



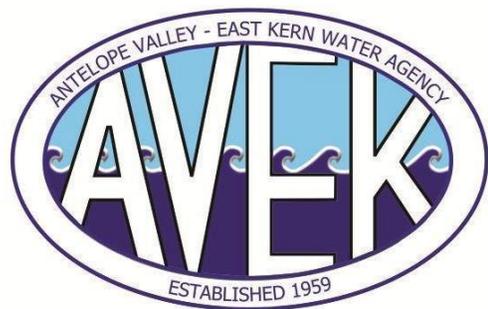
2021

Year in Review

Antelope Valley-East Kern Water Agency

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Palmdale, CA 93551

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www.avek.org



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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 2021 Year in Review.

2020 and 2021 were the driest consecutive years in California's precipitation history. With all but a small portion of the state experiencing extreme to exceptional drought, AVEK finished the 2021 water year with a 0% allocation of State Water Project Table A supplies. Despite these considerable challenges, investments in water storage programs enabled the Agency to meet all customer demands and maintain rigorously high water quality standards, accomplishments made possible through long range strategic planning.

2021 was another successful year of milestones for AVEK's largest water storage project, the High Desert Water Bank, some of which included drilling the first 4 recovery wells, completing plans for the Aqueduct Turnout/Turn-in and 90% design of the recharge basin and pipeline. The project is on track to meet Metropolitan Water District's goal of commencing recharge by mid-2023.

As we continue to experience patterns of extreme drought and limited State Water Project supplies, water storage programs and infrastructure development will be critical to long term water supply reliability.

AVEK has become a model in sound fiscal policy and practices, receiving a clean annual financial audit for the 8th consecutive year in a row. This would not be possible without a prudent Finance Committee and Board as well as a meticulous Staff that accurately accounts for and reports on our resources and expenditures.

As the COVID-19 pandemic continues, the Agency's commitment to following health and safety protocols ensured reliable service to our customers with no interruptions. While the pandemic brings a high level of uncertainty to everyday life, it has helped sharpen our ability to adapt and innovate.

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 3rd 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:

- Four conventional water treatment facilities
- Two groundwater banking and recovery facilities and one in development
- 184 miles of pipeline
- 11 pump stations
- 67 million gallons of treated storage



Department Highlights



Finance

Bond Ratings



In 2021, 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 2021, 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 2021, the Board approved the 2021/2022 Operating and Capital Budgets at a workshop held to present and discuss the Budgets. The 2021/2022 Operating Budget anticipates an increase to the Agency's net position of \$4,162,730 and anticipates reserves of \$128,996,123 at June 30, 2022.

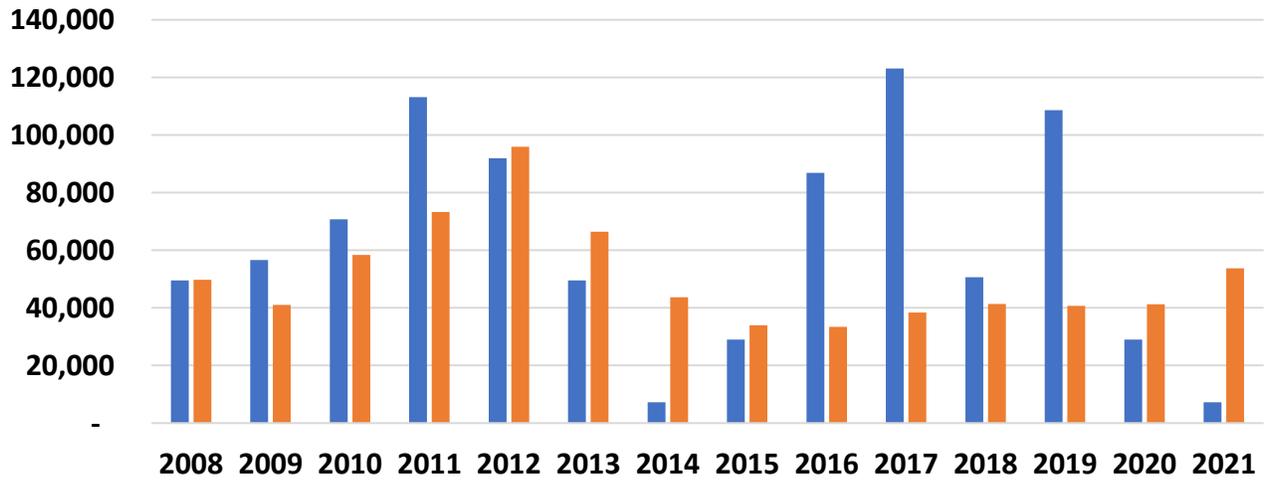
**AVEK Water Agency
Budget
Fiscal Year 2021/2022**

		2021-2022 Budget
OPERATING REVENUES		
4100	Water Sales	\$ 29,331,000
4200	Water Banking Sales	\$ -
4300	Water Transfers/Exchanges	<u>\$ 2,478,000</u>
	Total Operating Revenues	<u>\$ 31,809,000</u>
 OPERATING EXPENSES		
5000	Water Purchases	\$ 9,668,300
5100	Water Delivery & Treatment	\$ 2,776,000
5200	Maintenance & Supplies	\$ 1,524,050
5300	Fees & Services	\$ 3,125,750
5400	Travel & Transportation	\$ 327,100
5500	Personnel Expense	\$ 8,185,760
5600	Other Expense	\$ 125,000
5700	Depreciation	<u>\$ 8,000,000</u>
	Total Operating Expenses	<u>\$ 33,731,960</u>
 NON-OPERATING REVENUES		
4400	Property Tax Revenues	\$ 34,700,290
4500	Investment Income	\$ 1,105,000
4600	Other Income	\$ 1,217,000
4700	Lab Income	<u>\$ 55,000</u>
	Total Non-Operating Revenues	<u>\$ 37,077,290</u>
 NON-OPERATING EXPENSES		
5800	State Water Contract	\$ 27,991,000
5900	COP/Bond Interest & Fees	<u>\$ 3,000,600</u>
	Total Non-Operating Expenses	<u>\$ 30,991,600</u>
 Total Revenues		 <u>\$ 68,886,290</u>
 Total Expenses		 <u>\$ 64,723,560</u>
 Net Increase/Decrease		 <u><u>\$ 4,162,730</u></u>

Water Sales and Deliveries in AF (Calendar Year)

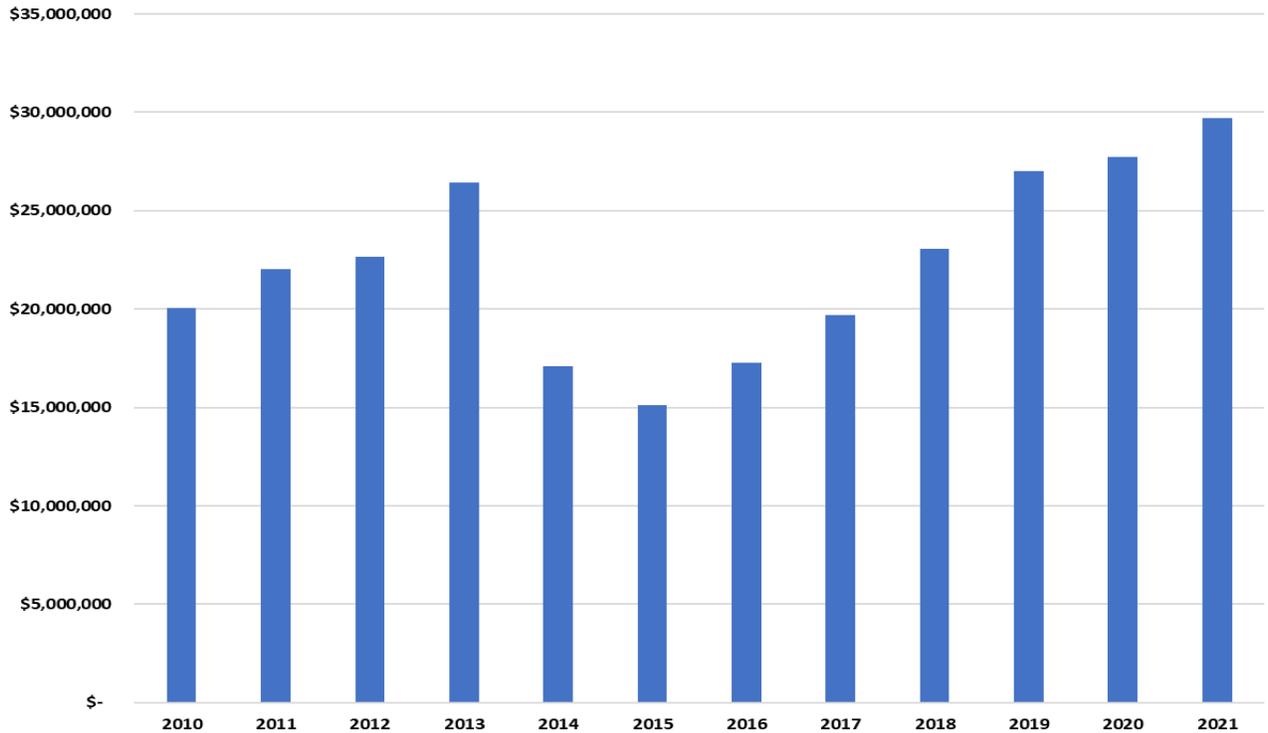
2021 Water Sold based on Customer Orders

■ Available for Delivery to AVEK ■ Water Sold



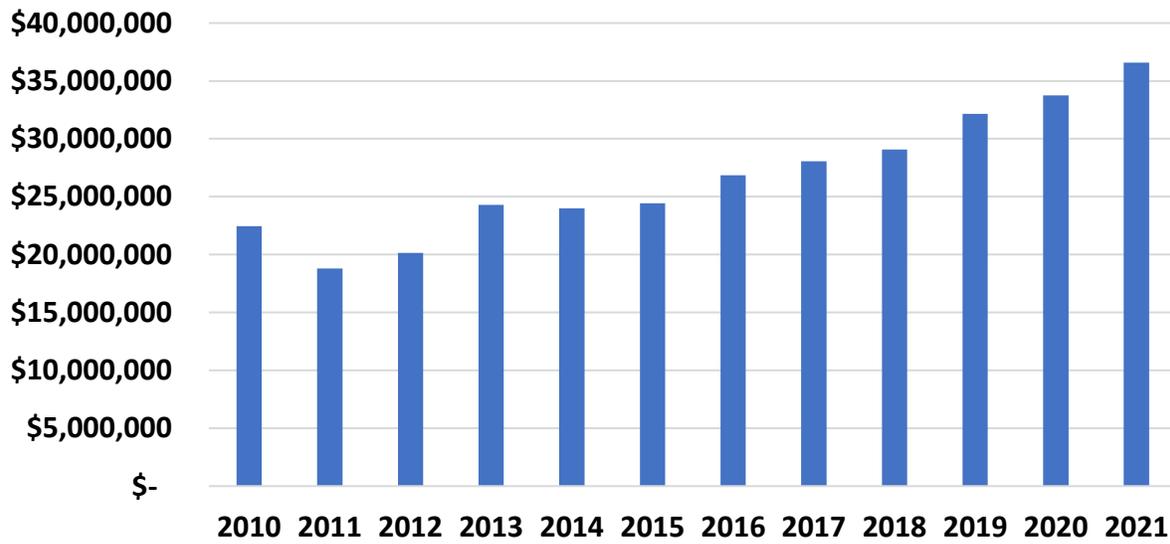
Total Water Sales (Fiscal Year)

2021 preliminary amount is not audited and subject to change



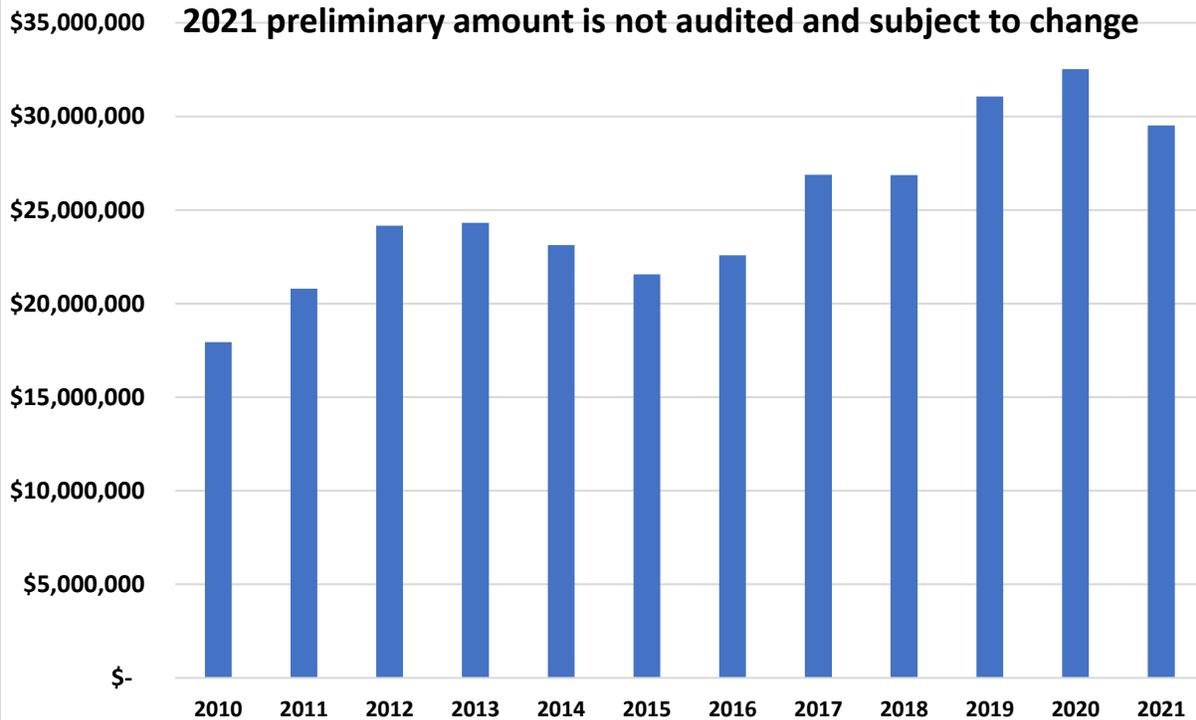
Property Tax Revenue (Fiscal Year)

2021 preliminary amount is not audited and subject to change



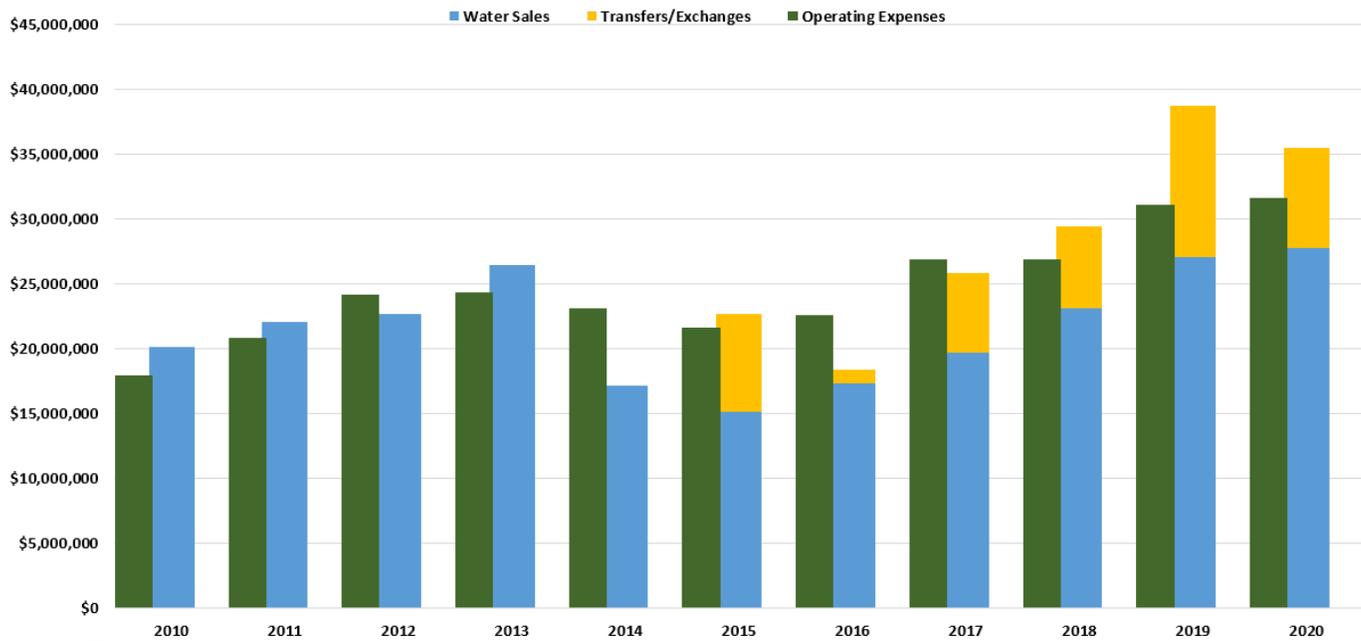
Operating Costs (Fiscal Year)

2021 preliminary amount is not audited and subject to change



WATER

Operating Costs and Sales (Fiscal Year) 2020 preliminary amount is not audited and subject to change

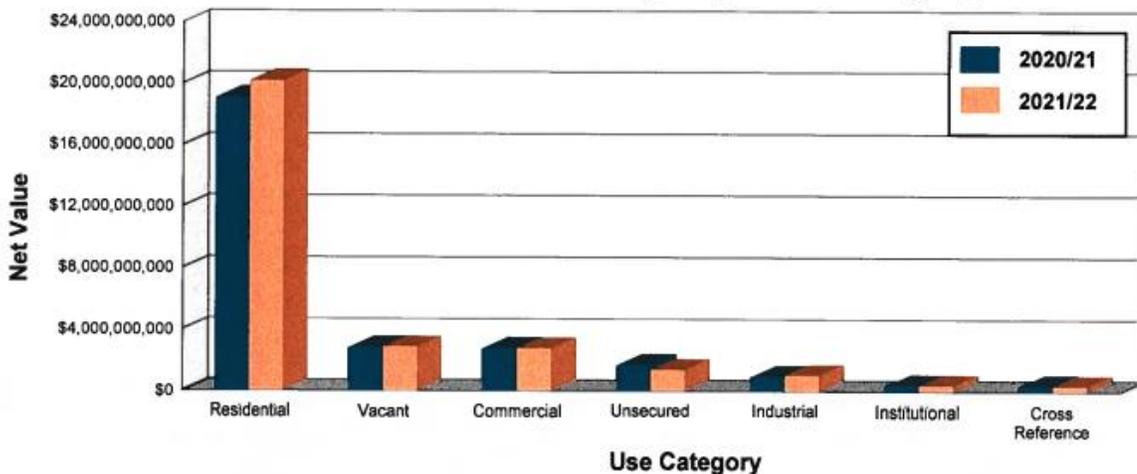


2021/22 Property Tax Summary

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 3.5% for the 2021/22 tax roll, mirrored the increase experienced countywide at 3.6%. The assessed value increase between 2020/21 and 2021/22 was \$1.1 billion. LA County assessments increased for residential properties by \$955 million, commercial properties by \$9.9 million and unsecured properties decreased by \$314 million.

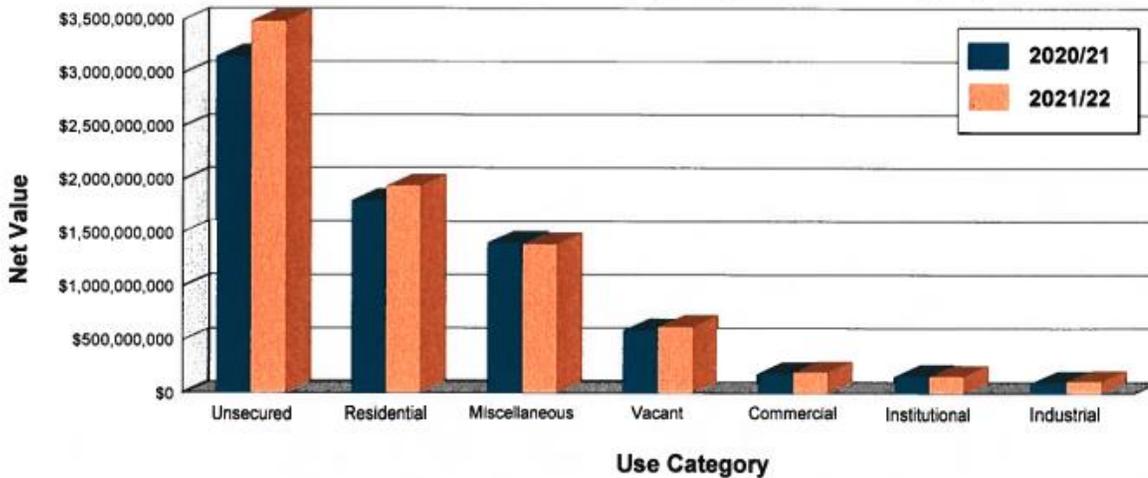
Assessed Value by Major Use Category



Kern County: The Agency also experienced a net taxable value increase in Kern County of 7.0% for the 2021/22 tax roll, which was more than the increase experienced countywide at 1.1%. The assessed value

increase between 2020/21 and 2021/22 was \$523 million. For Kern County assessments, residential property values increased by \$139 million, unsecured property values increased by \$338 million and miscellaneous property values decreased by \$12 million, whereas vacant land increased in value by \$39 million and industrial property increased by \$9 million.

Assessed Value by Major Use Category



The following tables identify the type of property assessments for each county and the 2020/21 value change.

LA County:

2020/21 to 2021/22 Value Growth by Use Category

Category	2020/21 Net Taxable Value	2021/22 Net Taxable Value	\$ Change	% Change
Residential	72,529 \$19,040,280,766	72,753 \$20,185,149,568 (68.7%)	\$1,144,868,802	6.0%
Vacant	67,572 \$2,839,438,751	67,408 \$2,882,369,237 (9.8%)	\$42,930,486	1.5%
Commercial	1,591 \$2,775,277,360	1,594 \$2,785,211,478 (9.5%)	\$9,934,118	0.4%
Unsecured	[3,991] \$1,726,768,458	[3,833] \$1,412,966,494 (4.8%)	-\$313,801,964	-18.2%
Industrial	515 \$979,054,150	511 \$1,062,008,076 (3.6%)	\$82,953,926	8.5%
Institutional	201 \$395,819,666	203 \$416,375,519 (1.4%)	\$20,555,853	5.2%
Cross Reference	[3,186] \$382,249,907	[3,197] \$388,392,677 (1.3%)	\$6,142,770	1.6%
Recreational	80 \$102,810,722	80 \$97,539,937 (0.3%)	-\$5,270,785	-5.1%
Miscellaneous	127 \$75,448,273	128 \$81,502,967 (0.3%)	\$6,054,694	8.0%
Irrigated	161 \$43,194,280	162 \$44,225,077 (0.2%)	\$1,030,797	2.4%
Dry Farm	31 \$5,349,317	31 \$5,105,475 (0.0%)	-\$243,842	-4.6%
SBE Nonunitary	[37] \$3,170,171	[34] \$2,250,144 (0.0%)	-\$920,027	-29.0%
Govt. Owned	7 \$629,417	5 \$622,950 (0.0%)	-\$6,467	-1.0%
Exempt	4,275 \$0	4,285 \$0 (0.0%)	\$0	0.0%
Unknown	0 \$0	1 \$0 (0.0%)	\$0	0.0%
TOTALS	147,089 \$28,369,491,238	147,161 \$29,363,719,599 (100.0%)	\$994,228,361	3.5%

Numbers in blue are parcel/assessment counts

Kern County:

2020/21 to 2021/22 Value Growth by Use Category

Category	2020/21 Net Taxable Value		2021/22 Net Taxable Value		\$ Change	% Change
Unsecured	[1,199]	\$3,153,520,169	[1,215]	\$3,491,474,066 (43.7%)	\$337,953,897	10.7%
Residential	14,796	\$1,802,893,386	14,894	\$1,942,186,921 (24.3%)	\$139,293,535	7.7%
Miscellaneous	951	\$1,406,641,951	953	\$1,394,278,652 (17.4%)	-\$12,363,299	-0.9%
Vacant	79,624	\$584,379,823	79,738	\$623,656,141 (7.8%)	\$39,276,318	6.7%
Commercial	410	\$187,275,380	416	\$197,202,346 (2.5%)	\$9,926,966	5.3%
Institutional	78	\$162,064,016	77	\$159,370,995 (2.0%)	-\$2,693,021	-1.7%
Industrial	229	\$103,357,891	241	\$112,657,192 (1.4%)	\$9,299,301	9.0%
Recreational	34	\$34,200,634	34	\$33,654,140 (0.4%)	-\$546,494	-1.6%
Irrigated	99	\$24,095,883	95	\$27,829,612 (0.3%)	\$3,733,729	15.5%
Govt. Owned	553	\$10,753,154	549	\$10,090,821 (0.1%)	-\$662,333	-6.2%
Dry Farm	96	\$5,616,772	96	\$5,732,060 (0.1%)	\$115,288	2.1%
SBE Nonunitary	[9]	\$239,208	[9]	\$239,208 (0.0%)	\$0	0.0%
Exempt	2,667	\$0	2,669	\$0 (0.0%)	\$0	0.0%
TOTALS	99,537	\$7,475,038,267	99,762	\$7,998,372,154 (100.0%)	\$523,333,887	7.0%

Numbers in blue are parcel/assessment counts

Auditing

For the past eight 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, 2021 was completed in September 2021. 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



www.ba.cpa
661-324-4971

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, 2021, 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.

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661-324-4971

FRESNO
10 River Park Place East, Suite 208
Fresno, CA 93720
559-476-3592

STOCKTON
2423 West March Lane, Suite 202
Stockton, CA 95219
209-451-4833

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, 2021, 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) Plan – 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 schedule of revenues and expenses – proprietary fund type – budget and actual and the High Desert Water Bank Statement of Net Position and Statement of Revenues, Expenses, and Changes in Net Position are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedule of revenues and expenses – proprietary fund type – budget and actual and the High Desert Water Bank Statement of Net Position and Statement of Revenues, Expenses, and Changes in Net Position have 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 them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2021, 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 solely 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 effectiveness of the Agency's 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
October 25, 2021

Financial Statements

**ANTELOPE VALLEY-EAST KERN WATER AGENCY
STATEMENT OF NET POSITION
AS OF JUNE 30, 2021**

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

CURRENT ASSETS:

Cash and Cash Equivalents	\$ 7,188,917
Investments	155,149,051
Receivables:	
Taxes	3,430,577
Interest	205,168
Services	5,876,061
Other	261,437
Inventory - Banked Water	18,160,920
Deposits and Prepaid Expenses	55,271
	<u>190,327,402</u>

NON-CURRENT ASSETS:

Land and Other Capital Assets Not Being Depreciated	54,869,439
Capital Assets, Net	<u>275,164,404</u>
Total Non-Current Assets	<u>330,033,843</u>

RESTRICTED ASSETS:

Restricted Investments	<u>842,566</u>
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Total Assets	<u>521,203,811</u>
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DEFERRED OUTFLOWS OF RESOURCES:

Post Employment Benefits (OPEB)	<u>3,112,159</u>
Total Assets and Deferred Outflows of Resources	<u>\$ 524,315,970</u>

LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION

CURRENT LIABILITIES:

Accounts Payable	\$ 3,197,645
Accrued Liabilities	8,936,473
Collections in Advance on Projects	180,857
Current Portion of Compensated Absences	142,451
Current Portion of Long-Term Debt	5,717,513
Escheated Funds	42,155
	<u>18,217,094</u>

NON-CURRENT LIABILITIES:

Payable from Restricted Assets	842,566
Deferred Water Delivery	235,536
Net OPEB Liability	12,408,453
Long-Term Portion of Compensated Absences	1,282,057
Long-Term Debt	<u>115,066,697</u>
Total Non-Current Liabilities	<u>129,835,309</u>

Total Liabilities	<u>148,052,403</u>
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DEFERRED INFLOWS OF RESOURCES:

OPEB	<u>909,443</u>
Total Liabilities and Deferred Inflows of Resources	<u>148,961,846</u>

NET POSITION:

Net Investment in Capital Assets	209,249,633
Unrestricted	<u>166,104,491</u>
Total Net Position	<u>375,354,124</u>
Total Liabilities, Deferred Inflows of Resources, and Net Position	<u>\$ 524,315,970</u>

**ANTELOPE VALLEY-EAST KERN WATER AGENCY
STATEMENT OF REVENUES, EXPENSES, AND
CHANGES IN NET POSITION
FOR THE YEAR ENDED JUNE 30, 2021**

OPERATING REVENUES	
Water Sales	\$ 29,550,878
Water Exchanges and Transfers	2,275,000
Irrigation Sales	608,877
Nickel Water Agreements	<u>2,421,044</u>
 Total Operating Revenues	 <u>34,855,799</u>
OPERATING EXPENSES	
Water Purchases	10,091,951
Pumping	1,075,644
Water Treatment	5,570,538
Transmission and Distribution	471,609
Administration and General	7,672,564
Groundwater Survey and Sites Reservoir and Other	165,718
Depreciation	<u>8,050,050</u>
 Total Operating Expenses	 <u>33,098,074</u>
 Operating Income	 <u>1,757,725</u>
NON-OPERATING REVENUES	
Tax Revenues	36,615,597
Net Investment Earnings	544,770
Other Revenues	8,216,199
Capacity Charges	<u>2,173,276</u>
 Total Non-Operating Revenues	 <u>47,549,842</u>
NON-OPERATING EXPENSES	
State Water Contract	23,118,401
Interest Expense	<u>2,654,975</u>
 Total Non-Operating Expenses	 <u>25,773,376</u>
 Change in Net Position	 23,534,191
 NET POSITION, BEGINNING OF YEAR	 <u>351,819,933</u>
 NET POSITION, END OF YEAR	 <u><u>\$ 375,354,124</u></u>

**ANTELOPE VALLEY-EAST KERN WATER AGENCY
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED JUNE 30, 2021**

CASH FLOWS FROM OPERATING ACTIVITIES:	
Cash Received from Customers	\$ 36,368,545
Cash Paid for Supplies to Suppliers	(24,147,160)
Cash Paid to Employees	<u>9,679,973</u>
Net Cash Provided by Operating Activities	<u>21,901,358</u>
CASH FLOWS FROM NON-CAPITAL AND RELATED FINANCING ACTIVITIES:	
Receipt of Property Taxes	36,591,067
Receipt of Capacity Charges and Other Revenue	10,389,475
Payment of State Water Contract	<u>(23,118,401)</u>
Net Cash Provided by Non-Capital and Related Financing Activities	<u>23,862,141</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:	
Acquisitions of Property and Equipment	(11,961,127)
Proceeds from Disposal of Property and Equipment	1,154,034
Principal Repayment of Bonds Payable	<u>(5,573,295)</u>
Net Cash Used in Capital and Related Financing Activities	<u>(16,380,388)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:	
Receipt of Interest and Investment Income	881,152
Payment of Interest Expense	(2,654,975)
Disposition (Acquisition) of Investments	<u>(33,166,900)</u>
Net Cash Used in Investing Activities	<u>(34,940,723)</u>
Net Decrease in Cash and Cash Equivalents	(5,557,612)
Cash and Cash Equivalents - Beginning of Year	<u>12,746,529</u>
Cash and Cash Equivalents - End of Year	<u><u>\$ 7,188,917</u></u>

**ANTELOPE VALLEY-EAST KERN WATER AGENCY
STATEMENT OF CASH FLOWS (Continued)
FOR THE YEAR ENDED JUNE 30, 2021**

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

Operating Income	\$ 1,757,725
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities	
Depreciation	8,050,050
Change in Assets - (Increase)/Decrease in:	
Services Receivable	924,164
Other Receivables	586,675
Inventory - Banked Water	2,975,183
Deposits and Prepaid Expenses	1,907
Changes in Liabilities - Increase/(Decrease) in:	
Accounts Payable	984,494
Accrued Liabilities	5,425,954
Compensated Absences	76,091
Deferred Water Delivery	(1,018)
Net OPEB Liability and Related Items	<u>1,120,133</u>
Net Cash Provided by Operating Activities	<u>\$ 21,901,358</u>

Engineering

High Desert Water Bank

2021 was another exciting year of progress for the High Desert Water Bank project (HDWB). The first four recovery wells were drilled by Pacific Coast Well Drilling in a very successful drilling program which yielded valuable data to inform the groundwater model and the design of the full wellfield. The Stantec Engineering, Design, and Hydrogeology team completed plans and specifications for the Aqueduct Turnout/Turn-in and the second recovery well drilling package which were both placed out to bid in the fourth quarter of 2021. Stantec's team also progressed the recharge basin and pipeline design to the 90% level in 2021 and anticipates completion of that design and bidding to occur in the second quarter of 2022. The Board also approved a master agreement with Kennedy Jenks for construction management support for all phases of HDWB construction. Steady progress was made in 2021 toward the completion of the project and Metropolitan Water District's goal of commencing recharge by mid-2023.



Construction/Design Projects

The Board awarded two construction contracts in 2021 which support our water banking capacity, reducing labor costs, and improving water quality.

The Westside Water Bank Underground Piping Project construction contract was awarded to Nicholas Construction in April 2021 and will be completed in 2022. This project will greatly reduce labor and replacement costs associated with above ground aluminum piping historically used at the Westside Water

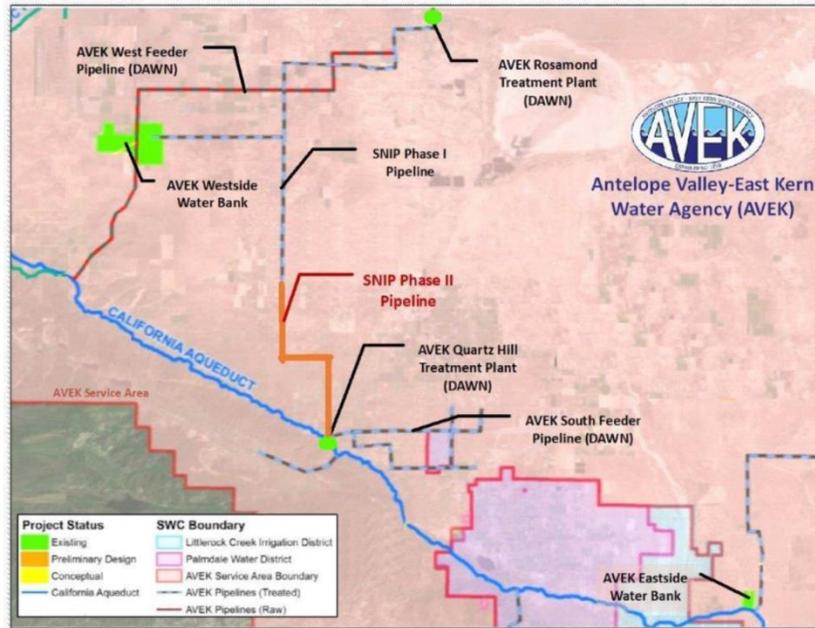
Bank and improve the reliability of the facility for consistent recharge of State Water Project (SWP) water for AVEK and AVEK's banking partners.



The Board also awarded a construction contract to W.M. Lyles for the SNIP Blending Vault project at the Rosamond Water Treatment Plant (RWTP). This project will allow recovered banked water to be blended with treated surface water in the RWTP clearwell to improve total trihalomethanes in the Kern County system when the plant is treating SWP water. This project is being partially funded by a \$350,000 DWR Prop 1 grant through the Fremont Basin Integrated Regional Water Management group and construction will be completed in early-2022.



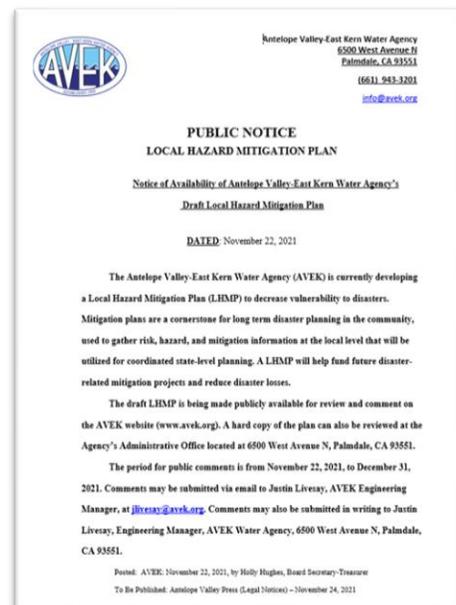
The SNIP Phase II Pipeline & Pump Station design continued to be developed in 2021 and is anticipated to be finalized in early-2022. This project would construct a pipeline and pump station that will allow recovered banked water from the Westside Water Bank (WWB) to be sent to the Quartz Hill Water Treatment Plant (QHWTP) to improve reliability to the Quartz Hill and Leona Valley service areas as well as serve as a tool for improving surface water quality by blending with recovered banked water when necessary. This critical link also allow water to be fed by gravity the QHWTP to all customers in Kern County – another reliability and resiliency improvement to our infrastructure. In coordination with Antelope Valley Integrated Regional Management group, AVEK was awarded a Department of Water Resrouces (DWR) Prop 1 grant for project with a 50% cost share up to \$1,169,203.



water would from the Water this

Planning

In early-2021 the Board awarded a contract to develop the Agency’s first 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. Staff worked with a consultant throughout 2021 to develop the plan and identify the hazard facing the Agency. A staff Technical Advisory Committee helped the plan development and a Public Advisory Committee, made Agency stakeholders, provided input on the plan. The first public hearing was held in 2021 and the plan was advertised for public comments at the end of 2021. The second and final public hearing was held in February 2022 before sending the to the California Office of Emergency Services for review and comment. The completed plan will be approved by FEMA and adopted by the Board and will allow AVEK to apply for grant funding to complete the identified mitigation projects. This project is partially funded by a FEMA Hazard Mitigation Grant Program Grant in the amount of up to \$125,000.



risks drive up of plan

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

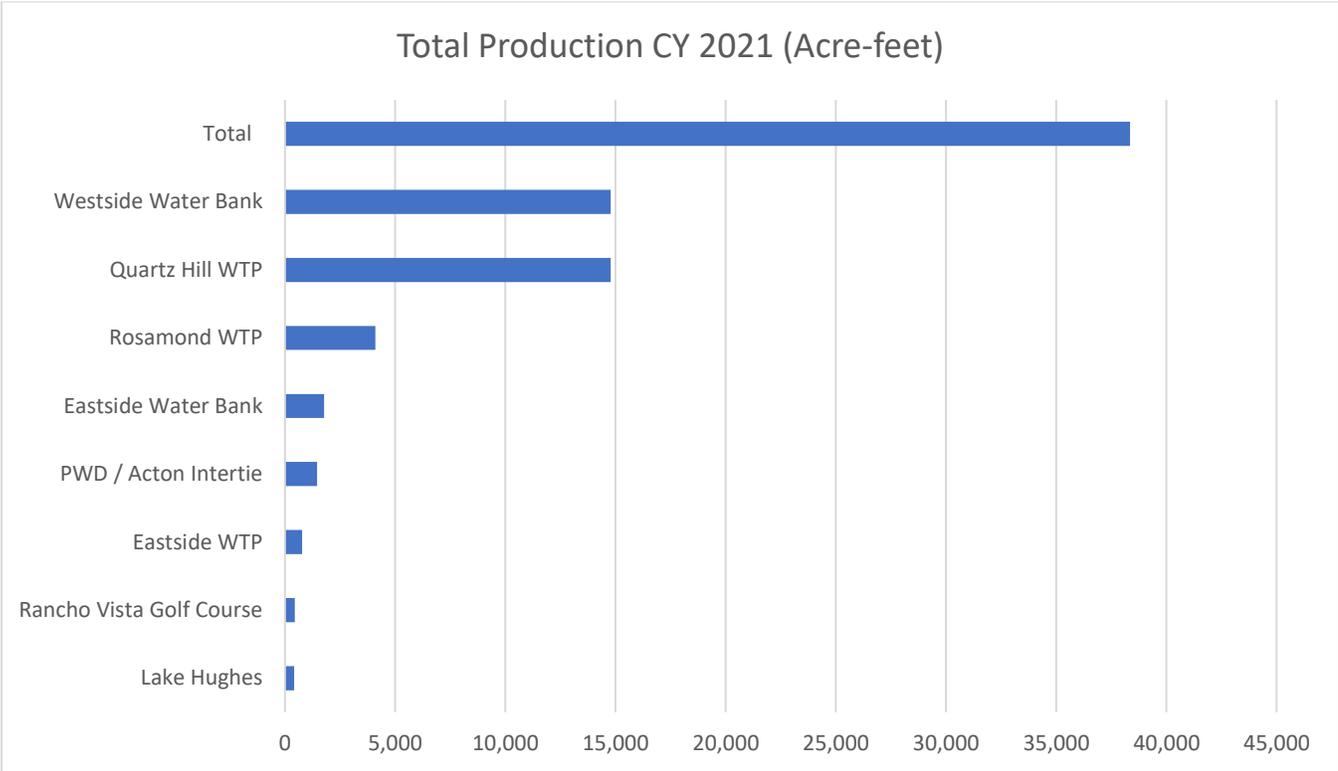


In 2021 the Operations Department maintained a consistent supply of treated water in all distribution systems that met all customer demands and exceeded all SWRCB requirements. By optimizing the treatment process in all facilities and maintaining efficient reservoir levels and chlorine residuals, THM 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 2021 was 38,538 Acre-Feet.



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

2021 PRODUCTION SUPPLY DATA (DWR and/or Recovery Meters)

<u>Quartz Hill (DWR Meter)</u>			<u>Rosamond (WWB Aq Wells)</u>			<u>EWB (Recovery Meters)</u>		
Month	MG	AF	Month	MG	AF	Month	MG	AF
January	215	658	January	0	0	January	24	74
February	300	920	February	3	8	February	18	54
March	468	1,435	March	0	0	March	34	105
April	346	1,061	April	0	0	April	45	138
May	407	1,249	May	0	0	May	50	154
June	611	1,874	June	0	0	June	78	239
July	600	1,839	July	23	72	July	70	215
August	764	2,344	August	189	579	August	73	225
September	534	1,638	September	158	484	September	54	166
October	344	1,056	October	125	384	October	52	161
November	267	818	November	114	351	November	54	166
December	141	434	December	72	222	December	24	74
Totals:	4,997	15,326	Totals:	684	2,100	Totals:	576	1771
<u>Eastside (DWR Meter)</u>			<u>Acton (PWD Supply Meters)</u>			<u>WWB (Potable Wells to Kern County)</u>		
Month	MG	AF	Month	MG	AF	Month	MG	AF
January	3	8	January	12	36	January	54	167
February	10	30	February	8	25	February	54	166
March	32	98	March	20	62	March	75	229
April	29	88	April	34	105	April	101	310
May	32	98	May	43	133	May	91	278
June	49	149	June	70	215	June	172	528
July	43	133	July	66	201	July	149	458
August	58	177	August	81	248	August	40	122
September	37	114	September	57	174	September	1	3
October	12	38	October	39	120	October	0	0
November	0	0	November	36	111	November	6	17
December	0	0	December	15	47	December	0	0
Totals:	305	933	Totals:	481	1,477	Totals:	743	2,278
<u>Lake Hughes (DWR Meter)</u>			<u>Rancho Golf (DWR Meter)</u>			<u>WWB (Potable Wells to LA County)</u>		
Month	MG	AF	Month	MG	AF	Month	MG	AF
January	5	16	January	1	4	January	238	729
February	5	16	February	2	5	February	247	758
March	7	20	March	7	22	March	308	944
April	7	21	April	15	46	April	364	1,117
May	14	43	May	19	57	May	263	807
June	14	44	June	27	82	June	518	1,590
July	8	25	July	24	74	July	468	1,437
August	10	31	August	23	72	August	589	1,808
September	14	44	September	14	44	September	388	1,189
October	19	57	October	8	26	October	249	764
November	13	40	November	5	15	November	191	587
December	5	14	December	1	4	December	191	778
Totals:	121	371	Totals:	146	451	Totals:	4,014	12,508

Production Costs

The Agency spent \$735,749 on chemicals in 2021, resulting in a chemical cost per acre-foot of \$20.29 as shown in the following table:

2021 CHEMICAL COSTS			
Treatment Chemicals Utilized:			
Chemical	Supplier	Use	Annual Cost
Aluminum Sulfate	ECO Services	Coagulant	\$390,172
Sodium Hypochlorite	JCI Jones	Disinfection	\$130,602
Zinc Orthophosphate	Thatcher	Corrosion Control	\$80,752
Liquid Oxygen	Airgas	Ozone Generation	\$98,076
Carbon Dioxide (QHWTP only)	Airgas	pH Adjustment	\$36,147
Total Chemical Costs:			\$735,749
Production (treated water/all sites)			
Site	MGD / Acre Feet		
Quartz Hill	9074 / 27,834		
Rosamond	1339 / 4,106		
Eastside (Inc. EWB)	830 / 2,546		
Acton	476 / 1,772		
*Westside Water Bank (to LA & Kern Co.)	<4,820 / 14,787 > (accounted for in QHWTP & RWTP production)		
Total MGD/Acre Feet:	11,820 / 36,258		
Chemical Cost Per Acre Foot:	\$20.29		
Note: Lake Hughes & Rancho Vista Golf Course acre foot demands are not included as there is no chemical treatment utilized at those sites.			

Personnel Costs

Personnel costs in 2021 were \$4,258,994.27, resulting in a personnel cost per acre foot of \$115.28. Energy costs across all sites in 2021 were \$1,810,047, resulting in an energy cost per acre-foot of \$48.59. The following table displays personnel costs per acre-foot for each site, along with total energy costs:

2021 COSTS (PERSONNEL & ELECTRICITY)			
(Includes: Compensation, Auto Allowance, Standby, Overtime, Sick Time, Vacation Time, Holiday Time Jury & Bereavement Leave, Retirement, FICA, Workers Comp, EAP and all Insurance Coverage)			
Facility	Total Personnel Costs	Acre Feet Produced	Personnel Cost per Acre Foot
Quartz Hill (inc. Rancho Vista Golf Course)	\$1,213,314.42	15,777	\$76.90
Rosamond	\$880,350.54	(Supply from WWB)	n/a
Eastside/Acton/EWB	\$616,968.78	4,181	\$147.56
WWB (inc. Lake Hughes)	\$582,489.49	16,985	\$34.30
Maintenance	\$965,871.04	n/a	n/a
Totals:	\$4,258,994.27	36,943	\$115.28
SoCal Edison Costs:	\$1,810,047	36,943	\$48.99

Capital Projects

Maintenance and asset replacement have been a large focus of the Operations Department for the past 15 years. In 2021/2022, Operations will complete over \$2,500,000 million of capital / asset replacement projects including: GAC replacement in six of the filters at QHWTP, rehabilitation of multiple pumps, actuators, and valves. Operations staff also took delivery of a 2022 John Deere 333G track loader.

Maintenance Department

The Department has been busy this past year. The staff of the Maintenance department have been working diligently on acquiring required State certification as well as Class A driver licensing. Many projects were completed from the 2020-2021 and 2021-2022 Capital Improvement list, as well as reactive (un-scheduled) maintenance projects. The department received new equipment to aid in effective job completion and is currently finalizing the final steps in securing a CMMS (Computerized Maintenance Management System). The following projects were completed in 2021:

Rosamond Treatment and North/Central Feeder

- Automated WWR flow adjustment using a new valve/actuator and communications at the treatment plant.
- Replaced dated chlorine analyzers at the treatment plant and Mojave tank farm with simpler, more efficient and more maintenance friendly analyzers.
- Replaced the bridge pumps on (1) of the RWTP bridges. The bridge is the sludge removal equipment that is in each clarifier.
- Fabricated steps and platforms for the treatment plant for safer access in certain areas of the treatment plant.
- Assisted with the rehabilitation of Central Feeder pump 4.

Quartz Hill Treatment Plant and South Feeder

- Calibrated controls on pH equipment to improvement efficiency.
- Replaced (1) sodium hypochlorite pump.

- Assisted with the rebuild of (1) backwash pump.
- Assisted with rebuild of (1) Leona Valley pump and motor.
- Rebuilt (1) Low pressure pump.
- Replaced dated chlorine analyzers at the treatment plant and Leona Valley feeder with simpler, more efficient and more maintenance friendly analyzers.



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

- Replaced dated chlorine analyzers at the treatment plant with simpler, more efficient and more maintenance friendly analyzers.
- Replaced the bridge pumps on (1) of the EWTP bridges. The bridge is the sludge removal equipment that is in each clarifier.
- Modified piping on filter to waste on filters to remove potential cross contamination in the filters.
- Aided in the turbidimeter replacement.
- Assisted in the rebuild of (1) wash-water tank pump.
- Replaced the rapid mixer unit at the treatment plant.

Acton Water Treatment Plant and Vincent Feeder

- Completed installation of a permanent step-up transformer.
- Assisted in the installation of security fencing for (2) portable generators.
- Repaired emergency generator for the treatment plant.

Westside Water Bank and HDWB

- Installed transfer switch on EW-17.
- Rehabbed EW-17, EW-23, and EW-24 wells.
- Rehabbed BR-1 well.
- Replaced seal and components on low pressure pumps at SNIP South pump station.
- Assisted with the repair of the Fairmont 60-inch slide gate.
- Replaced dated chlorine analyzers at the treatment plant and 80th and H disinfection station with simpler, more efficient and more maintenance friendly analyzers.

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.

Water Levels

Groundwater levels across AVEK’s Westside Water Bank, Eastside Water Bank, and Bench Ranch averaged 220 feet in 2021. The Westside Water Bank had the most significant decrease in water levels, dropping by 26 feet from January to December, 2021. The Eastside Water Bank and Bench Ranch had nominal drops in water level, with 8 feet and 6 feet respectively. The table below displays water levels on a monthly level at the Westside, Eastside, and Bench Ranch Water Banks.

2021 WATER BANK/WELLFIELD LEVELS (Below Ground Surface)					
Westside Water Bank		Eastside Water Bank		Bench Ranch	
<i>Month</i>	<i>Level (Average)</i>	<i>Month</i>	<i>Level (Average)</i>	<i>Month</i>	<i>Level (Average)</i>
January	186	January	281	January	155
February	193	February	301	February	157
March	201	March	277	March	158
April	201	April	281	April	157
May	223	May	279	May	159
June	218	June	287	June	158
July	227	July	291	July	169
August	217	August	307	August	163
September	220	September	298	September	162
October	219	October	296	October	160
November	205	November	296	November	160
December	212	December	289	December	161
Average	210	Average	290	Average	160
Note: Water level dropped approx. 26 ft. from Jan. to Dec.		Note: Water level dropped approx. 8 ft. from Jan. to Dec.		Note: Water Level dropped approx. 6 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. 2021 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.

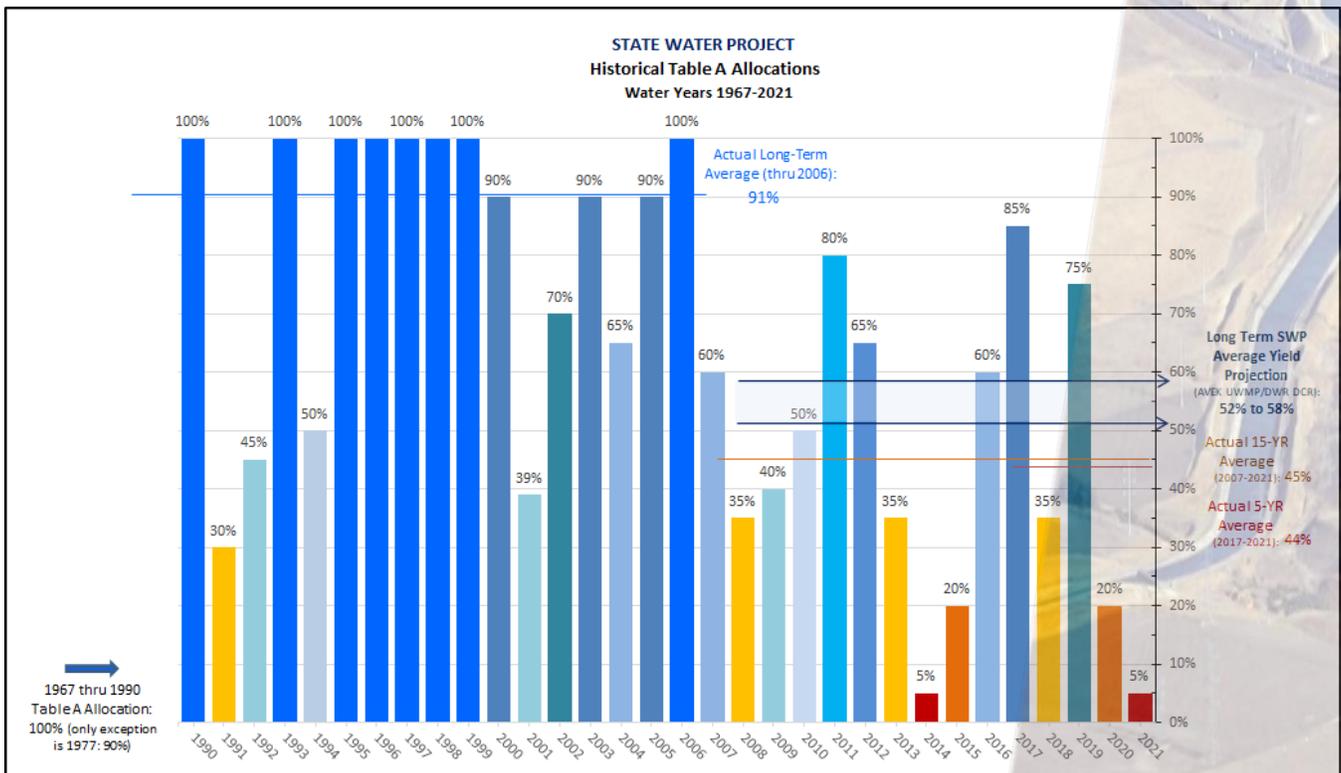
The development of a stand-alone Maintenance Department has provided opportunities for promotion and advancement. With the promotion of a second Assistant Manager of Operations (Water Banking and Maintenance), succession planning continues to be accomplished.

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, 2021 was a very successful year.

Water Resources

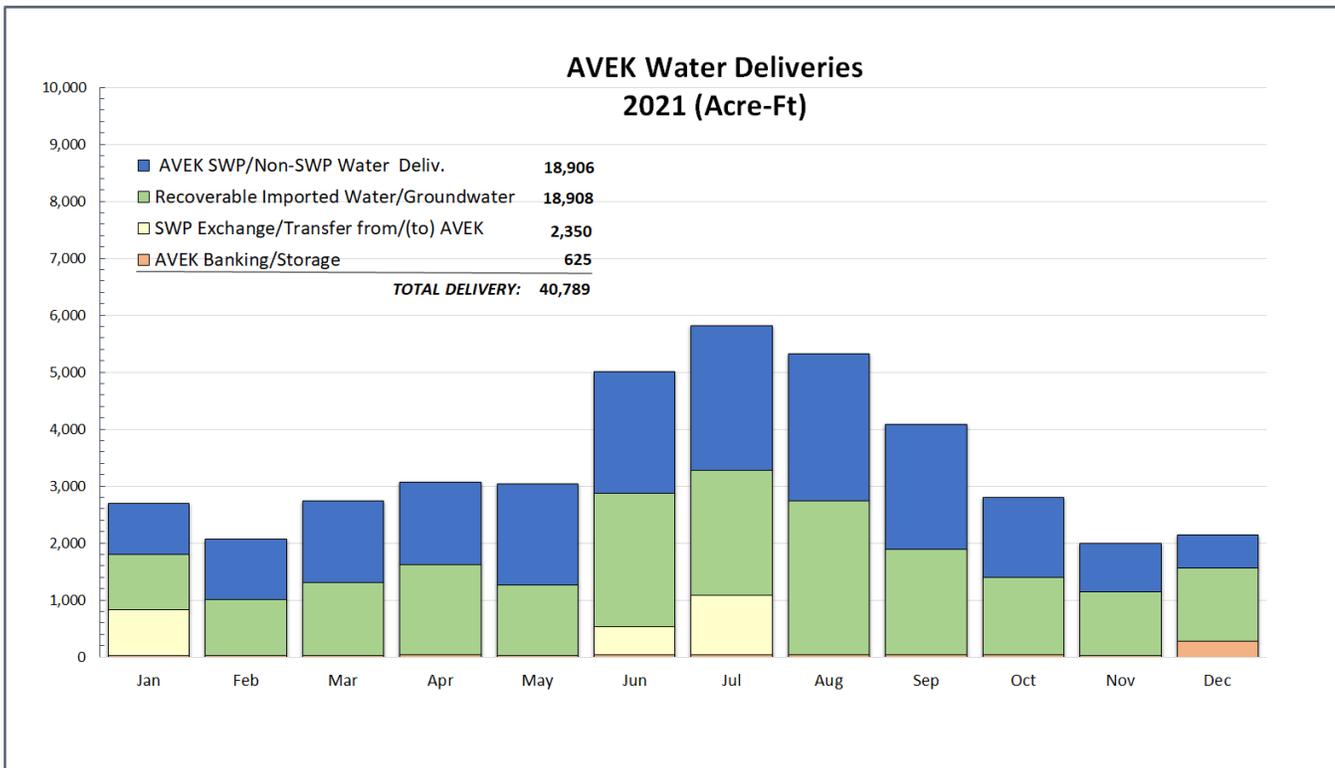
Water Supply & Demand

On March 23, 2021, Contractors to the State Water Project (SWP) including AVEK received the final word on SWP water supplies for the year. It was expected, given the previous Dry Water Year of 2020 and the lack of precipitation in the State, that AVEK would receive only a fraction of their contracted supplies for the year. The year did come up short, becoming only the second time in the history that the SWP Contractors would receive a 5% (7,242 acre-feet) Final Allocation of Table A supply. A fortunate benefit came with an additional supply of Carryover water stored from previous years, and the availability of Dry Year Purchase Water. These waters added 15,900 acre-feet of water for delivery into AVEK’s service area.



Once again in 2021, with the water needs of the greater Antelope Valley region first addressed, AVEK was then able to coordinate with Agency partners (including customers and other SWP Contractors) and the Department of Water Resources in fulfilling 2,350 acre-feet of transfer & exchange obligation. Another net 3,400 acre-feet of local groundwater was transferred through 2021 obligations, helping to support water demands seen by other local entities.

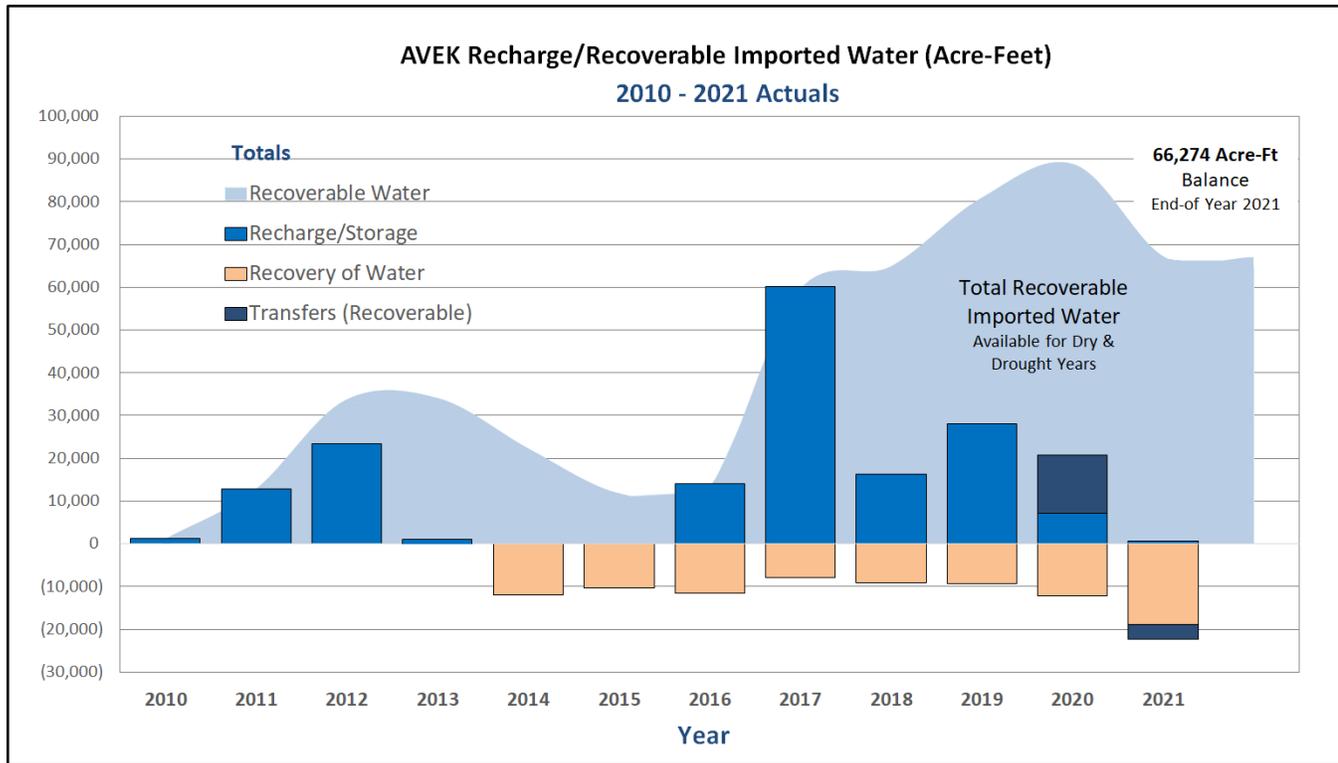
Water Deliveries



AVEK Water Deliveries (Acre-Feet)													
Water Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
SWP/Non-SWP Water	888	1,063	1,433	1,443	1,781	2,136	2,529	2,581	2,199	1,414	854	585	18,906
Recovered Imported Water	970	985	1,283	1,578	1,233	2,342	2,199	2,704	1,847	1,358	1,116	1,292	18,908
SWP Exchange/Transfer	805	0	0	0	0	500	1,045	0	0	0	0	0	2,350
SWP Banking/Storage	28	22	30	42	31	35	37	32	35	34	29	271	626
TOTAL	2,691	2,070	2,746	3,063	3,045	5,013	5,810	5,317	4,081	2,806	1,999	2,148	40,789

Statewide Drought continued to drag on into 2021, even amid mandatory restrictions governing outdoor water use in California. While State officials sought to lessen the blow of this Drought, AVEK drew on its ability to recover previously stored water supplies from its local banking facilities. This gave AVEK an advantage in the proper management of water resources. With the success of banking water during Wet Years such as 2017 and 2019, over 88,000 acre-feet of water supply was stored locally at the start of 2021. Even after delivering an annual record high amount of groundwater to its customers in 2021, AVEK still retained a balance of over 66,000 acre-feet of stored water supply coming into 2022.

Local Recharge & Recovery



AVEK Recharge/Recoverable Imported Water (Acre-Feet) 2010 - 2021				
Calendar Year	Recharged/Banked	Transferred to/(from)	Recovered Water	Recoverable Balance
2010	413	0	0	371
2011	12,831	0	0	11,919
2012	23,384	0	0	32,965
2013	371	0	0	33,299
2014	0	0	11,888	21,410
2015	0	0	10,358	11,052
2016	14,086	0	11,512	12,217
2017	60,240	0	7,868	58,565
2018	16,329	0	9,162	64,098
2019	28,068	0	9,234	80,126
2020	7,213	13,630	12,228	88,019
2021	625	(3,400)	18,908	66,274
Total	163,559	10,230	91,160	66,274

Since 2010, the Agency has recharged a combined total of 163,559 acre-feet of water at all its banking sites. Over half of this total was banked in the single year of 2017, primarily at AVEK’s Westside Water Bank. Other banking sites include Eastside Water Bank, Upper Amargosa Creek and Big Rock Creek Recharge sites.

The Water Recharge of SWP supplies to AVEK banking sites was very limited in 2021 due to dry hydrology throughout the State. AVEK’s Water Banking sites took delivery of only 626 acre-feet in recharge. The table below displays 2021’s monthly recharge, transfer obligations, recovered water, and recoverable balance.

By the end of 2021, AVEK had retained 66,274 acre-feet of recoverable stored water supply.

AVEK Recharge/Recoverable Imported Water (Acre-Feet) 2021														
Water Type	Jan 1st 2021	Month												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Recharged/Banked		28	22	30	42	31	35	37	32	35	34	29	271	626
Transferred to/(from)		0	0	1,087	0	0	0	0	0	0	(1,863)	(1,561)	(1,064)	(3,400)
Recovered Water		970	985	1,283	1,578	1,233	2,342	2,199	2,704	1,847	1,358	1,116	1,292	18,908
TOTAL		(945)	(966)	(169)	(1,540)	(1,206)	(2,311)	(2,166)	(2,675)	(1,816)	(3,190)	(2,651)	(2,112)	(21,745)
Recoverable Balance	88,019	87,074	86,109	85,940	84,400	83,194	80,883	78,718	76,043	74,227	71,037	68,387	66,274	66,274

Water Resource Related Projects

- The AVEK 2020 Urban Water Management Plan was completed and submitted to the Department of Water Resources (DWR) in September.
- Participated in 2021 Dry Year Water Purchase Program. In preparation for 2022, AVEK’s Initial Pump-In Program Proposal was submitted to the State for approval.
- SWP Water Exchange Amendments developed in partnership with Littlerock Creek Irrigation District and DWR.
- Regular Water Supply/Banking update presentations for Los Angeles County Waterworks Districts (LACWD) and Agency Management Staff.
- Quarterly/Annual Groundwater Reporting to the Antelope Valley Watermaster.
- Participated in State and local, multi-agency efforts for Water Conservation messaging.

Additional Project Tasks Included:

- AVEK Final Draft Water Service Agreements and Rules & Regulations for Water Service were completed for customer review and execution. Customer field visits were completed as part of the final stages of this project expected for completion in 2022.
- Water Service/Wheeling Agreements were developed/renewed for several Customers including Edwards Air Force Base, Boron CSD, North Edwards Water District, and Ceres Enterprises.
- Support for Agency 2022 Water Rates Study, AV Integrated Regional Water Management Planning, and LACWD AV Water Supply Resiliency Planning.

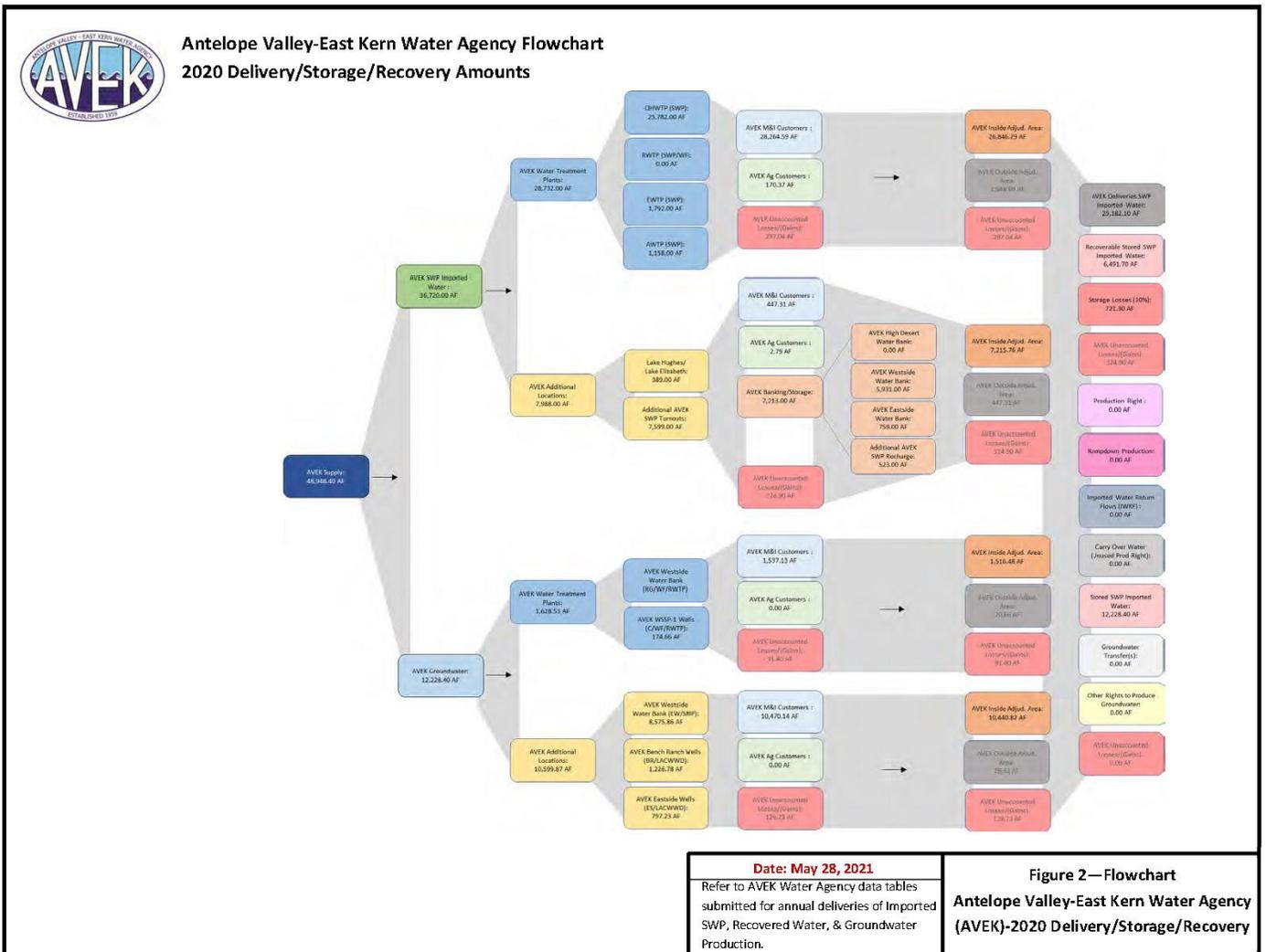
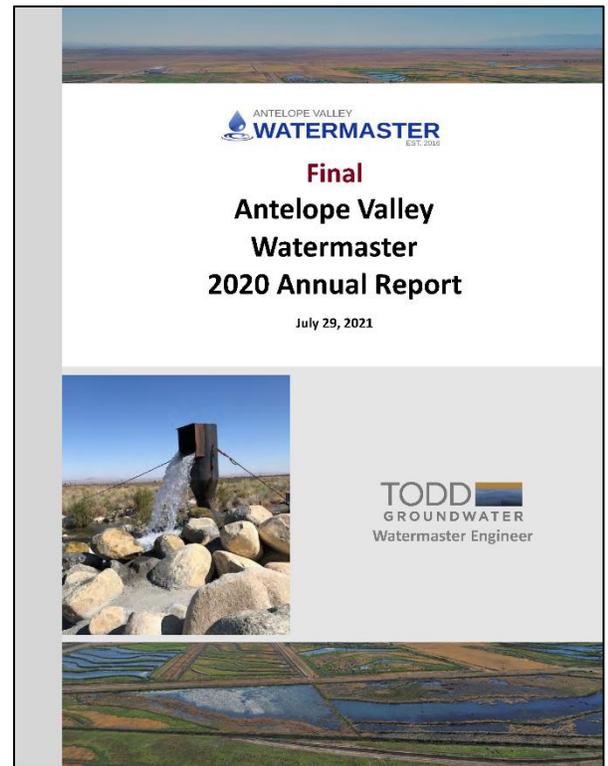
Supply & Demand Reporting

AVEK Water Resources staff maintain Water Supply and Demand planning reports for projecting, monitoring, and reporting the water outlook for the Agency. In 2021, AVEK continued to refine its use of management tools such as Latis in improving water management accuracy and efficiency. The Agency saw an approved method of monthly meter reading, usage, billing, and reporting of customer water use in 2021.

- Water Supply/Demand/Banking Plan Report - Regular meetings with Agency Administration, Operations, and customer staff focus on reporting and forecasting of 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 water supply scenarios.

- Groundwater Production Reports** – Agency groundwater production is recorded, monitored, and reported to the Antelope Valley Watermaster (AVW) on a quarterly and annual basis. This information is used for public notice of Agency 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 and projections. In 2021, AVEK delivered 18,700 acre-feet of groundwater to its customers.



- Transfers/Exchanges Report – Annual development of SWP transfer and exchange agreements are followed up with oversight and reporting to agreement partners and Agency staff and management. In addition to SWP water supplies, local groundwater transfers were managed. Six (6) SWP and groundwater transfer transactions were managed and completed in 2021.

Water Conservation Outreach

Although public outreach/education in 2021 continued to be limited due to COVID-19 restrictions, AVEK was able to conduct individual field visits with customers as it sought to complete the final stages of amending their Water Service Agreements and Rules & Regulations for Water Service. AVEK also participated in Drought messaging efforts with other local water suppliers.

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 2021 staff processed 10,089 samples, with a total of 37,515 analytes.



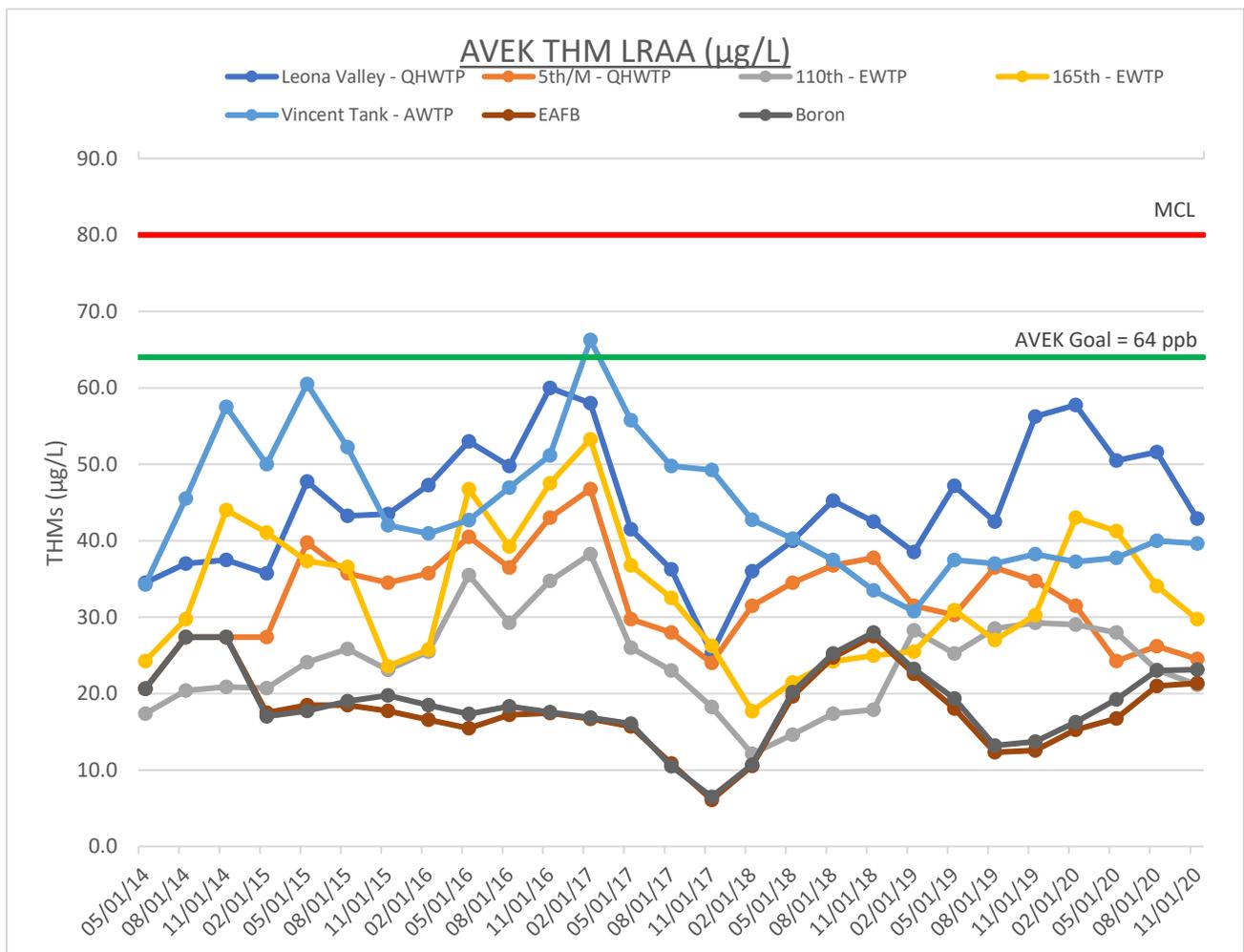
Arguably the most important service the Laboratory provides is bacteriological testing. In 2021 staff analyzed 7,159 tests for total coliform and E.coli. 4,869 of those tests were provided for the Agency. The remaining 2,290 bacteriological samples were analyzed for 145 various local small water systems, water haulers, well maintenance companies, and individual well owners. A list of 2021 Laboratory customers is provided

2021 AVEK Laboratory Customers

40th Street East MWC	Department of Water Resources	Piute Mutual Water Company
Abundant Water Wells	Eastside Union Elementary	Rancho Ybarra Camp
Acton Water Company	Edgemont Acres	Road Runner Pump
Aerial Acres	El Dorado Mutual Water Co.	Rosamond CSD
Agua Dulce Elementary	Evergreen MWC	Sand Canyon Oaks MWC
Airway Mutual Water Company	Golden Sands MHP	Seeber's Excavation & Hauling
Aloha Pure Water	Green Valley CWD	Shadow Acres MWC
Alpine Springs MHP	Grewe/Bryant Pump	Simone's Crystal Pure Water
American Water Wells	Halfway House Café	SPV Water Company
Anchor Retreat	Hughes Elizabeth Lakes USD	St. Andrew's Abbey
Angeles Crest Christian Camp	Huttopia Paradise Springs	Sundale Mutual Water Company
Antelope Park MWC	Joshua Acres MWC	Sunnyside Farms MWC
APC Plumbing	Kirk Business Center	Sunset Apartments
Aqua J Mutual Water Company	LA County Water Works	Sweet Water Ventures
AV Airport Express	Lake Elizabeth MWC	Tarzana Treatment
AV Progressive Club	Lancaster Slaughter House	Tejon Ranch
AV Solar	Lancaster Trailer Park	The Oaks
Baxter Mutual Water Company	Land Projects MWC	The Village
Bishop Services Inc.	Landale Mutual Water Company	Tierra Bonita
Bleich Flat	Le Chene	TNTruss
Blue Skies Living MHP	Lily of the Valley MHP	Tweedy Lake Club
Boeing	Lockheed Martin Aeronautics	US Borax
Boetsch Well Drilling	Lunde Water Company	Waste Management
Boron CSD	Mettler Valley MWC	Wendy's Water Truck
Bryant Griffin Pump	Mitchell's Avenue E Park	West Valley CWD
CA Dept. of Parks and Rec.	Morrison Well Maintenance	Western Skies MHP
Californian Mobile Home Park	National O&M	Westside Park
Canyon Creek Properties	Neenach Market and Café	Westside United School District
Carson Water	Newcomb's Ranch	White Fence Farms
City of Lancaster	North Edwards MWC	Willow Water
Colorado MWC	Painted Turtle Camp	Wilsona Gardens
Daily Nuts	Palm Ranch Irrigation District	Winterhaven Mobile Home Park
Del Sur Gardens	Patriot Plumbing	Young Nak Presbyterian
Desert Lake CSD	Pauley Water System	44 Private Well Owners

In 2021 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 50 ug/L (38% below the MCL) and we finished the year with maximum running annual averages of 20 ug/L (75% below the MCL) in our Kern County system and 41 ug/L (49% 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

- Published annual Water Quality Reports
- Completion of all blind performance evaluation tests required by ELAP to maintain our certification with a 100% pass rate
- Completed the method application training for the 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 1 new recruitment in 2021. Internal promotions resulted in a new Assistant Manager of Operations for Water Treatment and Production. The Agency ended 2021 with 46 full time employees.

Training and Safety

Agency Staff completed Hazmat and Right to Know and CPR training.

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 2021 was conducted from October 1, 2021 through November 1, 2021. Anthem PPO's and Consumer Driven Health Plans (CDHP) saw a 5% decrease in plan costs while the Anthem HMO plan had a 4.2% cost increase and Kasier plans had a 4.3% increase.

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 26 participants and their families (up from 25), saving the Agency \$45,848.20.

Total Compensation Study

In April 2020, Koff & Associates was contracted to perform a total compensation survey. Recommendations from the survey for salary ranges were incorporated in the 2021 / 2022 personnel budget to ensure AVEK stays competitive in the job market for retention and recruitment.

Covid-19

Throughout 2021, the AVEK continued to implement COVID-19 protocols as recommended by the Center for Disease Control, enabling the Agency to operate without major interruptions. Board and Committee meetings were held virtually and travel for State Water Contractors meetings and events was suspended.

Employee Morale

Throughout 2021, AVEK employees participated in several socially distanced all-hands meetings special events. An online Employee Newsletter helped keep Agency staff informed and engaged internally on topics such as new hires, accomplishments, and personal milestones.



Administration

State Water Contractors

AVEK's management team 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 Board and sub-committee meetings centered on the following key topics:

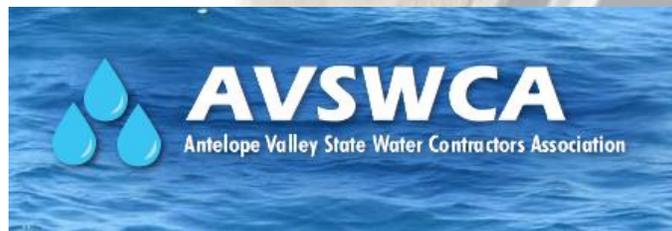
- Audit Finance
- Energy
- OME Dam Safety
- Operations
- Planning
- Delta Conveyance Project
- Biological Opinions
- Incidental Take Permit
- Voluntary Agreements
- Water Management Tools
- Long-term State Water Project Operations



The Agency supported a number of joint press releases, media statements and legislative initiatives to build a shared voice around relevant topics affecting the water community and work toward shared goals for building water supply reliability. Through SWC, water contractors collaboratively advocated for increased state funding to support infrastructure projects that build drought resiliency, including AVEK's SNIP Phase II Project, a 6.5 mile potable water pipeline that will complete a critical link between the Westside Water Bank and the Quartz Hill Water Treatment Plant.

Antelope Valley State Water Contractors Association

Working together with Palmdale Water District and Littlerock Creek Irrigation District, the Agency took an active role in administering 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 Division 2 Director served as Commissioner with Division 1 Director as an alternate.

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. Key milestones for the Association in 2021 include:

- Participated in the development of a Mutual Response Agreement for Antelope Valley Agencies
- Served as the grant manager for the Proposition 1, Round 1 IRWM Implementation Grant
- Approved an amended and restate Memorandum of Understanding with the Antelope Valley Regional Water Management Group to continue funding the grant administration and 25% share for the United States Geological Survey Groundwater Monitoring Program.
- Finalized the Big Rock Creek Joint Groundwater Recharge Project Feasibility Study

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 the final year of a 7-year court ordered rampdown of production to the native basin safe yield.

AVEK'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 hybrid virtual / in-person monthly Board meetings and various committee and administration meetings, including Agenda development and records management, all while maintaining a balanced budget.

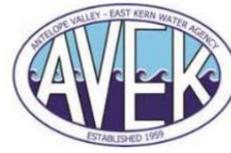
Board Activities

As the COVID-19 pandemic extended through 2021, AVEK's Board voted to continue fully virtual meetings under the provisions of Assembly Bill 361. The Agency conducted a combined total of over 100 Board and Committee meetings.

The Agency website was utilized throughout the year to disseminate accurate, timely information to Board members and the public, share news and engage with industry partners.

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
- AV Edge
- Water Education Foundation
- American Water Works Association
- Association of California Water Agencies
- Urban Water Institute
- California Foundation on the Environment and Economy



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THIS ITEM APPEARS ON

AVEK
4TH QUARTER 2020
NEWSLETTER

ZOOM FACILITATES BOARD MEETINGS DURING PANDEMIC

Communications

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

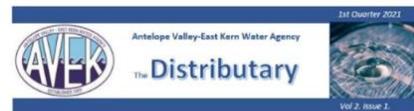
- Delivery of quarterly customer and employee newsletters
- Distribution of press releases
- Use of Agency website to share timely, relevant information
- Engagement with industry groups and legislators

Events

While in-person events were limited for a portion of the year due to COVID-19 protocols, the Agency conducted 5 facilities tours and presentations for the following groups:

- Kellar Williams Realty
- Valley Water

AVEK 1st Quarter 2021 Newsletter



George Lane Returns to Serve as AVEK Director
Former Antelope Valley-East Kern Water Agency Director George Lane accepted an appointment to fill AVEK's Division 4 seat, a vacancy created following the untimely death of his 34-year-old son Justin Lane, who was involved in a fatal traffic accident on January 1, 2021.

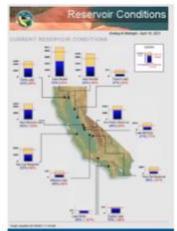
READ MORE +

DWR ANNOUNCES 5% ALLOCATION FOR SWP CONTRACTORS
Hope for an increased allocation of imported surface water this year dimmed when the California Department of Water Resources notified State Water Project Contractors, including the Antelope Valley-East Kern Water Agency, of a decrease in supplies from 10% to 5%.

READ MORE +

New Pipes and Valves Keep Water Deliveries Flowing
As community residents settled into 2021, crews from AVEK tended to a major maintenance project in Leona Valley.

READ MORE +



MARCH GM REPORT: ANOTHER DRY YEAR AHEAD
On Feb. 23, 2021, AVEK General Manager Dwayne Chisam informed Agency Directors at their board meeting that Californians, including those in the Antelope Valley, will face another dry year.

READ MORE +

2020 ANNUAL WATER QUALITY REPORTS ARE AVAILABLE - AVEK MEETS ALL STATE AND FEDERAL REQUIREMENTS

- California Foundation on the Environment and Economy
- Rosamond Municipal Advisory Council
- Assemblyman Tom Lackey and Senator Scott Wilk and Staff

Presentation topics included water supply, water quality, the SNIP Phase II Project and water storage and recovery projects.

Through continued engagement, local elected officials supported AVEK’s initiatives, advocating for state budget funding for drought resiliency projects and bringing forth legislation to provide new funding opportunities for water storage and infrastructure projects.



Garcia introduces water bill

FROM A PRESS RELEASE Mar 7, 2021 0



GARCIA

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WASHINGTON — Rep. Mike Garcia introduced a bill Wednesday to extend the bipartisan California water provisions of the Water Infrastructure Improvements for the Nation Act through fiscal year 2028.

Garcia's bill would enact a seven-year extension for critical water supply provisions in the WIIN Act and thus improve California's access to water.

The bill is co-sponsored by the entire House Republican California delegation — Kevin McCarthy (23rd District), Doug LaMalfa (First), Tom McClintock (Fourth), Jay Obernolte (Eighth), David Valadao (21st), Devin Nunes (22nd), Young Kim (39th), Ken Calvert (42nd), Michelle Steel (48th) and Darrell Issa (50th).