

# Western Regional Water Commission

## STAFF REPORT

**DATE:** February 12, 2020

**TO:** Chair and Members, Western Regional Water Commission (“WRWC”)

**FROM:** Jim Smitherman, WRWC Water Resources Program Manager

**SUBJECT:** Educational Workshop on OneWater Nevada, a multi-jurisdictional feasibility study focusing on advanced purified water treatment technologies and related demonstration projects

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### Workshop Topical Outline

#### 1. Technical Session

- a. Advanced Purified Water (Category A+ Reclaimed Water): what it is and what it isn't
- b. Existing Reclaimed Water Categories: allowed uses of each
- c. Uses of Advanced Purified Water: groundwater augmentation by well-injection or spreading basins
- d. Overview of Treatment Processes: feasibility study, proof of technology, drinking water criteria
  - 1) Conventional filtration vs. membrane technology
  - 2) Ozone / Biological Activated Carbon (O3/BAC): treatment for remaining total organic carbon (TOC), bioassays
  - 3) Ultraviolet Light, Granular Activated Carbon (UV/GAC): disinfection polishing step
- e. Timeline: accomplishments to date and what remains to be done
- f. Cost of Advanced Purified Water: a cost-competitive option, order of magnitude cost estimates
- g. Future Water Rights Considerations Concerning Advanced Purified Water: existing laws and regulations; potential for future will-serve commitments, cost and local government cooperation
- h. Demonstration Facility: location and size
  - 1) Purpose: proof of concept, advanced treatment, aquifer recharge, recovery, use water in conventional (purple pipe) reclaimed water system
  - 2) Clean, engineered facility, suitable for general public tours / education, leads to public acceptance
  - 3) OneWater Nevada Federal Funding support request

#### 2. Public Acceptance / Outreach Session

#### 3. Break for travel to Reno Stead Water Reclamation Facility for a tour of the OneWater Nevada Advanced Purified Water Treatment Demonstration Project

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