



8

PUBLIC FACILITIES AND UTILITIES

The purpose of the Public Facilities and Utilities Element is to address service and infrastructure needs for development under the General Plan. This Element focuses on specific functional needs of the City’s public services and facilities, and clearly distinguishes issues related to City services from those related to other service providers over which the City has no control. It addresses schools, libraries, and cultural facilities; drainage and flood control; and water, sewer, and solid waste services.

State law now requires General Plans to include consideration of environmental justice in preparing policies and implementation programs, and in creating the physical framework for development. The problems of environmental justice that the General Plan can address include procedural and geographic inequities.

- Procedural inequities might include “stacking” commissions or committees with individuals who ignore the interests of minority and low-income residents, holding meetings at times and places that minimize the ability of low-income residents to participate, using English-only communications when non-English speaking populations may be affected by land use decisions, and requiring lower levels of mitigation for projects affecting low-income and minority populations.
- Geographic inequities might include providing fewer public services, transit services, and parks for minority and low-income residents than for white, middle- and upper-income residents.

Several new policy initiatives, distributed throughout the General Plan, are included to address environmental justice.

The effects of the Concord Reuse Project (CRP) on Concord’s public facilities and utilities are particularly important. The CRP will add thousands of new homes and jobs in an area that lacks most urban services today. New water and sewer lines will be needed, and new schools, fire stations, and other public facilities will be required. Policies in the General Plan and the CRP Area Plan ensure that these services are planned and committed before

development is approved. The CRP also provides opportunities for new facilities which serve all Concord residents, addressing existing deficiencies while meeting the needs of a growing population.

8.1 SCHOOLS AND COMMUNITY FACILITIES

Schools

The Mt. Diablo Unified School District covers the Concord Planning Area as well as a large portion of Contra Costa County that serves Clayton, Bay Point, and portions of Walnut Creek and Pleasant Hill. Within the Planning Area, the District currently operates 14 elementary schools, 4 middle schools, and 8 high schools. These schools are presented in Table 8-1, along with enrollment and capacity counts from the 2006-2007 school year and the year 2004, respectively. In total, one elementary school and four high schools are over capacity, but the percentages are not large—two to six percent.

The City of Concord also is home to a variety of private elementary and middle schools, two private high schools, one university, a number of trade and vocational schools, and several adult and special education schools. The school sites are mapped on Figure 8-1. Around each school site, a ½-mile radius has been applied to indicate areas that are within walking distance. Neighborhoods that fall outside of these areas are considered beyond reasonable walking distance to a local school site.

Projected Enrollment

Projecting future school enrollment requires consideration of many factors, including the number of homes that may be added in future years, expected birth rates, the age distribution of the population, and private school enrollment trends. The Mt. Diablo Unified School District periodically prepares enrollment projections as part of its facility planning program.

The District has calculated the average number of students associated with different types of housing units and applies these statistics (called “student generation rates”) to estimate the number of students likely to reside in new housing developments.

Student generation rates are currently 0.6213 students per household for single family homes and 0.1896 students per household for multi-family homes. Of this total, the breakdown by grade is:

- K – 5: 47 percent of students
- 6 – 8: 27 percent of students
- 9 – 12: 26 percent of students

Table 8-1: Existing Public Schools in Concord (2006-2007)

Name	Location	Total Enrollment (2006-2007)	Total Capacity	% Above or Below Capacity
Elementary Schools				
Ayers	5120 Myrtle Dr	403	510	-21%
Cambridge	1135 Lacey Ln	705	750	-36%
El Monte	1400 Dina Dr	473	678	-30%
Highlands	1326 Pennsylvania Bl	665	810	-18%
Holbrook (*)	3333 Ronald Wy	461	570	-19%
Meadow Homes	1371 Detroit Av	868	882	2%
Monte Gardens	3841 Larkspur Dr	576	618	-7%
Mountain View	1705 Thornwood Dr	443	702	-37%
Silverwood	1649 Claycord Av	406	510	-20%
Sun Terrace	2248 Floyd Ln	572	762	-25%
Westwood	1748 West St	391	474	-18%
Woodside	761 San Simeon Dr	474	630	-25%
Wren Aveue	3339 Wren Av	407	606	-33%
Ygnacio Valley	2217 Chalomar Rd	527	606	-13%
<i>Elementary Subtotal</i>		7,371	9,108	-19%
Middle Schools				
El Dorado	1750 West St	967	1,187	-19%
Glenbrook (*)	2351 Olivera Rd	669	937	-29%
Oak Grove	2050 Minert Rd	635	1,101	-42%
Pine Hollow	5522 Pine Hollow Rd	723	918	-21%
<i>Middle School Subtotal</i>		2,994	4,143	-28%
High Schools				
Clayton Valley	1101 Alberta Wy	1,894	1,975	-4%
Concord	4200 Concord Bl	1,639	1,607	2%
Crossroads	1266 San Carlos Av	52	45	16%
Mt. Diablo	2450 Grant St	1,655	1,939	-15%
Nueva Vista	4200 Concord Blvd	52	45	16%
Olympic	2730 Salvio Street	366	375	2%
Summit	4200 Concord Bl	52	45	16%
Ygnacio Valley	755 Oak Grove Blvd	1,539	2,026	-24%
<i>High School Subtotal</i>		7,249	8,058	-10%
Total All Schools		17,614	21,309	-17%

Source: 2005-2006 Enrollment data from California Department of Education. 2006; 2004 Capacity data from Mount Diablo Unified School District Facilities Plan, 2004 Capacity figures are subject to change based on assumptions about classroom size and updated data from MDUSD.

(*) Schools closed in 2011.

Over the next 20 years, citywide enrollment is expected to increase as a result of new housing within the established urban area of Concord and new housing on the Concord Reuse Project (CRP) site. Schools in older parts of Concord generally have capacity to absorb expected growth, although there may be localized space shortages. On the CRP site, new schools will be needed to accommodate projected student growth and to meet the Area Plan's objectives for conveniently located public facilities.

An analysis conducted as part of the General Plan update indicated the capacity for 5,510 additional housing units in the urbanized area (excluding the CRP Area). Assuming these units mirror the existing housing mix in Concord (which is 60% single family and 40% multi-family and other), this development would generate about 2,472 students. Adding in the 12,200 units expected at the CRP site (which will include a larger percentage of multi-family units) would generate an additional 4,360 students. Thus, the total increase in citywide school enrollment would be approximately 6,831 students.

School age population and school needs are detailed in Table 8-2 and Table 8-3.

Planned Facilities

Given the limited amount of suitable vacant land available within the built City and the fact that most schools have sufficient capacity to absorb projected growth, no new sites for school facilities are proposed within the existing urbanized area. Up to six new schools are planned for the Concord Reuse Project (CRP) site, including four elementary schools, a middle school, and a high school. Sites for these campuses are not shown on the General Plan Diagram or the Area Plan, but will be identified as part of the more detailed planning to be undertaken for the CRP site. The number of new schools may be refined in the future depending on actual student generation and on the available capacity at existing schools near the CRP Area.

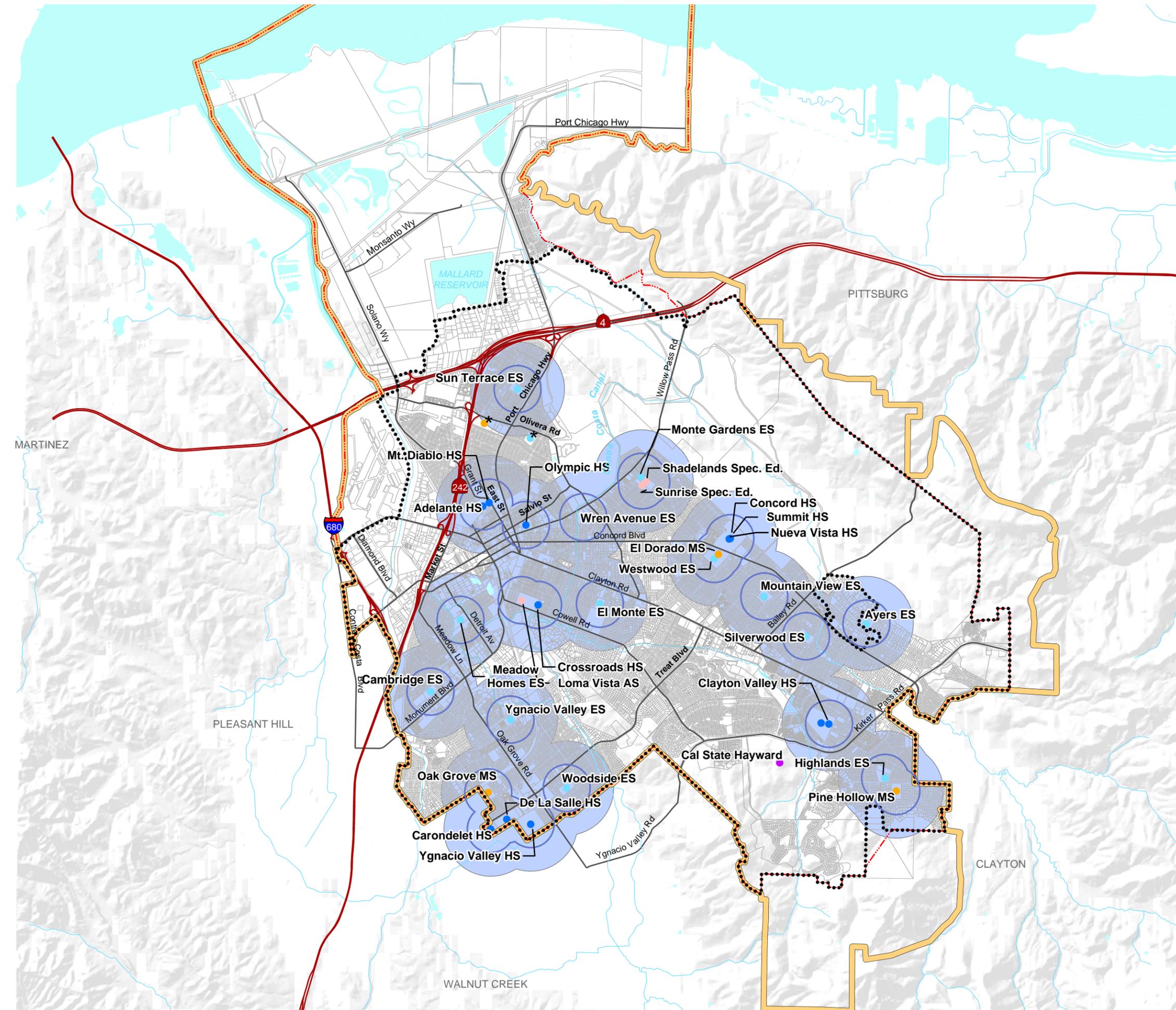
Figure 8-1
Existing Schools

- Elementary School
- Middle School
- High School
- Special Education/Adult School
- Higher Education
- 1/4-Mile Walking Distance from School Site
- 1/2-Mile Walking Distance from School Site
- City Limits
- Sphere of Influence
- Planning Area Boundary

Note: Planning area falls entirely within the Mt. Diablo Unified School District

* Indicates school closed in 2011

Source: City of Concord 2011



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Table 8-2: Buildout Student Population

Unit Type and Location	Additional Housing Units at Buildout	Student Generation Factor	Estimated Number of Students to be Generated by New Development
Within Existing Urbanized area			
Single Family	3,306	0.6213	2,054
Multi-Family	2,204	0.1896	418
Within CRP area (*)			
Low and Low-Medium Density	4,642	0.62	2,878
Medium Density	4,500	0.19	855
High Density and Mixed Use	3,130	0.20	626
Total	17,782 (*)	N/A	6,831

Source: Mt. Diablo Unified School District, 2006. City of Concord, 2006, 2012. Arup, 2011.

Table 8-3: Buildout Student Population and School Demand

Category	2006-2007 Current Enrollment	2006-2007 Current Capacity	2006-2007 Available Capacity	Additional Students at Buildout	Additional Capacity Needed at Buildout (*)	New Schools Needed or Proposed
Within Existing Urbanized Area						
K-5	7,371	9,108	1,737	1,162	N/A	0
6-8	2,994	4,143	1,149	667	N/A	0
9-12	7,249	8,068	809	643	N/A	0
Within Concord Reuse Project Area						
K-5	0	0	N/A	2,113	2,113	4
6-8	0	0	N/A	999	999	1
9-12	0	0	N/A	1,247	1,247	1
Total	16,558	23,472	6,814	6,831	See Note Below	6

(*) Although there is no shortage of school space within the existing urbanized area on a **citywide** level, it is possible that individual schools could require additional capacity as a result of localized growth in the next 20 years. This is particularly true at the elementary school level, where some schools are already over capacity. The table assumes students on the CRP site will only attend new schools to be constructed on the site. These students could also attend existing schools within the urbanized area, particularly those nearby with excess capacity, thereby lowering the number of new CRP schools.

Source: Mt. Diablo Unified School District, 2006. Arup, 2011. City of Concord, 2012.



Community Facilities

Community facilities are the network of public and private institutions that support the civic and social needs of the population. They offer a variety of recreational, artistic, and educational programs and special events. New community facilities are not specifically sited on the General Plan Urban Area Land Use Diagram. Small-scale facilities are appropriately sited as integral parts of neighborhoods and communities, while existing larger-scale facilities are generally depicted as public/semi-public land use, as appropriate. These facilities in Concord can be grouped into the following categories:

- **Community Centers.** Facilities designed to meet the needs of the population for civic meetings, recreational activities, social gatherings, and cultural enrichment.
- **Museums and Galleries.** These facilities house scientific, cultural and historical exhibits or offer space for artistic performances and presentations.
- **Civic Buildings.** Includes City and County administrative and public buildings.
- **Libraries.** Facilities in which literary, artistic, and reference materials are kept for public use and circulation. The library in Concord is located at 2900 Salvio St., in Central Concord.
- **Private Schools.** Facilities that offer instruction to children or adults in exchange for compensation.
- **Religious Facilities.** Includes houses of worship and other related uses.

8.2 DRAINAGE AND FLOOD CONTROL

Drainage

The existing drainage system in Concord is comprised of a network of storm drains, man-made lakes and detention ponds, improved channelized creeks and natural creeks. The City generally maintains drainage facilities within the public right of way, on public easements and on property owned in fee by the City. Components of the drainage system on private property, or within private drainage easements, are maintained by the underlying property owner or other private party. In unincorporated areas, responsibility for storm drain maintenance lies with the Contra Costa County Flood Control and Water Conservation District. Developments have the potential to cause erosion and increase in sediment and surface water run-off entering the City's storm drainage system. In order to minimize these impacts, General Plan policies focus on requiring future development projects to minimize runoff into the City's drainage system, and requiring additional drainage facilities during the development review process.

Flood Zones

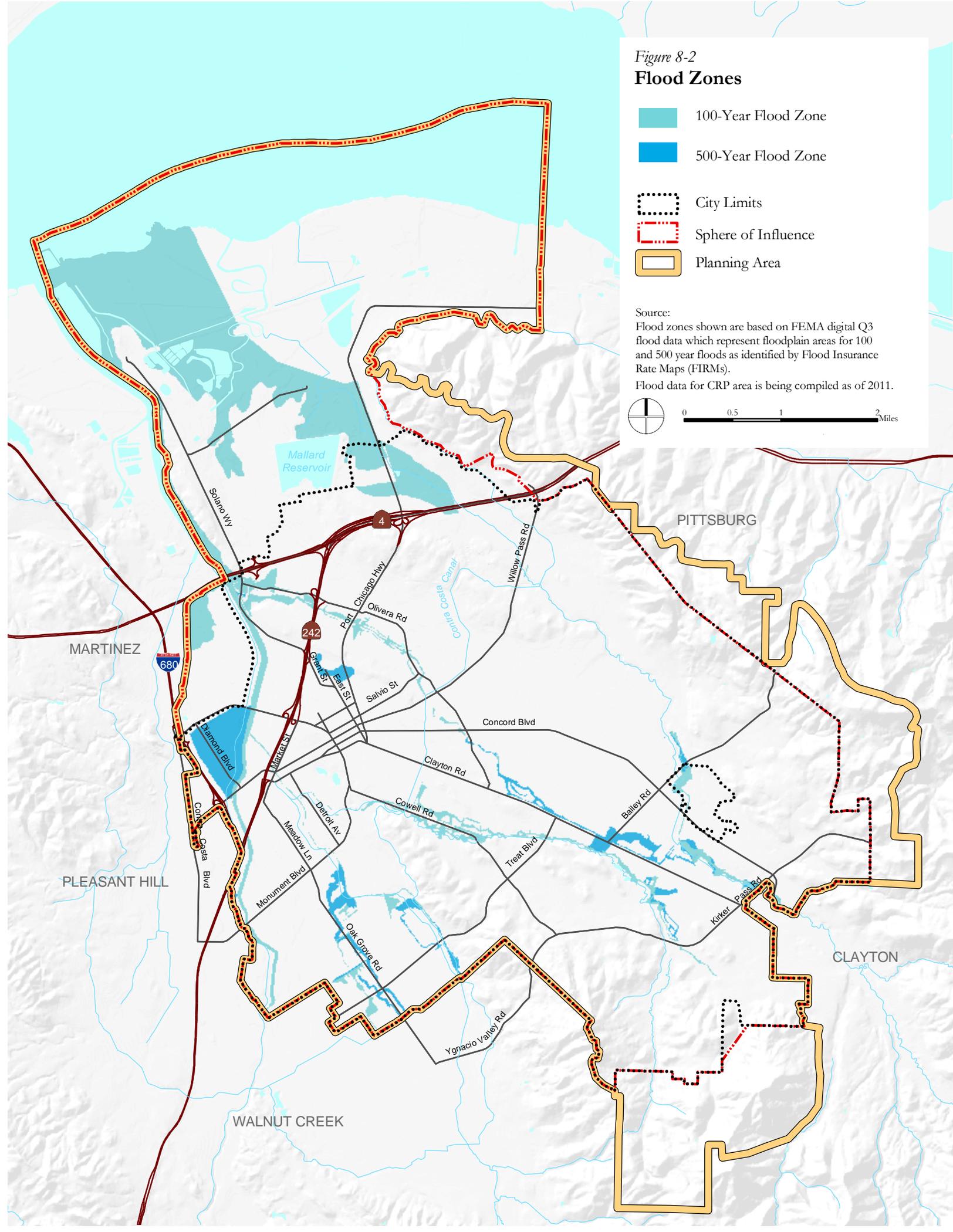
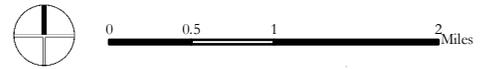
Flood zone mapping by the Federal Emergency Management Authority (FEMA) indicates that portions of Concord are located within 100 or 500-year flood zones, which are depicted in Figure 8-2. Generally, flood-prone areas are located in topographic lows and in close proximity to shorelines, streams and creeks such as north of Mallard Reservoir to Suisun Bay, along Pacheco Creek, and near the Buchanan Field Airport. Flood zone data for the Concord Reuse Project site is being compiled in 2011. Flood hazards on the site are generally located along Mount Diablo Creek, which is to be set aside as an open space corridor as part of the Area Plan. Other flood hazards on the site will generally be mitigated through drainage improvements and site planning.

Policies on flooding may be found in the Safety and Noise Element of the General Plan.

Figure 8-2
Flood Zones

-  100-Year Flood Zone
-  500-Year Flood Zone
-  City Limits
-  Sphere of Influence
-  Planning Area

Source:
 Flood zones shown are based on FEMA digital Q3 flood data which represent floodplain areas for 100 and 500 year floods as identified by Flood Insurance Rate Maps (FIRMs).
 Flood data for CRP area is being compiled as of 2011.



8.3 WATER, WASTEWATER, AND SOLID WASTE

Water Supply

Contra Costa Water District (CCWD) supplies the City's water; CCWD is almost entirely dependent on the Sacramento/San Joaquin Delta and the United States Bureau of Reclamation's Central Valley Project (CVP) for its raw water supply. The City of Concord is supplied from the Bollman Water Treatment Plant (WTP), located in North Concord. CCWD does not envision any constraints to providing water to new developments in the built-out parts of the City, as long as such developments are not anomalies in terms of typical water use. The CCWD was consulted in the planning of the Concord Reuse Project, and has indicated it has sufficient capacity to serve the development. The future need for water to serve the CRP Area will be reduced through conservation measures and the extensive use of reclaimed water for landscape irrigation.

Wastewater Systems

The City is responsible for most of the wastewater collection system, while treatment service is provided by the Central Contra Costa Sanitary District (CCCSD). CCCSD has sufficient existing infrastructure capacity to provide wastewater treatment service to additional, planned development that could be served by the City of Concord's system. CCCSD's effluent discharge limit should be sufficient to accommodate wastewater expected to be generated from currently planned growth within the Central service area. However, the addition of the Concord Reuse Project could eventually require an amendment to the National Pollution Discharge Elimination System (NPDES) permit to reflect higher effluent volumes. New wastewater collection lines will be needed to serve the Reuse Project, and improvements to transmission mains and pumping stations in North Concord may also be needed.

A growing percentage of the wastewater received at the CCCSD treatment plant is treated to a level high enough to enable its reuse for irrigation and other non-potable purposes within the service area. In 2009, about 200 million gallons a year were treated at the plant and then recycled via a network of transmission facilities serving golf courses, parks, and other landscaped areas. A reclaimed water system is planned for the Concord Reuse Project site, substantially reducing its per capita potable water needs. CCCSD is exploring other ways to expand the use of reclaimed

water in order to be better prepared for drought and avoid future diversions of water from the Delta.

Solid Waste Management and Recycling

Franchised solid waste collection and disposal services in Concord are provided by Concord Disposal Service (CDS). CDS also provides recycling services to the City. Working with CDS, the City has developed several programs to encourage recycling and reuse in Concord. In addition to curbside recycling, the City provides options for recycling additional materials such as construction debris, household hazardous waste, electronic devices, and motor oil. Programs such as these have led to an increase in the amount of the City’s solid waste that is diverted from landfills (see Table 8-4).

Table 8-4: Concord Solid Waste Diversion Rates (1998-2009)

Year	Diversion Rate
1998	31%
1999	44%
2000	50%
2001	41%
2002	37%
2003	48%
2004	50%
2005	46%
2006	49%
2007	49%
2008	56%
2009	61%

Source: City of Concord, 2010

8.4 GOALS, PRINCIPLES, AND POLICIES

GOAL PF-1: AVAILABILITY OF ADEQUATE PUBLIC UTILITIES

Principle PF-1.1: Provide a Safe and Reliable Water Supply.

Policy PF-1.1.1: Coordinate with the Contra Costa Water District (CCWD) to provide an adequate and safe water supply.

The City will work with CCWD to ensure that adequate water supply, quality, and distribution infrastructure will be available before permitting new development, and to ensure that new development participates in the improvement of water systems.

Policy PF-1.1.2: Encourage water conservation through City programs and cooperation with the CCWD.

Conservation measures include the use of water-efficient plumbing fixtures, drought-tolerant landscaping, and the use of rain barrels to collect water for gardening and landscaping. Many of these measures are being incorporated into the Concord Reuse Project to reduce its impact on the city's water needs.

Policy PF-1.1.3: Coordinate with the San Francisco Bay Regional Water Quality Control Board to provide for the implementation of Storm Water Management Programs intended to protect receiving water sources from pollutants.

Principle PF-1.2: Ensure Public Health and Safety by Providing Effective Wastewater Collection and Treatment.

Policy PF-1.2.1: Operate and maintain the City-owned wastewater collection system, including the transfer of wastewater to Central Contra Costa Sanitary District for treatment and disposal.

The City will work with CCCSD and other appropriate agencies to ensure that adequate and permanent sewer collection, transfer, and treatment facilities will be adequate to serve existing and future residents, and to ensure that new development participates in the improvement of wastewater systems.

Policy PF-1.2.2: Reduce the need for sewer system improvements by requiring new development to incorporate water conservation measures.

Policy PF-1.2.3: Cooperate with Central Contra Costa Sanitary District and other service providers to develop a wastewater reclamation program as a supplement to potable water supplies.

Principle PF-1.3: Protect the Community from Adverse Impacts of Water Runoff.

Policy PF-1.3.1: Require new development to provide any needed storm drains that are not part of the City's master storm drain system and to incorporate features into site improvement plans to minimize surface runoff.

Such features may include additional landscaped areas and/or swales, permeable paving, parking area design that minimizes runoff, and stormwater detention basins. The City complies with a number of Regional Water Quality Control Board programs to reduce runoff from these sources, and protect surface waters from runoff-related pollution.

Policy PF-1.3.2: Schedule master drainage improvement projects in the Capital Improvement Program.

Policy PF-1.3.3: Maintain master storm drain system maps that identify locations where easements should be reserved for the eventual installation of pipes and structures to ensure appropriate storm drainage management.

By providing clear guidelines to developers, the City can minimize costs of storm drainage improvements and ensure the system works

efficiently. This is particularly important on large new development sites such as the Concord Reuse Project.

Policy PF-1.3.4: Continue the Drainage Area Fee Program to fund master storm drainage improvements.

Policy PF-1.3.5: Ensure that new development contributes needed drainage improvements in proportion to a project's impacts, to assure an equitable distribution of costs to construct and maintain the City's master storm drainage system.

Additional policies dealing with flood hazards, including AB 162 compliance, can be found in the Safety and Noise Element.

Principle PF-1.4: Ensure Access to Utility Systems.

Policy PF-1.4.1: Require new development to coordinate with all utility providers to assure quality services to all residents and businesses throughout the community.

Policy PF-1.4.2: Conduct infrastructure planning for the Concord Reuse Project as part of subsequent planning activities for the site, including the preparation of specific plans or equivalent documents.

Principle PF-1.5: Continue Solid Waste Reduction and Recycling Efforts.

Policy PF-1.5.1: Expand reduction and recycling efforts within the City to divert increasingly larger portions of the waste stream from local landfills.

The City diverts approximately 60 percent of potential landfill material by utilizing a variety of programs, such as curbside recycling, recycling of debris from construction sites, back yard composting, and recycling of green waste and tires. The Concord Reuse Project provides an opportunity to increase the diversion rate even more by incorporating best practices in community design and construction.

Policy PF-1.5.2: Promote the importance of recycling industrial and construction wastes.

Industrial and commercial uses create significantly higher waste streams than do residential uses. The diversion of recyclable materials from commercial and industrial uses would greatly reduce the waste tonnage sent to local landfills each day. Recycling of construction and demolition debris can also reduce landfill needs.

Policy PF-1.5.3: Prepare informational handouts and web-based materials for the public regarding opportunities to reduce waste at homes and businesses, as well as methods for safe disposal of hazardous materials.

Policy PF-1.5.4: Require builders to incorporate adequate storage areas appropriately screened from the street for recyclables into new multifamily, commercial, and industrial structures.

GOAL PF-2: EXCELLENT EDUCATION, CULTURE, AND ARTS AND ENTERTAINMENT

Principle PF-2.1: Facilitate Educational Programs and Development of Facilities that Meet the Needs of the Community.

Policy PF-2.1.1: Maintain and improve educational opportunities in Concord through cooperation with the Mt. Diablo Unified School District (MDUSD), private schools, California State University, community organizations, and the Contra Costa County library system.

Policy PF-2.1.2: Work cooperatively with the MDUSD to ensure that sufficient land is identified and reserved to accommodate projected growth in the community.

The City is committed to facilitate school district planning and ensure that adequate facilities are available and conveniently located to serve existing and future residents. New development will be required to provide

necessary funding and/or capital facilities, as determined by the MDUSD.

Policy PF-2.1.3: Cooperate with the MDUSD in planning for new school sites and facilities and coordinate infrastructure improvements to ensure compatibility with City plans.

Policy PF-2.1.4: Work with the MDUSD to explore solutions to capacity problems at those schools where capacity is currently exceeded, and at schools where capacity may be exceeded in the future due to nearby growth.

These solutions could include expansion of existing school buildings (using school impact fees), the use of portable classrooms, adjustment of school service area boundaries, reassignment of grades to different schools, and other measures intended to distribute enrollment more evenly and reduce overcrowding.

Policy PF-2.1.4: Continue to partner with the MDUSD to optimize the joint use of school facilities for community use.

School playgrounds and grass fields offer excellent opportunities for use by the City during off-school hours to accommodate City-sponsored athletic clubs and the needs of after-school programs. Other school facilities that could be used by the City include auditoriums or cafeterias to host community meetings.

Policy PF-2.1.5: Encourage the establishment of vocational school and other training programs to prepare Concord's citizens for employment, in addition to traditional educational opportunities.

Policy PF-2.1.6: Develop additional schools, community centers, and other community facilities on the Concord Reuse Project (CRP) site.

New community facilities are planned on the CRP site to serve those who will live and work there. The site also offers opportunities for new facilities which serve residents from other parts of Concord. Some community facilities may be publicly owned while others may be privately owned but open to the public.

Principle PF-2.2: Support the provision of library and childcare services.

Policy PF-2.2.1: Pursue planning and development for new library facilities and services.

The City will coordinate planning for library facilities and services with key stakeholders. Adequate funding for construction and operations will need to be assured to avoid any adverse impacts on library operations.

Policy PF-2.2.2: Support the provision of internet service and other technology through public/private partnerships to supplement the traditional library reference and lending services that are available to the community.

Many high technology companies have grant programs or special equipment or software pricing for libraries, and foundations also have grant programs for libraries.

Policy PF-2.2.3: Continue to respond to the growing need for child care facilities and programs as a result of new residential, office, commercial, and industrial development, and allow child care facilities in all zoning districts, except for Downtown Pedestrian and Heavy Industrial areas.

Policy PF-2.2.4: Encourage the use of public and private facilities, schools, churches, community centers, and spaces within other facilities for child and adult care services.

Policy PF-2.2.5: Participate in efforts to coordinate child care programs to meet child care needs throughout the City.

Principle PF-2.3: Foster arts and entertainment.

Policy PF-2.3.1: Expand Concord's role as a regional entertainment center and encourage the creation and expansion of visual and performing arts programs.

Principle PF-2.4: Ensure environmental justice in providing public facilities and services.

Policy PF-2.4.1: Plan for the equitable distribution of new public facilities while avoiding over concentration of such facilities in one area.

The City will work with other public agencies and non-profit organizations to create and expand opportunities, programs, and services for persons with special needs in a manner that enhances the community's quality of life.

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