3.17 - Utilities and Service Systems

3.17.1 - Introduction

This section describes the existing conditions related to utilities and service systems (water, wastewater, stormwater, and solid waste) in the County and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to such utilities and service systems that could result from implementation of the project. Information in this section is based on information provided by the Contra Costa Water District (CCWD), CCWD 2015 Urban Water Management Plan (UWMP), Central Contra Costa Sanitary District (CCCSD), Del Hombre Utility Due Diligence Report, California Department of Resources Recycling and Recovery (CalRecycle), and Contra Costa County General Plan. The following comments regarding utilities and service systems were received as part of the Environmental Impact Report (EIR) public scoping process:

Trash capture devices shall be installed in catch basins to meet the County’s National Pollutant Discharge Elimination System (NPDES), subject to the review and approval of the Public Works Department.

3.17.2 - Environmental Setting

Water

The County receives water from the San Joaquin Delta. The CCWD oversees water distribution to central and northeastern Contra Costa County, a total area of more than 140,000 acres.

Water Source and Supply

Contra Costa County

Contra Costa County receives its water from the CCWD, which pumps water from four intakes in the San Joaquin Delta. The CCWD provides water to approximately 500,000 people in Contra Costa County, as both a retail and wholesale water supplier. As a retailer, the CCWD provides treated water to approximately 200,000 customers in the cities of Clayton, Clyde, Concord, Pacheco, Port Costa and parts of Martinez, Pleasant Hill, and Walnut Creek. The CCWD determined that in the Near-Term, the projected water supply is 213,700 acre-feet. By 2025 at Contra Costa County General Plan sunset, the CCWD would have a water supply of 237,700 acre-feet.\footnote{Contra Costa Water District (CCWD). 2015. Urban Water Management Plan.}

Surface Water

The CCWD’s water source is provided by the Central Valley Project (CVP), which receives water from storage releases from Shasta, Folsom, and Clair Eagle reservoirs into the Sacramento River in the San Joaquin Delta. The CCWD holds a separate Los Vaqueros water right that allows diversion of excess Delta Flows to Los Vaqueros Reservoir for storage. The CCWD also has a permit and a license that allow for total diversions of up to 26,700 acre-feet/year (AFY) 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. The CCWD holds water rights that allow diversion of up to 95,980 AFY of excess Delta flows to Los Vaqueros Reservoir for storage.\footnote{Ibid.}
between November 1 of each year and June 30 of the succeeding year, with the total combined limit on the CCWD CVP contract and Los Vaqueros water right diversions equal to 242,000 AFY.³

**Groundwater**

The primary groundwater basins within the CCWD service area are the Ygnacio, Clayton, Pittsburg Plain, and Tracy Groundwater Basins or Sub-Basins. The CCWD does not manage groundwater, nor does it use groundwater to meet any demands. There are an undetermined number of wells throughout the CCWD service area owned by industries, private individuals, and public municipal water utilities including the cities of Martinez and Pittsburg, the Golden State Water Company, and the Diablo Water District.⁴

**Project Site**

The two residences on the project site receive water service from the CCWD. The project site does not contain groundwater wells.

**Recycled Water**

**Contra Costa County**

Currently, over 10,000 AFY of recycled water is put to direct beneficial use in CCWD’s service area. The CCWD has agreements with the CCCSD and Delta Diablo (formerly Delta Diablo Sanitation District) regarding specific projects that provide recycled water supplies for industrial uses, wildlife enhancement, and landscape irrigation within CCWD’s service area.⁵ According to the CCWD 2015 UWMP, the CCWD provides approximately 700 AFY of recycled water to its customers.

**Project Site**

The project site does not currently receive or utilize recycled water.

**Water Demand and Use**

**Contra Costa County**

The CCWD 2015 UWMP summarizes the near-term and 2040 water demands during “Normal,” “Single-Dry,” and “Multi-Dry Year 3,” scenarios in Figures 1-3 and 1-4. According to Figure 1-3 in the CCWD 2015 UWMP, the CCWD service area has a normalized near-term water demand of 150,000 acre-feet during near-term maximum dry year demands. According to Figure 1-4, the CCWD service area will have a 2040 normalized water demand of 190,000 acre-feet. The CCWD has maintained an effective water conservation program that has resulted in the district currently serving less water compared to 1990 levels despite a 40 percent increase in population.⁶

**Project Site**

The existing two single-family homes connect to the CCWD and are included in the current annual potable water use described in the CCWD 2015 UWMP.⁷ In California, the average residential water

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³ Ibid.
⁴ Ibid.
⁵ Ibid.
use is 86 gallons per person per day.\(^8\) Assuming 2.88 persons per household, the existing home would demand 495.36 gallons per day or 180,806.40 gallons per year. Therefore, the total, single-family uses demand a total of 0.55 AFY.

**Water Distribution**

*Contra Costa County*

The CCWD's primary conveyance facility for its untreated water supply is the Canal, which carries water from Rock Slough for deliveries throughout CCWD's service area, terminating at Martinez Reservoir. The Canal is approximately 48 miles long with the major deliveries within the first 26 miles, which runs from Rock Slough to the Shortcut Pipeline near the Ralph D. Bollman Water Treatment Plant in Concord.\(^9\) The original Los Vaqueros Project, a project to expand the Los Vaqueros Reservoir, included a new point of diversion (at Old River south of the Highway 4 crossing) that operates in conjunction with the Rock Slough diversion point and associated water transmission facilities, pumping plants, and other facilities. The pumping plant is at the Old River intake and has an installed capacity of 250 cubic-feet-per-second (cfs). Diversion from the Old River intake for delivery to CCWD's service area began in the summer of 1997. In 2010, the CCWD completed construction of a pumping plant on Victoria Canal near Middle River that also has an installed capacity of 250 cfs.\(^10\)

The two pumping plants are permitted to operate at a combined capacity of 320 cfs. Both the Middle River and Old River pumping plants pump water to the 4-million-gallon Transfer Reservoir. From the Transfer Reservoir, water can either flow by gravity to the Canal or is pumped up to the Los Vaqueros Reservoir by the Transfer Pump Station. Water stored in the Los Vaqueros Reservoir is conveyed to the Canal by gravity.\(^11\)

**Project Site**

The two residences currently on the project site receive water from the CCWD through one 8-inch water line in Roble Road and three 8-inch water line connections in Del Hombre Lane.\(^12\)

**Wastewater**

*Contra Costa County*

The CCCSD provides wastewater treatment services to approximately 147 square miles and includes the cities of Danville, Lafayette, Moraga, Orinda, Pleasant Hill, Walnut Creek, unincorporated areas in central Contra Costa County; portions of Martinez and San Ramon, and several unincorporated communities in Alamo and Pacheco. The CCCSD also receives and treats wastewater from the City of Concord and City of Clayton collection systems. The CCCSD collects and treats an average of approximately 34 million gallons of wastewater per day and up to 230 million gallons per day during

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\(^10\) Ibid.

\(^11\) Ibid.

\(^12\) BKF Engineers. Del Hombre Due Diligence. May 23, 2018.
The CCCSD uses over 1,500 miles of piping with over 35,000 manholes and 19 pump stations to convey wastewater to the treatment plant in Martinez.

**Project Site**
The CCCSD Wastewater Treatment Plant currently provides sanitary sewer service to the project site. A 30-inch sewer main is located within Del Hombre Lane directly adjacent to the west of the project site boundary. There is currently no connection to the project site from this sewer main. There is also a 10-inch sewer main in Roble Road adjacent to the north of the project site boundary that connects to the project site.

**Long-Term Treatment Capacity Plans**
The CCCSD published a Comprehensive Waste Master Plan in June 2017. The CCCSD owns and operates the CCCSD Treatment Plant, located in Martinez, California. The CCCSD Treatment Plant has a treatment capacity of approximately 54 million gallons per day (mgd) and approximately 270 mgd of wet-weather flow. The CCCSD Treatment Plant currently treats an average daily dry-weather flow of 34 mgd and estimates to treat 41 average daily dry-weather flow by 2035. The majority of waste is treated to a secondary level, disinfected by ultraviolet light, and then discharged into Suisun Bay. Approximately 600 million gallons per year are treated to a tertiary level through additional filtration and disinfection before being distributed as recycled water for landscape irrigation, industrial processes, and plant operations.

**Wastewater Generation**

**Contra Costa County**

Wastewater generated by land uses within Central Contra Costa County is conveyed via existing infrastructure to the CCCSD Treatment Plant for treatment and then disposed or reused as recycled water.

**Project Site**
The project site contains two residences that generate 495.36 gallons per day or 180,806.40 gallons per year. The Utility Due Diligence Report determined that wastewater demand can be taken as 95 percent of the average daily water demand. As a result, 95 percent of the existing water demand, 495.36 gallons per day, is 470.59 gallons of wastewater per day.

**Stormwater**

**Generation and Collection**

**Contra Costa County**
The Contra Costa County Flood Control and Water Conservation District guides regional drainage plans throughout incorporated and unincorporated County areas. All stormwater drains into Suisun Bay via stormwater drainage systems and regional creeks and streams. The Contra Costa County

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16 Ibid.
Watershed Program is responsible for ensuring that the County complies with its municipal stormwater NPDES permits.\textsuperscript{17} Drainage facilities within unincorporated County are typically maintained by Contra Costa County Public Works or private property owners.\textsuperscript{18}

**Project Site**

The project site is located in unincorporated Contra Costa County, adjacent to the City of Walnut Creek and the Pleasant Hill/Contra Costa Centre Bay Area Rapid Transit (BART) Station, and is covered by the Municipal Regional Permit (MRP) for Discharges to San Francisco Bay. The MRP was adopted on October 14, 2009, and applies to 76 Bay Area municipalities in order to standardize requirements, pool resources and achieve results on a large scale.\textsuperscript{19} Contra Costa County Public Works would serve the project site. The project site is located within Drainage Area 44 and drains generally towards the northwest. The project is located on the western edge of Drainage Area 44, which abuts Drainage Area 44B to the west. There is a public storm drain line in Las Juntas Road to the north of the project site that drains northeasterly via Briarwood Lane to Walnut Creek within Drainage Area 44. There is a private storm drain line to the east of the project site on Roble Road, which also drains northeasterly towards Walnut Creek within Drainage Area 44. Within Drainage Area 44B there is an existing 84-inch public storm drain line running parallel and just to the west of Del Hombre Lane in the Iron Horse Regional Trail. A portion of the development to the north of the site drains to the 84-inch line in Drainage Area 44B via a second existing private storm drain system in Roble Road just north of the project. The storm drain connects to a manhole at the intersection of Las Juntas Way, Del Hombre Lane, and Roble Road.\textsuperscript{20}

**Solid Waste**

*Generation and Collection*

**Contra Costa County**

Central Contra Costa County Solid Waste Authority (dba RecycleSmart) provides solid waste and residential recycling services for areas within Contra Costa County. RecycleSmart holds franchise agreements with waste franchises that provide solid waste collection and disposal of residential and commercial solid waste. According to CalRecycle, Contra Costa County generates 807,550 tons of solid waste.\textsuperscript{21,22}

**Project Site**

RecycleSmart currently provides solid waste removal services for the project site. RecycleSmart is contracted with Republic Services for the collection, transfer, and disposal of residential and


\textsuperscript{18} BKF Engineers. 2018. Del Hombre Due Diligence, page 2.

\textsuperscript{19} Ibid.

\textsuperscript{20} BKF Engineers. 2018. Del Hombre Due Diligence, page 2.


commercial garbage, recycling, and organics. The existing two single-family homes on site would generate an estimated 7,300 pounds of solid waste a year.

**Landfills**

*Contra Costa County*

There are three separate landfills and four transfer stations that serve Contra Costa County. The three landfills are distributed geographically to serve the West County, Central and South County, and East County.

**Project Site**

Table 3.17-1 summarizes the closest landfill near the project site. Collectively, this landfill has approximately 63.4 million cubic yards in remaining capacity.

<table>
<thead>
<tr>
<th>Landfill</th>
<th>Location</th>
<th>Tons (approx.)</th>
<th>Cubic Feet (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keller Canyon Landfill</td>
<td>901 Bailey Road Pittsburg, CA 94565</td>
<td>3,500 tons per day</td>
<td>75,018,280 cubic yards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum Permitted Daily Throughput</td>
<td>Maximum Permitted Capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,500 tons per day</td>
<td>75,018,280 cubic yards</td>
</tr>
</tbody>
</table>

Source: CalRecycle 2015.

### 3.17.3 - Regulatory Framework

**Federal**

*Safe Drinking Water Act*

The Safe Drinking Water Act authorizes the United States Environmental Protection Agency (EPA) to establish 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.

*Clean Water Act (National Pollutant Discharge Elimination System)*

The Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), regulates the discharge of pollutants into watersheds throughout the nation. Under the CWA, the EPA implements pollution control programs and sets wastewater standards.

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The NPDES permit program was established within the CWA 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 concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and 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**

**California Porter-Cologne Water Quality Control Act**

Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), which was passed in California in 1969, the State Water Resources Control Board (State Water Board) has the ultimate authority over State water rights and water quality policy. Porter-Cologne also establishes nine Regional Water Quality Control Boards (RWQCBs) to oversee water quality on a day-to-day basis at the local and regional level. The RWQCBs engage in a number of water quality functions in their respective regions, and regulate all pollutant or nuisance discharges that may affect either surface water or groundwater.

**California Urban Water Management Planning Act**

The Urban Water Management Planning Act (California Water Code Sections 10610–10656) requires that all urban water suppliers with at least 3,000 customers prepare UWMPs and update them every 5 years. The act requires that UWMPs include a description of water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions. Specifically, UWMPs must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier’s water management planning;
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier;
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage;
- Describe plans to supplement or replace that source with alternative sources or water demand management measures;
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water);
- Quantify past and current water use;
- Provide a description of the supplier’s water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures; and
- Assess the water supply reliability.
**California Health and Safety Code**

Section 64562 of the California Health and Safety Code establishes water supply requirements for service connections to public water systems. Before additional service connections can be permitted, enough water must be available to the public water system from its water sources and distribution reservoirs to adequately, dependably, and safely meet the total requirements of all water users under maximum-demand conditions.

**California Senate Bills 610 and 221**

Senate Bill (SB) 610 and SB 221 (Water Code § 10910(c)(2)) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 seek to promote more collaborative planning between local water suppliers and cities and counties by requiring that detailed information regarding water availability be provided to decision-makers prior to approval of specified large development projects. SB 610 requires that detailed information be included in a Water Supply Assessment (WSA), which is then included in the administrative record that serves as the evidentiary basis for an approval action by a city or county. SB 221 requires that the detailed information be included in a verification of water supply. Under SB 610, WSAs must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code Section 10912(a)) subject to the California Environmental Quality Act (CEQA). A WSA was included in the CCWD 2015 UWMP that addresses the current and planned future water supply and demand of the water supplier, and makes a determination of the sufficiency of its water supplies existing and planned future uses, including the project site.25

**California Water Conservation Act**

The California Water Conservation Act (SB X7-7) was enacted in November 2009 and requires each urban water supplier to select one of four water conservation targets contained in California Water Code Section 10608.20 with the statewide goal of achieving a 20 percent reduction in urban per-capita water use by 2020. Under SBX7-7, urban retail water suppliers are required to develop water use targets and submit a water management plan to the Department of Water Resources by July 2011. The plan must include the baseline daily per-capita water use, water use target, interim water use target, and compliance daily per-capita water use.

**California Model Water Efficient Landscape Ordinance**

The California Model Water Efficient Landscape Ordinance was adopted by the California Office of Administrative Law in September 2009, and requires local agencies to implement water efficiency measures as part of its review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance or incorporate provisions of the ordinance into its own code requirements for landscaping. The County has not adopted a local ordinance.

**California Integrated Waste Management Act**

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed Assembly Bill 939, the California Integrated Waste

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Management Act of 1989 (AB 939), effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent in 1995 and 50 percent in 2000; established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, amendments to the California Integrated Waste Management Act introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction’s population (or in some cases employment) and its disposal as reported by disposal facilities.

Regional

San Francisco Bay Regional Water Quality Control Board

The San Francisco Bay RWQCB administers the NPDES stormwater permitting program and regulates stormwater in the San Francisco Bay region. Contra Costa County is a permittee under the Phase II NPDES Municipal Stormwater Permit for the Contra Costa Clean Water Program. Stormwater discharges from construction activities on 1 acre or more are regulated by the RWQCB and are subject to the permitting requirements of the NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activity (General Construction Permit).

The San Francisco Bay RWQCB prepared the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) for San Francisco Bay. The Basin Plan contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the region and describes beneficial uses of major surface waters and their tributaries.

Local

Contra Costa County General Plan

Public Facilities/Services Element

- **Policy 7-5:** The County shall take an active role in coordinating major infrastructure construction within the County, particularly the transportation system network and extension of sewer and water service, to assure consistency of these improvements with the General Plan.
- **Goal 7-F:** To assure potable water availability in quantities sufficient to serve existing and future residents.
- **Goal 7-G:** To encourage the development of locally controlled water supplies to meet the growth needs of the County.
- **Goal 7-H:** To encourage the conservation of water resources available to the County and to the State.
- **Goal 7-I:** To protect and enhance the quality of the water supplied to County residents.
- **Goal 7-J:** To ensure that new development pays the costs related to the need for increased water system capacity.

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• **Policy 7-16**: Water service systems shall be required to meet regulatory standards for water delivery, water storage and emergency water supplies.

• **Policy 7-17**: Water service agencies shall be encouraged to establish service boundaries and to develop supplies and facilities to meet future water needs based on the growth policies contained in the County and cities’ General Plans.

• **Policy 7-18**: Water service agencies should generally be discouraged from constructing new water distribution infrastructure which exceeds future water needs based on the buildout projections of the County General Plan and city general plans.

• **Policy 7-19**: Urban development shall be encouraged within the existing water Spheres of Influence adopted by the Local Agency Formation Commission; expansion into new areas within the Urban Limit Line beyond the Spheres should be restricted to those areas where urban development can meet all growth management standards included in this General Plan.

• **Policy 7-21**: At the project approval stage, the County shall require new development to demonstrate that adequate water quantity and quality can be provided. The County shall determine whether (1) capacity exists within the water system if a development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. This finding will be based on information furnished or made available to the County from consultations with the appropriate water agency, the applicant, or other sources.

• **Policy 7-26**: The need for water system improvements shall be reduced by encouraging new development to incorporate water conservation measures to decrease peak water use.

• **Goal 7-K**: To provide sewer collection, treatment and disposal facilities adequate to meet the current and projected needs of existing and future residents.

• **Goal 7-L**: To provide wastewater treatment that preserves, and to the extent feasible, enhances water quality and the natural environment.

• **Goal 7-M**: To develop wastewater reclamation as a supplement to imported surface water supplies.

• **Goal 7-N**: To assure that new development pays the costs related to the need for increased sewer system capacity.

• **Policy 7-29**: Sewer treatment facilities shall be required to operate in compliance with waste discharge requirements established by the California Regional Water Quality Control Board. Development that would result in the violation of waste discharge requirements shall not be approved.

• **Policy 7-30**: Sewer service agencies shall be encouraged to establish service boundaries and develop treatment facilities to meet future service needs based on the growth policies contained in the County and cities’ General Plans.

• **Policy 7-31**: Urban development shall be encouraged within the sewer Spheres of Influence adopted by the Local Agency Formation Commission. Expansion into new areas within the Urban Limit Line but beyond the Spheres of Influence should be restricted to those areas where urban development can meet growth management standards included in this General Plan.

• **Policy 7-33**: At the project approval stage, the County shall require new development to demonstrate that wastewater treatment capacity can be provided. The County shall determine whether (1) capacity exists within the wastewater treatment system if a development project is built within a set period of time, or (2) capacity will be provided by a
funded program or other mechanism. This finding will be based on information furnished or made available to the County from consultations with the appropriate water agency, the applicant, or other sources.

- **Policy 7-37:** The need for sewer system improvements shall be reduced by requiring new development to incorporate water conservation measures which reduce flows into the sanitary sewer system.

- **Goal 7-Q:** To employ alternative drainage systems improvements which rely on increased retention capacity to lessen or eliminate the need for structural modifications to watercourses, whenever economically possible.

- **Goal 7-R:** To enhance opportunities for public accessibility and recreational use of creeks, streams, drainage channels and other drainage system improvements.

- **Goal 7-T:** To ensure that new development pays its fair share of the costs related to increased runoff created by the development.

- **Goal 7-U:** To support the concept that existing development pays the cost of building and maintaining drainage improvements required to serve existing developed areas.

- **Policy 7-38:** Watershed management plans shall be developed which encourage the development of detention basins and erosion control structures in watershed areas to reduce peak stormwater flows, as well as to provide wildlife habitat enhancement.

- **Policy 7-39:** Land use plans and zoning shall be the primary means for floodplain management in preference to structural improvements, where possible.

- **Policy 7-40:** Alternative drainage system improvements such as floodplains, leveed floodways, bypass channels and culverts, and detention basins, shall be incorporated into new flood control plans and existing plans as they are revised.

- **Policy 7-44:** New development should be required to finance its legal share of the full costs of drainage improvements necessary to accommodate projected peak flows due to the project. Reimbursement from subsequent developments, which benefit from the added capacity, may be provided.

- **Policy 7-45:** On-site water control shall be required of major new developments so that no significant increase in peak flows occurs compared to the site’s pre-development condition, unless the Planning Agency determines that off-site measures can be employed which are equally effective in preventing adverse downstream impacts expected from the development or the project is implementing an adopted drainage plan.

- **Policy 7-51:** Detention basins shall be designed for multiple uses such as parks and playing fields when not used for holding water, if liability and maintenance issues can be satisfactorily resolved.

- **Policy 7-55:** As appropriate and to the extent allowed by law, assess all new development projects at least $0.35 per square foot of impervious surface created. This drainage fee is to be collected through existing County Flood Control drainage area fee ordinances, newly adopted drainage area fee ordinances, existing and new assessment districts, or other financial entities. The fee may be applied to the cost of any developer-sponsored regional flood control improvements on- or off-site, which mitigate the project’s flooding impacts. Regional facilities are defined as systems sized to handle at least 15 cubic feet per second and suitable for public agency maintenance, i.e., 24-inch diameter and larger storm drains.
Title 8 Chapter 82-26—Water Conservation Landscaping in New Developments
The Water Conservation in Landscaping Act was enacted in 2006, requiring the Department of Water Resources to update the Model Water Efficient Landscape Ordinance (MWELO). In 2009, the Office of Administrative Law (OAL) approved the updated MWELO, which required a retail water supplier or a county to adopt the provisions of the MWELO by January 1, 2010, or to enact its own provisions equal to or more restrictive than the MWELO provisions. Since the County did not adopt a new landscape ordinance by January 1, 2010, the project is subject to the MWELO as amended.

Title 9 Division 916—Water and Sewers
Title 9, Division 916, requires that adequate approved water supply system shall be provided to serve all of a proposed subdivision, that landscaping conform to applicable water conservation requirements, and that sewerage shall be provided to a proposed subdivision by a public sanitation district or utility having adequate plant and facility capacity.

Title 10 Division 1010—Drainage
Title 10, Division 1010, is adopted to provide for the implementation of drainage, recreation and riparian vegetation provisions of the general plan, protect watercourse riparian vegetation, permit control of projects that may change the hydraulic characteristics of watercourses and drainage facilities, control erosion and sedimentation, prevent the placement or discharge of polluting matter into watercourses, and require adequate watercourse drainage facilities.

Title 4 Chapter 418-10—Recycling Requirements for Landfill Disposal
Chapter 418-10 of the Contra Costa County Ordinance Code requires waste from the haulers of a local agency to meet minimum resource recovery requirements in order to dispose of solid waste in landfills located in the unincorporated area of the County.

Contra Costa Water District 2015 Urban Water Management Plan
The CCWD prepared the CCWD 2015 UWMP to meet the requirements of the California Urban Water Management Planning Act. The CCWD 2015 UWMP evaluates sources of the water supply for the County’s project population and future water demand until 2040, the planning horizon. The CCWD 2015 UWMP is intended to help facilitate implementation of SB 610 and SB 221.

3.17.4 - Impacts and Mitigation Measures
Significance Criteria
According to 2019 CEQA Guidelines Appendix G, to determine whether impacts related to utilities and service systems are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

d) 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?

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Approach to Analysis

Wastewater production was calculated and compared with CCCSD treatment capacity to determine whether wastewater treatment requirements would be exceeded. In addition, the demand for potable water (both with and without use of recycled water) was calculated to assist in determining whether sufficient water supply would be available. The County’s wastewater discharge permitting and stormwater requirements were also reviewed.

The following evaluation discusses whether the project would result in direct impacts on utilities and service systems such as existing wastewater and stormwater drainage facilities, water supply, or water treatment facilities. The evaluation also discusses whether the proposed would result in indirect impacts on utilities and services systems, such as construction impacts from new stormwater drainage systems. The analysis involved reviewing published data and material provided by the CCWD, CCCSD, BKF Engineers (BKF), CalRecycle, and Contra Costa County. Impacts related to electric power, natural gas, and telecommunications facilities are addressed in Section 3.7, Energy.

Specific Thresholds of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of utilities and service systems impacts resulting from implementation of the project.

- Create a need for relocated, new, or expanded water supply, wastewater treatment, or stormwater drainage facilities, the construction of which would result in significant construction-related traffic, air quality, greenhouse gas (GHG) emissions, energy, or noise impacts. Determination of significance of construction-related traffic, air quality, GHG emissions, or noise impacts is based on the respective specific thresholds of significance listed in Section 3.15 (Transportation), Section 3.2 (Air Quality), Section 3.7 (Greenhouse Gas Emissions), Section 3.5 (Energy), and Section 3.11 (Noise).

- Result in insufficient water supply to serve the project’s potable water demand.

- Inadequate capacity at the CCCSD Treatment Plant to serve the project’s wastewater generation.

- Insufficient daily capacity or permitted daily capacity of ACME Landfill and Keller Canyon Landfill to serve the project’s waste generation.

- Unable to comply with AB 939 solid waste diversion goals.
Impact Evaluation

Water, Wastewater, Stormwater, and Telecommunications Facilities

Impact UTIL-1: The project could require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Construction

Water Supply

The CCWD 2015 UWMP determined that the CCWD has sufficient water supplies to accommodate the anticipated population growth throughout its service area, including the project site. In addition, this project is located in an urbanized area that is currently served by the CCWD and accounted for in the WSA as described in Chapter 7 of the CCWD 2015 UWMP. As discussed under Impact UTIL-2, the project would not create the need for new water facilities or result in insufficient water supply. Thus, there would no need to construct new or expand existing water treatment facilities. Therefore, impacts related to need for relocation or construction of new or expanded water supply facilities would be less than significant.

Wastewater Treatment

Wastewater from the project site would be conveyed to the CCCSD Treatment Facility consistent with standards established by the San Francisco Bay Area RWQCB. The CCCSD published the Comprehensive Wastewater Master Plan in June 2017 that considered the existing and future wastewater treatment and recycled water needs of the County. The Comprehensive Wastewater Master Plan identifies and describes the needed capacity increases and treatment process upgrades needed to accommodate the anticipated future growth within the CCCSD service area. The Comprehensive Wastewater Master Plan determined that the existing facilities comply with regulatory requirements. The Comprehensive Wastewater Master Plan further identified construction upgrades, necessary to comply with anticipated regulatory changes, to the facilities in order to serve the level of growth anticipated in the CCCSD service area.

As described under Impact UTIL-3, the CCCSD Treatment Facility would contain sufficient capacity to serve all aspects of the project, and a new or expanded wastewater treatment facility would not be required. In addition, the Utility Due Diligence Report that analyzed utility capacity for the project site determined that there is sufficient capacity to handle the project’s expected wastewater generation.\(^{27}\) Furthermore, during preparation of the BKF Utility Due Diligence Report, CCCSD was contacted directly to determine if the project would be served by adequate sanitary sewer systems and if sufficient capacity would be available to serve the project. Correspondence with CCCSD confirmed that the existing sanitary sewer system contains sufficient capacity to handle the project’s potential wastewater generation.\(^{28}\)

Wastewater from the project site would consist mostly of wastewater typical of residential units. The project does not propose industrial or commercial use where wastewater pollutant levels or


wastewater volumes are typically high. Thus, the project would not require or result in the need for expanded or new wastewater treatment facilities. Therefore, impacts related to need for relocation or construction of new or expanded wastewater treatment facilities would be less than significant.

**Stormwater Drainage**

The project could have a significant impact if it required the construction or expansion of new stormwater drainage facilities. The project site is mostly undeveloped and composed of pervious surfaces. The project site contains two existing single-story residential homes. There is also an unmaintained concrete path with an east-west orientation in the center of the project site that does not connect to anything on the project site. In total, the project site currently contains a total of 4,908 square feet of impervious surface area and 99,625 square feet of pervious surface area.\(^{29}\)

The project would result in the development of 83,228 square feet of impervious surface area and 21,305 square feet of pervious surface area.\(^{30}\) Compared to existing conditions, the project would result in an increase of 78,320 square feet of impervious surfaces, with a commensurate increase in stormwater runoff. As a result, the project could result in the need for new or expanded storm drainage facilities, which represents a potentially significant impact.

Implementation of Mitigation Measure (MM) HYD-3 would ensure that the project collects and conveys stormwater entering or originating from the project site consistent with Division 914 of the municipal code. The project proposes to connect to the existing 84-inch public storm drain line running parallel to, and just to the west of Del Hombre Lane in the Iron Horse Regional Trail located within Drainage Area 44B. This drainage area was not designed to take runoff from Drainage Area 44. This is a diversion from the planned watershed, which will require an exception from Division 914 of the County Ordinance code. The applicant has requested this exception. The applicant has provided preliminary capacity calculations indicating that the Drainage Area 44B storm drain line is likely able to handle the additional runoff. The applicant will be required as a condition of any granting of the exception to provide comprehensive hydrology and hydraulic calculations demonstrating that the 84-inch public storm drain line has adequate capacity. If the line does not have adequate capacity, the applicant will be required to construct improvements such that the storm drain line is adequate, which may include an expansion of this stormwater facility. MM HYD-3 would also ensure that the project complies with regulations of the NPDES permit, and that the project applicant prepares and submits a Final Storm Water Control Plan and Stormwater Control Operation and Maintenance Plan to the County Public Works Department for approval. In addition, a Stormwater Pollution Prevention Plan (SWPPP) would be required as part of MM HYD-3, which would minimize flooding and the discharge of pollutants into waterbodies during construction. Therefore, impacts related to the need for relocation or construction of new or expanded stormwater drainage facilities would be less than significant with mitigation.

**Telecommunications**

There are no telecommunications facilities located on-site. However, the project would not need new telecommunications facilities because it is located in an urban area that already contains

\(^{30}\) Ibid.
sufficient telecommunications facilities. Therefore, impacts related to need for relocation or construction of new or expanded telecommunications facilities would be less than significant.

**Operation**
Impacts related to the need for relocation or construction of new or expanded water supply, wastewater treatment, stormwater drainage, or telecommunications facilities are limited to construction impacts. No respective operational impacts would occur.

**Level of Significant Before Mitigation**
Potentially Significant

**Mitigation Measures**
Implement MM HYD-3

**Level of Significance**
Less Than Significant with Mitigation

**Water Supply**

**Impact UTIL-2:** The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

**Construction**
Impacts related to sufficient water supplies are limited to operational impacts. No respective construction impacts would occur.

**Operation**
Water supply would be provided to the project site by CCWD. The project consists of 284 residential units. According to the California Department of Finance, unincorporated Contra Costa County has an average of 2.88 persons per household. Using this figure as a multiplier, the project would add approximately 818 persons to the population of Contra Costa County. The Utility Due Diligence Report provided a water demand rate of 185 gallons per day per person.\(^{31,32}\) Using this rate, the project would generate an estimated water demand of 151,330 gallons per day and 55.23 million gallons per year. On an annual basis, this equates to 168.96 acre-feet.\(^{33}\) The CCWD 2015 UWMP indicates that the total planned water supply in 2020 is anticipated to be 228,000 acre-feet.\(^{34}\) Thus, the project water demand would represent less than one percent of the project water supply totals forecasted for year 2020. Additionally, the CCWD 2015 UWMP determined that CCWD would have adequate water supplies to serve all customers in its service area during normal, dry, and multiple dry years.

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\(^{31}\) The San Francisco Public Water Resources Division Annual Report 2013–2014 estimates average residential water usage to be 49 gallons per person per day which more closely resembles the high-density residential use of the project. However, as a more conservative estimate, this EIR assumes 185 gallons per person per day to account for the total increase in water demand associated with the project within the County.


\(^{33}\) This numbers subtract account for the existing water usage.

dry years through 2040. Accordingly, adequate water supplies would be available to serve the project from existing and planned supplies. Therefore, impacts related to sufficient water supply availability would be less than significant.

**Level of Significance**

Less Than Significant

**Wastewater Treatment Capacity**

| Impact UTIL-3: | The project would not 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. |

**Construction**

Impacts related to adequate wastewater treatment capacity are limited to operational impacts. No respective construction impacts would occur.

**Operation**

The project could have a significant impact if the wastewater treatment provider would not have sufficient capacity to serve the proposed new uses in addition to the provider’s existing commitments.

The Utility Due Diligence Report determined that wastewater demand would be taken as 95 percent of the average daily water demand. As a result, 95 percent of the project’s water demand, 40,082 gallons per day, is 38,078 gallons of wastewater per day, which would result in project wastewater generation of 37,607.41 when accounting for the wastewater generated by the existing residencies. On an annual basis, this amounts to 13.73 million gallons of wastewater. The wastewater would be treated at the CCCSD Treatment Plant, which has a treatment capacity of approximately 54 mgd and approximately 270 mgd of wet-weather flow by the year 2035. The CCCSD Treatment Plant currently treats an average daily dry-weather flow of 34 mgd and estimates to treat 41 average daily dry-weather flow by 2035. As a result, the project’s estimated wastewater generation would be less than one percent of the total capacity of the CCCSD Treatment Plant. Thus, the project would not result in a need for new or expanded wastewater treatment facilities. Therefore, impacts related to wastewater treatment capacity would be less than significant.

**Level of Significance**

Less Than Significant

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Landfill Capacity

Impact UTIL-4: 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.

Construction

During the project’s construction phase, the two existing residences would be demolished, which would in turn result in construction-related solid waste. The project would be required to comply with Ordinance Code Chapter 418, which requires proper disposal of solid waste. Construction of the project would generate an estimated 2,266 tons of solid waste. The Keller Canyon Landfills (KCL) would serve as the solid waste disposal site for the project. Keller Canyon has a maximum permitted throughput of 3,500 tons per day and a remaining capacity of 52.5 million tons. Construction waste generated by the project would account for less than one percent of the total permitted capacity of this landfill and contains sufficient capacity to serve the project until their estimated closure dates. Assuming KCL receives the maximum daily tonnage permitted, there is approximately 40 years of remaining space left. Therefore, construction impacts related to landfill capacity would be less than significant.

Operation

RecycleSmart would provide operational solid waste collection services for the project site. Daily and annual operational solid waste generation estimates for the project are provided in Table 3.17-2. Operational solid waste generation for the project was calculated using standard waste generation rates provided by CalRecycle.

Table 3.17-2: Project Operational Solid Waste Generation

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Size</th>
<th>Approximate Waste Generation Rate</th>
<th>Approximate Waste Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>284 units</td>
<td>10 pounds/unit/day</td>
<td>Daily Total (tons)</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
<td>1.42</td>
</tr>
</tbody>
</table>

Notes:

The proposed residential units are estimated to generate a total of approximately 518.3 tons or 725.6 cubic yards of solid waste on an annual basis. This waste volume represents less than 0.01 percent of the available landfill capacity in Contra Costa County. Moreover, the values shown in the table are not adjusted to account for recycling, composting and waste reduction activities that would further divert

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37 Email communications with DCD staff and Keller Canyon Landfill Engineer. July 20, 2018.
waste from landfills (as required by compliance with Ordinance Code 418-10—Recycling Requirements for Landfill Disposal), which means that the above-referenced figures are conservative and may overestimate the amount of solid waste to be generated by operation of the project.

As a result, the project represents less than 1 percent of the total capacity of KCL, which contains sufficient capacity to serve the project. Therefore, operational impacts related to landfill capacity would be less than significant.

**Level of Significance**
Less Than Significant

### Solid Waste Regulations Consistency

**Impact UTIL-5:** The project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

**Construction**
The project would be required to comply with the County’s Municipal Code Title 4 Division 418-2.028 related to solid waste reduction and recycling measures. These measures would ensure compliance with the Integrated Waste Management Act by ensuring project construction waste is transferred to facilities that can adequately recycle solid waste. Thus, with compliance with existing County Municipal Code and the Integrated Waste Management Act, the project would comply with applicable solid waste regulations and statutes. Therefore, impacts related to solid waste regulations consistency are less than significant.

**Operation**
Project operation would be required to comply with applicable State and local regulations related to solid waste such as the California Integrated Waste Management Act and Title 4 Chapter 418 of the Contra Costa County Municipal Code. Adherence to the County Municipal Code would ensure sufficient solid waste collection and transportation is available to the project, and would also ensure that disposal sites contain sufficient capacity through permit review and inspections, and recycling programs are implemented in order to divert waste. As such, project operation would not impede the ability of the County to meet waste diversion requirements or cause the County to violate State and local statutes and regulations related to solid waste. Therefore, with compliance with existing State and County law requiring recycling and waste diversion from landfill requirements, operational impacts related to solid waste regulations consistency would be less than significant.

**Level of Significance**
Less Than Significant

### 3.17.5 - Cumulative Impacts

**Water**
The geographic scope of the cumulative potable water analysis is the service area of the CCWD, which provides potable water to residents and businesses within the County. The CCWD considered
the existing capacity and future demand for capacity to determine needed updates to water facilities. In the course of preparing the UWMP, the CCWD estimated water demand of future development in the service area and forecast the needed facility upgrades. The forecast included supply facility upgrades needed to accommodate growth in the County.

Cumulative projects listed in Table 3-1 (refer to Chapter 3, Environmental Impacts Analysis, Table 3-1, Cumulative Projects) are located within the CCWD service area and would create water supply demand. The CCWD 2015 UWMP determined that CCWD would be able to provide adequate water supplies to the County and cumulative projects area.\(^{40}\) The County would have adequate water supplies to serve the cumulative projects during normal and dry years.\(^{41}\) In addition, cumulative projects listed in Table 3-1, would be required to comply with provisions of the County Code and California Green Building Code related to water conservation. Therefore, the project, in conjunction with identified cumulative projects in Contra Costa County, would result in a less than significant cumulative impact related to water supply and water supply facilities.

**Wastewater**

The geographic scope of the cumulative wastewater analysis is the service area of CCCSD, which provides wastewater collection and treatment services for contracted cities and residents and business in unincorporated County land. The CCCSD considered the existing capacity and future demand for capacity to determine needed updates to wastewater and recycled water facilities. In the course of preparing the Comprehensive Wastewater Master Plan, CCCSD estimated wastewater generated from future development in the service area and forecast the needed facility upgrades. The forecast included treatment facility upgrades needed to accommodate growth in the County and maintain compliance with applicable regulatory standards for wastewater treatment and discharge.

Cumulative projects listed in Table 3-1 are located in the CCCSD service area and would generate volumes of wastewater. The Comprehensive Wastewater Master Plan determined that capacity exists to service the County and cumulative projects area demand with respect to wastewater treatment facilities. Therefore, the project, in conjunction with identified cumulative projects in Contra Costa County would result in a less than significant cumulative impact related to wastewater generation and wastewater treatment facilities.

**Storm Drainage**

The geographic scope for cumulative storm drainage is the areas that drain to the Contra Costa County Flood Control and Water Conservation District’s storm Drainage Area 44B, which would also accommodate the project’s storm drainage, pursuant to Contra Costa County Ordinance Code, Title 9 Division 914.

Cumulative projects listed in Table 3-1 predominantly consist of commercial and non-residential uses located in unincorporated Contra Costa County, the City of Walnut Creek, or the City of Pleasant Hill that generate volumes of stormwater. Of the projects listed in Table 3-1, only two appear to be located within Drainage Area 44B. Cumulative Project 1, the Avalon Bay residential project, is


\(^{41}\) *Ibid.*
currently under construction at the Pleasant Hill BART Station area; Cumulative Project 2, the Avalon Walnut Creek office building, is planned for construction at the Pleasant Hill BART Station area; both of these projects are consistent with the land uses assumed as part of the Pleasant Hill BART Station Specific Plan. Construction of these projects, in conjunction with the project, are therefore already accounted for as part of the formation of Drainage Area 44B; as noted in this chapter, the project may be required to construct improvements such that the storm drain line is adequate, which may include an expansion of this stormwater facility to ensure that adequate capacity is maintained. Therefore, the project, in conjunction with the construction of other projects within Drainage Area 44B, would not result in a significant cumulative impact related to stormwater generation and stormwater drainage facilities.

Solid Waste
RecycleSmart, a joint powers authority oversees regional waste diversion programs and contracts for the solid waste recycling collection services provided within this area of the County. Cumulative projects listed in Table 3-1 consist predominantly of residential uses and would generate solid waste that would increase demand on solid waste facilities to receive, process, and dispose solid waste.

As described previously, Keller Canyon Landfill has a remaining capacity of 52.5 million tons, which translates to approximately 40 years of remaining air space. The anticipated waste volume of cumulative projects development would be 3,531.41 cubic yards per year that represents less than one percent of the landfill’s maximum permitted capacity. Existing solid waste facilities provide sufficient capacity to serve cumulative development anticipated in the County. Therefore, the project, in conjunction with identified cumulative projects, would result in a less than significant cumulative impact related to solid waste generation and landfill capacity.

Level of Significance
Less Than Significant

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42 Email communications with DCD staff and Keller Canyon Landfill Engineer. July 20, 2018.