Potable Reuse: A New Water Supply for California’s Future

Winter 2017

Jennifer West

WateReUse California
Promotes responsible stewardship of California's water resources by maximizing the safe, practical and beneficial use of recycled water and by supporting the efforts of the of WateReuse Association.
2009-2015 Volumetric Changes in Beneficial Uses

ANNUAL USE
(acre-feet, cubic meters)

Agricultural Irrigation
Landscape & Golf Course Irrigation
Industrial & Commercial
Geothermal
Seawater Intrusion Barrier
Recreational Impoundment
Natural System Restoration, Wetlands & Wildlife Habitat
Groundwater Recharge
Other

1970
1977
1987
2001
2009
2015
PERMITTED GROUNDWATER (8)
Existing ≈ 200,000 AFY ~ 1.6 M People
**PERMITTED GROUNDWATER (8)**
Existing ≈ 200,000 AFY ∼ 1.6 M People

**PLANNED GROUNDWATER (19)**
Planned ≈ 293,500 AFY ∼ 1.6 M People

**PLANNED SURFACE WATER AUGMENTATION (4)**
Planned ≈ 100,000 AFY ∼ 800,000 People
Potable Reuse Regulatory Milestones

- Groundwater 2015
- DPR report 2016
- Surface Water Reservoir 2017
- Raw Water Augmentation 2023
- Treated Drinking Water ??
Major Milestone Reached: DPR Report to the Legislature

• Takeaway -- It’s feasible to develop statewide DPR regulations

• 6 research areas identified before regs can be developed

• Identifies different types of “DPR”
Major Milestone Reached: Surface Water Augmentation Regs

- Draft released in summer 2017
- Requires advanced treatment
- Requires extensive monitoring
- Six-month theoretical retention time
- Contains “alternative clause” to go to 2 months retention time
- New draft must go back to Expert Panel for approval
AB 574

Advances the use of recycled water in California.
Potable Reuse: Newly Defined Types

Reservoir Water Augmentation
Potable Reuse: Newly Defined Types

Raw Water Augmentation

1. Urban Water Use
2. Wastewater Treatment
3. Advanced Treatment ++
4. Other Raw Water Source
5. Water Treatment
Potable Reuse: Newly Defined Types

Treated Drinking Water Augmentation
Water Board Actions AB 574

• Sets 2023 deadline for Raw Water Augmentation regulation development and adoption

• Expert Panel to assist Water Board in regulation development

• Requires completion of DPR research
Plan for Research Projects

• **Driver:** Broad interest in initiating the 6 DPR projects identified by Expert Panel to support the development of DPR regulations in California

• **First Step:** Develop the project descriptions (PDs) for the 6 DPR projects
  – These PDs would define the scope of the 6 research projects

• **Proposed Approach:**
  – WE&RF and NWRI will fund a project to develop PDs (March – August 2017)
  – **Principal Investigators:** Adam Olivieri and Jim Crook (Expert Panel Co-Chairs)
  – Involve other Expert Panel members as needed
  – Consult with other experts as needed
Proposed Plan for 6 DPR Projects (continued)

• **Important:** Collaborate with SWRCB/DDW staff

• **Outcomes:**
  – Hold a workshop with broad participation to review draft PDs
  – Final PDs would be used to develop RFPs

• **Second Step:** Sponsor and Fund 6 DPR Projects based on PDs
  – Collaborate with SWRCB/DDW
  – Funding in part with Prop 1 (SWRCB/DWQ) and by WE&RF and Water Research Foundation

• **Contacts:**
  – Jeff Mosher (WE&RF) and Julie Minton (WE&RF)
Conclusions

• Potable reuse is a safe, new water supply for CA with great potential to expand.

• In last two years major milestones reached for potable reuse. CA remains a leader!
Contact Information:

Jennifer West
WateReuse California
Jwest@watereuse.org
(916) 669-8401