

UTILITIES AND SERVICE SYSTEMS

4.15 UTILITIES AND SERVICE SYSTEMS

This chapter describes the existing utilities and service systems serving the project and evaluates the potential environmental consequences of the project.

Water, wastewater, solid waste, and stormwater infrastructure are each addressed in separate sections of this chapter. In each section, a summary of the relevant regulatory setting and existing conditions is followed by a discussion of potential impacts and cumulative impacts from the project. Potential impacts associated with the need to expand existing electricity and natural gas facilities are addressed in Chapter 4.5, Energy, of this Draft EIR.

4.15.1 WATER

This section is based in part by the information provided in the Concord 2030 Urban Area General Plan Draft Environmental Impact Report prepared for the City of Concord by Dyett and Bhatia, adopted December 2006, and the City of Concord Community Reuse Plan Draft Environmental Impact Report prepared for the City of Concord by ARUP North American Ltd., adopted 2010.

4.15.1.1 ENVIRONMENTAL SETTING

Regulatory Framework

Federal Regulations

Federal Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), the principal federal law intended to ensure safe drinking water to the public, was enacted in 1974 and has been amended several times since it came into law. The SDWA authorizes the United States Environmental Protection Agency (EPA) to set national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally occurring and man-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Department of Health Services conducts most enforcement activities. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

State Regulations

California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, which was passed in California in 1969 and amended in 2013, the State Water Resources Control Board (SWRCB) has authority over State water rights and water quality policy. This Act divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions.

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RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. The City of Concord and Contra Costa County are overseen by the San Francisco Bay RWQCB.

California Senate Bills 610 and 221

Senate Bill (SB) 610 and SB 221 amended State law to ensure better coordination between local water supply and land use decisions and ensure adequate water supply for new development. Both statutes require that detailed information regarding water availability be provided to city and county decision-makers prior to approval of large development projects. SB 610 requires water supply assessments (WSAs) for certain types of projects, as defined by Water Code Section 10912, which are subject to the California Environmental Quality Act (CEQA). Projects required to prepare a WSA include large residential and commercial projects, as well as any project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units.

Because this is a plan level document and no specific development project is proposed, a WSA is not required for the proposed project pursuant to the California Water Code (“CWC” or “Water Code”) Section 10910-10915.

California Urban Water Management Planning Act

Through the Urban Water Management Planning Act of 1983, the California Water Code requires all urban water suppliers within California to prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. This requirement applies to all suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet¹ of water annually. The Act is intended to support conservation and efficient use of urban water supplies. The Act requires that total project water use be compared to water supply sources over the next 20 years in five-year increments, that planning occur for single and multiple dry water years, and that plans include a water recycling analysis that incorporates a description of the wastewater collection and treatment system within the agency’s service area along with current and potential recycled water uses. In September 2014 the Act was amended by SB 1420 to require urban water suppliers to provide descriptions of their water demand management measures and similar information.²

Groundwater Management Act (1992)

The Groundwater Management Act of the California Water Code (Assembly Bill [AB] 3030), signed into law on September 26, 1992 and effective on January 1, 1993, provides guidance for applicable local agencies to develop voluntary Groundwater Management Plans (GMP) in State-designated groundwater basins. The GMPs can allow agencies to raise revenue to pay for measures influencing the management of the basin, including extraction, recharge, conveyance, facilities’ maintenance, and water quality.³

¹ Once acre-foot is the amount of water required to cover 1 acre of ground (43,560 square feet) to a depth of 1 foot.

² Department of Water Resources. About Urban Water Management, <https://www.water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans>, accessed on March 13, 2018.

³ Department of Water Resources Planning and Local Assistance Central District, Groundwater, *Groundwater Management*, <http://www.cd.water.ca.gov/groundwater/gwab3030.cfm>, accessed on March 13, 2018.

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Sustainable Groundwater Management Act (2014)

The Sustainable Groundwater Management Act of 2014 (SGMA) consists of three legislative bills, SB 1168, Assembly Bill (AB) 1739, and SB 1319. The legislation provides a framework for long-term sustainable groundwater management across California. Under the roadmap laid out by the legislation, local and regional authorities in medium and high priority groundwater basins will form Groundwater Sustainability Agencies (GSAs) that oversee the preparation and implementation of a local Groundwater Sustainability Plan (GSP). The project site is adjacent to the Clayton Valley Groundwater Basin, which DWR has classified as “very low” priority. Therefore, the proposed project area is not within a GSA.⁴

The Water Conservation Act of 2009

The Water Conservation Act of 2009,⁵ SB X7-7, requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water by 20 percent by 2020, with an interim goal of a 10 percent reduction in per capita water use by 2015. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for state water grants or loans. The SB X7-7 requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified standards. It also requires agricultural water suppliers to prepare plans and implement efficient water management practices.

State Updated Model Landscape Ordinance

The updated Model Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by February 1, 2016 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance (MO). The City of Concord has incorporated the Water Efficient Landscaping Regulations by reference and revised Municipal Code Chapter 18.170, which is described below.

CALGreen Building Code

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as “CALGreen”) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations [CCR]) to apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in the code, throughout the State of California. CALGreen established planning and design standards for sustainable site development, including water conservation measures and requirements that new buildings reduce water consumption by 20 percent. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011. The building efficiency standards are enforced through the local building permit process.

⁴ Department of Water Resources, CASGEM Basin Prioritization 2014 Final Results, <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Basin-Prioritization/Files/B118-Basin-Prioritization-2014-Final.xlsx>, accessed on May 17, 2018.

⁵ Department of Water Resources, Water Conservation Act of 2009, <http://wdl.water.ca.gov/wateruseefficiency/sb7/>, accessed on March 13, 2018.

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The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design.
- Water efficiency and conservation.
- Material conservation and resource efficiency.
- Environmental quality.

The California Plumbing Code (Part 5, Title 24, CCR)

The California Plumbing Code (Part 5, Title 24, CCR) was adopted as part of the California Building Standards Code. The general purpose of the universal code is to prevent disorder in the industry as a result of widely divergent plumbing practices and the use of many different, often conflicting, plumbing codes by local jurisdictions. Among many topics covered in the code are water fixtures, potable and non-potable water systems, and recycled water systems. Water supply and distribution shall comply with all applicable provisions of the current edition of the California Plumbing Code.

District Regulations

East Bay Regional Park District Master Plan (2013)

The East Bay Regional Park District Master Plan, adopted July 16, 2013, provides policy direction for resource stewardship and development of parks within the jurisdiction of the District. The Master Plan also includes a vision, a mission statement, as well as policies and goals related to water utilities and service systems in the Natural Resource Management section

- NRM11: Park water resources will be used for beneficial purposes. Water quality will be monitored to comply with established standards. The District will participate in cooperative efforts to plan comprehensive watershed management and will adopt “best management practice” guidelines for District land use activities to minimize potential storm water pollution. The District will monitor land use planning and development activities by other agencies and cities to avoid potential adverse impacts to parkland from pollutants generated by off-site or upstream sources.
- NRM11b: The District will pursue conservation and control technologies for the use of potable and irrigation water. The District will seek to reduce the use of imported water for uses other than human consumption through conservation and by developing other sources of water for irrigation and non-potable needs.

Local Regulations

2015 Urban Water Management Plan⁶

The Contra Costa Water District (CCWD) adopted its 2015 UWMP in June 2016 in accordance with the SB X7-7 and the Urban Water Management Planning Act, outlined in Section 10610 of Division 6 of the

⁶ Contra Costa Water District, 2016, 2015 Urban Water Management Plan.

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California Water Code. One of the purposes of the UWMPs is to identify measures to meet SB X7-7 requirements that mandate a 20-percent reduction of per capita water use and agricultural water use throughout the State by 2020. These UWMPs evaluate the water supply capacity and the projected water demands of the service area over a 20- or 25-year planning horizon. A range of water supply scenarios were modeled, including 1) normal, 2) single-dry, and 3) multiple-dry water year conditions. The UWMPs also provide action plans in the event of a catastrophic interruption in water supplies.

City of Concord 2030 General Plan

The City of Concord 2030 General Plan includes goals, policies, and programs relevant to the environmental factors potentially affected by the proposed project. The following goal, principles, and policies are relevant to the proposed project:

- 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.
- Goal POS-3: Well-Planned Natural Resource Conservation.
- Principle POS-3.3: Facilitate Water Conservation.
 - Policy POS-3.3.1: Cooperate with the Contra Costa Water District to implement water saving programs.

Concord Reuse Project Area Plan

The Concord Reuse Project Area Plan includes policies and standards for land use, transportation, environmental protection, labor agreements, affordable housing, and public safety for the conversion of land uses within the Inland Area of the Concord Naval Weapons Station (CNWS) to civilian use. Adopted by City Council in 2012, the Plan adapted goals and concepts developed in the Concord Community Reuse Plan that articulated the community's preferred vision for the area. The Reuse Plan was adopted in 2010. The Area Plan involves development of over 12,200 new housing units, over 6.1 million square feet of commercial floor space, and a variety of community facilities and city parks primarily clustered on the western portion of the former base. The Plan provides the following principles and policies applicable to the proposed project:

- Principle U-1: Construct and operate utility systems which enable development of the CRP [Concord Reuse Project] area as a sustainable community with an outstanding quality of life.
 - Policy U-1.1: Provision of Utilities. Ensure the provision and maintenance of adequate water, wastewater, recycled water, stormwater drainage, and solid waste services to development on the CRP area by the City of Concord or by the agencies and special districts that provide these services to Concord.

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- Principle U-2: Provide a safe and reliable water supply to the CRP area.
 - Policy U-2.1: Water Management. Work with the CCWD to provide a safe and adequate water supply, coordinate water conservation activities, respond to water emergencies and long-term changes in water availability, and coordinate the delivery of water to future development within the CRP area.
 - Policy U-2.2: Water Conservation. Implement water conservation measures to reduce overall water demand and increase water efficiency.
 - Policy U-2.4: Site efficiency. Minimize water used to landscape and irrigate outdoor areas. To implement this policy, the following strategies should be among those applied:
 - Use water efficient landscape plantings, such as drought tolerant landscaping.
 - Install permeable pavement, green streets, and other landscaping techniques that manage stormwater runoff and reduce heat island effects.
 - Use non-potable water for irrigation and sewage conveyance (flushing) for commercial buildings and landscapes.
 - Policy U-2.7: Storage and Distribution System Standards. Ensure that water distribution systems, storage tanks, pump stations, and other water facilities serving the CRP area are constructed to meet CCWD's requirements and standards. Storage tanks will be required to meet CCWD's water supply and firefighting design standards. Tanks may be located in Conservation Open Space consistent with provisions of natural resource permits.
- Principle U-4: Reduce the use of potable water for non-potable purposes by providing a recycled water system serving the CRP area.
 - Policy U-4.1: Recycled Water Quality. Ensure that recycled water complies with all applicable health and safety standards and other pertinent water quality regulations.
 - Policy U-4.2: Recycled Water Use. Require use of non-potable water to irrigate all public spaces and private outdoor space managed by homeowner's associations. Prohibit use of potable water for irrigation unless there are no alternative supply sources. Use recycled water as the primary water supply for residential and commercial building cooling and all other applications where potable water is not essential.
 - Policy U-4.3: Water System Design Flexibility. Design buildings and irrigation systems to accommodate future use of recycled water if recycled water is not available at the time of construction.
 - Policy U-4.4: Purple Pipe. Require developers to install "purple pipe" in outdoor irrigation systems throughout the Planning Area to maximize the use of recycled water.

Concord Municipal Code

The City of Concord Municipal Code, organized by title, chapter, and section, contains all ordinances for Concord. Title 18, Development Code, includes regulations relevant to water resources in Concord as discussed below.

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- **Chapter 18.170, Water Efficient Landscaping.** Chapter 18.170 of the City's Municipal Code establishes water-efficient landscaping standards to conserve water use on irrigation. The chapter adopts the California State Model Efficient Landscaping Ordinance by reference, and requires compliance with the NPDES and stormwater control plan.

Existing Conditions

Water Supply

Existing water distribution at the site includes five water storage tanks with a total capacity of 1.7 million gallons and five pump stations that are owned by the United States Department of the Navy.⁷ Potable water is supplied to the project site by the Contra Costa Water District (CCWD). The CCWD serves approximately 500,000 customers within the over 140,000-acre area in eastern and central Contra Costa County.⁸ The CCWD provides treated water to the cities of Concord, Clayton, Clyde, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek. The CCWD also sells wholesale treated water to the cities of Antioch, the Golden State Water Company in Bay Point, and a portion of Brentwood. The CCWD also stores water in two reservoirs within Contra Costa County, including Mallard Reservoir in Concord and Los Vaqueros Reservoir in Brentwood. The Mallard Reservoir is the closest reservoir to the project site, located approximately 4 miles northwest.

CCWD co-owns and operates the Randall-Bold Water Treatment Plant, which provides treated water to Antioch, Diablo Water District serving Oakley, and Brentwood as well as its Treated Water Service Area. The Randall-Bold Plant has a production capacity of 50 million gallons per day (mgd) and is designed for future expansion for up to 80 mgd.⁹ The CCWD-operated Bollman Treatment Plant also supplies treated water to the project site. The Bollman Water Treatment Plant (Bollman Plant) is located in North Concord approximately 4 miles northwest of the project site and supplies potable water to the City, including the project site, as well as Pleasant Hill, Walnut Creek, Clayton, and Martinez. The Bollman Plant has a treatment capacity of 75 million mgd.¹⁰ CCWD also sells untreated water to the cities of Antioch, Martinez, and Pittsburg, and the California Cities Water Company in Bay Point, industrial and irrigation customers. CCWD water intakes are located at Rock Slough and on Old River located in eastern Contra Costa County, and Mallard Slough located in central Contra Costa County. Water is conveyed from these intakes through the 48-mile Contra Costa Canal, which runs from Rock Slough to the Terminal Reservoir in Martinez.¹¹

The major water supply source for the CCWD is the Sacramento-San Joaquin Delta under a contract with the United States Bureau of Reclamation's Central Valley Project (CVP) that runs to 2045. Under this contract, CCWD is provided up to 174 mgd, or 194,905 acre-feet per year (afy). As of 2015, annual retail

⁷ City of Concord, 2009, Concord Community Reuse Project Draft Revised EIR, page 16-1.

⁸ Quimby, Jeff. Director of Planning, Contra Costa Water District. Personal communication with Ashley James, PlaceWorks. May 8, 2018.

⁹ Contra Costa Water District, Randall-Bold Water Treatment Plant, <http://www.ccwater.com/documentcenter/view/992>, accessed on March 14, 2018.

¹⁰ Contra Costa Water District, Ralph D. Bollman Water Treatment Plant, www.ccwater.com/documentcenter/view/993, accessed on March 14, 2018.

¹¹ Contra Costa Water District, CCWD Facilities, <http://www.ccwater.com/923/CCWD-Facilities>, accessed on March 14, 2018.

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water demand was 58,840 afy. Planned retail water supplies are 113,100 afy in the year 2040, which are sufficient to meet retail demand of 96,500 afy in average and multiple dry years through the year 2040. The CCWD also maintains contracts with various local districts and private entities, including the East Contra Costa Irrigation District, for a total annual supply of 22 mgd. The City of Concord supplements its CCWD supply with two wells within the Clayton Valley Groundwater Basin,¹² which are located at City Park and at Dover and Frontage Roads, totaling 1.34 mgd.¹³ Groundwater levels in the basin 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 indicate groundwater meets drinking water standards.¹⁴

CCWD holds a Los Vaqueros water right that allows diversion of excess Delta Flows to Los Vaqueros Reservoir for storage. Surplus conditions occur in the Delta when there is more than enough water in the system to meet all regulatory constraints and demands. In wetter years, the Delta is in surplus conditions for much of the late winter through early summer. Surplus conditions are more limited in duration in drier years. CCWD also has a permit and a license that allow for total diversions of up to 23.9 mgd from the Delta at Mallard Slough. However, this water source often has high salinity levels and can only be used seasonally. Little or no water is available from Mallard Slough during dry periods.¹⁵

Recycled water would be provided by the Central Contra Costa Sanitary District (CCCSD) to the project site, although there is no existing service. The project site could be connected to the CCCSD recycled water distribution system either at the WWTP or at planned extensions of the recycled water distribution system. Recycled water may be used as a potable water alternative for landscape irrigation, decorative water features, and restroom facilities. The CCCSD has a recycled-water generation capacity of approximately 3 mgd, which has been allotted to current and future customers in the Concord/Pleasant Hill area. Additional generation capacity can be obtained with improvements to filtration and disinfection systems. CCCSD currently provides 200 million gallons (MG) per year to irrigation customers within the cities of Concord, Pleasant Hill, and Martinez, and 400 MG per year for plant use.¹⁶

Water Shortage Contingency Plans

The 2015 Urban Water Management Plan includes a Water Shortage Contingency Plan that addresses the water management practices required during a drought or other interruption of water supplies. The current M&I Water Shortage Policy provides for a minimum shortage allocation of 75 percent of adjusted historical use until irrigation allocations fall below 25 percent. In addition, Reclamation will deliver CVP water to CCWD at not less than a public health and safety water supply level, provided CVP water is available, if the Governor declares an emergency due to water shortage or if an emergency exists due to water shortage. CCWD's CVP allocation during a minimum public health and safety condition shall be sufficient to satisfy public health and safety requirements, which is estimated to be 60 percent of normal demand. To manage a water supply shortfall condition, four demand reduction stages have been defined.

¹² California Department of Water Resources, Groundwater Basin Boundary Assessment Tool, <https://gis.water.ca.gov/app/bbat/>, accessed on April 19, 2018.

¹³ Contra Costa Water District, 2016, 2015 Urban Water Management Plan.

¹⁴ Concord 2030 Urban Area General Plan, 2006, Draft Environmental Impact Report, page 3.13-2.

¹⁵ Contra Costa Water District, 2016, 2015 Urban Water Management Plan, page 6-2.

¹⁶ Contra Costa Water District, 2015, Treated Water Master Plan, page 2-17.

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The total demand reduction goal for each stage increases from less than 10 percent to up to 50 percent of normal demand from Stage I to Stage IV. Stages I and II involve voluntary customer demand reduction measures and Stages III and IV impose mandatory measures including allotments and temporary drought charges.

Water Demand

Total normalized annual water use in 2007 for CCWD was approximately 13,943 MG, or 38.2 mgd. As of 2015, retail water demand was 52.53 mgd. CCWD estimates that average annual daily water use for the Concord Area Plan area as a whole will be approximately 4.8 mgd (or 5,370 afy).¹⁷

4.15.1.2 STANDARDS OF SIGNIFICANCE

The project would have a significant impact on water service if:

1. It would require or result in the relocation or construction of new or expanded water facilities the construction or relocation of which would cause significant environmental effects.
2. There were insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

4.15.1.3 IMPACT DISCUSSION

UTIL-1	The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
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As described above, the CCWD has a total of 100.97 mgd existing and projected water supplies available through 2040.

As described in Chapter 3, Project Description, of this Draft EIR, the proposed project would result in approximately 35 acres of developed recreation and operations facilities, including a visitor center, event and educational spaces, picnic areas, campsites, overlooks, and interpretive elements. The proposed project's projected water demand was calculated using the water demand factors generated by CalEEMOD estimates by land use type and similar park projects. The projected water demand for the proposed project is shown in Table 4.15-1 below.

Specifically, new water connections or upgrades would be required at all park facilities. Potable water would be provided at the Visitor Center Complex, the Diablo Center, the caretaker's residence, the Corporation Yard, and several staging and picnic areas. Non-potable water would be provided at the cattle corral and troughs. The existing supply lines and troughs would be utilized to the extent feasible and

¹⁷ Contra Costa Water District, May 15, 2019, Concord Community Reuse Project – Water Demand Update, <https://www.ccwater.com/DocumentCenter/View/7114/051519-8-Concord-Community-Reuse-Proj---Water-Demand-Update>, accessed on October 15, 2019.

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TABLE 4.15-1 PROPOSED PROJECT WATER DEMAND (GPY)

Land Use	Size	Unit	Water Demand Per Unit (gpy)	Indoor Water Use (gpy)	Outdoor Water Use	Total Water Demand (gpy)
City Park	2.46	Acre	1,191,481	0	2,931,043	2,931,044
Visitor Center, Offices, Corp. Yard	86,111	Sq.Ft.	320	17,106,586	10,484,681	27,591,267
Caretakers Residence	1,200	Sq.Ft.	89	65,154	41,075	106,229
Campsite	11	Campsite	36,500	0	401,500	401,500
Orchard	100	Tree	43,800	0	4,380,000	4,380,000
Total Water Demand				17,171,740	18,238,299	35,410,041

Notes: Demand calculations may not match totals due to rounding.

gpy = gallons per year

Source: CalEEMod 2016 3.2, PlaceWorks, 2018.

improved where necessary. Irrigation for landscaping would be provided at the Visitor Center Complex and other park facilities which could be supplied by recycled water.

As shown on Table 4.15-1, the projected water demand for the proposed project would be 35.4 million gallons per year (gpy), which translates to 97,014 gallons per day (0.097 mgd) or 109 afy. The General Plan 2030 includes policies (listed above) that require that an adequate amount of public utilities, including water supply, be available to serve existing and future needs of the city. The proposed project would also be required to comply with the standards for water efficient landscape design included in CMC Chapter 18.170 in an effort to reduce water consumption. To supplement these existing regulations, the proposed project would design all impervious surfaces to comply with C.3 requirements which will ultimately decrease water demand within the project site. Consistency with these regulations and additional water from groundwater wells would ensure that future development under the proposed project would reduce impacts to the CCWD's water supply.

Furthermore, growth associated with the proposed project would be within the projected growth for the City in accordance with the City's General Plan. The CCWD's UWMP projects water demands based on land use and demographic change associated with County and City General Plans. As such, the UWMP accounts for the water demand of the proposed project. The UWMP shows that there is enough supply to meet this projected demand.

The CCWD conducted an SB 610 water supply assessment of the Concord Community Reuse Plan in 2010 that confirmed the CCWD's has the capacity to serve the Concord Community Reuse Project. The CCWD has estimated that the entire Concord Community Reuse Project would use 4.8 mgd (5,370 afy) of water and has accounted for future water demand with buildout of the Concord Community Reuse Project

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within its 2015 UWMP.¹⁸ Accordingly, impacts to water supplies and entitlements from the proposed project would be *less than significant*.

Significance without Mitigation: *Less than significant*.

UTIL-2 The project would require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which would cause significant environmental effects.

The CCWD supplies water to the former CNWS. There are existing CCWD trunk lines at the main CNWS gate on Port Chicago Highway and near the existing Coast Guard Housing complex located on Olivera Road. Additionally, there are five water storage tanks within the former CNWS, with a total capacity for the storage tanks of 1.7 million gallons. The three largest tanks are located north of Bailey Road (one 1 million gallon tank and two 350,000 gallon tanks), while the two south of Bailey Road are smaller (1,500 and 5,000 gallon tanks), gravity tanks. There is one pump station (located in the Concord Reuse Project area, outside of the proposed Regional Park project site) and two wells that extract water for livestock. There are water troughs connected by underground pipes to the storage tanks, throughout project site, to provide drinking water for cattle. There are 13 troughs north of Bailey Road and 13 troughs in the Southern Area.

The Contra Costa Canal and Clayton Canal currently traverse the site. Both canals were built as part of the Delta Division of the CVP by the Bureau of Reclamation. The canals are managed by CCWD and the canal rights-of-way are owned by the Bureau of Reclamation. The Contra Costa Canal is currently in use, while use of the Clayton Canal has been discontinued. The proposed project would not affect the use of the canals.

Potable water supply would be required at the Visitor Center Complex, the Diablo Center, the caretaker's residence, the corporation yard, and at some staging and picnic areas. There are currently supply lines from the CCWD to the project site; however, new connections or upgrades would likely be necessary for all park facilities.

Water would also be necessary for the cattle corral and troughs. There is currently a network of supply lines and troughs through the project site which would be utilized as feasible, and improved where necessary, with consideration of overall water demand and the relocation of the corral.

The Visitor Center Complex and key facilities may include landscape areas that require irrigation for establishment. There is a potential opportunity for irrigation water to be supplied through a connection to the recycled water system planned for the EDC area.

The proposed project would result in the construction of new water facilities and the expansion of existing facilities to serve park facilities. Short-term construction-related environmental effects (e.g., noise, dust, traffic, erosion) would be subject to compliance with applicable local and regional regulations and

¹⁸ Contra Costa Water District, May 15, 2019, Concord Community Reuse Project – Water Demand Update, <https://www.ccwater.com/DocumentCenter/View/7114/051519-8-Concord-Community-Reuse-Proj---Water-Demand-Update>.

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standard conditions for new construction related to water lines, in addition to the CCWD's best management practices (BMPs) for construction projects. For example, these regulations and conditions would require the water line construction to minimize dust generation, limit construction noise to daytime hours to limit impacts to sensitive receptors, and use modern equipment to limit emissions. Any new or expanded local water supply and distribution facilities would require permitting and review in accordance with CEQA, which would ensure environmental impacts are disclosed and mitigated to the extent feasible. However, despite the implementation of local and regional regulations and project policies, the potential remains that impacts from improvements to water facilities would be *significant*.

Significance without Mitigation: *Significant*.

Impact UTIL-2: Despite implementation of the proposed project policies, implementation of the proposed project would result in the need to construct additional facilities, the effects of which could be significant. Therefore, the impact would be *significant*.

Mitigation Measure UTIL-2: The District shall work with the City's Local Reuse Authority and the Engineering Division to ensure that all required water distribution systems, water storage tanks, pump stations, and other facilities at the site to supply the demand for potable water are constructed to meet the CCWD's requirements and standards.

Significance with Mitigation: *Less than significant*.

4.15.1.4 CUMULATIVE IMPACTS

UTIL-3	The project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to water service.
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The cumulative impact for water service is considered in the context of the growth from potential future development under the proposed project combined with the estimated growth in the CCWD service area. The CCWD supplies water to Clayton, Clyde, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek.

The proposed project would contribute to an increase in the cumulative demand for water. As described under Impact UTIL-1, the CCWD has determined that, in order to support the Concord Community Reuse Project, new facilities would be needed to provide water service. With the implementation of Mitigation Measure UTIL-1, the District would ensure that all required water distribution systems, water storage tanks, pump stations, and other facilities at the site to supply the demand for potable water are constructed to meet the CCWD's requirements and standards. With implementation of this mitigation measure, the proposed project would not contribute to cumulative impacts associated with the provision of water supply. The CCWD has concluded in its 2015 Urban Water Management Plan that CCWD's currently available and planned supplies, including future cumulative development outside of the project site under the Concord Community Reuse Project, are sufficient to meet the District's reliability goal and

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estimated water demands during average, single-dry and multiple-dry year conditions during the next 25 years.¹⁹ Therefore, cumulative impacts related to water service would be *less than significant*.

Significance without Mitigation: *Less than significant*.

4.15.2 WASTEWATER (SEWER)

This section describes the existing regulatory setting and conditions as well as potential impacts of the project with regard to wastewater collection and treatment facilities. Wastewater collection services in the city and project vicinity are provided by Contra Costa County Sanitary District (CCCSD). Wastewater treatment services are provided by CCCSD at the Bollman Waste Water Treatment Plant (Bollman Plant) in Martinez.

4.15.2.1 ENVIRONMENTAL SETTING

Regulatory Framework

Federal Regulations

The federal government regulates wastewater treatment and planning through the Federal Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), as well as through the National Pollutant Discharge Elimination System (NPDES) permit program, both of which are discussed in further detail below.

Clean Water Act

The Federal Water Pollution Act of 1972, more commonly known as the Clean Water Act (CWA), regulates the discharge of pollutants into watersheds throughout the nation. It is the primary federal law governing water pollution. Under the CWA, the EPA implements pollution control programs and sets wastewater standards. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable connections and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and

¹⁹ Contra Costa Water District, 2016, 2015 Urban Water Management Plan.

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provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

State Regulations

State Water Resources Control Board

On May 2, 2006 the SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows (SSOs) by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sanitary Sewer Master Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

The SWRCB has delegated authority to nine RWQCBs to enforce these requirements within their region. The San Francisco Bay RWQCB issues and enforces NPDES permits applicable to the WBSD wastewater collection system in Concord.

Sanitary District Act of 1923

The Sanitary District Act of 1923 (Health and Safety Code Section 6400 et seq.) authorizes the formation of sanitation districts and enforces the Districts to construct, operate, and maintain facilities for the collection, treatment, and disposal of wastewater. The Act was amended in 1949 to allow the districts to also provide solid waste management and disposal services, including refuse transfer and resource recovery.

District Regulations

There are no District polices or regulations for wastewater treatment.

Local Regulations

City of Concord General Plan

The City of Concord 2030 General Plan includes goals, policies, and programs relevant to the environmental factors potentially affected by the proposed project. The following goal, principle, and policy are relevant to the proposed project:

- Goal PF-1: Availability of Adequate Public Utilities.
- Principle PF-1.2: Ensure Public Health and Safety by Providing Effective Wastewater Collection and Treatment.

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

Concord Reuse Project Area Plan

The Concord Reuse Project Area Plan includes the following principles and policies applicable to the project site:

- Principle U-1: Construct and operate utility systems which enable development of the CRP area as a sustainable community with an outstanding quality of life.
 - Policy U-1.1: Provision of Utilities. Ensure the provision and maintenance of adequate water, wastewater, recycled water, stormwater drainage, and solid waste services to development on the CRP area by the City of Concord or by the agencies and special districts that provide these services to Concord.
- Principle U-3: Ensure public health and safety by providing effective wastewater collection and treatment services to the CRP area.
 - Policy U-3.1: Wastewater Management. Protect public health and safety by ensuring that adequate, effective wastewater collection systems are in place or committed as development of the CRP area takes place. All wastewater collection improvements made by the City of Concord shall be coordinated with the CCCSD.

Concord Municipal Code

The City of Concord Municipal Code, organized by title, chapter, and section, contains all ordinances for Concord. Title 13, Public Utilities and Services, includes regulations relevant to sanitary wastewater resources in Concord as discussed below.

- **Chapter 13.05, Sewer System.** Section 13.05.100 provides requirements for sewer system connections, while Section 13.05.110 provides requirements to establish sewer services to premises outside of the City.

Existing Conditions

This section describes the environmental setting and potential impacts of the project with regard to wastewater collection and treatment facilities.

Sanitary Sewer

The City of Concord provides wastewater collection service both within Concord and Clayton. Wastewater from the city is treated by the CCCSD. Wastewater is conveyed to the CCCSD's interceptor system and Wastewater Treatment Plant in unincorporated Martinez. CCCSD treats 32 million gpd, serving 481,600 residents and 3,000 businesses within Contra Costa County.²⁰ Approximately 43 percent of the project site

²⁰ Central Contra Costa Sanitary District, Service Area Map, <http://www.centalsan.org/index.cfm?navid=167>, accessed on March 14, 2018.

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is located within the CCCSD service area, which consists of the northeastern portion of the site. Another 43 percent of the site is not served by an existing sewer system but is entitled for service by the City of Concord and the CCCSD, which consists of the southwestern portion of the site.

The CCCSD is a special district that was established in 1946 to provide sewage collection, wastewater treatment, recycled water distribution and household hazardous waste collection services. The CCCSD serves approximately 456,200 people over an area of approximately 142 square miles, and includes the cities of Concord, Clayton, Walnut Creek, Pleasant Hill, Lafayette, Moraga, Orinda, Danville, portions of Martinez and San Ramon, and the adjacent unincorporated areas of Contra Costa County.²¹

The City pays a flow-proportional share of the WWTP operations and maintenance costs, as well as related CCCSD capital costs. The City also maintains a 20 Year Sewer Enterprise Plan, which provides a long-term forecast of anticipated revenues and expenditures of the Sewage Pump Station and sewage collection system, sewage treatment costs, City-related CCCSD capital improvements, and City-related capital improvements to the sewage infrastructure.²²

Wastewater Collection

The City of Concord's wastewater collection system consists of approximately 502 miles of underground pipelines, 8,140 manholes, and three siphons that collect and convey wastewater from homes and businesses to the CCCSD conveyance system, which terminates at the CCCSD Wastewater Treatment Plant (WWTP). Wastewater flows from the maintenance service area to the Concord pump station site by gravity. The Concord Sewage Pump Station pumps an average of approximately 12 mgd to CCCSD, but is capable of pumping up to 40 mgd during peak wet weather flows (PWWF). An additional 8 mgd of wastewater can be conveyed to CCCSD from the Sewage Pump Station through two gravity-flow bypass lines. From the pump station site, wastewater flows west underneath the Walnut Creek Flood drainage channel, to where it connects to the CCCSD A-Line at the intersection of Galaxy Way and Meridian Park Boulevard, and then eventually flows to the CCCSD Wastewater Treatment Plant in unincorporated Martinez. After the City's pump station was decommissioned, CCCSD installed two gravity-flow connections to connect to the A-Line. Gravity-flow connections are located north of Marsh Drive to service the North Concord area and south of Concord Avenue.²³

Aside from the North Concord system, the CCCSD collection system has sufficient capacity for existing and future dry weather flows, including peak daily flows. Capacity improvements are required only for correcting wet weather design event capacity deficiencies. The CCCSD Master Plan identifies current and projected capacity needs, and determined that seven miles of pipes are capacity deficient, and that the capacity of the 10 largest pump stations is adequate for a 10-year design event, except for one pipe. The 2017 CWMP recommended capacity improvements totaling 19,000 feet of collection system piping at a cost of \$14 million.²⁴

²¹ City of Concord, 2009, Community Reuse Project Draft Revised EIR, page 16-7.

²² City of Concord, 2012, Concord Reuse Project Area Plan, Book Two, page 66.

²³ City of Concord, 2009, Community Reuse Project Draft Revised EIR, page 16-6.

²⁴ Central Contra Costa Sanitary District, 2017, Sewer System Management Plan, page 8-4.

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Wastewater Treatment

The CCCSD WWTP treats raw wastewater from its 144-square mile service area over 10 municipalities in Contra Costa County, and discharges to Suisun Bay.

The WWTP has a maximum treatment capacity of 90 mgd, and a permitted dry weather treatment capacity of 53.8 mgd as set by the District's National Pollution Discharge Elimination System (NPDES) permit approved by the San Francisco Bay Regional Water Quality Control Board. The average dry weather flow of the WWTP was 33.3 mgd as of 2017.²⁵ The maximum wet weather flow is 240 mgd, while excess sewer inflow above the effluent discharge limit of 53.8 mgd is diverted into a holding tank.

The WWTP currently collects and treats wastewater at either secondary or advanced levels. Wastewater treated at the secondary level is released into Suisun Bay. Advanced treatment occurs at the CCCSD Filter Plant, which includes chemical-assisted filtration and chlorine disinfection to produce recycled water suitable for nonpotable uses. The CCCSD stores excess recycled water at the 30-million gallon capacity WWTP storage basin.

4.15.2.2 STANDARDS OF SIGNIFICANCE

Implementation of the proposed project would have a significant impact on wastewater service if it would:

1. Require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.
2. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

4.15.2.3 IMPACT DISCUSSION

This section analyzes the proposed project's potential impacts to wastewater collection and treatment facilities.

The proposed project does not include any uses that would typically have the potential to exceed wastewater treatment requirements, such as industrial land uses. The proposed Regional Park, recreational, and conservation open space uses that would result from the proposed project would not generate wastewater of different quality and treatability than that generated by current and proposed land uses in the CCCSD service area. The CCCSD WTP is currently in compliance with its NPDES permit requirements and the proposed project would not generate wastewater that would conflict with the

²⁵ Leavitt, Russell. Environmental Coordinator, Central Contra Costa Sanitary District. Personal communication with Ashley James, PlaceWorks. April 25, 2018.

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CCCSD's ability to comply with treatment requirements. Therefore, the proposed project would result in a *less-than-significant* impact.

Significance without Mitigation: *Less than significant.*

UTIL-4	The project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which would cause significant environmental effects.
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As described in the existing conditions section above, the CCCSD WTP is permitted to treat up to 53.8 mgd and has an average daily dry weather flow of 33.3 mgd. Accordingly, the CCCSD WTP has a remaining capacity to receive and process 20.5 mgd.²⁶ As shown on Table 4.15-1, the water demand for the proposed project was calculated based on the proposed land uses. It is unlikely that the wastewater generated by the increase in water demand for the proposed park and recreational land uses would be conveyed to the CCCSD WTP given that the proposed park and recreational areas would be primarily made up of pervious surfaces. However, for a conservative approach, this analysis assumes 90 percent of the net increase in water demand for the proposed project would become wastewater. Using this approach, the proposed project would generate approximately 0.04 mgd of wastewater.²⁷ This represents less than 1 percent (0.19 percent) of the remaining CCCSD WTP capacity.²⁸ While the increase in wastewater flows from the proposed project would add to the capacity demands on the CCCSD WTP, the amount of wastewater generated would not exceed the remaining capacity.

This EIR is a program-level document and does not evaluate the specific details associated with the installation of future utilities. Once utility and pipelines projects are planned and the details are known, additional environmental review may be required. Furthermore, the 2030 General Plan includes policies (listed above), such as Policy PF-1.2.2, which requires new development to incorporate water conservation measures in order to ensure effective wastewater collection and treatment. Therefore, the proposed project would result in a *less-than-significant* impact.

Significance without Mitigation: *Less than significant.*

UTIL-5	The project would not result in the determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
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As described under Impact UTIL-4, the WWTP has adequate capacity to serve the proposed project. Therefore, implementation of the proposed project is not expected to result in the determination by the

²⁶ 53.8 MGD permitted capacity – 33.3 average daily dry weather flow = 20.5 MGD remaining capacity.

²⁷ Assumes 90 percent of indoor water demand at park facilities is attributable to wastewater demand. (17,171,740 gpy of indoor water use x 0.90 = 15,454,566 gpy; 15,454,566 gpy / 365 days / 1,000,000 = 0.04 mgd)

²⁸ (0.04 wastewater generated/20.5 MGD remaining capacity) x 100 = 0.19 percent of the remaining capacity.

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CCCSD that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, the impact would be *less than significant*.

Significance without Mitigation: *Less than significant*.

4.15.2.4 CUMULATIVE IMPACTS

UTIL-6	The project, in combination with past, present, and reasonably foreseeable projects would result in less-than-significant cumulative impacts with respect to wastewater service.
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The cumulative impact for wastewater is considered in the context of the growth from potential future development under the proposed project combined with the estimated growth in the WWTP service area. The WWTP serves Concord, Clayton, Walnut Creek, Pleasant Hill, Lafayette, Moraga, Orinda, Danville, portions of Martinez and San Ramon, and the adjacent unincorporated areas of Contra Costa County.

The proposed project would contribute to an increase in the cumulative demand for wastewater. As described under Impact UTIL-4, the proposed project would generate wastewater that represents less than 1 percent (0.19 percent) of the remaining CCCSD WTP capacity. Therefore, the project is not expected to contribute to cumulative impacts associated with wastewater treatment services. Accordingly, cumulative impacts to sanitary wastewater service would be *less than significant*.

Significance without Mitigation: *Less than significant*.

4.15.3 SOLID WASTE

4.15.3.1 ENVIRONMENTAL SETTING

Regulatory Framework

State Regulations

California Integrated Waste Management Act

California's Integrated Waste Management Act of 1989, AB 939, subsequently amended by SB 1016, set a requirement for cities and counties throughout California to divert 50 percent of all solid waste from landfills by January 1, 2000 through source reduction, recycling, and composting. AB 939 also established the goal for all California counties to provide at least 15 years of on-going landfill capacity.

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on two factors: a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. The California Integrated Waste Management Board was replaced by the California Department of Resources Recycling and Recovery (CalRecycle) in 2010. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an

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annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate.

In 2011, AB 341 was passed that sets a State policy goal of not less than 75 percent of solid waste that is generated to be source reduced, recycled, or composted by the year 2020.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act requires areas in development projects to be set aside for collecting and loading recyclable materials. This Act required CalRecycle to develop a model ordinance for adoption by any local agency relating to adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model, or an ordinance of their own, providing for adequate areas in development projects for the collection and loading of recyclable materials.

Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826²⁹ requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that, on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. Greenhouse gas (GHG) emissions result from the decomposition of organic wastes in landfills. Mandatory recycling of organic waste is aimed at helping achieve California's aggressive recycling and GHG emission goals.

California Green Building Standards Code

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, California Code of Regulations [CCR], known as "CALGreen") was adopted as part of the California Building Standards Code to apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California, unless otherwise indicated in the code. Section 4.408, Construction Waste Reduction Disposal and Recycling, mandates that, in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. This Code requires that project applicants prepare a Waste Management Plan (WMP), for on-site sorting or construction debris, which is submitted to the City of Concord for approval.

The WMP is required to include the following:

- Identify the materials to be diverted from disposal by recycling, reuse on the Project or salvage for future use or sale.

²⁹ CalRecycle, 2016, Mandatory Commercial Organics Recycling, <http://www.calrecycle.ca.gov/recycle/commercial/organics/>, accessed on April 30, 2018.

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- Specify if materials will be sorted on-site or mixed for transportation to a diversion facility.
- Identify the diversion facility where the material collected can be taken.
- Identify construction methods employed to reduce the amount of waste generated.
- Specify that the amount of materials diverted shall be calculated by weight or volume, but not by both.

District Regulations

East Bay Regional Park District Master Plan (2013)

There are no policies or goals that are applicable to solid waste in the District's Master Plan.

East Bay Regional Park District Ordinance 38

District Ordinance 38 contains three applicable sections regulating solid waste:

- **Section 504: Littering Waters.** Any person who violates the littering laws of this State with respect to littering or dumping waste material in water or on shore may be arrested or issued a citation pursuant to Penal Code Section 374e. Penal Code Section 374e states: Every person who litters or causes to be littered, or dumps, or cause to be dumped, any waste matter into any bay, lagoon, channel, river, creek, slough, canal, lake or reservoir, or other stream or body of water, or upon a bay, beach or shore within 150 feet of the high water mark of any such water, is guilty of a misdemeanor.
- **Section 900.2: Littering or Dumping.** No person shall litter or cause to be littered any District parkland, or cause to be dumped any waste matter in or upon any District parkland. It shall be unlawful to place, deposit, or dump, or cause to be placed, deposited or dumped, any rocks or dirt in or upon any District parkland without the prior written consent of the General Manager. Any person littering or dumping any waste material upon District parkland shall be arrested or issued a citation pursuant to Penal Code Sections 374.4 and 374.3.
- **Section 900.3: Household or Industrial Materials.** No person, firm, or business shall bring household or industrial garbage, trash or waste materials into any lands owned or operated by the District for the purpose of placing such materials into any trash can, dumpster, or receptacle provided by the District.

Local Regulations

City of Concord 2030 General Plan

The City of Concord 2030 General Plan includes goals, policies, and programs relevant to the environmental factors potentially affected by the proposed project. The following goal, principle, and policies are relevant to the proposed project:

- Goal PF-1: Availability of Adequate Public Utilities.
- 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.

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

Concord Reuse Project Area Plan

The Concord Reuse Project Area Plan includes the following principles and policies applicable to the proposed project:

- Principle U-6: Expand the City's solid waste reduction and recycling efforts to the CRP area as development occurs.
 - Policy U-6.1: Solid Waste Management. Manage solid waste disposal in a manner that supports and advances the City's waste reduction, recycling, and composting goals.
 - Policy U-6.2: Construction and Demolition Debris Recycling. Manage and, to the extent feasible, reuse or recycle the debris generated by the demolition of storage bunkers, roads, railroad revetments, and buildings.

Concord Municipal Code

The City of Concord Municipal Code, organized by title, chapter, and section, contains all ordinances for Concord. Title 8, Health and Safety, includes regulations relevant to solid waste resources in Concord as discussed below.

- **Chapter 8.10, Sanitation**, provides regulations for disposal of garbage or refuse.
- **Chapter 8.20, Solid Waste**, describes the responsibilities and requirements for owners, occupants and service providers regarding solid waste collection, storage, recycling and disposal. The chapter provides regulations that govern collection and disposal, source reduction and recycling, and construction and demolition waste recycling.

City of Concord Climate Change Action Plan

The City's 2013 Climate Action Plan (CAP) was developed to reduce GHG emissions by implementing various strategies and programs at the local level.³⁰ The CAP strategies related to solid waste include 1) reducing business and multi-family waste, 2) anticipating the State's 2020 requirement of 75 percent diversion for business and multi-family waste sources, 3) striving for 75 percent reduction for single-family household waste by 2020 and mandate such reduction by 2030, and 4) requiring 75 percent reduction in municipal waste by 2020. The CAP reports that 9 percent of Concord GHG emissions are attributable to solid waste.

Existing Conditions

Mount Diablo Resource Recovery³¹ provides solid waste collection and conveyance service for Concord. Collected recyclables, organics, and garbage are conveyed to the Mt. Diablo Resource Recovery Park in Pittsburg for processing and shipment. The Mt. Diablo Resource Recovery Park serves the cities and

³⁰ City of Concord, *Climate Change Action Plan*, 2013, <http://www.cityofconcord.org/pdf/dept/planning/climate.pdf>, accessed on March 21, 2018.

³¹ Formerly known as Concord Disposal Service (CDS).

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communities of Concord, Pittsburg, Bay Point, Antioch, Oakley, Rio Vista, Discovery Bay, Byron, Knightsen, Bethel Island, and Brentwood.

The City of Pittsburg approved a Use Permit and Design Review of Plans for Mt. Diablo Resource Recovery Park in May 2015. Under this project, the existing Mt. Diablo Recycling Facility and the Recycling Center and Transfer Station were expanded and reorganized to become the Mt. Diablo Resource Recovery Park.³² In 2016, Concord's per capita solid waste disposal rate for employees in 2016 was 10.7 PPD; the CalRecycle per capita disposal rate target for employees is 12.1 PPD. In 2016, Concord's per capita disposal rate for residents was 4.3 PPD; the CalRecycle per capita disposal rate target for residents is 5.7 PPD.³³

CalRecycle³⁴ reports that in 2016 a total of 99,980 tons of solid waste from Concord was disposed at 18 different landfills. Eighty-eight percent (88.3 percent; 88,333 tons) of Concord's solid waste in 2016 went to the Keller Canyon Landfill. The three landfills receiving the second, third and fourth largest amount of solid waste from Concord in 2016 were:

- Potrero Hills Landfill (5,940 tons)
- Acme Landfill (4,146 tons)
- Recology Hay Road Landfill (769 tons)

Keller Canyon Landfill

The Keller Canyon Landfill is in unincorporated Contra Costa County to the east of the project site. It has a permitted throughput capacity of 3,500 tons per days. Its remaining capacity is 63,408,410 cubic yards. It has an estimated "cease operation date" of December 31, 2030.³⁵

Potrero Hills Landfill

The Potrero Hills Landfill is located in Suisun City, California. It has a permitted throughput capacity of 4,330 tons per day. Its remaining permitted capacity is 13,872,000 cubic yards. It has an estimated "cease operation date" of February 14, 2048.³⁶

³² City of Pittsburg, <http://www.ci.pittsburg.ca.us/index.aspx?page=828>, accessed on May 25, 2018.

³³ CalRecycle, <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx>, accessed on May 25, 2018.

³⁴ CalRecycle Jurisdiction Disposal by Facility Report, <http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=ReportYear%3d2016%26ReportName%3dReportEDRSJurisDisposalByFacility%26OriginJurisdictionIDs%3d100>, accessed on March 21, 2018.

³⁵ CalRecycle Jurisdiction Disposal by Facility Report, <http://www.calrecycle.ca.gov/SWFacilities/Directory/07-AA-0032/Detail/>, accessed on May 25, 2018.

³⁶ CalRecycle Jurisdiction Disposal by Facility Report, <http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=ReportYear%3d2016%26ReportName%3dReportEDRSJurisDisposalByFacility%26OriginJurisdictionIDs%3d100>, accessed on March 21, 2018.

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Acme Landfill

The Acme Landfill is located in Martinez, California. It has a permitted throughput capacity of 1,500 tons per day. Its remaining permitted capacity is 506,590 cubic yards. It has an estimated “cease operation date” of July 1, 2021.³⁷

Recology Hay Road Landfill

The Recology Hay Road Landfill is located in Vacaville, California. It has a permitted throughput capacity of 2,400 tons per day. Its remaining permitted capacity is 30,433,000 cubic yards. It has an estimated “cease operation date” of January 1, 2077.³⁸

4.15.3.2 STANDARDS OF SIGNIFICANCE

The project would have a significant impact on solid waste service if:

1. The project would generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
2. The project would be out of compliance with federal, State, and local management and reduction statutes and regulations related to solid waste.

4.15.3.3 IMPACT DISCUSSION

UTIL-7	The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
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As described above, the solid waste produced in Concord is collected by Mount Diablo Resource Recovery and conveyed to the Mt. Diablo Resource Recovery Park for processing. Once processed the waste is transported to the Keller Canyon Landfill, Potrero Hills Landfill, Acme Landfill, or Recology Hay Road Landfill. As described in Chapter 3, Project Description, of this Draft EIR, the new development potential under the proposed project in the project site at buildout could generate approximately 560,000 annual visitors (with 1,000 visitors expected on a typical weekday and 2,700 visitors expected on a typical weekend day), and 52 FTE employees. For the purposes of this analysis, solid waste generation is assumed to be the 2016 CalEEMod 3.2 default rates by land use type (see Appendix B of this EIR). Accordingly, the total estimated solid waste generation for the proposed project would be 517 PPD or 0.26 tons per day,³⁹ which represents less than 1 percent of the daily permitted capacity for Keller Canyon Landfill,⁴⁰ Potrero

³⁷ CalRecycle, Acme Landfill (07-AA-002), <http://www.calrecycle.ca.gov/SWFacilities/Directory/07-AA-0002/Detail/>, accessed on March 21, 2018.

³⁸ CalRecycle, “Recology Hay Road Landfill (48-AA-0002)”<http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0002/Detail/>, accessed on March 21, 2018.

³⁹ (517 PPD x 0.0005 tons) = 0.26 tons of waste per day.

⁴⁰ (0.26 tons of waste per day divided by 3,500 permitted daily capacity) x 100 = 0.007 percent of the daily permitted capacity.

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Hills Landfill,⁴¹ Acme Landfill,⁴² and Recology Hay Road Landfill.⁴³ In addition, the proposed project would be required to comply with State and local regulations that require the reduction of solid waste production and promote recycling and composting of materials listed above. The General Plan 2030 also includes policies that ensure the City's solid waste disposal needs are met, while maximizing opportunities for waste reduction and recycling. Accordingly, buildout of the proposed project would have a *less-than-significant* impact with regard to daily capacity at each of the landfill facilities.

Significance without Mitigation: *Less than significant.*

UTIL-8 The project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

As described above under Section 4.15.3.1, Regulatory Framework, California's Integrated Waste Management Act of 1989, AB 939, subsequently amended by SB 1016, set a requirement for cities and counties throughout the State to divert 50 percent of all solid waste from landfills by January 1, 2000 through source reduction, recycling, and composting. The City of Concord has several waste reduction and recycling programs in place to divert the amount of waste that is transported to other landfills. Curb-side recycling efforts in multi-family and commercial projects, as well as single-family neighborhoods, contribute to increased waste diversion.⁴⁴ In addition, the City provides education related to recycling, and programs for grass, construction, and demolition and household hazardous waste recycling. General Plan 2030 principles and policies actively encourage residential and commercial waste reduction and recycling programs to divert increasingly larger portions of the waste stream from local landfills. The policies also promote the importance of recycling construction wastes. Potential future development under the proposed project would be required to comply with existing regulations, including the General Plan 2030 policies, that have been prepared to minimize impacts related to adequate waste collection and disposal facilities. All staging areas would provide trash and recycling receptacles in compliance with AB 341. Storage and collection of recyclable materials separate from trash would also comply with requirements of AB 939. All solid waste and refuse would be collected, stored, recycled, and disposed in accordance with the City's municipal code Chapters 8.10 and 8.20. Furthermore, operation of the park would include recycling of green waste in accordance with AB 1826. At least 50 percent of construction and demolition debris would be recycled and/or salvaged for reuse in compliance with CALGreen Section 5.408. The project applicants would prepare a WMP for on-site sorting or construction debris, which is submitted to the City of Concord for approval.

Therefore, continued compliance with State and local policies, would ensure that impacts are less than significant with regards to solid waste and the impact would be *less than significant*.

⁴¹ 0.26 tons of waste per day divided by 4,330 permitted daily capacity) x 100 = 0.006 percent of the daily permitted capacity.

⁴² 0.26 tons of waste per day divided by 1,500 permitted daily capacity) x 100 = 0.017 percent of the daily permitted capacity.

⁴³ 0.26 tons of waste per day divided by 2,400 permitted daily capacity) x 100 = 0.01 percent of the daily permitted capacity.

⁴⁴ City of Concord, City Services, Recycling, <http://www.cityofconcord.org/page.asp?pid=1009>, accessed on April 24, 2018.

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Significance without Mitigation: *Less than significant.*

4.15.3.4 CUMULATIVE IMPACTS

UTIL-9	The project, in combination with past, present, and reasonably foreseeable development, would not result in significant impacts with respect to solid waste.
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The cumulative impact for solid waste is considered in the context of the growth from potential future development under the proposed project combined with the estimated growth in the areas served by the Keller Canyon Landfill, Potrero Hills Landfill, Acme Landfill, and Recology Hay Road Landfill.

While the proposed project would contribute to an increase in the cumulative demand for solid waste disposal, as described under Impact UTIL-7, the increase represents less than 1 percent of the remaining at the landfills that serve Concord. As described above, the proposed project would be served by a landfill with permitted capacity and would comply with federal, State, and local statutes and regulations related to solid waste. Accordingly, the proposed project cumulative impacts to solid waste would be *less than significant*.

Significance without Mitigation: *Less than significant.*

4.15.4 STORMWATER INFRASTRUCTURE

This section outlines the regulatory setting, describes environmental setting, and discusses potential impacts of the project with regard to stormwater infrastructure.

4.15.4.1 ENVIRONMENTAL SETTING

Regulatory Setting

Federal Regulations

The National Pollutant Discharge Elimination System (NPDES) permit program was established by the Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the United States including discharges from municipal separate storm sewer systems (MS4s).

State Regulations

State Water Resources Control Board and Regional Water Quality Control Board

In California, the SWRCB has broad authority over water quality control issues for the State. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the State by the federal government under the CWA. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs.

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Statewide General Permit

The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for Small Municipal Separate Storm Sewer System (MS4s) operators to efficiently regulate stormwater discharges under a single permit.⁴⁵ Permittees must develop and implement a Stormwater Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable.

SWRCB Construction General Permit

Construction activities that disturb one or more acres of land that could impact hydrologic resources must comply with the requirements of the SWRCB Construction General Permit (2009-0009-DWQ, which was amended by 2010-0014-DWQ in 2010).⁴⁶ Under the terms of the permit, applicants must file a complete and accurate Notice of Intent with the SWRCB. Applicants must also demonstrate conformance with applicable BMPs and prepare a Storm Water Pollution Prevention Plan (SWPPP), containing a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection, discharge points, and general topography both before and after construction, as well as drainage patterns across the project site. The operative Construction General Permit requires stormwater pollution prevention controls, including the imposition of minimum BMPs and the development and implementation of Rain Event Action Plans for certain sites.

NPDES Municipal Regional Stormwater Permit

The project is covered under the regulations of the new Municipal Regional Stormwater NPDES Permit (MRP) issued by the RWQCB. This NPDES Permit falls under Order R2-2015-0049, adopted on November 19, 2015.⁴⁷ The municipalities have to require both private and public projects to implement post-construct stormwater controls as part of their obligations under Provision C.3 of the MRP. Above and beyond post-construction stormwater management practices, the permit also requires municipalities to adopt trash and street sweeping programs to regulate discharges into storm drain systems or directly into waters of the United States.

Local Regulations

Contra Costa County Flood Control and Water Conservation District

The Contra Costa County Flood Control and Water Conservation District (CCCFCWCD) maintains surface water bodies within the county. The District ensures that adequate capacity exists to manage stormwater runoff from development, and requires that storm channels be designed to be capable of handling a 25-year storm event. Stormwater discharge in Concord is regulated by the Contra Costa Clean Water Program (CCCWP) in accordance with a NPDES permit issued by the SWRCB and overseen jointly by the

⁴⁵ State Water Resources Control Board, *Order No. 2003-0005-DWQ*, https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003_0005dwq.pdf, accessed on March 13, 2018.

⁴⁶ State Water Resources Control Board, *Order No. 2010-0014-DWQ*, http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_factsheet.pdf, accessed on March 13, 2018.

⁴⁷ California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order R2-2015-0049 NPDES Permit No. CAS612008, November 19, 2015, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/stormwater/Municipal/R2-2015-0049.pdf, accessed on May 23, 2018.

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San Francisco Bay and Central Valley RWQCB's. The CCCWP is administered by the District and is intended to reduce the discharge of pollutants in stormwater to the maximum extent possible and to effectively prohibit non-stormwater discharges into municipal storm drain systems and waterways. The CCCWP includes a number of management practices and control techniques to reduce discharge of pollutants and addresses municipal government activities, new development controls, and stormwater treatment.

City of Concord 2030 General Plan

The City of Concord 2030 General Plan includes goals, policies, and programs relevant to the environmental factors potentially affected by the proposed project. The following goals, principles, and policies are relevant to the proposed project:

- Goal PF-1: Availability of Adequate Public Utilities.
- Principle PF-1.1: Provide a Safe and Reliable Water Supply.
 - 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-1.3: 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.
 - 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.
- 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.
 - 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.
 - 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.
- Goal S-4: Flood Protection
- Principle S-4.1: Protect the community from risks to lives and property posed by flooding and stormwater runoff.
 - Policy S-4.1.1: Manage development to ensure compliance with the City's Flood Management Ordinance and the City's Stormwater Management and Discharge Control Ordinance.

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- Policy S-4.1.4: Design storm drainage facilities to meet the Contra Costa County Flood Control and Water Conservation District standards and ensure adequate and safe flow to minimize flooding.

Concord Reuse Project Area Plan

The Concord Reuse Project Area Plan includes the following principle and policies applicable to the proposed project:

- Principle U-5: Protect the CRP area from the adverse impacts of water runoff.
 - Policy U-5.1: Drainage Improvements. Improve drainage capacity in low-lying portions of the CRP area that are planned for future development. Flows from such areas should be controlled and directed using new drainage facilities.
 - Policy U-5.2: Grading and Stormwater Management Plans. Require the preparation of grading, drainage and stormwater management plans in Development Districts within the CRP area, consistent with the Concord Municipal Code and Contra Costa Clean Water Program's Joint Municipal NPDES permit requirements.
 - Policy U-5.3: Stormwater Best Management Practice. Implement best management practices to reduce runoff rates and volumes, avoid erosion and sedimentation, and protect surface water quality during and after construction.
 - Policy U-5.4: Stormwater Detention or Retention and Treatment. Implement NPDES permit provisions which require stormwater to be captured and treated or infiltrated on-site before being discharged into creeks or channels. Construct stormwater detention and/or retention facilities as needed to achieve this objective.
 - Policy U-5.5: Joint Use of Stormwater Detention and Retention Ponds. Coordinate the siting of stormwater detention and retention facilities with the planning of parks, greenways, and open space buffer areas.

City of Concord Municipal Code

The City of Concord Municipal Code, organized by title, chapter, and section, contains all ordinances for Concord. Title 16, Environment, and Title 18, Development Code, include regulations relevant to stormwater infrastructure in Concord as discussed below.

- **Chapter 16.05, Stormwater Management and Discharge Control.** Chapter 16.05 of the Municipal Code aims to protect and enhance the water quality of the City's watercourses and establishes regulations and restrictions related to pollutants in storm water discharges and non-storm water discharges, including spills, dumping, or disposal of materials. To reduce pollutants in stormwater, the City requires that new development or redevelopment projects use BMPs, such as biological treatments, detentions, and rain gardens.
- **Chapter 18.175, Stormwater Management.** Chapter 18.175 of the Municipal Code requires development projects that exceed the stormwater treatment threshold of the NPDES permit submit a stormwater control plan that complies with the Contra Costa Clean Water Program Stormwater C.3 Guidebook.

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Existing Conditions

Watershed and Creek Systems

The project site is located within the Mount Diablo Creek watershed, which encompasses 23,800 acres and drains the northwest flank of Mount Diablo. The Mount Diablo Creek watershed drains 77 percent of the site. The Concord watershed (a tributary to the Walnut Creek watershed) drains 22 percent of the western portion of the site. The remaining 1 percent of the site is drained by the Willow Creek watershed along the crest of the Los Medanos Hills to the north. Surface water consists of ephemeral tributaries of Diablo Creek that drain the Los Medanos Hills along the eastern portion of the project site, stock ponds, watering holes and seepage ponds, and hilltop ponds. Groundwater on-site is located in the low-lying valley at the western edge of the project site.

West of Los Medanos Hills, surface water on the project site flows east to west from higher to lower elevations through Mount Diablo Creek. On the eastern slope of Los Medanos Hills, water flows west to east to Willow Creek. In addition to creeks, there are two canals that cross the project site that are located within the Bureau of Reclamation right-of-way: the Contra Costa Canal and the Clayton Canal. The Contra Costa Canal originates in Rock Slough near Oakley and terminates 48 miles downstream at the Martinez Reservoir. The Contra Costa Canal is leased, maintained and monitored by the CCWD, and is operational except for the winter months. Approximately 3.5 miles of the 4.85-mile Clayton Canal occupies 38 acres of the project site; it has not been operational for the past 20 years.

Mount Diablo Creek is also known as Seal Creek from the point where it enters the site to the mouth at Suisun Bay. The headwaters of the Creek are located at the face of Mount Diablo, and water flows north-northwest through the watershed to wetlands on the south border of Suisun Bay.⁴⁸ Past ranching and farming practices and the existing network of roads, rail lines, and magazines developed as part of the CNWS site has substantially altered run-off, drainage, and vegetation patterns in the watershed. The upper watershed includes the area upstream of the site and the lower watershed includes the area downstream from the site. Riparian vegetation around Mount Diablo Creek consists primarily of buckeye, mule fat, grasses, and cottonwoods; there is limited development adjacent to the riparian corridor.

Storm Drain System

The City of Concord Public Works Maintenance Services Department operates and maintains the storm drain system that consists of 229 miles of storm drain pipes, 1,140 manholes and approximately 6,000 catch basins. Stormwater drains into 11 miles of creeks and drainage channels, which include Mount Diablo Creek, Galindo Creek, Pine Creek and their tributaries, and/or the Walnut Creek Flood Control Channel, which is maintained by the Contra Costa County Flood Control and Water Conservation District (CCCFC&WCD). The majority of runoff within the project site drains to Mount Diablo Creek due to site topography. Mount Diablo Creek and Holbrook Channel, also known as the Clayton Valley Drain, are the major surface drainage features within the project site; Clayton Canal and Contra Costa Canal are also

⁴⁸ Environmental Science Associates, 2015, Hydrology and Water Quality Study for the Concord Hills Regional Park Land Use Plan, included in Appendix B of the proposed Land Use Plan.

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within the site and are able to convey stormwater. There is no existing capacity analysis report of the City's storm drainage system.

The CCCFC&WCD maintains and manages surface water bodies within its service area, which includes Mount Diablo Creek and the Holbrook Channel. The CCCFC&WCD ensure that adequate capacity exists to manage stormwater runoff generated by development and requires storm channels to have adequate capacity for a 25-year storm event. Storm drainage facilities must meet CCCFC&WCD standards to ensure adequate and safe flow, thus minimizing the potential for flooding. The City requires that all development that creates, adds, or replaces existing impervious surface that meets or exceeds that NPDES stormwater treatment threshold create and implement a stormwater control plan in accordance with the Contra Costa Clean Water Program Stormwater C.3 Guidebook.⁴⁹

Flood Hazard Areas

Although the majority of the former CNWS is located on upland slopes, which would lessen the probability of flooding, the low-lying areas of the former CNWS near Suisun Bay and the Contra Costa Canal may be susceptible to flooding. Within the project site, the southwest border of the project site north of Bailey Road is located within a 100-year flood zone.

4.15.4.2 STANDARD OF SIGNIFICANCE

The project would have a significant stormwater-related impact if it would:

1. Require or result in the relocation or construction of new or expanded storm water drainage facilities the construction or relocation of which would cause significant environmental effects.

4.15.4.3 IMPACT DISCUSSION

UTIL-10	The proposed project would not require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which would cause significant environmental effects.
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Under existing conditions, the City's storm drainage systems are capable of containing the runoff from a 25-year storm event. In general, an increase in impervious surfaces with new development could result in an increase in stormwater runoff that could exceed the capacity of existing or planned stormwater drainage systems. In addition, changes in existing drainage patterns could increase the rate and/or amount of stormwater runoff.

While precise building plans have not yet been developed, it is estimated that development of the proposed Regional Park would install approximately 16.5 acres of new development, most of which would be impervious area, and replace 40.5 acres of existing impervious area in certain areas of the site, including buildings (such as the Visitor Center and Native Plant Nursery structures) and paved roads and

⁴⁹ Concord Municipal Code, Chapter 18.175, Stormwater Management.

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trails. In other areas, impervious surfaces (such as roads) would be removed.⁵⁰ Overall the project would reduce the total impervious area on the site by approximately 41 acres or 33 percent.⁵¹

Implementation of Low-Impact Development (LID) guidelines and engineering review of drainage calculations and development plans by the Concord Public Works Maintenance Services Department would ensure that there are no significant increases in peak flow rates or runoff volumes. City General Plan Policy PF-1.3.1 requires new development to provide any needed storm drains and to minimize surface runoff. Further, the Municipal Code requires new development to submit a stormwater control plan that reduces stormwater pollutant discharges. Those projects that exceed the NPDES stormwater treatment threshold must submit a plan that complies with the County's C.3 Guidelines.

All new and redevelopment projects that create or replace 10,000 square feet or more of impervious space are considered regulated projects and would be required to comply with the C.3 provisions of the MRP requirements and implement various post-construction BMPs and LID features that include site design, stormwater treatment, runoff retention, and peak flow management. These measures would minimize the amount of stormwater runoff from the new sites.

Any increase in peak flow rates shall be handled on-site by retention to treat excess flow for the 25-year storm event. Any retained on-site stormwater would eventually be routed to existing storm drains. Future development under the proposed project, as part of the City's approval process, would be required to comply with existing regulations, including General Plan policies and Zoning regulations that have been prepared to minimize impacts related to stormwater drainage facilities. Any future development on the project site, throughout the 2050 buildout horizon, would be required to meet minimum setback requirements near the Clayton Canal and Mount Diablo Creek bank and would employ green building best practices. In addition, the Grading and Drainage Plans for each future project would be reviewed by the City to ensure that on-site drainage, LID features, and retention basins are adequate to prevent on-site or off-site flooding. As a result of implementation of these measures, including compliance with the C.3 provisions of the CMC, development associated with implementation of the proposed project would not require significant expansions of the existing stormwater drainage infrastructure. Therefore, the proposed project would result in a *less-than-significant* impact with respect to future development runoff.

⁵⁰ Existing developed areas includes approximately 125 acres of roadways, parking lots, and asphalt aprons surrounding buildings. Also included are a wide variety of structures, including buildings and magazines. This relatively broad category is collectively used to describe any land surface on site that consists primarily of steel, asphalt, or concrete. Such areas often contain patches of ruderal vegetation as well as landscaped trees and shrubs. During construction by the Navy, the tops of the magazines on the site were covered with soil, and a plant community similar in structure and composition to the adjacent grasslands has developed over the years. Accordingly, the top of the magazine structures has been included in the California annual grassland vegetation community and are not included in this number.

⁵¹ Based on preliminary site plan estimates, the project site would contain approximately 84 acres of developed park uses once complete. This includes the following existing infrastructure areas that would not be converted to restoration areas: paved roads, rail, unpaved roads, and magazines/building sites. This number also includes 16.5 acres of new development. This is a conservative (worst-case) scenario as it includes unpaved roads, which could be considered as permeable areas, and it does not account for the earthen/grassy portions of magazines. Excluding the unpaved roads, the developed park uses would be 70.2 acres.

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Significance without Mitigation: *Less than significant.*

4.15.4.4 CUMULATIVE IMPACTS

UTIL-11	The project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to stormwater infrastructure.
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The geographic context used for the cumulative assessment of water quality and hydrology impacts is the Mount Diablo Creek Watershed, which encompasses the entire site.

As discussed previously, new development and redevelopment under the proposed project would require conformance with State and local policies that would reduce stormwater utility impacts to less-than-significant levels. When applicable, any additional new development within the project site would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the City of Concord’s General Plan, design guidelines, zoning regulations, and other applicable City requirements that reduce impacts related to stormwater hydrology. More specifically, potential changes related to stormwater flows, drainage, impervious surfaces, and flooding would be minimized via the implementation of stormwater control measures, retention, infiltration, LID measures, and review by the City’s Public Works Maintenance Services Department to integrate measures to reduce potential flooding impacts. Per the City General Plan Policy PF 1.3.1 all new development would provide any needed storm drains to minimize surface runoff. Furthermore, the Municipal Code would require all new development to submit a stormwater control plan that reduces stormwater pollutant discharges. Any projects that exceed the NPDES stormwater treatment threshold would submit a plan that complies with the County’s C.3 Guidelines. Furthermore, all new and redevelopment projects that create or replace 10,000 square feet or more of impervious space would comply with the C.3 provisions of the MRP requirements. In addition, all future projects would submit Grading and Drainage Plans to the City for review to ensure that on-site drainage and LID features are adequate to prevent on-site or off-site flooding. All cumulative projects would be subject to similar permit requirements and would be required to comply with City ordinances and to be consistent with the General Plan, as well as numerous water quality regulations that control construction related and operational discharge of stormwater. Therefore, cumulative impacts would be *less than significant*.

Significance without Mitigation: *Less than significant.*

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4.16 WILDFIRE

This chapter the regulatory framework and existing conditions on the project site related to wildfire and analyzes the potential for the project to result in wildfire impacts.

4.16.1 ENVIRONMENTAL SETTING

4.16.1.1 REGULATORY FRAMEWORK

This section summarizes key State, District, and local regulations and programs related to wildfire which the District considered in evaluating the potential for the proposed Land Use Plan to have a significant effect related to wildfire. There are no relevant federal regulations applicable to the proposed project.

State Regulations

California Building Code

The State of California provides a minimum standard for building design through Title 24 of the California Code of Regulations (CCR), commonly referred to as the “California Building Code” (CBC). The CBC is located in Part 2 of Title 24. The CBC is updated every three years, and the current 2016 CBC went into effect in January 2017; the 2019 CBC will take effect in 2020. The City of Concord adopted the CBC into its Municipal Code (see below). Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

Chapter 7A of the CBC, Materials and Methods for Exterior Wildfire Exposure, prescribes building materials and construction methods for new buildings in a Fire Hazard Severity Zone. Chapter 7A contains requirements for roofing; attic ventilation; exterior walls; exterior windows and glazing; exterior doors; decking; protection of underfloor, appendages, and floor projections; and ancillary structures.

California Fire Code

The California Fire Code (CFC) is Part 9 of Title 24. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, fire hydrant locations and distribution, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The City of Concord adopted the CFC into its Municipal Code (see below).

Chapter 49 of the CFC, Requirements for Wildland-Urban Interface Fire Areas, prescribes construction materials and methods in fire hazard severity zones; requirements generally parallel CBC Chapter 7A. The CFC is updated on a three-year cycle; the current 2016 CFC took effect in January 2017; the 2019 CFC will take effect in 2020.