

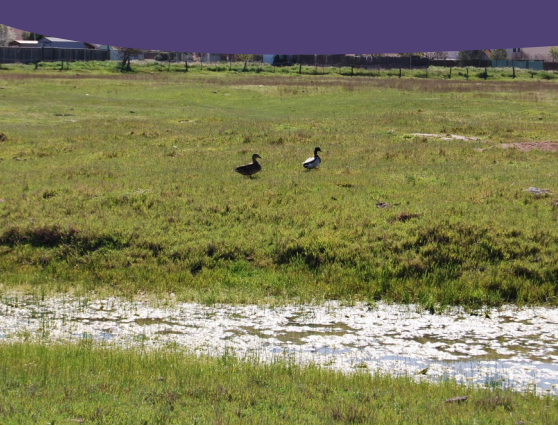
9

Open Space and Conservation Element



CITY OF
LIVERMORE
CALIFORNIA

Draft General Plan 2045



9. OPEN SPACE AND CONSERVATION ELEMENT

The Open Space and Conservation Element guides how Livermore will preserve, manage, and enhance its diverse natural resources. This element reflects the community’s commitment to protecting its natural environment while balancing growth and conservation.

Livermore’s natural setting features expansive open spaces, rolling hills, natural arroyos and waterways, agricultural lands, and diverse ecosystems that provide habitat for plants and wildlife. These natural resources shape the community’s identity, quality of life, and economic vitality. Open spaces frame the city with a mix of vineyards, farms, rangeland, and natural areas that reflect the region’s agricultural heritage while providing recreational opportunities and environmental benefits. These areas also support important ecological functions, including wildlife habitat, watershed protection, groundwater recharge, carbon sequestration, and air quality improvement.



The Tri-Valley Conservancy has a permanent conservation easement on 1,168 acres in Doolan Canyon, which will provide a greenbelt buffer between Livermore and Dublin.

The Open Space and Conservation Element contains goals and policies addressing the following topics:

Open Space and Natural Ecosystems

Managing Livermore’s open spaces and natural areas that define the community’s identity and provide environmental benefits.

Biological Resources

Protecting sensitive habitats, special-status species, and wildlife corridors that support biodiversity in the Livermore area.

Water Quality and Water Resources Management

Improving water quality in Livermore’s creeks, arroyos, and groundwater basins.

Agricultural Resources

Conserving agricultural lands, particularly vineyards and rangelands that contribute to Livermore’s economy and rural character.

Parks and Recreation

Providing parks, recreational areas, and trails that offer residents access to nature and outdoor activities.

Air Quality

Managing air quality as a resource for community health and environmental sustainability.

Climate Change, Energy Conservation and Efficiency

Managing energy as a community resource through efficiency, renewable energy use, and resilient infrastructure to conserve resources, reduce greenhouse gas emissions, and support long-term sustainability.

Mineral Resources

Managing and conserving mineral resources to balance economic value with environmental protection and land use compatibility.

This element ensures that as Livermore continues to develop, the community’s natural resources will be conserved, restored, and enhanced for the benefit of current and future generations.

Relevance to General Plan Vision and Guiding Principles

The Open Space and Conservation Element supports the 2045 General Plan Vision and Guiding Principles by protecting and enhancing Livermore’s natural environment and resources that define the community’s character and support quality of life. This element advances the following Guiding Principles:



Prosperity

- Preserving agricultural lands that contribute to Livermore’s economy and supporting agritourism through diversification of agricultural products.
- Monitoring funding mechanisms to support agricultural preservation.
- Ensuring a reliable and efficient energy system to sustain quality of life.



Vibrancy

- Maintaining public access to open spaces for recreational opportunities.
- Fostering diverse open space systems that provide both conservation value and recreational uses.



Equity

- Preserving and restoring natural landscapes to improve community health.
- Providing equal access to open space resources and environmental and sustainability benefits for all residents.



Sustainability

- Conserving open spaces, biological resources, and wildlife habitats.
- Protecting water quality in creeks, arroyos, and groundwater basins.
- Promoting renewable energy sources and energy conservation.
- Reducing air pollution and greenhouse gas emissions.
- Implementing sustainable agricultural and land management practices.
- Ensuring reliable and renewable energy infrastructure.

OPEN SPACE AND NATURAL ECOSYSTEMS



The North Livermore hills serve as a significant open space resource that offers scenic vistas and sustains the region’s biodiversity.

9. Open Space and Conservation Element

Open spaces are a defining feature in Livermore’s identity and play an important role in the city’s environmental health and quality of life. These areas include undeveloped natural lands, parks, recreation sites, and greenbelts that surround and weave through the city. They serve multiple purposes: providing wildlife habitat and corridors, creating recreation opportunities, managing stormwater, recharging groundwater, and visually separating Livermore from neighboring communities. Open spaces, such as the North Livermore hills, Brushy Peak, and South Livermore Valley, enhance the city’s scenic beauty and rural character while supporting biodiversity and ecosystem resources.

Open space areas and healthy ecosystems also offer crucial climate resilience benefits to Livermore. For example, natural arroyos and creeks absorb and slow stormwater runoff, reducing the risk of urban flooding. Grasslands allow rainwater to seep into underground aquifers, helping to sustain local water supplies during longer and more frequent droughts. Parks, greenbelts, and mature street trees provide shade and release moisture into the air, reducing local temperatures and mitigating the heat reflected and retained by hard surfaces, which is especially important to combat extreme heat. As noted in the Climate Action Plan, open spaces and working lands sequester carbon, helping to reduce greenhouse gas emissions.



Open spaces are central to Livermore’s identity, balancing recreational opportunities with natural resource protection.

Livermore protects its open spaces through policies, regulations, land acquisition, partnerships, and conservation easements. Livermore’s north and south urban growth boundaries (UGBs) promote infill development while protecting agricultural and habitat resources outside city limits. Significant open spaces exist within and surrounding Livermore’s sphere of influence (SOI) and UGB.

The City works with public agencies, nonprofit organizations, and local stakeholders to protect and maintain important open space

areas long term. Beyond the UGB, local agencies, including East Bay Regional Park District, Livermore Area Recreation and Park District, and Tri-Valley Conservancy preserve open space and natural areas. These partners help protect ridgelines, oak woodlands, grasslands, riparian corridors, arroyos, knolls, and key views that the community values. Protecting and enhancing these areas requires stakeholders to coordinate effectively, balancing development pressures with conservation goals to ensure Livermore maintains its unique character and environmental health for future generations.

While many people associate the term “open space” with parkland, open spaces may be publicly or privately owned, may or may not allow public access, and may be used for economic purposes such as grazing or growing crops. California General Plan requirements define several categories of “open space land,” as shown in **Table OS-1**.

Table OS-1. Open Space Categories

Open Space Land Categories	Examples
Open space for natural resource preservation	Habitat areas, stream corridors
Open space used for resource production	Grazing land, farmland, mining areas
Open space for recreation	Local parks, regional parks, trails
Open space for public health and safety	Floodplains, landslide areas, watersheds
Open space in support of military installations	Buffers, overflight areas
Open space for the protection of places sacred to Native Americans	Places, objects, or features sacred to Native Americans

Goal OS-1

Conserve the value and function of Livermore’s open space for natural resource protection, recreation, and scenic value.



Policies

Policy OS-1.1 Diverse Open Space System

Foster an open space system that supports the natural function of the land, protects sensitive wildlife and plant species, preserves important viewsapes, and creates opportunities for recreation.

Policy OS-1.2 Greenbelts

Secure and maintain a greenbelt of nonurbanized land surrounding Livermore to serve as a buffer between communities and to preserve, enhance, and expand an integrated network of open space.

Policy OS-1.3 Open Space Preservation and Restoration

Prioritize opportunities to preserve, restore, rewild, and enhance natural landscapes to support environmental and community health.



Policy OS-1.4 Open Space Acquisition and Connection

Prioritize land acquisition efforts that would result in the creation and expansion of permanent open spaces or corridors that link existing or create new protected natural resource areas.

Policy OS-1.5 Open Space Public Access

Maintain existing and establish new public access to public open space lands as appropriate, while also preserving the character and conservation value of the open space.



Policy OS-1.6 Open Space Easement Designation

Work with local stakeholders and agencies to use open space easements to preserve sensitive habitat and resources.

Policy OS-1.7 Open Space Easement Monitoring

Monitor City-owned open space easements on an ongoing basis and work with other easement holders to comply with the terms of the easements.

Policy OS-1.8 Open Space Preservation Agency Coordination

Coordinate with the County of Alameda, East Bay Regional Park District, Livermore Area Recreation and Park District, Tri-Valley Conservancy, and other partner organizations to preserve and protect important resources inside and outside the urban growth boundary.

Policy OS-1.9 Brushy Peak Regional Preserve

Coordinate with the Livermore Area Recreation and Park District and East Bay Regional Park District to support efforts to preserve and protect the Brushy Peak Regional Preserve consistent with the goals of the Livermore Area Recreation and Park District's Parks, Recreation, and Trails Master Plan and East Bay Regional Park District's Master Plan.

Policy OS-1.10 Preservation of Natural Amenities

Preserve and enhance, or work with other agencies, as appropriate (e.g., with joint grant applications, sharing of staff resources and legal services), to preserve and enhance the following natural amenities:

- | | |
|---------------------------------|--|
| a. Ridgelines | j. Sycamore Grove |
| b. Oak Woodlands and Grasslands | k. Hilltops (North Livermore Urban Growth Boundary Initiative) |
| c. Grasslands | l. Slopes (North Livermore Urban Growth Boundary Initiative) |
| d. Riparian Woodland | m. Viewscapes (North Livermore Urban Growth Boundary Initiative) |
| e. Arroyos and Creeks | n. Frick Lake |
| f. Knolls | o. Springtown Alkali Sink |
| g. Doolan Canyon | |
| h. Arroyo Mocho/Cedar Mountain | |
| i. Corral Hollow | |

BIOLOGICAL RESOURCES



The diverse biological resources in Livermore include a variety of vegetation communities, wildlife, and special status plants that are essential to the local ecosystem.

Livermore supports a diverse array of biological resources, including various vegetation communities, sensitive habitats, and special-status plants and wildlife. As shown in **Figure OS-1**, vegetation habitats in Livermore include grasslands, woodlands, riparian areas, and wetlands. Although Livermore continues to grow, the city has retained important natural habitats in surrounding open spaces. These areas provide essential ecosystem services, including wildlife habitat, water filtration, carbon sequestration, and pollination. The most biologically diverse areas are generally found along creek corridors, in alkali wetlands in the northern portion of the city, and in undeveloped grasslands and woodlands around the city's periphery.

To address the unique habitats within and around Livermore, the City is developing the Livermore Habitat Conservation Plan to protect biological resources while efficiently maintaining and developing infrastructure. Once adopted, the Habitat Conservation Plan would streamline routine maintenance and capital improvement program projects, such as stream maintenance and road widening, by providing a comprehensive framework for regulatory compliance and conservation. Through this integrated approach, the Habitat Conversation Plan aims to conserve important habitats and protect listed and at-risk species.

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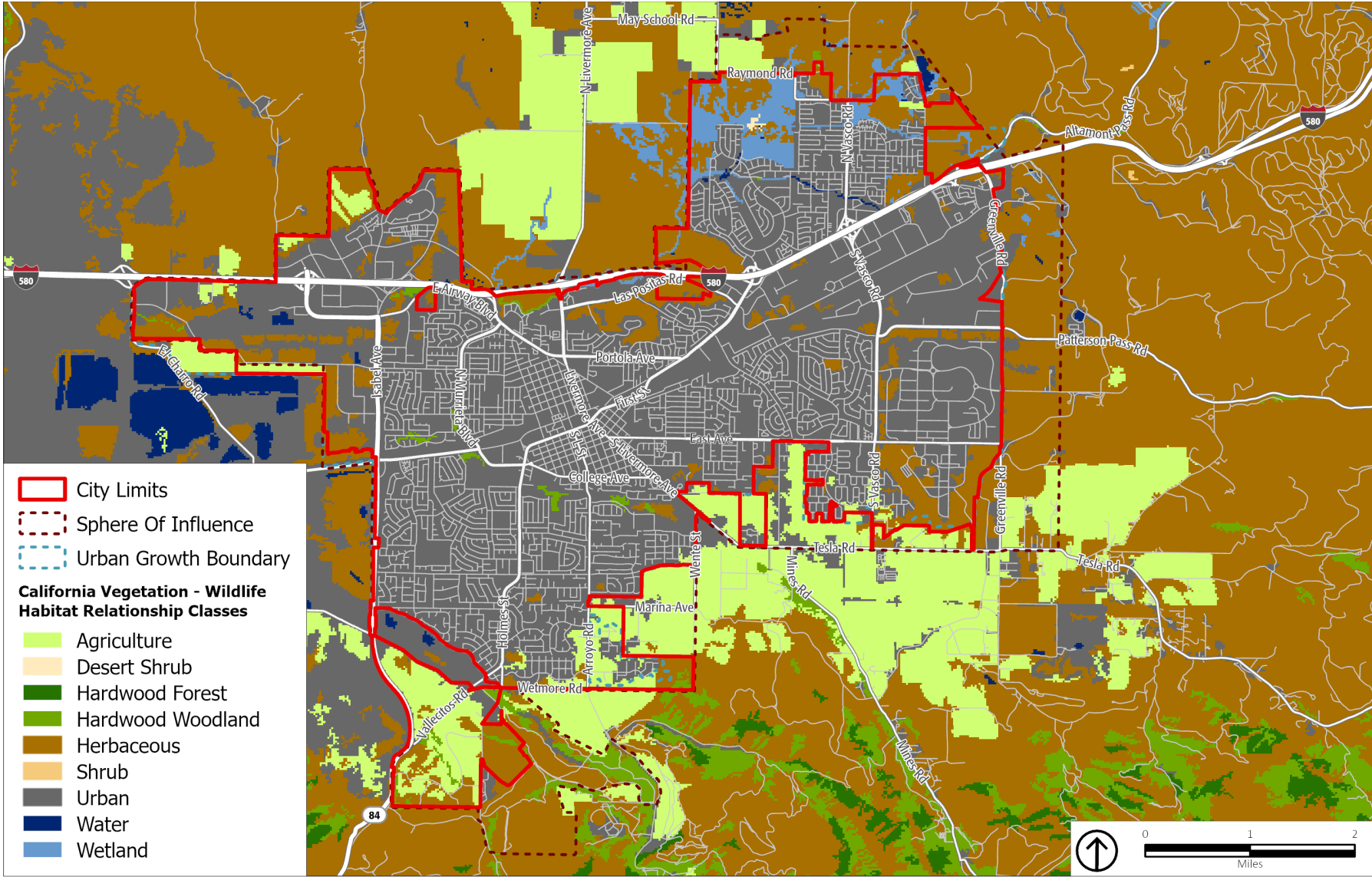
Livermore provides habitat to several special-status plants and animals protected under federal and State endangered species laws, including California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), burrowing owl (*Athene cunicularia*), palmate-braced bird's beak (*Cordylanthus palmatus*), Livermore tarplant (*Deinandra bacigalupii*), and other rare species associated with alkali wetlands and grasslands. The U.S. Fish and Wildlife Service has designated critical habitat for certain protected species in portions of Livermore. Aquatic resources, such as streams, arroyos, and wetlands, provide particularly important habitats for many species and are subject to various regulatory protections under federal and State laws.



Protection of native plants such as the bird's beaks is essential to supporting the unique biodiversity in the area.

Wildlife movement is essential for maintaining healthy ecosystems and biodiversity. An interconnected network of natural areas enables plants and animals to disperse and access resources, while barriers such as Interstate 580, local roads, walls, and urban development impede movement and fragment habitat. While Livermore itself is not within a designated regional wildlife corridor, natural areas along the city's periphery and creek corridors serve as important local movement routes for wildlife. The East Alameda County Conservation Strategy provides a framework for protecting and enhancing natural resources in eastern Alameda County, including guidance on maintaining and improving habitat connectivity. The Livermore Habitat Conservation Plan takes the next step by preserving land with habitat to mitigate for future capital and stream maintenance project impacts within and near Livermore. By protecting and enhancing habitat connectivity, Livermore can support biodiversity conservation, improve climate resilience, and maintain healthy ecosystems for future generations.

Figure OS-1 Vegetation Habitats



Source: City of Livermore, 2021; Cal Fire, 2024; Esri, 2025; PlaceWorks, 2025

Note: This map is included for informational purposes and is not adopted as part of this General Plan.

Goal OS-2

Preserve and enhance
biological resources.



Policies

Policy OS-2.1 Biodiversity Preservation

Preserve biodiversity within the Planning Area, with special emphasis on species that are sensitive, rare, declining, unique, or represent valuable biological resources.

Policy OS-2.2 East Alameda County Conservation Strategy

Require all development projects involving ground-disturbing activities to submit an Environmental Assessment Form as part of a complete application. The City will use this assessment to identify potential effects on special-status species and sensitive habitats and require that project design and implementation are consistent with the applicable avoidance, minimization, and, where necessary, compensatory mitigation measures set forth in Tables 3.2 through 3.12 of the East Alameda County Conservation Strategy.

Policy OS-2.3 Livermore Habitat Conservation Plan

Adopt and implement the Livermore Habitat Conservation Plan to address impacts to the federally listed species that result from implementation of the City's Capital Improvement Program and Stream Maintenance Program, and other projects implemented by the City to support General Plan buildout.

Policy OS-2.4 Existing Native Vegetation

Conserve Livermore's native trees and vegetation, which are important biological resources in the Planning Area.

Policy OS-2.5 Cluster Development

Work with project applicants to cluster new development to minimize its overall footprint in areas of ecological sensitivity, such as hillsides, alkali springs, creek corridors, and watersheds, and preserve space for habitat and wildlife connectivity.

Policy OS-2.6 Avoidance of Sensitive Features

Protect wetland and biological resources by requiring new development to avoid areas that support wildlife and plant habitats that contribute to ecological connectivity. Instead, integrate these features into overall development to support long-term ecological health.

Policy OS-2.7 Habitat Mitigation and Long-Term Management

Use habitat mitigation as a tool to support the long-term protection and management of sensitive natural habitats, including alkali sinks, riparian vegetation, freshwater marshes, vernal pools, wetlands, and woodlands. Support the use of mitigation banks and other mechanisms that provide durable, landscape-scale conservation outcomes.

Policy OS-2.8 Habitat Restoration

Restore areas adjacent to existing open space areas with native plant and animal communities.

Policy OS-2.9 Riparian Enhancements

Promote the long-term health and ecological function of riparian areas by ensuring that adjacent development supports the protection, enhancement, and restoration of native riparian vegetation.

Policy OS-2.10 Wildlife Linkage

Coordinate with Caltrans, the California Department of Fish and Wildlife, and other partners to plan for wildlife linkages to allow for the safe travel of wildlife across Interstate 580.

Policy OS-2.11 Aquatic Habitat Corridor Maintenance

Require the maintenance of aquatic movement corridors, in accordance with the Stream Maintenance Program, that connect natural open space areas.

Policy OS-2.12 Native Vegetation and Pollinator Support

Require new development to plant native plants and native flowering plants, shrubs, and trees that provide nectar and pollen sources throughout the growing season in new construction and public spaces. Prohibit the use of invasive non-native plant species.

Policy OS-2.13 Wildlife-Compatible Farm Management Practices

Educate agricultural interests about the benefits of maintaining or developing areas of natural habitat with wildlife-compatible farm management practices.

Policy OS-2.14 Biological Resource Preservation Grant Funding

Work with local, regional, and State natural resource agencies and area nonprofit organizations to develop programs and apply for grants to fund preservation of sensitive biological resources, including arroyos, wetlands, riparian areas, and grasslands.

WATER QUALITY AND WATER RESOURCES MANAGEMENT



Recycled water from wastewater treatment used for irrigation helps maintain high-quality water resources in open spaces.

What is a Watershed?

A watershed is the area of land where all surface water ultimately drains to a common outlet, such as a stream, bay, or ocean. Everything that happens on land within a watershed affects water quality downstream. Urban development, agricultural practices, and industrial activities can introduce pollutants into waterways through stormwater runoff. Protecting water quality requires managing activities throughout the entire watershed, often involving coordination between multiple jurisdictions. Watershed management strategies include controlling pollution sources, preserving riparian buffers, managing stormwater, and restoring natural hydrologic processes.

Livermore's arroyos, waterways, and tributaries form an important part of the greater Alameda Creek Watershed, as shown on **Figure OS-2**. The city's major arroyos and creeks include Arroyo Valle, Arroyo Las Positas, Arroyo Mocho, Arroyo Seco, Altamont Creek, Cottonwood Creek, and Dry Creek, which generally flow from east to west across the Livermore Valley, as shown in **Figure OS-3**. These natural waterways provide critical ecological functions, serving as wildlife movement corridors, supporting diverse plant and animal species, aiding in groundwater recharge, and contributing to the city's visual character.

Maintaining the quality of these waterways is essential for both ecological health and human well-being. The Zone 7 Water Agency owns and maintains approximately one-third of the creeks and channels in the Livermore-Amador Valley, while the City of Livermore owns approximately 7 miles and maintains about 13 miles of channels and creeks in the city. The City, in coordination with the Zone 7 Water Agency and other agencies, implements a Stream Maintenance Program that provides a framework for routine maintenance activities while protecting environmental resources. These activities include removing debris, managing vegetation, stabilizing banks, and maintaining flood-control capacity while preserving habitat value.

Livermore's groundwater basin is also a vital water resource, serving as an important water supply source for the region. The Livermore Valley Groundwater Basin is replenished by natural and artificial recharge and is managed by Zone 7 Water Agency as the designated Groundwater Sustainability Agency. Protecting both surface water quality and groundwater resources requires ongoing efforts to minimize pollutants from urban runoff, regulate development near waterways, manage stormwater effectively, and implement best management practices for erosion control. Keeping Livermore's waterways in as natural a

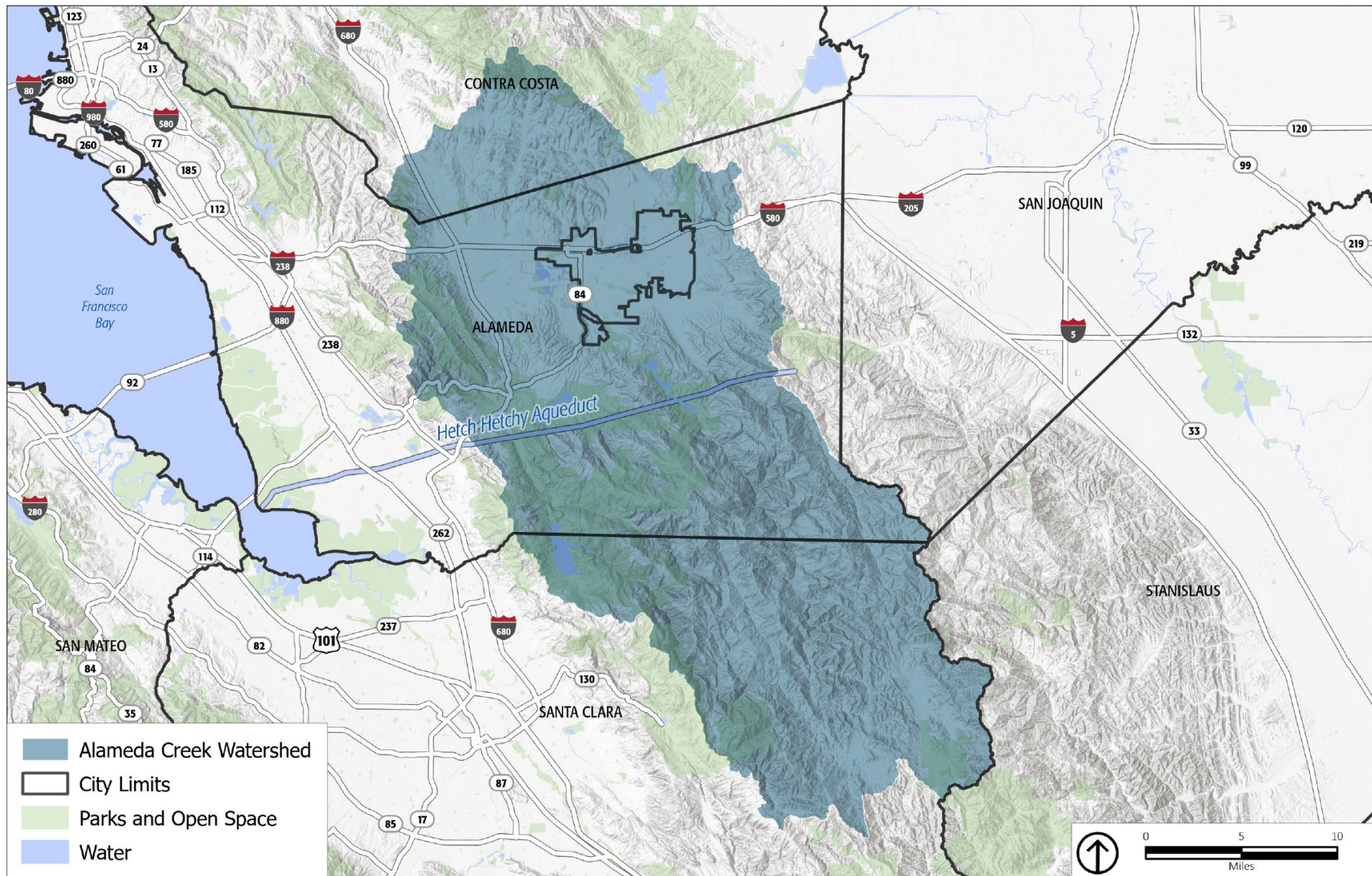
state as possible helps maintain their biological integrity while also providing flood protection, water quality benefits, and recreational opportunities.



Livermore's arroyos and creeks serve as important water resources that contribute to ecological health and human well-being.

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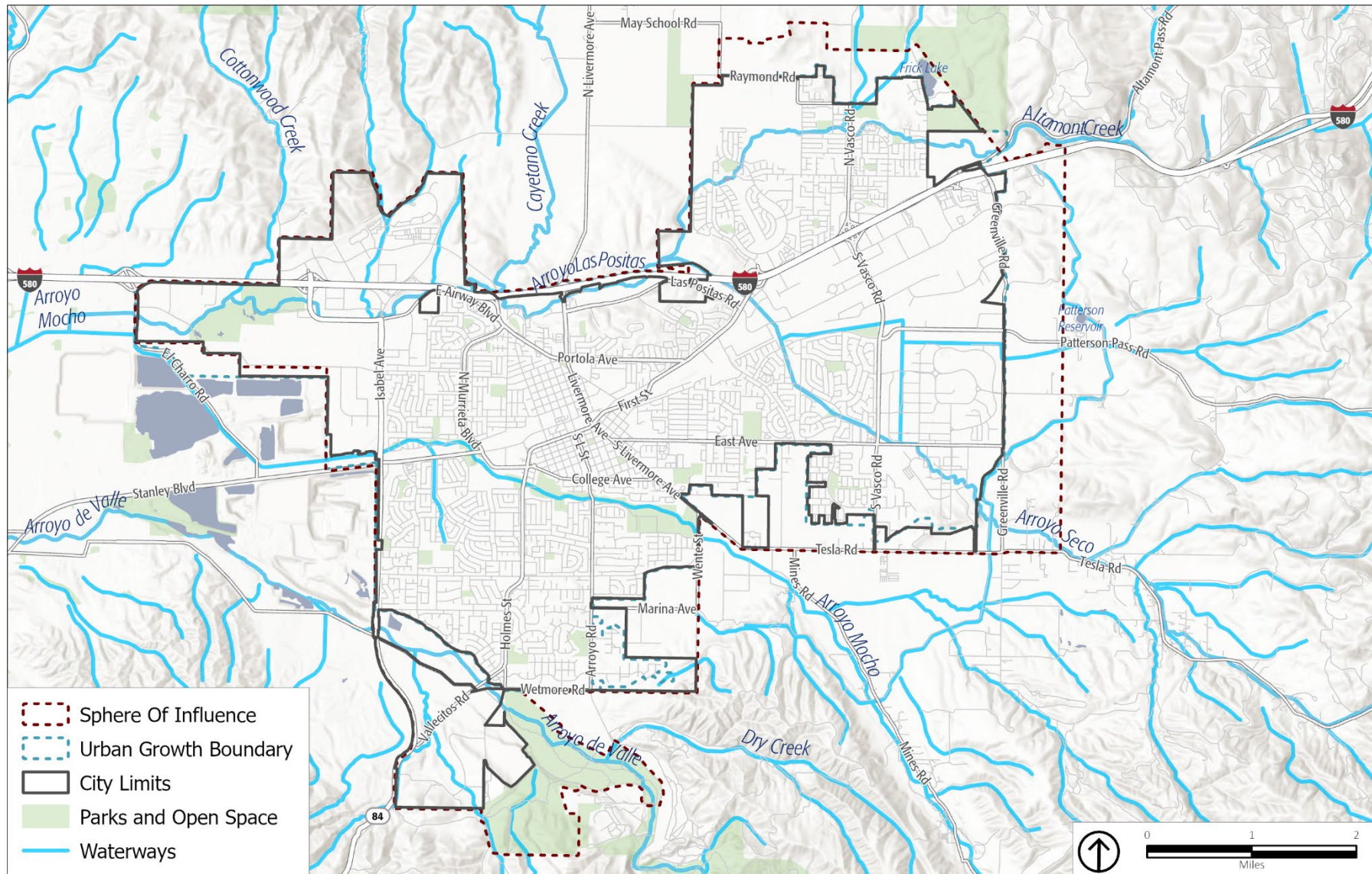
Figure OS-2 Alameda Creek Watershed



Source: City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

Note: This map is included for informational purposes and is not adopted as part of this General Plan.

Figure OS-3 Waterways



Source: City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

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Goal OS-3

Protect Livermore's groundwater resources, waterways, tributaries, and associated riparian habitats.



Policies

Policy OS-3.1 Water Quality

Maintain and improve the quality and quantity of Livermore's surface water, groundwater, and groundwater recharge areas.

Policy OS-3.2 Waterway Maintenance and Improvement

Maintain and enhance Livermore's creeks, arroyos, and wetlands in as natural a state as possible to reduce erosion, improve water quality, preserve habitat, and increase resilience to climate change. Coordinate with Zone 7 Water Agency and other partners to implement nature-based solutions that support flood protection and stormwater management, ecological function, and public safety.



Policy OS-3.3 Runoff Regulation

Regulate runoff from urban uses to protect the quality of surface water and groundwater.

Policy OS-3.4 Groundwater Management and Protection

Continue to work with the Zone 7 Water Agency and other regional partners to support the sustainable management, protection, and recharge of the Livermore Valley Groundwater Basin, addressing aquifer nutrient loading, monitoring groundwater quality, and contributing to the implementation of regional groundwater management.

AGRICULTURAL RESOURCES



Agricultural land preservation through conservation easements helps maintain agricultural viability and create a permanent greenbelt around the city.

Conservation Easements

A conservation easement is a voluntary, legally binding contract between a property owner and a government agency or land trust that places limitations on the use of an open space or agricultural property to maintain its conservation value in perpetuity. The landowner maintains the right to own, use, sell the property, or transfer the land to heirs and agrees to a limited set of uses that can occur on the land. Conservation easements remove the possibility of urban development, which diminishes the land value. The lower land value reduces estate tax obligations, which can help heirs to continue to keep the land as open space or agriculture.

Agricultural resources are an integral part of Livermore’s heritage, economy, and identity. Since its early European settlement, Livermore has thrived as a ranching and agricultural town, with agriculture and wine production remaining an important economic sector. The Livermore Valley is home to one of California’s oldest wine regions, dating back to the 1760s, when the Spanish missionaries began wine grape cultivation. Today, Livermore is surrounded by more than 50 wineries and over 3,000 acres of vineyards, which drive tourism and economic activity. Agricultural lands in Livermore’s Planning Area also include cropland, orchards, and pasture lands.

Livermore prioritizes conserving agricultural land, both for its economic value and its contribution to the city’s open space network. The city and surrounding areas contain important agricultural resources, including Prime Farmland, Farmland of Statewide Importance, and Unique Farmland as classified by the California Department of Conservation’s Farmland Mapping and Monitoring Program, as shown on **Figure OS-4**. Many agricultural landowners participate in the Williamson Act program, which provides property tax incentives for maintaining agricultural use of their lands, as shown on **Figure OS-5**. The Tri-Valley Conservancy and other land trusts have also helped preserve thousands of acres through conservation easements, particularly in the South Livermore Valley, as shown on **Figure OS-6**. These preservation efforts help maintain agricultural viability while creating a permanent greenbelt around the city.

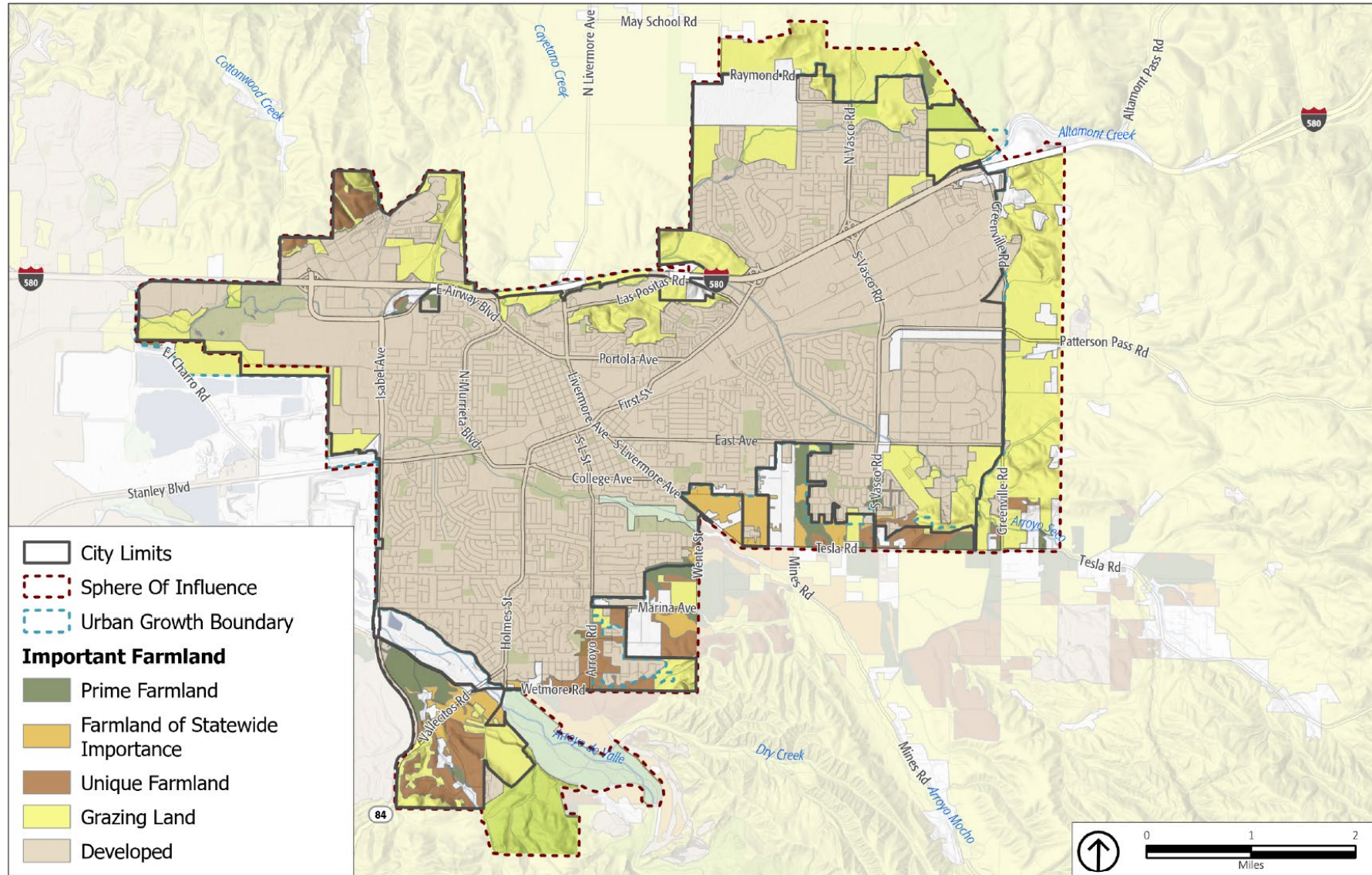
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As development pressures continue, protecting and maintaining key agricultural lands requires multiple approaches. Climate change poses additional challenges to agricultural sustainability, potentially affecting growing conditions, water availability, and crop viability as climate hazards intensify. By preserving agricultural lands and supporting sustainable farming practices, Livermore can maintain its agricultural heritage, enhance food security, protect natural resources, and sustain the rural character that makes the community distinctive.



The Livermore Valley hosts one of California's oldest wine regions, with thriving wineries that support agritourism and local economic activity.

Figure OS-4 Agricultural Resources

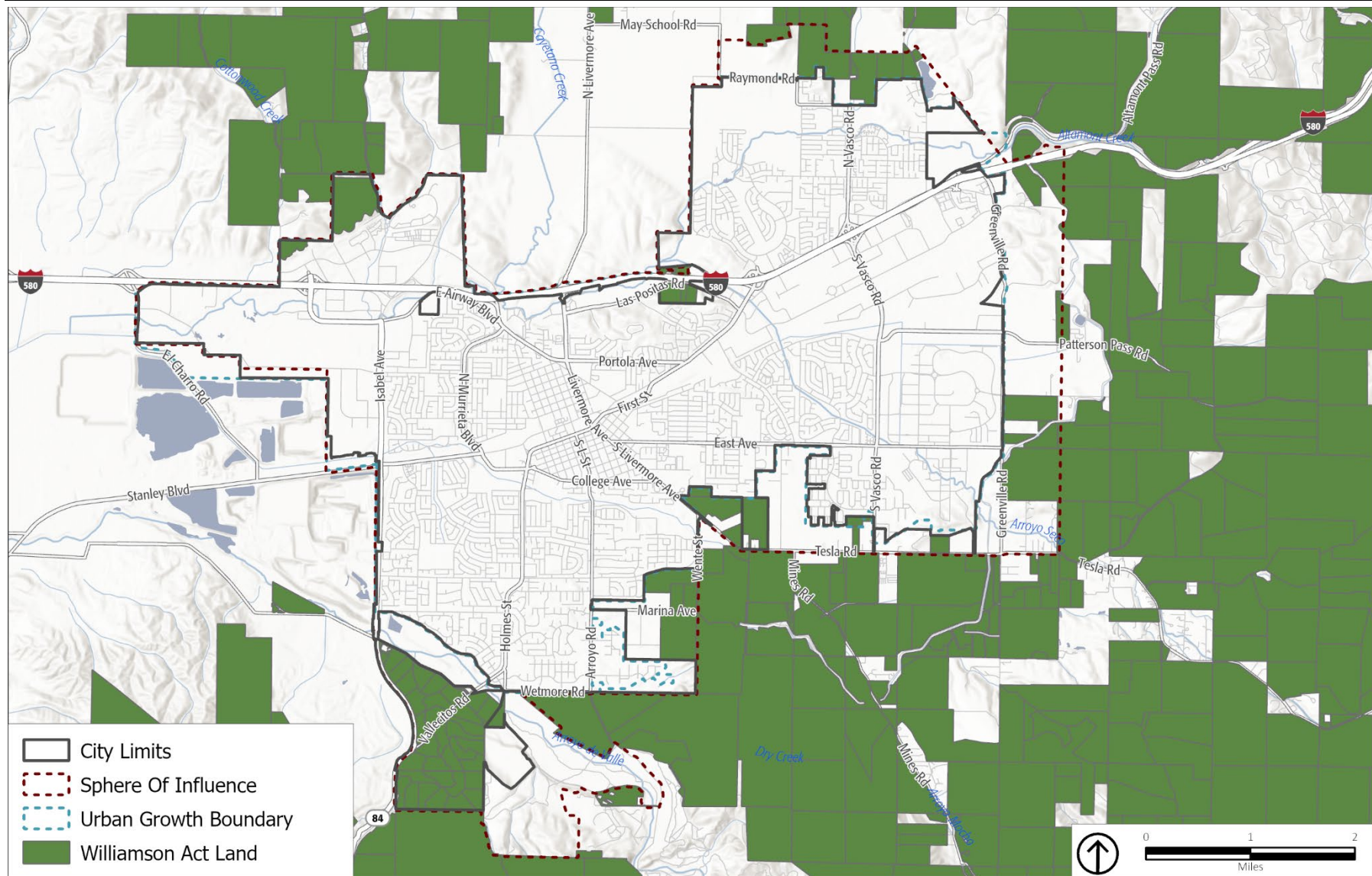


Source: CA Dept. of Conservation, 2020; City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

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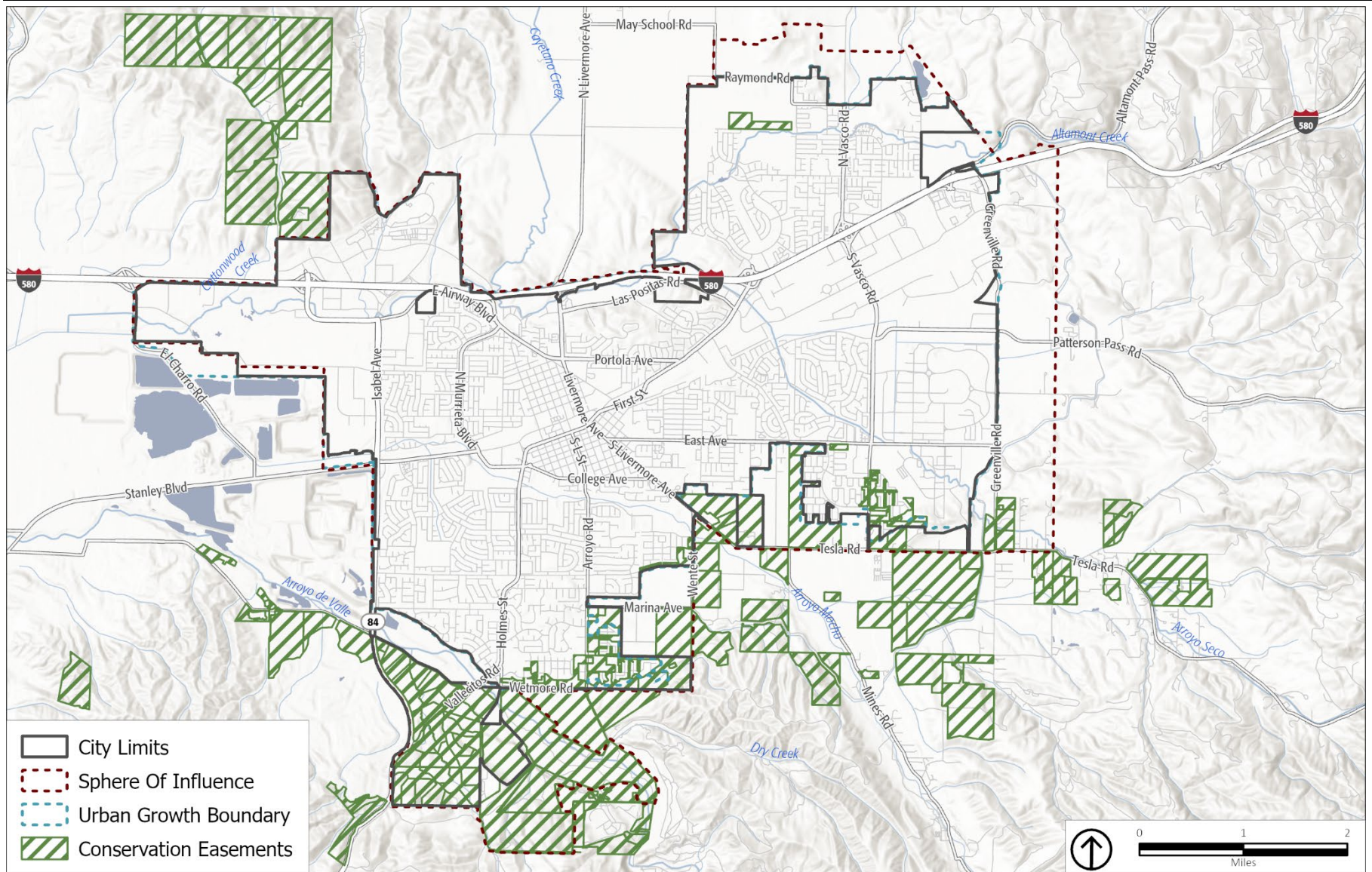
Figure OS-5 Williamson Act Land



Source: CA Dept. of Conservation, 2023; City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

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Figure OS-6 Tri-Valley Conservancy Conservation Easements



Source: City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

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Goal OS-4

Protect agricultural land and working landscapes as vital parts of the Livermore open space network in and around the Planning Area.



Policies

Policy OS-4.1 Farmland Preservation

Preserve undeveloped lands with an agricultural or open space designation, to the greatest extent feasible (i.e., through zoning, conservation easements, or other measures), for open space or agricultural use.

Policy OS-4.2 Vineyard Expansion

Implement necessary actions to preserve and expand the vineyards and orchards.

Policy OS-4.3 Diversity of Agricultural Products

Allow the cultivation of a variety of agricultural products, in addition to viticulture, to support agritourism, such as hops, vegetables, and fruit.

Policy OS-4.4 Permanent Conservation Easements

Promote awareness of permanent conservation easements as an opportunity to monetize land stewardship and support agricultural production, open space, and sensitive natural resources.

Policy OS-4.5 Williamson Act Land Conservation

Recruit agricultural landowners to enter the agricultural preserve program established under the Land Conservation (Williamson) Act, particularly in areas adjacent to urban designations in the General Plan.

Policy OS-4.6 Agricultural Soil Management

Protect and manage valuable agricultural soils in the Planning Area.

Policy OS-4.7 Agricultural Preservation Funding

Monitor and identify potential funding mechanisms to support the preservation of agricultural uses.

Policy OS-4.8 Agricultural Preservation Agency Coordination

Work with the County of Alameda, land trust organizations, other conservation groups, and water purveyors to preserve agricultural and related supporting uses outside the urban growth boundary.

Policy OS-4.9 Agricultural Incentives

Advocate at the State level to expand incentives, such as Williamson Act contracts, that allow agricultural operations to remain economically viable.



Conservation of agricultural lands in Livermore Valley supports economic development through agritourism.

PARKS AND RECREATION



May Nissen Park supports a variety of active and passive recreational opportunities for all ages in the heart of the city.

Parks and open space play an important role in community health by providing recreational opportunities and places for people to gather and increase social cohesion. The Livermore Area Recreation and Park District (LARPD) is a Special District that serves Livermore with parks, trails, recreation programs, and facilities. Created in 1947 by Livermore voters, the LARPD is an independent governmental agency governed by a five-person elected Board of Directors. LARPD's jurisdiction includes 250 square miles covering the City of Livermore and surrounding areas, providing a comprehensive system of neighborhood parks, community parks, special-use facilities, trails, and regional natural open spaces. In addition, the East Bay Regional Park District (EBRPD) manages regional parks and open space areas in and around Livermore, offering additional opportunities for hiking, biking, wildlife observation, and environmental education. EBRPD's regional trail network and preserved natural landscapes complement the local park system and help expand the region's access to recreational opportunities. Both Park Districts are independent and work collaboratively together and with the City to provide recreational services to the community.

Figure OS-7 identifies existing parks in Livermore. Although the City of Livermore is not the recreation services provider for the community, the City can ensure there are policies in place to equitably provide and distribute park space and amenities as the city continues to grow. The City coordinates with LARPD on the timing and development of park improvements, particularly in new development areas, to ensure recreational amenities keep pace with population growth and meet the diverse needs of Livermore residents.

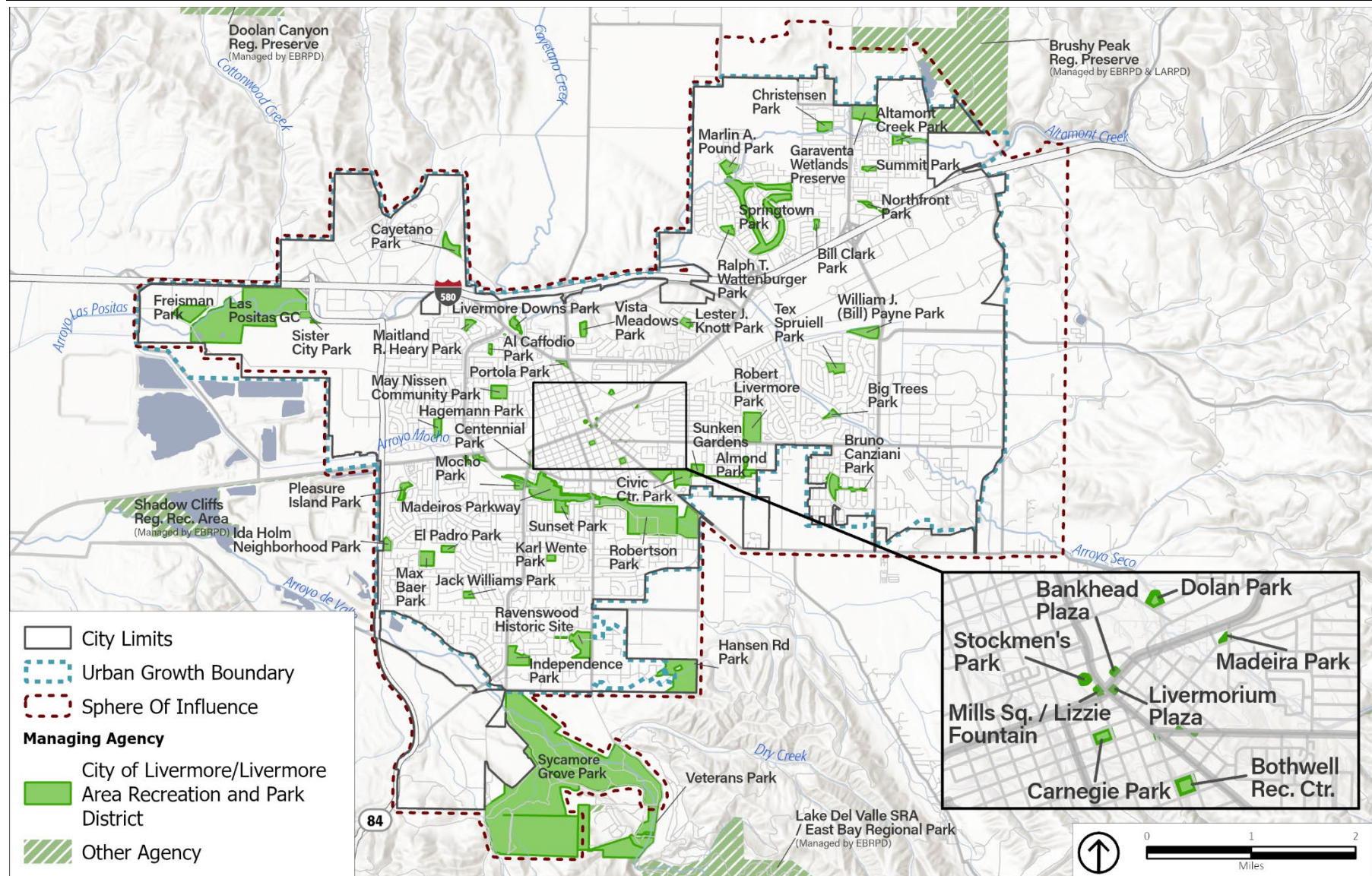
Having access to park space has also been shown to improve mental and emotional health. **Figure OS-8** shows the parts of Livermore that are within a half-mile area around each park and open space, which is the average 10-minute walking distance. People who live near a park have lower rates of obesity, reduced stress, and increased opportunities for social connection. Ensuring equitable access to parks and recreation facilities throughout the community is a key consideration in park planning and development.



Parks and open spaces encourage healthy lifestyles by supporting physical activities like walking and biking.

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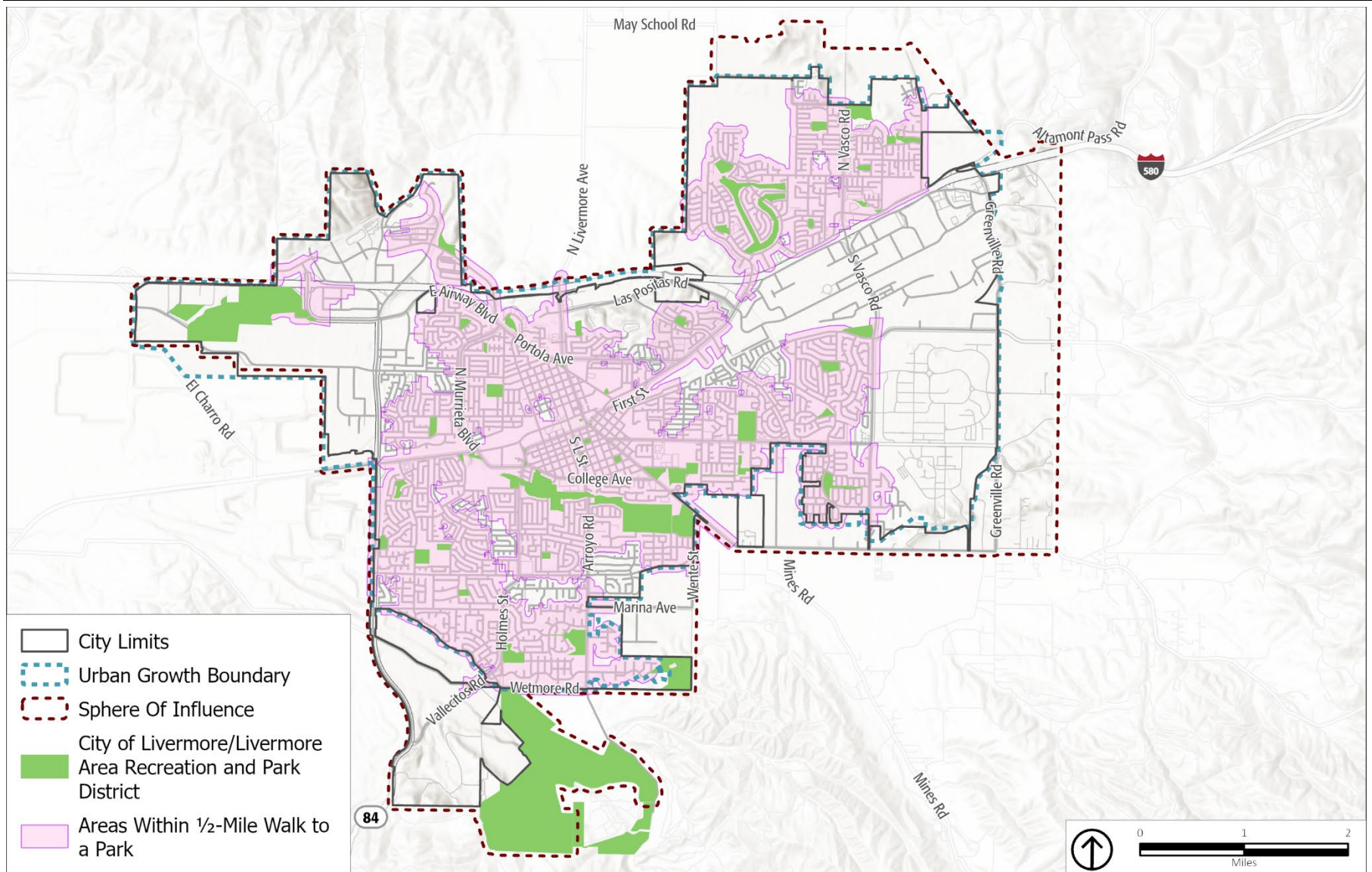
Figure OS-7 Livermore Parklands



Source: City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

Note: This map is included for informational purposes and is not adopted as part of this General Plan.

Figure OS-8 Land within a Half Mile of a Park



Source: City of Livermore, 2021; Esri, 2025; PlaceWorks, 2025

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Goal OS-5

Provide parks, recreational programs, and facilities that are equitably distributed so that all residents can experience the physical and mental health benefits of parks and open space.



Policies

Policy OS-5.1 Comprehensive Park and Recreation System

Work with the Livermore Area Recreation and Park District to provide a comprehensive system of parks and recreation facilities in Livermore that are efficient, accessible to all users, well-maintained, and equitably distributed throughout the community.



Policy OS-5.2 Park and Trail Master Plan Update

Coordinate with the Livermore Area Recreation and Park District on preparing and updating the District's Park and Trails Master Plan, including the identification of sites for future parks, trails, and recreation facilities. Ensure alignment with the Citywide Active Transportation Plan to create an integrated network of parks, trails, and corridors that support walking, biking, and other forms of non-motorized mobility.

Policy OS-5.3 Livermore Area Recreation and Park District Park Coordination

Coordinate with the Livermore Area Recreation and Park District regarding the timing of completion of park improvements and to develop adequate neighborhood, community, and other appropriate park space and facilities in Livermore to serve foreseeable population increases.



Policy OS-5.4 Regional Park Development Coordination

Coordinate with the Livermore Area Recreation and Park District and the East Bay Regional Park District in developing adequate regional park space around Livermore to serve the existing community and foreseeable population increases in Livermore and its environs.



Policy OS-5.5 Future Community Park Site

If the Livermore Area Recreation and Park District cannot identify an appropriate future community park site in the urban growth boundary, support the efforts of the Livermore Area Recreation and Park District to seek a community park site outside the urban growth boundary, in accordance with the North Livermore Urban Growth Boundary Initiative.

Policy OS-5.6 Park Access

Ensure all neighborhoods are within a half mile of a park, open space, or outdoor recreational area. In denser (average of 20 dwelling units per acre or greater) Specific Plan areas, such as Downtown, Isabel Neighborhood Specific Plan, and Midtown Specific Plan, ensure all units are within a quarter mile of a park, open space, or outdoor recreational area.

**Policy OS-5.7 Establish Park Service Standards**

Implement a standard of publicly owned parkland per thousand population that is consistent with Livermore Area Recreation and Park District standards.

Policy OS-5.8 Implement Park Service Standards

Coordinate with the Livermore Area Recreation and Park District to identify sites to maintain park service standards, prioritize new parks and park improvements in park-deficient neighborhoods, and identify funding sources for park acquisition and improvements.

**Policy OS-5.9 Park Development Fees**

Require developers to provide land or in-lieu fees for parks, as governed by the terms of the Quimby Act.

Policy OS-5.10 Park Fees

Collaborate with the Livermore Area Recreation and Park District on updates to the in-lieu park fee ordinance and park facility fees to ensure they reflect current needs and support the development of parks, trails, and recreational facilities.

Policy OS-5.11 Park and Public Facility Colocation

Where feasible and safe, incorporate recreational facilities into sites planned for new public facilities to maximize land use efficiency, provide community benefit, and achieve park service standards.

Policy OS-5.12 Park Water Conservation and Shade Provision

Provide water conservation and shade provision when designing or redesigning parks and/or advising the Livermore Area Recreation and Park District on park design/redesign.



Policy OS-5.13 Recreational and Cultural Facilities and Activities

Provide a full range of recreational and cultural facilities and activities in Livermore's park system.



Policy OS-5.14 Trail Access

Continue to encourage public access to, and maintenance of, existing recreational trails in Livermore. Prioritize gap closures and trail connections to denser neighborhoods (20 dwelling units per acre [du/ac] or more) to facilitate safe and convenient nonmotorized access to parks and open space.



Policy OS-5.15 Creekside Recreational Opportunities

Develop public recreational opportunities and trails along the arroyos and creeks while ensuring that increased public access is managed to protect these areas from adverse environmental impacts, such as erosion or water pollution.



Active and passive recreational facilities, such as picnic and barbecue areas, improve the quality and enjoyment of public spaces for residents and visitors.

AIR QUALITY



Interstate 580 is a major source of air pollutants, including diesel particulate matter from heavy-duty trucks and other vehicles.

Regulating Air Pollution

Air pollution can cause or contribute to a wide range of health problems. Some people, including children, the elderly, and those with existing respiratory or cardiovascular conditions, are particularly vulnerable to its effects. The State of California has established standards for "criteria" pollutants that are harmful to public health and the environment, including ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. In addition, the Bay Area Air District develops plans and regulations to help the region attain these health-protective standards.

Clean air is an essential resource for public health, environmental quality, and overall quality of life in Livermore. The city is in the San Francisco Bay Area Air Basin and falls under the jurisdiction of the Bay Area Air District (Air District), which regulates air pollution within the nine-county Bay Area region. Livermore's air quality is influenced by local topography, climate conditions, and various pollution sources. Interstate 580, which bisects Livermore, is a significant source of air pollutants, including diesel particulate matter from heavy-duty trucks and other vehicles. The community faces challenges with air quality, particularly elevated levels of ground-level ozone and particulate matter. The Tri-Valley cities, including Livermore, have been identified by the Air District as "impacted communities" because both ozone and fine particulate matter (PM_{2.5}) levels periodically exceed air quality standards.

Livermore and its residents can make efforts to manage air quality as a vital resource and work towards improving overall environmental conditions. Livermore's Climate Action Plan, which adopts strategies to reduce greenhouse gas emissions, also has the effect of reducing other types of air pollutants. These efforts align with regional, State, and federal initiatives to reduce air pollution and protect public health. By implementing policies and programs that improve air quality, Livermore can enhance public health outcomes, address climate change concerns, and create a more livable environment for all residents, especially those in neighborhoods most affected by air pollution sources.

Goal OS-6

Protect and improve Livermore's air quality



Policies

Policy OS-6.1 Air Quality Thresholds of Significance

Use thresholds of significance that match or are more stringent than the air quality thresholds of significance identified in the current Bay Area Air District Air Quality Guidelines when evaluating air quality impacts of projects.

Policy OS-6.2 Health Risk Assessment

Require new development that introduces new sensitive receptors near existing or planned sources of toxic air contaminants to prepare a Health Risk Assessment. Identify appropriate mitigation, based on the findings of the Health Risk Assessment, to reduce health risks from major sources of toxic air pollution, such as high-volume roadways, stationary sources, and warehousing.

Policy OS-6.3 Development Requirements Near Interstate 580

For new development that is within 1,000 feet from Interstate 580, require installation of enhanced ventilation systems and other strategies to protect people from respiratory, heart, and other health effects associated with breathing polluted air in both indoor and outdoor spaces.

Policy OS-6.4 Sensitive Receptors

Prohibit the location of sensitive receptors (e.g., residential uses, schools, hospitals) in the vicinity of industries that generate toxic emissions; conversely, prohibit the location of industries that generate toxic emissions in the vicinity of sensitive receptors.

Policy OS-6.5 Toxic Air Contaminants Sources

Require that when new development that would be a source of toxic air contaminants is proposed near residences or sensitive receptors, the project applicant shall provide adequate buffer distances (based on recommendations and requirements of the

California Air Resources Board and the Bay Area Air District or requirements that are more stringent), or the project applicant shall incorporate filters or other equipment/solutions into the new development to reduce nearby receptors' exposure to acceptable levels. The project applicant shall coordinate potential mitigation associated with this policy requirement with any required permit conditions from the Bay Area Air District.

When new residential or other sensitive receptors are proposed near existing sources of Toxic Air Contaminants, the project applicant shall provide adequate buffer distances (based on recommendations and requirements of the California Air Resources Board and the Bay Area Air District or requirements that are more stringent), or the project applicant shall incorporate filters or other equipment/solutions into the new residential and sensitive receptor development or the Toxic Air Contaminant source to reduce the potential exposure to acceptable levels.

Policy OS-6.6 Odor-Generating Land Use

When development of a known odor-generating land use is proposed near residences or sensitive receptors, the project applicant shall provide adequate buffer distances (based on recommendations and requirements of the California Air Resources Board [CARB] and the Bay Area Air District), or the project applicant shall incorporate filters or other equipment/solutions into the new odor-generating development to reduce nearby receptors' exposure to acceptable levels.

When new residential or other sensitive receptors are proposed near existing sources of odors, the project applicant shall provide adequate buffer distances (based on recommendations and requirements of CARB and the Bay Area Air District), or the project applicant shall incorporate filters or other equipment/solutions into the new residential and sensitive receptor development to reduce the receptor's exposure to acceptable levels.

Policy OS-6.7 Construction Dust Control Plan

Require project developers to develop and implement a construction-period dust control plan, consistent with the Basic Best Management Practices for Construction-Related Fugitive Dust Emission outlined in the Bay Area Air District's California Environmental Quality Act Air Quality Guidelines.

Policy OS-6.8 Construction Air Quality Impacts Reduction

Require the project applicant to minimize air quality impacts generated during construction activities in compliance with the Bay Area Air District's regulations and guidelines on construction activity impacts.

Policy OS-6.9 Refrigerated Trucks

Require new development, when applicable, to provide adequate truck parking loading space, and a zero-emission power source for refrigerated trucks to minimize idling during truck operation.

Policy OS-6.10 Vehicle Emissions Reduction

Work with regional municipalities and State agencies to reduce automobile-related vehicle emissions.



Policy OS-6.11 Vehicle Trip Reduction Incentives

Develop incentives to reduce vehicle trips and increase ridesharing to reduce pollutants generated by vehicular combustion engines.



Policy OS-6.12 Anti-Idling Requirements

Reduce and limit idling of municipal, community, and/or commercial vehicles.



Policy OS-6.13 Wildfire Health Protection

Work with the Alameda County Public Health Department to distribute health information and N95 masks during poor air quality events.

Policy OS-6.14 Clean Air Center

Operate equitably located, accessible clean air centers on poor air quality days.



Policy OS-6.15 Public Transit Support

Work with transit providers and implement local improvements to maximize the use of regional and local mass transit systems. To this end, the City shall actively support:



- a. Federal, State, and regional funding for construction of Valley Link passenger rail service.
- b. The designation of special lanes on Interstate 580 for the exclusive use of commuter buses during peak-traffic periods.
- c. Efficient operations of local and regional transit systems to minimize the travel time between communities and major generating areas served by the regional system.
- d. Transit connections to ACE, BART, and future rail stations in close coordination with the Livermore-Amador Valley Transit Authority.
- e. Improved bicycle and pedestrian connections to ACE stations and the Livermore transit center.

Policy OS-6.16 Privately Owned Zero-Emission Equipment

Work with local and regional partners to publicize the advantage of zero-emission equipment and any available financial incentives.



Policy OS-6.17 Low-Emission City Vehicles

Purchase City vehicles that have alternative fuel systems with reduced emissions as suitable models are available.

**Policy OS-6.18 Agency Coordination for Dust Control**

Coordinate with other local and regional agencies (e.g., the Livermore Area Recreation and Park District, Livermore Valley Joint Unified School District, Alameda County) to manage and control fugitive dust from sources, including, but not limited to, quarries, ballfields, construction sites, and landscaping and maintenance activities.

Policy OS-6.19 Project-Specific Emissions

Require projects that exceed the Bay Area Air District (Air District) screening criteria to evaluate project-specific construction and operational emissions in conformance with the Air District's methodology, and if criteria air pollutants are determined to have the potential to exceed the Air District thresholds of significance, require mitigation of impacts to an acceptable level.

CLIMATE CHANGE, ENERGY CONSERVATION, AND EFFICIENCY



As part of energy conservation and efficiency efforts, solar access helps create an equitable energy system that reduces greenhouse gas emissions.

Climate Change

Climate change is driven by an increase in greenhouse gas emissions (GHGs) in Earth's atmosphere, trapping more heat near the surface and changing Earth's climate in a number of ways. Livermore, like most communities in California, is expected to experience multiple direct impacts as a result of climate change, including potential flooding, drought, extreme heat, and negative effects on public health and biodiversity. The City addresses these challenges through its Climate Action Plan (CAP), which serves as a comprehensive strategy for reducing emissions through various land use, transportation, energy, and waste-reduction measures. Regular updates to the CAP ensure that Livermore maintains a Qualified GHG Reduction Strategy that meets or exceeds State reduction targets and reflects the latest scientific understanding and technological solutions. By coordinating climate action implementation across City departments, Livermore takes a holistic approach to reducing emissions and adapting to climate impacts. This coordinated strategy helps create a resilient community prepared to thrive amid changing conditions while contributing to global efforts to limit warming and preserve environmental systems for future generations.

Energy Conservation and Efficiency

Energy consumption often uses natural resources and generates significant greenhouse gas emissions that contribute to climate change. In Livermore, as in many communities across California, energy used for buildings, transportation, and industrial processes accounts for a substantial portion of the community's carbon footprint. The City of Livermore has established greenhouse gas reduction goals through its Climate Action Plan, which serves as the primary implementation strategy for reducing emissions from energy use and other sources. Livermore can reduce its contribution to climate change, improve air quality, reduce energy costs, and enhance energy resilience by continuing to increase energy conservation, energy-efficiency, and use of clean, renewable energy sources.

California has established ambitious targets for reducing greenhouse gas emissions and transitioning to carbon-free electricity, including achieving carbon neutrality by 2045. Livermore supports these goals by promoting energy-efficient building designs, encouraging renewable energy installations, and supporting the transition to all-electric buildings and vehicles, among other strategies. The City leads by example through implementing energy-efficiency measures and renewable energy at municipal facilities, particularly those that provide critical services or function as resilience centers. Energy conservation and efficiency efforts are complemented by participating in community choice energy programs like Ava Community Energy, which provides residents and businesses with cleaner electricity options. These combined efforts also create local economic benefits and improve energy security.



The City advances energy efficiency by supporting the transition to all-electric vehicles and expanding access to charging infrastructure.

Goal OS-7

Make Livermore strong and resilient by acting to significantly reduce greenhouse gas emissions and adapt to a changing climate.



Policies

Policy OS-7.1 Climate Action Plan Updates

Update the Livermore Climate Action Plan (CAP) at least every five years, maintaining the CAP as a Qualified Greenhouse Gas (GHG) Reduction Strategy under the Guidelines for the California Environmental Quality Act as laid out by the State



and Bay Area Air Quality Management District. The CAP shall include an inventory of the level of GHG emissions within the city for a recent year, in comparison to a 2005 baseline, and shall set out specific policies and actions to be undertaken by the City to reduce GHG emissions to a level that meets or exceeds State GHG reduction targets. The policies and actions will include incentives, actions, and requirements to reduce the city's GHG emissions, the GHG emissions of the private sector, and actions that the City will take in concert with public agencies, the private sector, and other stakeholders to reduce GHG emissions. Updates to the CAP will include a public and stakeholder engagement process.

Policy OS-7.2 Climate Action Plan Implementation

Continue to implement the Climate Action Plan (CAP). Identify key City staff and partner agencies responsible for implementing CAP strategies and actions. Integrate CAP strategies and actions into annual department workplans and budget. Continue to identify and pursue funding mechanisms for CAP implementation.



Policy OS-7.3 Planning for Climate Change

Account for the effects of climate change in updating or amending the General Plan or Development Code, disaster planning efforts, City projects, infrastructure planning, future policies, and long-term strategies, as feasible. Recognize potential climate change consequences, such as flooding, wildfire, hotter temperatures, and changing air quality. Protect the community from the effects of climate hazards, including against risks of displacement and challenges in rebuilding after major incidents.



Policy OS-7.4 Climate Awareness

Maintain a climate protection action-awareness campaign as well as support and coordinate other similar efforts in order to make residents, public institutions and businesses aware of the link between their everyday energy use and greenhouse gas emissions.



Policy OS-7.5 Climate Action Coordination

Coordinate climate action efforts and implementation of climate adaptation projects across City departments.








Goal OS-8

Promote a clean, reliable, and equitable energy system by increasing energy efficiency, expanding the use of renewable and carbon-free energy sources, and reducing greenhouse gas emissions from buildings, transportation, and infrastructure.



Policies

- Policy OS-8.1 Climate Action Plan Implementation**
 Implement Climate Action Plan strategies to improve energy efficiency and conservation, promote carbon-free energy sources, and reduce energy-related greenhouse gas emissions. 
- Policy OS-8.2 Per-Capita Energy Use**
 Reduce per-capita energy use. 
- Policy OS-8.3 Clean and Resilient Energy for Public Facilities**
 Ensure City facilities and operations use clean, reliable, and resilient energy sources that reduce emissions and support long-term sustainability. Prioritize energy systems that improve efficiency and maintain essential services during power disruptions. 
- Policy OS-8.4 Sustainable Energy through Electrification**
 Develop strategies and standards to advance sustainable energy by requiring efficient, all-electric appliances in new buildings, where feasible. Encourage property owners to transition existing buildings to electric appliances over time through partnerships, incentives, and public education that promotes clean energy. 
- Policy OS-8.5 Energy-Efficient Development Decisions**
 Consider the energy efficiency of proposed development when making land use and development review decisions. 

Policy OS-8.6 Solar Access

Consider solar access, siting structures to maximize natural heating and cooling, and landscaping during the design review process to aid passive cooling protection from prevailing winds and maximize year-round solar access.

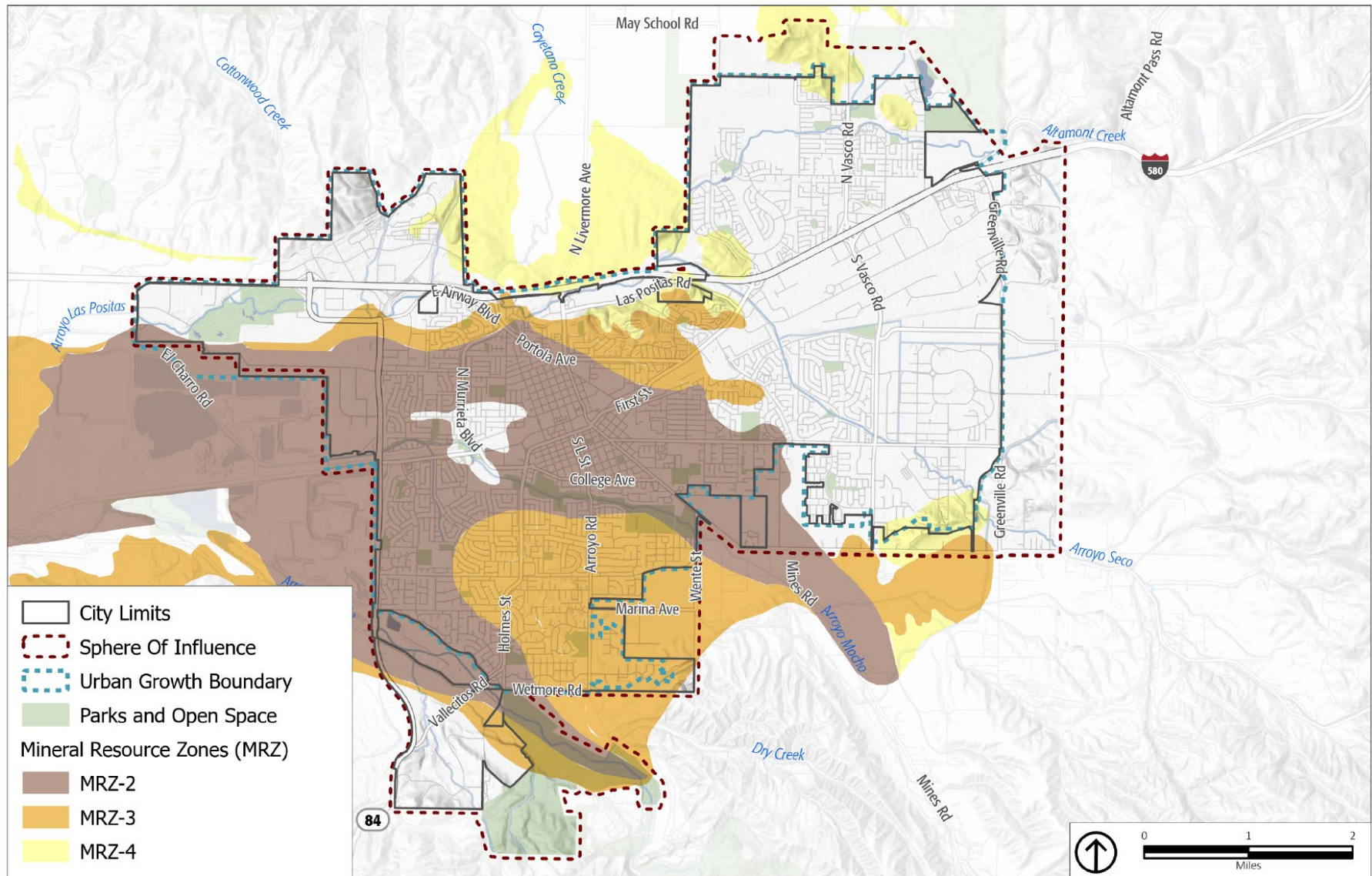


An electric transit fleet would support Livermore's greenhouse gas reduction goals.

MINERAL RESOURCES

Areas near Livermore are underlain by alluvial deposits, which contain significant reserves of sand and gravel deposits suitable for use as aggregate in the production of Portland Concrete Cement, as shown on **Figure OS-9**. Mining is likely to continue in the vicinity of Livermore due to the continued presence of these resources and the need for gravel and cement in the regional and local economy.

Figure OS-9 Livermore Mineral Resources



Source: City of Livermore, 2021; Esri, 2025; California Dept. of Conservation, 1986; PlaceWorks, 2025

Note: This map is included for informational purposes and is not adopted as part of this General Plan.

Goal OS-9

Preserve and use mineral resources in the city and its Planning Area, while ensuring minimal adverse impacts on environmental resources and surrounding uses.



Policies

Policy OS-9.1 Mineral Resources Consideration

Consider potentially available mineral resources on the property or in the vicinity when considering land use proposals.

Policy OS-9.2 Mining Operation

Prior to approval of any new or expanded mining operation, ensure that the operation will not create significant nuisances, hazards, or adverse environmental effects.

Policy OS-9.3 Mining Operation Standards

Require new or substantially expanded mining operations in the Planning Area to adhere to the following standards and work with Alameda County to implement these standards:

- a. Demonstrate no significant adverse impacts from the mining operation on adjoining areas and uses, including, but not limited to, noise, dust, and vibration.
- b. Demonstrate no substantial increase in hazards to neighboring uses, water quality, air quality, agricultural resources, and biological resources.
- c. Demonstrate that the proposed plan complies with existing applicable County and State waste management plans and standards.
- d. Implement a landscaped buffer zone between quarrying operations and noise and dust-sensitive adjacent uses to ensure consistency with standards established in the City's Noise Element of the General Plan.
- e. Use berms, barriers, sound walls, and other similar measures to ensure that noise from quarrying does not cause exceedance of ambient noise-level standards relevant to noise-sensitive adjacent uses.

Policy OS-9.4 Mining Operation Expansion

Allow continued operation and expansion of existing mining operations where impacts to environmental resources and surrounding uses can be mitigated to less-than-significant levels.

Policy OS-9.5 Mineral Extraction Impacts

Evaluate potential mineral extraction proposals with careful consideration of their effects on air and water quality, agriculture, vegetation, wildlife, and scenic, visual, recreational resources, land use, and community goals. The City will work collaboratively with applicants to avoid or minimize significant adverse impacts and support the City's long-term environmental and community values.

Policy OS-9.6 Mining Reclamation

Ensure reclamation of mining areas for reuse are consistent with the City's General Plan goals relative to land use and economic development and provision of services and meet the requirements of the California Surface Mining and Reclamation Act.

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