Metropolitan Domestic Water Improvement District Board of Directors Meeting

May 15, 2023

Adoption of an Updated Total Dissolved Solids Blending Target for the Northwest Recharge, Recovery and Delivery System

Synopsis

The Board of Directors is requested to update the Metropolitan Domestic Water Improvement District's Northwest Recharge, Recovery and Delivery System (NWRRDS) blending total dissolved solids target (TDS).

Background

The NWRRDS project is designed to reduce groundwater pumping in the Metro Main service area that is experiencing groundwater level declines that could increase due to the continuation of climate change impacts. Maximizing the use of renewable water resources through the NWRRDS project is increasingly important to better manage available water resources and aquifer water levels.

Issues

On April 14, 2014, the Board adopted an average annual range between 400 and 500 milligrams per liter (mg/L) for TDS blended water. Even with the installation of the Ironwood Blend Well, deliveries of recovered Central Arizona Project (CAP) water from Avra Valley via NWRRDS will have to be reduced to meet the 400 and 500 mg/L target. By increasing the target to an annual average of 500 mg/L or less, there is more opportunity to increase the NWRRDS deliveries to the Metro Main service area and further offset groundwater pumping. The United States Environmental Protection Agency's secondary water quality standard for TDS is 500 mg/L. Thus, using the revised blending target would match that of the current water quality standard.

Recommendation

It is recommended the Board of Directors adopt an updated TDS blend target for NWRRDS to an annual average of 500 mg/L or less.

Board of Directors Meeting May 15, 2023 Adoption of an Updated Total Dissolved Solids Blending Target for the NWRRDS Page 2 of 2

Suggested Motion

I move to adopt an updated total dissolved solids blend target for the Northwest Recharge, Recovery and Delivery System to an annual average of 500 mg/L or less.

Respectfully submitted,

Wally Wilson Water Resources Manager

I concur with the above-noted recommendation. Respectfully submitted,

Joseph Olsen, P.E. General Manager