

# Supplemental Information Packet

Presentation for Agenda Item 4  
Supplemental Packet Date: March 22, 2022  
A. Gomez

**Supplemental Information:**

Any Agenda related public documents received and distributed to a majority of the Water Commission after the Agenda Packet is printed are included in Supplemental Packets. Supplemental Packets are produced as needed. The Supplemental Packet is available in the City Clerk's Office, 501 Poli Street, Room 204, Ventura, during normal business hours as well as on the City's Website - <https://www.cityofventura.ca.gov/716/Water-Commission>.

# Draft

## 2022 Comprehensive Water Resources Report

Jennifer Tribo  
Senior Management Analyst

Water Commission Meeting  
March 22, 2022

- Annual analysis of balance of short term and long-term water supply and demand.
- Standardized method to estimate water supply demands for development projects.
- Establishes whether a water shortage exists, and, if so, what shortage Stage is recommended, per the 2020 Water Shortage Event Contingency Plan (WSECP).

- **Reduce the length of the overall report**
- **Shorten the Executive Summary**
  - Summarize the major findings and conclusions.
  - Urge continued conservation.
  - Identify if a water shortage stage has been declared.

**Water Loss Factor:** TBD

**Baseline Demand:** Utilized the 5-year average for baseline demand.

**Water Supply Projections:** Water supply sources have been updated to consider drought conditions, recent regulatory changes, and operational constraints.

**Section 6 Changes:** Changed from “Conclusions and Discussion” to “Comparison of Supply and Demand Projections”.

**Shortage Stage Declaration:** Has been moved from Sections 4 and 5 to Section 6 and updated to reflect changes to the 2020 WSECP.

# Demand and Supply Projections vs Actuals for 2021

	2021 Drought Demand Projections	2021 Drought Supply Projection	2021 Actuals
Casitas		3,798	3,721
Ventura River		736	1,364
Mound Basin		3,270	1,855
Oxnard Plain Basin		5,304	4,701
Santa Paula Basin		2,661	2,366
Recycled Water		576	612
<b>TOTAL</b>	<b>14,210</b>	<b>16,345</b>	<b>14,619</b>

# Baseline Demand

Table 3-3				
Historical Annual Water Consumption				
Calendar Year	Consumption <sup>[1]</sup> (AF)	Averages, AFY <sup>[2]</sup>		
		3-year	5-year	10-year
2012	18,004		16,236	15,169
2013	17,723			
2014	16,995			
2015	14,194			
2016	14,262			
2017	13,973		14,102	
2018	14,211			
2019	13,575			
2020	14,130	14,108		
2021	14,620			

# Table 3-4: Calculation of Water Demand Impact

Water Demand Factor Classification	Quantity <sup>[1]</sup>		Estimated Future Water Demand			Casitas Quantity		Estimated Future Water Demand (within Casitas Boundary)				
Single-Family	355	du	104,370	gpd	117	AFY	0	du	0	gpd	0	AFY
Multi-Family	2,122	du	443,498	gpd	488	AFY	1,338	du	279,642	gpd	308	AFY
Non-Residential	245.4	ksf	46,904.68	gpd	52.54	AFY	53.0	ksf	11,605.7	gpd	13	AFY
Self-Storage	1.5	acre	429	gpd	0.48	AFY	0.0	ac	0	gpd	0	AFY
Assisted Living	0	bed	0	gpd	0	AFY	0	bed	0	gpd	0	AFY
Hotel w/ Restaurant	125	room	21,500	gpd	24	AFY	0	room	0	gpd	0	AFY
Hotel/motel (no restaurant)	0	room	0	gpd	0	AFY	0	room	0	gpd	0	AFY
Park/Golf Course	0	ac	0	gpd	0	AFY	0	ac	0	gpd	0	AFY
School	0	student	0	gpd	0	AFY	0	bed	0	gpd	0	AFY
PROJ-5810 Ventura Botanical Gardens <sup>[2][3]</sup>	-		119,627	gpd	134	AFY	-		119,627	gpd	134	AFY
PROJ-11236 Mobile Gas <sup>[4]</sup>	-		2,196	gpd	2.46	AFY	-		-		0	AFY
PROJ-14017 VA Clinic	--		12,962	gpd	14.52	AFY	-		-		0	
<b>Total</b>			<b>743,654</b>	<b>gpd</b>	<b>833</b>	<b>AFY</b>			<b>406,198</b>	<b>gpd</b>	<b>455</b>	<b>AFY</b>



# Projected Demand

**Table 3-6: Projected Water Demand Growth per Absorption Rate**

Year	Demand Allocation <sup>[1]</sup> (AFY)	Population Growth <sup>[2]</sup>	Projected Water Demand <sup>[3]</sup> (AFY)
Baseline Demand			<b>14,102</b>
2022	166.6		14,269
2023	166.6		14,435
2024	166.6		14,602
2025	166.6		14,768
2026	166.6		14,935
2027		0.54%	15,016
2028		0.54%	15,098
2029		0.54%	15,180
2030		0.54%	15,263
<b>Totals</b>	<b>833</b>		

# Water Supply Capacity

**Table 4-1**

<b>Water Supply Source</b>	<b>Supply Capacity (AFY)</b>
Casitas Municipal Water District <sup>[1]</sup>	5,490
Ventura River / Foster Park	4,200
Mound Groundwater Basin	4,000
Oxnard Plain Groundwater Basin	5,304
Santa Paula Groundwater Basin <sup>[2]</sup>	3,000
City Acquired Water Rights <sup>[3]</sup>	126
Recycled Water	577
<b>TOTAL</b>	<b>22,697 AF</b>

# Current Water Supply 2022 (Drought)

**Table 4-2**

Water Supply Source	Current Supply 2022 (AF)
Casitas Municipal Water District <sup>[1]</sup>	3,843
Ventura River / Foster Park	1,000
Mound Groundwater Basin	3,500
Oxnard Plain Groundwater Basin	5,304
Santa Paula Groundwater Basin <sup>[2]</sup>	3,000
Recycled Water	577
<b>TOTAL</b>	<b>17,224 AF</b>

# Projected Future Water Supply: Table 4-3

Water Supply Source	Existing	Existing	Future		
	Supply Capacity	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)	2030 Normal Supply (AF)
Casitas Municipal Water District	5,490	3,843	3,864	3,369	5,965
Ventura River / Foster Park	4,200	1,000	1,298	1,298	4,200
Mound Groundwater Basin	4,000	3,500	4,000	4,000	4,000
Oxnard Plain Groundwater Basin	5,304	5,304	5,174	5,045	4,267
<u>Santa Paula Groundwater Basin</u>					
Original City Allocation	3,000	3,000	3,000	3,000	3,000
City Acquired Water Rights	126				126
Recycled Water	577	577	577	577	577
VenturaWaterPure	0	0	0	0	2,800
State Water	0	0	0	0	1,300
<b>TOTAL</b>	<b>22,697</b>	<b>17,224</b>	<b>17,398</b>	<b>17,323</b>	<b>26,252</b>

	Existing	Future	
Water Supply Source	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)
Casitas Municipal Water District	3,843	3,349	3,403

Assumptions:

- 2022 drought impact = Stage 3
- 2023 and 2024= Stage 4

Justification: 34.7% capacity on 3/9/2022.

Demand Projections:

- Added projects completed since 2014 and those to be completed by end of 2022.
- Assumed under construction and approved projects would be completed within the next 5 years.

# Projected Supply: Ventura River / Foster Park

	Existing	Future	
Water Supply Source	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)
Ventura River / Foster Park	1,000	1,298	1,298

## Assumptions:

- 2022 drought impact = Assumes Nye Wells 7 and 8 are turned off by the end of May due to projected low stream flows. Intake facility is not currently operable.
- 2023 and 2024 drought impact = Most recent driest year (2015)

# Projected Supply: Mound Groundwater Basin

	Existing	Future	
Water Supply Source	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)
Mound Groundwater Basin	3,500	4,000	4,000

## Assumptions:

- 2022 drought impact = estimated annual production capacity of Mound Well 1 Victoria 2 plus anticipated production from Mound 3 in summer 2022.
- 2023 and 2024= 10-year average (2000 to 2009).

## Justification:

- Mound Well 3 operational in summer 2022 and Mound Well 2 operational 2023

	Existing	Future	
Water Supply Source	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)
Oxnard Plain Groundwater Basin	5,304	5,174	5,045

Assumptions:

- 2022 drought impact = based on average pumping for base period 2005-2014 = 5,304 AF
- 2023 and 2024= Anticipated linear ramp down to meet estimated sustainable yield by 2040.

Justification:

- FCGMA new allocation system effective October 1, 2020



	Existing	Future	
Water Supply Source	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)
<u>Santa Paula Groundwater Basin</u>	3,000	3,000	3,000

Assumptions:

- 2023 and 2024 drought impact = estimated annual production capacity of Saticoy Well #3

Justification:

- Saticoy Well 2 used as backup
- Assumes construction of Saticoy Well #4, not anticipated to be producing water until 2025

# Projected Supply: Recycled Water

	Existing	Future	
Water Supply Source	2022 Supply Drought Impact (AF)	2023 Supply Drought Impact (AF)	2024 Supply Drought Impact (AF)
Recycled Water	577	577	577

## Assumptions:

- Based on five-year average of recycled water demand (2017 to 2021).

# 2020 WSECP Table 4-1

**Table 4-1: Water Shortage Stages and Triggers/Demand Reduction Goals**

	Trigger	Demand Reduction Goal
Advisory Stage 1	Annual Supply Projection is between 0 and 10% below Demand Projection	10% Voluntary
Moderate Stage 2	Annual Supply Projection is greater than or equal to 10% and less than 20% below Demand Projection	10% Mandatory
Stage 3	Annual Supply Projection is greater than or equal to 20% and less than 30% below Demand Projection	20% Mandatory
Severe Stage 4	Annual Supply Projection is greater than or equal to 30% and less than 40% below Demand Projection	30% Mandatory
Stage 5	Annual Supply Projection is greater than or equal to 40% and less than 50% below Demand Projection	40% Mandatory
Critical Stage 6	Annual Supply Projection is greater than or equal to 50% of Demand Projection	50% Mandatory

- 2022 Supply Projection = 17,224 AF
- 2022 Demand Projection = 14,269 AF
- Climate adjustment factor = 5%
- Adjusted 2022 Demand Projection = 14,982 AF

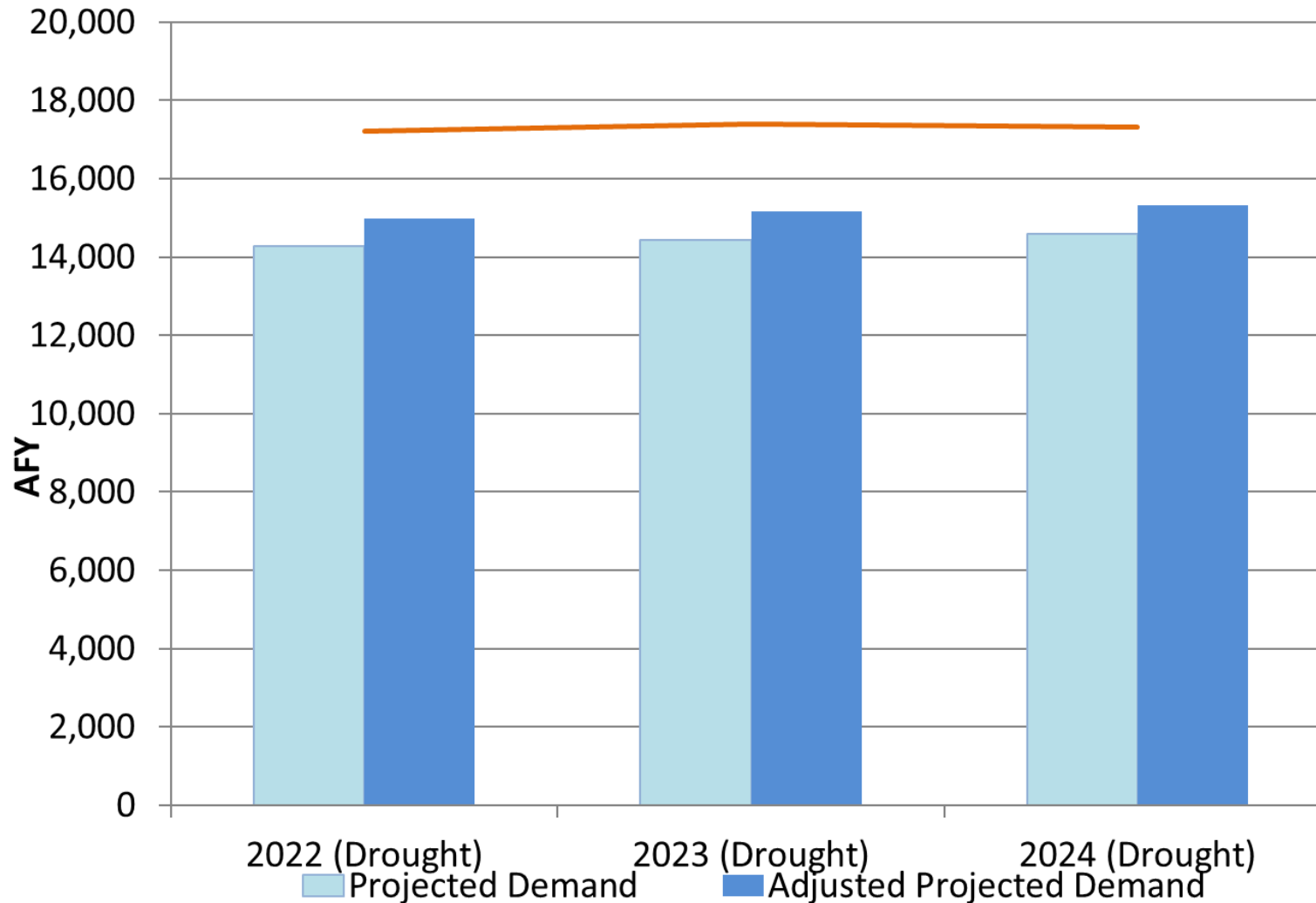
**Result: Water Shortage Stage not triggered because the Demand Projection is less than the Supply Projection.**

# Table 6-1: Near Term Demand vs. Supply Comparison

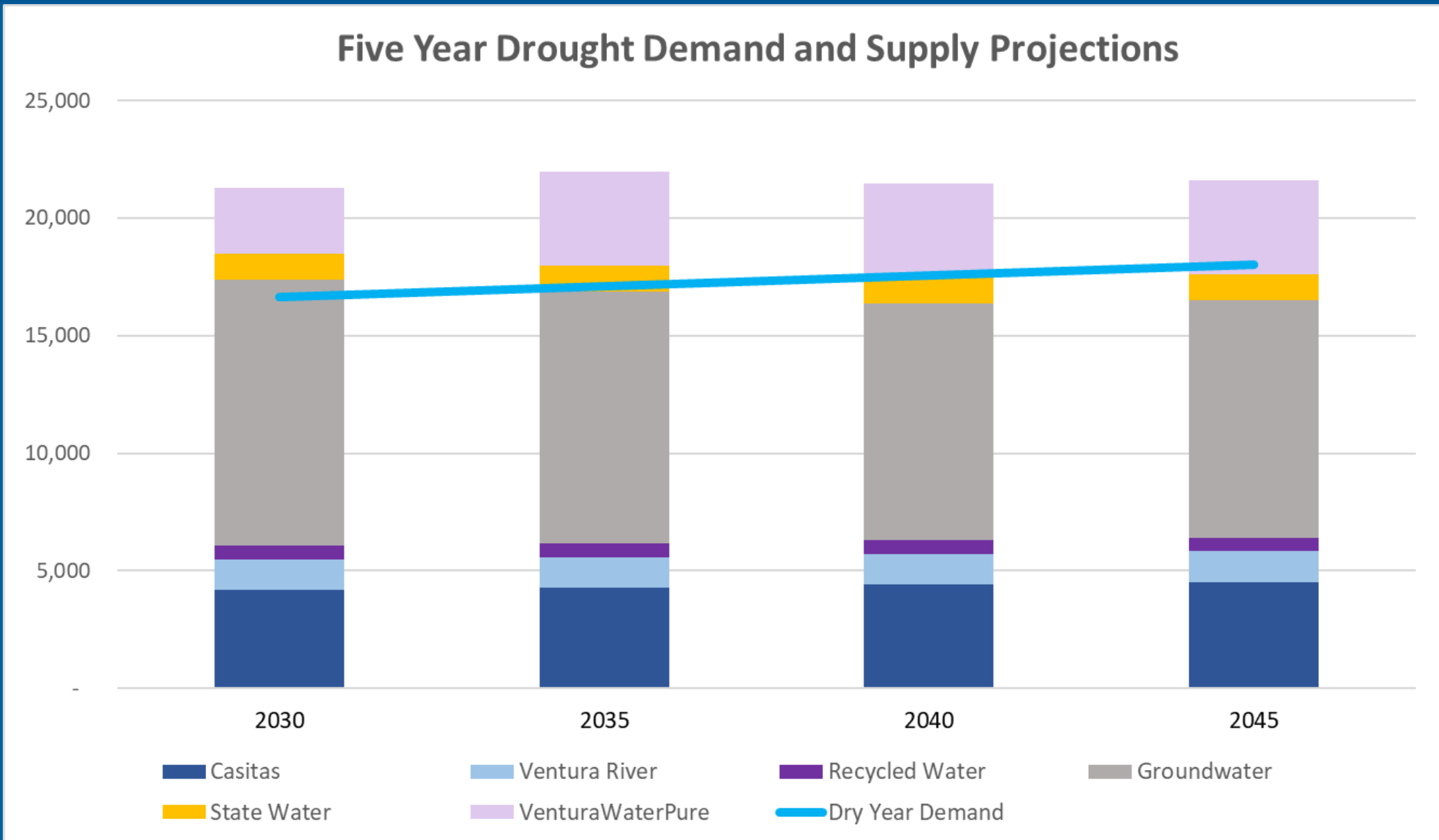
Year	Actual Demand <sup>[1]</sup> AFY	Projected Demand <sup>[2]</sup> AFY	Adjusted Projected Demand AFY	Projected Supply <sup>[3][5]</sup>		Adjusted Percent Difference
				AFY	% Diff.	
2018	14,211	16,035				
2019	13,575	15,605				
2020	14,130	15,789				
2021	14,620	14,210	15,631			
2022 (Drought)		14,269	14,982	17,224	20.7%	14.96%
2023 (Drought)		14,435	15,157	17,398	20.5%	14.79%
2024 (Drought)		14,602	15,332	17,323	18.6%	12.99%

# Near-Term Demand vs. Supply Comparison

Figure 6-1: Near-term Demand vs. Supply Comparison



# Figure 6-2: Five Year Drought Demand and Supply Projections from 2020 UWMP



# Next Steps

- Comments on Draft 2022 CWRR due – Friday, April 1, 2022.
  - E-mail to Amanda DeLeon at [adeleon@cityofventura.ca.gov](mailto:adeleon@cityofventura.ca.gov)
- Discussion of comment matrix and Final Draft 2022 CWRR
  - April 26, 2022 Water Commission meeting.
- Final 2022 CWRR to the City Council – June 2022.



# Recommendation

Receive this written report and an oral presentation, and provide comments, on the Draft 2022 Comprehensive Water Resources Report (CWRR).