



DATE: October 15, 2014

TO: Honorable Mayor and City Councilmembers

FROM: Water Utilities Department

SUBJECT: **AUTHORIZATION TO PROVIDE \$10,000 IN FUNDING TO WATEREUSE [WATER REUSE] RESEARCH FOUNDATION'S DIRECT POTABLE REUSE INITIATIVE**

SYNOPSIS

Staff and the Utilities Commission recommend that the City Council authorize the Water Utilities Department to provide \$10,000 in funding to the WaterReuse Research Foundation's Direct Potable Reuse Initiative to support efforts for indirect and direct potable water reuse.

BACKGROUND

The North San Diego Water Reuse Coalition (Coalition) is working to expand the beneficial use of recycled water in North San Diego County. These efforts focus on leveraging shared infrastructure and effective partnerships to connect recycled water supply with demand. The projects include both irrigation reuse or "purple pipe" projects and potable reuse. Until now, potable reuse has only been examined on an indirect basis. However, as the conversation broadens to include Direct Potable Reuse (DPR), more projects become potentially viable in North San Diego County.

The Coalition supports the need for expanding research to address technical issues associated with Direct Potable Reuse, to assist California Department of Public Health and the State Water Resources Control Board with regulatory guidelines to ensure safe and reliable treatment methods are implemented, and to develop education and outreach material for the public. As DPR (and Indirect Potable Reuse) has significant potential benefits to the region as a cost effective and locally produced water supply, the Coalition see regional value in supporting this effort as well as potential benefit to specific projects of the Coalition members, including the City of Oceanside's Indirect Potable Reuse project in the Mission Basin. Direct benefits to the City include;

- Shaping regulatory development for indirect and direct potable reuse projects such as the Mission Basin project;

- Pushing the feasibility of such projects into the forefront for the California Department of Public Health thereby, making DPR and IPR, alternative supply options for the City.
- Direct or Indirect Potable Reuse could improve water quality and supply within the San Diego region, and provide a locally produced, drought resistant, water supply. The City's Indirect Potable Reuse project has the potential to double local groundwater use, the City's lowest cost water supply, within the City.
- A future Direct Potable Reuse project has the potential to reuse 100 percent of flows treated at the San Luis Rey and the La Salina treatment plants, exceeding the Council goal of 50 percent local supplies by 2030.

ANALYSIS

Indirect Potable Reuse (IPR) is the concept of purifying wastewater to drinking water standards and introducing it into an environmental buffer prior to a potable use. Indirect potable reuse (IPR) is occurring on a variety of scales within California and other arid states and counties due to the scarcity of potable water supplies. The largest IPR project near North San Diego County is the Groundwater Replenishment System in Orange County, which can produce up to 70 million gallons per day of high quality water. Due to the success of projects like this, the water reuse community has been exploring the concept of Direct Potable Reuse, which can increase the cost effectiveness and regional availability of potable reuse. Utilizing advanced treatment technologies such as reverse osmosis and advanced oxidation, water produced from these treatment plants exceeds the quality of many current potable water supplies.

The goal of this initiative is to establish direct potable reuse as a water supply option that can be implemented by California water utilities. Direct potable reuse is defined as the planned introduction of purified recycled water either directly into a public water system or into a raw water supply immediately upstream of a drinking water treatment plant. In 2013, State legislation was enacted requiring the California Department of Public Health (CDPH) to investigate and, in consultation with the State Water Resources Control Board (SWRCB), to report to the California Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse by December 31, 2016.

The WaterReuse Research Foundation (WRF) is embarking on a multi-year research effort to ensure that relevant scientific, technical, public acceptance and other factors are available to CDPH for the development of DPR regulatory criteria. WaterReuse California and the WaterReuse Research Foundation have developed a funding strategy that leverages funds from WaterReuse members (both public and private) to raise \$6,000,000. More than 30 public agencies from throughout the state have committed to contribute to this effort, including San Diego County Water Authority, City of San Diego, Western Municipal Water District, Eastern Municipal Water District, Irvine Ranch Water District, Orange County Water District, and San Francisco Public Utilities Commission. The North San Diego Water Reuse Coalition (Carlsbad, Oceanside, Escondido, Leucadia Wastewater District, Olivenhain Municipal Water District, Rincon Municipal

Water District, Santa Fe Irrigation District, Vallecitos Water District, Vista Irrigation District, and San Elijo Joint Powers Authority) also supports this effort, and as such, have discussed contributing as a group.

FISCAL IMPACT

The funding for this City's contribution to WaterReuse would come from Water Utilities Department, Water Administration Operating budget, 750010711.5305. The amount of the contribution would be \$10,000, currently there is a balance of over \$116,738 in this account; therefore, there is sufficient budget for this project. The source of the funds is current year operating revenues.

INSURANCE REQUIREMENTS

Does not apply

COMMISSION OR COMMITTEE REPORT

The Water Utilities Commission will review recommendation at its regularly scheduled meeting on October 21, 2014.

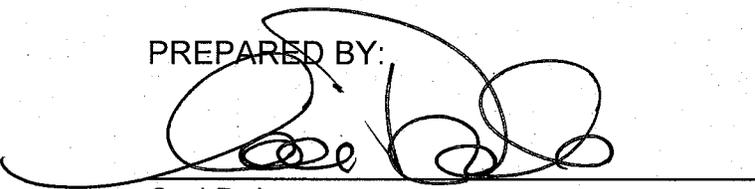
CITY ATTORNEY'S ANALYSIS

City Attorney Analysis does not apply.

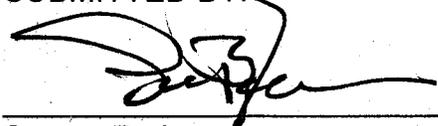
RECOMMENDATION

Staff and the Utilities Commission recommend that Council authorize the Water Utilities Department to provide \$10,000 in funding to the WaterReuse Research Foundation's Direct Potable Reuse Initiative to support efforts for indirect and direct potable water reuse.

PREPARED BY:


Cari Dale
Water Utilities Director

SUBMITTED BY:


Steven R. Jepsen
City Manager

REVIEWED BY:

Michelle Skaggs Lawrence, Assistant City Manager

James R. Riley, Financial Services Director



