospitalizations, and at least 140 deaths were reported. As heat events are projected to become more frequent and last longer, preparing for the public health challenges they pose is critical.

In 2019, Contra Costa County reported an extreme heat event from June 9th to 11th. The combination of high pressure and strong offshore flow resulted in an early season heat wave across the Bay Area. Multiple daily records were broken across the region due to the heat. Three fatalities were reported: one person died as a direct result of heat-related illness, and two others drowned while attempting to cool down during the heat wave. In 2021, Contra Costa County reported an extreme heat event from July 9th

to 11th. Daytime highs rose above 100°F, with locations across the East Bay up to 110°F. Overnight lows remained warm, particularly across higher elevations, where temperatures were between 70°F and 80°F in the early mornings. There were no reported fatalities from this heat event.

Extreme heat events are dangerous because people exposed to extreme heat can suffer a number of heat-related illnesses, including heat cramps, heat exhaustion, and (most severely) heat stroke. As reflected in the Vulnerability Assessment, seniors, small children, persons with chronic illnesses and disabilities, and those with limited mobility are particularly susceptible to heat. Seniors and individuals below the poverty level are the most vulnerable to extreme heat. Nursing homes and elder-care facilities are especially vulnerable to extreme heat events if power outages occur and air conditioning is not available. In addition, individuals below the poverty level may be at increased risk from extreme heat if use of air conditioning is not affordable. Areas with lower extreme heat thresholds are not necessarily at lower risk, because persons and community assets accustomed to cooler temperatures may be less prepared for extreme heat events. Outdoor workers in construction or landscaping are also much more exposed to the elements than most people, so they are more susceptible to extreme heat conditions and the potential illnesses associated with very high temperatures.

Very high temperatures can harm plants and animals that are not well adapted to them. Extreme heat can increase the temperature of water in lakes, streams, creeks, and other water bodies, especially during drought events when water levels are lower. In some cases, water temperatures may exceed comfortable levels for several plants and animals, causing ecological harm. Trees and other vegetation in the natural and urban environment help to lower surface and air temperatures by 2°F to 9°F.vi, vii

Indirectly, extreme heat puts more stress on power lines, causing them to run less efficiently. The heat also causes more demand for electricity (usually to run air conditioning units), and in combination with the stress on the power lines, may lead to brownouts and blackouts and associated health and economic impacts. Wildfire risk increases as vegetation dries out. Damage to roadways, bridges, and other transportation infrastructure may also occur. An example occurred in Contra Costa County in June 2022, when extreme heat buckled BART tracks, causing a derailment.

Over 36,000 homes, or 57 percent of the housing stock in the unincorporated county, were constructed prior to 1980; they are unlikely to have air conditioning and may lack effective insulation. Therefore, people living in these homes, especially vulnerable populations, are at higher risk for heat-related illnesses from extreme heat events. To help provide relief from the heat, the County opens public libraries during extreme heat days and heat waves. These air-conditioned community spaces provide essential cool spaces for vulnerable populations.

Potential Changes to Extreme Heat in Future **Years**

Extreme heat tends to occur on an annual basis and is likely to continue occurring annually. While the western portions of Contra Costa County close to San Francisco Bay generally experience cooler temperatures than the eastern portions of the county, high temperatures throughout the county will continue to be a common occurrence.

Overall, Contra Costa County is expected to see an increase in average daily high temperatures. Depending on the future severity of climate change, the State's Cal-Adapt database indicates the annual average maximum temperature is expected to increase from a historical annual average of 71.1°F to an average of up to 75.8°F by the middle of the century (2035 to

2064), and an average of up to 79.0°F by the end of the century (2070 to 2099). Figure HS-13 shows the average temperature forecast in Contra Costa County for the end of the century.

Although the temperature increases may appear modest, the projected high temperatures are substantially greater than historical norms. These increases also make it more likely that an above-average high temperature will cross the extreme heat threshold. The warmer temperatures brought on by climate change are likely to cause an increase in extreme heat events, increasing the risk of death from dehydration, heat stroke, heat exhaustion, heart attack, stroke, and respiratory distress. By the end of the century, the county is projected to experience an annual average of 18 to 30 extreme heat days per year.

Severe Weather

Severe weather is generally any destructive weather event, but usually occurs in Contra Costa County as localized storms that bring heavy rain, hail, thunderstorms, and strong winds. Severe weather is usually caused by intense storm systems, although certain types of strong winds can occur without a storm. The types of dangers posed by severe weather vary widely and may include injuries or deaths, damage to buildings and structures, power outages, fallen trees, and roads and railways blocked by debris. In addition, lightning from these storms can strike objects and ignite wildfires and structure fires that can damage buildings and endanger people. Severe weather may also include tornadoes, although they are uncommon in Contra Costa County; only four have been recorded in the county since 1950.

A relatively common weather pattern that brings southwest winds and heavy rain to California is often referred to as an atmospheric river. Atmospheric rivers are long, narrow regions in the atmosphere that transport most of the water vapor carried away from the tropics. These columns of vapor move

with the weather, carrying large amounts of water vapor and strong winds. When the atmospheric rivers make landfall, they often release this water vapor in the form of rain or snow, causing heavy rains that can lead to flooding and mudslide events.

High winds, often accompanying severe storms, can cause significant property damage, threaten public safety, and have adverse economic impacts from business closures and power loss. High winds, as defined by the National Weather Service, are sustained wind speeds of 40 miles per hour (mph) or higher lasting one hour or longer, or wind gusts of 58 mph or higher for any duration. These winds may occur as part of a seasonal climate pattern or in relation to other severe weather events, such as thunderstorms. Contra Costa County experiences high wind on an annual basis, although some high wind events have been particularly severe. On January 4, 2008, Contra Costa County reported 110 mph winds in the East Bay Hills and Diablo Range. During this high wind event, a very strong cyclone slammed into the San Francisco and Monterey Bay areas, bringing rain, high winds, record high surf, and coastal flooding. Hundreds of thousands of residences and businesses were without power, some for several days, due to high winds toppling power lines. The storm caused millions of dollars in property damage due to falling trees hitting cars and structures as well as damage to roads due to heavy rain. In another event on December 11, 2014, Contra Costa County reported 83 mph winds. This atmospheric river event brought heavy rain and gusty winds with a strong winter storm that impacted the Bay Area for several days. Contra Costa County and the greater Bay Area experienced a series of atmospheric rivers in winter 2023. Flooding was widespread throughout the county, with landslides in several steeper sloped areas of the county.

All wind events pose several different types of threats. By themselves, the winds pose a threat to the health of people and structures in the county. Dust and plant pollen blown by the wind can create respiratory problems. The winds can blow roofs off buildings and cause tree limbs to fall on people and property. High winds also increase the threat of wildfires. Winds may dry out brush and forest areas, increasing the fuel load in fire-prone areas. Winds may spark wildfires by knocking down power lines or causing them to arc. If wildfires do start, high winds can push flames quickly into new areas, contributing to rapid spread and making them harder to control. This can also affect the air quality in Contra Costa County and may disrupt regional infrastructure networks.

Public Safety Power Shutoff Events

Electricity utilities throughout California, including Pacific Gas and Electric Company (PG&E), have begun to occasionally "de-energize," or turn off the electricity for power lines that run through areas where there is an elevated fire risk. This is intended to reduce the risk of power lines sparking or being damaged and starting a wildfire. These events, called public safety power shutoff (PSPS) events, result in a loss of power for customers served by the affected power lines. A PSPS event may occur at any time of the year, but they usually occur during high wind events and dry conditions. PSPS events may be limited to specific communities or they may affect broad swaths of the state. In October 2019, PG&E conducted one large-scale PSPS event, shutting off power to approximately 740,000 customers in 35 counties across the state, including customers in Contra Costa County. Several PSPS events also occurred in 2020. While smaller, these events still affected thousands of PG&E customers across the county.

PSPS events can impact emergency management activities. A loss of power can make it more difficult for homes or businesses to receive emergency notifications if needed. PSPS events can also create vulnerabilities for community members that lack backup power supplies and depend on electricity for heating or cooling homes and buildings, lighting, and internet. PSPS events may also be harmful to people who depend on electrically

powered medical devices. Additionally, community members may be faced with economic hardships and be deprived of important services, such as grocery stores, gas stations, and banks/ATMs. Traffic lights and other trafficcontrol systems may not work, which can complicate evacuation and may hinder emergency response. Although critical public health and safety facilities often have backup generators, the loss of power may also disable other key infrastructure systems.

Potential Changes to Severe Weather in Future Years

According to historical hazard data, severe weather is an annual occurrence in Contra Costa County. Damage and disaster declarations related to severe weather have occurred and will continue to occur in the future. Heavy rain and thunderstorms are the most frequent type of severe weather in the county. Wind and lightning often accompany these storms and have caused damage in the past. However, actual damage associated with the primary effects of severe weather has been limited. It is the secondary hazards, such as floods and fire, that have had the greatest impact on the county. Thunderstorms, high winds, and lightning can each have localized impacts on infrastructure, properties, and public safety. Transportation, including freight movement, faces increased congestion when severe storms occur.

Climate change is expected to cause an increase in intense rainfall and strong storm systems. This means that Contra Costa County could see more intense weather resulting from these storms in the coming years and decades, although such an increase may not affect all forms of severe weather. While average annual rainfall may increase only slightly, climate change is expected to cause an increase in the number of years with intense levels of precipitation. Heavy rainfall can increase the frequency and severity of other hazards, including flooding.

Endnotes

ⁱ Bedsworth, Louise, Dan Cayan, Guido Franco, Leah Fisher, Sonya Ziaja (California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, California Public Utilities Commission). 2018. Statewide Summary Report. California's Fourth Climate Change Assessment. Publication number: SUMCCCA4-2018-013.

Ocean Protection Council. 2018. State of California Sea-Level Rise Guidance.

https://opc.ca.gov/webmaster/ftp/pdf/agenda items/20180314/Item3 Ex hibit-A OPC SLR Guidance-rd3.pdf.

iii California Coastal Commission. 2018. California Coastal Commission Sea Level Rise Policy Guidance: Science Update - July 2018.

https://documents.coastal.ca.gov/assets/slr/guidance/2018/3 Ch3 2018A doptedSLRGuidanceUpdate.pdf.

iv United States Geologic Survey. 2023. Frequently Asked Questions. https://www.usgs.gov/fags/what-probability-earthquake-will-occur-losangeles-area-san-francisco-bayarea#:~:text=Within%20the%20next%2030%20years,an%20earthquake %20measuring%20magnitude%207.5

- ^v United States Census Bureau. 2016–2020 American Community Survey 5-Year Estimates: Year Structure Built.
- vi Huang, J., H. Akbari, and H. Taha. 1990. The Wind-Shielding and Shading Effects of Trees on Residential Heating and Cooling Requirements. ASHRAE Winter Meeting, American Society of Heating, Refrigerating and Air-Conditioning Engineers. Atlanta, Georgia.
- vii Kurn, D., S. Bretz, B. Huang, and H. Akbari. 1994. *The Potential for* Reducing Urban Air Temperatures and Energy Consumption through Vegetative Cooling. ACEEE Summer Study on Energy Efficiency in Buildings, American Council for an Energy Efficient Economy. Pacific Grove, California.



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