



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: DECEMBER 10, 2018

ITEM NO: 5

SUBJECT: RECYCLED WATER PROGRAM UPDATE; MEMORANDUM OF UNDERSTANDING BETWEEN PUBLIC WORKS AND PUBLIC UTILITIES DEPARTMENTS; CAPITAL EXPENDITURE OF \$3,750,000, IN FIVE SEPARATE RECURRING ANNUAL PAYMENTS OF \$750,000 FOR PUBLIC UTILITIES DEPARTMENT'S SHARE OF THE RECYCLED WATER IMPROVEMENTS AT THE RIVERSIDE REGIONAL WATER QUALITY CONTROL PLANT

ISSUES:

Receive and file an update on the City of Riverside's Recycled Water Program; recommend that the City Council approve the Memorandum of Understanding between Public Works and Public Utilities Departments; and recommend that the City Council approve the capital expenditure for \$3,750,000 in five annual payments of \$750,000 for Public Utilities Department's share of the recycled water system improvements at the Riverside Regional Water Quality Control Plant.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Receive and file an update on the City's Recycled Water Program;
2. Recommend that the City Council approve the Memorandum of Understanding between Public Works and Public Utilities Departments designating the roles and responsibilities of the parties regarding the operation and maintenance of the recycled water system within the Riverside Regional Water Quality Control Plant; and
3. Recommend that the City Council approve the capital expenditure for \$3,750,000, in five annual payments of \$750,000 for Public Utilities Department's share of the recycled water system improvements at the Riverside Regional Water Quality Control Plant.

BACKGROUND:

On May 22, 2017, staff presented an update to Board of Public Utilities (Board) on the City's Recycled Water Program that started over 25 years ago. The Board report also provided an update on the California Environmental Quality Act (CEQA) effort for the Jackson Street and Arlington Avenues Recycled Water projects, grant and loan funding opportunities, recycled water customer site conversions, Riverside Public Utilities Department (RPU)'s costs for recycled water from Public Works (PW), as well as a future regional recycled water project opportunity.

DISCUSSION:

This section provides a status update for the various projects comprising the recycled water program.

Jackson Street Recycled Water Pipeline Project, Phase I

In June 2017, the Board awarded a construction contract for the Jackson Street Recycled Water Pipeline Project, Phase I. This project has since been completed and is in service.

Jackson Street Recycled Water Pipeline Project, Phase II

The Jackson Street Recycled Water Pipeline Project, Phase II will continue the recycled water pipeline within Jackson Street from Don Derr Park southerly along Monroe Street, Lincoln Avenue and Jackson Street terminating at Cleveland Avenue where it will intertie with Western Municipal Water District's (Western) non-potable water system, providing recycled water to Western. In addition, this project will expand recycled water service to five (5) potential recycled water customers initially identified along the pipeline alignment. A wholesale rate for recycled water sales has not yet been established with Western and the Phase II project is currently unfunded.

Arlington Avenue Recycled Water Pipeline Project

This project will consist of a recycled water line extension west of Van Buren Boulevard along Arlington Avenue and areas south to bring recycled water to six potential recycled water customers initially identified along the pipeline alignment. This project is currently unfunded and no work is anticipated for the next five years.

Regional Recycled Water Project Opportunity

The City is participating in the Upper Santa Ana River Habitat Conservation Plan (HCP). The HCP is comprised of thirteen agencies with San Bernardino Valley Municipal Water District (Valley District) taking the lead. The purpose of the HCP is to obtain environmental take coverage for listed species, with efforts focused on addressing the federally endangered Santa Ana sucker fish. Once the necessary coverage is obtained, participating agencies will have the ability to pursue water supply projects that would otherwise be extremely difficult to pursue or fund due to environmental restrictions. The HCP obtained Prop 84 funding to construct sucker fish restoration projects along tributaries of the Santa Ana River located within the City of Riverside. Additional grant funding opportunities will continue to be explored by the HCP. The HCP also plans to restore Hidden Valley Wetlands and translocate sucker fish into the foothills of the San Bernardino and San Gabriel Mountains.

In order to restore these tributaries and the Hidden Valley Wetlands, the HCP projects will require a source of water. RPU staff conceptually created a concept project, the Riverside Habitat, Parks and Water Project, in which a portion of the recycled water currently being discharged from the Riverside Regional Water Quality Control Plant (RWQCP) could be piped north via a regional pipeline constructed to deliver recycled water to tributaries of the Santa Ana River to support the Santa Ana sucker fish. This pipeline will also deliver recycled water to key City Parks and green spaces. A southern pipeline would deliver recycled water to restoration efforts at Hole Creek and Hidden Valley Wetlands. By partnering with Valley District and the HCP, project costs will be shared, reducing RPU's overall capital and maintenance expense for a large regional recycled water pipeline within the City limits.

The Riverside Habitat, Parks, and Water Project will require the City to petition the California State Water Resources Control Board to modify its current discharge obligation at the RWQCP. However because the project will significantly improve listed species and habitat found along the Santa Ana River, staff believe this to be an opportune time to pursue a wastewater change of use petition. Lastly, staff is working with Valley District to create an agreement in which the recycled water delivered to the HCP will be exchanged for a like amount of groundwater from the Bunker Hill Basin or other source. The Riverside Habitat, Parks,

and Water Project has the ability to provide the City with approximately 5,000 acre-feet of recycled water currently owed to the river, up to 5,000 acre-feet of exchange water for use as a future water supply source, reduce the cost of implementing recycled water use in the City, and keep City Parks irrigated during drought conditions.

Public Works/RPU Memorandum of Understanding (MOU)

Since the early 2000s, PW has undertaken modernization and expansion of the RWQCP to include additional treatment capacity and the use of new membrane bioreactor technology to meet the City's growing needs. The treated effluent from the RWQCP serves as the source of recycled water for RPU. In anticipation of construction and operation of the recycled water system, RPU executive staff has been in close coordination with PW to ensure that the expansion of the RWQCP incorporates changes needed to provide additional recycled water flows. Based on this interdepartmental coordination, the attached MOU was created which establishes guidelines and the understanding between PW and RPU related to operations, maintenance, communication and costs associated with recycled water system to supply RPU's recycled water distribution system.

Under the MOU, PW will operate and maintain the RWQCP and be responsible for providing recycled water that meets California Code of Regulations Title 22 requirements under its Waste Discharge and Producer/User Reclamation Permit. PW will perform all water quality testing, inspection, monitoring, and regulatory reporting. RPU will be responsible for any necessary water quality testing, inspection, monitoring, and regulatory reporting within the recycled water distribution system outside of the RWQCP and will complete all necessary reporting to comply with its Master Reclamation Permit with California State Water Resources Control Board, Division of Drinking Water (DDW).

PW and RPU are responsible for maintenance and repairs of all pipelines, valves, meters, conduit, and other equipment pertaining to the recycled water system on their respective sides of the recycled water system. PW will be responsible for maintenance of all pipelines, valves, meters, and other equipment within the RWQCP; RPU will be responsible for maintenance and repair of all pipelines, valves, meters, and other equipment within the recycled water distribution system. Maintenance of RPU's underground facilities within the RWQCP will be repaired by PW at RPU's expense. Maintenance costs for the recycled water booster station will be shared between both departments equally.

RPU and PW staff worked together in identifying incremental capital costs to PW during the upgrade of the RWQCP. A total cost of \$3,750,000 which includes a construction cost of \$2,768,313 and an interest cost of \$974,616 for the bonds used to fund the RWQCP expansion were identified. The table below provides the breakdown of costs.

Item	RPU's Share of		Total
	Construction Costs	Interest Paid	
Recycled Water Booster Station	\$2,103,839	\$762,176	\$2,866,015
36-Inch Pipeline	\$664,474	\$212,440	\$876,914
Totals	\$2,768,313	\$974,616	\$3,742,929
RPU Payment to PW			\$3,742,929
Total To Use			\$3,750,000

FISCAL IMPACT:

The total fiscal impact for this item is \$3,750,000 for payment from the Water Enterprise Fund to the Public Works Sewer Enterprise Fund over a total of five years to be made in five annual payments of \$750,000. Sufficient funds for payment of Years 1 and 2 to Public Works are budgeted and available in the Recycled

Water Facilities Account No. 6230000-470811. The remaining balance of \$2,250,000 for annual payments for Years 3 to 5 will be budgeted and included as part of the Fiscal Year 2020/21 – 2021/22 biennial budget process.

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Attachments:

1. Memorandum of Understanding For Production and Distribution of Recycled Water
2. Presentation