Untapped Potential: Water Reuse for California's Future Water Supply Reliability

City of San Diego's Remarks provided to the Assembly Water, Parks and Wildlife Committee's Oversight Hearing

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Deputy Director
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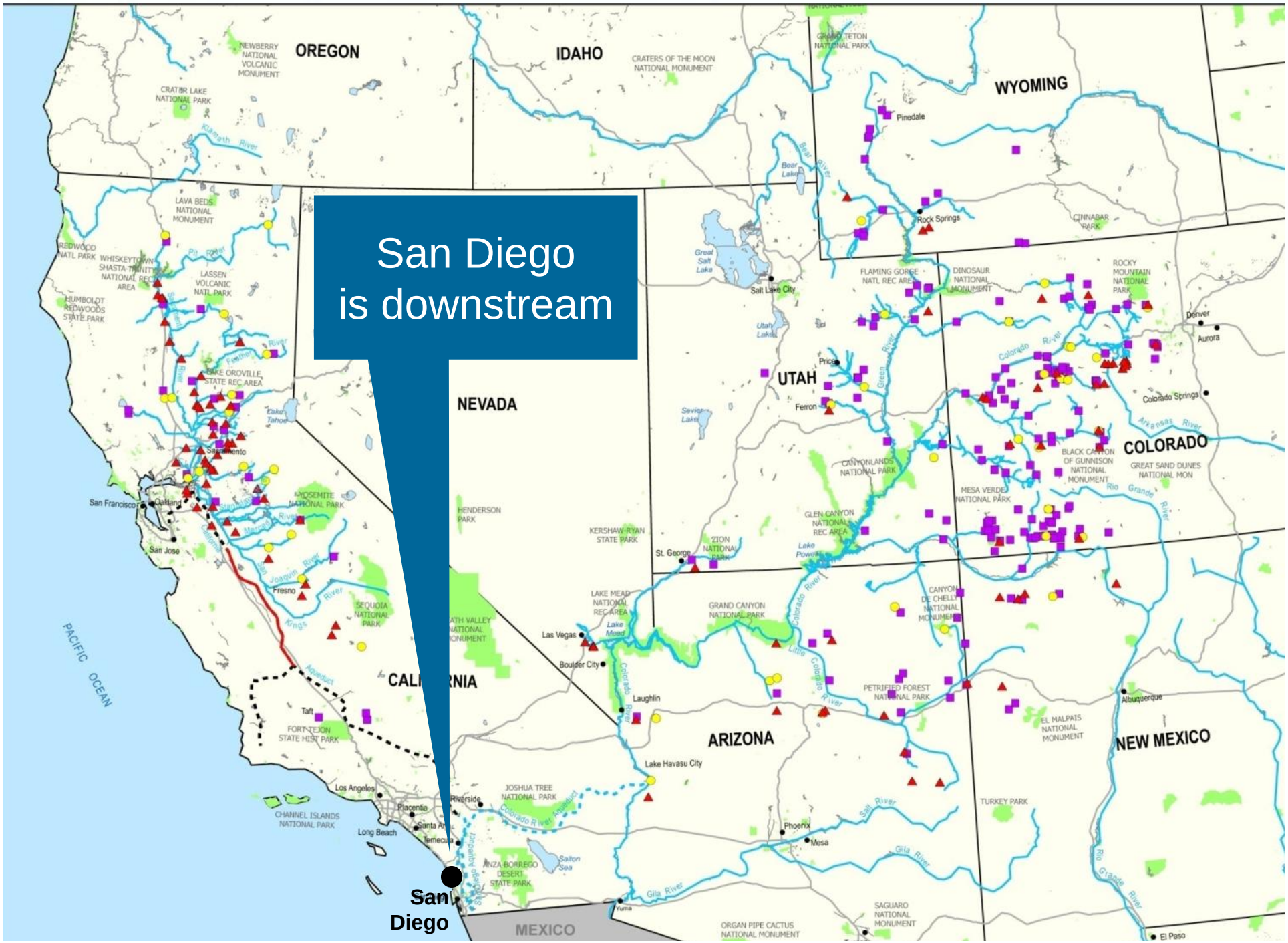
City of San Diego

- Population: 1.3 million
- Service area: 404 square miles
- 8th largest city in the U.S.


California Water Projects
Federal Water Projects
Central Valley Project
Coachella Canal
All American Canal
State Water Projects
Local Water Projects
Mokelumne Aqueduct
Hetch Hetchy Aqueduct
Los Angeles Aqueduct
Colorado River Aqueduct
Bay-Delta
Redding
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
Colorado River


San Diego
is downstream
OREGON
IDAHO
WYOMING
NEVADA
UTAH
COLORADO
ARIZONA
NEW MEXICO
CALIFORNIA
MEXICO
PACIFIC OCEAN
San Diego

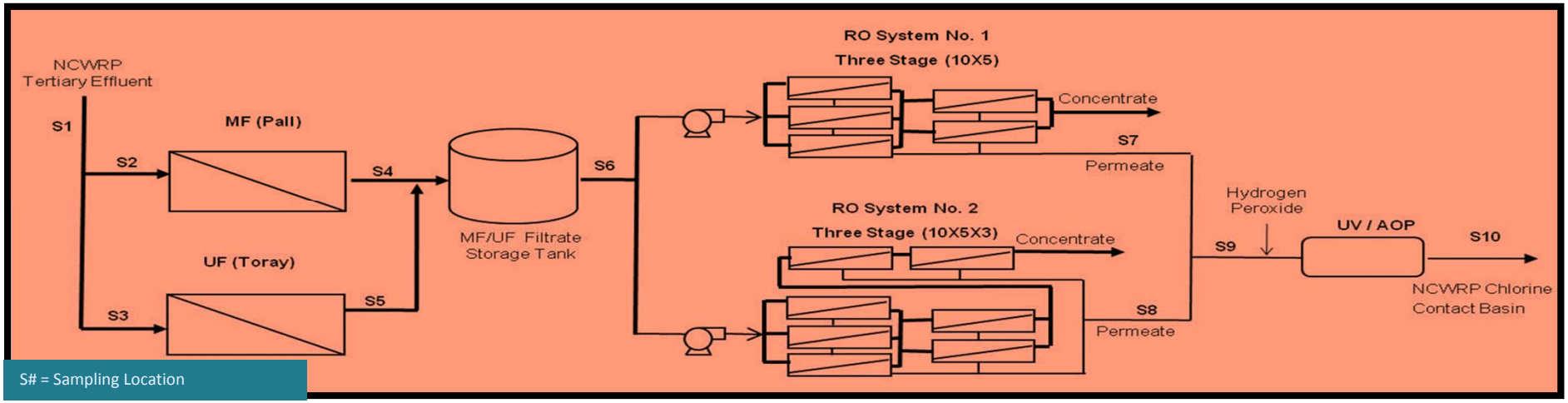
Our Water Supply Challenges

- Limited local supplies
- Increasing cost of imported water
- Pumping restrictions
- Recurring drought conditions
- Natural disasters

San Diego's Water Reuse Program

- 2004 ➤ City Council directs City Manager to conduct a study to evaluate options to increase the use of recycled water.
- 2006 ➤ Water Reuse Study identified six potential options to maximize the use of the City's existing recycled water.
- 2007 ➤ City Council voted to proceed with a Demonstration Project to determine the feasibility of utilizing highly purified tertiary water to augment raw water supply.

Advanced Water Purification Facility

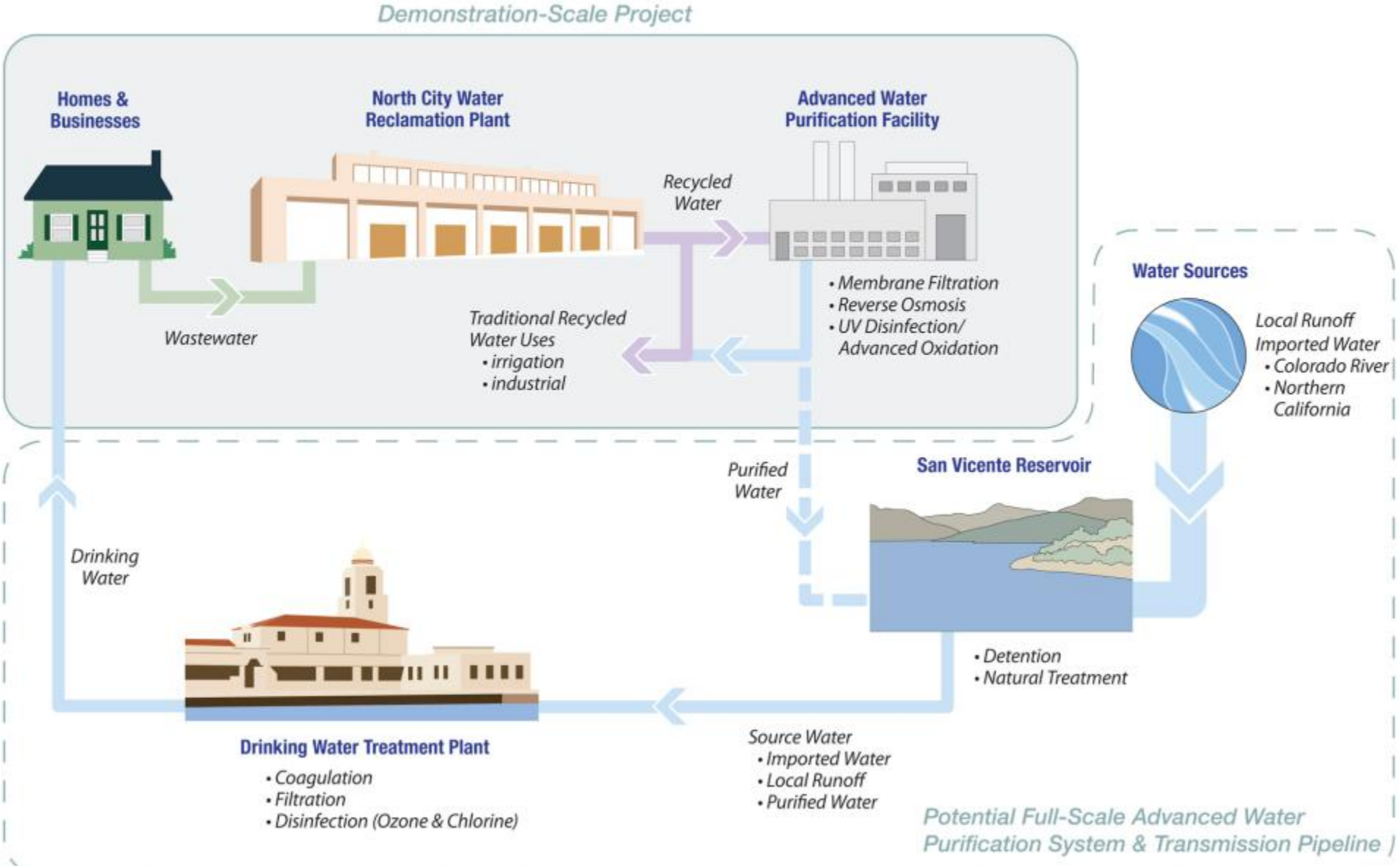


S# = Sampling Location

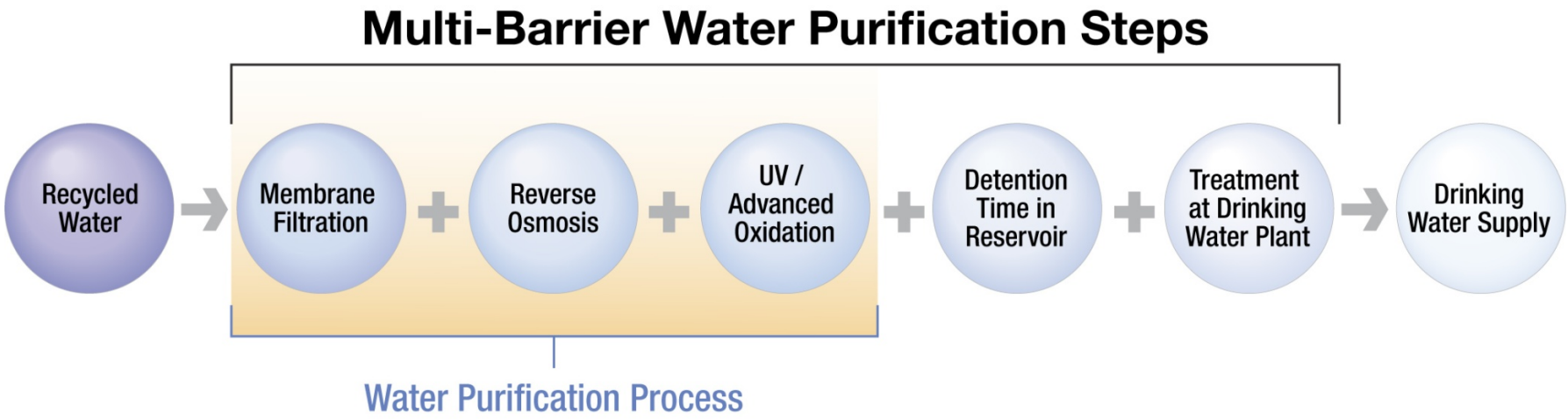
City of San Diego's

Water Purification Demonstration Project

Purification Process



Water Purification Process



Microfiltration & Ultrafiltration

Reverse Osmosis

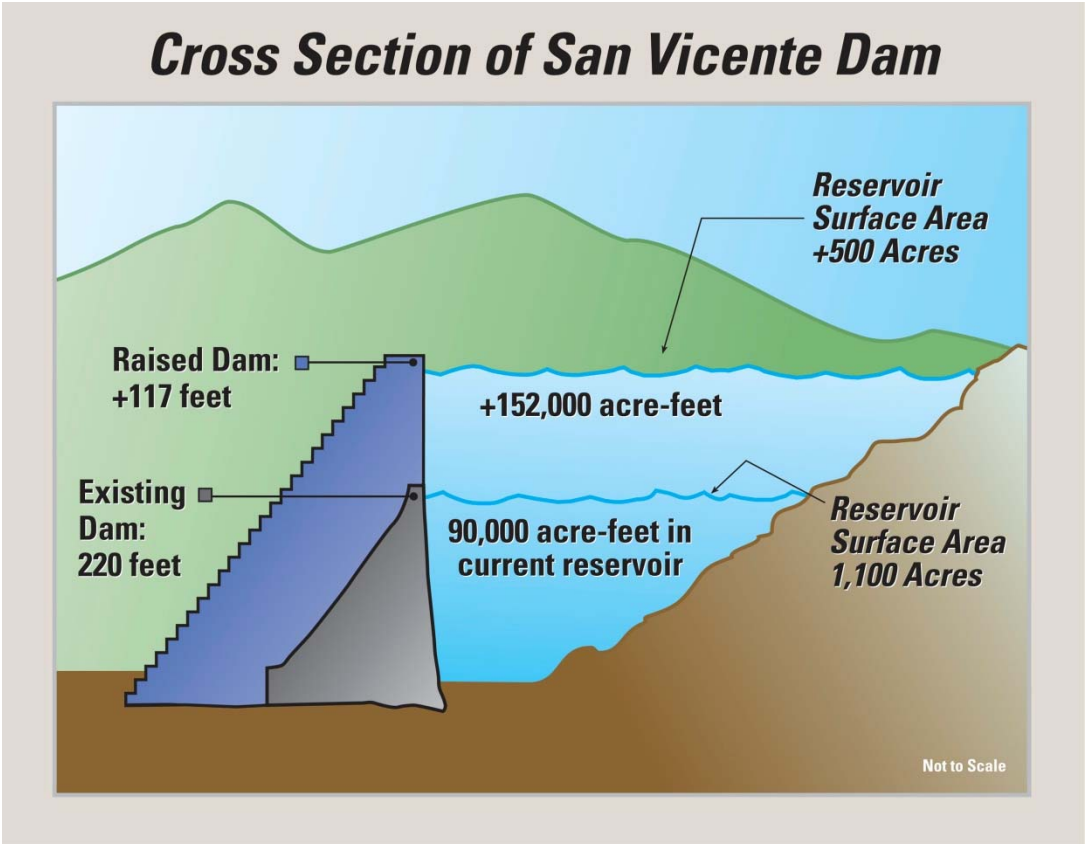
Ultraviolet Light / Hydrogen Peroxide

Independent Advisory Panel

- Review challenging issues facing water and wastewater communities
- Provide independent, technical, and scientific review
- Well-known reputation as a credible, third-party, research-oriented organization

Regulatory Framework - California Department of Public Health CDPH

- Series of workshops
- Submitted treatment testing and monitoring plan
- Demonstration testing
- Reservoir modeling



First Quarter Results - Overview

- Exceptional overall water quality, met all project treatment goals
- Purified water met all drinking water standards
- Equipment at each step in the treatment process is performing properly

Coalition of Support

Materials & Tools

- Fact sheets
- FAQ
- Info card
- Newsletter
- E-update
- Social Media
- QR Code
- Website
- Premiums

Public Tours

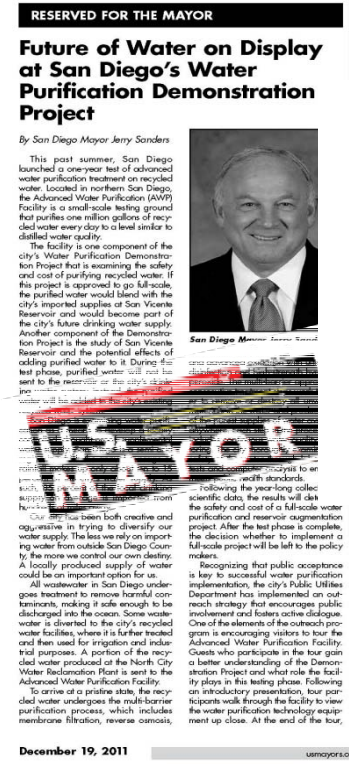
- Presentation
- Walking tour
- Water comparisons
- Active dialogue
- Useful feedback
- Print advertisements
- Water bill inserts

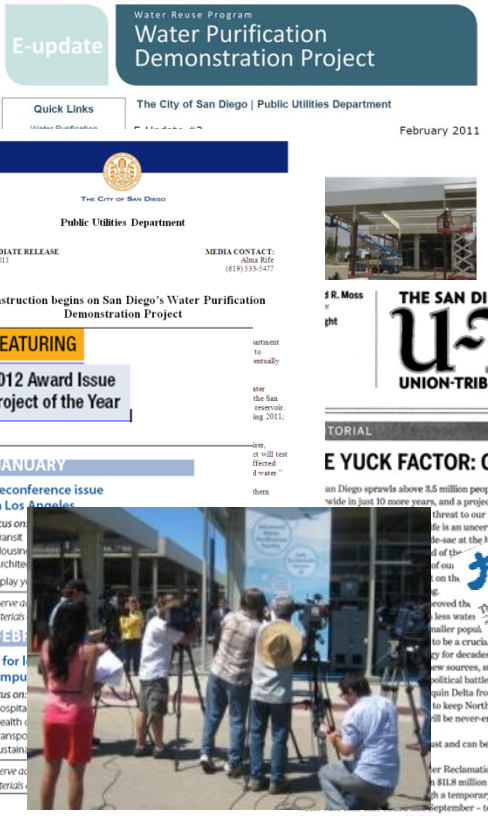
Media

Strategy

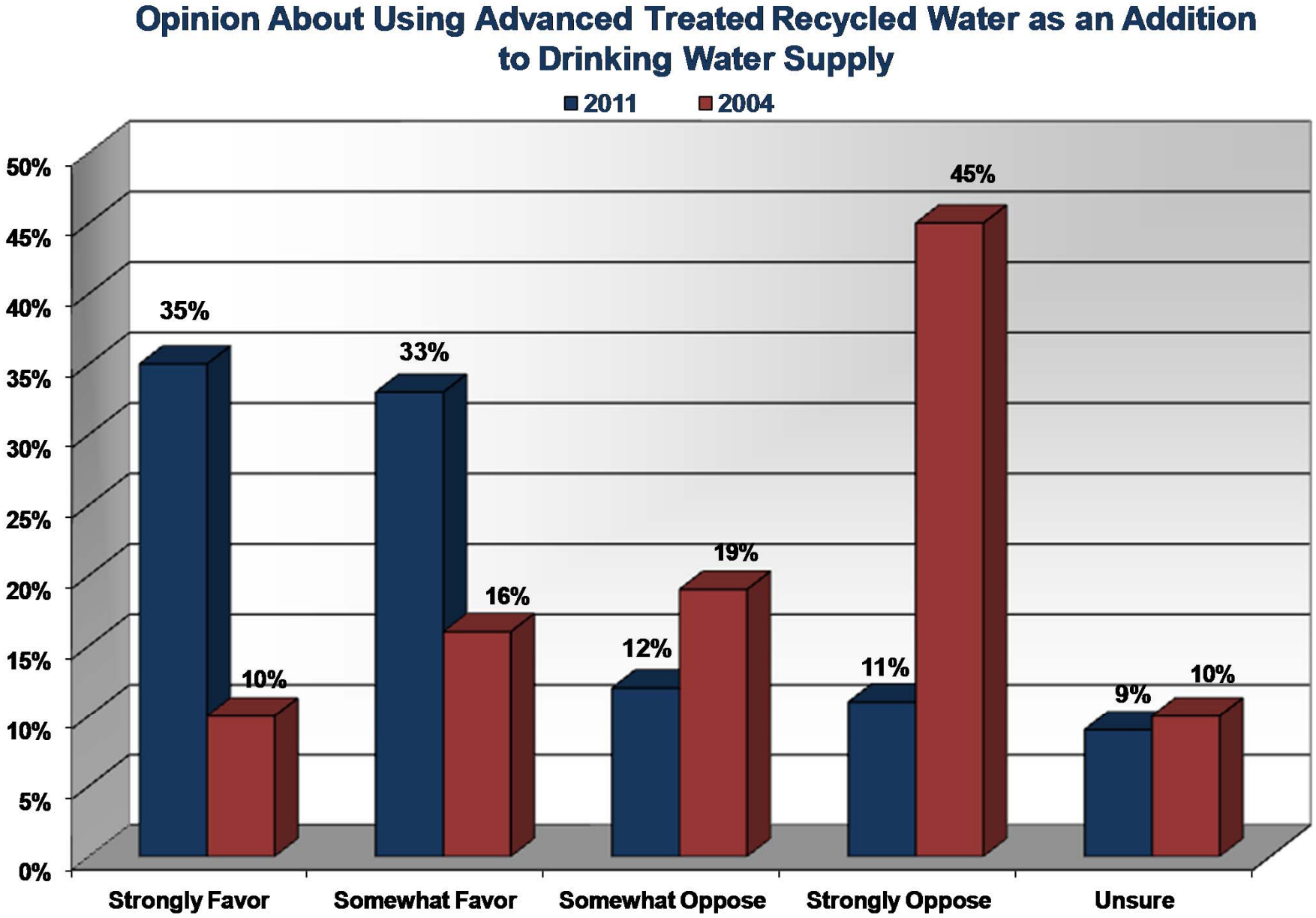
- Template article submissions
- Event calendars
- Editorial briefings
- Media consultant

Results



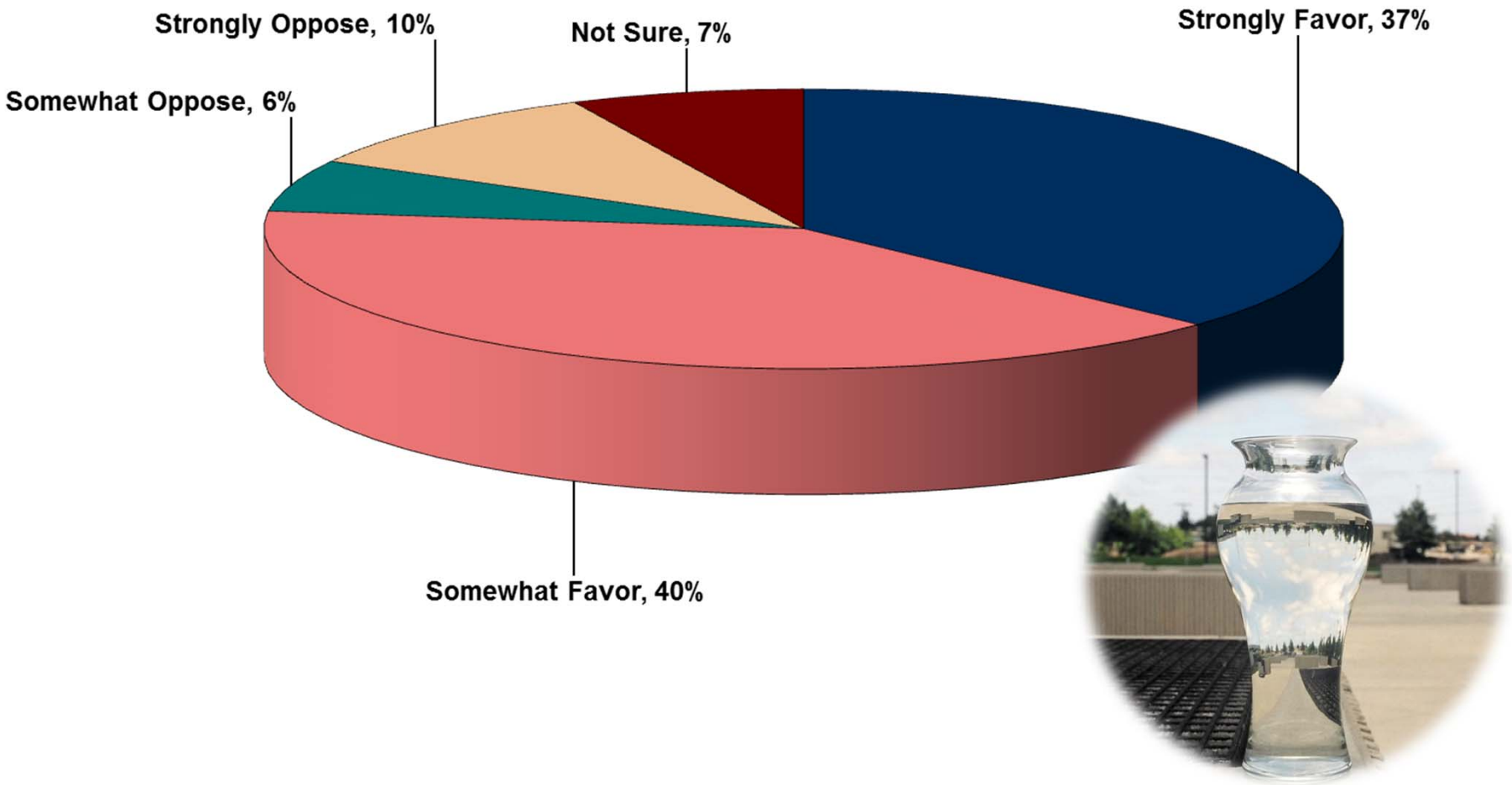


Rea & Parker/SDCWA Research Study



Opinion about Water Purification Demonstration Project

(scale: 1 = Strongly Favor..4 = Strongly Oppose--mean = 1.87)



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Water Purification Demonstration Project

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