

# Supplemental Information Packet

Agenda Related Items – Meeting April 23, 2019

Supplemental Packet Date: April 23, 2019

D. Martinez

**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>.



# ADMINISTRATIVE REPORT

Date: April 23, 2019  
Agenda Item No: 2  
Meeting Date: April 23, 2019

**To: Ventura Water Commission**  
**From: Susan Rungren, Ventura Water Interim General Manager**  
**Subject: Redlined Draft 2019 Comprehensive Water Resources Report**

Attached are additional materials for Agenda Item 2 (Redlined Draft 2019 Comprehensive Water Resources Report) Attachment B. Attached is a copy of additional comments submitted by Commissioner McCord that were inadvertently omitted from the Agenda Packet. Also attached is a draft version of Table 6-2 of the Draft CWRR that was not available in time for the original Agenda Packet.

**CITY OF VENTURA WATER SUPPLY SOURCES - POSSIBILITIES, CHALLENGES AND UNCERTAINTIES**

Supply Component	Range of Available Data (Years)	Historical Range (AFY)	Estimated Minimum Supply Volume (AFY)	Estimated Maximum Supply Volume (AFY)	Potential Environmental/Regulatory/Legal Constraints	Potential Climate Change Impacts	Sensitivity to Annual Variations in Precipitation	Potential Opportunities to Increase Supply	Infrastructural Challenges
Oxnard Plain Groundwater Basin	1962-2018	802-6,177	3,862	3,862	Current Supply reflects current allocation from Fox Canyon Groundwater Management Agency (FCGMA). Allocation will be refined in the next year as the Groundwater Sustainability Plan (GSP) is completed.	Sustainable Yield of the Basin will be established utilizing historical hydrology and historical pumpage. Groundwater Sustainability Plans are required to consider impacts related to climate change when establishing sustainable yield.	<b>Not sensitive</b> - City is allocated a portion of basin sustainable yield which normalizes annual fluctuations in precipitation.	<b>Limited</b> - Initial allocation may be higher, but will likely decrease annually over the next 20 years. Water Supply projects funded and constructed through the FCGMA could increase allocations. Future trading program could allow the City to buy or sell annual allocations.	Continued maintenance and replacement of groundwater wells.
Santa Paula Groundwater Basin	1969-2018	0-3,096	1,182	3,041	Current Supply reflects current allocation according to a court stipulated judgment.	Santa Paula Basin Technical Advisory Committee (TAC) is charged with establishing a program to "monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of inflow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality." The Judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the safe yield of the basin.	<b>Not sensitive</b> - City received an annual allocation of groundwater according to the Judgment.	<b>Limited</b> - "Adjudicated" Basin, would require reassessment of basin safe yield. Allocations could decrease if triggers are met due to extended dry conditions. Allocation is based on a rolling 7 year running average, so City could pump additional water in some years.	Continued maintenance and replacement of groundwater wells.
Mound Basin	1982-2018	213-5,546	1,963	4,000	The Mound Basin Groundwater Sustainability Agency (MBGSA) will determine the sustainable yield of the Basin through the GSP development process.	Sustainable Yield of the Basin will be established utilizing historical hydrology and historical pumpage. Groundwater Sustainability Plans are required to consider impacts related to climate change when establishing sustainable yield.	<b>Not sensitive</b> - City will be allocated a portion of basin sustainable yield which normalizes annual fluctuations in precipitation.	<b>Possible</b> - The sustainable yield for the basin has not yet been determined. The MBGSA will likely develop allocations of sustainable yield through its GSP development process.	Continued maintenance and replacement of groundwater wells. Two replacement wells are currently being designed/constructed.
Foster Park	1933-2018	1,293-9,874	1,573	6,700	An instream flow study (under development) and litigation may reduce allowable extractions.	Most climate change predications call for more intense rainfall, although not necessarily more rainfall. This may allow increased pumping/diversions during certain rainfall events while still meeting instream flow requirements. Increased frequency and duration of drought periods could also reduce available supplies.	<b>Very Sensitive</b> - River flows are directly related to the amount of annual rainfall.	<b>Possible</b> - Rebuilt Wellfield and Diversion Facility would allow and increase from current. Longterm objective to increase to 6,700 AFY in wet years.	Need rebuilt/replacement extraction facilities.
Casitas	1960-2018	753-11,998	3,365	6,067	Fish Passage and Habitat Considerations have reduced allowable diversions from Ventura River.	Most climate change predications call for more intense rainfall, although not necessarily more annual rainfall. This may allow increased diversions during certain rainfall events while still meeting fish flow requirements. Increased frequency and duration of drought periods could also reduce available supplies.	<b>Sensitive</b> - Available supply is a function of lake level, and lake level is a function of annual rainfall and diversion ability.	<b>Limited</b> - The City's allocation increases with growth within Casitas' service area, but can be reduced when water conservation is triggered by low lake levels.	Current agreement with Casitas generally limits the City's supply to the demand within the Casitas' service area.
Recycled Water	1995-2018	430-880	700	700	Increased urban conservation could reduce wastewater flows. Demand varies with precipitation.	Higher demand in dry years. Lower demand in wet years.	<b>Sensitive</b> - Higher demand in dry years. Lower demand in wet years.	<b>Limited</b> - Previous studies have determined that it is not cost effective to extend purple pipe beyond the existing focus area. Demand is low and fluctuates seasonally and annually with higher demand in hot and dry months.	Previous studies have determined that it is not cost effective to extend purple pipe beyond the existing focus area.
State Water Project	1980-2018	500-10,000	0	10,000	Reliability of State Water Project deliveries currently uncertain given the status of Water Fix and issues related to the Delta. This project is currently in the environmental review and permitting phase.	Most climate change predications call for reduction in snow pack and earlier melt of the snow pack that occurs. This would create early spring flows in excess of available State storage and concurrent agricultural demands. Could result in more frequent Article 21 water, but lower Table A deliveries.	<b>Sensitive</b> - Annual allocations are a function of rainfall, snowpack, and reservoir storage.	<b>Probable</b> - Completion of the State Water Interconnection and blending station projects would allow the City to deliver its annual allocation into the City's distribution system.	Requires construction of a pipeline, blending station, right of way acquisition, and agency agreements.
VenturaWaterPure	NA	NA	2,800	4,000-5,400	Implemented in part to comply with a consent decree and State law to reduce wastewater discharges to the Santa Clara River Estuary. This project is currently in the environmental review and permitting phase.	Potable reuse is considered a drought and climate change resilient supply.	<b>Not Sensitive</b> - Production of potable reuse supplies are dependent on wastewater flows, not annual rainfall.	<b>Probable</b> - Once the VenturaWaterPure project is complete, it would contribute at least 2,800 AFY of water to the City's water supply. Projected production is estimated to be up to 4,000 AFY by 2030 and potentially up to 5,400 AFY under a 100 percent diversion scenario.	Requires construction of an Advanced Water Purification Facility, ocean outfall, and associated infrastructure for aquifer storage and recovery wells.

Table 4-3: Summary of Projected Future Water S

Water Supply Source <sup>[1]</sup>	Existing	Existing
	Normal Supply	2019 Supply Drought Impact (AFY)
Casitas Municipal Water District	5,375	3,763 <sup>[2]</sup>
Ventura River / Foster Park	4,200	2,323 <sup>[5]</sup>
Mound Groundwater Basin	4,000	1,963 <sup>[8]</sup>
Oxnard Plain Groundwater Basin <sup>[10]</sup>	4,100	3,862
<u>Santa Paula Groundwater Basin</u>		
Original City Allocation <sup>[11]</sup>	3,000	3,000
City Acquired Water Rights <sup>[12]</sup>	40.9	40.9
Recycled Water	700	700
VenturaWaterPure	0	0
<b>TOTAL</b>	<b>21,415</b>	<b>15,651</b>
State Water <sup>[14]</sup>		

Note: Projected supply values do not take into account water quality for all sources or account for loss of one source.

[1] None of these numbers preclude the City's water rights.

[2] 30% drought impact based on 2017 agreement with casitas

[3] Projects that Casitas will declare Stage 4 (40% reduction) if the drought continues to 2021.

[4] Casitas future supply is adjusted as demand increases within the Casitas service area based on the absorption rate in Table 3-8.

[5] 5 year production average from 2014-2018.

[6] Average of 2 most recent driest years (2015 -2016).

[7] Based on the highest City production value in the past 10 years (2008-2017) and the intent of the City to restore production to the hi

[8] Two year average production (2017-2018).

[9] Ten year average production (2000-2009); operational limitations removed once replacement wells come online.

[10] Fox Canyon Groundwater Management Agency (FCGMA) Emergency Ordinance E allocations were adopted by FCGMA Board or

[11] The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually.

[12] Water rights acquired for the past development of Tract 4632 and development of Phase 1 of Tract 5632 and Tract 5774.

[13] From the 2015 Urban Water Management Plan.

[14] Low range reflects potential limitations in wheeling capacity and uncertainty of SWP deliveries. High range assumes full allocation

Supply from Existing and Potential New Sources

INSERT COLUMN FOR 2022/2023

WATER SUPPLY

Future			
2020 Supply Drought Impact (AFY)	2021 Supply Drought Impact (AFY)	2025 Supply (AFY)	2030 Supply (AFY)
3,844 <sup>[2]</sup>	3,365 <sup>[3]</sup>	5,904 <sup>[4]</sup>	6,067 <sup>[4]</sup>
1,573 <sup>[6]</sup> ?	1,573 <sup>[6]</sup>	3,647 - 6,700 <sup>[7]</sup>	3,647 - 6,700 <sup>[7]</sup>
4,000 <sup>[9]</sup>	4,000 <sup>[9]</sup>	4,000 <sup>[9]</sup>	4,000 <sup>[9]</sup>
3,862	3,862	3,862	3,862
3,000	3,000	3,000	3,000
40.9	40.9	40.9	40.9
700	700	700	865 <sup>[13]</sup>
0	0	2,800	2,800-4,000
17,020	16,541	23,954-27,007	24,282-28,535
		0-10,000	0-10,000

DELETE

SEE ATTACHED 20 YEAR SUMMARY OF STATE WATER ALLOCATION FOR VENTURA COUNTY.

historical levels by 2025.

April 11, 2014. Temporary extraction allocation for FY 2016 = 3,862 AFY.

of the City's 10,000 AF per year entitlement.