Advancing Potable Reuse in the San Diego Region: Opportunities, Public Acceptance and Regulatory Challenges

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Opportunities
Major Challenges to Water Supply Reliability

- Population and Economic Growth
- SWP Reliability
- Recurring Droughts
- Climate Change
Diversifying Supplies to Improve Long-Term Reliability

Reduced Ocean Discharge

- The San Diego Region Discharges over 300 MGD of sewage effluent to the Pacific Ocean
Augmenting Surface Supplies in San Diego County
Improved water quality
Public Acceptance
Water Reliability Coalition

- BIOCOM
- Building Industry Association
- Building Owners and Managers Association
- Citizens Coordinate for Century 3
- Coastal Environmental Rights Foundation
- Endangered Habitats League
- Environmental Health Coalition
- Empower San Diego
- Friends of Infrastructure
- Industrial Environmental Association
- National Association of Industrial and Office Properties
- San Diego Audubon Society
- San Diego Coastkeeper
- San Diego County Taxpayers Association
- San Diego Regional Chamber of Commerce
- San Diego Regional Economic Development Corporation
- San Diego River Park Foundation
- Surfrider Foundation, San Diego Chapter
- Sustainability Alliance of Southern California
- Utility Consumers’ Action Network
- San Diego and Imperial Counties Labor Council
San Diego is downstream.
City of San Diego Public Outreach & Education

- Speakers Bureau
- Community Events
- Facility Tours
- Media Outreach

www.purewatersd.org
Advanced Water Purification Facility

Open for tours since Summer 2011

Register online at www.PureWaterSD.org
Water Purification Process

Multi-Barrier Water Purification Steps

Recycled Water → Membrane Filtration → Reverse Osmosis → UV / Advanced Oxidation → Detention Time in Reservoir → Treatment at Drinking Water Plant → Drinking Water Supply

Water Purification Process

Microfiltration & Ultrafiltration → Reverse Osmosis → Ultraviolet Light / Hydrogen Peroxide
Opinion About Using Advanced Treated Recycled Water as an Addition to Drinking Water Supply

- **Strongly Favor**: 10% (2011), 9% (2004)
- **Somewhat Favor**: 33% (2011), 16% (2004)
- **Somewhat Oppose**: 12% (2011), 19% (2004)
- **Strongly Oppose**: 45% (2011), 11% (2004)
- **Unsure**: 9% (2011), 10% (2004)
Regulatory Certainty
Regulatory Goals

- CDPH: Reliable supply of pure, wholesome and potable water that is protective of public health
- State and Regional Boards: protect and enhance the quality of our state’s waters for present and future generations for all needs – such as drinking, bathing, boating, swimming, farming, manufacturing, and environmental uses.
- Regulatory certainty is critical for allowing policy makers to make educated decisions
Regulatory Requirements can have significant cost impacts
Expert Panel Opinion on “Direct” Potable Reuse

- Can raw water augmentation be done in a safe manner and what should the criteria be?
- Delays in this expert panel leaves regulatory uncertainty in the planning process
Regulatory Certainty on Regional Board Permitting is critical

- Criteria for Regional Board permits?
- What if the reservoir is on the 303(d) list?
- What if ATPW is blended with other raw water supplies?
- What if this water may end up in various reservoirs throughout the County?

Fishing at San Vicente
Permitting of projects using ATPW

- Should Porter Cologne apply?
- Should the Federal Clean Water Act apply?
- Does the high purity of the advance treated water make a difference?
- What are the risks?
One Solution for Creating Regulatory Certainty

- The risk of ATPW to the environment is de minimus
- This is a water supply and not a waste
- ATPW should be regulated under the Safe Drinking Water Act as a drinking water supply
- CDPH should convene expert panel to get timely recommendations