

2024 RPU'S GROUNDWATER ATLAS

Public Utilities

Board of Public Utilities
October 27, 2025

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Purpose of the 2024 Groundwater Atlas

1. Describes current condition of the groundwater basins
2. Tracks changes over time
3. Provides readable data to Customers, Elected officials, Executive Management and RPU staff.
4. Support water supply planning and management.



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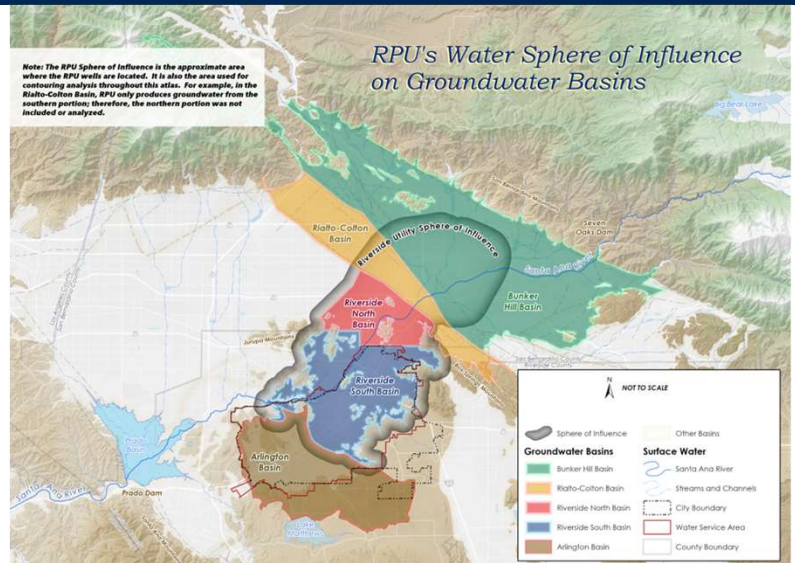


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What's New in 2024

1. Updates the 2021 GW Atlas
2. Last presented to Board:
November 14, 2022
3. Includes exhibits covering:
 - a. Basin hydrology
 - b. RPU Groundwater rights
 - c. RPU 2024 production
 - d. Groundwater levels, storage, and quality

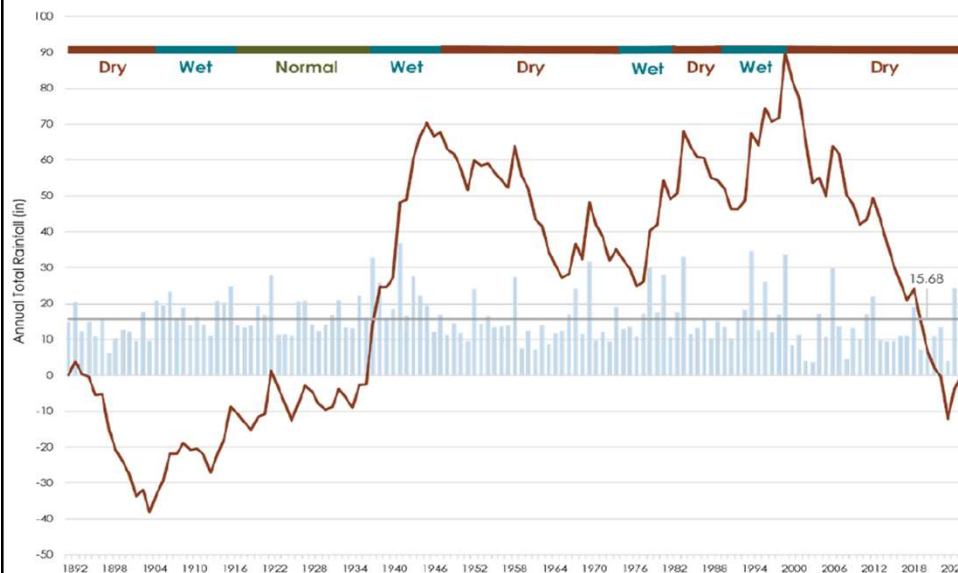


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HYDROLOGIC CONDITIONS

Annual Precipitation in the San Bernardino Hospital Gauge for the period 1892 - 2024
(132 Years Rainfall Patterns and variability)



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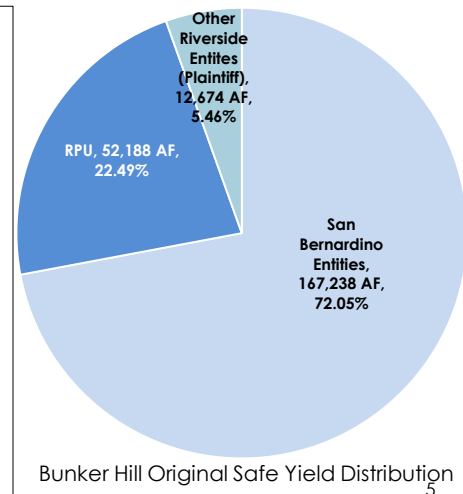
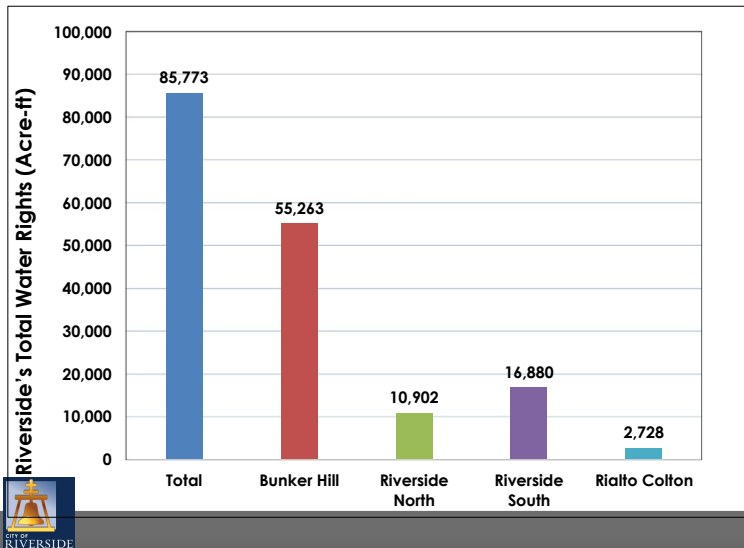
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GROUNDWATER RESOURCES MANAGEMENT

The City of Riverside Total Water Right and Base Period Production (in acre-feet) by Basin



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RPU GROUNDWATER SYSTEM

RPU Water System Overview:

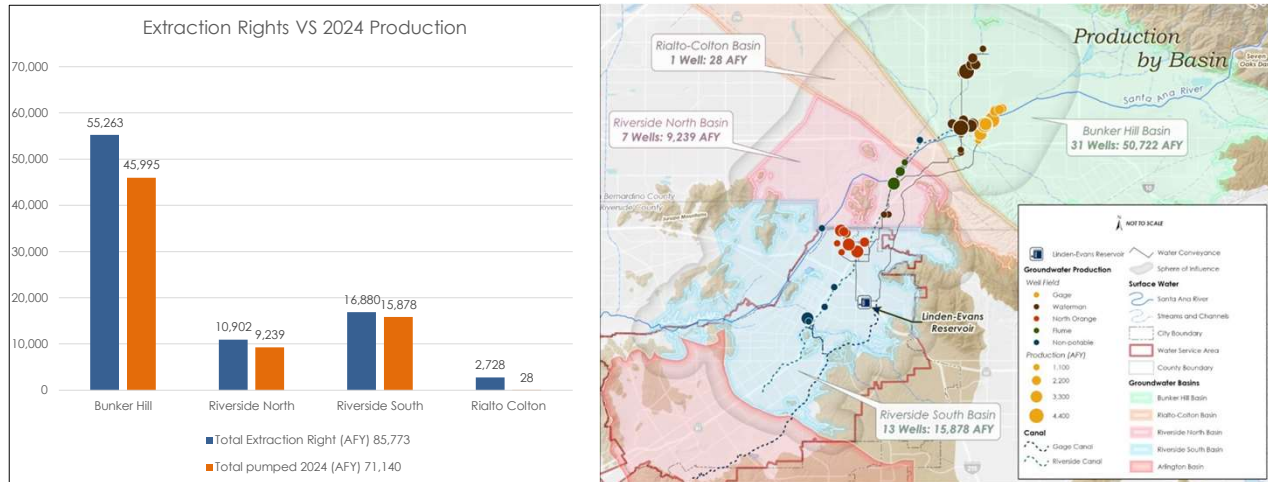
1. 52 groundwater wells
2. 44 miles of potable transmission mains
3. 30 miles of non-potable conveyance system
4. Serves ~300,000 people
5. 69,340 service connections
6. 75 square-mile service area
7. Surplus water also provided to the City of Norco and Western Municipal Water District



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GROUNDWATER PRODUCTION

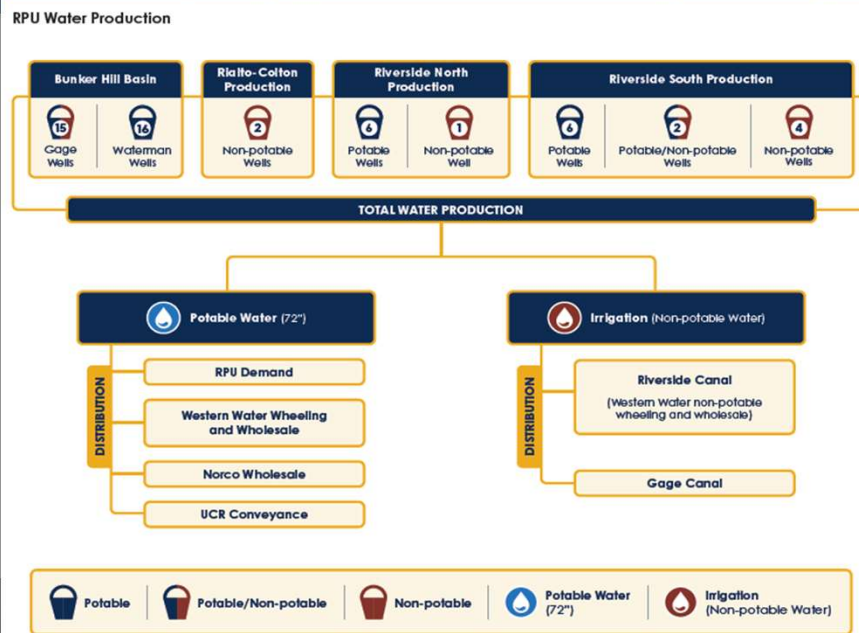


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GROUNDWATER FACILITIES



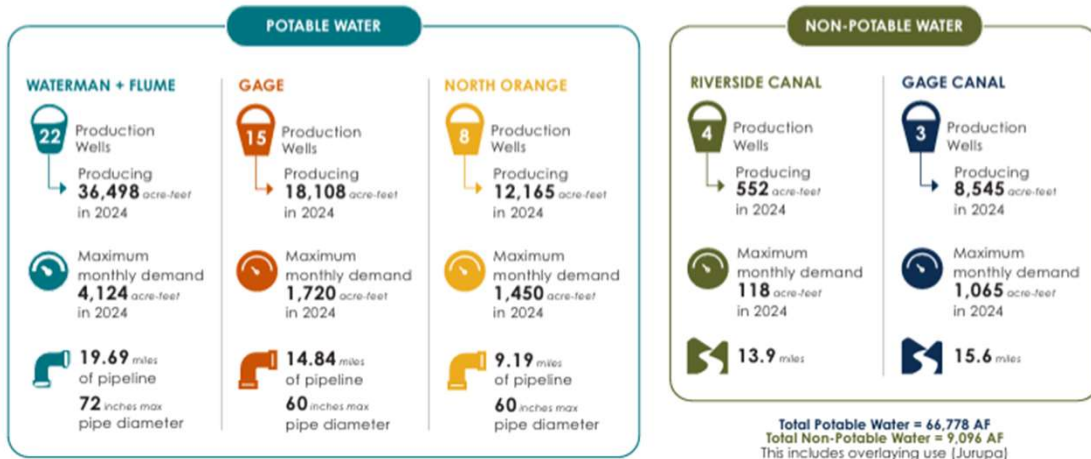
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GROUNDWATER FACILITIES

Groundwater Well Production and Pipes



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GROUNDWATER LEVELS

Basin Monitoring Activities:

1. RPU monitors 4 groundwater basins:
 - Bunker Hill, Rialto Colton, Riverside North and Riverside South Basins
2. Data collected from RPU, USGS and other water agencies:
 - Water levels
 - Water quality
 - Production
3. Groundwater levels show a **long-term decline** over the past 25 years → **Impact:** Higher production costs and reduced capacity

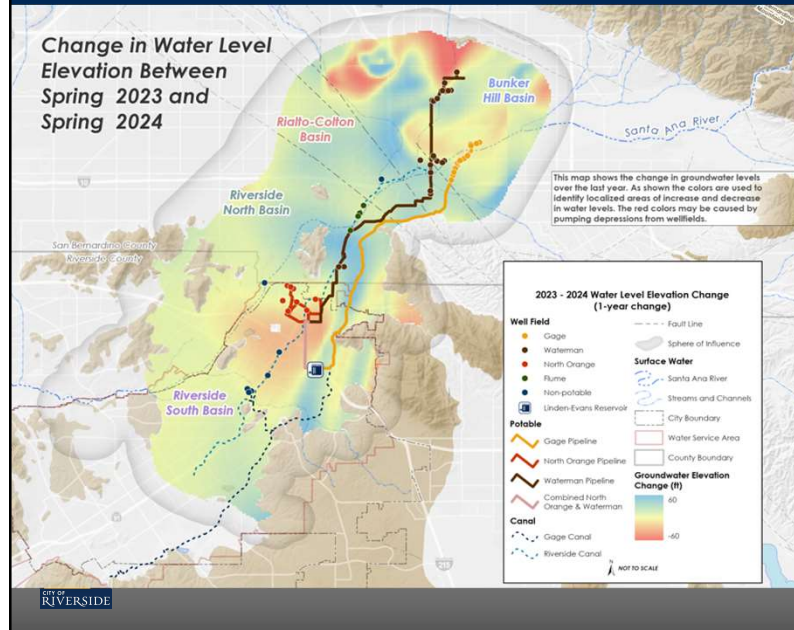


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GROUNDWATER LEVELS



Groundwater Level Decline from 1999 to 2024 within RPU's Sphere of Influence:

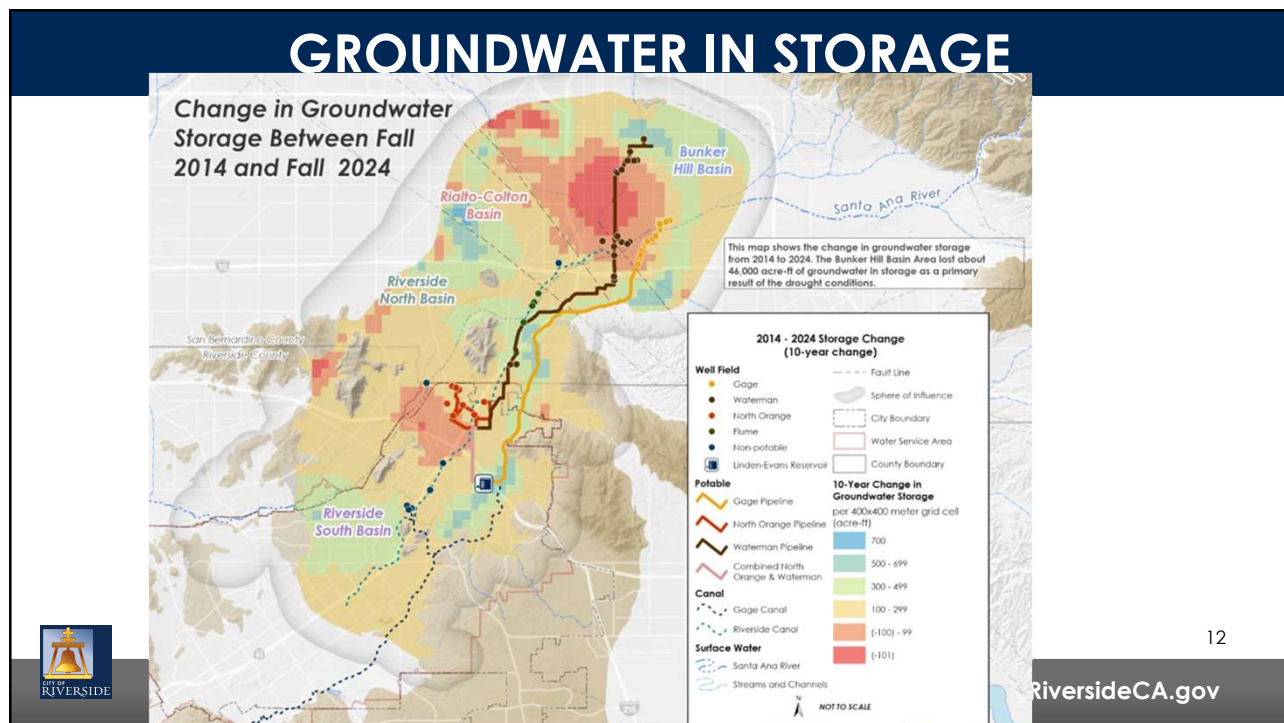
- BUNKER HILL
Decline of about 4.7 ft/yr
- RIALTO-COLTON
Decline of about 1 ft/yr
- RIVERSIDE NORTH
Decline 2.1 ft/yr
- RIVERSIDE SOUTH
Decline 0.3 ft/yr

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GROUNDWATER IN STORAGE

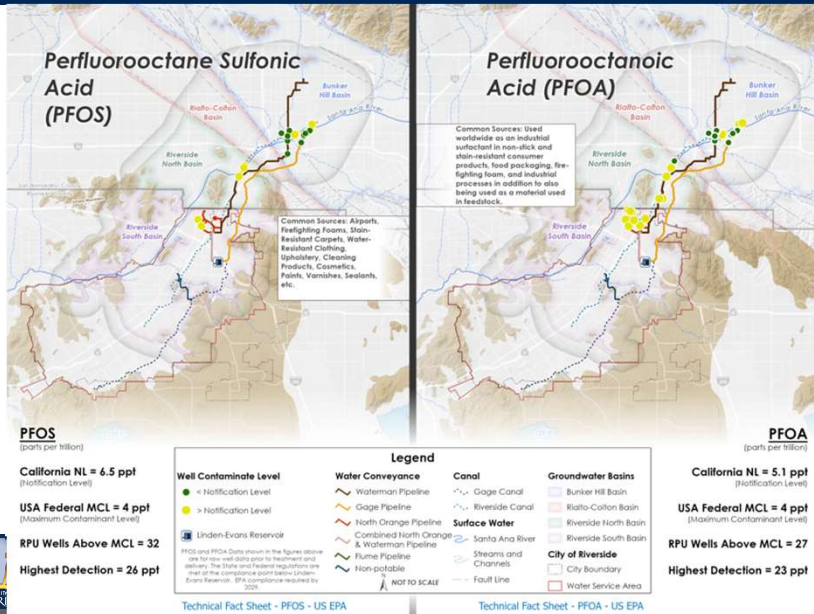


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GROUNDWATER QUALITY



2024 Groundwater Quality

Sources

- 49 wells sampled
- 45 potable water
- 4 non-potable water

A summary of the water quality data is geographically displayed. PFOS and PFOA is shown as an example to the left.

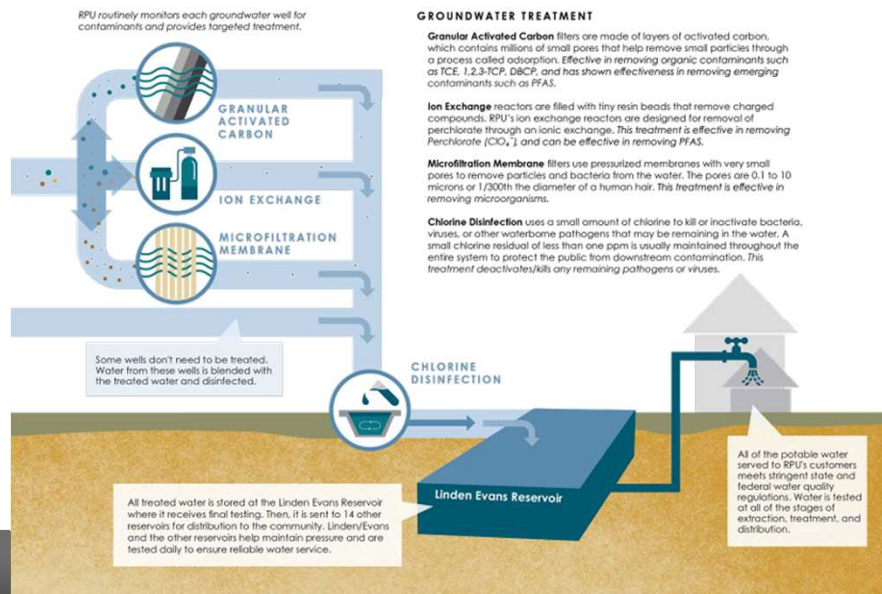
Compliance with EPA PFAS regulations is required by 2031.

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GROUNDWATER TREATMENT



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RECOMMENDATIONS

That the Board of Public Utilities receive and file an update on Riverside Public Utilities' 2024 Groundwater Atlas.



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