



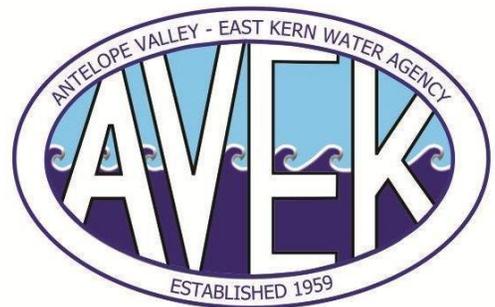
2020

## Year in Review

Antelope Valley-East Kern Water Agency

6450 West Avenue N,  
Palmdale, CA 93551

661-943-3201  
[www.avek.org](http://www.avek.org)



**DRAFT**

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# Message from the General Manager



On behalf of the Antelope Valley-East Kern Water Agency (AVEK), we are pleased to present the 2020 Year in Review.

2020 was by far one of the most uncommon years in the Agency’s more than 60-year history. While the Agency faced numerous uncertainties brought forth by the COVID-19 global pandemic, its Board and Staff embraced these new challenges, displaying an extraordinary level of adaptability and resiliency.

In response to the COVID-19 pandemic, new health and safety protocols were developed and followed in accordance with OSHA guidelines to ensure a safe work environment. Some of the most significant changes that took place were transitioning to remote public meetings, cross training staff between water treatment facilities, and adjusting work schedules and hours of operation to increase social distancing. As a result, the Agency had only two confirmed COVID-19 cases in 2020 and fulfilled its mission of supplying high quality water to the communities it serves without service interruptions.

The Agency has continued to make tremendous progress in developing water storage and recovery programs to increase its portfolio of reliable, high quality water supplies and build a sustainable future. Phase I of The High Desert Water Bank project, which kicked off in early spring with the award of an Engineering, Design, and Hydrogeology contract, is well underway, while concepts for Phase II and beyond are being developed. The Underground Piping Project at the Westside Water Bank, which progressed through 100% design in 2020, will greatly improve efficiency and water supply reliability while reducing costs. The Eastside Water Bank Expansion project, which will increase water storage capacity, continues to progress, with environmental work underway and a portion of design completed.

The Agency met all customer demands, maintained rigorous water quality standards, and completed over \$3 million dollars in asset replacement projects. The new stand-alone maintenance department, which launched in 2020, will increase the range of duties that are performed in-house by staff while reducing asset life cycle costs, ensuring the Agency is prepared to meet the needs of our growing population.

I want to highlight that the Agency maintained its status quo of a balanced budget and received clean financial audits for the 7th consecutive year—a testament to the high level of financial integrity the Agency displays in governing its resources.

# About Antelope Valley-East Kern Water Agency

In 1959, AVEK received its charter as a regional water Agency from the California State Legislature, an event that followed the 1953 formation of the Antelope Valley-Feather River Association. The concept was to import surface water supplies from the Feather River.

In 1962 AVEK's Board of Directors signed a contract with the state to secure the delivery of water supplies intended to supplement the local groundwater. **AVEK became the 3<sup>rd</sup> largest State Water Contractor with an entitlement of 144.844 acre-feet.**

In 1999, AVEK joined forces with Palmdale Water District and Littlerock Creek Irrigation District to form the Antelope Valley State Water Contractor's Association (AVSWCA), a joint powers authority. Together, the agencies optimize the use of water resources, protect surface water and groundwater storage.

## Importing Water Through the State Water Project

Imported water is delivered to AVEK through the State Water Project (SWP) facilities.

- Initial funds for construction of the SWP were obtained through a \$1.75 billion bond ratified by California voters in 1960.
- The SWP begins on the Feather River where runoff is stored behind Oroville Dam. The water then flows down natural channels to the Sacramento-San Joaquin Delta.
- Oroville Dam is the largest of 20 SWP storage reservoirs. It has a capacity of 3.5 million acre-feet of water.

**"The mission of AVEK is to deliver reliable, sustainable and high-quality supplemental water to the region in a cost-effective and efficient manner"**

# Service Area

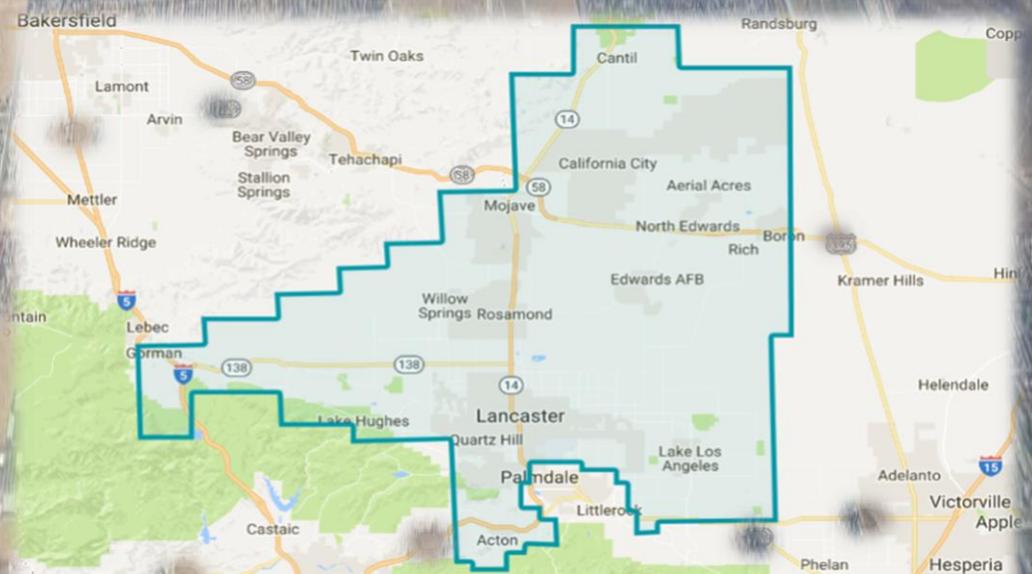
Serving over 20 municipal users along with Edwards Airforce Base, Plant 42, and U.S. Borax, AVEK's more than **2400 square mile territory** includes portions of Los Angeles, Kern and Ventura Counties.

The Agency serves a population of over 500,000 people.

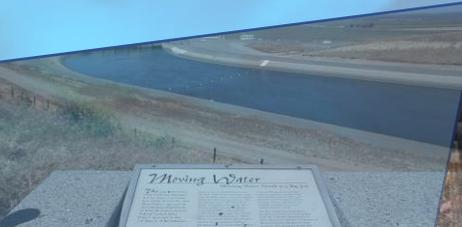
The bulk of the water imported by AVEK is treated and distributed to customers throughout its service area through Domestic-Agricultural Water Network (DAWN) project facilities. AVEK's current infrastructure includes:

- 120 miles of water distribution pipeline
- Five water storage reservoirs with capacity for 11 million gallons of water
- Four water treatment facilities
- A state-of-the-art laboratory

Additionally, AVEK maintains 3 water storage projects, the Westside, Eastside and High Desert Water Banks



# Department Highlights



## Bond Ratings



In 2020, AVEK maintained its high bond ratings from S&P Global (AA) and Moody's (A1), two companies that rank government bond issues on the organization's financial stability and operating outlook when seeking to secure bonds for specific projects.



In March 2020, the Annual Report for COP and Bond covenant compliance reporting was completed. This report discusses the Agency's service area and water system operations as well as current and historical information on water sources and supply, water demand and deliveries and operating results. This report is submitted to the Municipal Securities Rulemaking Board (MSRB) through the EMMA system as part of the ongoing compliance requirements for the Agency's outstanding bond issues.

## Budget

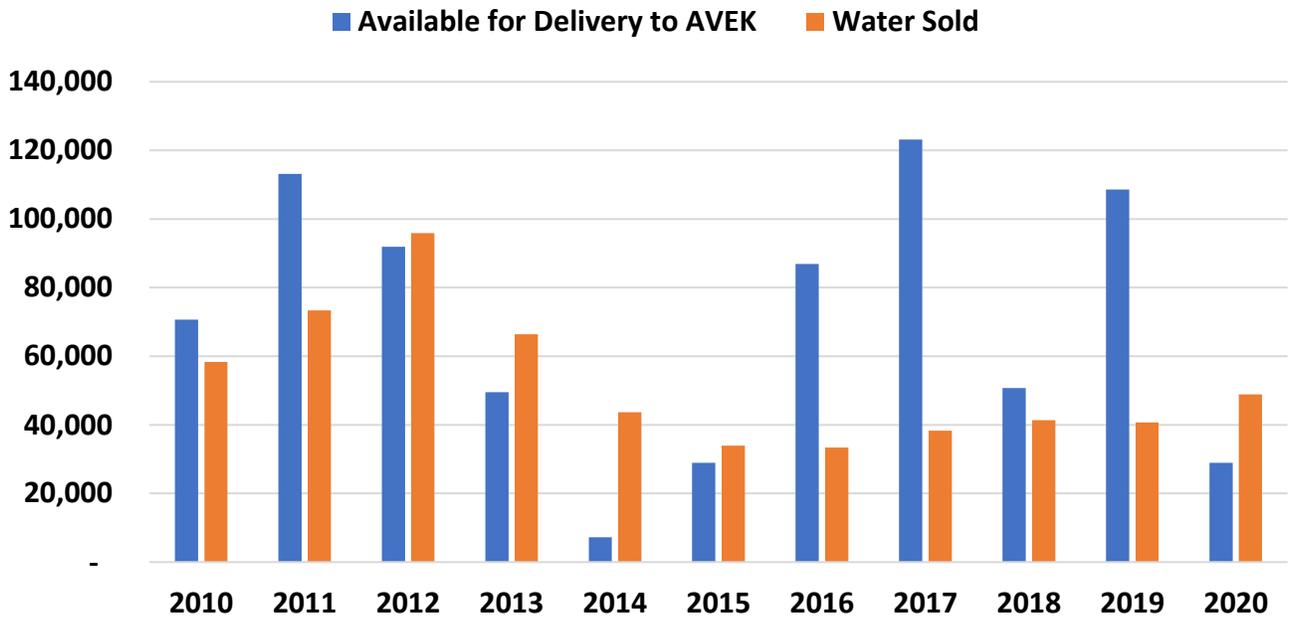
The Agency maintained a balanced budget and in July 2020, the Board approved the 2020/2021 Operating and Capital Budgets at a workshop held to present and discuss the Budgets. The 2020/2021 Operating Budget anticipates an increase to the Agency's net position of \$5,304,105 and anticipates reserves of \$112,597,883 at June 30, 2021.

**AVEK Water Agency**  
**Quarterly Revenue and Expense Report**  
**For the Quarter Ending December 31, 2020**

	Year to Date Actual	2020-2021 Budget	% of Annual Budget
<b>OPERATING REVENUES</b>			
4100	\$ 17,448,455	\$ 33,454,000	52%
4200	\$ -	\$ -	0%
4300	\$ 2,275,000	\$ 4,691,000	48%
	<u>\$ 19,723,455</u>	<u>\$ 38,145,000</u>	<u>52%</u>
<b>OPERATING EXPENSES</b>			
5000	\$ 3,869,619	\$ 13,900,000	28%
5100	\$ 1,320,687	\$ 2,684,400	49%
5200	\$ 563,561	\$ 1,419,150	40%
5300	\$ 1,534,278	\$ 3,334,600	46%
5400	\$ 59,214	\$ 256,500	23%
5500	\$ 3,473,931	\$ 7,714,615	45%
5600	\$ 30,000	\$ 125,000	24%
5700	\$ 4,000,000	\$ 8,000,000	50%
	<u>\$ 14,851,290</u>	<u>\$ 37,434,265</u>	<u>40%</u>
<b>NON-OPERATING REVENUES</b>			
4400	\$ 17,687,015	\$ 31,475,275	56%
4500	\$ 366,743	\$ 1,105,000	33%
4600	\$ 4,643,144	\$ 1,159,400	400%
4700	\$ 26,112	\$ 55,000	47%
4800	\$ 943,440	\$ -	0%
4900	\$ 580,365	\$ -	0%
	<u>\$ 24,246,819</u>	<u>\$ 33,794,675</u>	<u>72%</u>
<b>NON-OPERATING EXPENSES</b>			
5800	\$ 11,809,909	\$ 25,766,000	46%
5900	\$ 1,533,860	\$ 3,435,305	45%
	<u>\$ 13,343,769</u>	<u>\$ 29,201,305</u>	<u>46%</u>
	<u>\$ 43,970,274</u>	<u>\$ 71,939,675</u>	<u>61%</u>
	<u>\$ 28,195,059</u>	<u>\$ 66,635,570</u>	<u>42%</u>

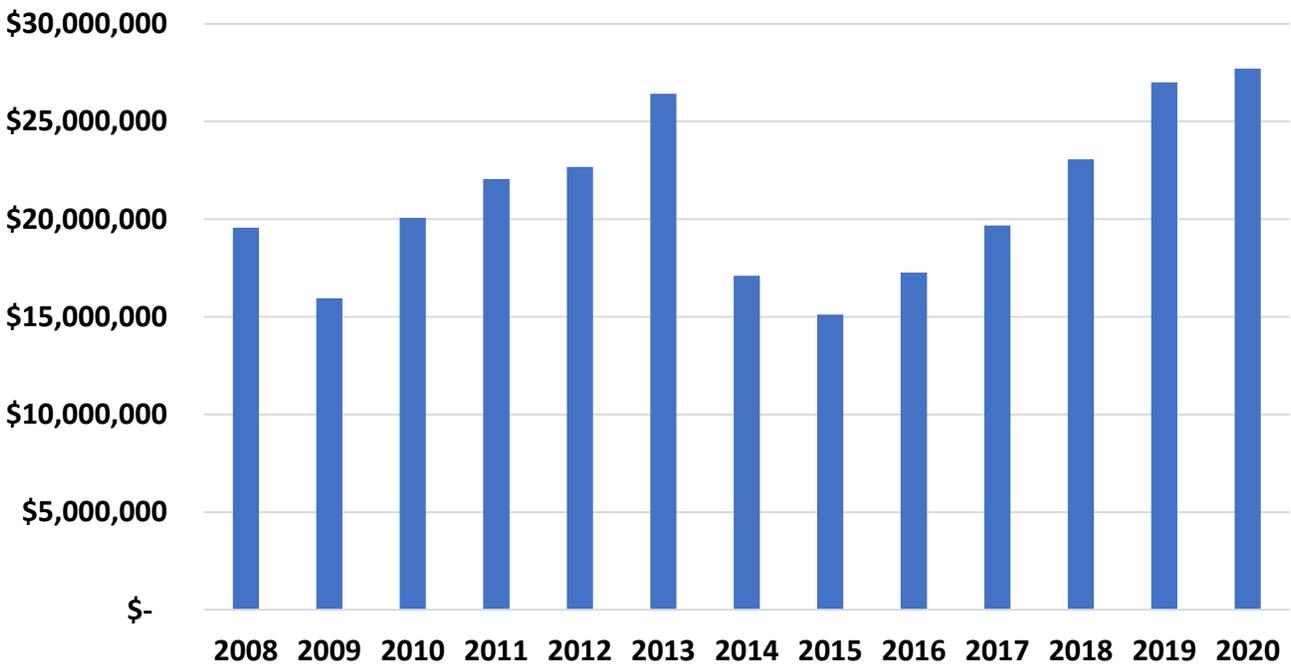
## Water Sales and Deliveries in AF (Calendar Year)

### 2020 Water Sold based on Customer Orders



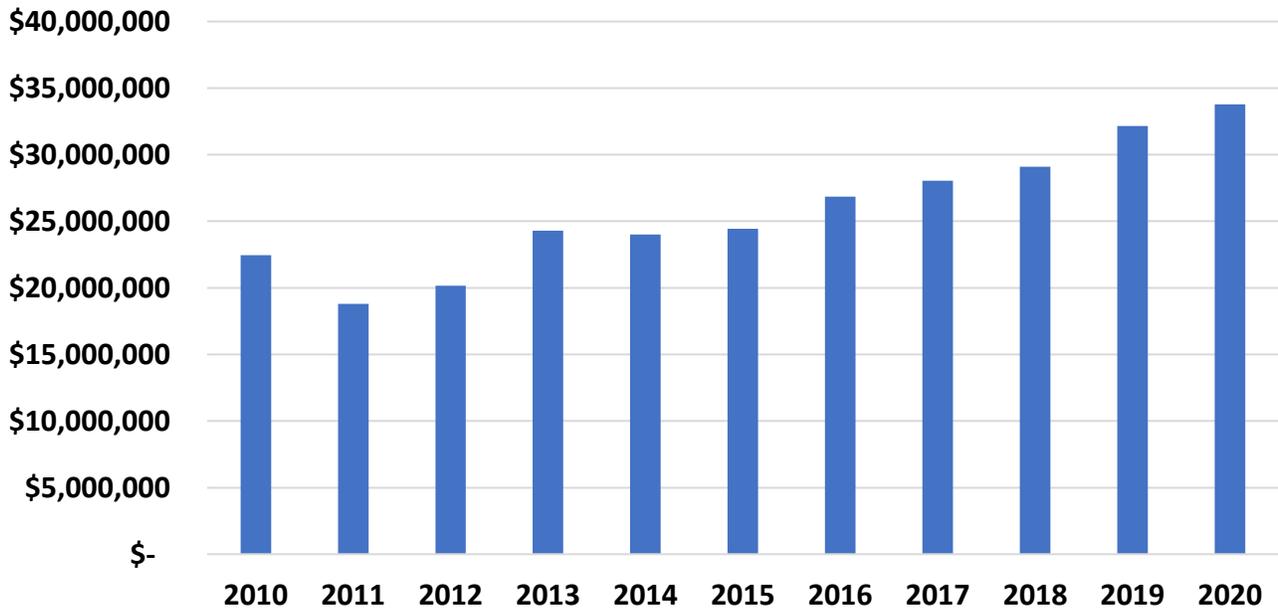
## Total Water Sales (Fiscal Year)

2020 preliminary amount is not audited and subject to change



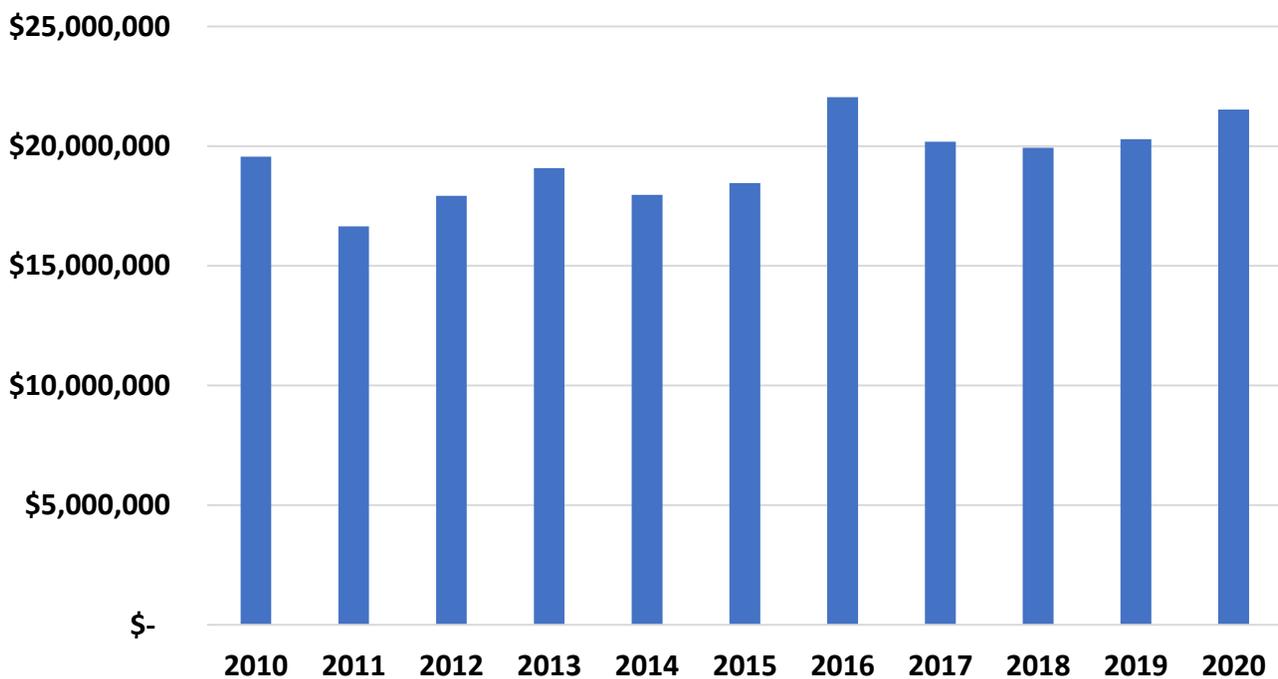
## Property Tax Revenue (Fiscal Year)

2020 preliminary amount is not audited and subject to change



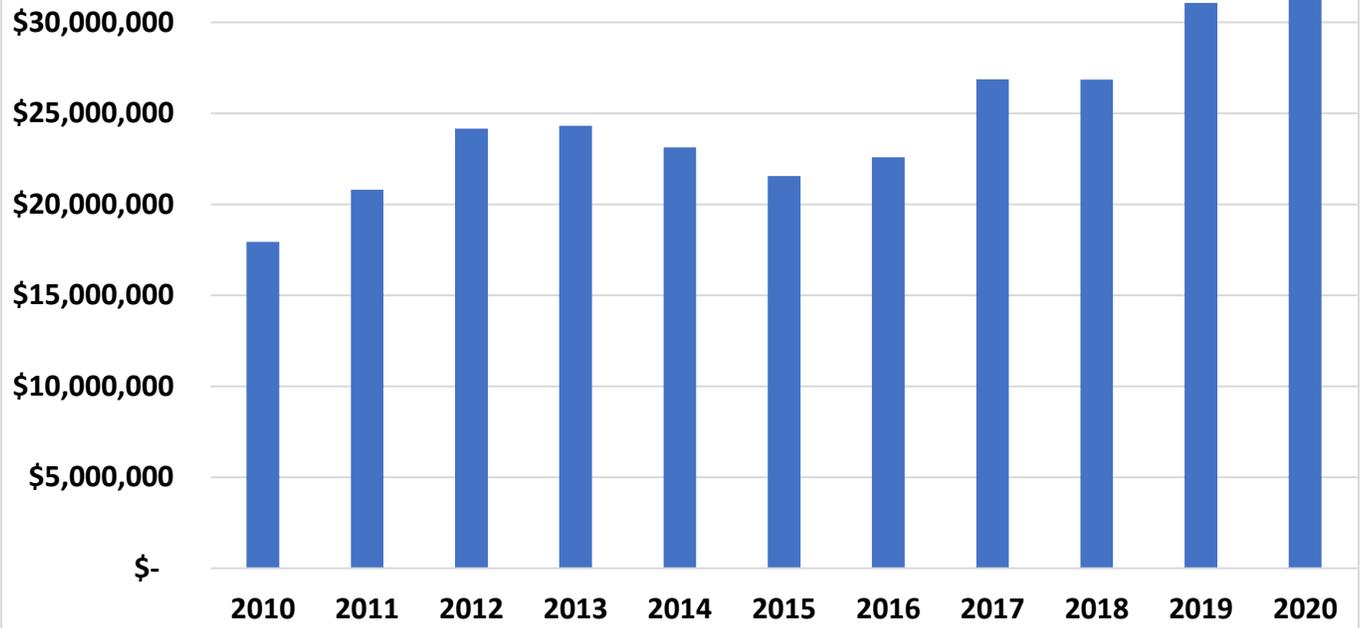
## State Water Contract Fixed Costs (Fiscal Year)

2020 preliminary amount is not audited and subject to change



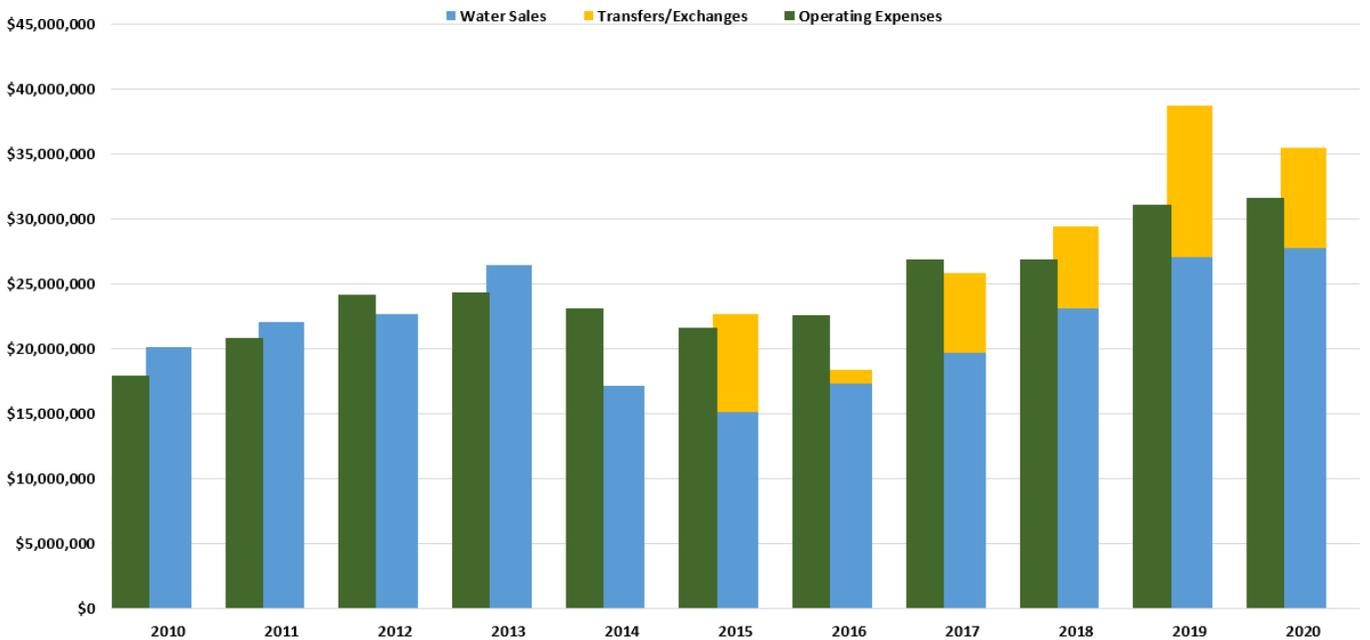
## Operating Costs (Fiscal Year)

2020 preliminary amount is not audited and subject to change



## Operating Costs and Sales (Fiscal Year)

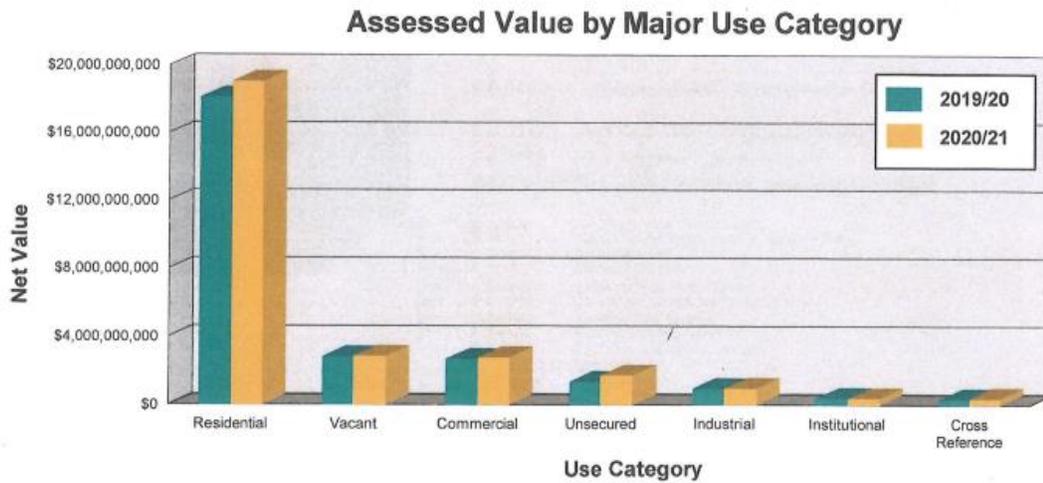
2020 preliminary amount is not audited and subject to change



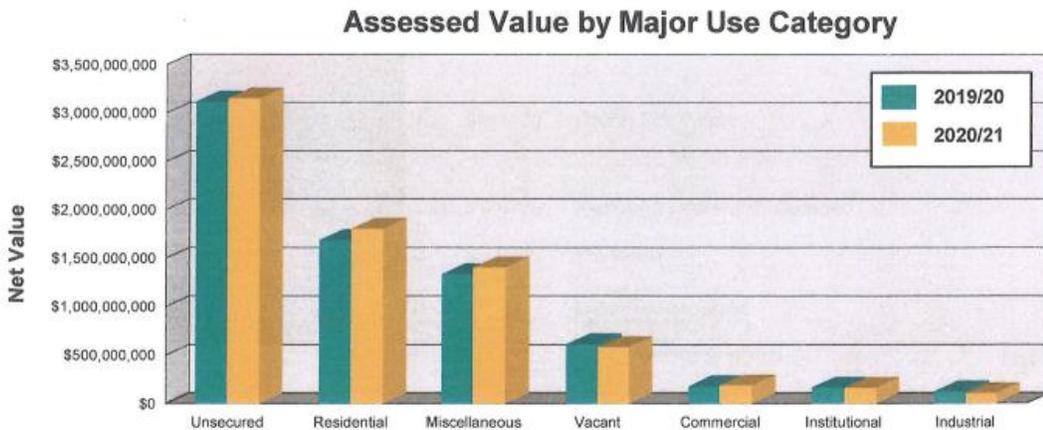
## 2020/21 Property Tax Summary

The Agency’s boundaries fall within Los Angeles, Kern and Ventura Counties and the Agency assesses taxes on property within the service boundary for the payment of the California State Water Project.

**LA County:** The Agency experienced a net taxable value increase of 6% for the 2020/21 tax roll, which was slightly less than the increase experienced countywide at 6.1%. The assessed value increase between 2019/20 and 2020/21 was \$1.6 billion. LA County assessments increased for residential properties by \$955 million, commercial properties by \$106 million and unsecured properties by \$382 million.



**Kern County:** The Agency also experienced a net taxable value increase in Kern County of 2.8% for the 2020/21 tax roll, which was a little less than the increase experienced countywide at 3.1%. The assessed value increase between 2019/20 and 2020/21 was \$202 million. For Kern County assessments, residential property values increased by \$119 million, unsecured property values increased by \$38 million and miscellaneous property values increased by \$74 million, whereas vacant land decreased in value by \$24 million and industrial property decreased by \$18 million.



The following tables identify the type of property assessments for each county and the 2019/20 value change.

**LA County:**

**2019/20 to 2020/21 Value Growth by Use Category**

Category	2019/20 Net Taxable Value		2020/21 Net Taxable Value			\$ Change	% Change
Residential	72,260	\$18,085,558,076	72,529	\$19,040,280,766	(67.1%)	\$954,722,690	5.3%
Vacant	67,570	\$2,790,451,442	67,572	\$2,839,438,751	(10.0%)	\$48,987,309	1.8%
Commercial	1,585	\$2,669,016,868	1,591	\$2,775,277,360	(9.8%)	\$106,260,492	4.0%
Unsecured	[3,971]	\$1,345,208,664	[3,991]	\$1,726,768,458	(6.1%)	\$381,559,794	28.4%
Industrial	518	\$941,720,497	515	\$979,054,150	(3.5%)	\$37,333,653	4.0%
Institutional	200	\$385,508,435	201	\$395,819,666	(1.4%)	\$10,311,231	2.7%
Cross Reference	[3,182]	\$330,004,241	[3,186]	\$382,249,907	(1.3%)	\$52,245,666	15.8%
Recreational	80	\$86,047,724	80	\$102,810,722	(0.4%)	\$16,762,998	19.5%
Miscellaneous	112	\$49,215,836	127	\$75,448,273	(0.3%)	\$26,232,437	53.3%
Irrigated	178	\$66,958,103	161	\$43,194,280	(0.2%)	-\$23,763,823	-35.5%
Dry Farm	31	\$5,244,451	31	\$5,349,317	(0.0%)	\$104,866	2.0%
SBE Nonunitary	[37]	\$3,171,849	[37]	\$3,170,171	(0.0%)	-\$1,678	-0.1%
Govt. Owned	5	\$595,586	7	\$629,417	(0.0%)	\$33,831	5.7%
Exempt	4,239	\$0	4,275	\$0	(0.0%)	\$0	0.0%
Unknown	190	\$6,000	0	\$0	(0.0%)	-\$6,000	-100.0%
<b>TOTALS</b>	<b>146,968</b>	<b>\$26,758,707,772</b>	<b>147,089</b>	<b>\$28,369,491,238</b>	<b>(100.0%)</b>	<b>\$1,610,783,466</b>	<b>6.0%</b>

Numbers in blue are parcel/assessment counts

**Kern County:**

**2019/20 to 2020/21 Value Growth by Use Category**

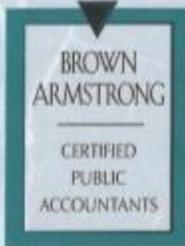
Category	2019/20 Net Taxable Value		2020/21 Net Taxable Value			\$ Change	% Change
Unsecured	[1,221]	\$3,115,482,730	[1,199]	\$3,153,520,169	(42.2%)	\$38,037,439	1.2%
Residential	14,746	\$1,683,931,879	14,796	\$1,802,893,386	(24.1%)	\$118,961,507	7.1%
Miscellaneous	864	\$1,332,840,393	951	\$1,406,641,951	(18.8%)	\$73,801,558	5.5%
Vacant	79,855	\$608,045,432	79,624	\$584,379,823	(7.8%)	-\$23,665,609	-3.9%
Commercial	402	\$176,021,535	410	\$187,275,380	(2.5%)	\$11,253,845	6.4%
Institutional	77	\$159,665,579	78	\$162,064,016	(2.2%)	\$2,398,437	1.5%
Industrial	224	\$121,687,441	229	\$103,357,891	(1.4%)	-\$18,329,550	-15.1%
Recreational	35	\$34,383,776	34	\$34,200,634	(0.5%)	-\$183,142	-0.5%
Irrigated	99	\$23,698,318	99	\$24,095,883	(0.3%)	\$397,565	1.7%
Govt. Owned	569	\$10,778,684	553	\$10,753,154	(0.1%)	-\$25,530	-0.2%
Dry Farm	96	\$5,602,025	96	\$5,616,772	(0.1%)	\$14,747	0.3%
SBE Nonunitary	[13]	\$778,220	[9]	\$239,208	(0.0%)	-\$539,012	-69.3%
Exempt	2,659	\$0	2,667	\$0	(0.0%)	\$0	0.0%
<b>TOTALS</b>	<b>99,626</b>	<b>\$7,272,916,012</b>	<b>99,537</b>	<b>\$7,475,038,267</b>	<b>(100.0%)</b>	<b>\$202,122,255</b>	<b>2.8%</b>

Numbers in blue are parcel/assessment counts

## **Auditing**

For the past seven consecutive years, independent auditors gave AVEK a clean bill of health when scrutinizing the Agency's financial statements and related records. An audit of the Agency's financial statements for the fiscal year ending June 30, 2020 was completed in September 2020. Auditors issued their report with an unqualified opinion on the Agency's financial statements. An unqualified opinion is the best report that can be received and means that the auditor determined that the financial statements were free of any material misrepresentations and are maintained in accordance with Generally Accepted Accounting Principles (GAAP). The auditor also issued a report on internal controls which states that no internal control deficiencies or findings considered to be material weaknesses were identified.

# Independent Auditors' Report



**BAKERSFIELD OFFICE  
(MAIN OFFICE)**  
4200 TRUXTON AVENUE  
SUITE 300  
BAKERSFIELD, CA 93309  
TEL 661.324.4971  
FAX 661.324.4997  
EMAIL info@bacpas.com

**FRESNO OFFICE**  
10 RIVER PARK PLACE EAST  
SUITE 208  
FRESNO, CA 93720  
TEL 559.476.3592

**STOCKTON OFFICE**  
1919 GRAND CANAL BLVD  
SUITE C6  
STOCKTON, CA 95207  
TEL 888.565.1040

WWW.BACPAS.COM

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MEMBER of the American Institute of  
Certified Public Accountants

## BROWN ARMSTRONG

*Certified Public Accountants*

### INDEPENDENT AUDITOR'S REPORT

Board of Directors and  
Finance and Budget Committee  
Antelope Valley-East Kern Water Agency  
Palmdale, California

#### Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Antelope Valley-East Kern Water Agency (the Agency) as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Agency's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Agency's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Agency's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Agency as of June 30, 2020, and the respective changes in financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (MD&A) on pages 3-7 and the Other Post Employment Benefits (OPEB) - Schedule of Changes in the Net OPEB Liability and Related Ratios on page 36 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board (GASB) who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Agency's basic financial statements. The statement of revenues and expenses – budget and actual is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The statement of revenues and expenses – budget and actual has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

## Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 9, 2020, on our consideration of the Agency's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Agency's internal control over financial reporting and compliance.

BROWN ARMSTRONG  
ACCOUNTANCY CORPORATION

*Brown Armstrong*  
*Accountancy Corporation*

Bakersfield, California  
November 9, 2020

# Financial Statements

**ANTELOPE VALLEY-EAST KERN WATER AGENCY  
STATEMENT OF NET POSITION  
AS OF JUNE 30, 2020**

<u>ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</u>	
<b>CURRENT ASSETS:</b>	
Cash and Cash Equivalents	\$ 12,746,529
Investments	121,982,151
Receivables:	
Taxes	3,406,047
Interest	541,550
Services	6,800,225
Other	848,112
Inventory - Bariled Water	21,136,103
Deposits and Prepaid Expenses	57,178
Total Current Assets	<u>167,517,895</u>
<b>NON-CURRENT ASSETS:</b>	
Land and Other Capital Assets not being depreciated	47,261,764
Capital Assets, Net	<u>280,015,036</u>
Total Non-Current Assets	<u>327,276,800</u>
<b>RESTRICTED ASSETS:</b>	
Restricted Investments	<u>1,456,470</u>
Total Assets	<u>496,251,165</u>
<b>DEFERRED OUTFLOWS OF RESOURCES:</b>	
Post Employment Benefits (OPEB)	<u>3,359,506</u>
Total Assets and Deferred Outflows of Resources	<u>\$ 499,610,671</u>
 <u>LIABILITIES</u>	
<b>CURRENT LIABILITIES</b>	
Accounts Payable	\$ 2,213,151
Accrued Liabilities	3,510,519
Current Portion of Long-Term Debt	5,573,294
Collections in Advance on Projects	174,857
Compensated Absences	1,348,417
Escheated Funds	<u>42,155</u>
Total Current Liabilities	<u>12,862,393</u>
<b>NON-CURRENT LIABILITIES</b>	
Payable from Restricted Assets	1,456,470
Deferred Water Delivery	242,554
OPEB Liability	11,438,917
Certificates of Participation, Series 2008A-2	45,000,000
Water Revenue Refunding Bonds, 2016	82,974,211
CREBs Revenue Bonds 2017	<u>12,810,000</u>
Total Non-Current Liabilities	<u>133,922,152</u>
Total Liabilities	<u>146,784,545</u>
<b>DEFERRED INFLOWS OF RESOURCES:</b>	
OPEB	<u>1,006,193</u>
Total Liabilities and Deferred Inflows of Resources	<u>147,790,738</u>
<b>NET POSITION</b>	
Net Investment in Capital Assets	200,919,295
Unrestricted	<u>150,900,638</u>
Total Net Position	<u>351,819,933</u>
Total Liabilities, Deferred Outflows of Resources, and Net Position	<u>\$ 499,610,671</u>

The accompanying notes are an integral part of these financial statements.

**ANTELOPE VALLEY-EAST KERN WATER AGENCY  
STATEMENT OF REVENUES, EXPENSES, AND  
CHANGES IN NET POSITION  
FOR THE YEAR ENDED JUNE 30, 2020**

<b>OPERATING REVENUES</b>	
Water Sales	\$ 27,550,558
Water Exchanges and Transfers	4,875,000
Irrigation Sales	168,694
Nickel Water Agreements	<u>2,885,708</u>
Total Operating Revenues	<u>35,479,960</u>
<b>OPERATING EXPENSES</b>	
Water Purchases	10,348,936
Pumping	1,004,962
Water Treatment	5,226,472
Transmission and Distribution	531,364
Administration and General	7,530,483
Groundwater Survey and Sites Reservoir	163,669
Conservation	31,071
Depreciation	<u>7,684,417</u>
Total Operating Expenses	<u>32,521,374</u>
Operating Income	<u>2,958,586</u>
<b>NON-OPERATING REVENUES</b>	
Tax Revenues	33,748,656
Net Investment Earnings	2,941,277
Other Revenues	12,771,834
Capacity Charges	<u>759,710</u>
Total Non-Operating Revenues	<u>50,221,477</u>
<b>NON-OPERATING EXPENSES</b>	
State Water Contract	21,549,120
Interest Expense	<u>3,185,107</u>
Total Non-Operating Expenses	<u>24,734,227</u>
Change in Net Position	28,445,836
NET POSITION, BEGINNING OF YEAR, AS RESTATED	<u>323,374,097</u>
NET POSITION, END OF YEAR	<u>\$ 351,819,933</u>

The accompanying notes are an integral part of these financial statements.

**ANTELOPE VALLEY-EAST KERN WATER AGENCY  
STATEMENT OF CASH FLOWS  
FOR THE YEAR ENDED JUNE 30, 2020**

<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>	
Cash Received from Customers	\$ 34,513,448
Cash Paid for Supplies to Suppliers	(14,420,237)
Cash Paid to Employees	<u>(6,746,809)</u>
Net Cash Provided by Operating Activities	<u>13,346,402</u>
<b>CASH FLOWS FROM NON-CAPITAL AND RELATED FINANCING ACTIVITIES:</b>	
Receipt of Property Taxes	33,776,911
Receipt of Capacity Charges and Other Revenue	13,531,544
Payment of State Water Contract	<u>(21,549,120)</u>
Net Cash Provided by Non-Capital and Related Financing Activities	<u>25,759,335</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>	
Acquisitions of Property and Equipment	(6,180,406)
Principal Repayment of Bonds Payable	<u>(5,442,569)</u>
Net Cash Used in Capital and Related Financing Activities	<u>(11,622,975)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>	
Receipt of Interest and Investment Income	2,967,247
Payment of Interest Expense	(3,185,107)
Disposition (Acquisition) of Investments	<u>(16,579,132)</u>
Net Cash Used in Investing Activities	<u>(16,796,992)</u>
Net Increase in Cash and Cash Equivalents	10,685,770
Cash and Cash Equivalents - Beginning of Year	<u>2,060,759</u>
Cash and Cash Equivalents - End of Year	<u>\$ 12,746,529</u>

The accompanying notes are an integral part of these financial statements.

**ANTELOPE VALLEY-EAST KERN WATER AGENCY  
STATEMENT OF CASH FLOWS (Continued)  
FOR THE YEAR ENDED JUNE 30, 2020**

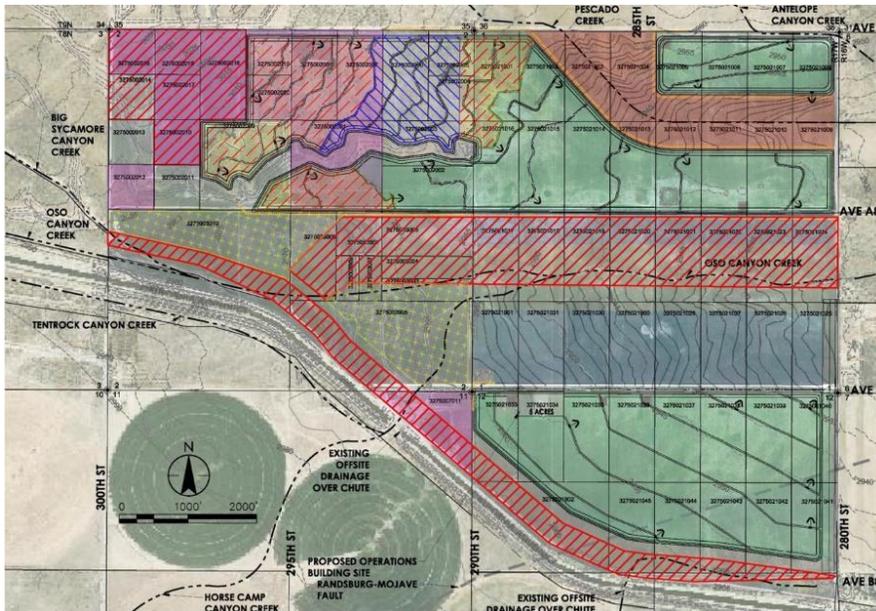
**RECONCILIATION OF OPERATING INCOME  
TO NET CASH PROVIDED BY OPERATING ACTIVITIES**

Operating Income	\$ 2,958,586
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities	
Depreciation	7,684,417
Change in Assets - (Increase)/Decrease in:	
Services Receivable	(173,072)
Other Receivables	(793,440)
Inventory - Banked Water	18,944
Deposits and Prepaid Expenses	4,342
Changes in Liabilities - Increase/(Decrease) in:	
Accounts Payable	(280,743)
Accrued Liabilities	3,014,932
Compensated Absences	114,722
Deferred Water Delivery	7,019
OPEB Liability and Related Items	<u>790,695</u>
Net Cash Provided by Operating Activities	<u>\$ 13,346,402</u>

The accompanying notes are an integral part of these financial statements.

## High Desert Water Bank

2020 was an exciting year of progress for the High Desert Water Bank project. The Board awarded an Engineering, Design, and Hydrogeology contract to Stantec Consulting in March, who oversaw the drilling of eleven piezometer nests for monitoring groundwater response to recharge, the completion of the geotechnical program to support civil design, and completion of plans and specifications for the drilling of four pilot recovery wells, a deep monitoring well, and a dual-completion piezometer nest. The Board awarded a construction contract for the pilot well drilling work in December and the contractor is expected to mobilize in February 2021 and complete their work by October 2021. These wells will provide valuable information regarding both recovery capacity and water quality at varying depths to support the final design of the project.



## Construction/Design Projects

The Board approved four design contracts in 2020 which support expanding water banking capacity, reducing labor costs, increasing system resiliency, and improving water quality.

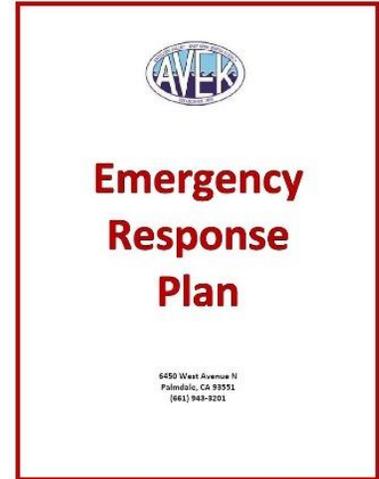
The Westside Water Bank Underground Piping Project progressed through 100% design in 2020 and the Board authorized staff to place this project out to bid. This project will greatly reduce labor and replacement costs associated with above ground aluminum piping historically used at the Westside Water Bank and improve the reliability of the facility for consistent recharge of State Water Project water for AVEK and its banking partners.

The Eastside Water Bank Expansion project progressed to 20% preliminary design of the recharge basins and pipeline and 100% design for equipping an existing well. The CEQA document for the



## Planning

The Agency made great strides toward emergency preparedness in 2020. A Vulnerability Assessment and Emergency Response Plan, both required by the America's Water Infrastructure Act of 2018, were completed ahead of the EPA required deadlines of March and September, respectively. The Emergency Response Plan contains procedures, roles, responsibilities, and checklists for use during an emergency response event. The preparation of the plan included two instructor-led staff exercises where mock earthquake scenarios were played out in real-time. These exercises were well-received by participating staff members and positive feedback was received from the instructor.



The Agency also released a Request for Proposals in November 2020 for a consultant to create the Agency's first ever Local Hazard Mitigation Plan. This plan will identify hazards the Agency and our constituents face and identify projects that will help to mitigate those risks in the long term. The completed plan, which will be approved by FEMA and adopted by the Board, will allow AVEK to apply for grant funding to complete the identified mitigation projects.

Planning efforts extended beyond emergencies and into the reliability of our water supplies and investment in infrastructure. Staff began working with a consultant to update the Urban Water Management Plan in August. This plan is required of all water suppliers serving more than 3,000 acre-feet per year and looks into the future to plan for and address the reliability of the Agency's water resources over a period of 20 years. The plan will present measures to manage demands as well as contingency plans in the event of a water shortage.

Investment in our infrastructure is critical to providing a safe, reliable water supply, and key to this is establishment of water rates and fees to support maintenance, upgrades, and expansion to our treatment facilities and distribution system. In 2020 staff began working with consultants and Board Committees to establish a Capacity Fee that would ensure our historical investments are well maintained for the benefit of all of our customers and ensures that each future connection to our system makes a fair contribution for the benefit of having infrastructure already in place.

# Operations

## Overview

Operations is made up of two divisions; Water Treatment and Quality, and Water Banking and Maintenance. The Water Treatment and Quality division is charged with the production of water supplies to meet customer demands, while Water Banking and Maintenance is responsible for maintaining all facilities.

## Water Treatment and Production

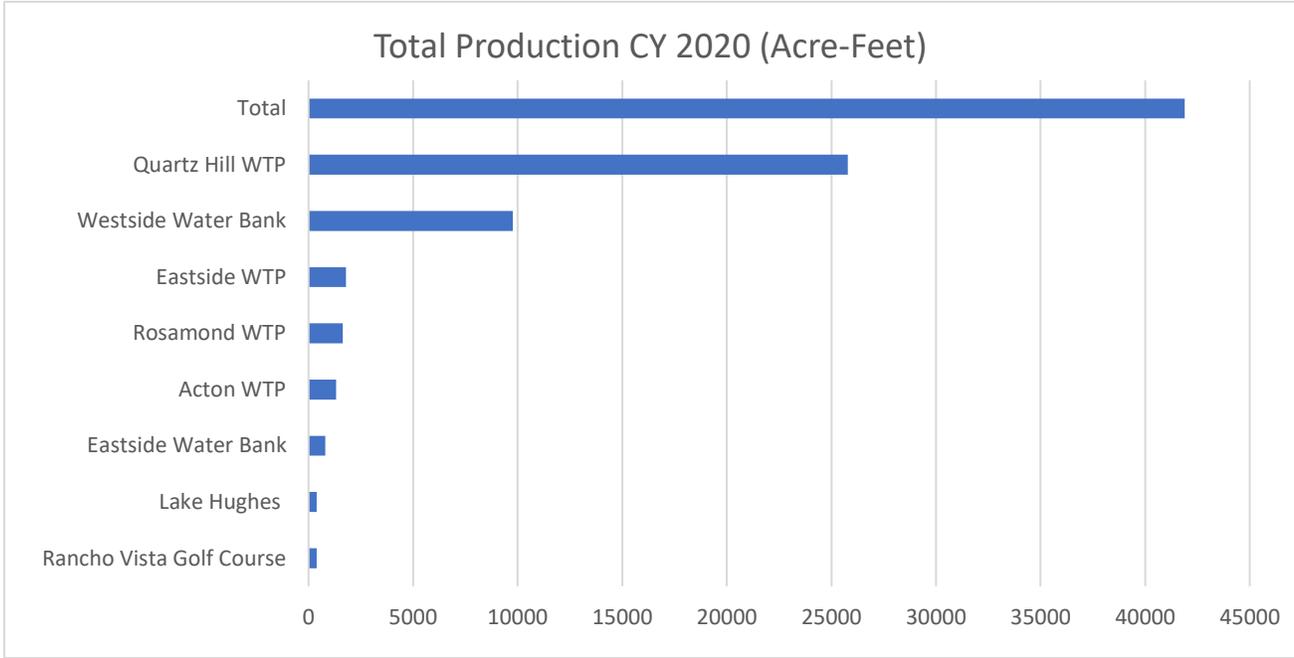


In 2020 the Operations Department maintained a consistent supply of treated water in all distribution systems that met all customer demands and exceeded all SWRCB requirements. By optimizing the treatment process in all facilities and maintaining efficient reservoir levels and chlorine residuals, THM levels were well below AVEK's self-imposed target goals.

During the summer, when raw water quality is the most challenging, Operations staff worked diligently to ensure treated water quality targets and customer demands were consistently met.

## Production

Total production of water received from either DWR turnouts or recovered groundwater in 2020 was 41,886 Acre-Feet.



The following tables display production amounts on a monthly basis across 9 sites:

2020 PRODUCTION SUPPLY DATA (DWR and/or Recovery Meters)								
<b>Quartz Hill (DWR Meter)</b>			<b>Rosamond (WWB Ag Wells)</b>			<b>EWB (Recovery Meters)</b>		
Month	MG	AF	Month	MG	AF	Month	MG	AF
January	259	795	January	69	211	January	0	0
February	510	1,564	February	0	0	February	1	4
March	415	1,272	March	0	0	March	18	56
April	426	1,307	April	0	0	April	34	103
May	807	2,474	May	0	0	May	45	138
June	882	2,707	June	0	0	June	6	18
July	1,082	3,319	July	21	63	July	28	85
August	1,178	3,613	August	140	428	August	38	117
September	1,052	3,227	September	159	488	September	2	6
October	796	2,443	October	106	326	October	0	0
November	554	1,699	November	42	128	November	29	90
December	447	1,370	December	0	0	December	59	181
Totals:	8,408	25,790	Totals:	537	1,644	Totals:	260	798
<b>Eastside (DWR Meter)</b>			<b>Acton (PWD Supply Meters)</b>			<b>WWB (Potable Wells to Kern County)</b>		
Month	MG	AF	Month	MG	AF	Month	MG	AF
January	27	83	January	9	28	January	1	4
February	37	112	February	19	57	February	99	304
March	13	40	March	6	18	March	84	259
April	0	0	April	10	31	April	72	222
May	42	129	May	52	160	May	45	139
June	89	274	June	49	151	June	202	621
July	85	261	July	60	184	July	104	318
August	99	303	August	61	188	August	0	0
September	98	300	September	69	211	September	5	16
October	79	242	October	44	134	October	0	0
November	16	48	November	25	77	November	41	126
December	0	0	December	27	82	December	87	266
Totals:	585	1,792	Totals:	431	1,321	Totals:	740	2,275
<b>Lake Hughes (DWR Meter)</b>			<b>Rancho Golf (DWR Meter)</b>			<b>WWB (Potable Wells to LA County)</b>		
Month	MG	AF	Month	MG	AF	Month	MG	AF
January	3	9	January	0	0	January	80	244
February	4	11	February	1	2	February	111	341
March	3	9	March	0	0	March	142	436
April	4	11	April	6	18	April	142	436
May	7	22	May	19	57	May	202	620
June	13	41	June	22	66	June	215	661
July	21	64	July	26	79	July	232	713
August	18	54	August	22	67	August	293	900
September	16	50	September	13	41	September	188	577
October	11	35	October	11	34	October	260	797
November	18	54	November	4	13	November	243	745
December	9	29	December	3	9	December	333	1,021
Totals:	127	389	Totals:	127	386	Totals:	2,441	7,491

**Production Costs**

The Agency spent \$2,206,309 on chemicals in 2020, resulting in a chemical cost per acre-foot of \$30.31 as shown in the following table:

<b><u>2020 CHEMICAL COSTS</u></b>			
<b><u>Treatment Chemicals Utilized:</u></b>			
<b>Chemical</b>	<b>Supplier</b>	<b>Use</b>	<b>Annual Cost</b>
Aluminum Sulfate	ECO Services	Coagulant	\$525,136
Sodium Hypochlorite	JCI Jones	Disinfection	\$146,549
Zinc Orthophosphate	Thatcher	Corrosion Control	\$160,948
Liquid Oxygen	Matheson	Ozone Generation	\$327,176
Carbon Dioxide (QHWTP only)	Praxair	pH Adjustment	\$46,500
<b>Total Chemical Costs:</b>			<b>\$1,206,309</b>
<b><u>Production (all sites)</u></b>			
<i>Site</i>	<i>MGD / Acre Feet</i>		
Quartz Hill	8,408 / 25,790		
Rosamond (from Ag. Wells)	537 / 1,644		
Eastside (Inc. EWB)	845 / 2,590		
Acton	Supply from PWD		
Westside Water Bank (from Potable Wells)	3,183 / 9,766		
<b>Total MGD/Acre Feet:</b>			<b>12,971 / 39,790</b>
<b>Chemical Cost Per Acre Foot:</b>			<b>\$30.31</b>

Total personnel costs in 2020 were \$2,820,601.20, resulting in a personnel cost per acre foot of \$67.33. Energy costs across all sites in 2020 were \$1,256,288, resulting in an energy cost per acre-foot of \$29.99. The following table displays personnel costs per acre-foot for each site, along with total energy costs:

<b>2020 COSTS (PERSONNEL &amp; ELECTRICITY)</b>			
(Includes: Compensation, Auto Allowance, Standby, Overtime, Sick Time, Vacation Time, Holiday Time Jury & Bereavement Leave, Retirement, FICA, Workers Comp, EAP and all Insurance Coverage)			
<b>Facility</b>	<b>Total Personnel Costs</b>	<b>Acre Feet Produced</b>	<b>Personnel Cost per Acre Foot</b>
Quartz Hill (inc. Rancho Vista Golf Course)	\$1,113,902.67	26,176	\$42.55
Rosamond	\$802,284.49	(Supply from WWB)	n/a
Eastside/Acton/EWB	\$593,215.72	3,911	\$151.67
WWB (inc. Lake Hughes)	\$158,898.15	11,799	\$13.46
Maintenance	\$152,300.27	n/a	n/a
<b>Totals:</b>	<b>\$2,820,601.30</b>	<b>41,886</b>	<b>\$67.33/Acre Foot (Personnel)</b>
<b>SoCal Edison Costs:</b>	<b>\$1,256,288</b>	<b>41,886</b>	<b>\$29.99/Acre Foot (Electricity)</b>

### Unaccounted Water

Total water sales in 2020 were 33,402 acre-feet, resulting in a system loss of 604 acre-feet with a total production of 34,009 acre-feet. The following table displays total production and sales with losses or gains across 5 sites:

<b>2020 SYSTEM GAIN/LOSS (Unaccounted Water)</b>			
<b>System</b>	<b>Production (Acre Feet)</b>	<b>Sales (Acre Feet)</b>	<b>Gain/Loss (%)</b>
South Feeder (Inc. Leona Valley)	25,790	25,394	- 1.5%
North Feeder	3,919	3,727	- 5%
East Feeder	2,590	2,533	- 2%
Acton Feeder	1,321	1,298	- 1.7%
Lake Hughes Feeder	389	450	+ 15%
<b>Total</b>	<b>34,009</b>	<b>33,402</b>	

### Capital Projects

Maintenance and asset replacement have been a large focus of the Operations Department for the past 14 years. In 2020/2021, Operations will complete over \$4,000,000 million of capital / asset replacement projects including: GAC replacement in six of the filters at QHWTP, rehabilitation of the 10<sup>th</sup> Street, Leona Valley and East Feeder, multiple pumps, actuators, and valves. Operations staff also

took delivery of a 2021 John Deere 310L Loader / Backhoe, along with a 25 ft. Big Tex equipment trailer, to be used primarily by the newly formed Maintenance Department.

### **Formation of the Maintenance Department**

The maintenance department was up and running this year with the development of the department Staff. The majority of the year, the department operated with only the Maintenance Supervisor, who is also the Agency's welder, and one Maintenance Technician. Staff was increased to include three electrical technicians, an additional maintenance technician, and a well and pump technician, for a total of 7 employees. Familiarization and training was a primary focus for new employees



### **Department Development**

The Department assumed the majority of Quartz Hill Water Treatment Plant's maintenance tasks, including weekend call. A large volume of corrective maintenance items were completed, and much needed preventative maintenance was performed on plant equipment at all water treatment facilities. The Maintenance Department has been able to alleviate most maintenance responsibility from plant personnel, enabling them to focus more on plant operations and cross-train between different facilities. The department completed the following tasks in 2020:

#### Rosamond Treatment and North/Central Feeder

- Installed control valves and controls on Boron pump station pumps 3 and 4. They are now part of the rotation whereas before they were not able to be ran.
- Installed a transfer switch on Boron pump station. We now have back up generator power in the event of a power fail.
- Installed sodium pump at the plant.
- Replaced the bridge pumps on (1) of the RWTP bridges. The bridge is the sludge removal equipment that is in each clarifier.

- Replaced the MTRI chlorine analyzer at the Mojave Tank Farm. The prior equipment was unreliable and unrepairable.
- Rehabbed the Phillips Lab Pump Station. All pumps and motors were rebuilt. All control valves and pressure reducing valves were rebuilt. The air compressor was repaired. The sample line for the chlorine residual was replaced. A valve was installed and other repairs on the surge tank. Demolition of outdated equipment was completed to accommodate installation of new equipment.
- (2) Backup power generators were installed at the RWTP. Security was installed around them and power was installed to plug in the generators to maintain the batteries and block heaters. This has made the generators more of a permanent installation to provide backup power to operate the SNIP North pump station- pumps.



#### Quartz Hill Treatment Plant and South Feeder

- Replaced the cooling coil on the south ozone generator power supply.
- Replaced a check valve at the west decant pumping station.
- Rebuilt the backwash pump discharge header.
- Assisted the contractor with the re-pipe of El Dorado and Westside Park turnouts. Rebuilt the air/vacuum valves on the section of the south feeder on 10<sup>th</sup> street.
- Rebuilt the Sunnyside farms turnout by replacing isolation valves and spools.

#### East Side Water Treatment Plant and East Feeder, Eastside Water Bank

- Fabricated/repairs material for moss screen actuator-anchor and pedestal.
- Began installation of a transfer switch at the EWB.

#### Acton Water Treatment Plant and Vincent Feeder

- Assisted contractor with removing and repairing (2) high-lift pumps.
- Performed a backup emergency generator test at the Acton pump station facility.
- Began installation of a permanent step-up transformer.

#### Westside Water Bank and HDWB

- Installed flow meter and piping for HDWB ag well for contractor use.
- Repaired many issues with WWB well controls.
- Test ran a backup generator with the transfer switches at EW-16 and EW-23.

## Water Banking

Operations staff has been instrumental in logging data from the High Desert Water Bank Project monitoring wells along with continual development of new recharge ponds at the Westside Water Bank facility.

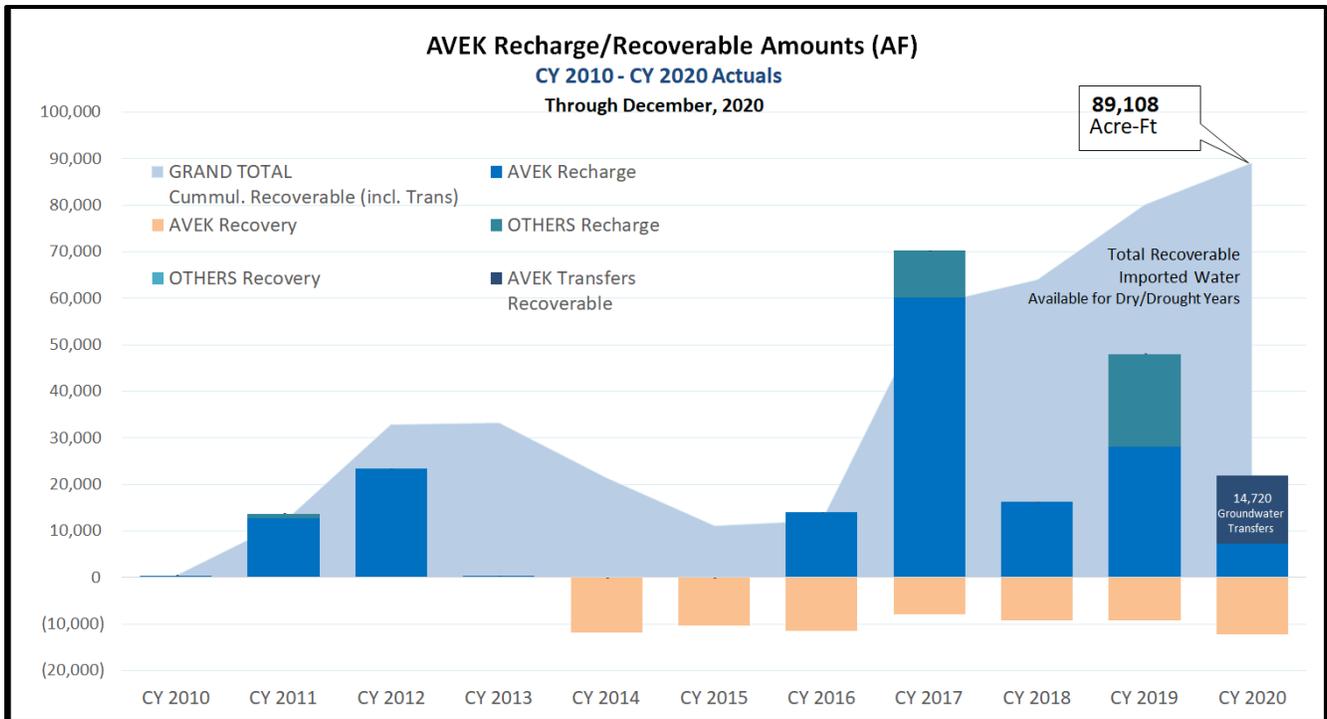


## Local Recharge & Recovery

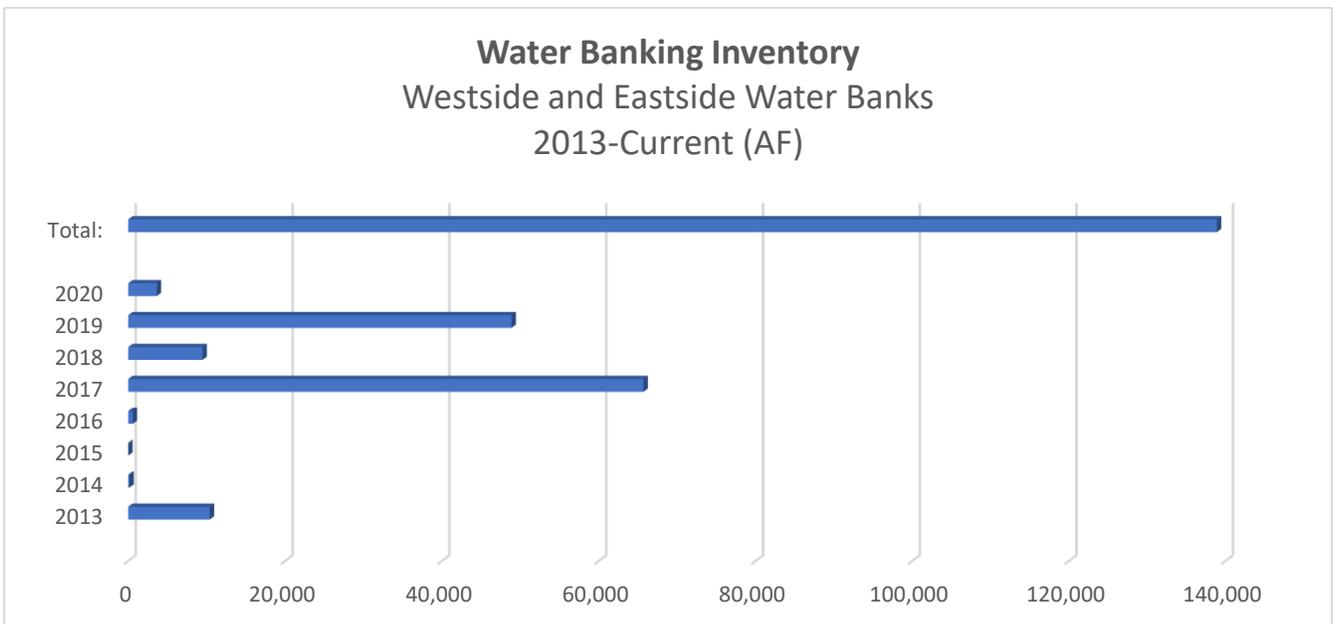
The Water Recharge of SWP supplies to AVEK banking sites was limited in 2020 due to dry hydrology throughout the State. AVEK's Westside and Eastside Water Banks took delivery of 6,690 acre-feet in recharge. 526 acre-feet of recharge water was added to the regional Upper Amargosa Creek Recharge Project. The table below displays in put to AVEK's water banks on a monthly basis.

By the end of 2020, with an additional 14,700 acre-feet of supply through groundwater transfers, AVEK had over 89,000 acre-feet of recoverable stored water supply.

<b>2020 WATER BANKING AMOUNTS</b>					
<b>Westside Water Bank</b>		<b>Eastside Water Bank</b>		<b>Upper Amargosa Creek</b>	
<i>Month</i>	<i>Acre Feet</i>	<i>Month</i>	<i>Acre Feet</i>	<i>Month</i>	<i>Acre Feet</i>
January	2658	January	15	January	88
February	3244	February	20	February	217
March	0	March	61	March	104
April	6	April	70	April	75
May	0	May	97	May	30
June	3	June	108	June	1
July	2	July	145	July	1
August	3	August	87	August	1
September	9	September	98	September	1
October	0	October	2	October	0
November	2	November	21	November	0
December	4	December	35	December	8
<b>Total:</b>	<b>5931</b>	<b>Total:</b>	<b>759</b>	<b>Total:</b>	<b>526</b>



Since 2013, the Agency has banked a combined total of 143,373 acre-feet of water at the Westside and Eastside Water Banks. At Westside Water Bank, a total of 138,919 acre-feet of water has been banked since 2013, over half of which was banked in 2017. At Eastside Water Bank, 4,454 acre-feet of water has been banked since 2016.



**WATER BANKING INVENTORY / 2013 - CURRENT**

<u>YEAR</u>	<u>WWB (AF)</u>	<u>EWB (AF)</u>	
2013	10,406		
2014	159		
2015	5		
2016	592	997	
2017	65,719	760	
2018	9,487	778	
2019	48,892	1161	
2020	3,659	758	
<b>Total:</b>	<b>138,919</b>	<b>4,454</b>	<b>143,373</b>

*Note: This total does not account for 10% 'leave behind' or any water that has been recovered.*

**Water Levels**

Groundwater levels across AVEK’s Westside Water Bank, Eastside Water Bank, and Bench Ranch averaged 200 feet in 2020. The Westside Water Bank had the most significant decrease in water levels, dropping by 34 feet from January to December, 2020. The Eastside Water Bank and Bench Ranch had nominal drops in water level, with 11 feet and 3 feet respectively. The table below displays water levels on a monthly level at the Westside, Eastside, and Bench Ranch Water Banks.

<b>2020 WATER BANK/WELLFIELD LEVELS (Below Ground Surface)</b>					
<b>Westside Water Bank</b>		<b>Eastside Water Bank</b>		<b>Bench Ranch</b>	
<i>Month</i>	<i>Level (Average - Feet)</i>	<i>Month</i>	<i>Level (Average - Feet)</i>	<i>Month</i>	<i>Level (Average - feet)</i>
January	158	January	257	January	153
February	160	February	254	February	159
March	152	March	254	March	157
April	160	April	265	April	153
May	168	May	273	May	159
June	185	June	272	June	156
July	176	July	271	July	155
August	181	August	287	August	158
September	187	September	278	September	158
October	191	October	270	October	155
November	191	November	272	November	157
December	192	December	268	December	156

**Note: Water level dropped approx. 34 ft. from Jan. to Dec.**      **Note: Water level dropped approx. 11 ft. from Jan. to Dec.**      **Note: Water Level dropped approx. 3 ft. from Jan. to Dec.**

## **Well Maintenance**

Well and Pump Technician performed well maintenance on all Westside Water Banks, Eastside Water Bank, and Bench Ranch wells. 2020 annual well testing parameters include the following:

- Bearing temperature readings and upper and lower points on motor
- Vibration readings taken at upper and lower points on motor
- Oil levels
- Flow (gpm)
- Amperage readings (static and under load)
- Voltage testing (static and under load)
- Water level (static and dynamic)
- Pump speed (RPM and Hz)
- Sounding

## **Training and Staff**

Staff received hundreds of hours of safety, skill, and management training. A cross-training program has also been developed to enable Operators to become skilled at all jobs, situations, and maintenance issues they will be confronted with at the facilities.

The development of a stand-alone Maintenance Department will provide opportunities for promotion and advancement. With the recent promotion of a second Assistant Manager of Operations (Water Banking and Maintenance), succession planning continues to be accomplished.

In summary, while Operations is made up of many 'moving parts' and responsibilities, the accomplishments we strive for daily, monthly, and annually are providing water that meets all regulatory requirements and customer demands, maintaining a safe and friendly work environment, and providing Operations employees opportunities for personal growth and advancement. In this, 2020 was a very successful year.

# Water Resources

After a record-high year of State Water Project (SWP) deliveries in 2019, Staff made a shift in management style due to a more limited resource in 2020. Coordination with AVEK partners (including other State Water Contractors), the Department of Water Resources, and Agency Operations staff became even more critical in helping to protect AVEK's imported and local water supplies, while still fulfilling transfer & exchange obligations. Local groundwater transfers to AVEK banking sites were 14,720 acre-feet, allowing the Agency to sustain the strategic water storage goal established for its customers.

2020 also brought an improvement in water use and production reporting with the Agency's transition into Latis, the new meter read, usage, billing, and reporting software. This new tool has made presentations to Agency Board and management staff, customers, and the Antelope Valley Watermaster more accurate.

## Projects

Staff updated the AVEK Water Service Agreements and Rules & Regulations for Water Service. New agreements were at a final stage in 2020, with project completion expected in early 2021. Multiple customer interactions regarding AVEK water service updates were conducted to assure that our customers were well informed prior to final adoption by the Board.

Additional projects included:

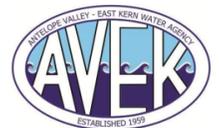
- Supporting the Agency's 2021 Water Rates Study
- Water System Master Plan
- Integrated Regional Water Management Planning (IRWMP)
- 2020 Urban Water Management Plan (UWMP).

## Rules & Regulations for Water Service

### Antelope Valley-East Kern Water Agency

6500 West Avenue N,  
Palmdale, CA 93551

661-943-3201  
[www.avek.org](http://www.avek.org)



## Exchanges/Transfers

AVEK has had an active Water Transfer and Exchange Program. In 2020, 14,720 Acre-Feet of water supply was obtained through groundwater transfers.

11,286 Acre-Feet of AVEK water was delivered to entities listed in the table below. The Agency fulfilled previous exchange obligations and recovered \$2.28 Million in 2020.

AVEK Water Agency - 2020 Groundwater Transfers		
Entity Name	Transferred to AVEK (Acre-Ft)	Month
Homer LLC (WDS Ca. II/RRG)	11,643	April-20
Homer LLC (WDS Ca. II/RRG)	2,267	October-20
Luz Solar Partners (FPL)	810	August-20
<b>Total:</b>	<b>14,720</b>	

## Supply & Demand Reporting

Staff maintains Water Supply and Demand planning reports for projecting, monitoring, and reporting the water outlook for the Agency. In 2020, the below management tools were updated and improved for accuracy with the stated benefit(s) realized:

- AVEK Monthly Water Meter Reading Report - 2020 was the first full year for the use of Latis software. The WRM Department, working with other management and the software engineer,

The screenshot displays the Latis Water Information Management System interface. The main window title is "Latis - Antelope Valley-East Kern Water Agency". The application menu includes "Maintain", "Operations", and "Financial". The "Reports" menu is open, showing "Meter Readings - Facility".

Search filters are set as follows:

- Begin Date: 1/1/2020
- End Date: 12/31/2020
- Company: <None>, Antelope Valley Count
- Facility: 21.7L, 294th St. West DWR/H
- Include Offline Readings: No

The report title is "Antelope Valley-East Kern Water Agency Meter Reading - Company - Facility" with a date range of "From 01/01/2020 - 12/31/2020". A warning message states: "\*greater than 60% deviation from previous".

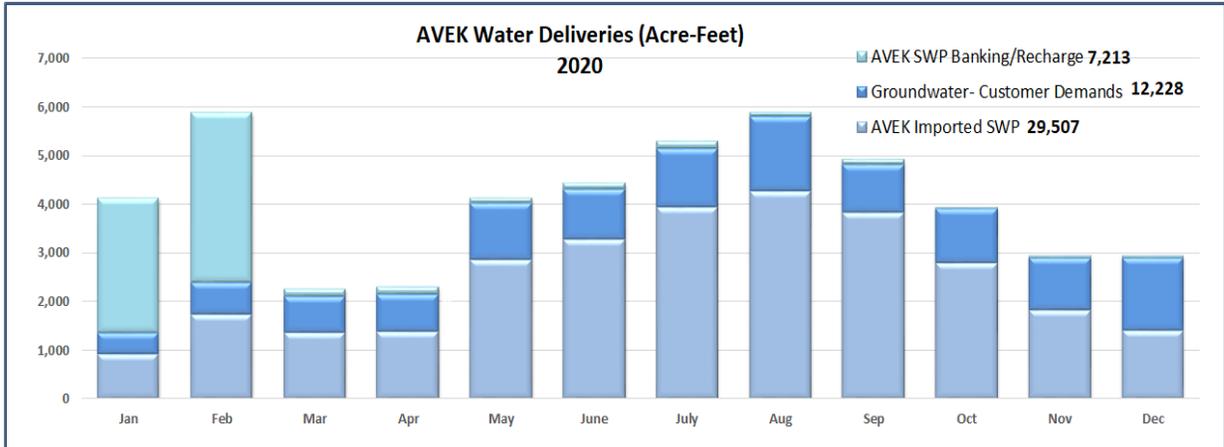
Company	Facility	Meter	Effective Date	Adj.	Reading	Previous Reading				
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	01/28/2020 10:37 AM	No	60,248,500.000	60,248,500.000	0.00	0.00	1,314,500.000	120.00
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	03/03/2020 10:30 AM	No	60,248,500.000	60,248,500.000	0.00	0.00	1,314,500.000	120.00
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	03/31/2020 11:03 AM	No	60,261,600.000	60,248,500.000	0.30	0.00	1,314,500.000	115.00
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	04/28/2020 10:12 AM	No	60,261,600.000	60,261,600.000	0.00	0.30	1,314,500.000	115.00
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	06/02/2020 10:19 AM	No	60,261,600.000	60,261,600.000	0.00	0.00	1,314,500.000	115.00
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	06/30/2020 10:07 AM	No	60,458,100.000	60,261,600.000	4.51	0.00	1,314,500.000	
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	07/28/2020 09:44 AM	No	60,853,200.000	60,458,100.000	9.07	4.51	1,314,500.000	
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	08/25/2020 10:01 AM	No	61,292,800.000	60,853,200.000	10.09	9.07	1,314,500.000	
Antelope Valley Country Club	QHWTP - AV Country Club	AV Country Club	09/29/2020 10:06 AM	No	61,541,600.000	61,292,800.000	5.71	10.09	1,314,500.000	

The Latis logo and version information are displayed on the right side of the report:

- Latis
- Water Information Management System
- Antelope Valley-East Kern Water Agency
- Version: 1.16.6.0
- © Avadine
- OS Version: Microsoft Windows 10 Pro

further refined this tool and saw an approved meter reading, usage, billing, and reporting of customer water use in 2020.

- Water Supply/Demand/Banking Plan Report** - The WRM Department again had regular summary discussions with Agency administration and operations departments, outlining AVEK SWP supplies, projected groundwater production, and banking/recharge opportunities. This reporting keeps management better informed of delivery, banking, and transfer/exchange actions possible given the current and projected supply scenarios.



- Groundwater Production Reports** - Groundwater production was reported to the Antelope Valley Watermaster (AVW) by the WRM Department both quarterly and annually. This is used in public stating of the Agency’s groundwater pumping as required by the AV Groundwater Adjudication Judgment. It is also a part of the AVW Annual Report, State-required reporting, Water System Master Planning, IRWMP and UWMP development, and internal water resource planning.

Imported Water Deliveries - Exhibit 8 Parties <sup>1</sup>	Water Use Type <sup>2</sup>	Return Flow Percent	Imported Water Use (Af)												
			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-3 Year <sup>3</sup>		
A.V. Materials	M&I	39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Antelope Valley Country Club	M&I	39	76.50	134.14	125.57	76.78	105.17	88.00	139.12	88.68	102.81	30.17			
Antelope Valley-East Kern Water Agency (AVEK) - M&I (Amount sold to Parties not on Exhibit 8)	M&I	39	2,565.28	2,668.56	2,389.40	2,155.94	1,897.88	2,132.00	2,260.03	2,282.25	1,725.51	2,158.24			
Antelope Valley-East Kern Water Agency (AVEK) - Ag(Amount sold to Parties not on Exhibit 8)	Ag	34	3,107.41	1,969.88	2,195.17	134.82	47.65	40.65	116.97	41.33	37.59	21.86			
Antelope Valley Water Company	M&I	39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Antelope Valley Water Storage, LLC	Ag	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Boron CSD <sup>3</sup>	M&I	39	195.75	201.59	197.01	180.13	158.50	162.21	171.75	209.13	316.42	374.40			
California Department of Parks	M&I	39	4.50	6.00	6.00	5.50	9.07	6.57	6.00	6.00	6.03	0.44			
California Water Service Company-Lancaster	M&I	39	0.00	0.00	0.00	0.00	0.00	1.00	5.00	10.87	16.84	11.36			
Copa de Oro Land Co.	Ag	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Crystal Organic Farms	Ag	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Desert Lake CSD	M&I	39	112.63	116.14	90.67	82.21	92.50	78.99	81.46	125.14	124.31	123.45			
Diamond Farming Company	Ag	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Edgemont Acres MWC	M&I	39	145.23	191.86	182.31	165.51	131.33	154.34	159.85	164.34	137.64	166.37			
El Dorado MWC	M&I	39	0.00	0.00	4.58	4.59	1.02	3.57	1.53	35.10	13.63	44.99			
Eyherabide Sheep Co.	Ag	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Godde, Forrest	Ag	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Granite Construction Co	M&I	39	2.50	2.00	1.50	0.50	1.00	0.00	0.00	0.00	0.00	0.00			

- Transfers/Exchanges Report - The WRM Department again oversaw the reporting of all SWP transfers and exchanges, including agreement partners, terms, and water balances. In addition to SWP Supplies, local groundwater transfers were managed. Eleven (11) agreement obligations were monitored and managed for active/potential transaction in 2020.

## Outreach

In-person public outreach/education in 2020 was limited due to the COVID-19 climate. All AVEK active water users were invited to meet individually with a video conferencing option provided to discuss the Agency's Water Service Agreement and Rules & Regulations updates. Seventeen (17) of these meetings were completed. Support of Agency virtual presentations continued with the creation/presentation of exhibits for the regular Board meetings and water interest groups.



# Laboratory

## Services Provided

The Laboratory provides a pivotal service to AVEK by way of coordinating and analyzing water samples. These water quality results allow for the Agency to maintain compliance with state and federal regulations. In 2020 staff processed 10,473 samples, with a total of 38,981 analytes.

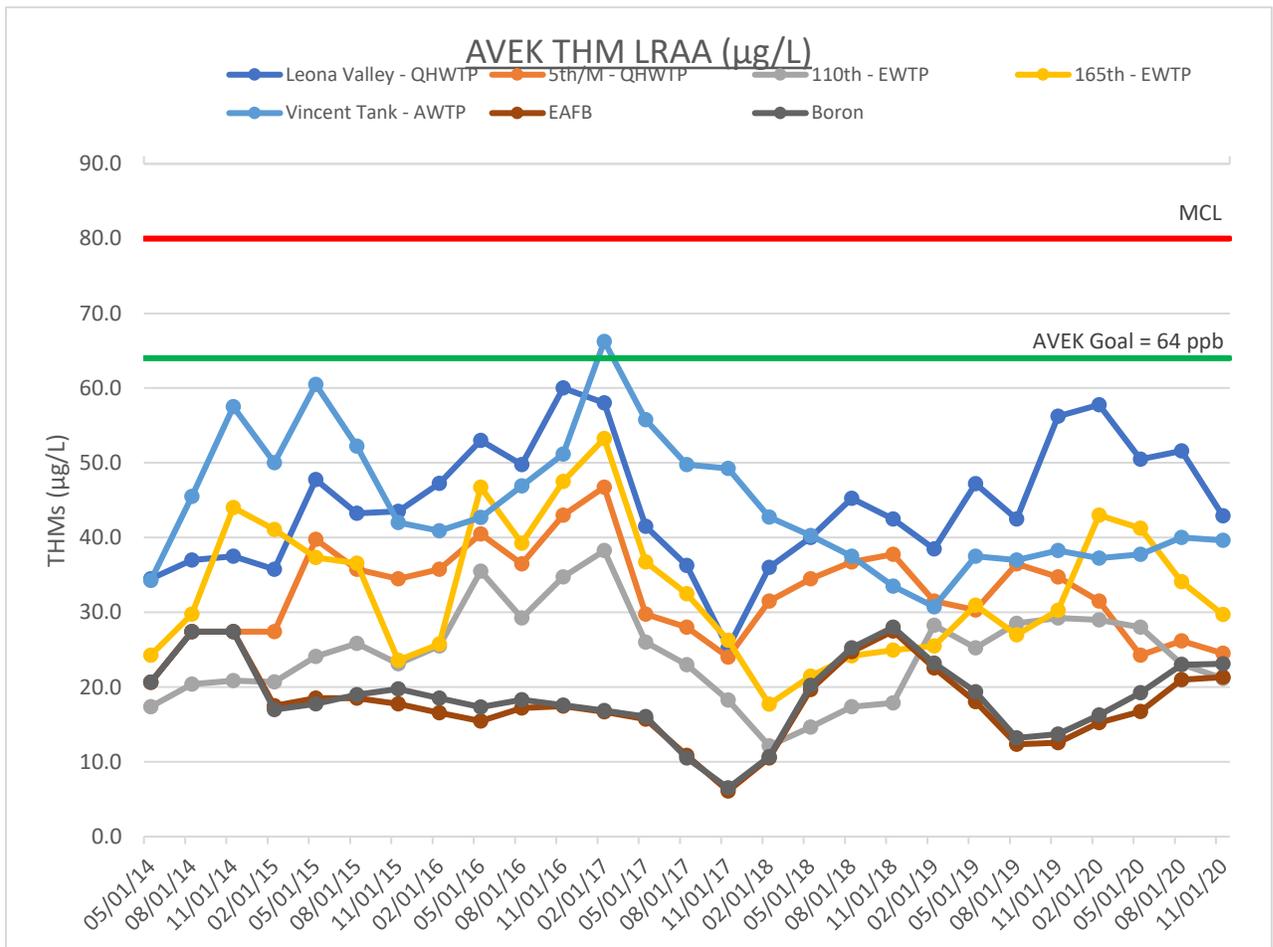
Arguably the most important service the Laboratory provides is bacteriological testing. In 2020 staff analyzed 7,172 tests for total coliform and E.coli. 4,813 of those tests were provided for the Agency. The remaining 2,359 bacteriological samples were analyzed for 140 various local small water systems, water haulers, well maintenance companies, and individual well owners. A list of 2020 Laboratory customers is provided below.

2020 AVEK Laboratory Customers			
40th Street East MWC	Carson Water	KJI Plumbing Inc.	Richard Monstein
Abdul Housni	Castaic Lake Recreation	LA County Fire Camp 14	Road Runner Pump
Abundant Water Wells	Christensen Brothers	LA County Water Works	Robert Bloch
Acton Water Company	City of Lancaster	Lake Elizabeth MWC	Rod Castillo
Adam Sylvies	Colorado MWC	Lancaster Trailer Park	Rod Sproule
Aerial Acres	Cornelis VanderEyck	Land Projects MWC	Roger Reitano
Agua Dulce Elementary	Curtis Gall	Landale MWC	Rosamond CSD
Airway MWC	Daily Nuts	Lang Ranch Properties	Sarah Shackleton
Aloha Pure Water	Del Sur Gardens	Le Chene	Shadow Acres MWC
Alpine Springs MHP	DWR	Lily of the Valley	Simone's Crystal Pure Water
American Water Wells	Desert Lake CSD	Littlerock Creek Irrigation	SPV Water Company
Anchor Retreat	Eastside Union Elementary	Live Again Recovery Homes	St. Andrew's Abbey
Angeles Crest Christian Camp	Edgemont Acres	Lockheed Martin Aeronautics	Sundale MWC
Antelope Park MWC	El Dorado MWC	Lunde Water Company	Sunnyside Farms MWC
Anthony Khov	Evergreen MWC	Mario Larrabure	Sweet Water Ventures
APC Plumbing	Fidela Arcuri	Medallion Contracting	Tarzana Treatment
Aqua J MWC	First Responders First	Michael Burtner	Tejon Ranch
Austin Brady	Fred Cannon	Michael Gillett	The Oaks
AV Airport Express	Gall Brothers	Mitchell's Avenue E Park	The Village
AV Progressive Club	Golden Sands MHP	Morrison Well Maintenance	Tierra Bonita
AV Solar	Green Valley CWD	National O&M	Tony Galeazzi
Baxter MWC	Grewe/Bryant Pump	Neenach Market and Café	Tweedy Lake Club
Billie Fox	Gus Hernandez	Newcomb's Ranch	US Borax
Bishop Services Inc.	Halfway House Café	Noelle Parker	Waste Management
Bleich Flat	Hughes Elizabeth Lakes USD	North Edwards MWC	Wendy's Water Truck
Blue Skies Living MHP	Huttopia Paradise Springs	Painted Turtle Camp	West Valley CWD
Bob Large	J&L Construction	Palm Ranch Irrigation District	Western Skies
Boeing	Jeff Zimmerman	Pauley Water System	Westside Park
Boetsch Well Drilling	Joshua Acres MWC	Piute MWC	Westside USD
Boron CSD	Kathy Howe	Punchbowl Canyon Water	White Fence Farms
Bryant Griffin Pump	Kayden Lee	Quartz Hill Irrigation District	William Curry
Cain Smead	Kelley's Underground Const.	Rancho Ybarra Camp	Willow Water
CA Parks Dept.	Ken Wipff	Randy Martin	Wilsona Gardens
Californian MHP	Kendra Supple	Rene Levesque	Winterhaven MHP
Canyon Creek Properties	Kirk Business Center	Richard Jones	Young Nak Presbyterian

## Water Quality

In 2020 the Laboratory once again distributed the Annual Water Quality Report to our customers ahead of schedule, allowing them extra time to complete their Consumer Confidence Reports and supply them to their retail customers. Monthly and quarterly results were reported on schedule to the health department, with all water quality parameters for the Agency meeting or exceeding State and Federal standards.

Our in-house THM monitoring program proved essential again as we were able to track THM levels between compliance cycles throughout the year to ensure our goal of providing our customers with a minimum 20% buffer for their own THM compliance. The highest running annual average at any given site throughout the year was 58 ug/L (28% below the MCL) and we finished the year with maximum running annual averages of 28 ug/L (65% below the MCL) in our Kern County system and 45 ug/L (44% below the MCL) in our LA County system.



## Equipment

The Laboratory acquired a new Gas Chromatography-Mass Spectrometry System (GCMS) through the Capital Improvement Plan (CP 21-01). This instrument was installed in 2020 and will be essential in maintaining our excellent THM levels for many years to come.



### Milestones

- Successful implementation of COVID-19 protocols to prevent any infections of staff, while having to interact with the public on a daily basis
- Completion of all blind performance evaluation tests required by ELAP to maintain our certification with a 100% pass rate
- Purchase and installation of a new GCMS
- Promotion of Jasmine Preza from Senior Laboratory Technician to Principal Analyst
- Updates to our Quality Assurance manual to comply with upcoming changes in ELAP regulations

# Human Resources

## **Staffing**

AVEK conducted 4 new recruitments in 2020. To staff the new the new Maintenance Department, the positions of Electrical Technician and Well and Pump Technician were filled. Internal promotions resulted in a new Assistant Manager of Operations for Water Banking and Maintenance and Maintenance Supervisor, and an Operator made the lateral move to Maintenance Technician I. Operator positions at the Westside Water Bank and Quartz Hill Water Treatment Plant were backfilled. The Agency ended 2020 with 47 full time employees.

## **Training and Safety**

Agency Staff completed Hazmat and Right to Know training. CPR training is scheduled for early spring 2021. Due to Covid-19, the State of California postponed testing for Distribution and Treatment licenses and continued education classes were limited to on-line resources only.

The agency received three (3) President's Special Recognition awards from the Association of California Water Agencies Joint Powers Insurance Authority (ACWA JPIA). The awards recognized the Agency for minimizing risks to achieve a loss ratio of less than 20% for the Liability, Property, and Workers' Compensation Insurance programs.

The department was awarded a Wellness Grant in the amount of \$1800 from Anthem and JPIA. Funds were used to promote sun safety and healthy eating.

## **Benefits**

Employee Benefits Open Enrollment for 2020 was conducted from October 1, 2020 through November 1, 2020. There was no aggregate increase to the plan costs except for a 9% increase to the Kaiser Plans and 7.6% increase to the Anthem HMO plan.

The Agency offers a variety of medical plans through Anthem Blue Cross and Kaiser with 51% of participants covered by Anthem Blue Cross and 49% covered by Kaiser. Enrollment in the Consumer Driven Health plans (CDHP) increased to 25 participants (up from 19) and their families, saving the Agency \$41,198. As an incentive for employees to enroll in the CDHP the Agency increased the contribution to Health Savings Accounts by \$200 for both plans.

## **Total Compensation Study**

April 2020, Koff & Associates was contracted to perform a total compensation survey to ensure that AVEK was competitive in the job market for both employee retention and recruiting prospective employees. On average, AVEK salaries were 11.3% below market median for base salary and 8.6% below market compensation. The survey information will be reviewed for the 2021 budget cycle.

**Covid-19**

Throughout 2020 AVEK had only 2 employees test positive for COVID-19 and both returned to work with no health issues. The Agency developed and implemented a COVID-19 Response Plan that enabled the Agency to continue to operate without major interruptions. Information technology was used to disseminate timely information about COVID-19 protocols to the Board, employees, customers and the public. Board and Committee meetings were held virtually and travel for State Water Contractors meetings and events was suspended. The Agency continues to implement COVID-19 protocols as recommended by the CDC.

**Employee Morale**

Managers worked on keeping employee morale high during the strains of COVID-19 by providing branded AVEK personal protection gear such as face masks and bandanas. Additionally, staff participated in virtual all-hands meetings and socially distanced special events.

# Administration

## **State Water Contractors**

AVEK's Executive Management actively engaged with State Water Contractors (SWC), an advocacy group that represents the Agency's legal, policy, and regulatory interest in the State Water Project (SWP), as well as the interests of 26 other member agencies. Working in partnership with other member agencies, water organizations and the Department of Water Resources (DWR), Management participated in over 100 SWC meetings, including, but not limited to regular Board Meetings, General Counsel Reports, and meetings for the following sub-committees and key topics:

- Audit Finance
- Energy
- OME Dam Safety
- Operations
- Planning
- Delta Conveyance Project
- Biological Opinions
- Incidental Take Permit
- Voluntary Agreements
- Water Management Tools
- Long-term State Water Project Operations

Through consistent participation in SWC advocacy efforts, AVEK has increased its share of voice in the water community, working collaboratively to achieve goals for improved water supply reliability and cost-effective, environmentally sustainable management of the SWP.

## **Antelope Valley State Water Contractors Association**

Working together with Palmdale Water District and Littlerock Creek Irrigation District, the Agency took an active role in administrating and governing the Antelope Valley State Water Contractors Association (AVSWCA). A joint powers authority, AVSWCA's purpose is to optimize the use of water resources and protect local surface water and groundwater storage. AVEK's Division 6 Director served as the Association Chair, while two other Board members served as Commissioner and Alternate Commissioner.

The Agency participated in bi-monthly Board Meetings for the Association, with a focus on developing plans for maximum cooperative use of available water resources. The Association and Agency jointly participated in the Big Rock Creek Recharge project and other key milestones for the Association in 2020 include:

- Approving adoption of the 2019 update to the Antelope Valley Integrated Regional Water Management Plan

- Migration of the Associations website to a new Content Management System
- Development of a draft MOU for mutual aid from AVSWCA to mutual water companies within the Antelope Valley
- Shifted administration of the United States Geological Service Groutwater Monitoring Program to the Antelope Valley Watermaster

## Antelope Valley Watermaster

The Agency continued providing administration over the Antelope Valley Watermaster (Watermaster), a governing body responsible for the implementation of the Judgement and Physical Solution for the Antelope Valley Groundwater Adjudication. The Watermaster is in year 6 of a 7-year court ordered rampdown of production to the native basin safe yield.

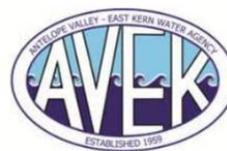
The Agency’s Division 6 Director served as Watermaster Board Chair, while the Assistant General Manager served as Watermaster Administrator, providing leadership and oversight for implementation of the Judgement, which considers the water rights of over 4000 parties. Agency staff provided ongoing administrative, customer, and billing support to parties included in the Judgement, including public water suppliers, landowners, small pumpers and non-pumping property owners, and the federal and state governments. Agency staff coordinated and conducted virtual monthly Board meetings and various committee and administration meetings, including Agenda development and records management.

Key achievements for the Watermaster in 2020 include:

- Maintaining a balanced budget with limited revenue resources.
- Development of the Watermaster Rules and Regulations
- Approval of the application for the Upper Amargosa Creek Recharge Project

## Board Activities

With COVID-19 protocols limiting in-person gatherings, the Board of Directors and Staff embraced the opportunity to conduct virtual meetings and events, increasing the use of videoconferencing technologies such as Zoom and Microsoft Teams. The Agency conducted a combined total of over 90 Board and Committee meetings, more than 75 percent of which were conducted virtually.



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THIS ITEM APPEARS ON

AVEK  
4TH QUARTER 2020  
NEWSLETTER

**ZOOM FACILITATES BOARD MEETINGS  
DURING PANDEMIC**

A website-based engagement tool was used to disseminate accurate, timely information to Board members and the public. Smartsheet, a collaboration and work management software, was utilized to improve planning and tracking of Board and Committee Agenda items, as well as to keep Board members and Management Staff informed of Agency activities.

Board members represented the Agency at numerous in-person and virtual water industry and community conferences, meetings, and events, including those hosted by the following organizations:

- California Special Districts
- Greater Antelope Valley Economic Alliance
- Water Education Foundation
- American Water Works Association
- Antelope Valley Board of Trade
- Association of California Water Agencies
- Urban Water Institute
- California Foundation on the Environment and Economy

### Communications

Working collaboratively, the Board and Staff developed the Agency's first Board-approved Strategic Communications Plan in 2020. The purpose of the plan is to help shift the Agency toward a more proactive approach in communicating, and provide policy direction for the planning and implementation of outreach activities to provide timely, relevant, accessible information to stakeholders and the public. The plan was developed around two core goals, with key objectives defined for each goal:

- Raise the Agency's profile and brand reputation
- Inform and educate the Agency's stakeholders and the public

The Agency implemented numerous activities centered on key objectives in the 2020 Strategic Communications Plan including:

- Development of a Legacy Program
- Contributing to a Scholarship Endowment Fund for Antelope Valley College students
- Delivery of quarterly customer newsletters
- Delivery of press releases
- Award nominations
- Use of Agency website to share timely, relevant information
- Engagement with other State Water Contracts, customers, industry and community groups, and legislators

Antelope Valley-East Kern Water Agency



## Events

While in-person events were limited for the majority of the year due to COVID-19 protocols, the Agency conducted 3 facilities tours and presentations for the following groups:

- Edwards Air Force Base – Environmental Management and Engineering
- Los Angeles County Waterworks District 40
- Mike Garcia, Congressman 25<sup>th</sup> District and Staff

Events were centered on Agency advocacy efforts, providing operational, water quality and water supply information to key stakeholders.



In addition to hosting events, Agency Executive Management sought opportunities to participate in events with industry colleagues to increase knowledge on water storage projects and potential water banking partners, touring the Coachella Valley Water District's Whitewater Recharge Project and the McMullin Area Groundwater Sustainability Agency's Water Bank Project.

