

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: MARCH 22, 2021

SUBJECT: RIVERSIDE PUBLIC UTILITIES GROUNDWATER ATLAS UPDATE

ISSUE:

Receive this update on the Riverside Public Utilities Groundwater Atlas.

RECOMMENDATION:

That the Board of Public Utilities receives this update on the RPU's Groundwater Atlas.

BACKGROUND:

On June 24, 2019, the Board of Public Utilities (Board) approved a Supplemental Agreement for preparing the Riverside Public Utilities Groundwater Atlas (GW Atlas) for 2018 with Water Systems Consulting, Inc., of Rancho Cucamonga (WSC), in an amount not to exceed \$102,140. The purpose for developing a GW Atlas was to establish a high-level reporting mechanism to describe the current condition of RPU's groundwater basins and also to prepare a framework for RPU staff to update future GW Atlas versions efficiently.

The intent is to have an atlas-style document consisting of detailed exhibits that characterize the state of the groundwater basins with respect to hydrology, groundwater production, groundwater recharge, groundwater levels, groundwater quality, and groundwater storage. WSC developed a comprehensive hydrologic/hydrogeologic database, and analyzed, arranged, formatted, and documented the complex data in a clear and concise format. The final report will be posted on the utility's website and printed upon request. Many other water agencies in the region, such as Chino Basin Watermaster, Eastern Municipal Water District, and Orange County Water District, prepare annual groundwater assessments or state of the basin reports for evaluating changes in their local groundwater basins.

DISCUSSION:

The City of Riverside Public Utilities Department (RPU) provides potable water to 65,000 service connections, which serves over 310,000 people in the community. RPU currently owns and operates over 50 groundwater production wells, and has obtained 100 percent of its water supply from local groundwater basins since 2008. RPU has approximately 55,000 acre-feet

(AF) of extraction rights from the San Bernardino Basin Area (SBBA), about 28,000 AF from the Riverside Basin, and 2,700 AF from the Rialto-Colton Basin.

General conditions in these basins are dynamic and influenced by many factors, most of which are outside of RPU's control. Throughout the year, RPU staff measure water levels and collect water quality data at production and monitoring wells across the three groundwater basins to observe current conditions. Groundwater data collected by the United States Geological Survey (USGS) as well as by other water agencies in the area is also tracked to gain a further understanding of the basins. Over the last 20 years, groundwater levels in these basins show a long-term declining trend. This negatively impacts RPU's production capacity and increases the cost to produce groundwater.

The GW Atlas will serve as a tool for reviewing highly complex monitoring data, benchmarking basin conditions, understanding historical changes in groundwater levels and quality, characterizing groundwater flow patterns and the change in groundwater elevations over time and space, identifying areas where groundwater production might be optimized, and where new production wells could be sited. The GW Atlas will help RPU staff proactively evaluate water supply within these local basins, further understand the changing basin conditions, and educate the community, City Council, RPU Board, and Executive Management.

FISCAL IMPACT:

There is no fiscal impact associated with this informational report.

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Approved by:	Al Zelinka, FAICP, City Manager
Approved as to form:	Kristi J. Smith, Interim City Attorney

Certifies availability of funds:	Edward Enriquez, Chief Financial Officer/City Treasurer
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Attachment:	Presentation
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