

**REVISED**  
**AGENDA ITEM SUBMITTAL**

**Meeting Date:** September 7, 2016

**Budgeted:** N/A

**To:** Board of Directors

**Budgeted Amount:** N/A

**Cost Estimate:** N/A

**From:** Mike Markus

**Funding Source:** N/A

**Program/Line Item No.:** N/A

**General Counsel Approval:** N/A

**Engineers/Feasibility Report:** N/A

**Staff Contact:** J. Kennedy

**CEQA Compliance:** N/A

**Subject: METROPOLITAN WATER DISTRICT LOS ANGELES COUNTY CITY OF  
CARSON INDIRECT POTABLE REUSE PROJECT**

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**SUMMARY**

The Metropolitan Water District (MWD) is studying the feasibility of constructing a GWRS type project in partnership with Los Angeles County Sanitation District in the City of Carson. The District, via the construction of necessary pipelines, could receive 65,000 acre-feet per year of water from the project to recharge the groundwater basin. An OCWD resolution of support for the project was adopted in January 2016. As previously requested by Board members, a MWD representative, John Bednarski, will provide a project update and presentation.

Attachment(s):

- November 2015 MWD staff report describing the project and study
- Presentation provided to MWD Engineering and Operations Committee on August 15, 2016

**RECOMMENDATION**

Informational

**BACKGROUND AND ANALYSIS**

The Los Angeles County Joint Water Pollution Control Plant in the City of Carson currently treats approximately 270 million gallons of day of wastewater to secondary standards before it is discharged through outfall tunnels to the Pacific Ocean. MWD is working with the Los Angeles County Sanitation District to potentially construct a GWRS indirect potable reuse (IPR) type project at the Carson plant to purify and create up to 150 million gallons per day of new water supplies to be used to replenish local groundwater basins in Southern California.

MWD staff is working to complete a feasibility report for the project by December 2016 for consideration by the MWD Board. MWD has indicated the District via a contract could receive 65,000 acre-feet per year of water to recharge the groundwater basin.

The quality of this water would be high, similar to GWRS water, with a low total dissolved solids concentration. It also appears the water would have reliability similar to GWRS and would not be subject to the MWD Allocation process during drought cycles.

Potential Future Water Supply Portfolio

In 2015 the District committed to purchase 650,000 acre-feet of MWD untreated full service water from the Municipal Water District of Orange County over ten years which is an average of 65,000 acre-feet per year. The Carson IPR project would in general replace that commitment. How the proposed project could be incorporate into the OCWD service territory water supply portfolio is shown in the figure below. The figure provides a projection of future water supply sources. The Basin Production Percentage would be approximately 96% with this water supply mix.

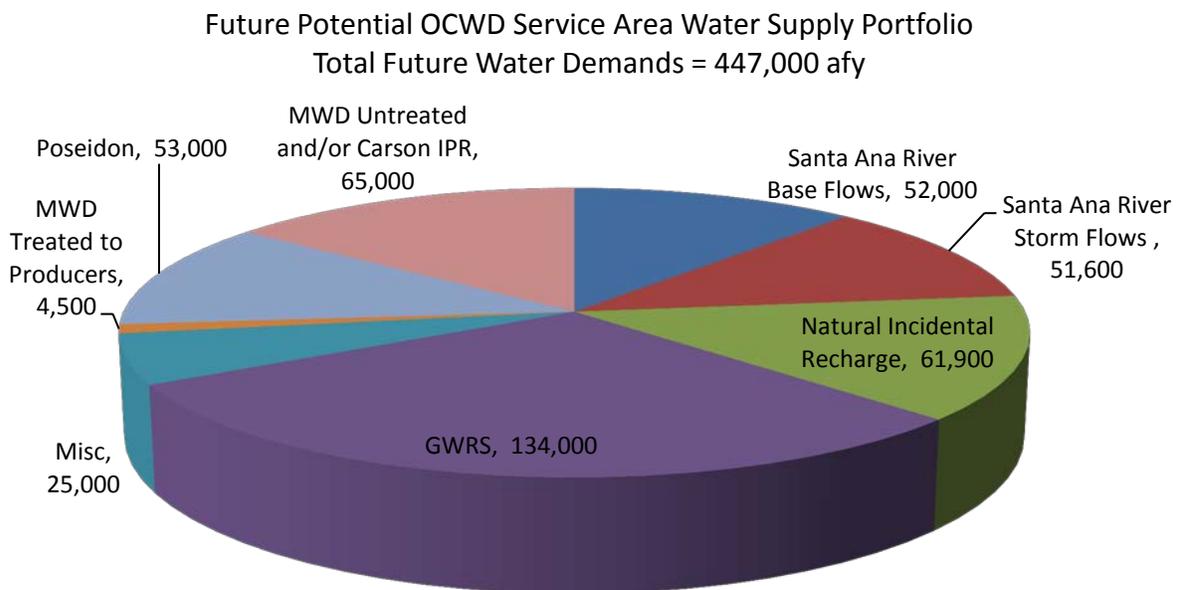


Figure Assumptions

- Total future water demands of 447,000 acre-feet per year is an average of two numbers: (1) a summation of the 19 Groundwater Producers individually estimated future water demands provided in their 2015 Urban Water Management Plans which is 459,000 acre-feet per year; and (2) the MWDOC Orange County Water Supply Reliability study estimate of 435,000 acre-feet per year.
- Santa Ana River Storm Flows and Natural Incidental Recharge amounts shown were provided at the March 9, 2016 Water Issues Committee. Based upon past hydrology, there is a 50% probability of receiving these amounts of water to recharge the groundwater basin.
- Santa Ana River Base Flows are assumed to decline from the current approximately 64,000 acre-feet per year to 52,000 acre-feet per year. This is the

“Medium Base Flow Condition” as described with modeling work Wildermuth Environmental provided for the District in 2014.

- GWRS is expanded from 103,000 to 134,000 acre-feet per year.
- Miscellaneous supplies are the IRWD Michelson and OCWD GAP purple pipe reclamation projects. These two projects currently provide about 20,000 acre-feet per year of water supply.
- MWD Untreated and/or Carson Indirect Potable Reuse (IPR) project. OCWD originally committed to take a total of 650,000 acre-feet of MWD untreated full service water over a ten year period (65,000 acre-feet per year). This commitment ends in December 2024. MWD would want the District to contractually commitment to taking a similar amount of water from the Carson IPR project in-lieu of the original 65,000 acre-feet per year commitment to purchase untreated full service water.
- Poseidon – The chart assumes the Poseidon project moves forward.
- MWD Treated water to Producers is calculated as the difference between total water demands of 447,000 acre-feet per year and the total of the other supply sources. Over the past 30 years the average amount of treated imported water provided by the MWD to the 19 OCWD Groundwater Producers is 136,000 acre-feet per year.

## **PRIOR BOARD ACTIONS**

January 2016 – Approved resolution of support for the MWD IPR project