

City of Rialto

Legislation Text

File #: EDC-19-122, Version: 1

For Economic Development Committee [January 30, 2019]

TO: Honorable Economic Development Committee Members

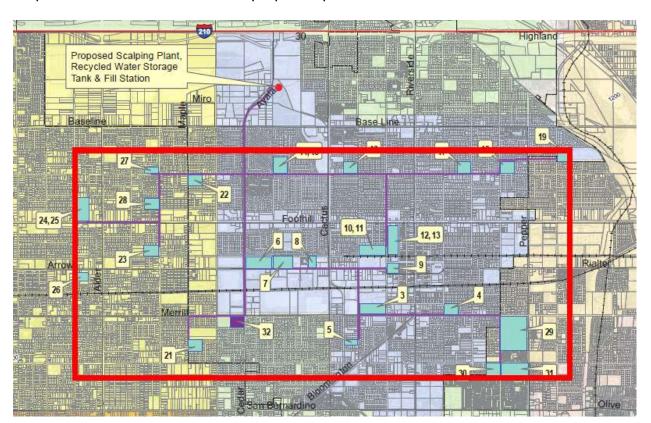
APPROVAL: Robb R. Steel, Assistant CA/Development Services Director

FROM: Thomas J. Crowley, P.E., Utilities Manager

Provide Direction to Staff Regarding a Wastewater Scalping Plant and Recycled Water Distribution System

BACKGROUND:

West Yost recently prepared a draft Recycled Water Feasibility Study for the City of Rialto and the State Water Resources Control Board that explored the possibility of adding a new scalping plant and a recycled water distribution system to serve recycled water to the central portion of the City. The service area for the proposed scalping plant is shown below in the area marked by the red box. The map also includes the site for the proposed plant.



The draft Feasibility Study is being reviewed; however applicable excerpts of it has been included as

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Attachment 1 and this staff report summarizes the findings of this study with respect to a scalping plant. It should be noted that the total costs discussed for a scalping plant and distribution system include both capital and operations and maintenance costs.

ANALYSIS/DISCUSSION:

The total annual cost to own and operate was estimated to be \$2,823 per ac-ft (AF) of recycled water delivered which included \$1,868 per AF for capital costs. The capital costs include capital construction costs for a new 0.841 million gallons per day scalping plant, 3.6 million gallon storage tank, recycled water fill station, recycled water distribution pipelines, and ongoing operation and maintenance costs for the scalping plant and proposed pipelines.

West Yost compared the total annual AF per year cost to the AF per year cost of domestic potable water from the City and surrounding domestic water providers based on their current domestic water rates. The full cost benefit analysis is included in the Recycled Water Feasibility Study and includes a comparison of the rate needing to be charged to pay for the system and operation against the current potable water rate to determine overall financial feasibility. The results of this comparison are also summarized on Figures 5-1, 5-2, 5-3 and 5-7, which have been included as **Attachment 2**. As shown on the figures attached, the study indicates that an additional subsidy of \$1,451 per AF would be required to be equal to the domestic water cost for existing City of Rialto customers. The analysis assumed 943 AF based on current customer consumption records.

The study also considered adjacent water provider customers that could hydraulically be served by gravity (i.e. no on-going pumping costs, which would drive up to the O,&M cost). The subsidy to serve adjacent water provider customers with recycled water from the scalping plant would be in the range of \$891 to \$2,156 per AF. These AF costs were determined based on an estimated total AF per year recycled water demand for the City of Rialto and surrounding water providers of 943-acre feet per year. This results in a total annual estimated subsidy cost of approximately \$2.4 million per year over the 30-year capital cost amortization period or until domestic water rates increase, thus reducing the estimated subsidy amount.

Unfortunately, there are no financial benefits as the cost outweighs what can feasibly be charged. The other benefits of a scalping plant are to provide recycled water to existing domestic water irrigation and construction water customers. This will result in offsetting the existing domestic water use for parks, schools, freeway landscaping and other large irrigated landscape areas, and for construction and sewer cleaning purposes. The offsetting of domestic water with recycled water will reduce the overall regional domestic water pumping currently required to serve existing irrigation and construction water uses. In addition, the scalping and treating of raw wastewater from the sewer system will increase downstream sewer capacity and may alleviate potential bottlenecks as growth within these areas occurs. Another benefit would be the continued irrigation of landscape areas during drought periods when domestic water conservation measures require the reduction or elimination of irrigation water use.

FINANCIAL IMPACT:

The financial impact would be estimated if direction is provided to further explore the possibility of constructing a wastewater scalping plant and recycled water distribution system. Costs for the Recycled Water Feasibility Study have already been budgeted and approved by Council.

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RECOMMENDATION:

Staff requests the Economic Development Committee provide direction on a possible Wastewater Scalping Plant and Recycled Water Distribution System in the north end of the City of Rialto.