Advancing Potable Reuse in the San Diego Region:

Opportunities, Public Acceptance and Regulatory Challenges

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San Diego County Water Authority

Opportunities

Major Challenges to Water Supply Reliability

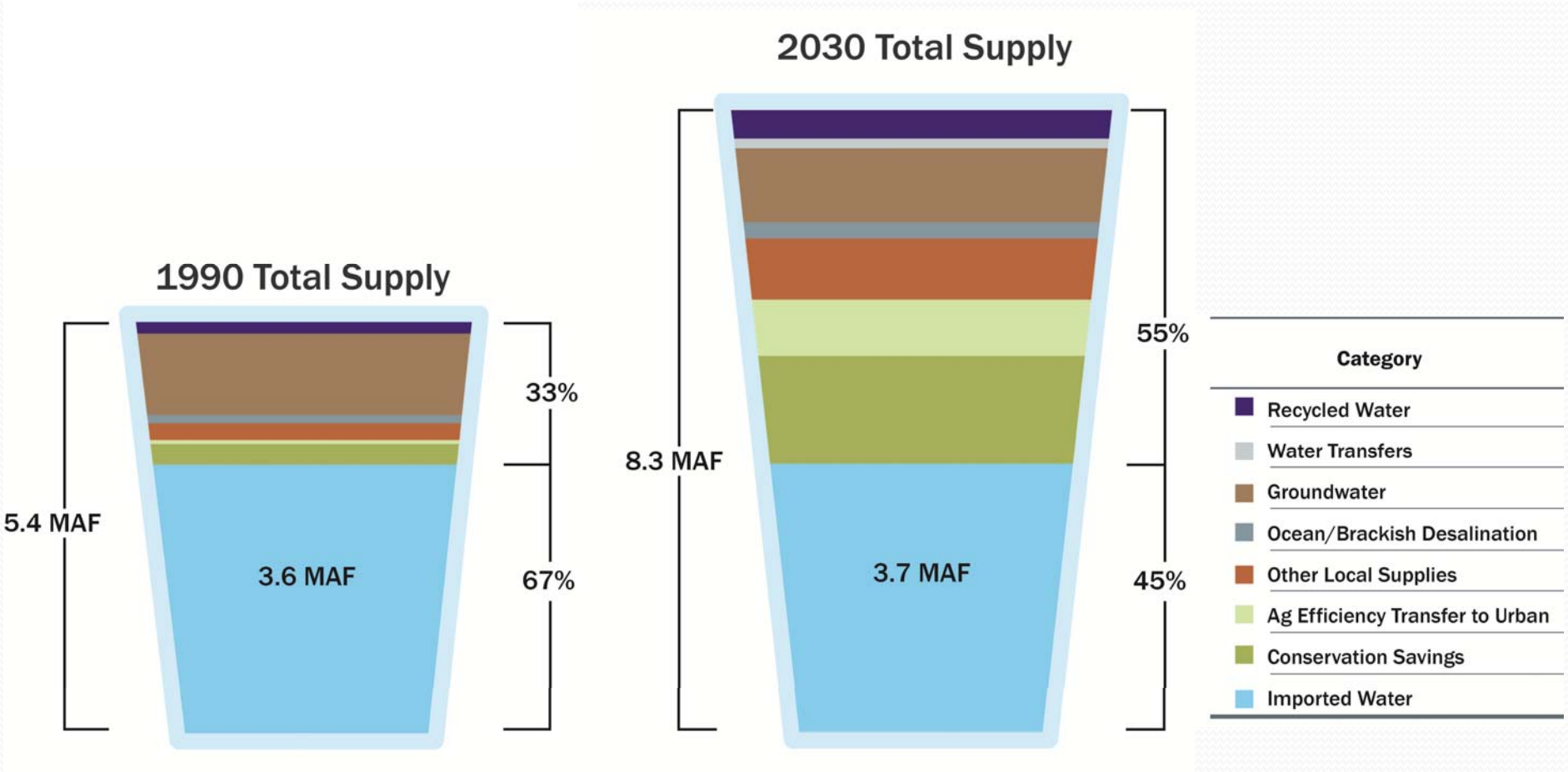
Population and Economic Growth

SWP Reliability

Recurring Droughts

Climate Change

Diversifying Supplies to Improve Long-Term Reliability



CALIFORNIA **URBAN WATER** AGENCIES

Source: California Urban Water Agencies' Water Supply Reliability Report. August 2012 (2010 Urban Water Management Plan Data)

Reduced Ocean Discharge

- The San Diego Region Discharges over 300 MGD of sewage effluent to the Pacific Ocean

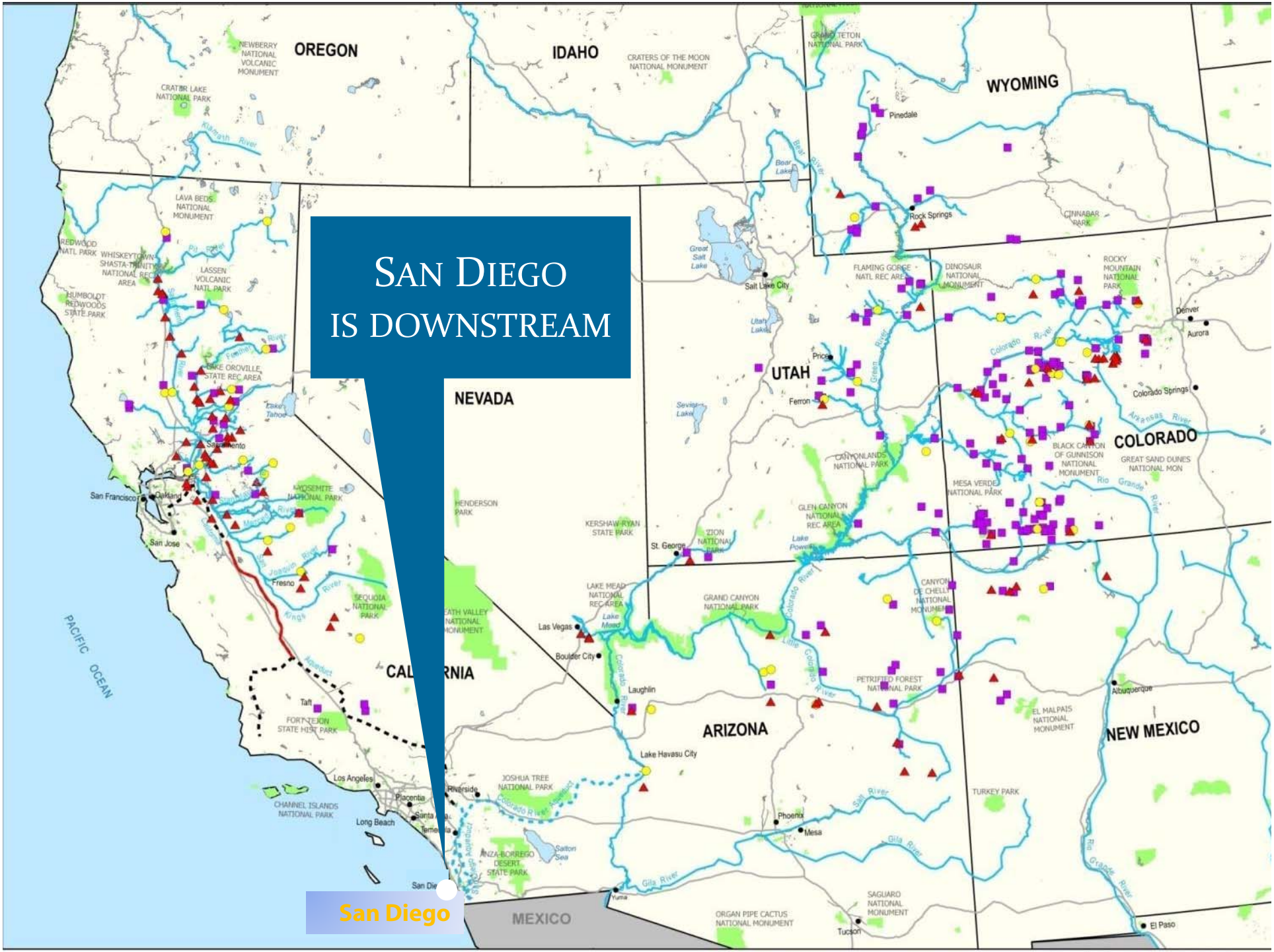
Augmenting Surface Supplies in San Diego County

Improved water quality

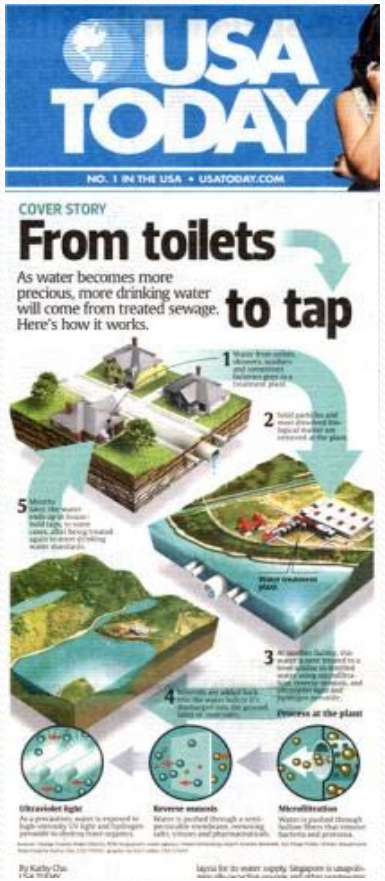
Public Acceptance

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 and Imperial Counties Labor Council
- 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
IS DOWNSTREAM
San Diego
OREGON
IDAHO
WYOMING
NEVADA
UTAH
COLORADO
ARIZONA
NEW MEXICO
MEXICO
PACIFIC OCEAN
San Francisco
Oakland
San Jose
Sacramento
Fresno
Los Angeles
Long Beach
Riverside
Las Vegas
Boulder City
Laughlin
Lake Havasu City
Phoenix
Mesa
Tucson
Yuma
Salt Lake City
Rock Springs
Pinedale
Price
Ferron
St. George
Denver
Aurora
Colorado Springs
Albuquerque
El Paso
Taft
Placentia
Yosemite National Park
Sequoia National Park
Grand Canyon National Park
Zion National Park
Canyonlands National Park
Mesa Verde National Park
Petrified Forest National Park
Joshua Tree National Park
Channel Islands National Park
Lake Tahoe
Lake Mead
Lake Powell
Great Salt Lake
Utah Lake
Bear Lake
Colorado River
Gila River
Salton Sea
Rio Grande River
Arkansas River

City of San Diego Public Outreach & Education



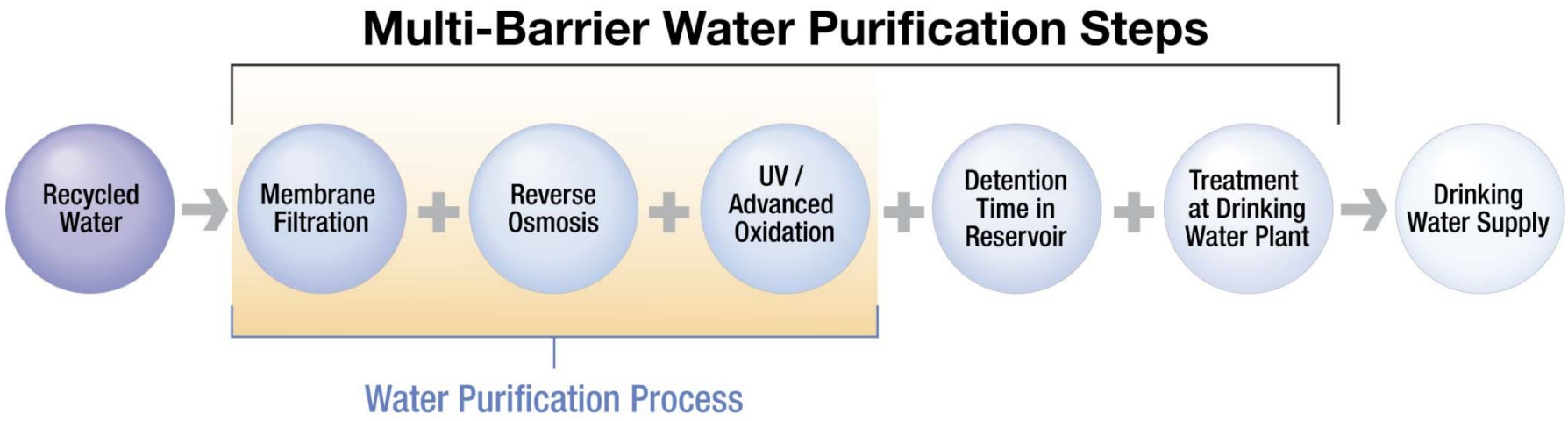
- Speakers Bureau
- Community Events
- Facility Tours
- Media Outreach

www.purewatersd.org

Advanced Water Purification Facility

Register online at www.PureWaterSD.org

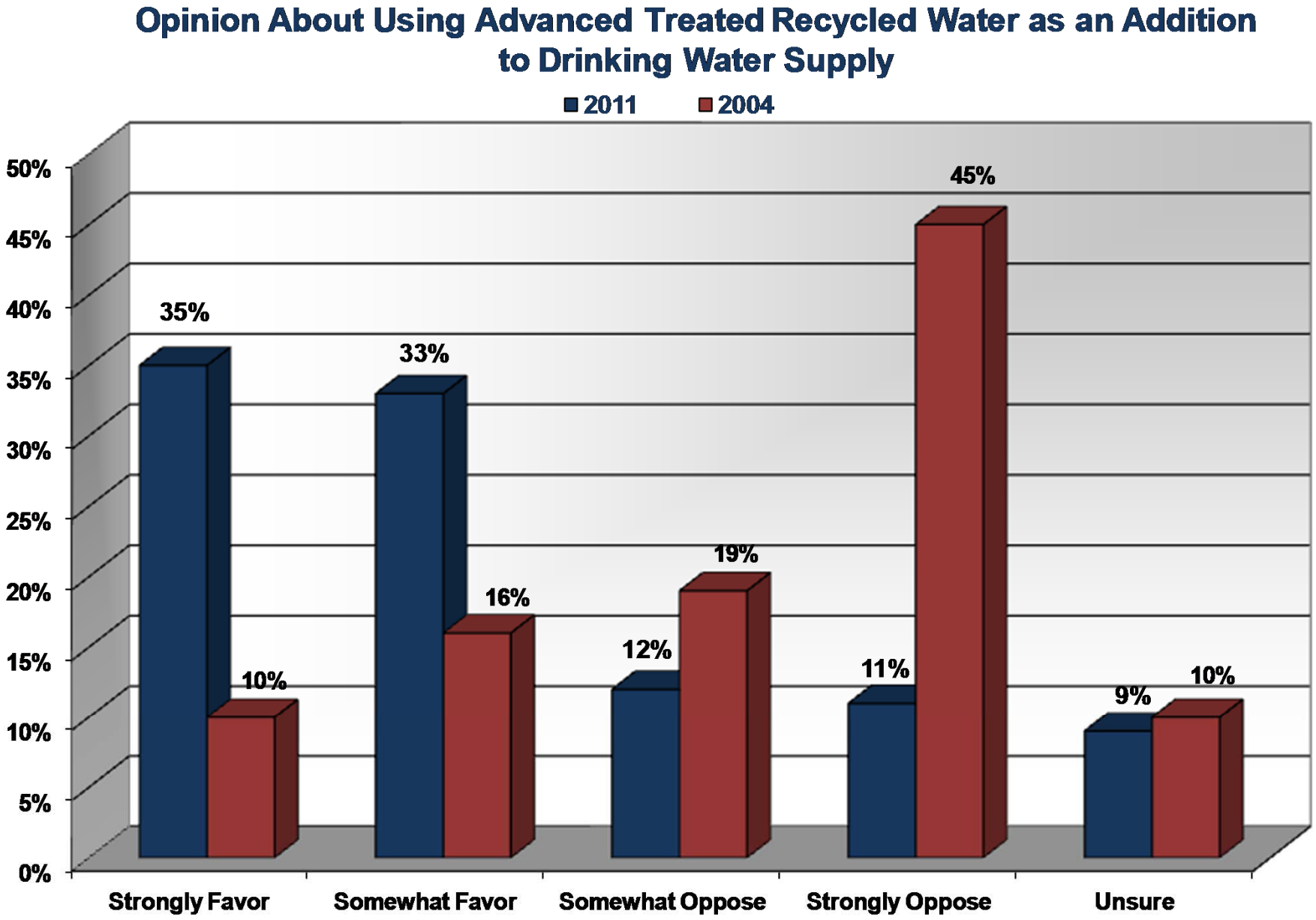
Water Purification Process



Microfiltration & Ultrafiltration

Reverse Osmosis

Ultraviolet Light / Hydrogen Peroxide

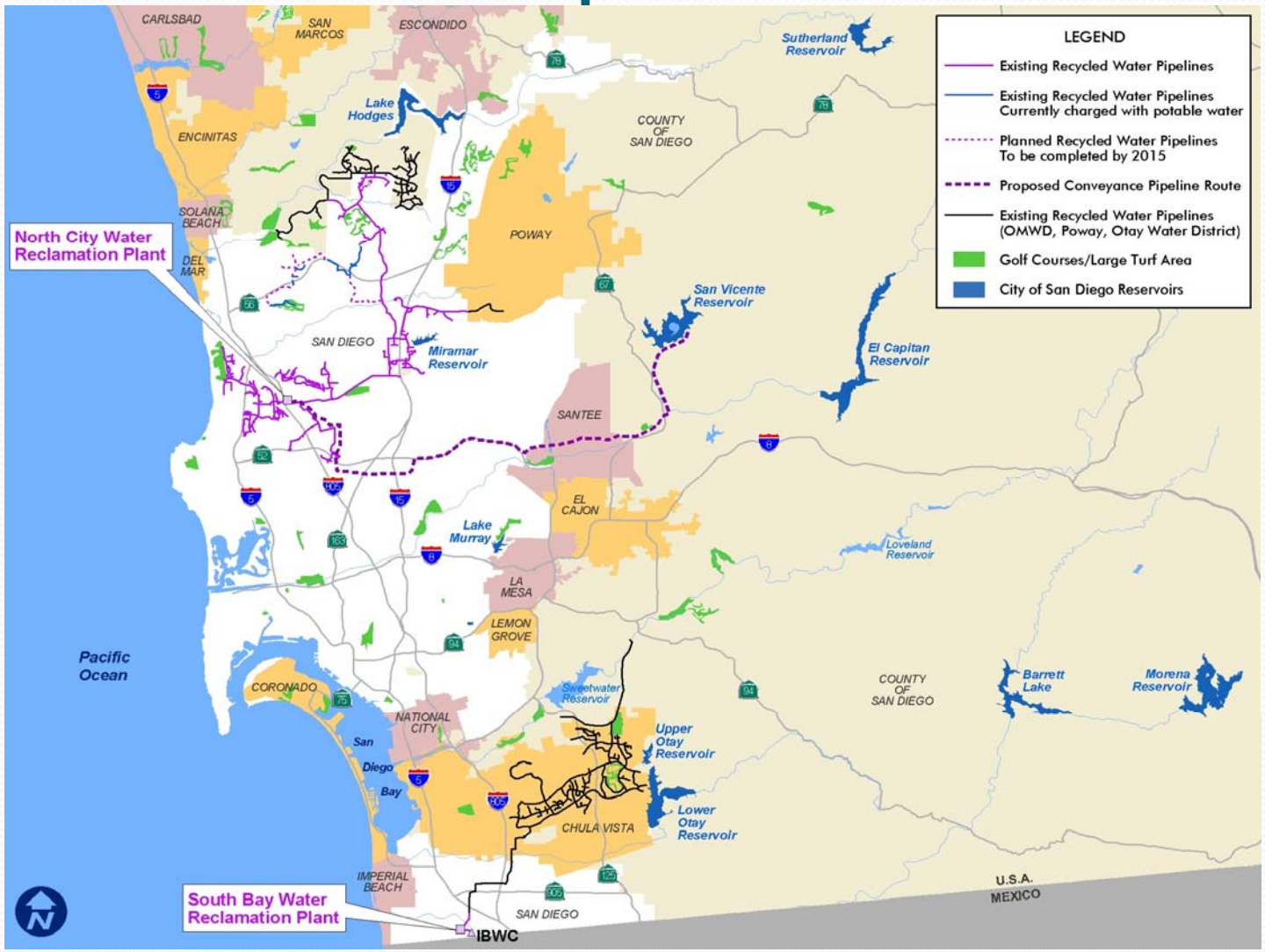

Opinion About Using Advanced Treated Recycled Water as an Addition to Drinking Water Supply
2011
2004
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
35%
10%
33%
16%
12%
19%
11%
45%
9%
10%
Strongly Favor
Somewhat Favor
Somewhat Oppose
Strongly Oppose
Unsure

Regulatory Certainty

Regulatory Goals

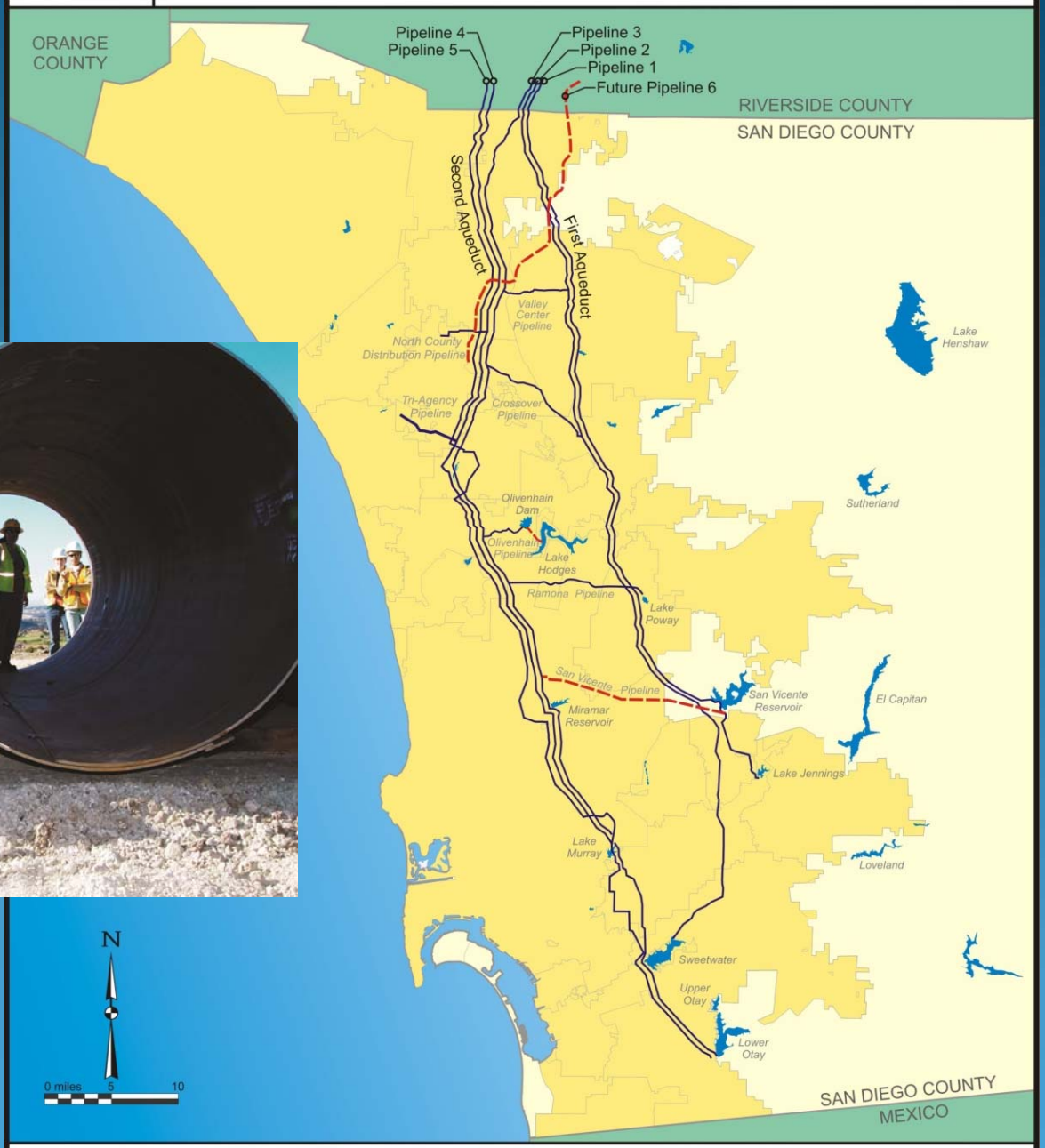
- CDPH: Reliable supply of pure, wholesome and potable water that is protective of public health
- State and Regional Boards: protect and enhance the quality of our state's waters for present and future generations for all needs – such as drinking, bathing, boating, swimming, farming, manufacturing, and environmental uses.
- Regulatory certainty is critical for allowing policy makers to make educated decisions

Regulatory Requirements can have significant cost impacts



San Diego County Water Authority

CURRENT AQUEDUCT SYSTEM



Expert Panel Opinion on "Direct" Potable Reuse

- Can raw water augmentation be done in a safe manner and what should the criteria be?
- SB 918: Expert Panel Opinion due in 2016
- 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