



6

PARKS, OPEN SPACE AND CONSERVATION

The purpose of the Parks, Open Space, and Conservation Element is to provide guidance for preservation of the City’s open spaces and other natural resources, as well as identify the parks and recreation facilities available to local residents. It addresses parks and recreation, open space, biological resources, and conservation.

6.1 PARKS AND RECREATION

This General Plan chapter serves as a guiding document for any implementation documents prepared by the City Community and Recreation Services Department that plan for and develop parks in Concord. Under this Plan, Concord is committed to creating parkland and maintaining a park system that meets citizens’ recreational needs and contributes to the City’s positive image. The presence of well-designed parks and community facilities is essential to the health and well-being of City residents.

Existing Parks and Recreation Facilities

The existing Concord parks and recreation system comprises 22 neighborhood and community parks and various specialized recreation facilities. These parks range in size from the 0.2-acre Iron Horse Park to the 126-acre Newhall Community Park. All provide valuable recreation opportunities to Concord’s residents. In addition to the parks, seven community centers are distributed throughout the City. These offer recreational and educational services, as well as foster a sense of community identity and pride. The City also operates a Senior Center on the grounds of the John F. Baldwin Park and public swimming pools at Concord Community Park and Meadow Homes Park. In addition, specialized recreation facilities such as the Diablo Creek Golf Course and the Galindo House and Gardens provide unique opportunities for recreation within the City. In total, the City’s parks and recreation facilities offer a diverse range of outdoor, indoor, and cultural experiences to meet the needs of the community. Table 6-1 details existing public parks and recreation facilities by acreage.

Table 6-1: Existing Public Parks and Recreational Facilities

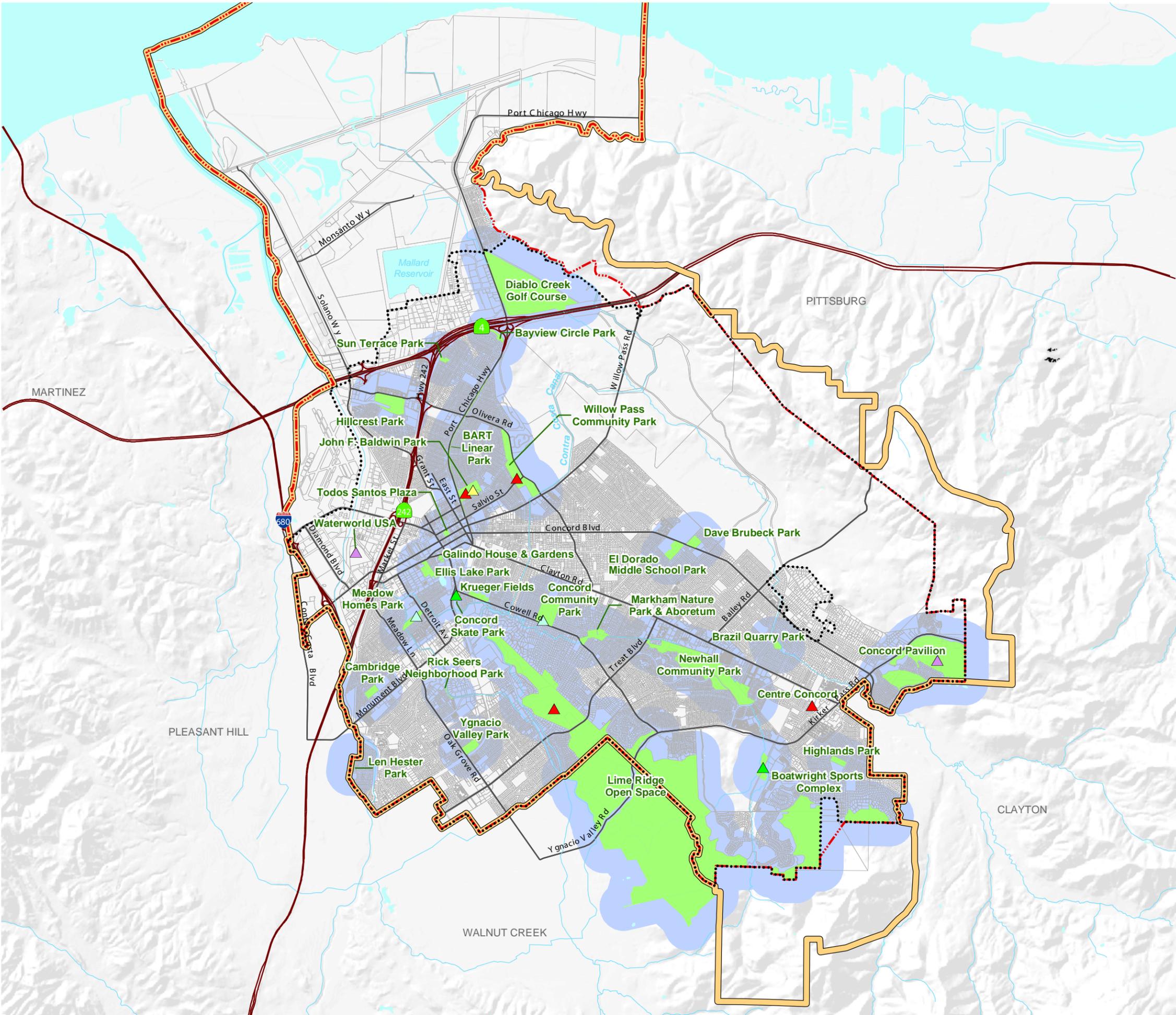
Name	Acres
BART Linear Park	5.2
Bayview Circle Park	3.3
Brazil Quarry Park	3.6
Cambridge Park	6.4
Dave Brubeck Park (Concord Boulevard Park)	7.1
Concord Community Park	30.2
Concord Skate Park	0.6
El Dorado Middle School Park	11.8
Ellis Lake Park	9.6
Highlands Park	5.7
Hillcrest Community Park	28.4
Iron Horse Park	0.2
John F. Baldwin Park	17.8
Krueger Fields	7.2
Len Hester Park	3.9
Meadow Homes Park	8.5
Newhall Community Park	126.1
Rick Seers Neighborhood Park	0.6
Sun Terrace Park	2.6
Todos Santos Plaza	2.0
Willow Pass Community Park	40.4
Ygnacio Valley Park	9.5
Neighborhood and Community Parks Subtotal	330.7
Daniel E. Boatwright Sports Complex	9.4
Diablo Creek Golf Course	189.9
Galindo House and Gardens	1.6
Lime Ridge (within Planning Area) ¹	90.0
Markham Nature Park & Arboretum	14.2
Specialized Recreation Subtotal	305.1
Total	635.8

Source: City of Concord, Dyett and Bhatia 2006

¹ Includes staging areas, trails, and parking areas located within Lime Ridge as parkland. Excludes passive open space and conservation lands.

Figure 6-1
**Existing Parks
 and Recreation Facilities**

-  Existing Parks and Recreation Facilities
-  Community Center
-  Senior Center
-  Swimming Pool
-  Sports Complex
-  Major Private Recreation Facility
-  1/4-Mile Walking Distance from Park
-  City Limits
-  Sphere of Influence
-  Planning Area



Source:
 City of Concord, 2011; Dyett & Bhatia, 2006.



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Table 6-2 shows the total acreage by park type and the acreage per 1,000 residents, as of 2006—the base year for this Plan. The acreage tally in this table is conservative, as it excludes large passive open space areas and private open space within subdivisions. Figure 6-1 illustrates existing parks and recreation facilities.

Table 6-2: Summary of Existing Recreational Facilities

Type	Total Acres	Acres per 1,000 residents
Neighborhood and Community Parks	331	2.7
Specialized Recreation	305	2.5
Total	636	5.2

Source: Dyett and Bhatia, 2006



Park Demand

The process for determining demand of parkland in Concord is based on the following components:

- Implementing the parkland standards for neighborhood and community parks;
- Making up the existing deficiency in parkland for current residents in Concord with new parkland; and
- Providing parkland to meet demand by new residents in Concord.

The City’s current citywide goal for public parkland is 6 acres per 1,000 residents. This goal will be reached through a combination of land dedication within new development, in-lieu fees, bond measures, land donations, Regional Park District acquisitions, and other methods. Consistent with the Quimby Act, the City requires

new development to dedicate 5 acres of public parkland per 1,000 new residents or to pay an in lieu fee equivalent to the value of such parkland. These funds are used to acquire parkland as opportunities arise. The park impact fee is an important tool for reaching the 6 acre per 1,000 goal.

In 2006, 636 acres of neighborhood and community parks and specialized recreation facilities served a population of approximately 124,440 residents, resulting in 5.2 acres of parkland per 1,000 residents. This is 87 percent of the 6 acre per 1,000 goal. Although Lime Ridge is not a typical community park, many of the staging areas, trails and parking areas located within the park do serve residents’ open space needs and are included in the calculations.

As discussed in the Land Use Element, the buildout of the General Plan Diagram would result in approximately 14,120 new residents in Concord outside of the Concord Reuse Project (CRP) Area and another 28,800 persons within the CRP area, for a total population of about 167,360. According to the parkland performance standard requiring 5 acres of parkland per 1,000 new residents, new development would require 215 acres of parkland. Using the City’s functional parkland goal of 6 acres per 1,000 residents, the total population at buildout would require a total of 1,004 acres of parkland or an additional 368 acres above the current parkland supply. Table 6-3 summarizes this parkland need.

Table 6-3: Parkland Demand Summary at Plan Buildout

New Residents at Buildout	42,920
New Parkland Acreage Needed for Standard (5 acres per 1,000 new residents)	215
Total Population at Buildout	167,360
Total Parkland Acreage Needed for Goal (6 acres per 1,000 residents)	1,004
2011 Parkland Acreage	636
Additional Parkland Acreage Needed to Meet Citywide Goal	368

Source: Arup, 2011. City of Concord, 2012

In 2011, the citywide park inventory is not sufficient to accommodate the projected population at buildout. In addition, many of the City's residents are not within a reasonable walking distance to a park, and many of the parks in the City's inventory contain specialized recreational facilities, such as hiking trails, that may not appeal equally to all residents. New community and neighborhood park facilities will be needed to augment the supply of parkland in areas that are not currently in close proximity to a neighborhood park and to serve developing areas.

Proposed Parks

The Area Plan for the Concord Reuse Project includes a sufficient quantity of parkland to attain the citywide goal of 6 acres per 1,000 residents. A new City park is proposed on about 100 acres on the east side of Willow Pass Road within the project site. A 75-acre tournament sports facility is planned on an adjoining site. The Area Plan also calls for an expansion of Willow Pass Park on the east side of Olivera Road. In addition, over 2,500 acres on the site are designated "Conservation Open Space," with a majority of this acreage to be contained in a new regional park. Because most of the regional park will be passive open space, it will not all count toward the City's parkland acreage standard. However, staging areas, picnic areas, nature observation areas, and other improved facilities may be included. The Reuse Project site also includes a network of greenways, portions of which may serve as parks for adjacent neighborhoods.

Neighborhood and pocket parks are also included in the Concord Reuse Project Area Plan. The precise location of these parks will be determined through future planning studies and development approvals. Each of the village neighborhoods is likely to have at least one neighborhood park ranging from 2 to 10 acres in size. Smaller facilities such as plazas and pocket parks will be developed, providing space not only for recreation but also for public gatherings, markets, outdoor performances, and other activities.

Outside of the Reuse Project site, the City will continue to strive to locate neighborhood and community parks in areas that are currently not located within reasonable walking distance to a park. Joint use agreements with schools can provide an effective way to increase park acreage in underserved areas.



6.2 PARKS AND RECREATION GOALS, PRINCIPLES, AND POLICIES

GOAL POS-1: PREMIER PARKS AND RECREATION FACILITIES

Principle POS-1.1: Provide and Maintain Park and Recreation Facilities for the Entire Community.



Policy POS-1.1.1: Acquire and develop additional neighborhood and community parks to serve existing and future needs, working toward a goal of 6 acres of park land per 1,000 residents.

Conservation open space would generally not be counted when calculating this standard. However, portions of conservation areas and regional parks may be included if they include staging areas, recreational facilities, lawns, nature centers, picnic areas, and similar improvements.



Policy POS-1.1.2 Ensure that new residential development provides for a substantial share of the 6 acre per 1,000 resident goal cited above. New residential development shall be required to dedicate on-site parkland or pay an in-lieu fee for park acquisition. The dedication and/or fee requirement shall be based on a standard of 5 acres per 1,000 residents, consistent with the Quimby Act.



Policy POS-1.1.3: Provide a variety of recreation spaces and facilities to serve the needs of the community.

Examples of this include play fields, parks, open spaces, trails, recreation centers, special recreation areas, golf courses, outdoor entertainment facilities such as bandstands, and commercial recreational uses.

Policy POS-1.1.4: Continue to acquire and/or improve new parklands as needs or opportunities arise.

Policy POS-1.1.5: Secure and maintain parks and open space facilities consistent with the ability of the City, East Bay Regional Park District, or an



Policy POS-1.1.6: Pursue the development of park and recreation facilities within reasonable walking distance of all residences.

For planning purposes, reasonable walking distance is defined as one-quarter to one-half mile.

Policy POS-1.1.7: Review infrastructure needs for existing and new recreational facilities, and where appropriate, identify required improvements in the City's Capital Improvement Program.

The City will assess its recreational facilities to ensure that related infrastructure, including parking lots, pathways, buildings, and service facilities are functional and well maintained. Attention will also focus on providing on-site parking, bicycle storage facilities, and transit access for park facilities that will meet the needs of park users and adjacent neighbors.

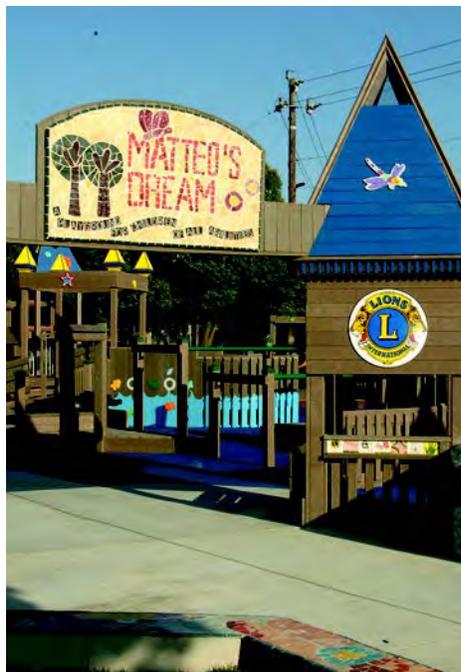


POS-1.1.8: Identify new park sites within the City limits to ensure that sufficient park and recreation facilities are set aside for Concord residents through the parkland dedication process, in lieu fees paid by subdividers, or other methods appropriate for increasing the City's parkland inventory.

This would include park sites within the already urbanized portion of the City as well as parks on the Concord Reuse Project site. While the Reuse Project site will enable Concord to meet its 6 acre per 1,000 goal on a citywide basis, there will continue to be a need for new parks in other parts of the City where development takes place.

Principle POS-1.2: Provide a Citywide, Interconnected, Multi-Use Trails System.

Policy POS-1.2.1: Implement strategies and actions associated with the design, development, and operation of



multi-purpose trails as contained in the Trails Master Plan.

The Trails Master Plan provides the framework for the future planning of an integrated and easily-accessible system of routes and trails. Amendments to the Trails Master Plan may be made periodically to reflect new opportunities, such as those on the Concord Reuse Project site.

Policy POS-1.2.2: Work with proposed development projects to provide new linkages to existing trails and create new trails where feasible.

This is particularly important on the Reuse Project site, given the scale of the development and the importance of integrating the site with the balance of Concord.



Principle POS-1.3: Facilitate Community Recreational Opportunities at Public School Sites.

Policy POS-1.3.1: Utilize closed or under-used public school sites for community recreation when feasible.

Policy POS-1.3.2: Work with the Mt. Diablo Unified School District to provide use of school facilities after school and during summer months for community recreation uses.

See also Policy PF-2.1.5.

Principle POS-1.4: Facilitate Private Recreation.

Policy POS-1.4.1: Encourage developers to provide for-profit regional recreation facilities.

While the City's first and foremost objective is to ensure that new neighborhoods provide recreational amenities for the enjoyment of future residents, the City also encourages new development to contribute recreational facilities to the greater community, when feasible. These may include new golf courses, equestrian centers, water-related facilities, and tournament sports facilities, all of which can help meet recreational needs.

6.3 OPEN SPACE

Concord's setting—within a valley surrounded by gently sloping foothills and laced with creeks—includes natural resources that are important, not only for aesthetic value, but also for environmental quality, habitat protection, and water resources. In addition, preserving the general configuration of the hills, creeks, and natural topographic features fosters a sense of place for the community, and this affords current and future residents an understanding of the City's natural setting and native topography. These many functions of open space underscore the importance of careful land use planning.

Classification of Open Space

State planning law provides a structure for the preservation of open space by identifying four open space categories:

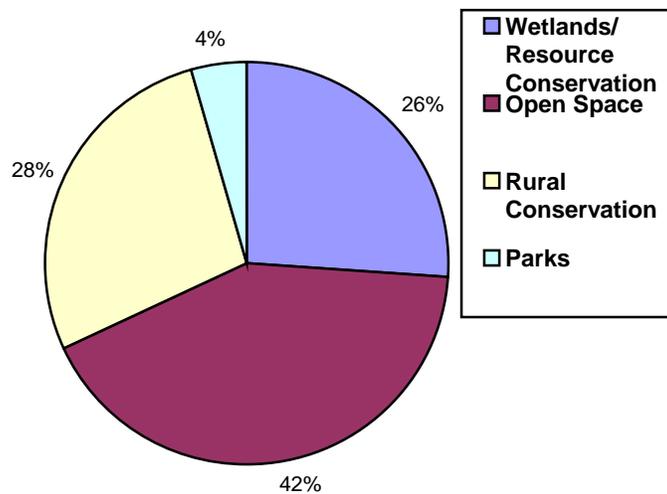
- Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, such as: habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; coastal beaches, lakeshores, banks of rivers and streams; and watershed lands.
- Open space for outdoor recreation including, but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, such as access to lakeshores, beaches, rivers and streams; and areas that serve as links between major recreation and open space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
- Open space for public health and safety including, but not limited to, areas that require special management or regulation due to hazardous or special conditions. This type of open space might include: earthquake fault zones, unstable soil areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.
- Open space used for the managed production of resources including, but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and

streams that are important for the management of commercial fisheries; and areas containing major mineral deposits.

Existing Open Space

Figure 6-2 illustrates a composite of open space within Concord. The land use classifications that fall under one or more of these open space categories are: Active Parks, Open Space, Wetlands/Resource Conservation, and Rural Conservation. Open water (e.g., Suisun Bay) is excluded. In total, open space lands constitute approximately 12,743 acres or 38.4 percent of the total Planning Area. Significant open spaces within the Planning Area include: Lime Ridge Open Space, the Mt. Diablo Foothills, and the area north of Mallard Reservoir that is designated Wetlands/Resource Conservation. More than half of the Concord Reuse Project Area will be conserved as open space, including the Los Medanos Hills and the Mount Diablo Creek corridor. The distribution of land use classifications that comprise open space areas is summarized in Chart 6-1.

Chart 6-1: Types of Open Space in the Concord Planning Area²



² Chart 6-1 is based on conditions as of 2012, using the acreages from General Plan Table 3-2 (Land Use Element). The portion of the Reuse Project Area planned as permanent open space is included in the chart; the portion planned for future development is not included.



The open space resources illustrated in Figure 6-2 are not intended to imply that the public interest would be best served by prohibiting development on all such lands. Rather, these open space resources likely signify one of three possible scenarios, depending upon the ecosystem fragility, location, hazard potential, regulatory constraints, and other pertinent factors. General Plan policies and Development Code requirements should be consulted to decide which scenario to apply to specific areas of open space. The scenarios are:



- All development should be prohibited;
- Development should be permitted on part of the land and the balance preserved as open space—a clustering concept; or
- Development should be permitted subject to site plan and architectural review and the imposition of specific conditions to protect against hazards and preserve the integrity of the land and the environment.

Determination of how these open space resources are to be protected will be made on a case-by-case basis following standards and review procedures established in the Development Code and subdivision regulations consistent with General Plan policies. Those areas meeting the first of the three criteria listed above will generally remain permanent open space and will be used for recreation or resource conservation.

Open Space Action Plan

Concord’s Open Space Action Plan consists of the goals, directions for specific actions and programs which the City Council intends to pursue to implement the ideas for open space systems contained in this element. Additional detail on how the Action Plan will be implemented is in Volume III, Implementation Program, Table 5, “Implementation Actions for Parks, Open Space and Conservation Element”. Taken together, these initiatives specifically respond to and are consistent with the Government Code’s requirements for an Open Space Action Plan that is to include “specific programs which the legislative body intends to pursue in implementing its open space plan” (Section 65564).

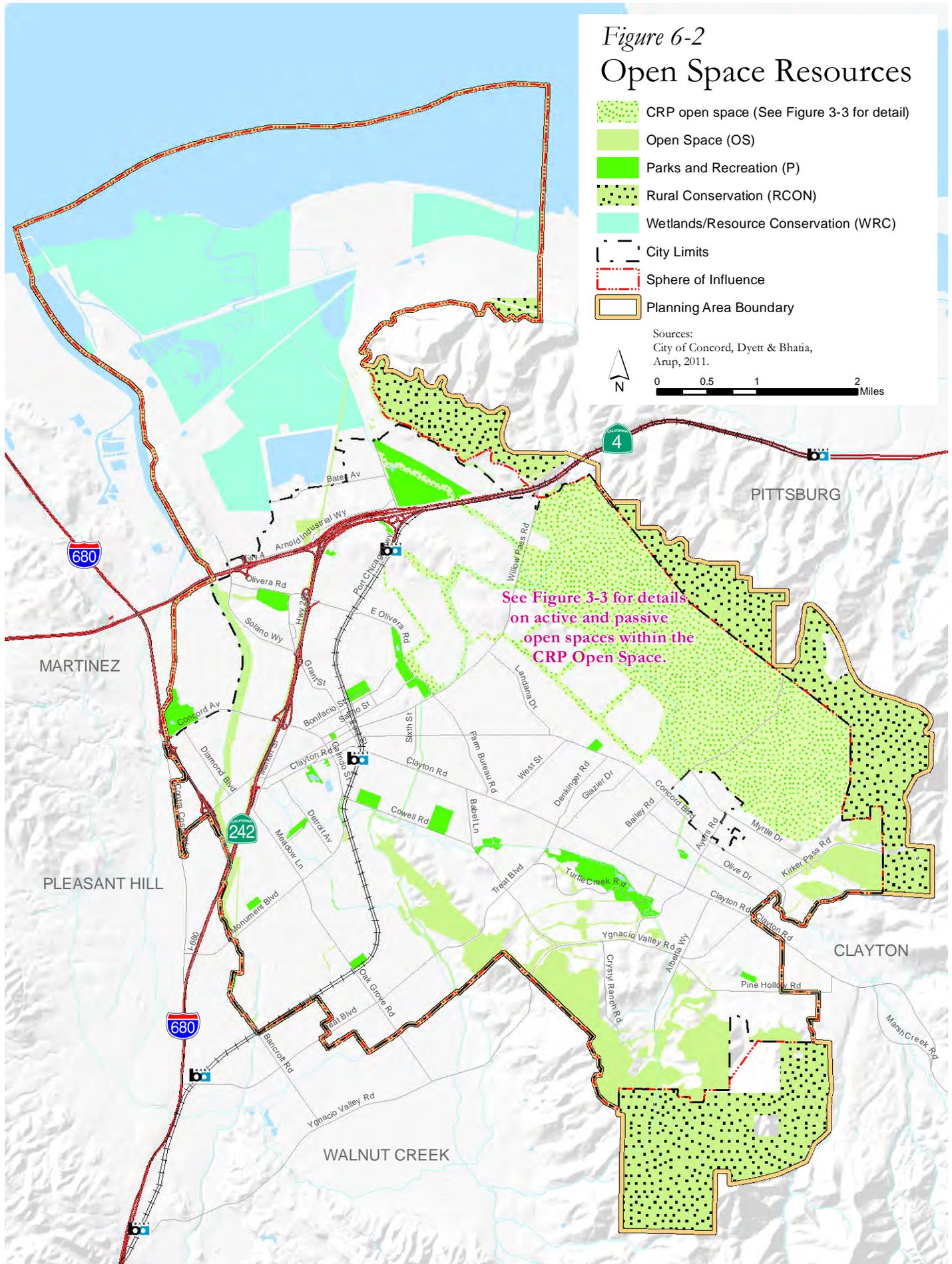
Figure 6-2
Open Space Resources

-  CRP open space (See Figure 3-3 for detail)
-  Open Space (OS)
-  Parks and Recreation (P)
-  Rural Conservation (RCON)
-  Wetlands/Resource Conservation (WRC)
-  City Limits
-  Sphere of Influence
-  Planning Area Boundary

Sources:
City of Concord, Dyett & Bhatia,
Arup, 2011.



0 0.5 1 2 Miles





6.4 OPEN SPACE GOALS, PRINCIPLES, AND POLICIES

GOAL POS-2: A PROTECTED AND ACCESSIBLE OPEN SPACE SYSTEM

Principle POS-2.1: Provide an Interconnected Open Space System.

Policy POS-2.1.1: Acquire, preserve, and maintain open space for future generations.

Policy POS-2.1.2: Participate in joint planning and implementation with the State of California Parks and Recreation Department, East Bay Regional Park District, and other appropriate agencies to establish connections to Mt. Diablo State Park.

Policy POS-2.1.3: Utilize the Trails Master Plan and Map to develop connections between open space areas.

As noted above, the Trails Master Plan should be updated to reflect plans for the Concord Reuse Project site.

Policy POS-2.1.4: Incorporate portions of the Concord Reuse Project site into the regional open space network, and provide trail and greenway connections between this area and developed Concord neighborhoods.

Principle POS-2.2: Preserve Natural Resources within Designated Open Space.

Policy POS-2.2.1: Design structures and facilities located within parks and open space areas to complement the natural setting and values of each site and adjacent lands.

Policy POS-2.2.2: Strive to preserve open space in southeast Concord in order to expand the Lime Ridge Open Space area.

The City will coordinate with the East Bay Regional Park District on how best to obtain additional open space in this area. A



connection from Concord's open space system to the Mt. Diablo State Park is of high importance.

Policy POS-2.2.3: Strive to preserve open space in northeast Concord in order to maintain the visual profile of the Los Medanos Hills.

The City will coordinate with the East Bay Regional Park District in the dedication of a new regional park on the Concord Reuse Project site. The park will encompass the most environmentally sensitive portions of the site, including the Los Medanos Hills.

Policy POS-2.2.4: Use open space where feasible to delineate an urban edge.

Policy POS-2.2.5: Require degraded open space areas to be restored to an environmentally sustainable condition as part of development approval where these lands are proposed as permanent open space in new development.

This can be done with use of native plants during revegetation and through creek and habitat restoration programs on larger sites.

Policy POS-2.2.6: Restore degraded open space owned by the City, including but not limited to habitat improvements and control of invasive plant species.

Principle POS-2.3: Expand Open Space Systems as Opportunities are Identified.

Policy POS-2.3.1: Increase the regional trail, ridgeline, and hillside open space system in the City's Planning Area through joint efforts with East Bay Regional Park District, Contra Costa County, the U.S. Government, and nonprofit trustee agencies.

Policy POS-2.3.2: Establish priorities for open space preservation in the City's Planning Area based on an evaluation of natural resources, viewsheds, wildlife habitats, and recreational opportunities.

Examples of establishing priorities include the following:

- *Significant natural areas that are historically, ecologically, scientifically, locally unique, important or threatened;*
- *Ridgelines and viewsheds above 300 feet elevation, as well as scenic vistas;*
- *Wildlife and plant habitats and fragile ecosystems with sensitive species in need of protection;*
- *Creek environments; and*
- *Lands suitable for recreation such as hiking, photography, nature study, bicycling, horseback riding, and fishing.*

6.5 CONSERVATION

Natural Resources

Although Concord is the largest city in Contra Costa County, and urbanized to a great extent, valuable natural resources still exist within the Planning Boundary. These are sometimes located in pockets of open space within the City limits, but more commonly found in large swaths of open space such as the former CNWS or Lime Ridge Open Space. Identified biological resources are illustrated in Figures 6-3 and 6-4, and discussed below. There are some mineral resources in the Planning Area, east of Lime Ridge Open Space outside the City limits, but no mining occurs within the City.

Vegetation and Habitat

The City of Concord is located in the Bay Area-Delta Bioregion, as defined by the State's Natural Communities Conservation Program. This Bioregion is comprised of a variety of natural communities, which range from Salt Marshes to Chaparral to Oak Woodlands. The high diversity of vegetation found in Contra Costa County is a result of topographic and micro-climate diversity and, combined with the rapid pace of development in the region, has resulted in a high degree of endangerment for local flora and fauna.

Figure 6-3 shows the distribution of vegetation and habitat within the Planning Area.³ The primary habitat types include Urban, Annual Grassland, Estuarine, Coastal Brackish Marsh, Riverine, Chaparral, and Foothill Pine-Blue Oak Woodland. The most prevalent habitat type is Urban, which covers the majority of the area within the City limits and is generally continuous to the west

³ As classified by the Wildlife Habitat Relationships System and/or the California Natural Diversity Data Base (CNDDB), 2006.

and southwest, adjoining the cities of Pleasant Hill and Walnut Creek, respectively. To the east, urban habitat continues into the City of Clayton.

Uplands (Annual grassland, Chaparral, Foothill Pine-Oak)

Annual grassland habitat is found primarily along Concord's eastern edge, occurring in the CNWS and extending further east into Los Medanos Hills. Grassland habitat is also found in the southern extremity of the City limits in the area of Lime Ridge Open Space. The Lime Ridge area also includes, to a lesser extent, chaparral habitat. The slopes of Mt. Diablo in the southern portion of the Planning Area contain a mix of habitat types. The western portion is occupied by the extension of grassland and chaparral habitats occurring in Lime Ridge Open Space. Chaparral is the prevalent habitat type in the central portion, which also contains some areas of Foothill Pine-Oak Woodland habitat.

The eastern portion of the area is primarily urban habitat, with an area of annual grassland habitat in its southeast corner.



Marshes

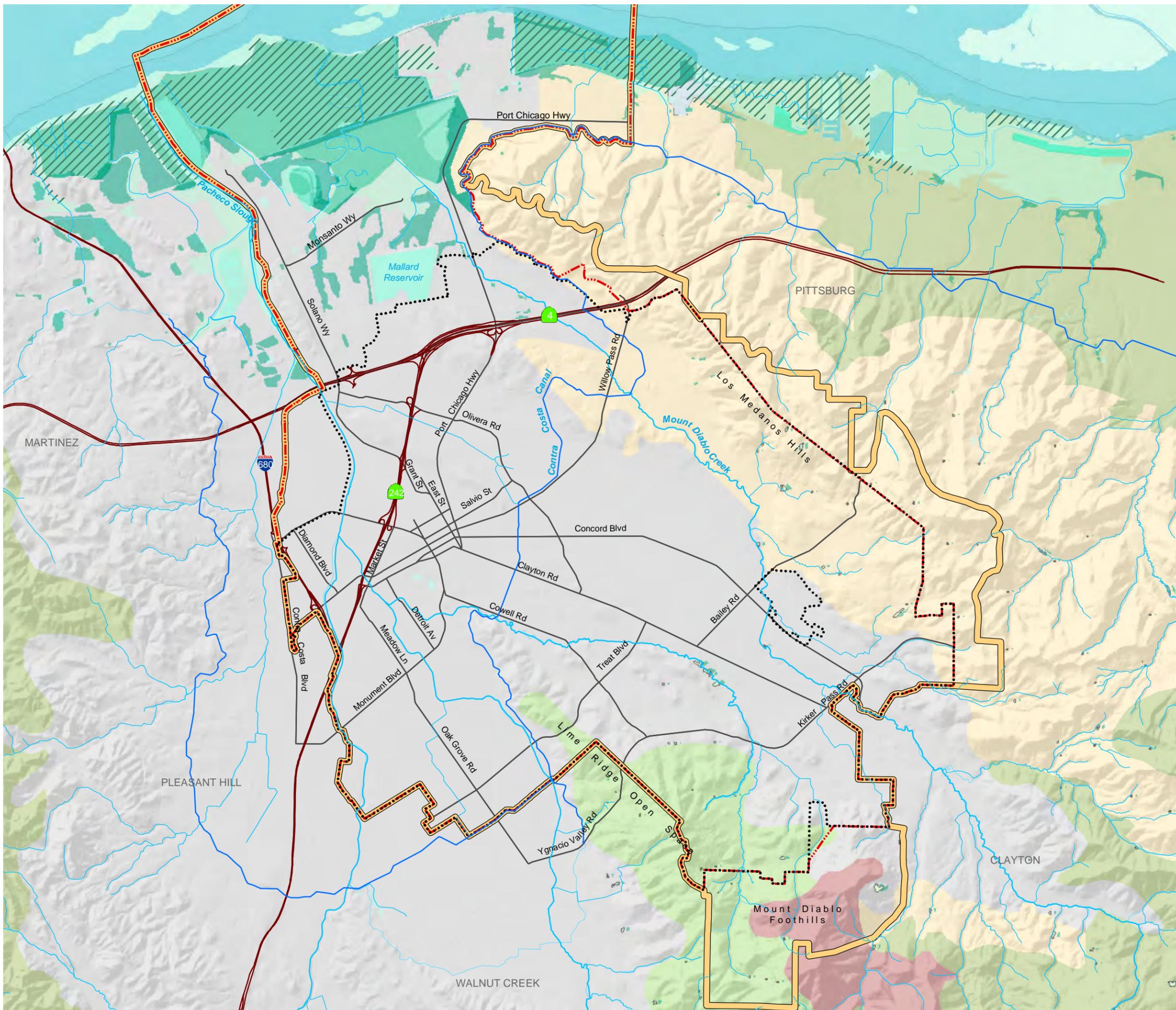
The Concord Planning Area is bordered to the north—and includes a small part of—the estuarine habitat of Suisun Bay. Bordering the Bay is the Avon-Port Chicago Marsh, a relatively extensive area of Coastal Brackish Marsh. This area extends up to two miles south toward the developed areas of Concord and is bordered to the west by Pacheco Creek and to the east by Clyde and the Tidal portion of the former CNWS. Most of this marsh area is considered to be high quality habitat. More patchy brackish marsh habitat is also found beyond these boundaries, both east and west of the Planning Area along Suisun Bay.

Wetlands and Riparian Corridors

Laced within the habitats discussed above are a number of creeks, principally Walnut, Pine, Galindo, and Mount Diablo, and tributaries to these creeks. Although much of the extent of these creeks has been disturbed, the waterways provide important aquatic and riparian habitat, providing resources and movement corridors for flora and fauna. The southern portion of the Planning Area in the Mount Diablo Foothills contains a number of drainages, including tributaries to Galindo Creek. In addition, intermittent streams and seasonal wetland ponds also occur in the area. Although unmapped, they provide seasonal habitats for local wildlife including species such as the Tiger salamander, which is listed as a special status species by the California Natural Diversity

Figure 6-3

Vegetation and Habitat



Uplands

- Annual Grassland
- Annual Grassland (80%-90%)
Chamise Chaparral (10%-20%)
- Buck Brush Chaparral (70%-80%)
Foothill Pine-Oak Woodland (20%-30%)
- Urban

Wetlands

- Coastal Brackish Marsh
- Estuarine - Subtidal
- Estuarine - Intertidal
- Lacustrine
- Palustrine

- City Limits
- Sphere of Influence
- Planning Area Boundary

See the Concord Community Reuse Plan Final Environmental Impact Report for details on the CRP area.

Source:
Coastal Brackish Marsh habitat designated by the California Natural Diversity Database (CNDDB): 2006. All other wetlands delineated by the National Wetland Inventory (NWI): 2002. Upland vegetation and habitat from California GAP Analysis: 1998. Creeks and waterways from Contra Costa County: 2005.



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Database (CNDDDB). The grassland habitat in the eastern portion of the Planning Area contains a number of such seasonal wetlands.

Special Status Species

The locations of potential and known special status species within the Planning Area are shown in Figure 6-4. The non-urban areas at the south, east and north portions of the Planning Area are both known and potential habitat for a number of special status animal and plant species. Lime Ridge supports known populations of Mount Diablo manzanita (*Arctostaphylos auriculata*, endemic to the Mount Diablo area), Mount Diablo fairy lantern (*Calochortus pulchellus*), Diablo helianthella (*Helianthella castanea*), and Hall's bush mallow (*Malacothamnus hallii*). This ridge provides important habitat for these special status plant species and is considered a Significant Ecological Area by Contra Costa County.

The ridge, and the grassland and chaparral habitat extending east through the slopes of Mt. Diablo to Clayton, also provide potential habitat for Alameda whipsnake (*Masticophis lateralis euryxanthus*). Mount Diablo buckwheat (*Eriogonum truncatum*) has been historically recorded near this area as well. Despite being considered potentially extinct, a number of recorded locations, including this one, are still considered potential habitat for this species. Southeast of the border of the Planning Area lies Mitchell Creek, beyond which is the ecological area associated with Mt. Diablo State Park. This area contains a concentration of special status species. Recorded populations of Mount Diablo fairy lantern, Mount Diablo Brewer's western flax (*Hesperolinon breweri*), and Diablo helianthella occur in the vicinity. Mt. Diablo is considered a Significant Ecological Area by Contra Costa County, and this Significant Ecological Area extends into Concord's Planning Area.

Portions of the hills within the eastern boundary of the Planning Area provide habitat for California tiger salamanders, which have been observed along intermittent streams and seasonal wetland ponds in this area (CNDDDB, 2006). Given that this species can range up to slightly over one-mile upland from these sources, much of the grassland area is considered habitat. Intermittent streams and ponds also provide habitat for California red-legged frog (*Rana aurora draytonii*), which has been observed on the southeastern portion of the Concord Reuse Project site.

The burrowing owl (*Athene cunicularia*) has been recorded on the Concord Reuse Project site. This species has the potential to occur in all grassland habitats in the Concord Planning Area. The eastern border of the Planning Area parallels and slightly overlaps the edge

of known San Joaquin kit fox (*Vulpes macrotis mutica*) habitat (CNDDDB, 2006).

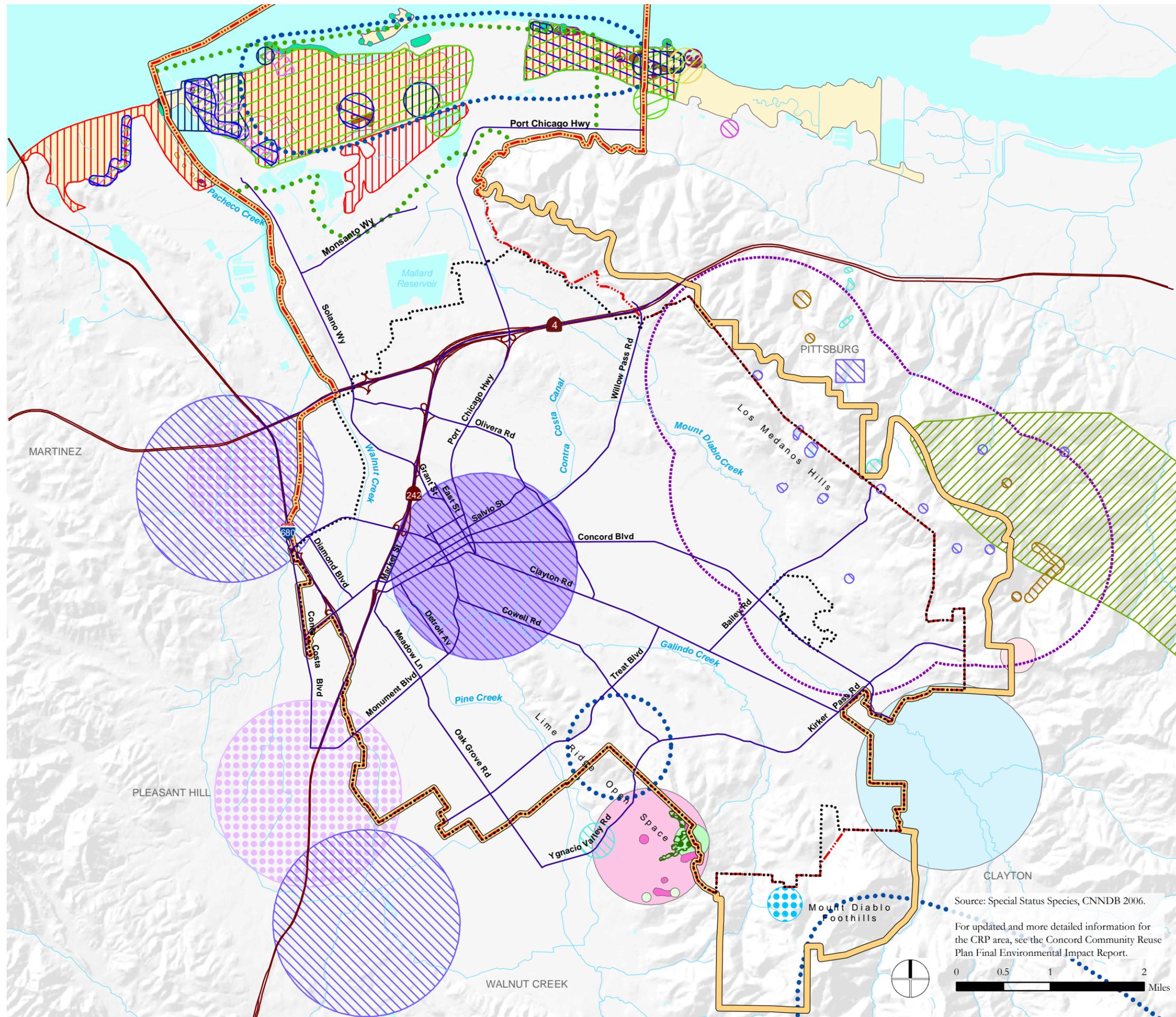
Roundleaved filaree (*Erodium macrophyllum*) has been historically recorded in the grasslands at the southeast portion of the Planning Area. Although most Contra Costa County records for this species are historic, fieldwork is lacking and its status in the county is uncertain. Grassland and woodland habitats of the Concord Planning Area provide potential habitat for this species. The Avon-Port Chicago Marsh provides habitat for a host of special status wildlife and plant species including California black rail (*Laterallus jamaicensis coturniculus*), California clapper rail (*Rallus longirostris obsoletus*), Salt-marsh harvest mouse (*Reithrodontomys raviventris*), Suisun song sparrow (*Melospiza melodia maxillaries*), Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), Mason's lilaepsis (*Lilaepsis masonii*), and Soft bird's beak (*Cordylanthus mollis* ssp. *mollis*). All of these species have been recorded from this area and are presumed to be extant there. The marsh is considered to be a Significant Natural Area by the California Department of Fish and Game (CDFG) and Contra Costa County considers it a Significant Ecological Area. The CDFG also has mapped a considerable portion of this marsh as Coastal Brackish Marsh, a sensitive community.

Planning for the reuse of the former Concord Naval Weapons Station has required extensive documentation of special status species on the project site. In addition to the California red-legged frog, California tiger salamander, and Burrowing Owl habitat noted above, a number of protected birds have been observed, including Golden eagles, Bald eagles, Loggerhead shrikes, and Peregrine falcons. The site also contains potential habitat for the Western Pond turtle and Coast horned lizard, although neither species has been observed. The Concord Reuse Project (CRP) Area Plan conserves the most sensitive habitat areas on the site as open space.

A few historical records of special status species exist within the urbanized area of Concord, particularly California tiger salamander (*Ambystoma californiense*), Contra Costa goldfields (*Lasthenia conjugens*), Caper-fruited tropidocarpum (*Tropidocarpum capparideum*), and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). These are located in central Concord and along the urban border to the west with Pleasant Hill, the southwest with Walnut Creek, and the southeast with Clayton. These populations are presumed extirpated due to urban growth. All, except for the Tiger salamander, probably no longer occur in the area. Mount Diablo buckwheat (*Eriogonum truncatum*) has been historically recorded from the west slope of Mount Zion, near the southeast

Figure 6-4

Special Status Species & Ecologically Significant Areas



- San Joaquin Kit Fox
- Salt-Marsh Harvest Mouse
- San Joaquin Pocket Mouse
- Burrowing Owl
- California Black Rail
- California Clapper Rail
- California Least Tern
- Saltmarsh Common Yellowthroat
- Suisun Song Sparrow
- California Red-Legged Frog
- California Tiger Salamander
- Potential Tiger Salamander Upland Habitat
- Brandegee's Eriastrum
- Caper-Fruited Tropicocarpum
- Coastal Brackish Marsh
- Congdon's Tarplant
- Contra Costa Goldfields
- Delta Tule Pea
- Diablo Helianthella
- Hall's Bush Mallow
- Mason's Lilaeopsis
- Mt. Diablo Buckwheat
- Mt. Diablo Fairy-Lantern
- Mt. Diablo Manzanita
- Round-Leaved Filaree
- Soft Bird's-Beak
- Suisun Marsh Aster
- CDFG Significant Natural Area
- Contra Costa Significant Ecological Area
- City Limits
- Sphere of Influence
- Planning Area Boundary

Source: Special Status Species, CNND 2006.
 For updated and more detailed information for the CRP area, see the Concord Community Reuse Plan Final Environmental Impact Report.

0 0.5 1 2 Miles

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corner of the City limits, just west of Clayton. This species is potentially extinct but a number of recorded locations, including this one, are still considered to provide potential for occurrence.

Wildlife Corridors

While the habitats found in the City supply resources for local plant and animal populations, on a larger scale open spaces in the area serve the crucial function of providing movement corridors for regional wildlife. Lime Ridge and the annual grasslands of Los Medanos Hills and the Mount Diablo Foothills represent the northern extent of continuous natural habitat extending south through Mount Diablo, the Black Hills, Briones Valley, and beyond. Thus, Planning Area open spaces are part of larger systems of regional wildlife movement corridors, as exhibited by the species that are observed in them. Also, creeks and waterways within the Planning Area may provide rainy season migration routes for California tiger salamanders and California red-legged frogs, in addition to more common amphibians. Areas of riparian vegetation associated with these waterways may provide cover for migrating or non-migrating birds and mammals.

Water Resources

Surface water bodies within Concord include Mallard Reservoir, Walnut Creek, Pacheco Creek, Mount Diablo Creek, Galindo Creek, Pine Creek, Contra Costa Canal, and sloughs and wetlands located along Suisun Bay. Some stock ponds, watering holes, and seepage ponds are found on the Concord Reuse Project site. These ponds and watering holes are mainly located in the hills where natural water sources are scarce.

Watersheds

Watersheds within the region are defined by creeks, streams, and other surface water drainages that originate in the upland areas near Mt. Diablo and flow downslope towards the Bay. As illustrated in Figure 6-5, much of the Planning Area lies within the Mount Diablo Creek watershed, which drains into Pacheco Slough and the Suisun Bay. Additionally, five other watersheds are at least partially located within the Planning Area including Concord, Grayson Creek/Murderers Creek, Kirker Creek, Pine Creek/Galindo Creek, and Willow Creek/ Coastal Drainages. These watersheds drain into creek systems in adjacent jurisdictions. Boundaries between these watersheds are created by the topographic features such as ridges and valleys that shape surface water drainage patterns. Acreage information for each watershed is summarized in Table 6-4.

Table 6-4: Watersheds in Planning Area

Watershed Name	Acreage	Percent of Total
Concord	5,549	18%
Grayson Creek/ Murderers Creek	1,018	3%
Kirker Creek	214	1%
Mt. Diablo Creek	13,138	43%
Pine Creek/ Galindo Creek	8,507	28%
Willow Creek and Coastal Drainages	2,281	7%
Total¹	30,706	100%

¹The remainder of the Planning Area lies within Suisun Bay.

Source: Contra Costa County, Dyett and Bhatia, 2006

Groundwater Basins

Concord is underlain by two groundwater basins, Clayton Valley and Ygnacio Valley, as defined by the Department of Water Resources (DWR). The Clayton Valley groundwater basin is bounded by Suisun Bay to the north, Mt. Diablo Creek to the east, the Concord Fault to the west, and the foothills of Mt. Diablo to the south. The Clayton Valley is underlain by thick alluvial deposits which cover faulted and folded older rocks. The water bearing units are Quaternary-age and older alluvial deposits, which exceed 700 feet in depth. These units are hydraulically connected with Suisun Bay.

The Ygnacio Valley groundwater basin is bounded by Suisun Bay to the north, Highway 680 to the west, the Concord Fault to the east, and the City of Walnut Creek to the south. Walnut and Grayson Creeks flow through the basin before draining into Pacheco Creek and then into Suisun Bay. The Ygnacio Valley groundwater basin is formed in a depression between the Berkeley Hills and the Mt. Diablo Range. Thick alluvial deposits cover folded and faulted older rocks. The water bearing units in the basin are from Quaternary deposits. As in the Clayton Valley basin, water bearing deposits are over 700 feet in depth. Aquifers in this basin are hydraulically connected to the Sacramento River⁴.

Information from DWR indicates that groundwater levels in both of the basins have declined gradually. Groundwater levels are generally lowest during the summer months and highest during the winter months. Water quality testing conducted on samples collected from water supply wells in the Clayton and Ygnacio

⁴ California Department of Water Resources, California Groundwater – Bulletin 118, updated October 2003.

Figure 6-5

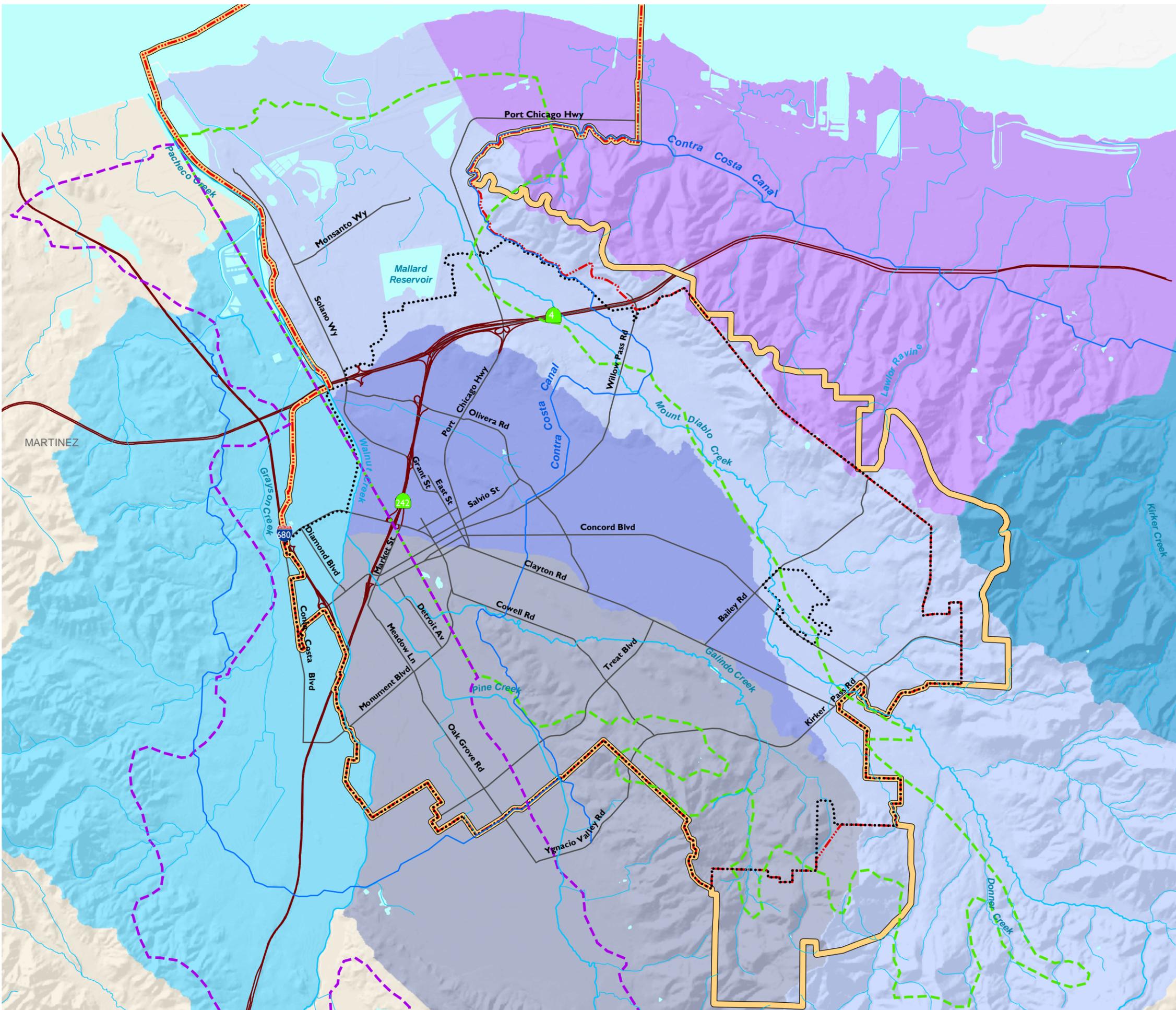
Water Resources

Watershed Boundaries

- Concord
- Grayson Creek / Murderers Creek
- Kirker Creek
- Mt. Diablo Creek
- Pine Creek / Galindo Creek
- Willow Creek and Coastal Drainages

Groundwater Basins

- Clayton Valley
- Ygnacio Valley
- City Limits
- Sphere of Influence
- Planning Area Boundary



Source:
Contra Costa County: 2005.



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Valley basins indicate groundwater meets drinking water standards (DWR 2003).

Mineral Resources

There are no significant mineral resources within the City limits. In the southeast portion of the extended Planning Area, some aggregate mineral resources exist, which are being commercially mined.



6.6 CONSERVATION GOALS, PRINCIPLES, AND POLICIES

GOAL POS-3: WELL-PLANNED NATURAL RESOURCE CONSERVATION

Principle POS-3.1: Preserve and Protect Water Quality.

Policy POS-3.1.1: Enhance and maintain the natural values of creeks and major drainage ways.

This could include restoration measures along Galindo, Mount Diablo, and Pine Creeks to improve ecological systems, slow peak storm runoff, and increase infiltration.

Policy POS-3.1.2: Preserve and restore native riparian vegetation and wildlife, and establish riparian corridors along all creeks.

Policy POS-3.1.3: Require adequate building setbacks for development adjacent to creek banks and major drainage ways to protect neighboring properties from erosion and flooding.

The Development Code will include standards for development near creeks.

Policy POS-3.1.4: Support improvements along creeks in consultation and cooperation with creek restoration and design professionals.

Policy POS-3.1.5: Provide access easements for creek maintenance purposes and public access to creekside amenities, where consistent with habitat protection objectives and resource agency regulations.



Policy POS-3.1.6: To the extent practical, preserve creeks in a natural condition while providing for the need to convey storm water.

Policy POS-3.1.7: Improve the quality of underground and surface waters in Concord through coordination with outside agencies.



The State Department of Fish and Game, Contra Costa County Flood Control, the Water Conservation District, the Soil Conservation District, the Contra Costa Water District, and the Regional Water Quality Control Board, are all agencies that the City can partner with to maintain and improve water quality.

Principle POS-3.2: Preserve and Protect Wetlands.

Policy POS-3.2.1: Preserve bay marshes, wetlands, and tidal areas adjacent to Suisun Bay as open space.

This policy is consistent with state and federal “no net loss” policies for wetlands. Preservation mechanisms include the following:

- *Avoidance of sensitive habitat areas (some of the tidal area from Pt. Edith west along the tidal marsh to the Proposed Urban Limit Line is designated the Point Edith Wildlife Area, a wildlife refuge priority use area);*
- *Clustering of development away from wetlands;*
- *Transfer of development rights for preservation of existing sensitive lands; and/or*
- *Compensatory in-kind mitigation, such as restoration or creation.*

Policy POS-3.2.2: Provide visual, and where practical, physical access to wetland areas in a manner consistent with protection of these fragile ecological systems.

Policy POS-3.2.3: For wetlands that are not adjacent to Suisun Bay, follow management and protection measures that are consistent with state and federal requirements.

A number of small wetland areas exist on the Concord Reuse Project (CRP) site. The CRP Area Plan generally conserves these areas as open space, although conservation may not be feasible in all instances. In such cases, mitigation measures have been prescribed to establish replacement wetlands elsewhere.

Principle POS-3.3: Facilitate Water Conservation.

Policy POS-3.3.1: Cooperate with the Contra Costa Water District to implement water saving programs.

Policy POS-3.3.2: Implement water-conserving practices in City operations and projects.

Such practices may include use of low-flow plumbing, water-conserving appliances, and xeriscape (e.g., drought-tolerant planting and landscaping with low-water needs).

Principle POS-3.4: Preserve and Protect Wildlife and Vegetation Resources.

Policy POS-3.4.1: Conserve wildlife habitat and wildlife corridors, including seasonal migration routes, and require appropriate mitigation in the event such areas are impacted by development,

Policy POS-3.4.2: Protect rare, threatened, or endangered species and their habitats through the environmental review process and in accordance with State and Federal law.

Project-level environmental review will assess the potential impact of proposed development on special-status species and sensitive natural communities and could require mitigation measures and monitoring to ensure protection of sensitive biological resources.

Policy POS-3.4.3: Retain significant vegetation, including native vegetation and heritage trees, where feasible,

and require replacement plantings as appropriate for mitigation.

The Development Code will include standards and review criteria to implement this policy.

Policy POS-3.4.4: Plant vegetation to increase benefits to wildlife.

Policy POS-3.4.5: Coordinate with appropriate regulatory and trustee agencies to enhance protection of special status species and sensitive natural communities.

Coordination with regulatory and trustee agencies will include, but not be limited to, the California Department of Fish and Game, U.S. Fish and Wildlife Service, and the Regional Water Quality Control Board.

Policy POS-3.4.6: Avoid construction-related activities during breeding and nesting seasons for special status species.

Construction-related activities within sensitive habitat of special status species will generally not be allowed during the breeding season or season of greatest effect on their survival. If project activities cannot avoid these seasons, the project applicant will have to arrange for surveys of any special status species in accordance with state and federal standards and follow applicable trustee agency protocol for species protection.

Policy POS-3.4.7: Promote habitat restoration in areas of special status species.

The City will coordinate with appropriate agencies and the community to improve habitat restoration efforts throughout the Planning Area, and will include special status species habitat restoration requirements in the Development Code. Plans for the Community Reuse Project include restoration of habitat along Mount Diablo Creek and in the Los Medanos Hills.

Principle POS-3.5: Conserve Mineral Resources.

Policy POS-3.5.1: Encourage conservation of valuable mineral resources and provide substantial protection of significant mineral deposits, consistent with the City's other land use goals.

Policy POS-3.5.2: Regulate extraction and consumption of mineral resources in accordance with applicable State law.

Policy POS-3.5.3: Prohibit residential land uses within mineral resource impact areas containing mineral deposits of state-wide or regional significance as determined by the California State Mining and Geology Board.

Residential land uses are inherently incompatible with mining. Mining activities typically require a high public or private investment in structures, land improvements, and landscaping that can be adversely affected if incompatible uses are allowed in the vicinity of these operations.

Policy POS-3.5.4: Preserve significant mineral resource areas in open space areas.

Policy POS-3.5.5: Require future development in the vicinity of significant mineral resources to be planned and designed to minimize conflict between mineral extraction activities and neighboring land uses.

Principle POS-3.6: Conserve Natural Resources.

Policy POS-3.6.1: Encourage, and where appropriate require, sustainable building practices for new development and the remodeling of existing buildings.

Sustainable building practices employ a wide variety of construction techniques and methods that allow new development and building remodels to last longer, cost less to operate, and protect the health of workers and

residents. Examples of sustainable building practices include the use of advanced framing techniques that reduce lumber requirements, incorporating recycled building materials, designing with solar heating and cooling systems, and using energy efficient appliances, water heaters, and insulation.

Policy POS-3.6.2: Require that future design and construction on the Concord Reuse Project Site incorporates sustainable development principles, including green building, green infrastructure, site planning which maximizes solar access opportunities, and a land use and transportation plan which maximizes opportunities for non-automobile travel.

Reuse of the Concord Naval Weapons Station offers a particularly important opportunity to apply sustainable building practices on a community-wide scale. The Concord Reuse Project Area Plan includes policies, standards, and other measures to conserve water and fossil fuels.

6.7 CULTURAL AND HISTORIC RESOURCES

The lands encompassed by the Planning Area have a long and rich history of human habitation. The earliest known occupation of the area dates to 200 B.C., and sites with evidence of those cultures still remain. Far more salient to modern residents in Concord is the large inventory of historic homes and buildings, which provide a visual history of the development of the City from its first modern settlement to today. The existence of both archaeologically sensitive areas and historic buildings in Concord underscores the need for policies that preserve such aspects of the City's heritage.

In addition to a desire by the local community to protect historic resources, several State laws, most notably the California Environmental Quality Act (CEQA) Guidelines §15064.5(f) and Public Resources Code §5020-5029 and 21083.2, protect archaeological and historical resources. To preserve historic resources, the State has formed the State Historical Resources Commission that conducts the State Historic Resource Inventory and maintains the California Register of Historic Resources, which identifies historic landmarks and points of interest. The Commission

also provides recommendations for the National Register of Historic Places.

Archaeological Resources

A review of the Planning Area conducted by the Northwest Information Center found 12 recorded American Indian archaeological resources listed with the State Historical Resources Information System. These sites range from sparse lithic scatters to ethnographic village sites. Additional assessments were conducted as part of the reuse planning process for the former Concord Naval Weapons Station. These assessments found 10 archaeological sites that were potentially eligible for National Register listing, including three prehistoric (Native American) sites and seven historic sites. Six of these sites are outside of the development area proposed by the Concord Reuse Project and will be conserved as parkland or open space. The other four sites (one pre-historic and three historic) are within proposed development areas. Data documentation, recovery, and curation measures will be required before any earth disturbing activities are permitted in these areas.⁵

Two additional prehistoric sites were identified approximately one quarter-mile west of the Willow Pass Road Corridor along Walnut Creek and within the Monument Boulevard Corridor. Although the latter was leveled in 1937 for agricultural purposes, a salvage crew from U.C. Berkeley recorded the site prior to its demolition, which yielded numerous burials and artifactual remains.⁶ The site was capped in the mid-1960s.⁷ It is possible these two sites are components of a single village site that may qualify for the National Register of Historic Places.

Additionally, the Planning Area contains many topographical features near which archaeological sites in this portion of Contra Costa County tend to be located, such as ridgelines, midslope terraces, alluvial flats, ecotones, and near sources of water. Given the environmental setting and the archaeologically sensitive nature of the general area, the review concluded that there is a high potential for additional Native American sites within the Planning Area.⁸

⁵ *Concord Community Reuse Project EIR, Arup, 2010.*

⁶ *Piling, A.R., Archaeological Site Survey Record, CA-CCo-250, University of California, on file at the Northwest Information Center, Sonoma State University, 1949.*

⁷ *Ananian, B. Archaeological Reconnaissance for the Port Chicago Pipeline Project, on file at the Northwest Information Center, Sonoma State University, File No S-17897, 1994*

⁸ *The Northwest Information Center does not provide maps showing specific locations in order to protect these sites from looting.*

Table 6-5: City of Concord Designated Historic Sites and Structures

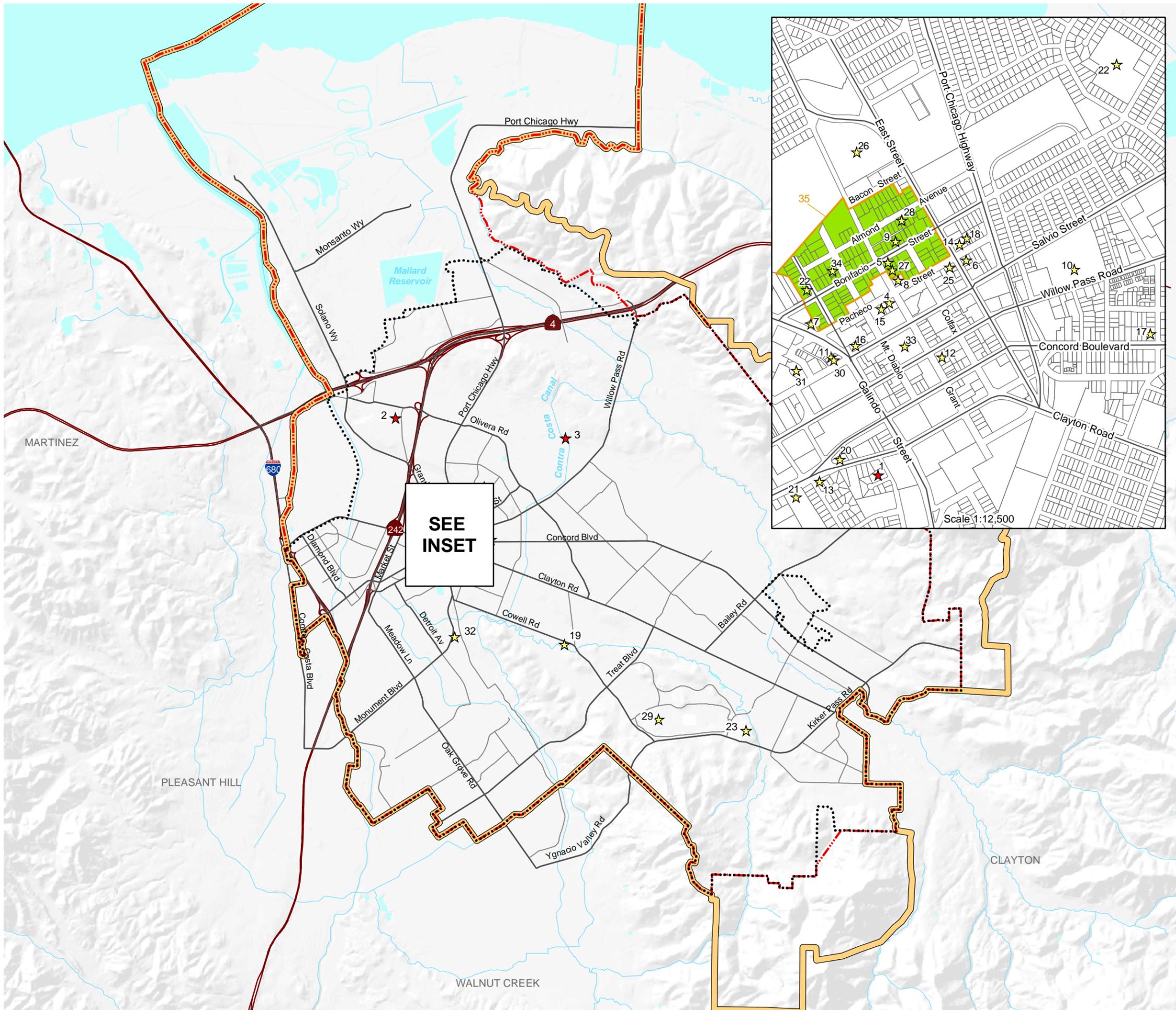
No.	Name	Address
1	Francisco Galindo House ²	1721 Amador St.
2	Francisco Pacheco Adobe ^{1,2}	3119 Grant St.
3	Contra Costa Canal ^{1,2}	Various
4	Rosal Apartment House	2178 Pacheco St.
5	Alves House	2190 Grant St.
6	Barnett House	2080 East St.
7	Beebe House	1921 Concord Ave.
8	Bibber House	2108 East St.
9	Bolla House	2289 Bonifacio St.
10	Concord Elementary School	2701 Willow Pass Rd.
11	Concord Fire Hall	1982 Concord Ave.
12	Concord Fire House	2210 Willow Pass Rd.
13	Eddy House	1800 Clayton Rd.
14	Elworthy House	2118 East St.
15	Elworthy-Keller House	2156 Pacheco St.
16	Foskett & Elworthy Building	2001 Salvio St.
17	Gieselhard House	2885 Concord Blvd.
18	Ginochio-Accinelli House	2459 Pacheco St.
19	Ginochio-DeRosa House	3800 Cowell Rd.
20	Ivey House	1849 Clayton Rd.
21	Keller House	1760 Clayton Rd.
22	Kelly House	1987 Bonifacio St.
23	Live Oak Cemetery	Deer Oak Pl.
24	Maltby Mansion	3033 Bonfiacio St.
25	Maltby-McKinnon House	2350 Pacheco St.
26	Mount Diablo High School	2455 Grant St.
27	Neustaedter House	2156 Grant St.
28	Nunez House	2334 Almond Ave.
29	Old Cowell Firehouse Ct.	4425 Prairie Willow Ct.
30	Perry House	1990 Concord Ave.
31	Salvio Pacheco Adobe	1870 Adobe St.
32	St. Stephen's Cemetery	2701 Monument Ct.
33	Todos Santos Plaza	2175 Willow Pass Rd.
34	Webb-Soto House	2243 Mt. Diablo St.
35	North Todos Santos District	Between Pacheco St., East St., Bacon St., Galindo St.

¹ California State Historical Landmark

² National Register Site

Source: *City of Concord General Plan Background, 1994. "History of Concord," Concord Historical Society, 1986, and 2006.*

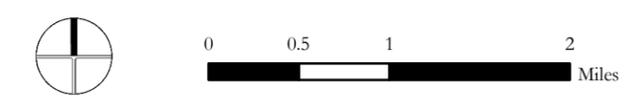
Figure 6-6
Cultural & Historic Resources



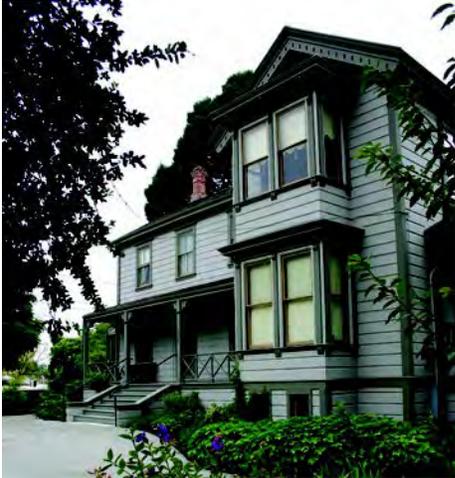
- ★ National Register Site
- ☆ Historic Site or Structure
- 35 North Todos Santos District
- ⋯ City Limits
- - - Sphere of Influence
- ▭ Planning Area Boundary

Note: See Table 6-5 for site address and name by label number.

Sources:
 City of Concord General Plan Background, 1994.
 "History of Concord," Concord Historical Society, 1986 and 2006.
 "Historical Walking Tour Guide," Concord Historical Society, 2003.



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Historic Resources

Many of the historic resources in Concord date back to the days of its founding, and are located near Todos Santos Plaza. Additionally, the City’s historic buildings reflect its changing role through time as a center of agriculture, military activities, and commercial activities. The City contains three National Register Sites or Structures, and 32 additional sites and structures within its City limits are considered by the Concord Historical Society to be important local historic resources. The City of Concord designated historic sites and structures are mapped in Figure 6-6 and listed in Table 6-5.



6.8 HISTORIC AND CULTURAL RESOURCES GOALS, PRINCIPLES, AND POLICIES

GOAL POS-4: PRESERVE HISTORIC AND ARCHEOLOGICAL RESOURCES

Principle POS-4.1: Protect the City’s historic sites and structures and prehistoric cultural resources.



Policy POS-4.1.1: Preserve all City, State, and Federally designated historic sites and structures to the maximum extent feasible.

As part of Plan implementation, the City will undertake appropriate review and consultation as required by applicable State and Federal laws pertaining to historic and archaeological resource protection, and may consider relocation of certain historic structures to a central or single location as a preservation tool.

Policy POS-4.1.2: Consult with the State Office of Historic Preservation with respect to managing impacts of development and land use on historic and archaeological resources.

Developers and property owners are also strongly encouraged to consult with the Concord Historical Society on their

development proposals or rehabilitation plans for a designated or potentially historic structure or building.

Policy POS-4.1.3: Preserve important historic and archaeological sites during new development, reuse, and intensification.

In the case of archaeological sites, preservation does not always mean leaving a site “as is.” It could involve recovering artifacts from a site and permitting subsequent development, capping a site so it remains undisturbed, or other measures which protect the resource.

Policy POS-4.1.4: In identified sensitive areas, require archaeological studies as part of the development review process.