

2020 URBAN WATER MANAGEMENT PLAN

Riverside Public Utilities

Board of Public Utilities
June 14, 2021

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BACKGROUND

1. An Urban Water Management Plan (UWMP) is required of every urban water supplier as defined in the California Water Code Section 10610 et seq. and is updated every five years for calendar years ending in "0" or "5".
2. On May 24, 2021, the Board of Public Utilities conducted a UWMP workshop.
3. The 2020 UWMP update must be adopted and submitted to the California Department of Water Resources (DWR) by the July 1 deadline.

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BACKGROUND

Urban Water Management Plans are required by the State:

1. Completed/updated every 5 years
2. Pre-requisite for certain loans and grants
3. Foundational documents for new development
4. Support long-term and drought planning
 - 25-year horizon

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DISCUSSION

1. RPU serves more than 3,000 AFY to its retail customers and is therefore required to prepare an update to its UWMP every five years.
2. RPU serves more than 3,000 AFY to wholesale customers for potable municipal purposes and is therefore required to prepare additional sections within the UWMP. (New for RPU)
3. RPU has prepared the UWMP in accordance with the UWMP Act, sections 10610 through 10656 of the California Water Code.
4. RPU coordinated with its wholesale water supplier, Western Municipal Water District (WMWD), in the preparation of the demand and supply estimates presented in the report.
5. In addition to WMWD, RPU requested input, data, and comments from 26 neighboring agencies while preparing this plan.

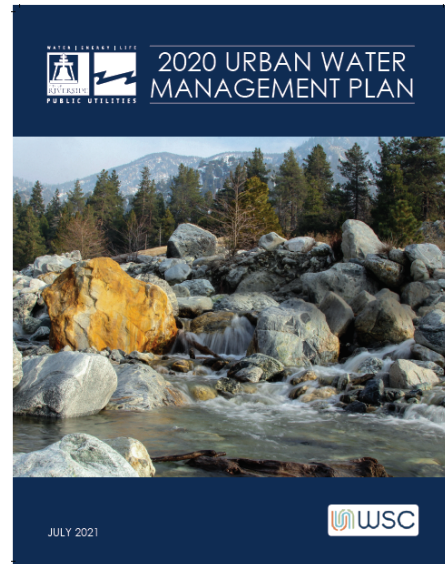
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UWMP CONTENTS

1. UWMP Introduction and Lay Description
2. Plan Preparation
3. System Description
4. Customer Water Use
5. Conservation Target Compliance
6. Water Supply Characterization
7. Water Supply Reliability
8. Water Shortage Contingency Planning
9. Demand Management Measures
10. Plan Adoption/Submittal/Implementation



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2020 UWMP – NEW CRITERIA

2015 UWMP	2020 UWMP
Not Required - Executive Summary (Ch. 1)	Introduction and Lay Description (Ch. 1)
Three Consecutive Dry-Year Water Reliability Assessment (Ch. 8)	Five Consecutive Dry-Year Water Reliability Assessment (Ch. 7)
Not Required	Drought Risk Assessment (Ch. 4)
Not Required	Seismic Risk (Ch. 8)
Not Required	Energy Use Information (Ch. 6)
Water Loss Reporting for One Year (Ch. 5)	Water Loss Reporting for Five Years (Ch. 4)
WSCP was Four (4) stages (Ch. 9)	WSCP with Six (6) stages (Ch. 8)
Not Required	Groundwater Supplies Coordination (Ch. 6)

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ACTUAL CUSTOMER WATER USE

	2016	2017	2018	2019	2020
Potable and Raw Water	76,619	81,017	82,143	73,127	81,197
Recycled Water Demand	177	187	187	143	141
Total Water Use:	76,796	81,204	82,330	73,270	81,338

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POPULATION PROJECTION

Service Area Population Current and Projected Population

Population served	2020	2025	2030	2035	2040	2045
RPU service area	310,554	321,896	333,652	345,838	358,468	371,560

Based on Southern California Association of Governments (SCAG)
Traffic Analysis Zone (TAZ) data developed as part of SoCal Connect 2020

Over next 25-years:

Annual estimated population increase – about 2,400/yr, or 750 EDUs,
or 0.7%

Total estimated population increase – about 61,000, or 19,000 EDUs, or
19%

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PROJECTED WATER DEMAND

	2020	2025	2030	2035	2040	2045
Potable and Raw Water	81,197	85,012	87,383	89,840	92,387	95,027
Recycled Water Demand	141	5,700	13,420	13,420	13,420	13,420
Total Water Use:	81,338	90,712	100,803	103,260	105,807	108,447

Use Type	Projected Water Use				
	2025	2030	2035	2040	2045
WMWD	2,000	2,000	2,000	2,000	2,000
City of Norco	1,000	1,000	1,000	1,000	1,000
WMWD	2,000	2,000	2,000	2,000	2,000
Raw Water Losses	600	600	600	600	600
-	5,600	5,600	5,600	5,600	5,600

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CUSTOMER WATER USE

Over next 25-years

Annual water demand is estimated to increase:

550 acre-ft/yr, or 0.7%

Total water demand is estimated to increase:

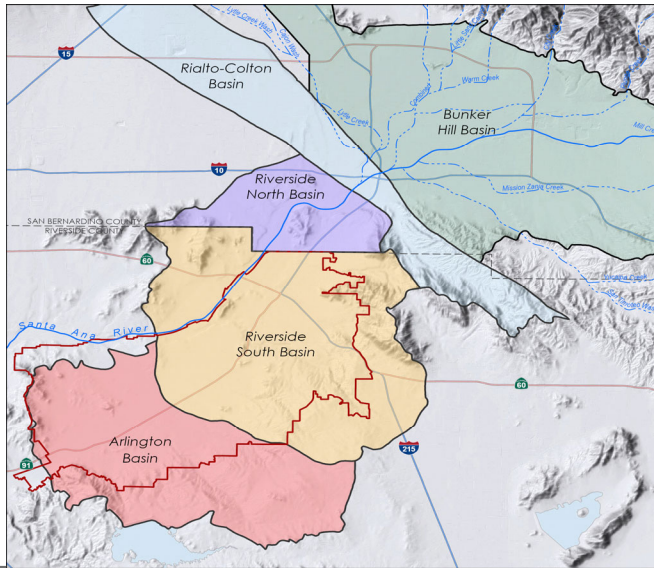
13,800 acre-ft, or 17%

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CURRENT WATER SUPPLIES



Extraction/Export Rights

Bunker Hill

- 55,263 AFY Export

Colton

- 2,728 AFY Export

Riverside North

- 10,902 AFY Export

Riverside South

- 16,880 AFY Extraction

85,774 AFY Total

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PROJECTED WATER SUPPLIES

Water Supply	Additional Detail on Water Supply	2025 Reasonably Available Volume	2030 Reasonably Available Volume	2035 Reasonably Available Volume	2040 Reasonably Available Volume	2045 Reasonably Available Volume
Groundwater	Bunker Hill	55,263	55,263	55,263	55,263	55,263
Groundwater	Seven Oaks Enhanced Phase II	1,000	1,000	1,000	1,000	1,000
Groundwater	BH Active Recharge 2025	750	1,000	1,500	1,500	1,500
Groundwater	Riverside North	10,902	10,902	10,902	10,902	10,902
Groundwater	RNASR	-	2,000	2,000	2,000	2,000
Groundwater	Riverside South	16,880	16,880	16,880	16,880	16,880
Groundwater	Box Springs	-	-	2,800	2,800	2,800
Groundwater	Columbia, Etc. Stormwater	-	-	-	1,500	1,500
Groundwater	Rialto-Colton	2,728	2,728	2,728	2,728	2,728
Recycled water	RWQCP	5,700	13,420	13,420	13,420	13,420
Purchased or Imported Water	From WMWD	21,700	21,700	21,700	21,700	21,700
-	Total:	114,923	124,893	128,193	129,693	129,693

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WATER SUPPLY RELIABILITY

Normal Year projected Supply and Demand Comparison

	2025	2030	2035	2040	2045
Supply Totals	114,923	124,893	128,193	129,693	129,693
Demand Totals	90,712	100,803	103,260	105,807	108,447
Difference:	24,357	23,947	24,487	22,907	20,053

Normal Year Supply and Demand Comparison for Wholesale

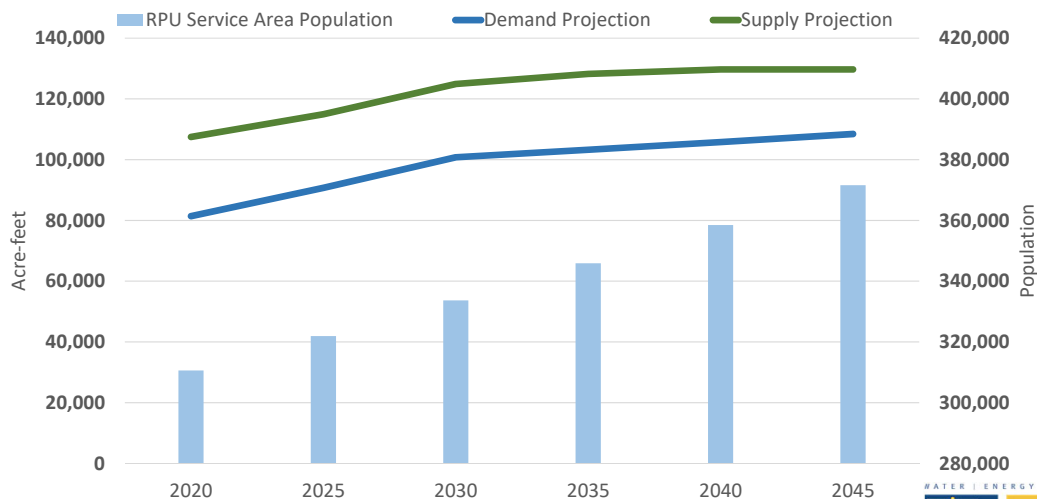
	2025	2030	2035	2040	2045
Supply Totals	5,600	5,600	5,600	5,600	5,600
Demand Totals	5,600	5,600	5,600	5,600	5,600
Difference:	0	0	0	0	0



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PROJECTED WATER SUPPLY VS. WATER DEMAND



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2020 UWMP CONCLUSIONS

1. RPU's identified supplies exceed the expected demands through 2045, provided it:
 - a) Continues conservation efforts
 - b) Implements long-range planning, and
 - c) Develops new water supply projects
2. RPU continues to meet customer demands in a cost-effective and environmentally responsible manner
3. RPU effectively manages water resources by proactive planning and projects implementation

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UWMP COMMENTS RECEIVED

From Gage Canal Company:

1. Exchange Term referenced for GCC
2. Clarification on Non-potable sources
3. Irrigation Losses mentioned at 2% (<1% for total production, or 5% for non-potable only)
4. "Overlying Uses" refer to the water demand for the Jurupa Ditch Company
5. Section 9.2.3 – clarify the 3 tiers rate system

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UWMP COMMENTS RECEIVED

From C.U.R.E.:

1. Large increases in water use In table 4-2 in 2018, 2019, 2020
2. Section 9.2.3 is relying on a four-tier system vs possible future budget-based rates
3. UWMP should be tailored to include more of a local emphasis for sustainability (City's 2020 strategic plan, Greenbelt and Santa Ana River)
4. Clarify Gage vs. agricultural users
5. Watermaster and WMWD involvement as wholesaler
6. Stakeholder outreach and workshops on planning and strategy

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UWMP COMMENTS RECEIVED

From C.U.R.E. Continued:

7. Calculate carbon and climate related benefits of urban green spaces
8. Set goals for purposes of measurement over next 5 years and beyond, i.e., develop an integrated score card for interlocking City and RPU goals

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RECOMMENDATIONS

Recommend that the Board of Public Utilities:

1. Conduct a Public Hearing for review of the 2020 Urban Water Management Plan
2. Recommend that the City Council adopt the 2020 Urban Water Management Plan.