

# **APPENDIX J**

## **Water Supply Assessment**





MARK PESTRELLA, Director

**COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC WORKS**

*"To Enrich Lives Through Effective and Caring Service"*

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IN REPLY PLEASE  
REFER TO FILE

June 20, 2017

The Honorable Board of Supervisors  
County of Los Angeles  
383 Kenneth Hahn Hall of Administration  
500 West Temple Street  
Los Angeles, California 90012

Dear Supervisors:

**ADOPTED**

BOARD OF SUPERVISORS  
COUNTY OF LOS ANGELES

44 June 20, 2017

LORI GLASGOW  
EXECUTIVE OFFICER

**WATER RESOURCES CORE SERVICE AREA  
LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY  
APPROVAL OF WATER SUPPLY ASSESSMENT FOR AVANTI SOUTH  
(SUPERVISORIAL DISTRICT 5)  
(3 VOTES)**

**SUBJECT**

This action is to approve the Water Supply Assessment for the Avanti South Project in the City of Lancaster and authorize the Director of Public Works or his designee to sign the Notice of Determination and submit said notice and the Water Supply Assessment to the City of Lancaster for the Avanti South Project's environmental documentation.

**IT IS RECOMMENDED THAT THE BOARD ACTING AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY:**

1. Find that the action set forth in this Board letter is not a project pursuant to the California Environmental Quality Act.
2. Approve the Water Supply Assessment for the Avanti South Project in the City of Lancaster.
3. Authorize the Director of Public Works or his designee to sign the Notice of Determination and submit said notice and the Water Supply Assessment to the City of Lancaster for the Avanti South Project's environmental documentation.

**PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION**

The purpose of this action is to approve the Water Supply Assessment (Enclosure A) required by the California Water Code Section 10910 et seq., and sign the Notice of Determination (Enclosure B) showing that although the Los Angeles County Waterworks District No. 40, Antelope Valley (Waterworks District), currently has insufficient water supplies for the proposed developments, the Avanti South Project intends to purchase sufficient water entitlement for the needs of the Avanti South Project by utilizing the Memorandum of Understanding (MOU) between Antelope Valley-East Kern Water Agency (AVEK) and the Waterworks District.

### **Implementation of Strategic Plan Goals**

The County Strategic Plan directs the provisions of Strategy II.3, Make Environmental Sustainability Our Daily Reality and Strategy III.3, Pursue Operational Effectiveness, Fiscal Responsibility, and Accountability. The recommended actions promote sound, prudent, and transparent policies and practices that help ensure maintenance of critical, high-priority County public services to protect and preserve our precious water resources while preserving the quality of life for County residents.

### **FISCAL IMPACT/FINANCING**

There will be no impact to the County General Fund or any other fund.

### **FACTS AND PROVISIONS/LEGAL REQUIREMENTS**

The California Water Code Section 10910 et seq., requires the Waterworks District to prepare an assessment for the projects in the Waterworks District's service area subject to the California Environmental Quality Act (CEQA) that involve residential development of more than 500 dwelling units, commercial development of more than 250,000 square feet, or retail development of more than 500,000 square feet. The assessment must include a discussion with regard to whether the Waterworks District's 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 Avanti South Project in addition to the Waterworks District's existing and planned future water uses. Pursuant to the California Water Code Section 10910(g)(1), the Board must approve the assessment at a regular or special meeting.

Based on the Waterworks District's 2015 Urban Water Management Plan adopted by the Board on January 24, 2017, the assessment indicates that the Waterworks District has the ability through the purchase of water entitlements to provide the needed water supply for this development under all conditions. The Avanti South Project intends to purchase sufficient water entitlement for the needs of the Avanti South Project by utilizing the MOU between AVEK and the Waterworks District.

The MOU, executed in August 2013, provides a framework for the Waterworks District and AVEK to work together to secure the water supplies necessary to meet the Waterworks District's present and future water demands. In the MOU, both parties agree to work together to acquire additional imported water supply entitlements. Prior to obtaining a Will Serve Letter, development applicants are required to submit a deposit, currently set at \$10,000 per acre-foot, to purchase needed water supply and to enter into a water supply agreement with the Waterworks District. AVEK will use these funds to negotiate and execute a contract for additional water or other permanent water supplies that will be allocated to the Waterworks District for use in providing water service to the developer's project.

The project is a proposed development of approximately 307.6 acres located in the Antelope Valley within the City of Lancaster. The Avanti South Specific Plan separates the project into two subareas.

The first area is bounded by the proposed West Avenue K-8 extension on the north, 62nd Street West and single-family homes to the east, Avenue L on the south, and 70th Street West to the west. The second area is bounded by a vacant lot to the north, 70th Street West to the east, the proposed West Avenue K-8 extension to the south, and 75th Street to the west. The project consists of 1,375 single-family dwelling units, 325 apartment units, 14 acres of commercial use, an elementary school, a fire station, and over 31 acres of park and open space.

**ENVIRONMENTAL DOCUMENTATION**

The proposed action is mandated of the Waterworks District by the California Water Code Section 10910(g)(1) and, therefore, does not constitute a discretionary approval by the Waterworks District that would be subject to CEQA. Pursuant to the California Water Code Section 10911(b), the City, as the land-use authority responsible for approving the specific plan in question and the lead agency under CEQA for the Avanti South Project, is required to include the assessment provided by the Waterworks District in the environmental impact report that the City is processing for the Avanti South Project.

**IMPACT ON CURRENT SERVICES (OR PROJECTS)**

There will be no negative impact on current County services or projects during the performance of these actions.

**CONCLUSION**

Please return an adopted copy of this letter to the Department of Public Works, Waterworks Division.

Respectfully submitted,



MARK PESTRELLA

Director

MP:AA:ir

Enclosures

c: Chief Executive Office (Rochelle Goff)  
County Counsel  
Executive Office

# Water Supply Assessment Avanti South Lancaster, California

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## 1 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.

SB 610 (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 it is expected to include a proposed residential development of more than 500 dwelling units. Avanti South contains more than 500 dwelling units; therefore, it qualifies as a project and requires a water supply assessment pursuant to §10912(a)(1). 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.

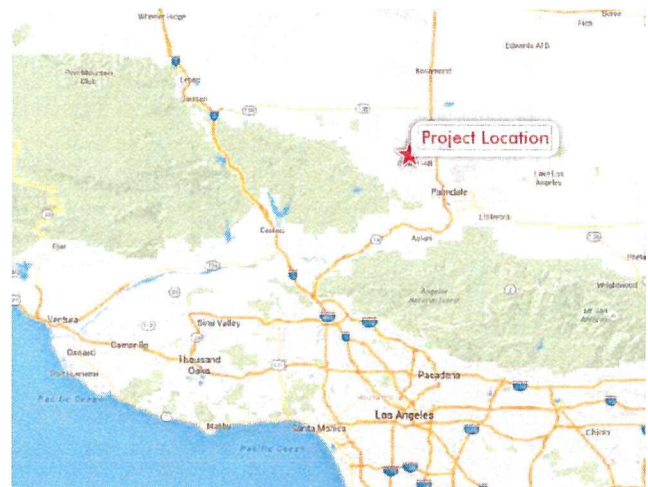
SB 221 covers approvals of subdivision maps with more than 500 units and prohibits agencies from approving a subdivision map of more than 500 units without a letter of verification that sufficient and reliable water is available. Sufficient water supply is the total water supply available during normal, single-dry, and multiple-dry years within a 20-year projection 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 BACKGROUND

### 2.1 PROJECT DESCRIPTION

Avanti South is a proposed development of approximately 307.6 acres located in the Antelope Valley within the City of Lancaster, California. The Avanti South Specific Plan separates the project into two subareas: Avanti South and Avanti West (Figure 1 and Figure 2). The Avanti South parcel is bounded by proposed West Avenue K-8 extension on the north, 62nd Street West and single family homes to the east, Avenue L on the south, and 70th Street West to the west. The Avanti West parcel is bounded by a vacant lot to the north, 70th Street West to the east, the proposed West Avenue K-8 extension to the south, and 75th Street to the west. Avanti South Specific Plan consists of 1,375 single family dwelling units, 325 apartment units, 14 acres of commercial use, elementary school, fire station, and over 31 acres of park and open space (Table 1 and Figure 3).







Avanti South  
Site Vicinity map

Kimley » Horn

Figure 2. Site Vicinity

Table 1. Residential Lot Study Summary for Avanti South

Planning Area	Avanti South Area (acres)	Avanti West Area (acres)	Total (acres)
Low Density Residential	35.57	34.76	70.33
Medium Density Residential	102.47	22.59	125.06
High Density/Multifamily Residential	14.28	0	14.28
Open Space/Park Sites	25.61	5.89	31.5
Fire Station	0	1.31	1.31
Commercial	14.01	0	14.01
School	12.76	0	12.76
Streets	29.58	8.75	38.33
<b>Total</b>	<b>234.28</b>	<b>73.31</b>	<b>307.58</b>



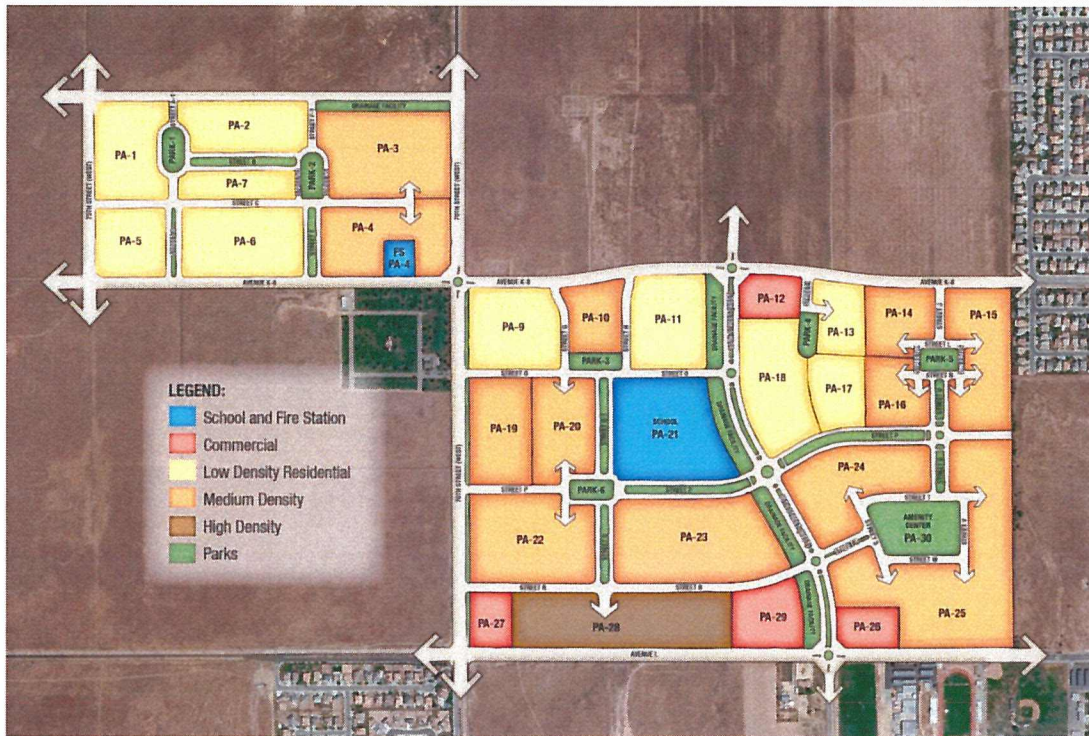


Figure 3. Proposed Land Uses

## 2.2 REGIONAL URBAN WATER MANAGEMENT PLAN

The 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.

## 3 WATER DEMAND

The 2015 UWMP identifies water use factors identified 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 used to determine the water consumption based on the area of each land use type. The Avanti South project includes four land use development types: single family residential, multi-family residential, commercial (including fire station), public areas (parks and detention basins), and institutional (schools). The water demand factors for these land use types, provided in the UWMP, are summarized in Table 2. Water demand for commercial, industrial, mixed, and institutional uses were calculated based on information provided in the 2015 UWMP.

Water demand for low, medium, and high density residential was provided by LACWD. The demand for low density residential and medium density residential is 0.83 and 0.74 AFY/Lot, respectively. The demand for high density residential is based on demand factors determined from actual consumption of multi-family residential accounts from 2010 through 2016 (Table 3). The annual demand for high density residential is summarized in Table 4

Projected yearly water demand for Avanti South, summarized in Table 5, is estimated using the factors discussed above.

**Table 2. Water Use Factors in Acre-Feet per Year (AFY) per Acre by Land Use Type**

Type	Comm.	Heavy Industry	Light Industry	Mixed Use	Institutional/Governmental
AFY/acre	2.25	0.3	1.1	2.5	2.6

2015 UWMP Table 3-2 – District 40 Water Use Duty Factor by Land Use Type. Factors include water losses.

**Table 3. Multi-Family Residential Water Consumption**

Year	Consumption (AFY)	Population	GPCD
2010	853.64	7950	96
2011	869.42	8037	97
2012	891.66	8125	98
2013	855.93	8212	93
2014	863.75	8299	93
2015	821.37	8387	87
2016	766.61	8474	81
<b>Average</b>			<b>92</b>

LACWD, 2017. GPCD = Gallons per capita per day

**Table 4. Multi-Family Residential Water Demand**

Unit Type	% of Units	Population per Unit	Total Population	Demand (GPD)	Demand (AFY)
2-Bedroom	50	4	325	29,900	33.5
1-Bedroom	30	2	195	17,940	20.1
Studio	10	1.5	49	4,508	5.0
3-Bedroom	10	6	195	17,940	20.1
<b>Total</b>			<b>764</b>	<b>70,288</b>	<b>78.7</b>

Assumes two (2) people per bedroom and 1.5 people per studio.



**Table 5. Single Family Residential Acreage for Avanti South**

Planning Area	Land Use Type	Yearly Demand Factor (AFY/Lot)	# Lots	Demand (AFY)
Low Density Residential	Single Family Residential – 566 Lots	0.83	566	469.8
Medium Density Residential	Single Family Residential – 809 Lots	0.74	809	598.7
High Density/Multifamily Residential	Multi-Family Residential – Table 4	N/A	N/A	78.7
Planning Area	Land Use Type	Yearly Demand Factor (AFY/acre)	Area (acres)	Demand (AFY)
Open Space/Park Sites	Public Areas	2.6	31.5	81.9
Fire Station	Commercial	2.25	1.31	2.9
Commercial	Commercial	2.25	14.01	31.5
School	Institutional	2.5	12.76	31.9
Streets	N/A	0	38.33	0
<b>Total</b>				<b>1295.4</b>

## 4 DISTRICT 40 PROJECTED SUPPLY AND DEMAND

Projected supply and demand data for the District uses data from the 2015 UWMP for District 40.

### 4.1 WATER USE

The District serves water to eight regions, encompassing approximately 554 square miles, within the Antelope Valley. The communities of Lancaster and Palmdale are served by Regions 4 and 34. These regions include a large majority of the existing residential development within the District’s service area. The demand projections by land use type for the District are summarized in Table 6. It is stated in the 2015 UWMP that the District does not currently use or project to use recycled water.

**Table 6. District 40 Projected Yearly Water Demand in Acre-Feet per Year (AFY) by Land Use Type**

	2020 Demand (AFY)	2025 Demand (AFY)	2030 Demand (AFY)	2035 Demand (AFY)
Single Family Residential	66,410	74,330	82,170	90,020
Multi-Family Residential	3,590	4,020	4,440	4,870
Commercial	5,050	4,450	3,840	3,230
Industrial	5,380	6,030	6,660	7,300
Institutional/Governmental	1,680	1,480	1,280	1,080
Losses	6,180	6,800	7,410	8,020
Recycled Water	8,200	10,900	13,600	16,300
<b>Total (without recycled water)</b>	<b>88,290</b>	<b>97,110</b>	<b>105,800</b>	<b>114,520</b>
<b>Total (with recycled water)</b>	<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>

2015 UWMP Table 3-3. Retail: Demands for Potable and Raw Water Projected; and Table 3-4. Retail: Total Water Demands.

## 4.2 PROJECTED WATER SUPPLY (NORMAL YEAR)

The District 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 has purchased 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 2035, from the 2015 UWMP is summarized in Table 7.

**Table 7. District 40 Projected Water Supplies during Normal Water Year in Acre-Feet per Year (AFY)**

Water Supply Sources	2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)
Groundwater	36,790	36,790	36,790	36,790
AVEK (Purchased)	61,000	61,000	61,000	61,000
Recycled Water	8,200	10,900	13,600	16,300
Anticipated New Supply	4,100	12,900	21,600	30,300
<b>Total</b>	<b>110,090</b>	<b>121,590</b>	<b>132,990</b>	<b>144,390</b>

2015 UWMP Table 5-11: Water Supplies – Projected

## 4.3 RESPONSE TO SUPPLY DEFICIENCIES

### 4.3.1 CURRENT DROUGHT

The drought in California has made water supply deficiencies a major concern prompting the Governor to issue an Executive Order requiring a statewide reduction in water use of 25%. To achieve this, each agency is assigned a mandated water reduction target. The District’s mandated water reduction target is 32%.

The District is highly susceptible to drought conditions, which exacerbate water shortages. In order to provide demands during short-term drought situations, the District implemented a Phased Water Conservation Plan (PWCP) (<http://dpw.lacounty.gov/wwd/web/Documents/part5.pdf>). The PWCP is comprised of 10 phases with water conservation targets set for each phase.

In 2015, water use declined as a result of the mandated demand reductions. It is not known to what extent water use will rebound to pre-drought levels once the drought ends.

#### **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.

Lancaster Water Reclamation Plant (LWRP), Palmdale Water Reclamation Plant (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 Understand (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 to 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. Avanti South will require a New Water Supply Entitlement Acquisition Agreement with the District.

#### **4.3.4 WATER SUPPLY – DRY YEARS**

2015 UWMP projected water supply for the single-dry year and multiple-dry year scenarios are summarized in Table 8 and Table 9.



**Table 8. District 40 Normal Water Year, Single-Dry Water Year, and Multiple-Dry Water Year Assessment in Acre-Feet per Year (AFY)**

		2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)
<b>Demand</b>		<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>
Normal Water Year	Groundwater	36,790	36,790	36,790	36,790
	AVEK (Purchased)	61,000	61,000	61,000	61,000
	Recycled Water	8,200	10,900	13,600	16,300
	New Supply	4,100	12,900	21,600	30,300
	<b>Total Supply</b>	<b>110,090</b>	<b>121,590</b>	<b>132,990</b>	<b>144,390</b>
Single-Dry Water Year	Groundwater	36,790	36,790	36,790	36,790
	AVEK (Purchased)	4,800	4,800	4,800	4,800
	New Supply	320	1,015	1,700	2,385
	Groundwater - banked supplies	46,380	54,405	62,510	70,545
	Recycled Water	8,200	10,900	13,600	16,300
	<b>Total Supply</b>	<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>
Multiple-Dry Water Year First Year	Groundwater	36,790	36,790	36,790	36,790
	AVEK (Purchased)	12,000	12,000	12,000	12,000
	New Supply	820	2,580	4,320	6,060
	Groundwater - banked supplies	38,680	45,740	52,690	59,670
	Recycled Water	8,200	10,900	13,600	16,300
	<b>Total Supply</b>	<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>
Multiple-Dry Water Year Second Year	Groundwater	36,790	36,790	36,790	36,790
	AVEK (Purchased)	16,200	16,200	16,200	16,200
	New Supply	1,100	3,500	5,800	8,200
	Groundwater - banked supplies	34,200	40,620	47,010	53,330
	Recycled Water	8,200	10,900	13,600	16,300
	<b>Total Supply</b>	<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>
Multiple-Dry Water Year Third Year	Groundwater	36,790	36,790	36,790	36,790
	AVEK (Purchased)	24,500	24,500	24,500	24,500
	New Supply	1,700	5,300	8,900	12,400
	Groundwater - banked supplies	25,300	30,520	35,610	40,830
	Recycled Water	8,200	10,900	13,600	16,300
	<b>Total Supply</b>	<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>

2015 UWMP Table 5-11: Water Supplies – Projected, ac-ft/yr; Table 6-3: Single Dry Year Water Supply; and Table 6-4: Retail: Multiple-Dry Years Supply.

**Table 9. Summary of Projected Water Supply and Demand in Acre-Feet per Year (AFY)**

	2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)
Projected Demand	96,500	108,000	119,400	130,800
<b>Total Projected Supply</b>				
Normal Year	110,090	121,590	132,990	144,390
Single-Dry Year	96,500	108,000	119,400	130,800
Multiple-Dry Year	96,500	108,000	119,400	130,800

## 5 WATER SUPPLY ENTITLEMENTS, RIGHTS, SERVICE CONTRACTS, AND MOU'S

In 2015, the District received an estimated 38,410 AF of water that was a combination of groundwater and SWP water (2015 UWMP 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 subbasin to the South Lahontan Hydrologic Region Basin
- Recycled Water – the District does not currently serve recycled water for irrigation purposes

Water supply sources are provided in the 2015 UWMP 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 ac-ft/yr 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 Antelope Valley Water Bank (AVWB) will be a banking facility capable of 100,000 ac-ft/yr of recharge, 100,000 ac-ft/yr of recovery, and 500,000 ac-ft 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 judgment and physical solution in the Antelope Valley Groundwater Cases. The judgement imposes 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 1990’s 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 ac-ft/yr starting in 2020. For purposes of the 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.

## 6 CONCLUSION

1. The Los Angeles County Waterworks Districts (LACWD), District 40 has been identified as the public water distributor for Avanti South;
2. Water demand projections include anticipated development. The projected acreage is based on the amount of land that is vacant or currently planned for redevelopment from 2015-35.
3. The calculated water demand for Avanti South is 1295.4 AFY. Avanti South is a planned development that has been accounted for in the 2015 UWMP;
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 Avanti South demand, through 2035 under normal, single-dry, and multiple-dry water year conditions (Table 8 and Table 9).

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 Avanti South over the next 20-years.

## 7 REFERENCES

- California Department of Water Resources. 2004. Bulletin 118, Antelope Valley Groundwater Basin. Updated February 2004.
- Los Angeles County, Department of Public Works, Waterworks District No. 40. 2015. 2015 Water Management Plan for District 40, dated January 2017. Prepared by Brown and Caldwell.
- Los Angeles County Waterworks Districts (LACWD), Part 5 – Phased Water Conservation Plan (<http://dpw.lacounty.gov/wwd/web/Documents/part5.pdf>)