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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.



Community Health



Environmental Justice



Economic Development



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

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.

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 1 and 2 soils and considered the very best soils for farming. As shown in Figure COS-2, these soils are primarily in East County.

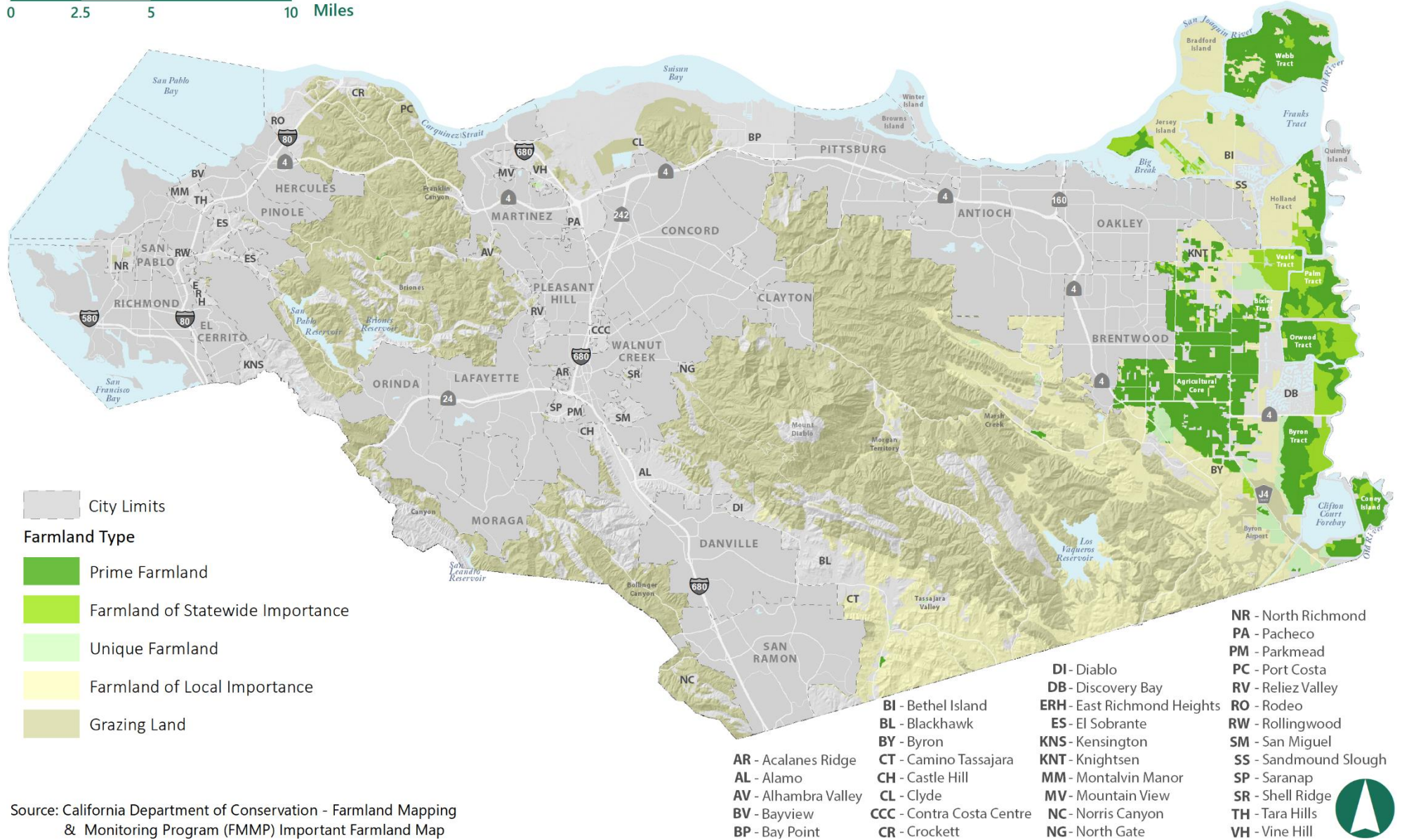


Agricultural land and farmworker labor yield valuable crops in Contra Costa County.

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

0 2.5 5 10 Miles

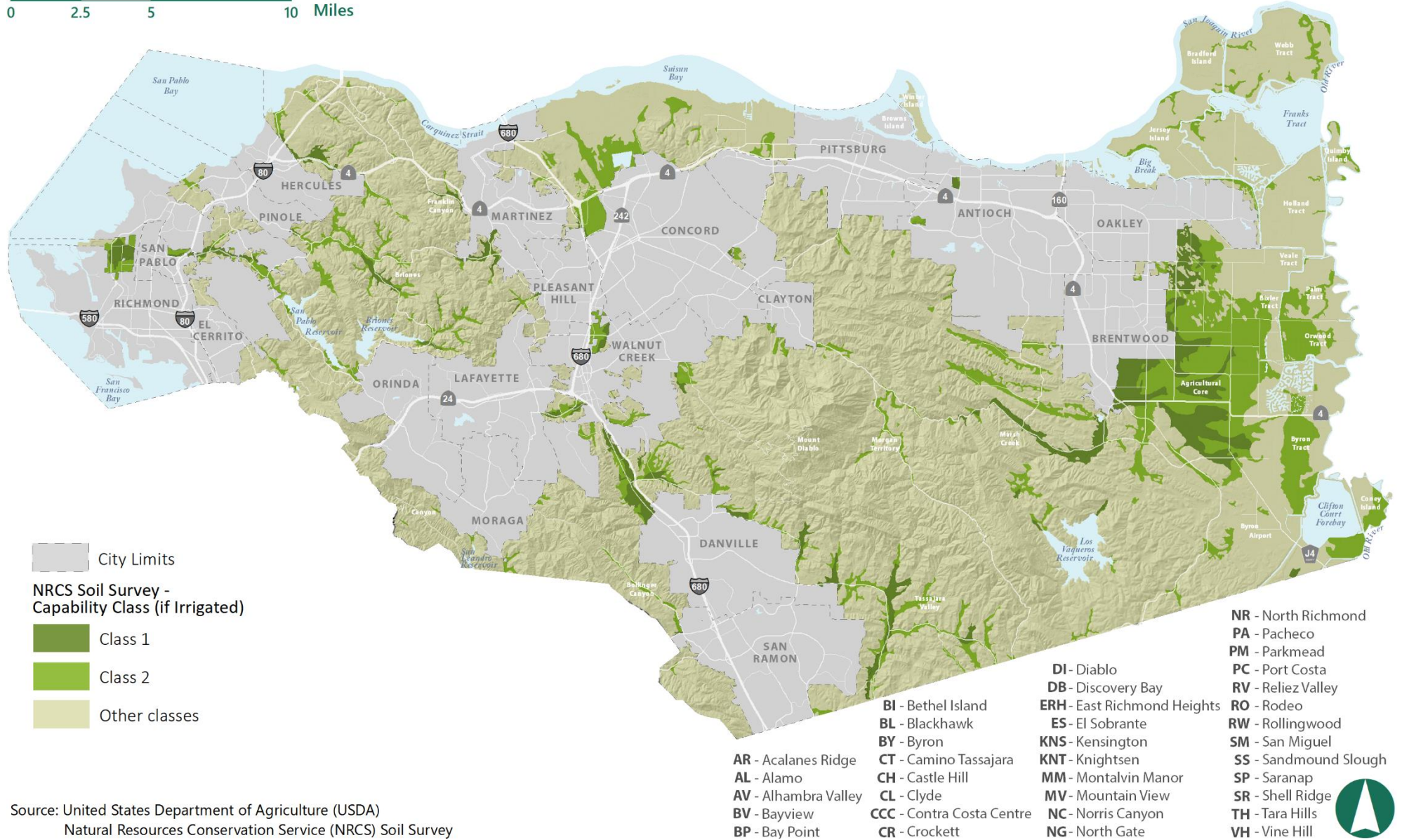


Source: California Department of Conservation - Farmland Mapping & Monitoring Program (F MMP) Important Farmland Map



FIGURE COS-2 PRIME PRODUCTIVE AGRICULTURAL SOILS

0 2.5 5 10 Miles



Source: United States Department of Agriculture (USDA)
Natural Resources Conservation Service (NRCS) Soil Survey



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.



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.*

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.
- (b) Specific mechanisms that could be used.
- (c) Geographic areas where these mechanisms could be used.
- (d) Organizational and administrative requirements.
- (e) 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:

- (a) Setbacks on urban properties to provide a buffer for agricultural uses.
- (b) Location and arrangement of buildings, structures, and uses on urban properties.
- (c) Lighting, fencing, screening, and appropriate landscaping/vegetation.

COS-A2.5

Review the Williamson Act Program to identify potential areas for improvement, such as:

- (a) Expanding the range of allowable uses to include wildlife habitat areas.
- (b) Increasing enforcement of non-compliant properties.
- (c) Ensuring agricultural conservation commitments are adequate to justify inclusion in the Program.
- (d) 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)



U-pick farms offer opportunities to experience agriculture firsthand and support the local farming community.

As of 2022, Contra Costa County ranked 37th 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, cherries, and grapes 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, co-processing, and co-packing across the county.
- Expanded agricultural tourism.

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

COS-P3.1  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, short-term guest accommodations in a manner that is non-disruptive 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-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.

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.

ECOLOGICAL 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 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.*

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.

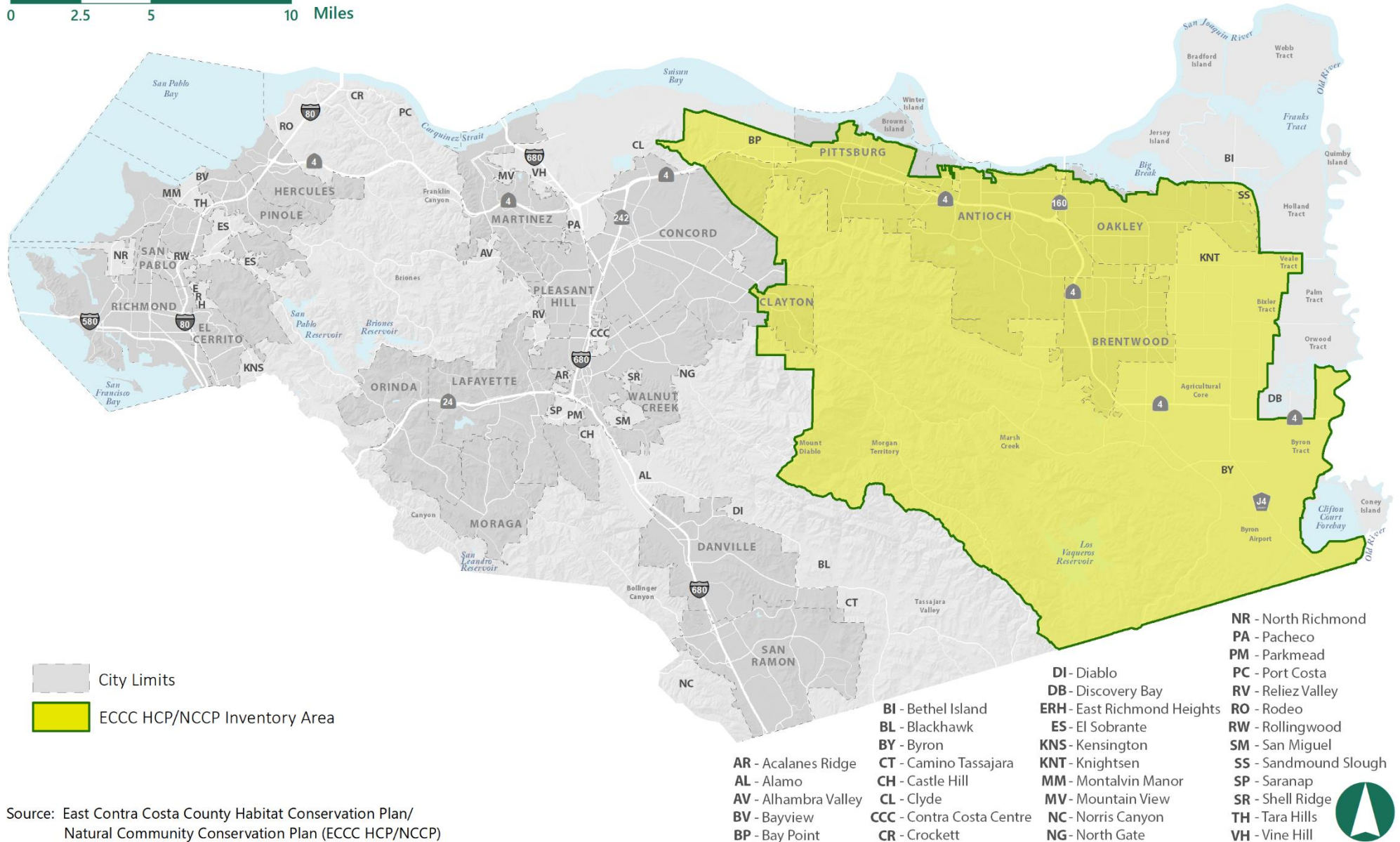
COS-P4.3 Require a biological resources assessment prepared according to State and federal protocols for projects with the potential to impact rare, threatened, endangered, or special-status species or their habitat, and implement appropriate mitigation for identified impacts, preferably near the impact 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

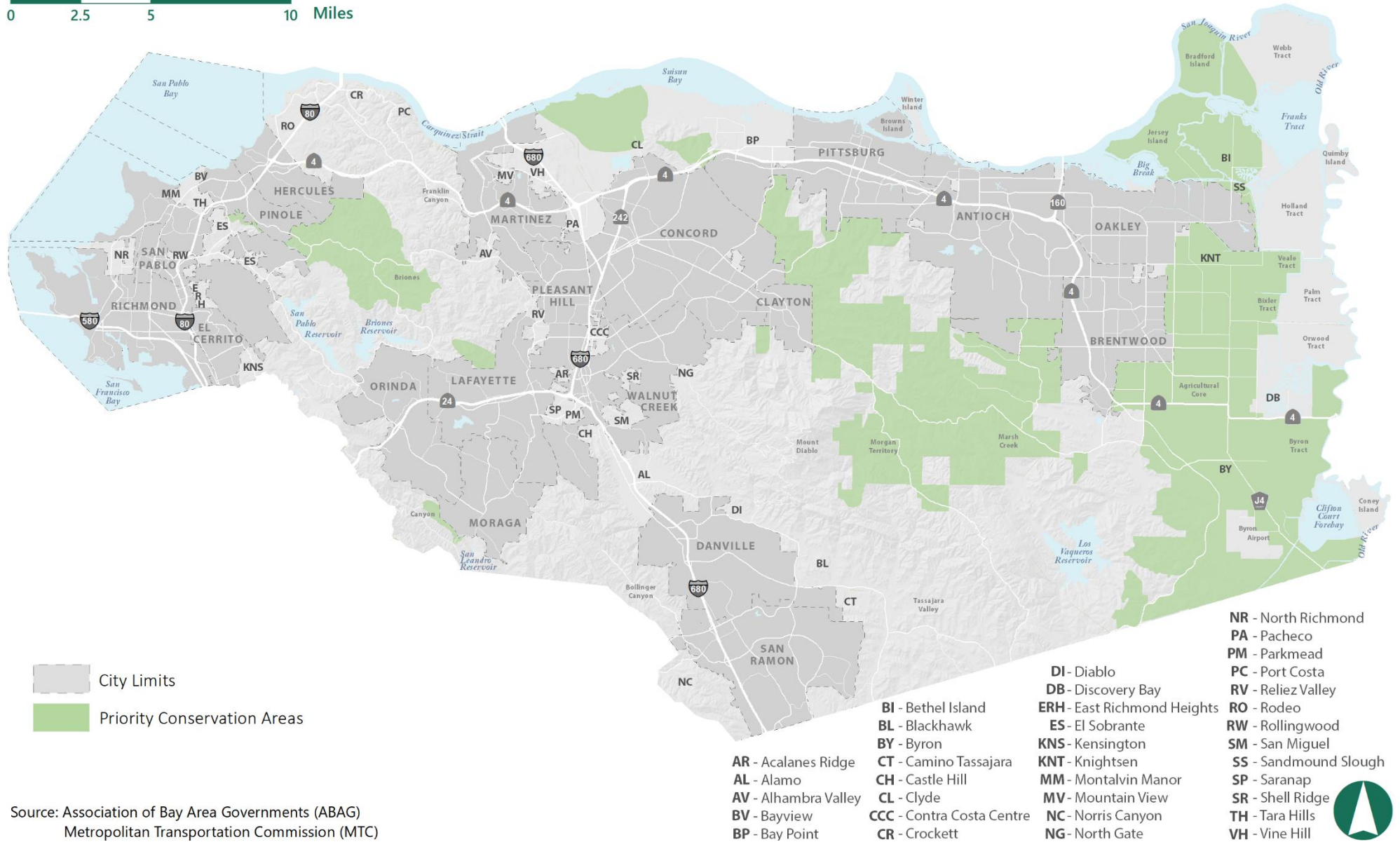
0 2.5 5 10 Miles



Source: East Contra Costa County Habitat Conservation Plan/
 Natural Community Conservation Plan (ECCC HCP/NCCP)

FIGURE COS-4 PRIORITY CONSERVATION AREAS

0 2.5 5 10 Miles



Source: Association of Bay Area Governments (ABAG)
 Metropolitan Transportation Commission (MTC)



COS-P4.5 

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 erosion-control 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:

- (a) Setbacks on urban properties to provide a buffer for resource areas.
- (b) Clustering of development to maximize ecological and conservation benefits.
- (c) 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.

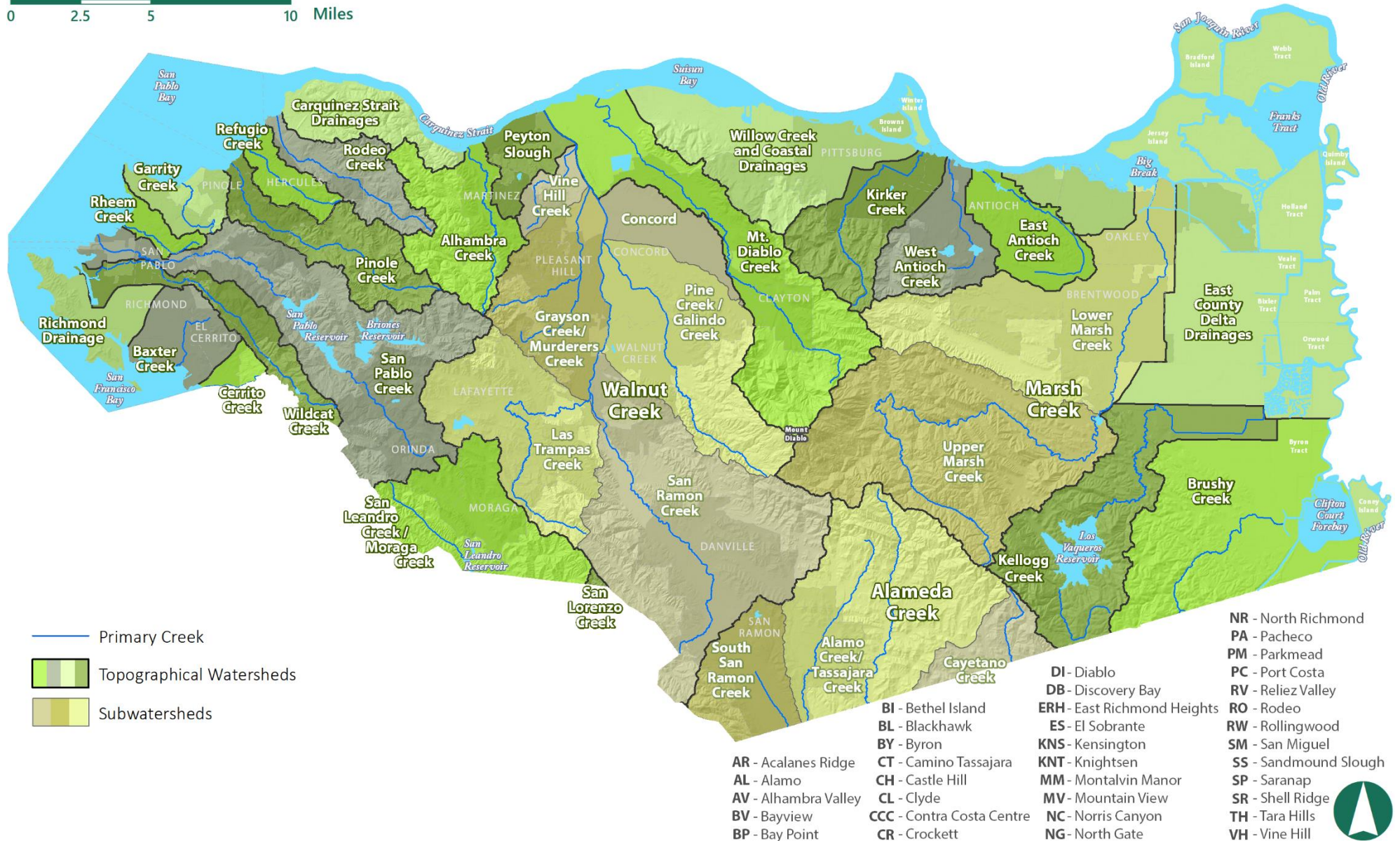


Wetlands in Radke Martinez Regional Shoreline Park provide valuable wildlife habitat along the Carquinez Strait. (Community-submitted photo)

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-6 WATERSHEDS

0 2.5 5 10 Miles





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 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.

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

0 2.5 5 10 Miles

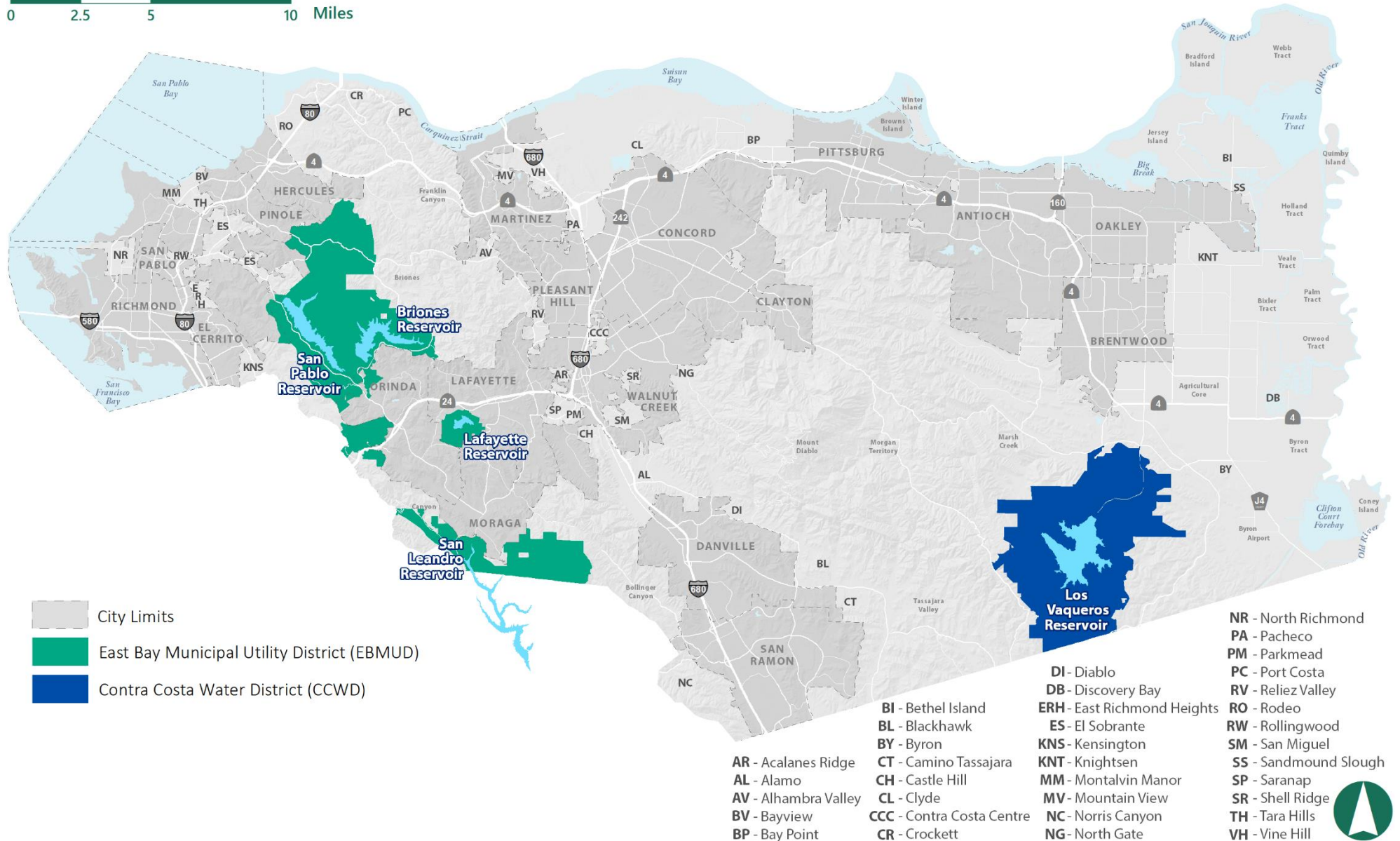
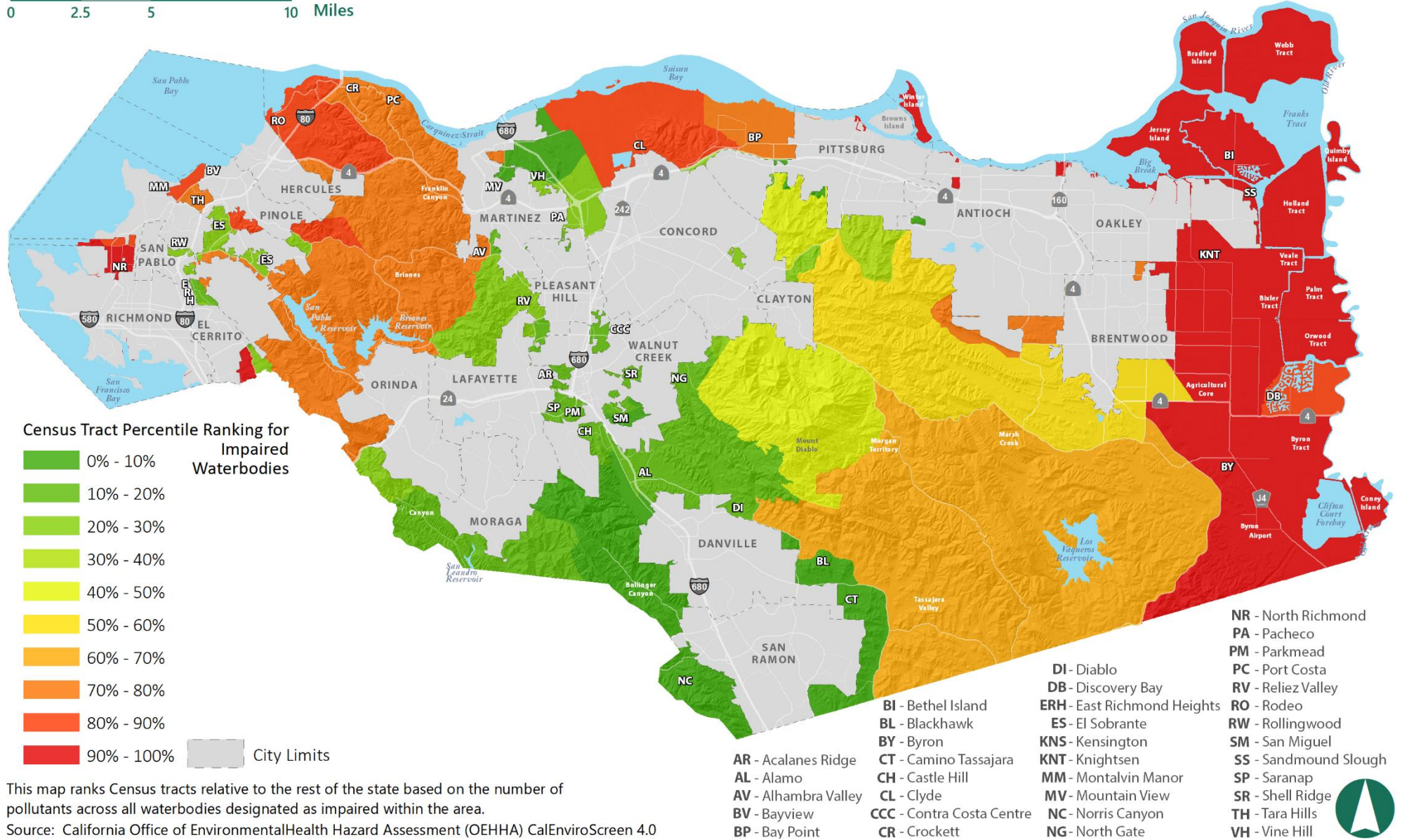


FIGURE COS-8 IMPAIRED WATERBODIES RANKINGS RELATIVE TO THE STATE

0 2.5 5 10 Miles



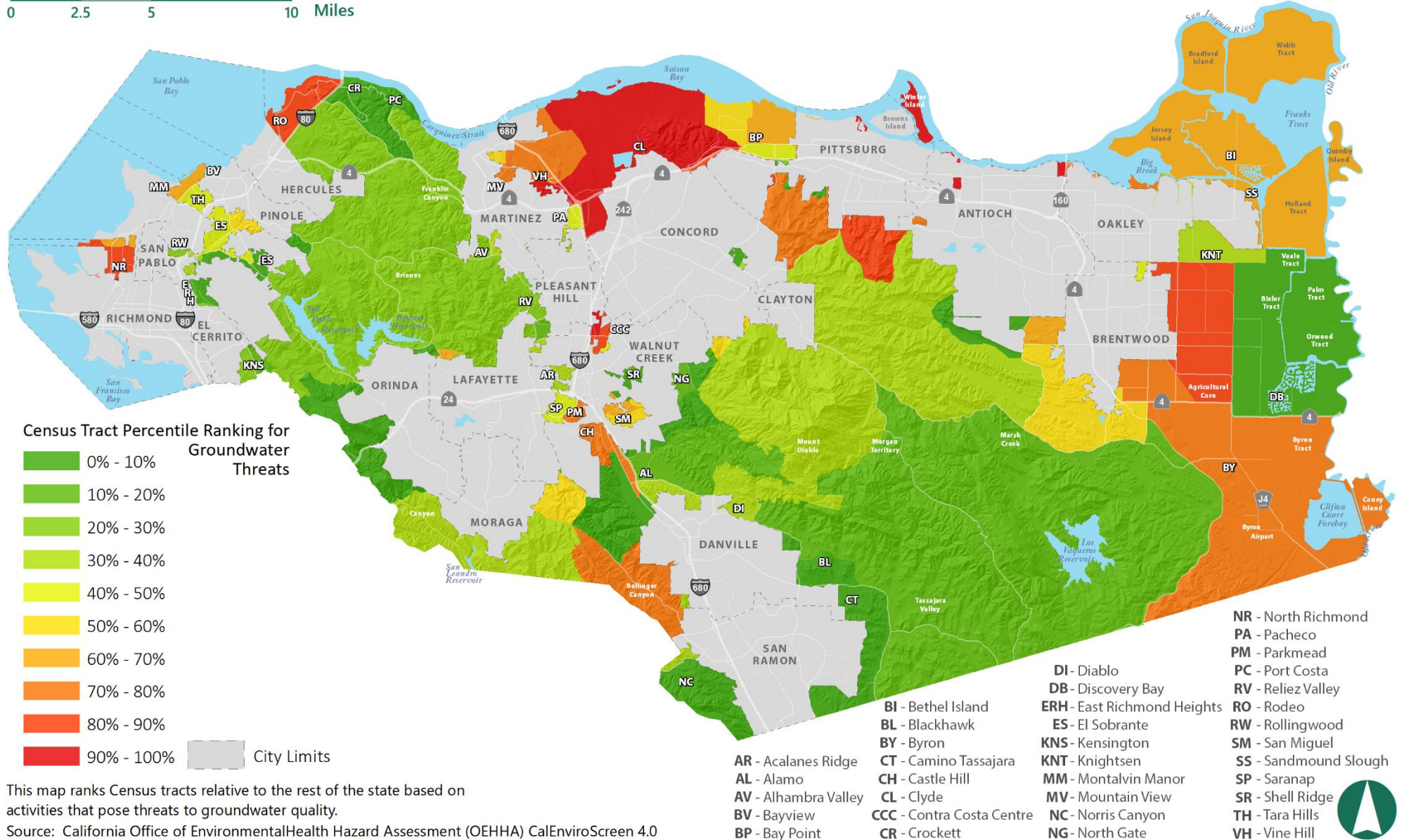
This map ranks Census tracts relative to the rest of the state based on the number of pollutants across all waterbodies designated as impaired within the area.

Source: California Office of Environmental Health Hazard Assessment (OEHHA) CalEnviroScreen 4.0



FIGURE COS-9 GROUNDWATER THREAT RANKINGS RELATIVE TO THE STATE

0 2.5 5 10 Miles



This map ranks Census tracts relative to the rest of the state based on activities that pose threats to groundwater quality.

Source: California Office of Environmental Health Hazard Assessment (OEHHA) CalEnviroScreen 4.0


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


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.

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 aquifer 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.*

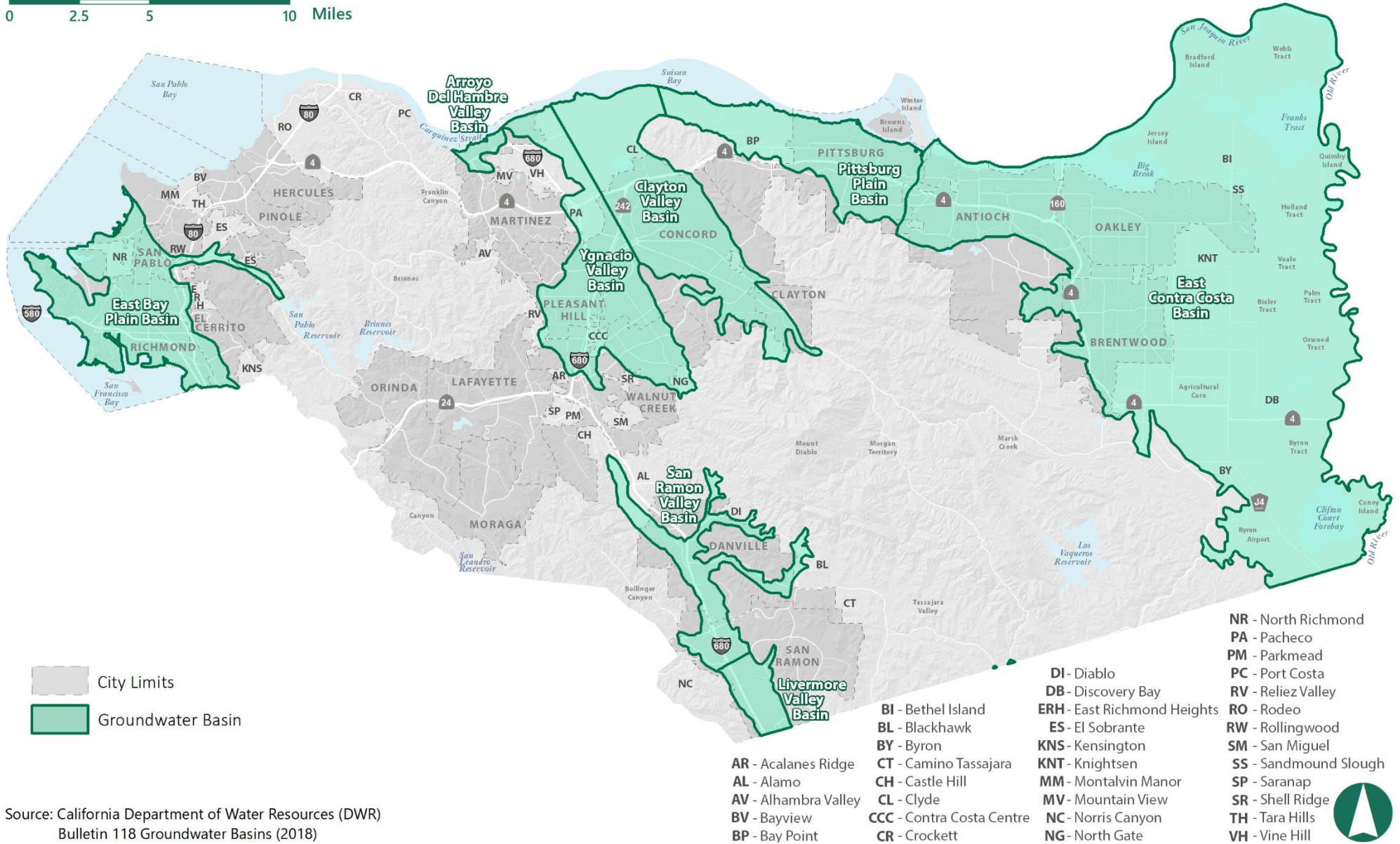
COS-P7.7  Require landscaping for new development to filter and retain runoff, and support flood management and groundwater recharge.*

COS-P7.8   Promote installation of drought-tolerant green infrastructure, including street trees, in landscaped public areas.



FIGURE COS-10 GROUNDWATER BASINS

0 2.5 5 10 Miles



Source: California Department of Water Resources (DWR)
Bulletin 118 Groundwater Basins (2018)



COS-P7.9 

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-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.

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 non-point 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:

- (a) Adequate channel width and depth, as defined by the State Harbors and Navigation Code.
- (b) Adequate public fire protection services.
- (c) Adequate public vehicular access.
- (d) Adequate supply of potable water.
- (e) Adequate on-site facilities for sewage and solid waste disposal.
- (f) Compatibility with nearby agricultural uses.
- (g) Compatibility with nearby conservation/habitat lands.
- (h) 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. (Community-submitted 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 archaeological 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 guiding 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).



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 reinterment 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.*

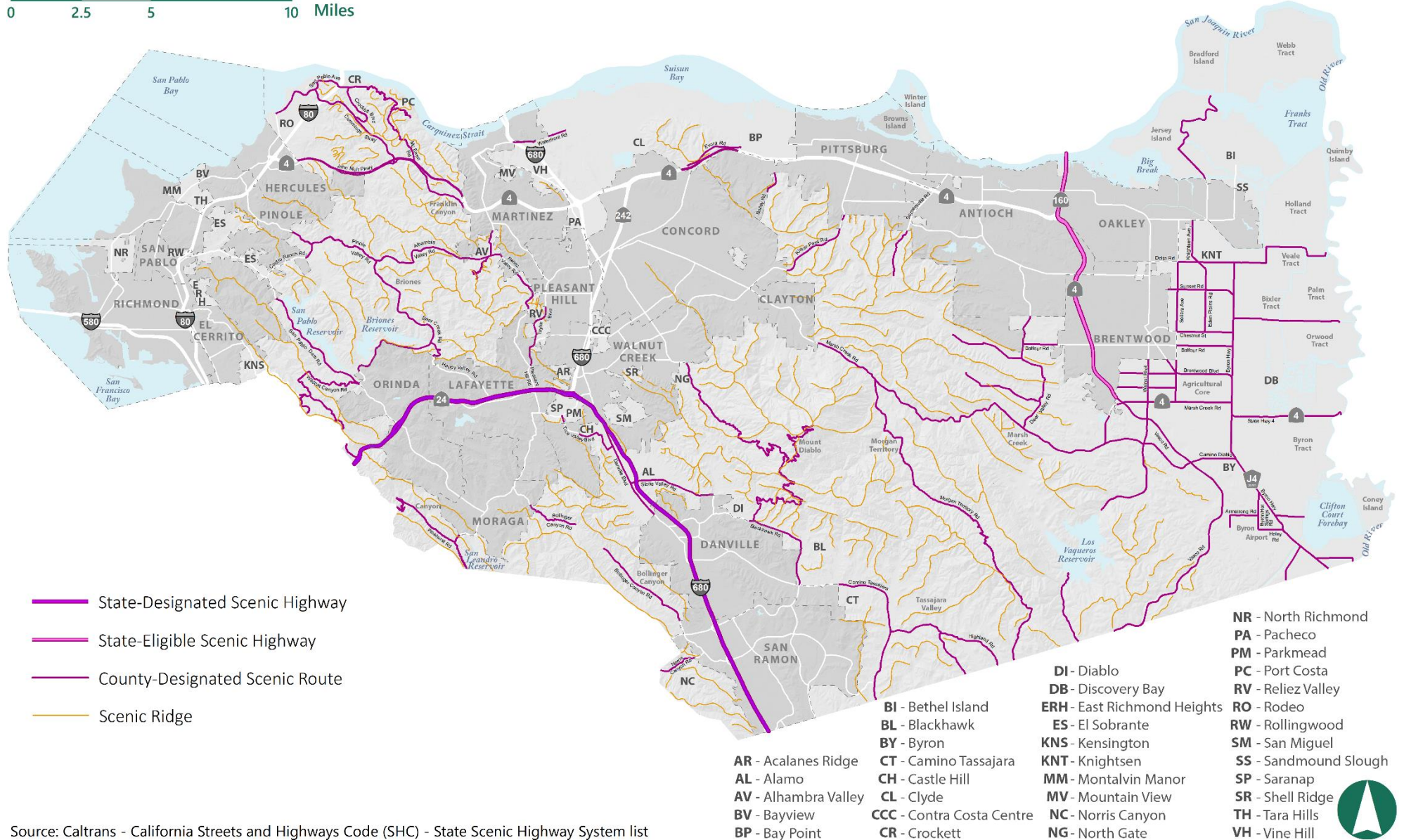
COS-P12.3

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

0 2.5 5 10 Miles




- State-Designated Scenic Highway
- State-Eligible Scenic Highway
- County-Designated Scenic Route
- Scenic Ridge

- AR - Acalanes Ridge
- AL - Alamo
- AV - Alhambra Valley
- BV - Bayview
- BP - Bay Point
- BI - Bethel Island
- BL - Blackhawk
- BY - Byron
- CT - Camino Tassajara
- DI - Diablo
- DB - Discovery Bay
- ERH - East Richmond Heights
- ES - El Sobrante
- KNS - Kensington
- KNT - Knightsen
- MM - Montalvin Manor
- MV - Mountain View
- NC - Norris Canyon
- CR - Crockett
- PA - Pacheco
- PM - Parkmead
- PC - Port Costa
- RV - Reliez Valley
- RO - Rodeo
- DI - Diablo
- DB - Discovery Bay
- ERH - East Richmond Heights
- ES - El Sobrante
- KNS - Kensington
- KNT - Knightsen
- MM - Montalvin Manor
- MV - Mountain View
- NC - Norris Canyon
- CR - Crockett
- NR - North Richmond
- PA - Pacheco
- PM - Parkmead
- PC - Port Costa
- RV - Reliez Valley
- RO - Rodeo
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- KNS - Kensington
- KNT - Knightsen
- MM - Montalvin Manor
- MV - Mountain View
- NC - Norris Canyon
- CR - Crockett

Source: Caltrans - California Streets and Highways Code (SHC) - State Scenic Highway System list





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 watershed 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 quality.

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-P13.1



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.

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.

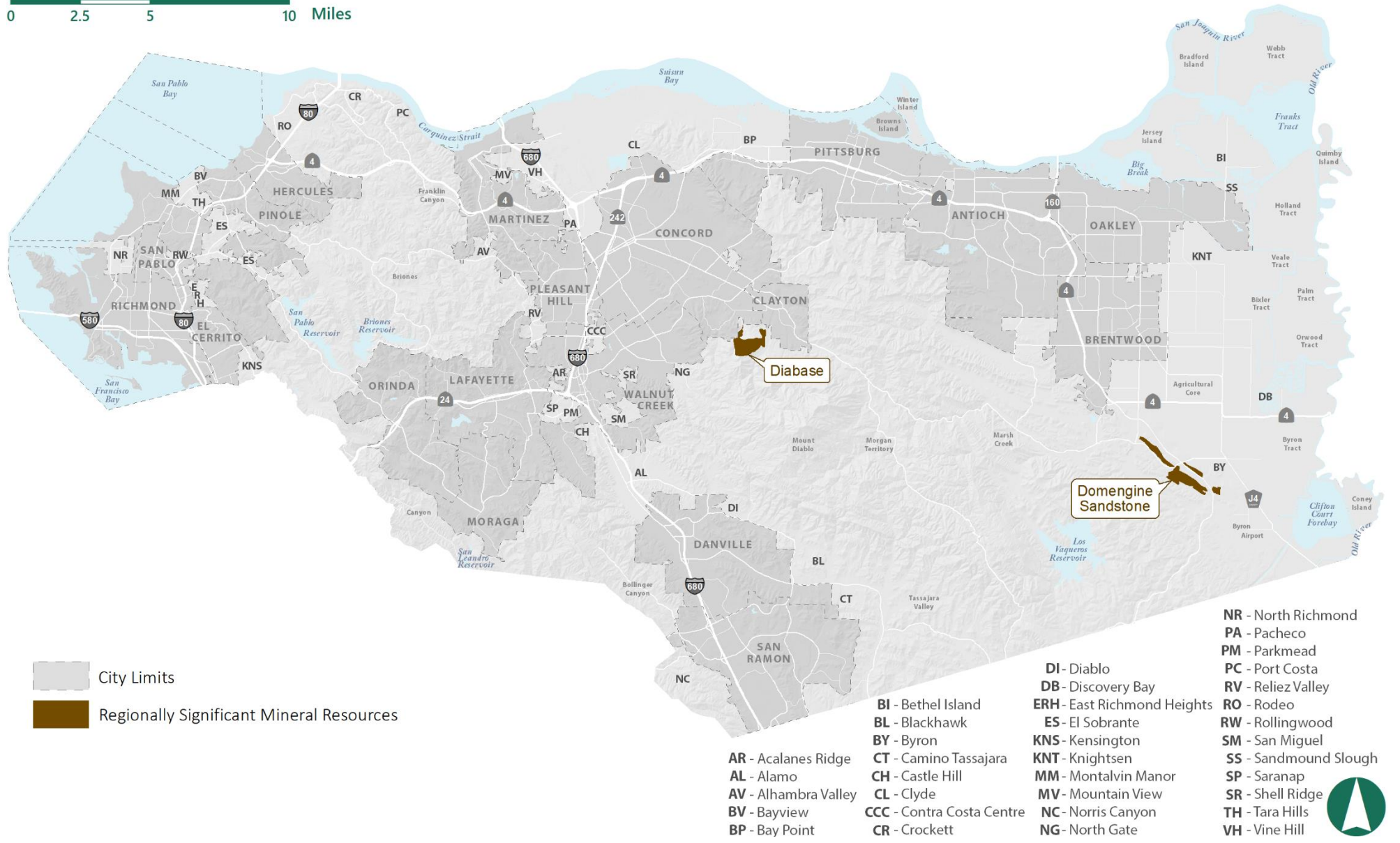
COS-P13.3



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

0 2.5 5 10 Miles



City Limits
 Regionally Significant Mineral Resources

- | | | | |
|----------------------|---------------------------|-----------------------------|-----------------------|
| AR - Alcalanes Ridge | BI - Bethel Island | DI - Diablo | NR - North Richmond |
| AL - Alamo | BL - Blackhawk | DB - Discovery Bay | PA - Pacheco |
| AV - Alhambra Valley | BY - Byron | ERH - East Richmond Heights | PM - Parkmead |
| BV - Bayview | CT - Camino Tassajara | ES - El Sobrante | PC - Port Costa |
| BP - Bay Point | CH - Castle Hill | KNS - Kensington | RV - Reliez Valley |
| | CL - Clyde | KNT - Knightsen | RO - Rodeo |
| | CCC - Contra Costa Centre | MM - Montalvin Manor | RW - Rollingwood |
| | CR - Crockett | MV - Mountain View | SM - San Miguel |
| | | NC - Norris Canyon | SS - Sandmound Slough |
| | | NG - North Gate | SP - Saranap |
| | | | SR - Shell Ridge |
| | | | TH - Tara Hills |
| | | | VH - Vine Hill |





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. Consistent with State policy to reduce greenhouse gas (GHG) emissions and improve air quality, two of the four petroleum refineries in the county converted their operations from refining crude oil to processing biofuels.

Today, most of the electricity generated in the county is from renewable sources, like wind and solar. The California Energy Commission designated

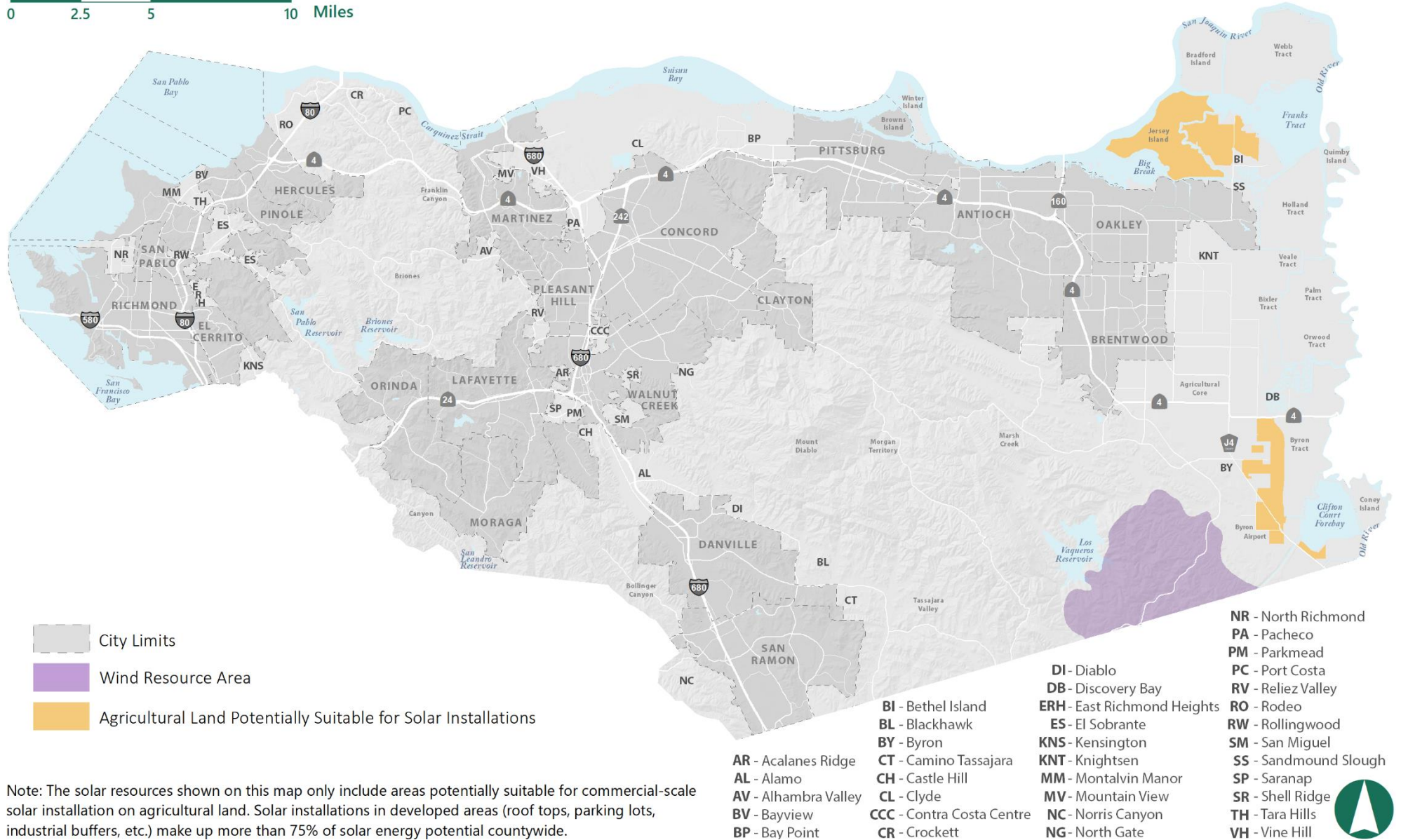
the Altamont Pass area, including the Byron Hills portion of eastern Contra Costa County, as an area with high wind potential, as shown in Figure COS-14. In the early 1980s the private sector responded to that designation and federal and State tax incentives by moving rapidly into the wind energy business 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.

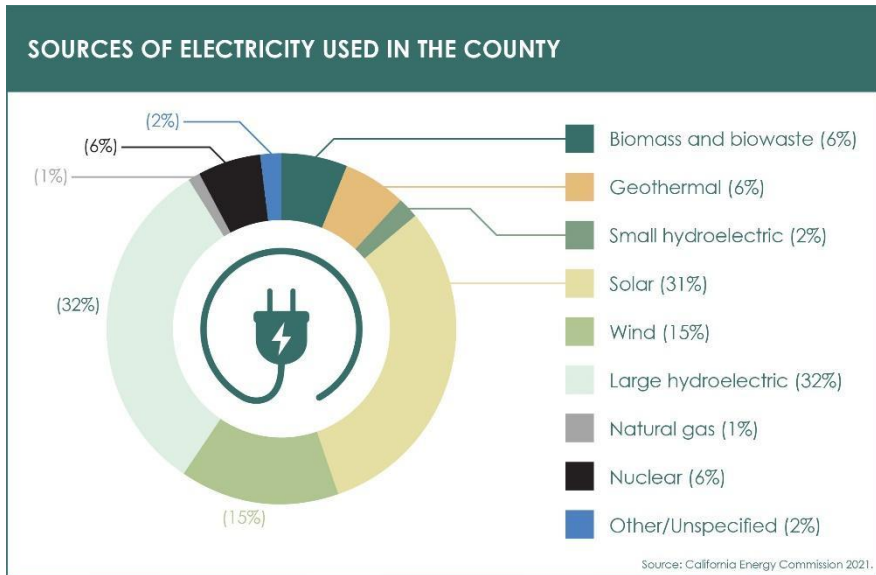
Pacific Gas and Electric Company (PG&E) and MCE are the primary electricity providers for Contra Costa County. Most of the electricity consumed in the county is generated from large hydroelectric, solar, and wind sources, as indicated in the graph on page 7-46.

FIGURE COS-14 WIND AND SOLAR ENERGY RESOURCE AREAS IN RURAL AREAS

0 2.5 5 10 Miles



Note: The solar resources shown on this map only include areas potentially suitable for commercial-scale solar installation on agricultural land. Solar installations in developed areas (roof tops, parking lots, industrial buffers, etc.) make up more than 75% of solar energy potential countywide.



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.

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).



Wind turbines generate power in East Contra Costa County near Byron.

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 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.

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.*

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.

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:
 - 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.
- (b) Restrict oil and gas drilling operations to agricultural zoning districts only.
- (c) Require a land use permit for all new and expanded oil and gas wells.
- (d) Require a reclamation plan for oil and gas well sites that includes bonding for site clean-up.
- (e) 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.

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 encroaching 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 low-carbon 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 energy-efficient 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.