

This section describes the regulatory setting, impacts associated with wastewater services, water services, and solid waste disposal that are likely to result from project implementation, and measures to reduce potential impacts to wastewater, water supplies and solid waste. A detailed discussion of the proposed project's storm drainage and flood control facilities is included in Section 3.9, Hydrology and Water Quality. Therefore, storm water drainage and infrastructure is not addressed in this EIR section. This section is based in part on the following documents, reports and studies:

- City of Davis General Plan (City of Davis May 2001, Amended through 2013),
- City of Davis 2010 Urban Water Management Plan (Brown & Caldwell, 2011),
- Water Supply Master Plan for the Cannery (Mackay and Soms, September 2012a),
- Water Supply Assessment for the Cannery (West Yost, 2012),
- Sanitary Sewer Master Plan for the Cannery (Mackay and Soms, September 2012b),
- Wastewater Facilities Strategic Master Plan (City of Davis, 2005), and
- Wastewater Project – Staff's Analysis of Project History (City of Davis, 2012).

Comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic from the following: Pam Neiberg (April 11, 2012), Davis Neighbors, Inc. (April 9, 2012), George Heubeck (March 27, 2012), and BJ Klosterman (April 11, 2012). Each of the comments related to this topic are addressed within this section.

3.15.1 WASTEWATER SERVICES

EXISTING SETTING

Wastewater Treatment

Wastewater treatment for the project area is provided by the City of Davis Public Works Department. The City's wastewater treatment plant (WWTP) is located approximately four miles northeast of the project site on County Road 28H, and is supplied by over 150 miles of sewer line. The plant was designed to accommodate an average dry weather flow of 7.5 million gallons per day (mgd). The 2011 estimated dry weather flow to the plant was approximately 5.2 mgd, leaving, at that time, a remaining capacity of 2.3 mgd (Mackay and Soms, 2012b). The main component of the treatment plant consists of 120 acres of eight-foot-deep secondary treatment oxidation ponds, which were constructed beginning in 1972. Later improvements to the system, including an overland flow system, aeration equipment, and a wetlands system (the Davis Wetlands) have resulted in treated municipal wastewater effluent containing concentrations of organic and suspended solids ranging from 45 to 90 mg/L, which is typical of older wastewater facilities.

Although the City has thus far been able to adapt to changing regulatory requirements, the *2003 Status Report* and *2005 Wastewater Facilities Strategic Master Plan* (2005 WWFSMP) anticipate that the City's combination of natural and modified natural wastewater treatment processes may not be sustainable, reliable, or consistent with the State's wastewater treatment and disposal

objectives. For instance, the system is not capable of meeting upcoming treatment standards for nitrogen (such as ammonia) and pathogens, including viruses. Modern plants typically produce much cleaner effluent water, with suspended solids concentrations in the three to ten mg/L range.

Compliance with more restrictive wastewater discharge standards may be dependent in part upon improved drinking water quality. Wastewater discharge requirements for some contaminants (for instance, copper) are much more stringent than standards for the same contaminants in drinking water; thus, water quality problems of the potable water supply may actually compound the difficulty of producing wastewater discharge which meets standards.

The 2005 WWFSMP proposed improvements to the City's WWTP that were intended to address future regulatory challenges and provide for sustainability features that exceed regulatory requirements. In June 2008, the City's review of a draft version of Preliminary Design Report (PDR) being prepared to implement the 2005 WWFSMP identified estimated costs of \$207-\$225 million for the total project. The City Council directed staff to re-evaluate the cost estimate and overall scope of the project. Staff prepared an updated scope and the Council authorized funding to finalize the PDR, directed staff to investigate alternatives, and directed additional study of the project, including input on more cost-effective solutions. After a charette process and examination of regional options, in April 2011, the Council chose the Charette Plan as the preferred option to meet the City's wastewater treatment and disposal obligations and selected the design-bid-build method as the preferred project delivery method. The Charette Plan proposed basically the same treatment scheme as originally envisioned in 2005, but with the addition of oxidation ponds, which resulted in smaller treatment units and lower energy requirements. The City is currently in the process of completing the planning for the upgrades to the WWTP.

While the specific capacity of the upgraded WWTP has not yet been approved by the City Council, it is likely to remain the same as the existing WWTP, at approximately 7.5 mgd. The WWTP size provides the capacity for growth of 0.5 percent from 2012 to 2018, and 1 percent growth through 2037.

Wastewater Conveyance

The City's existing sewer mains are shown in Figure 3.15-1. As shown in Figure 3.15-1, the City of Davis owns and maintains a trunk main in Covell Boulevard. This pipe is 36" in diameter along the project site frontage. The invert of this pipe is approximately 22 feet below street grade. As described in the Cannery Sanitary Sewer Master Plan, City Public Works staff has indicated that the Covell Blvd. pipeline is nearing its allowable capacity. Approximately 700 feet east of J Street, the 36" main drains into a 42" trunk main, which flows north in an easement across private property. This main crosses under Channel A, then continues north and east, discharging at the City's WWTP. City Public Works staff has indicated the 42" trunk main and downstream pipes to the treatment plant have adequate capacity to serve the proposed discharge from The Cannery Project.

Existing Project Site Facilities

Since demolition of cannery facilities, the site has not been served by a public sewer system. Existing facilities on-site include an abandoned six-inch diameter sewer line that is stubbed to the southern side of the Project, near East Covell Boulevard. This line proceeds south from the old cannery entrance at Covell Blvd., continues east along the south side of Covell Blvd., and then ties into a 15" line which discharges into the above-described 42" trunk main. This 6" pipe does not have adequate capacity to serve the proposed project. Therefore, the onsite portion is proposed for removal.

The old Hunt Wesson/ConAgra canning facility also utilized a 24" gravity pipe which was used to convey tomato canning wastewater from the facility to a pump station, and the wastes were thence conveyed via force main to disposal fields owned by ConAgra, which are located near the City's WWTP on CR 28H. The wastewater was disposed of through land application on this property. The City of Davis holds the easement within which this 24" pipe is located. The 24" pipe is relatively shallow (approximately seven feet below existing grade). The condition of the 24" pipe is not known and may not be adequate to convey sanitary sewer flows because of potential leakage concerns and/or solids settlement resulting from slow flow velocities.

REGULATORY SETTING - WASTEWATER

Clean Water Act (CWA) / National Pollutant Discharge Elimination System (NPDES) Permits

The CWA is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand (BOD), (2) total suspended solids (TSS), and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment usually in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by another CWA program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before being discharged to surface water.

The City's current NPDES Permit (NPDES No. CA0079049), which regulates the wastewater effluent quantity and quality upon discharge, was issued on October 25, 2007 and amended in February 2009 and September 2010. The NPDES permit is administered by the Regional Water Quality Control Board.

City of Davis Wastewater Facilities Strategic Master Plan

In 2005, the City of Davis prepared the Davis Wastewater Facilities Strategic Master Plan. The purpose of the Master Plan is to provide a strategic plan that outlines wastewater treatment, disposal, and reuse facility needs for a 25-year planning horizon. The Master Plan outlines the facilities needed and steps required to: 1) meet treatment requirements specified in the then active 2001 NPDES permit, 2) provide flexibility to meet anticipated future regulatory requirements, 3) determine repair and replacement needs for the facility, 4) improve reliability to ensure process performance, and 5) provide community benefits.

City of Davis General Plan

The City of Davis General Plan contains the following goals and policies that are relevant to wastewater aspects of the proposed project:

Goal WATER 5. Remain within the capacity of the City wastewater treatment plant.

Policy WATER 5.1. Evaluate the wastewater production of new large scale development prior to approval to ensure that it will fall within the capacity of the plant.

Policy WATER 5.2. Provided that the existing plant capacity is not exceeded, require new large scale development to pay its fair share of the cost of extending sewer service to the site.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it will:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
2. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

3. 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.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-1: Wastewater generated by the proposed project may exceed the capacity of the wastewater treatment plant, and may exceed the wastewater treatment permit requirements (Less than Significant)

Wastewater generated at the project site would be conveyed to the City's WWTP for treatment and disposal. The on-site sewer system for the Project would consist of a system of eight-inch and ten-inch diameter sewer lines under local streets which would collect and convey wastewater flows generated from the Project to one or more points of connection. The on-site sewer system would connect to the existing 42-inch diameter trunk sewer located on East Covell Boulevard east of the project site via a new 10-inch diameter sewer line constructed within East Covell Boulevard. Flows from the Project would be conveyed easterly in the new 10-inch diameter sewer line to the existing 42-inch diameter trunk sewer (which is shown on Figure 3.15-1) and then northeasterly to the City's existing treatment plant. The City has indicated that the 42" main and downstream conveyance system have adequate capacity to accommodate The Cannery. Alternatively, the project could upsize the existing line within Covell Boulevard (replace the existing 36-inch line from J Street to L Street with a 39-inch or 42-inch line), providing a single sanitary sewer line from the project to L Street with enough capacity to accommodate the project.

In general, the newly proposed sewer lines are shown to be located within public ROW and typically under the paved road section. The southern portion of the system within The Cannery project would be relatively deep.

In order to facilitate wastewater treatment options, the on-site sewer system would be extended to Well No. 33, located in the southwest corner of the site. This 0.2-acre existing well site is planned to be expanded by an additional 17,000 +/- square feet and equipped with water treatment facilities to help dispose of backwash and facilitate waste water flows.

The downstream end of the on-site collection system would be extended easterly along the north side of E. Covell Blvd so that the connection to the existing City system would be made at the 42" pipe. The proposed alignment of the wastewater conveyance pipes would avoid and bypass the 36" trunk main located along the project's southern boundary, which the City's model estimates is nearing capacity. As described previously in this section, the existing 42" trunk main where the project's sewer flows would be conveyed to, has adequate capacity to handle the increased wastewater flows generated by the proposed project and convey these flows to the City's WWTP.

Table 3.15-1 presents the projected sewer flows from the proposed project. The calculated flows were based on rates provided by City staff in an August 1, 2012 Utility Guidance Letter. The proposed project would generate 0.19 mgd average dry weather flow, served from a single point of service. The peak wet weather flows generated by the project would be 0.44 mgd.

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TABLE 3.15-1: PROJECT SEWER FLOWS

<i>LAND USE</i>	<i>ACRES (GROSS)</i>	<i>UNITS</i>	<i>FLOOR AREA (SF)</i>	<i>PERSONS</i>	<i>FLOW PER UNIT (GPD)</i>	<i>ADDF (GPD)</i>	<i>PF</i>	<i>PDDF (GPD)</i>	<i>I/I (GPD)</i>	<i>PWWF (GPD)</i>
Low Density Residential	14.8	96		260	230	22,080	2.147	47,406	8,880	56,286
Medium Density Residential	25.2	240		650	230	55,200	2.147	118,514	15,120	133,634
High Density Residential	10.0	250		678	230	57,500	2.147	123,453	6,000	129,453
Mixed Use-High Density Residential	Incl.	24		65	230	5,520	2.147	11,851	Incl.	11,851
Mixed Use-Commercial	15.0	0		0	2000	30,000	2.147	64,410	9,000	73,410
Mixed Use-Employees	Incl.	0	236,000	944	15	14,160	2.147	30,402	Incl.	30,402
Recreation-Clubhouse	1.0	0	5,500	22	1500	1,500	2.147	3,221	600	3,821
Non sewer generating area (Parks, OS, ROW, etc)	32.4	0		0	0	0	0	0	0	0
Total	98.4	610	241,500			186,960 (0.19 mgd)		399,256	39,600	438,856 (0.44 mgd)

Notes:

- 1- Per Capita Flow Rates were established by the Davis Public Works Department and provided in an August 1, 2012 Utility Guidance Letter
- 2- 2.71 occupants per unit established by the Davis Public Works Department and provided in an August 1, 2012 Utility Guidance Letter
- 3- Flow per occupant is 85 gallons per day per occupant. Commercial/Business Park/Retail/Semi-public flows based on 15 gallons per day per employee. One employee per 250 square feet.
- 4- Infiltration and Inflow allowance is assumed 600 gpd per gross acre per Davis Public Works Department and provided in an August 1, 2012 Utility Guidance Letter.
- 5- ADDF = Average Daily Dry Weather Flow
- 6- PF = Peaking Factor
- 7- I/I = Infiltration and Inflow (applied on gross acreage basis). Parks, Open space, & ROW are exempt.
- 8- PWWF = Peak Wet Weather Flow = Design Flow for pipes
- 9- Mixed Use (Non-Residential) area is shown at full acreage in addition to the Mixed Use (Residential) flows - a conservative assumption.

The City's WWTP has a design capacity of 7.5 mgd. The 2011 estimated dry weather flow to the plant was approximately 5.2 mgd, leaving, at that time, a remaining capacity of 2.3 mgd. Additionally, as shown in Table 2.19 of the 2005 WWFSMP, at full City buildout (2030 conditions,

which includes development of the subject property) the average dry weather flow to the WWTP is projected to be 6.96 mgd, which is within the treatment capacity of the City's WWTP. As stated in the 2005 WWFSMP, the existing permitted discharge capacity of the 7.5 mgd average dry weather flow will not be exceeded during the 25-year planning horizon of the 2005 Master Plan.

Implementation of the proposed project would not result in adverse effects to the wastewater conveyance or treatment system in the City of Davis. Wastewater flows from the proposed project would be conveyed to the WWTP via an existing 42" trunk main, which has adequate capacity to meet existing demand in addition to the demand generated by the proposed project. Additionally, the City's WWTP has adequate capacity, under both existing and future cumulative conditions, to treat the wastewater generated by the proposed project. Since the wastewater generated by the proposed project would not contribute to an exceedance of the permitted treatment capacity of the WWTP, the proposed project would not result in a violation of the City's NPDES permit requirements for the treatment and discharge of wastewater. This is a **less than significant** impact, and no mitigation is required.

3.15.2 WATER SUPPLIES

EXISTING SETTING

Water Service Area

The City of Davis is located in the Central Valley in the southeastern corner of Yolo County and to the east of the coastal mountain range and San Francisco Bay Area, and 12 miles west of the state capital of Sacramento. It occupies an area of about 9.8 square miles (6,281 acres). Incorporation of the City occurred in 1917, and water service is provided to all residential (single and multi-family), commercial, industrial, and irrigation customers, and for open space and fire protection uses. The City's water service area, bordered by the UC Davis campus, includes the City, El Macero (located south of Interstate 80), and additional areas to the north, south, and east of the City.

HISTORICAL AND EXISTING WATER DEMAND

The City's water demand fluctuated over the past 15 years as population has increased and water conservation practices have been implemented. In 1995, the City's water demand was 12,494 acre-feet per year (af/yr) and, in 2010, the City's water demand was 11,955 af/yr. Table 3.15-2 shows the City's water demand (based on water production) for 2005 through 2010.

3.15 UTILITIES

TABLE 3.15-2: HISTORICAL POTABLE WATER DEMAND (AF/YR)

	2005	2006	2007	2008	2009	2010
Total Urban Water Management Plan Water Demand	14,452	14,333	14,762	14,219	12,835	11,955

BASED ON TABLE 3-2- GROUNDWATER- VOLUME PUMPED (DWR TABLE 18), CITY OF DAVIS URBAN WATER MANAGEMENT PLAN, JULY 2011

As shown in Table 3.15-2, the City's 2009 and 2010 potable water demands (based on water production) were about 2,000 to 2,800 af/yr lower than 2007 demands. This reduction in potable water demand is partially due to additional water conservation measures which were implemented during the recent drought, relatively wet conditions in 2010, and a declining economy. This trend has generally been experienced by water utilities throughout California during this period.

FUTURE WATER DEMAND

The City's future water demand is anticipated to increase as approved projects build out and new developments are approved and constructed within the City's water service area. However, the rate of growth within the City service area has slowed as a result of growth management policies and the current economic downturn. Hence, water demands are not anticipated to increase as rapidly as they have in the past. The Water Distribution System Optimization Plan documented water demand projections (also used in the 2010 UWMP) as based on the Senate Bill x7-7 per capita water demand Regional Target of 167 gpcd by 2020. Using that per capita water demand, and assuming the population would grow by 2.5 percent between 2010 and 2015, and then by 5 percent for each five-year increment from 2015 to 2035, the City developed its water demand projection. Based on these reports, the City is planning for a potential population increase of 1,700 persons (equivalent to 688 dwelling units based on the current occupancy of 2.48 persons per dwelling unit) from 2010 to 2015, and of 5,200 persons (equivalent to 2,100 dwelling units based on the current occupancy of 2.48 persons per dwelling unit) from 2010 to 2020.

The projected water demand through 2035, calculated as described above and presented in the City's 2010 UWMP, is shown in Table 3.15-3. The projected water demand includes the existing and projected future water demand by existing users, on-going development projects (including the Cannery Project), and future service areas located outside the City limits.

The City currently has an extensive water conservation program in place, as described in Chapter 6 of the City's 2010 UWMP. The projected water demand presented in Table 3.15-3 includes continued implementation of the City's existing water conservation program, and is based on future normal hydrologic conditions. In single dry or multiple dry years, the projected future water demand is the same as the water demand shown in Table 3.15-3, except that in 2035 the dry year water demand (under normal, single dry year, and multiple dry year conditions) is projected to be 15,916 af/yr.

TABLE 3.15-3: PROJECTED FUTURE WATER DEMAND (AF/YR)

	2015	2020	2025	2030	2035
Total Water Demand	13,095	13,749	14,437	15,158	15,917

BASED ON TABLE 3-14- TOTAL WATER USE (DWR TABLE 11), CITY OF DAVIS URBAN WATER MANAGEMENT PLAN, JULY 2011

City of Davis Water Supplies

The proposed project, if approved by the City, is capable of being served by the City from the City's existing and future portfolio of water supplies. The water supply for the proposed project would have the same water supply reliability and water quality as the water supply available to each of the City's other existing and future water customers.

The water demands for the proposed project (together with existing water demands and planned future uses) are within the growth projections used for the City's 2010 UWMP. Therefore, the descriptions provided below for the City's water supplies have been taken, for the most part, from the City's 2010 UWMP, which was adopted in July 2011.

EXISTING POTABLE GROUNDWATER SUPPLIES

The City currently receives water supplies from groundwater pumped from 20 groundwater wells located within the City. As described in the City's Groundwater Management Plan (2006), the City is located in the Yolo Subbasin (Subbasin 5-21.67) of the Sacramento Valley Groundwater Basin as defined in the California DWR Bulletin 118 update (DWR, 2003). The Yolo Subbasin is bounded by Cache Creek on the north; the Sacramento River on the east; Putah Creek on the south; and the Coast Range on the west. Land surface elevations within the Yolo Subbasin range from approximately 0 feet along the southeastern edge to approximately 630 feet along the western edge. Except near the western edge of the basin, where land surface elevations increase with proximity to the Coast Range, the topographic relief is low. Land surface elevations within the City service area range from approximately 30 to 60 feet. The Plainfield Ridge, the topographic expression of the Dunnigan Hills anticline, is an area of slightly elevated rolling hills located approximately four miles west of Davis. The Yolo Basin, the flood basin of the Sacramento River, is located approximately three miles northwest of the City.

The City maintains 20 active wells in the intermediate depth and deep aquifer zones. The wells and the corresponding approximate groundwater production capacities are listed in Table 3.15-4.

3.15 UTILITIES

TABLE 3.15-4: CITY OF DAVIS GROUNDWATER WELLS

WELL NO.	AQUIFER	CAPACITY, GPM
1	Intermediate	1,040
EM3	Intermediate	1,165
7	Intermediate	946
11	Intermediate	1,360
14	Intermediate	--(a)
15	Intermediate	1,178
19	Intermediate	1,200
20	Intermediate	1,108
21	Intermediate	1,120
22	Intermediate	1,183
23	Intermediate	1,700
24	Intermediate	1,855
25	Intermediate	1,035
26	Intermediate	1,591
27	Intermediate	1,058
28	Deep	591
30	Deep	1,712
31	Deep	2,759
32	Deep	2,339
33 ^(b)	Deep	1,750
34	Deep	2,348 ^(c)
Total Capacity		30,259
Firm Capacity ^(d)		27,500

SOURCE: CITY OF DAVIS WATER DISTRIBUTION SYSTEM OPTIMIZATION PLAN, MAY 2011

(a) CAPACITY VARIES DUE TO THE WELL'S VARIABLE PUMP

(b) THE LEWIS WELL, WHICH IS LOCATED ON THE PROJECT SITE.

(c) OFFLINE WHILE MANGANESE TREATMENT SYSTEM IS CONSTRUCTED.

(d) ASSUMES THE LARGEST WELL (DDW-31) IS NOT IN SERVICE.

Projected Future Groundwater Use

Table 3.15-5 identifies the City's projected groundwater projection through 2035. Between 2015 and 2020, the City plans to complete a project to deliver treated surface water from the Sacramento River to the City's water supply. This surface water project will allow the City to scale back its future groundwater extractions during normal years. For example, at buildout of the General Plan, groundwater production capacity in normal years is anticipated to be approximately 6,000 af/yr, according to the 2010 UWMP. The City will continue to rely on groundwater for demand peaking, drought, and emergency supplies, during single dry or multiple dry years, as needed, to meet demands when surface water supplies may be limited.

TABLE 3.15-5: PROJECTED GROUNDWATER PRODUCTION (AF/YR)

	2015	2020	2025	2030	2035
Projected Potable Groundwater Production, af/yr	15,000	6,000	6,000	6,000	6,000

SOURCE: WEST YOST ASSOCIATES, 2012

In the future, the City will construct new production and emergency supply wells, as needed, to replace existing, aging production wells and to provide supply reliability in the event of a drought or other emergency situation. The City's potential uses of groundwater during droughts are consistent with its Groundwater Management Plan.

Groundwater Sufficiency

The City's 2010 UWMP addressed the sufficiency of the City's groundwater supplies, in conjunction with the City's other existing and additional water supplies, to meet the City's existing and planned future uses. Based on the information provided in Chapter 6 of the Water Supply Assessment (WSA) regarding groundwater levels and well capacity and the information in the City's 2010 UWMP, the City's groundwater supply is sufficient to meet the water demands of the Project, in addition to the City's existing uses. As discussed above, the City's use of groundwater over the last few years has significantly declined, primarily due to water conservation programs. In the future, the City's use of groundwater is anticipated to decrease even further, as high-quality surface water supplies become available. Assuming normal year hydrologic conditions, annual groundwater use is anticipated to be as low as 6,000 af/yr by 2020, as indicated in the 2010 UWMP. This anticipated future groundwater pumpage is significantly below the City's historical groundwater pumpage, the average annual operational deep well capacity of 8,000 to 9,000 af/yr, and the projected pumping under Dry Year Water Supplies. By reducing groundwater extraction on an average annual basis, the City will: (1) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., the City will effectively be "banking" its groundwater); and (2) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and repair caused by the lower-quality groundwater.

Groundwater Quality

Groundwater in the Davis area is of moderate quality for municipal and agricultural water supply. Major groundwater production zones have traditionally been divided into the "Intermediate Aquifer" and "Deep Aquifer" based on general water chemistry, even though both are geologically part of the larger Tehama Formation. The "Intermediate Aquifer" begins at about 200 feet below ground surface, transitioning to the "Deep Aquifer" at about 700 feet below ground surface. Groundwater is characterized as dominated by calcium-magnesium bicarbonate in the "Intermediate Aquifer" and sodium bicarbonate in the "Deep Aquifer." Groundwater from the "Deep Aquifer" is more desirable for household use, having low concentrations of nitrate and selenium, and moderate hardness. Groundwater from the "Intermediate Aquifer" is more desirable for irrigation, having lower relative concentrations of sodium. Boron is found throughout all zones at concentrations that can have some adverse effects when used for irrigation of

sensitive plants. Arsenic concentrations are higher in some of the “Deep Aquifer” zones than in other zones, though still generally below current drinking water limits.

Because of the better acceptability for household use, new drinking water supply wells for the City and UC Davis have been completed into the “Deep Aquifer.” Water quality will be monitored in the future to determine if and when recharge from shallower sources is reaching deep wells. Concerns about water quality have been one of the driving forces for the pursuit of supplemental surface water.

Water Distribution System

The City’s water distribution system operates as one pressure zone with one elevated tank and two ground level storage tanks with booster pump stations. The hydraulic grade in the system is based on the level in the elevated tank. The wells are controlled by a Supervisory Control and Data Acquisition (SCADA) system based on the level in the elevated tank.

The City’s water system consists of piping ranging from 2 to 14-inches (in). Almost 90 percent of the distribution system consists of 6 to 10-in diameter pipelines. The City’s pipeline system was constructed to support localized supply, with wells spread throughout the City. This type of localized supply does not require large diameter transmission mains.

There are three storage tanks in the City’s water system, the existing Elevated Tank and West Area Tank (WAT) and the new East Area Tank (EAT). The three tanks have a combined storage of 8.2 million gallons. The WAT has a booster pumping capacity of 4,200 gpm and the EAT will have a total pumping capacity of 6,000 gpm. The WAT and EAT fill during off-peak demand periods and then the booster station pumps stored water back into the system during peak periods based on time and system pressure.

The only water system to which the City is connected is the UC Davis water system via two interties. UC Davis retains ownership of the interties. UC Davis entered into a water supply agreement with the City on July 9, 2010 which is in effect through June 30, 2016. The water supply agreement allows the City to receive up to 300,000 hundred cubic feet (CCF) water supply per year with a flow rate not to exceed 1,500 gpm from UC Davis.

2005 Water Well Agreement

Water supply for the project is secured by the November 1, 2005 Water Well Agreement (the “Agreement”) between Pole Line Road Holding Company, LLC (Lewis, previous property owner) and the City. Under the terms of the Agreement the City will provide water service to the project as long as the demands of the project are less than the capacity of the well constructed by Lewis on the property (City Well Number 33).

Specifically, Section VII of the Agreement states that a material consideration for Lewis to develop the well was to assure an adequate source of water for development of the property provided the production volume of the well exceeds the total projected water demand of the development proposed for the property. This commitment for service is also contingent upon Lewis conveying

the well to the City. This condition was satisfied on September 5, 2008 when the well site was deeded to the City by Lewis.

The capacity of the well, which has been rated at 1,750 gallons per minutes, exceeds the peak hour demands of the project, which are conservatively estimated at 1,280 gallons per minute. Additionally, the annual production capacity of the well, assuming a 67 percent duty factor, is approximately 1,383 acre-feet per year (af/yr), which exceeds the projected annual demand of the project, which is conservatively estimated at 439.6 af/yr.

Surface Water

The City currently utilizes no surface water, relying solely on local groundwater resources for its entire community water supply. The City currently anticipates additional potable water supplies in the future to be surface water delivered from the Sacramento River for direct consumption and possibly to serve an aquifer storage and recovery (ASR) program.

Each of these additional water supply opportunities is described below.

DAVIS WOODLAND WATER SUPPLY PROJECT

The City is participating in the Davis Woodland Water Supply Project. Most of the description below is from the Woodland-Davis Clean Water Agency website and the City's 2010 UWMP.

In September 2009, the Cities of Woodland and Davis established the Woodland-Davis Clean Water Agency (WDCWA), a joint powers authority, to implement and oversee a regional surface water supply project.

The regional project will replace deteriorating groundwater supplies with safe, more reliable surface water supplies from the Sacramento River. Once complete, the project will serve more than two-thirds of the urban population of Yolo County. It may also serve UC Davis, a project partner.

Primary Project Goals:

- Provide a new water supply to help meet existing and future needs
- Improve drinking water quality
- Improve the quality of treated wastewater

Project plans include a jointly-owned and operated intake on the Sacramento River with RD 2035, raw water pipelines connecting the intake to a new regional water treatment plant, and separate pipelines delivering treated water to Woodland, Davis, and UC Davis. Improvements to existing water supply systems will vary for Woodland and Davis and will include facilities such as distribution pipelines, water storage tanks and booster pump stations.

The regional water supply project is scheduled for design in 2013, for construction between 2013 and 2015, and for operation in 2016.

Under the project's first phase, approximately 12 million gallons per day (mgd) of treatment and delivery capacity and an annual volume of up to 20,131 af/yr will be reserved for the City through 2030, with an additional 5.4 to 5.5 mgd treatment and delivery capacity (for a total of approximately 23 mgd) when the water treatment facility is expanded to treat 51.8 mgd. This expansion is currently anticipated to be beyond 2040.

The project will ultimately divert up to 45,000 acre-feet of water per year from the Sacramento River. Appropriative water rights were granted in March 2011 and will be subject to conditions imposed by the state. Water diversions will be limited by Term 91 during summer and other dry periods. Term 91 is a condition that the State Board puts in permits, requiring in-basin diverters to curtail their diversions at times when the state and federal projects have released water that needs to move through the whole system — for example, to meet Delta water quality objectives. A more senior water right for 10,000 acre feet was purchased from Conaway Preservation Group (CPG) to provide a summer water supply. Groundwater will continue to be used by Davis when demand for water cannot be met with surface water supplies alone.

AQUIFER STORAGE AND RECOVERY

The City is considering the potential benefits of an ASR program that would allow the City to optimize the conjunctive use of its water supplies through injection of treated (potable) drinking water into selected aquifer zones within the groundwater sub-basin for storage when surplus supplies are available, and recovery of that potable water from the aquifer to optimize water quality and meet seasonal peak demands during drought periods, or when emergency or disaster scenarios preclude the use of imported water supplies.

REGULATORY SETTING – WATER SUPPLIES

Senate Bill 610

Senate Bill (SB) 610 requires that public agencies in a position of approving certain projects check with the water agency proposed to serve the project to determine if there are sufficient water supplies available to accommodate the project. SB 610 applies to projects that meet the following criteria:

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

- A mixed-use project that includes one or more of the projects specified above.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

SB 610 amended Public Resources Code Section 21151.9 to provide that whenever a city or county decides that a project meets any of the above criteria, it must comply with Section 10910 *et seq.* of the Water Code. Section 10910 *et seq.* of the Water Code was also amended by SB 610 to require a city or county to coordinate the CEQA analysis with the water agency proposed to serve the project. Section 10910 *et seq.* requires a city or county to identify any public water system that may supply water to a proposed project. The city or county must ask each of these water providers to indicate whether its “total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.” If the city or county cannot receive this information from the water provider, it must provide the water supply assessment itself.

City of Davis General Plan

The City of Davis General Plan contains the following goals and policies that are relevant to water supply for the proposed project:

Goal WATER 1. Minimize increases in water use. Reduce per capita water consumption by 20 percent as compared to historic use through programs encouraging water conservation.

Policy WATER 1.1. Give priority to demand reduction and conservation over additional water source development.

Policy WATER 1.2. Require water conserving landscaping.

Policy WATER 1.3. Do not approve future development within the City unless an adequate supply of quality water is available or will be developed prior to occupancy.

Goal WATER 2. Ensure sufficient supply of high quality water for the Davis Planning Area.

Policy WATER 2.1. Provide for the current and long range water needs of the Davis Planning Area, and for protection of the quality and quantity of groundwater sources.

Policy WATER 2.2. Manage groundwater resources so as to preserve both quantity and quality of groundwater sources.

Policy WATER 2.3. Maintain surface water quality.

City of Davis Urban Water Management Plan

The City of Davis prepared an Urban Water Management Plan in 2010, as required by the Urban Water Management Planning Act of 1983. The focus of the Plan is the conservation and efficient use of water in the Davis service area, and the development and implementation of plans to assure

reliable water service in the future. The Plan contains projections for future water use, discusses the reliability of the City’s water supply, describes the City’s water treatment system, and contains a water shortage contingency plan. In addition, the Plan contains best management practices for efficient water use.

City of Davis Groundwater Management Plan

Under mutual agreement, the City and UC Davis Groundwater Management Plan (GWMP) was developed to address groundwater management needs specific to the City and UC Davis service areas. (These areas are not directly included or managed under the Yolo County Flood Control and Water Conservation District (YFCWCD) GWMP.) The GWMP documents planned groundwater management activities and describe potential future actions to increase the effectiveness of groundwater management in the Davis area. The GWMP incorporates information from the Phase I and Phase II Deep Aquifer Studies and other regional groundwater investigations into a plan for managing and monitoring the effects of groundwater utilization. The GWMP includes all mandatory and suggested components outlined in CWC §10750 et seq. and §10753.7.

THRESHOLDS OF SIGNIFICANCE- WATER SUPPLY

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a less than significant impact on the environment associated with Utilities if it will:

1. Not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
2. Have sufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are not needed.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-2: The project may not be adequately served by existing water supply sources under existing and cumulative conditions (Less than Significant)

The project is proposing two points of connection to the City’s existing water distribution infrastructure. The project would provide two connections to the existing 10” water main in Covell Blvd., along the southern boundary of the project site. In order to meet pressure requirements for the project (such as those needed to adequately provide water at pressure during fire events), a connection to the existing water facilities west of the project (at F Street and Faro Avenue or in F Street south of Amapola) may be required. The on-site water distribution system would consist of a looped ten-inch diameter water main that would connect to the existing 10-inch diameter water main in East Covell Boulevard.

When the Hunt-Wesson cannery was in operation on the project site, four onsite wells were used to supply water to the facility. The wellhead equipment for these wells has been removed,

however, it may be feasible to refurbish one or more of the wells onsite to generate an additional source of non-potable water. This additional source of non-potable water could potentially be used for landscape irrigation and the urban farm. The use of these decommissioned wells is being explored by the City and the project applicant, but no conclusion has been reached as to whether these wells will be used to provide supplemental non-potable water to the project. For the purposes of the water supply analysis in this EIR, it is assumed that all water delivered to the project site, including water for landscape irrigation and the urban farm, would come from the City’s municipal water supply.

The City provided water use factors, shown in Table 3.15-6, for use in projecting potable water demand from the proposed project.

TABLE 3.15-6: CITY OF DAVIS WATER USE FACTORS^(A)

<i>PROPOSED LAND USE</i>	<i>WATER USE FACTOR (UNITS AS SHOWN)</i>
Low Density Residential	450 gpd/du
Medium Density Residential	450 gpd/du
High Density Residential	225 gpd/du
Commercial	2,125 gpd/ac
Clubhouse	2,500 gpd/ac
Parks and Open Space	4.3 af/ac/yr ^(B)

SOURCE: CITY OF DAVIS STAFF, AUGUST 2012.

(A) AS APPROVED BY DAVIS PUBLIC WORKS STAFF IN AUGUST 2012.

(B) THE PROJECT MAY IRRIGATE LANDSCAPING WITH NON-POTABLE WATER DRAWN FROM AN EXISTING ON-SITE AGRICULTURAL GROUNDWATER WELL, WHICH WOULD NOT REQUIRE POTABLE WATER FROM THE CITY. THE WATER USE FACTOR FOR PARKS AND OPEN SPACE WAS PROPOSED IN THE WATER MASTER PLAN. THIS ANALYSIS ASSUMES IRRIGATION WATER WOULD COME FROM MUNICIPAL SUPPLY SOURCES.

The water use factors listed in Table 3.15-6 were applied to the number of dwelling units and gross acres for the respective land uses for the Project to estimate the total potable water demand.

The total projected water demand for the proposed project at buildout is presented in Table 3.15-7. As shown, the projected potable water demand for the proposed project (including the non-potable irrigation uses) is estimated to be approximately 440 acre-feet per year (af/yr). No recycled water demand has been assumed for the proposed project. The City standard maximum-day peaking factor and peak hour peaking factor are 2.0 and 1.8, respectively. The projected average day, maximum day, and peak hour demands are shown in Table 3.15-7.

The values shown in Table 3.15-7 are based on the land use types described in the Project Description and the water demand factors described in the Water Supply Master Plan (WSMP) prepared for the project. These values differ slightly from the values in the WSMP due to slightly different land use quantities and calculation rounding.

3.15 UTILITIES

It should also be noted that although water demands for the proposed project will increase incrementally over time as various portions of the Project are developed, this analysis identifies the total estimated demands for the proposed project at full buildout.

TABLE 3.15-7: POTABLE WATER DEMAND PROJECTIONS FOR THE CANNERY PROJECT

LAND USE TYPE	WATER DEMAND UNITS	NO. OF UNITS ^(A)	UNIT WATER DEMAND FACTOR, AF/YR/UNIT ^(B)	PROJECTED ANNUAL DEMAND, AF/YR	AVERAGE DAY DEMAND, GPM	MAXIMUM DAY DEMAND, GPM ^(C)	PEAK HOUR DEMAND, GPM ^(D)
Low Density Residential	Dwelling Units	96	0.54	52.0	32.3	64.5	116.1
Medium Density Residential	Dwelling Units	240	0.54	130.0	80.6	161.3	290.3
High Density Residential	Dwelling Units	250	0.27	67.7	42.0	84.0	151.2
Mixed Use Residential at HDR Rate	Dwelling Units	24	0.27	6.5	4.0	8.1	14.5
Commercial	Acres	16	2.59	41.4	25.7	51.4	92.5
Neighborhood Commercial	Acres	0.7	3.01	2.1	1.3	2.6	4.7
Parks/ OS/ Greenbelts	Acres	32.5	4.30	139.8	86.6	203.6	610.8
Public/ Quasi-Public	Acres	0.2	--	--	--	--	--
Totals				439.6	272.5	575.4	1,280.0

SOURCE: WATER SUPPLY ASSESSMENT FOR THE CANNERY EIR, WEST YOST ASSOCIATES, AUGUST 2012.

(A) FROM THE NOP PROJECT DESCRIPTION, FEBRUARY 2012.

(B) FROM TABLE 3.15-6 CONVERTED TO ACRE-FEET PER YEAR. INCLUDES 7.5% UNACCOUNTED-FOR WATER FACTOR AS DESCRIBED IN THE WATER MASTER PLAN, SEPTEMBER 2012.

(C) USES CITY STANDARD OF 2 TIMES AVERAGE DAY DEMAND, EXCEPT PARKS, ETC. WHICH USES 2.35 TIMES AVERAGE DAY DEMAND.

(D) USES CITY STANDARD OF 1.8 TIMES MAXIMUM DAY DEMAND, EXCEPT PARKS, ETC. WHICH USES 3.0 TIMES MAXIMUM DAY DEMAND.

Table 3.15-8 summarizes the City's current water supplies and water demands in normal, single dry and multiple dry years based on existing demands, development projects with approved water supply and the proposed project. As shown, for all of the hydrologic conditions, the City's existing water supplies are sufficient to meet the City's existing water demands, in addition to the

proposed project, and a water surplus would remain under all of the scenarios (normal years, single dry year, multiple dry years).

TABLE 3.15-8: EXISTING WATER SUPPLY AND DEMAND (INCLUDING PROPOSED PROJECT)

SUPPLY	CURRENT DRY YEAR WATER SUPPLY AVAILABILITY, AF/YR		
	NORMAL YEARS	SINGLE DRY YEAR	MULTIPLE DRY YEARS
Existing Water Supplies			
Groundwater	15,000	15,000	15,000
Total Potable Water Supply	15,000	15,000	15,000
Existing Potable Water Demand (2010) ¹	11,955	11,955	11,955
Existing Potable Water Demand (2010) plus the Proposed Project	12,395	12,395	12,395
Potable Water Supply Surplus (Deficit)	2,607	2,607	2,607

SOURCE: WATER SUPPLY ASSESSMENT FOR THE CANNERY EIR, WEST YOST ASSOCIATES, AUGUST 2012.

NOTE 1: EXISTING POTABLE WATER DEMAND (2010) INCLUDES UNACCOUNTED FOR WATER (AND IS THEREFORE EQUAL TO HISTORICAL PRODUCTION)

Table 3.15-9 summarizes the City’s Year 2035 water supplies and water demands in normal, single dry and multiple dry years. The projected water demands shown include the projected water demands for the proposed project. As shown, for all hydrologic conditions, the City’s existing and additional water supplies are sufficient to meet the City’s Year 2035 water demands. No water supply shortages are anticipated for any hydrologic conditions based on Year 2035 water demands.

3.15 UTILITIES

TABLE 3.15-9: EXISTING AND ADDITIONAL YEAR 2035 WATER SUPPLY AND DEMAND (INCLUDING PROPOSED PROJECT)

SUPPLY	YEAR 2035 WATER SUPPLY RELIABILITY, AF/YR		
	NORMAL YEARS	SINGLE DRY YEAR	MULTIPLE DRY YEARS
Existing Water Supplies			
Groundwater	6,000	8,500	6,000
Additional Water Supplies			
WDCWA Surface Water Project	13,104	7,642	11,242
Aquifer Storage and Recovery	--	Unknown	Unknown
Total Potable Water Supply	19,104	16,142	17,242
Projected 2035 Potable Water Demand	15,916	15,916	15,916
Potable Water Supply Surplus (Deficit)	3,188	226	1,326

SOURCE: WATER SUPPLY ASSESSMENT FOR THE CANNERY EIR, WEST YOST ASSOCIATES, AUGUST 2012.

NOTE: THE CITY IS PLANNING TO DECREASE GROUNDWATER USE TO 6,000 AF/YR BY THE YEAR 2015 (BASED ON NORMAL YEAR SUPPLY CONDITIONS). HOWEVER, STUDIES DESCRIBED IN THE WSA HAVE INDICATED THAT UP TO 8,500 AF/YR OF GROUNDWATER IS AVAILABLE TO THE CITY TO MAKE UP FOR SHORTFALLS IN THE EVENT OF SEVERE DROUGHT OR OTHER WATER SHORTAGE.

Based on the analysis described above, and the analysis contained in the Water Supply Assessment (which was prepared consistent with the requirements of SB 610, and is attached as Appendix F), the City's existing potable water supplies are sufficient to meet the City's existing and projected future potable water demands, including those future potable water demands associated with the proposed project, to the year 2035 under all hydrologic conditions (normal years and dry years). Therefore, the proposed project would result in a **less than significant** and **less than cumulatively considerable** impact to water supplies, and no new water production, treatment or extraction facilities would be required to serve the proposed project. No mitigation is required.

3.15.3 SOLID WASTE

EXISTING SETTING

Solid waste collection and disposal in the City of Davis (including the project site) is provided by Davis Waste Removal, Inc. (DWR). DWR has a drop-off and buy-back center and provides residential curbside, apartment, and business collection services. In addition to the weekly garbage service, DWR provides green waste and recycling pickup and street sweeping service. Recoverable items include: mixed paper, glass, aluminum cans, steel and tin cans, some plastics, corrugated cardboard, yard waste, and used motor oil.

Local solid waste management planning is governed by the Integrated Waste Management Act of 1989. The Act established strict mandates for local agencies to achieve a 25 percent reduction in solid waste disposed of by 1995 and a 50 percent reduction by the year 2000. Each city is required to

prepare, adopt, and submit to the County a Source Reduction and Recycling Element (SRRE). Counties must also prepare a SRRE for unincorporated areas.

All non-recyclable waste generated by the City of Davis is disposed of at the 722-acre Yolo County Central Landfill, which is located off County Road 28H near its intersection with County Road 104. The landfill is owned and operated by the Yolo County Department of Planning and Public Works. As described in the Yolo County General Plan Draft EIR (Yolo County, April 2009), the Central Landfill is a Class III solid waste landfill which provides comprehensive solid waste and recycling services, including municipal solid waste, recycling, salvaging, household hazardous waste, and business hazardous waste. Permitted maximum disposal (“throughput”) at the Central Landfill is 1,800 tons per day. At the current waste disposal rate (also assuming a diversion rate of 70 percent, no large increase of waste from outside the County, and future waste cells operated as bioreactors described below) the landfill’s closure date is estimated to be January 1, 2081. The Central Landfill has several unique features and operations that distinguish it from typical waste management facilities and has been recognized by the U.S. Environmental Protection Agency for its innovative approach to reducing its impact on the environment, as follows:

- Bioreactor. A portion of the landfill is operated as a bioreactor, where the decomposition of waste is accelerated by adding liquid and recirculating the leachate. This process enhances the growth of microbes that promote solid waste decomposition, and as a result, landfill waste can be decomposed and stabilized within 10 to 15 years rather than decades. Benefits of bioreactor operations include: an increased rate of gas generation and energy production which allows increased gas collection efficiency and a reduction in greenhouse gas emissions; reduced pollution; extended use of the landfill facility by refilling stabilized areas; and reduced closure maintenance costs.
- Phytoremediation. The area surrounding the landfill has a high groundwater table. In order to keep the groundwater table low, groundwater is pumped from 16 wells along the northern landfill boundary. Shallow groundwater in this area of the valley contains boron and selenium. These minerals are naturally-occurring but the amount in the water is too high for the water to be released into the adjacent Willow Slough bypass. As a result, the landfill uses phytoremediation (treating water with plant growth) to reduce the boron and selenium concentrations present in the groundwater. The water is stored and used to grow 45-acre parcels of kenaf, a hibiscus relative, which is known to accumulate boron and selenium. The kenaf is harvested and used as alternative daily cover at the landfill in place of soil.
- Energy Production. A landfill gas-to-energy plant is located in the southwest portion of the landfill. The plant owner leases rights to the landfill gas and the energy production rights from the County under an agreement, and subcontracts with Minnesota Methane to operate the energy plant. The plant produces a maximum of 3,860 kilowatts per hour.

REGULATORY SETTING – SOLID WASTE

California’s Integrated Waste Management Act of 1989 (AB 939)

California’s Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling and composting. In order to achieve this goal, AB 939 requires that each City and County prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 939 also established requirements for cities and counties to develop and implement plans for the safe management of household hazardous wastes. In order to achieve this goal, AB 939 requires that each city and county prepare and submit a Household Hazardous Waste Element.

75 Percent Solid Waste Diversion

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to recycle 75 percent of the solid waste generated in the state by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by July 1, 2012, and also streamlines various regulatory processes.

Construction and Demolition Waste Materials Diversion

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the California Integrated Waste Management Board (CIWMB, which is now CalRecycle) to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

California Green Building Standards Code (CALGreen)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects (CALGreen Section 5.713).

City of Davis Municipal Code, Chapter 32

Chapter 32 of the City’s Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 32 sets forth solid waste collection and disposal requirements for residential and commercial customers, and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste. Article 32.04 establishes the Diversion of Construction and Demolition Debris Ordinance, which requires projects necessitating a building permit, with exceptions as set forth in the ordinance, to divert fifty percent of construction and demolition debris generated from applicable construction, remodeling, or demolition projects from disposal to landfills through recycling, reuse and diversion programs.

City of Davis General Plan

The City of Davis General Plan contains the following goals and policies that are relevant to solid waste disposal and recycling:

Goal MAT 1. Enhance the quality of the environment by conserving resources and minimizing waste by reducing, reusing, recycling, and re-buying.

Policy MAT 1.1. Promote reduced consumption of non-renewable resources.

Goal MAT 2. Provide adequate waste disposal capacity for Davis.

Policy MAT 2.1. Plan for the long-term waste disposal needs of Davis.

THRESHOLDS OF SIGNIFICANCE- SOLID WASTE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a less than significant impact on the environment associated with Utilities if it will:

1. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
2. Comply with federal, State, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-3: The project may not be served by a permitted landfill with sufficient capacity to meet the solid waste disposal needs of the project (Less than Significant)

Average solid waste generation rates are calculated using a per capita factor derived by dividing total solid waste by the current population. Although done on a per capita basis, this rate reflects all land uses within the City. The "per person generation rate" in the City was estimated at 3.12 pounds per day in the 2000 General Plan Update EIR (p. 5C-9).

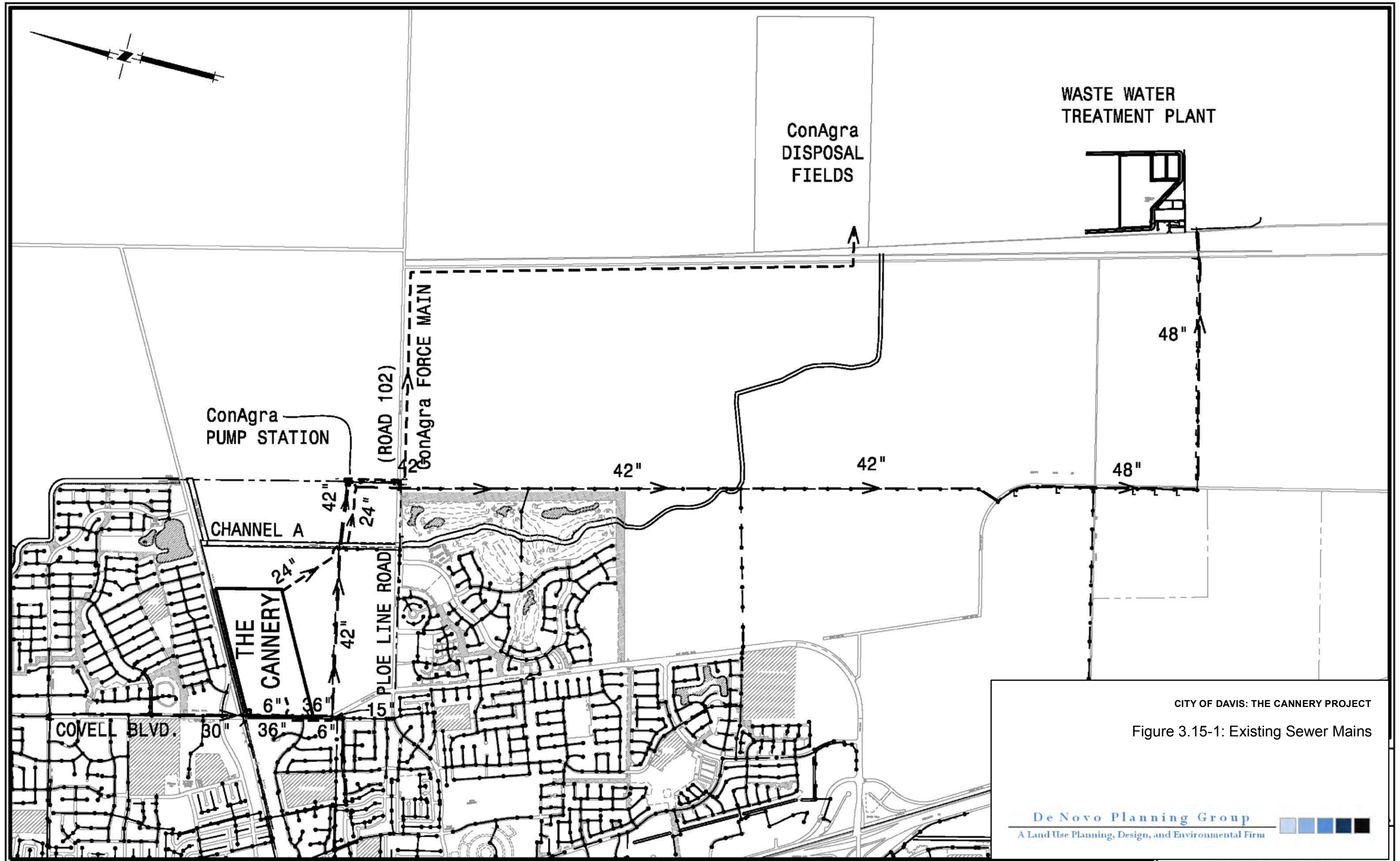
The proposed project would introduce approximately 1,444 people to the City. Using the General Plan Update EIR's generation rate of 3.12 pounds per person per day, the proposed project would generate 4,505 lbs/day of solid waste from the proposed residential uses. In order to determine solid waste generation from the non-residential uses proposed at the project site, a rate of 12.1 pounds per day, per employee was used. This waste generation rate is consistent with the guidance provided by the California Department of Recycling and Resources Recovery for commercial uses. As described in Section 2.0, the project is estimated to generate up to 850 jobs. Therefore, the non-residential component of the project would generate up to 10,285 lbs/day of solid waste. Total solid waste generated by all aspects of the project would be 14,790 lbs/day, or approximately 7.4 tons/day.

The proposed project would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. Specifically,

3.15 UTILITIES

Chapter 32 of the City's Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 32 sets forth solid waste collection and disposal requirements for residential and commercial customers, and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste.

As previously described, permitted maximum disposal at the Central Landfill is 1,800 tons per day. The total permitted capacity of the landfill is 49,035,200 cubic yards, which is expected to accommodate an operational life of about 68 years (January 1, 2081). The addition of the volume of 7.4 tons/day of solid waste generated by the proposed project to the Yolo County Central Landfill would not exceed the landfill's remaining capacity. This is a **less than significant** impact.



CITY OF DAVIS: THE CANNERY PROJECT
 Figure 3.15-1: Existing Sewer Mains

Data source: MacKay & Soms. Map date: January 16, 2013.

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