

APPENDIX K

Draft Water Supply Assessment

DRAFT
WATER SUPPLY ASSESSMENT
LANCASTER HEALTH DISTRICT MASTER PLAN
LANCASTER, CALIFORNIA

December 2020

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1.0 PURPOSE

In order to address some of the uncertainty regarding water supply and provide for a more detailed understanding of water availability for individual projects, the California State Legislature adopted Senate Bill (SB) 610 and SB 221.

Senate Bill (California Water Code Division 6, Part 2.10, Sections 10910-10915) requires the preparation of water supply assessments (WSAs) for larger development projects or land use plans that are subject to the California Environmental Quality Act (CEQA) process. SB 610 applies to a project if the project includes any of the following:

- 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 in this subdivision.
- 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.

The Lancaster Health District Master Plan would allow for the replacement of the existing 342 bed Antelope Valley Hospital main facility with a 300-bed/700,000 square foot main facility, a 40 bed psychiatric hospital and a 40 bed rehab hospital. To supplement the hospital facility, 284 sub-acute care beds (skilled nursing, rehab, and drug rehab) and 400 continuum of care beds are planned. In addition to these medical uses, the District Master Plan would allow for 250 single family residential dwelling units; 1,350 multifamily residential units; 180 hotel rooms; 70,000 square foot conference center; 842,000 square feet of commercial and office space; and a 1,100 stall parking structure. Therefore, the master plan qualifies as a project and requires a WSA pursuant to Sections 10912(a)(1), (2), (3), (6), and (7). The WSA must be included in the environmental document addressing the potential environmental impacts of the project. In order for the project to be approved, the Water Supply Assessment must conclude that the supply of domestic water available to the development is adequate, and will continue to be adequate over the next 20 years during normal, single-dry, and multiple-dry years.

SB 221 covers approvals of subdivision maps with more than 500 units and prohibits agencies from approving a subdivision map of more than 500 units with a letter of verification that sufficient and reliable water is available. Sufficient water supply is the total water supply available during normal, single-dry, and multiple-dry years within a 20-year projects that will meet the projected demand of the proposed project, in addition to existing and future planned uses.

This WSA is produced for the Los Angeles County Waterworks Districts (LACWD), District 40 to meet the requirements of SB 610 and support a letter of verification to meet the requirements of SB 221. The District was formed to supply water for urban use throughout the Antelope Valley.

2.0 BACKGROUND

2.1 Project Description

The project area encompasses approximately 272 gross acres in the central portion of the City of Lancaster around 15th Street West (Figure 1 and Figure 2). Specifically, the project area is generally bounded by Avenue J, Avenue K, 20th Street West/State Route 14 (SR), and Kingtree Avenue. The Lancaster Health District Planning Area has been divided into three subareas:

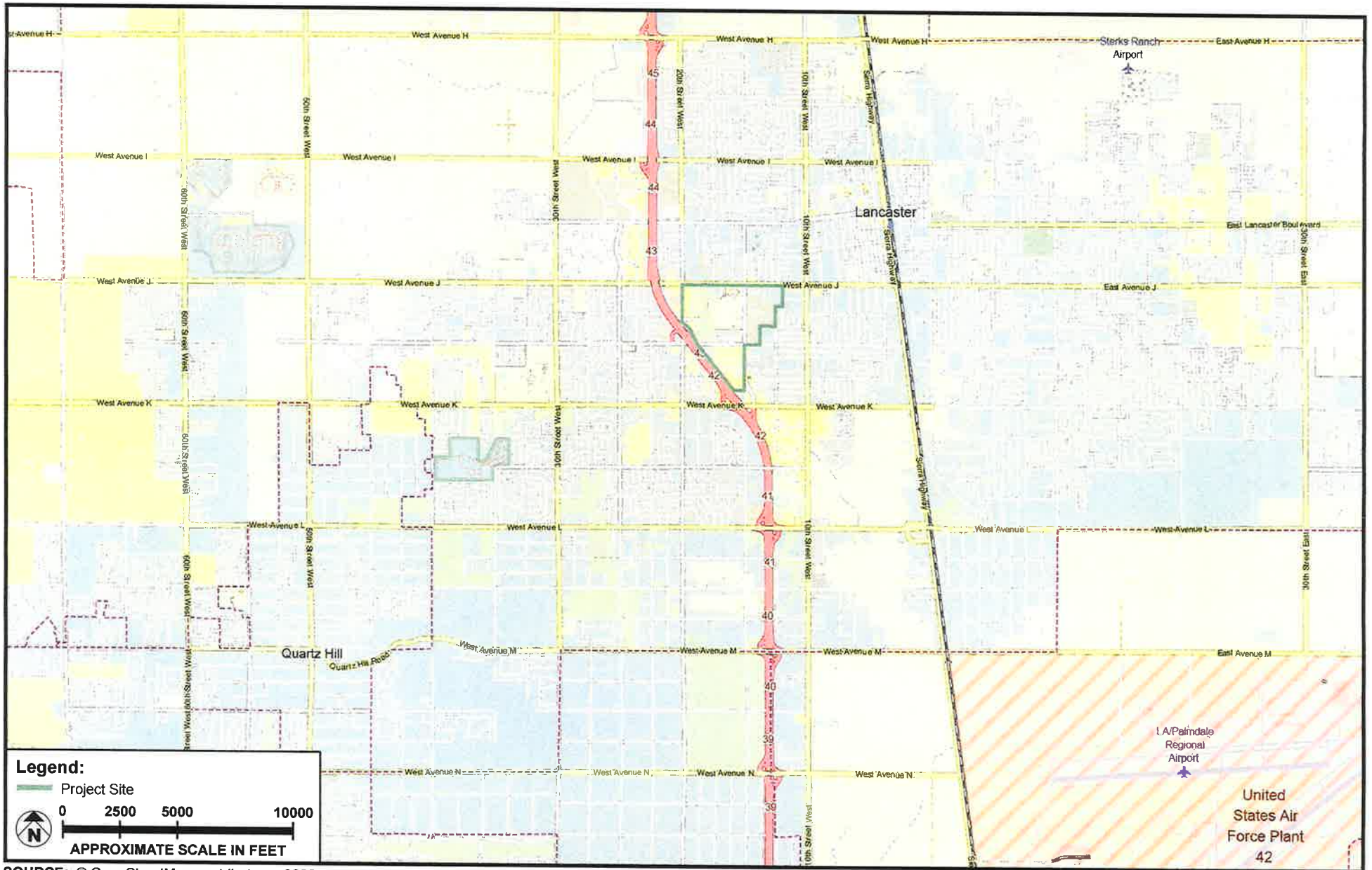
- Subarea 1 bounded by Avenue J, 15th Street West, Avenue J-8, and 20th Street West
- Subarea 2 bounded by Avenue J, 15th Street West, Avenue J-8, and Kingtree Avenue
- Subarea 3 bounded by Avenue J-8, 15th Street West, Avenue J-12, and SR-14

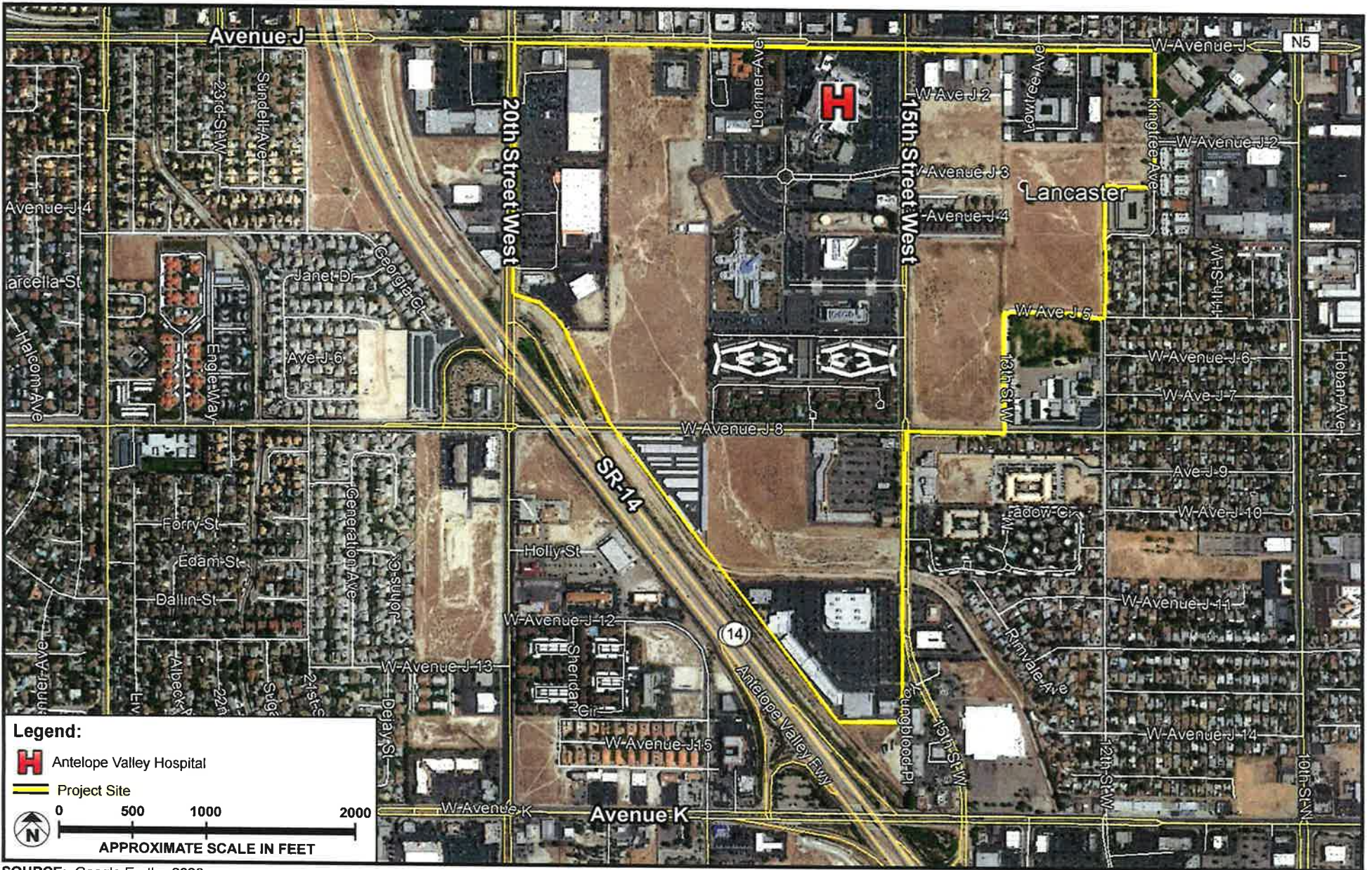
The proposed Master Plan would allow for a maximum level of development throughout the plan area and would encompass a variety of land use types. The land uses and units/square footages are shown in Table 1. The proposed land uses are in addition to the existing land uses within the plan area. The 300-bed main hospital facility¹ would replace the existing hospital and as such would not be expected to increase water usage; however, the proposal also includes smaller specialized hospital facilities which would increase the total number of beds provided. Additionally, a 202,000 square foot continuum of care facility was previously approved on a portion of the project site; however, it is likely that the project will expire. Therefore, all of the land uses below have been included in the water calculations to ensure an accurate estimate.

**Table 1
Lancaster Health District Land Uses (New Development)**

Land Use	Square Footage	Units
Single Family Residential – condos		250 dwelling units
Multi-Family Residential		1,350 dwelling units
Office/Commercial	842,000	
Hotel	259,200	180 rooms
Conference Center	70,000	
Hospital (including plant facility)	712,000	300 beds
Acute/Sub Acute Care Beds	328,800	364 beds
Continuum of Care	480,000	400 rooms/beds
Parking Garage	385,000	1,100 stalls

¹ The existing 78-bed Antelope Valley Women and Infant Pavilion would remain unchanged. The existing 342 bed Antelope Valley Hospital will be demolished and replaced with a 300 bed main hospital and several smaller specialty “hospitals”.





SOURCE: Google Earth - 2020

The uses identified in Table 1 would be distributed throughout the plan area. The anticipated distribution of these uses in the plan area is shown in Table 2.

**Table 2
Lancaster Health District New Land Uses by Subarea**

Land Use	Subarea 1	Subarea 2	Subarea 3
Single Family Residential – condos	--	40 unit	210 units
Multi-Family Residential	802 units	465 units	83 units
Office/Commercial	720,000 sf	61,000 sf	61,000
Hotel	180 rooms		
Conference Center	70,000 sf		
Hospital (including plant facility)	300 beds		
Acute/Sub Acute Care Beds	364 beds		
Continuum of Care		400 rooms/beds	
Parking Garage	1,100 stalls		

2.2 REGIONAL URBAN WATER MANAGEMENT PLAN

The adopted 2015 Urban Water Management Plan (UWMP) for District 40, dated January 2017, provides a summary of the agency’s water supplies, demands, plans to ensure future reliability, detailed discussions of current and future water supply, and water supply strategies for the Antelope Valley. The District is currently preparing the 2020 UWMP; however, a copy of that plan is not currently available. In the absence of an approved 2020 UWMP, the available draft 2040 water supply and demand estimates have been provided by District 40. The 2020-2035 numbers provided in the analysis below are from the adopted UWMP; the draft water numbers that were available for 2040 have been included for information purposes.

3.0 WATER DEMAND

The 2015 UWMP identifies water use factors by land use type that, if utilized, will allow the District to meet the water demand reduction targets mandated by SB X7-7, or a 20% demand reduction by the year 2020. These water use factors are typically used to determine the water consumption based on the area (acreage) of each land use type. The Lancaster Health District Master Plan includes five land use development types: single family residential, multi-family residential, commercial, institutional/governmental, and mixed use (hotel/conference center). The water demand factors for these land use types, provided in the UWMP, are summarized in Table 3. However, these factors are based on acreages and do not account for the increase in density proposed under the Master Plan. As such, more appropriate water demand factors for the different uses were identified by District 40 or through research. These factors are provided in Table 4.

Water demand for the residential uses was also provided by LACWD. The demand for medium density residential was identified as 0.82 afy/lot. The medium density residential was based on lots between 4,000 and 7,000 square feet. Due to the proposed density for the single family residential uses of 14 to 24 units to the acre, a water demand of 0.82 afy/lot was utilized. With a total of 250

single family residential units proposed within the plan area, the total water demand for single family residences would be 205 afy.

Table 3
Water Use Factors in Acre-Feet per Year (AFY) per Acre by Land Use

Land Use Type	Water Demand (afy/acre)
Single Family Residential	3.90
Multi-Family Residential	2.50
Commercial	2.25
Heavy Industrial	0.30
Light Industrial	1.10
Institutional/Governmental	2.60
Mixed Use	2.5
Source: 2015 UWMP Plan, Table 3-2	

Table 4
Specific Water Demand Factors by Proposed Land Use

Project Land Use	Water Demand Factor
Single Family Residential	0.82 acre-feet/year/dwelling unit
Multi-Family Residential	81 gallons/day/person
Office/Commercial	4.17 acre-feet/year/39,999 sf bldg
Hotel	81 gallons/day/person with 1.5 people per room @ 85% occupancy
Conference Center	4.17 acre-feet/year/39,999 sf bldg
Hospital	156 gallons/day/bed
Acute/Sub-Acute Care Beds	156 gallons/day/bed
Continuum of Care	156 gallons/day/bed
Parking Garage	N/A
Source: Office/Commercial and Hotel factors were provided by District 40. The conference center utilized the office/commercial rate. The water demand for the hospital, acute/sub-acute care and continuum of care facilities was obtained by utilizing the wastewater generation rates for convalescent type uses and multiplying it by a factor of 1.25.	

Actual water consumption for multi-family residential uses was previously provided for another project for the years 2010 to 2016. This resulted in an average per capita use/day of 92 gallons (Table 5). This average was sent to the District for confirmation that it was still accurate and the District requested that 81 gallons/capita/day be utilized assuming one (1) occupant per studio unit; two (2) occupants per bedroom in one- and two-bedroom units; and five (5) occupants per 3-bedroom unit.

**Table 5
Historical Multi-Family Water Consumption**

Year	Consumption (AFY)	Population	Gallons Per Capita Per day
2010	853.64	7,950	96
2011	869.42	8,037	97
2012	891.66	8,125	98
2013	855.93	8,212	93
2014	863.75	8,299	93
2015	821.37	8,387	87
2016	766.61	8,474	81
Average			92

Source: Water Supply Assessment for the Avanti South Specific Plan, adopted by the Board of Supervisors June 20, 2017

The projected yearly water demand for multi-family residences within the Lancaster Health District at buildout was estimated using the 81 gallons/capita/day (Table 6).

**Table 6
Multi-Family Residential Demand**

Unit Type	% of Units	# of Units	Population Per Unit	Total Population	Demand (gpd)	Demand (afy)
Studio	10	135	1	135	10,935	12.25
1-bedroom	30	405	2	810	65,610	73.49
2-bedroom	50	675	4	2,700	218,700	244.98
3-bedroom	10	135	5	675	54,675	61.24
Total		1,350		4,320	349,920	391.96

Based on 81 gallons per capita per day and occupant loads as identified by District 40 (LACWD Email May 14, 2019)

Based on the information provided above, the total water demand for the proposed uses within the plan area at build out were estimated. Based on these calculations, all the proposed land uses within the plan area at buildout would require a total of 899.19 acre feet of water on a yearly basis. The net increase in water consumption, less the existing hospital use and the credit for TTM 22804, would be 836.05 acre feet per year (see Table 7).

**Table 7
Total Water Demand by Land Use Type**

Land Use	Number of Units/Square Feet	Demand Factor	Gallons Per Day	Total Demand (afy)
Single Family Residential – Condos	250 du	0.82 afy/dwelling unit		205
Multi-Family Residential	1,350 du	81 gallons/day/person	349,920	391.96
Office/Commercial	842,000 sf (21.05 bldgs)	4.17 afy/39,999 sf bldg		87.71
Hotel	180 rooms	81 gallons/day/person with 1.5 people per room @ 85% occupancy	18,590	20.83
Conference Center	70,000 sf (1.75 bldgs)	4.17 afy/39,999 sf bldg		7.29
Hospital	300 beds	156 gallons/day/bed	46,875	52.51
Acute/Sub-Acute Care Beds	364 beds	156 gallons/day/bed	57,031	63.88
Continuum of Care	400 rooms/bed	156 gallons/day/bed	62,500	70.01
Parking Garage	1,100 stalls	N/A		
Total				899.91
Less Existing Hospital				59.86
Less Credit for TTM 22804				4
Net Increase in Water Demand				836.05

4.0 DISTRICT 40 PROJECTED SUPPLY AND DEMAND

Projected supply and demand data for the District uses data from the adopted 2015 UWMP for District 40 as the 2020 UWMP is currently under preparation. The supply and demand data for the years 2020-2035 was obtained from the adopted 2015 UWMP. Some draft water data for 2040 has been provided by the District and included for informational purposes. Where differences exist between the draft data provided and the adopted 2015 UWMP for years 2020-2035, the data from the adopted plan was utilized.

4.1 WATER USE

The District serves water to eight regions, encompassing 554 square miles, within the Antelope Valley. The communities of Lancaster and Palmdale are served by Regions 4 and 34 which are integrated and operated as one system. These regions include a large majority of the existing development within the District’s service area. The six other regions within the District’s service area include the communities of Pearblossom (Region 24), Littlerock (Region 27), Sun Village (Region 33), Rock Creek (Region 39), Northeast Los Angeles County (Region 35), and Lake Los Angeles (Region 38). The demand projections by land use type for the District are summarized in Table 8. As stated in the 2015 UWMP, the District does not currently use or project to use recycled water, although recycled water is used and sold by others within the service area.

**Table 8
District 40 Projected Yearly Water Demand by Land Use Type**

Land Use	Projected Water Use (afy)				
	2020	2025	2030	2035	2040 ¹
Potable and Raw Water Demand					
Single Family Residential	66,410	74,330	82,170	90,020	49,892
Multi-Family Residential	3,590	4,020	4,440	4,870	6,965
Commercial	5,050	4,450	3,840	3,230	13,168
Industrial	5,380	6,030	6,660	7,300	132
Institutional/Governmental	1,680	1,480	1,280	1,080	4,741
Losses	6,180	6,800	7,410	8,020	5,655
Subtotal	88,290	97,110	105,800	114,520	80,780
Recycled Water Demand	8,200	10,900	13,600	16,300	N/A
Total Water Demand	96,490	108,010	119,400	130,820	80,780
Source: 2015 UWMP Table 3-3 and Table 3-4					
Note: 2040 draft projected water use provided by District 40, November 18, 2020.					
N/A – not available.					

4.2 PROJECTED WATER SUPPLY (NORMAL YEAR)

District 40 currently purchases water imported from the State Water Project (SWP), from the Antelope Valley East-Kern Water Agency (AVEK) and pumps groundwater from the Antelope Valley Groundwater Basin. Water use declined in 2015 as a result of the Governor’s mandated

demand reductions. To maximize the use of SWP supplies, AVEK has developed the Westside Water Bank within its service area. The District anticipates purchasing banked groundwater to use for future dry years when supplies from the SWP and groundwater will not meet future demands. Projected water supply during a normal water year, through 2040 is summarized in Table 9.

**Table 9
Projected Water Supplies During Normal Water Year**

Water Supply	2020	2025	2030	2035	2040¹
Purchased/Imported Water (AVEK)	61,000	61,000	61,000	61,000	61,000
Groundwater	36,790	36,790	36,790	36,790	36,500
Anticipated New Supply (Purchased/ Imported – Developer Fee)	4,100	12,900	21,600	30,300	39,000
Recycled Water	8,200	10,900	13,600	16,300	N/A
Total	110,090	121,590	132,990	144,390	136,500
Source: 2015 UWMP Table 5-11 2040 draft data provided by District 40, November 18, 2020. N/A – not available					

4.3 RESPONSE TO SUPPLY DEFICIENCIES

4.3.1 Climate Change Impacts

The most recent drought in California has made water supply deficiencies a major concern prompting Governor Brown to issue a proclamation of a State of Emergency in January 2014 and an Executive Order requiring a statewide reduction in water use of 25% in 2015. To achieve this reduction, each agency was assigned a mandated water reduction target. The District’s mandated water reduction target was 32%. Governor Brown lifted the drought emergency in April 2017.

4.3.2 Recycled Water

Recycled water helps provide the Antelope Valley a beneficial reuse of treated wastewater. The distribution infrastructure that conveys recycled water to users is referred to as the Antelope Valley Backbone. Only a portion of the Antelope Valley Backbone is constructed. As funding sources become available, the Antelope Valley Backbone will be expanded to serve additional recycled water demands.

The Lancaster Water Reclamation Plant (LWRP), Palmdale Water Reclamation Plan (PWRP) and Rosamond Wastewater Treatment Plant (RWWTP) are the wastewater treatment plants serving the area that would provide tertiary treated water to supply recycled water demands.

4.3.3 New Water Supply

The District has projects planned in the near future to increase supplies and reliability. The District will also purchase additional SWP water, if available, to be banked by AVEK for extraction during future dry years.

In order to acquire sufficient water supplies for future demands, the District has established, through a Memorandum of Understanding (MOU) with AVEK, a New Water Supply (Developer Fee) for new developments, which provides a method to acquire additional imported water supplies. The method creates a coordination effort between the developer, the District, and AVEK. The developer and the District work together to determine the volume of new water supply needed, which the developer then pays AVEK to receive a letter of commitment from the District for the new water supply. AVEK then designates this new water supply to the District for the developer over and above the District's current allocation of supplies. Developers may secure entitlements by entering into agreements with the District to purchase a permanent water supply. New developments proposed within the Lancaster Health District will require a New Water Supply Entitlement Acquisition Agreement with the District for any water beyond existing use.

4.3.4 Water Supply – Dry Years

The 2015 UWMP projected water supply for the single-dry year and multiple-dry year scenarios through 2035. The District is currently preparing the 2020 UWMP which would account for water supply and demand through 2040; however, the document is not currently available. The water data for 2020-2035 was obtained from the adopted 2015 UWMP. The available draft water numbers for 2040 were provided by the Water District and is provided for informational purposes. Not all 2040 data was available. These scenarios are summarized through 2040 in Tables 10 and 11.

Table 10
District 40 Normal, Single-Dry and Multiple-Dry Water Years (AFY)

		2020	2025	2030	2035	2040 ¹
		Demand	96,490	108,010	119,400	130,820
Normal Water Year	Purchased/Imported (AVEK)	61,000	61,000	61,000	61,000	61,000
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Recycled Water	8,200	10,900	13,600	16,300	N/A
	New Supply	4,100	12,900	21,600	30,300	39,000
	Total Supply	110,090	121,590	132,990	144,390	136,500
Single-Dry Water Year	Purchased/Imported (AVEK)	4,800	4,800	4,800	4,800	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	46,380	54,405	62,510	70,545	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	320	1,015	1,700	2,385	
	Total Supply	96,490	108,010	119,400	130,820	
Multiple Dry Water Year First Year	Purchased/Imported (AVEK)	12,000	12,000	12,000	12,000	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	38,680	45,740	52,690	59,670	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	820	2,580	4,320	6,060	
	Total Supply	96,490	108,010	119,400	130,820	
Multiple Dry Water Year Second Year	Purchased/Imported (AVEK)	16,200	16,200	16,200	16,200	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	34,200	40,620	47,010	53,330	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	1,100	3,500	5,800	8,200	
	Total Supply	96,490	108,010	119,400	130,820	
Multiple Dry Water Year Third Year	Purchased/Imported (AVEK)	24,500	24,500	24,500	24,500	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	25,300	30,520	35,610	40,830	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	1,700	5,300	8,900	12,400	
	Total Supply	96,490	108,010	119,400	130,820	
Source: Years 2020-2035: 2015 UWMP Table 5-11, Table 6-2, Table 6-3, and Table 6-4 Year 2040: Available draft data for 2040 was provided by District 40 on November 18, 2020.						

Table 11
Summary of Projected Water Supply and Demand (Acre-Feet/Year)

	2020	2025	2030	2035	2040
Projected Demand	96,490	108,010	119,400	130,820	80,780
Total Projected Supply					
Normal Year	110,090	121,590	132,990	144,390	136,500
Single-Dry Year	96,490	108,010	119,400	130,820	
Multiple-Dry Year	96,490	108,010	119,400	130,820	

5.0 WATER SUPPLY ENTITLEMENTS, RIGHTS, SERVICE CONTRACTS, AND MEMORANDUMS OF UNDERSTANDING

In 2015, the District received an estimated 38,410 acre feet (AF) of water that was a combination of groundwater and SWP water (2015 USMP Table 1-1). The District’s current sources are as follows:

- Imported SWP Water – purchased from the Antelope Valley – East Kern Water Agency (AVEK).
- Banked Groundwater – purchased from AVEK for use in future dry years.
- Groundwater – the District operates production wells with supply coming from the Antelope Valley Groundwater Basin, a sub-basin of the South Lahontan Hydrologic Region Basin.
- Recycled Water – the District does not currently provide recycled water for irrigation purposes although recycled water is used and sold by others within the service area.

Water supply sources are provided in the 2015 URMP and are summarized below. The District provides retail water service to customers located within its service area, all of which is located within AVEK’s boundary. The sources of supply include groundwater and imported water which AVEK has obtained from the SWP for delivery on a wholesale basis to retail water purveyors within AVEK’s boundaries, such as the District.

5.1 PURCHASED WATER

The District purchases imported water from AVEK. AVEK has an entitlement to SWP water delivered to the Antelope Valley. The Antelope Valley began to receive water deliveries from the SWP in 1972. AVEK has an allocation of 144,844 acre-feet/year of water from the SWP. The amount of water listed in “Table A” of the contract between the SWP and contracting agencies represents the maximum amount of water an agency may request each year. The District is not a SWP contractor and cannot obtain additional “Table A” entitlement.

To maximize the use of SWP supplies, AVEK has developed the Westside Water Bank within its service area. Through the Westside Water Bank facilities, AVEK can take delivery of SWP supplies exceeding customers’ demands for use as groundwater recharge for future recovery in dry years.

Water banking is a crucial strategy that water purveyors will use to help navigate the uncertainties in the availability of water supplies for the area. Water banking involves storing water when it is available in wet years or low-demand periods and recovering it during periods of drought or high demands.

At full buildout, the Antelope Valley Water Bank (AVWB) will be a banking facility capable of 100,000 acre-feet/year of recharge, 100,000 acre-feet/year of recovery; and 500,000 acre-feet of total storage capacity within the underlying aquifer. The AVWB would contribute to existing and future water requirements in the Antelope Valley during periods when surface water supplies are deficient.

5.2 GROUNDWATER

Historically, groundwater has been the secondary source of water supply within the District. Groundwater is extracted from the Antelope Valley Groundwater Basin. Prior to the 2015 UWMP, the groundwater basin was under adjudication. In 2015, the Superior Court of California (Court) entered a judgement and physical solution in the Antelope Valley Groundwater cases. The judgement imposed pumping restrictions, which will be fully implemented following a 7-year ramp down period starting in 2016. As part of the judgement, a “Watermaster” board was appointed by the Court to implement and enforce the judgement. The board has the power to impose a fee on those that pump more than their allocated right.

The Antelope Valley Groundwater Basin (basin), located within the South Lahontan Hydrologic Region, is bounded on the northwest by the Garlock fault zone at the base of the Tehachapi Mountains; on the southwest by the San Andreas fault zone at the base of the San Gabriel Mountains; on the east by ridges, buttes, and low hills; and on the north by the Fremont Valley Groundwater Basin.

Natural recharge to the basin is primarily accomplished by perennial runoff from the surrounding mountains and hills. Most recharge occurs at the foot of the mountains and hills by percolation through the head of alluvial fan systems. The Big Rock and Little Rock Creeks, in the southern part of the basin, contribute to 80% of natural runoff into the basin. Other minor recharge is from return of irrigation water and septic system effluent.

The District extracts groundwater from the Basin. The Basin was found to be in overdraft by the adjudication court. From the 1990s agricultural uses have significantly increased groundwater production, exacerbating the drop in groundwater levels across the basin.

Groundwater projections from the 2015 UWMP allow for a total groundwater right of 36,790 acre-feet/year starting in 2020. For the purposes of water supply projections, the 2015 UWMP assumed that this right will be applicable for all water year types. If not, groundwater banked in previous years will be used.

5.3 MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN AVEK AND THE DISTRICT

In August 2013, AVEK and the District signed a Memorandum of Understanding (MOU). The MOU requires applicants seeking a water service commitment from the District to submit a formal request to the District and execute a New Water Supply Entitlement Acquisition Agreement between the applicant and the District. As part of the agreement, the District may require the applicant to deposit with the District the amount of money estimated by AVEK to be necessary to fund AVEK's cost of purchasing additional imported water supplies required by the District as a condition of providing a service commitment to the applicant's development. As of the effective date of the MOU, costs are estimated to equal \$10,000 for each acre-foot of additional imported water supplies that need to be acquired. It is anticipated that this MOU will be updated in the near future.

6.0 CONCLUSION

1. The Los Angeles County Waterworks Districts (LACWD), District 40 has been identified as the public water distributor for the Lancaster Health District Master Plan.
2. Water demand projects include anticipated development. The projected acreage is based on the amount of land that is currently vacant or planned for future redevelopment from 2020-2040.
3. The net increase in the calculated water demand for the Lancaster Health District Master Plan is 836.05 acre feet per year. The Lancaster Health District Master Plan is a planned development that has been accounted for in the 2015 UWMP and will be accounted for in the 2020 UWMP which is currently under preparation.
4. Through a combination of existing supply, groundwater banking, new supply and recycled water, the 2015 UWMP projects that total supply will meet demand, including the demand generated by the Lancaster Health District, through 2035 under normal, single-dry, and multiple-dry year water conditions. It is also expected that supply will meet demand under these same conditions through 2040 based on the data provided by the District 40, even though 2020 UWMP is currently under preparation (Tables 10 and 11).

This WSA has shown that the District's total projected water supplies available during normal, single-dry, and multiple-dry water years will meet the projected water demand for the Lancaster Health District Master Plan over the next 20 years (through 2040).

7.0 REFERENCES

Los Angeles County Department of Public Works, Waterworks District 40. Final 2015 Urban Water Management Plan for District 40, February 2017.

Los Angeles County Department of Public Works, Adopted Water Supply Assessment for the Avanti South Project, June 20, 2017.

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Los Angeles County Sanitation District, Table 1, Loadings for Each Class of Land Use.

Los Angeles County Waterworks Districts (LACWD), Part 5 – Phase Water Conservation Plan. (<http://dpw.lacounty.gov/wwd/web/Documents/part5.pdf>)