

Quality 
Value 
Reliability 
Customer Service
For all of San Diego...every day!



#### Arizona Water Reuse Symposium



John Helminski Assistant Director City of San Diego Public Utilities

July 27, 2015



# Tweet Us @PureWaterSD !





#### Pure Water San Diego @PureWaterSD

Working to provide a safe, reliable and local drinking water supply for San Diego through the use of proven water purification technology.

# #PureWaterSD

Pure Water San Diego @PureWaterSD - Jul 14 San Diego likely to become model for other cities exploring water recycling, bit.lv/1CAl3Qm #PureWaterSD



Pure Water San Diego @PureWaterSD - Jan 28

Pure Water San Diego: A Video Created by USD Students: youtu.be/JtrTy9ZJjtc?a via @YouTube

YouTube







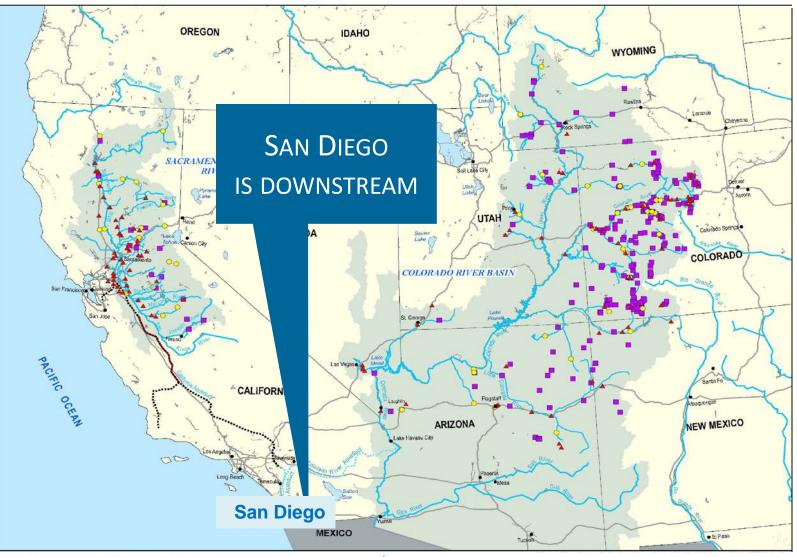
### San Diego Water/Wastewater Facts







### 85% of Our Water is Imported

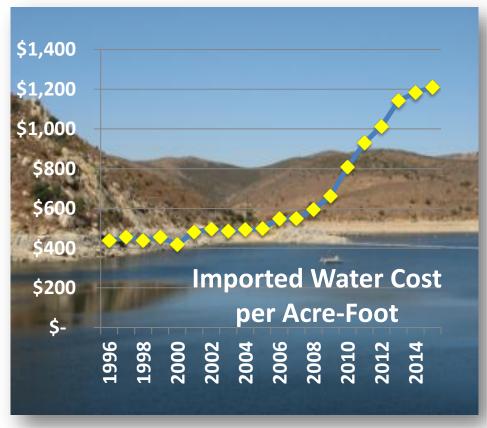


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## **Numerous Water Challenges**

- Limited local & imported supplies
- Population growth
- Bay Delta constraints
- Natural disaster risk
- Rising imported water costs
- Recurring drought

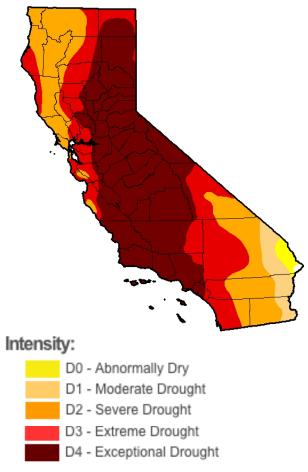


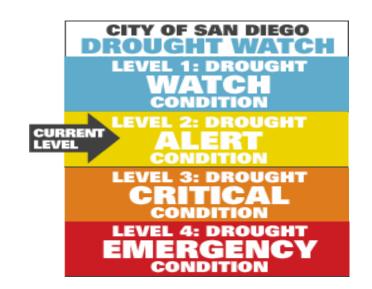




# 2011-2015 Drought

#### U.S. Drought Monitor 6/30/15





- It's time to get serious about the California drought – San Diego Union Tribune, 3/23/15
- California snowpack at lowest level on record USA Today, 4/1/15
- California approves big fines for wasting water during drought – LA Times,4/15/15
- Drought forces California into first mandatory rules to save water Reuters, 5/05/15

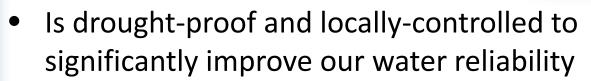
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### What is Pure Water San Diego?

Pure Water San Diego is a phased multi-year program that:

 Uses proven technology to produce a safe, sustainable, and necessary high quality water supply



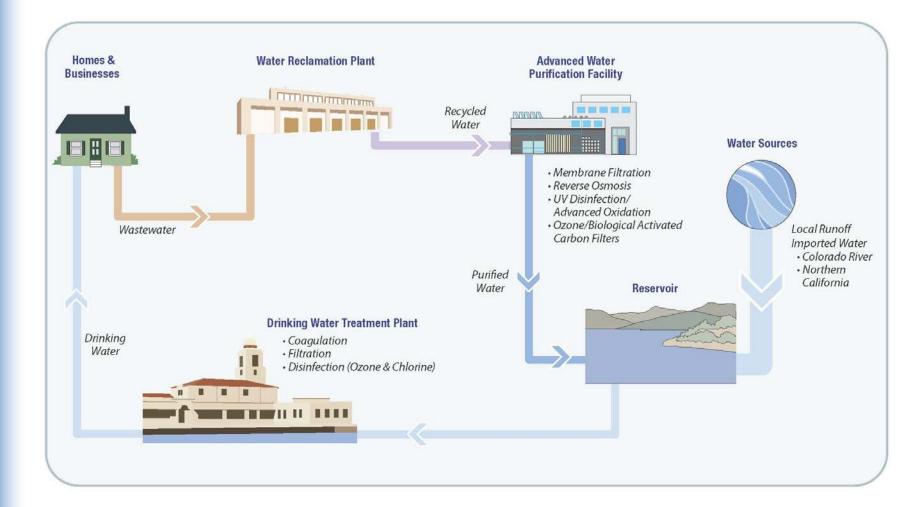
 Is a cost-effective investment for San Diego's future water needs







### Here's How It Will Work



Pure Water San Diego Has Been Successfully Demonstrated

#### 1 million gallon per day Demonstration Project

- Conducted 9,000 lab tests Met all standards
- Exceptional water quality Comparable to distilled water
- Energy use is comparable to imported water



Microfiltration &

#### **Reverse Osmosis**



Advanced Oxidation/UV Light & Hydrogen Peroxide

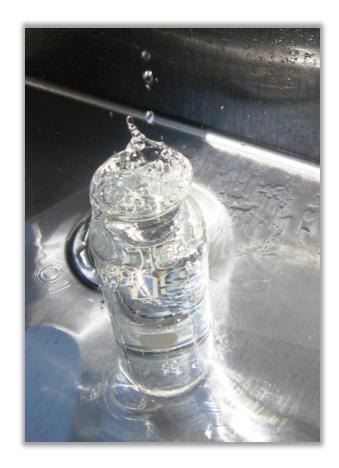


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## State & Federal Regulators Are Supportive

- September 7, 2012, California Department of Public Health approved the San Vicente Reservoir Augmentation Concept
- February 12, 2013, the Regional Water Board supported the City's efforts to develop the San Vicente Reservoir Augmentation Project







## **Developing Our Local Water Supply**

Sutherland Reservoir

CO UNTY OF

SAN DIEGO

San Vicente

Reservoir

Lower Otay Reservoir

CO UNTY OF SAN DIEGO

**Otav Water** 

Treatment Plant

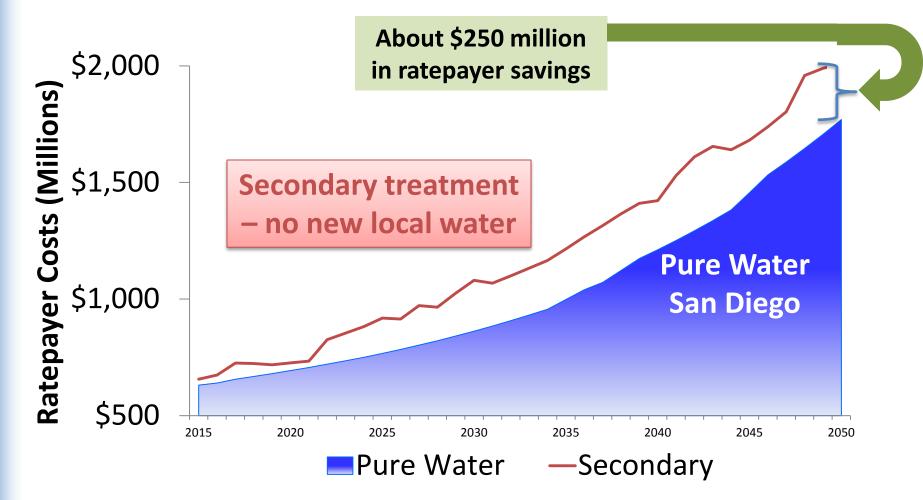
ILS.A

MEXICO





# Pure Water San Diego Saves Money



Pure Water is estimated to cost from \$1,700 to \$1,900 per acre foot

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# Who Supports Pure Water?

- **Elected Officials** 
  - City Council Point Loma permit application approval, Nov. 18, 2014
- Environmental Groups
- Wastewater Participating Agencies
- Professional Engineering Community
- Water Reliability Coalition
- Business Community
- Independent Rates Oversight Committee







DEPARIMENT Quality, Value, Reliability – In Every Drop! 🖉





Regional

ESTAURAN



COASTKEEPER

**WATEREUSE** 

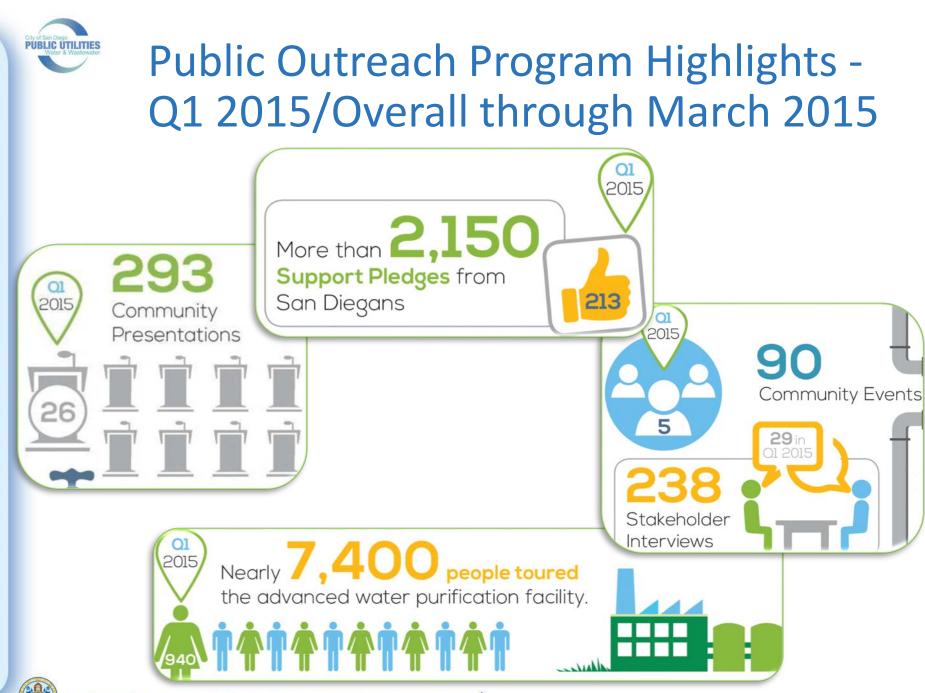












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## **Recent Awards & Recognition**

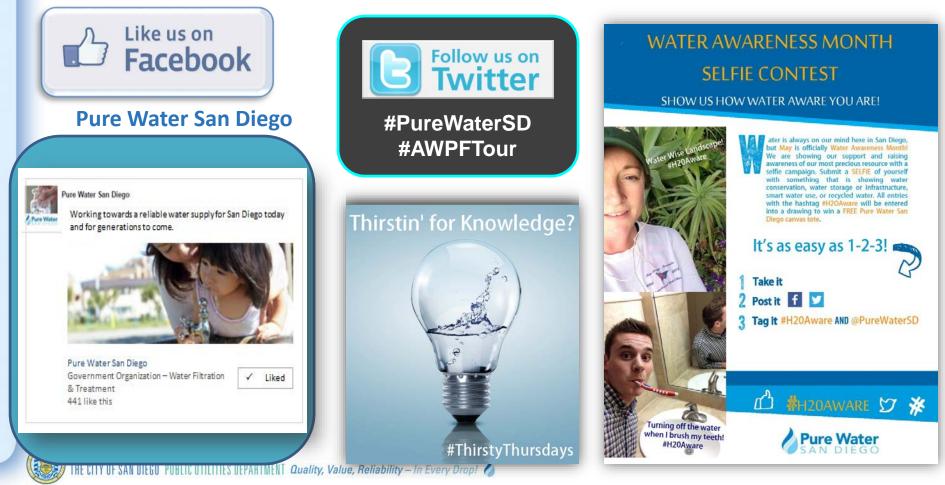
- 2015 U.S. Water Alliance Water Prize
- 2015 California Association of Sanitation Agencies Public Outreach and Education Achievement Award
- 2014 Public Relation's Society of America's Silver Bernay's Award
- 2014 Water Reuse Association CA Community Outreach & Public Education Program of the Year Award





### Social Media

- Facebook ads: 150%+ "likes" increase
- Contests and interactive Content





## Multicultural Outreach/Engagement

- Multicultural consultants
- Stakeholder interviews
- Group tours/presentations
- Community events











## **Youth Connection**

- Project SWELL
- San Diego Youth Commission
- Boy Scouts/Girl Scouts of San Diego
- Children's AWP Facility Tours
- Community Events Catered to Kids









# **USD** Partnership

- Invited 30 students to participate in a community education strategy effort
- Students worked in teams to survey a target demographic and develop:
  - Infographic that tells the Pure Water story
  - Video that explains the Pure Water
     San Diego Program in a fun,
     engaging and dynamic way
  - Hashtags to advance in social media









### USD Video

#### • Target Demographic: Women ages 30-40





#### USD Video

#### • Target Demographic: Men and Women ages 18-26







## **Tour Program**

- Tours continue to be a staple of the outreach program
- Nearly 8,000 people have taken the tour
- "Seeing is Believing"









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## Pure Water Working Group

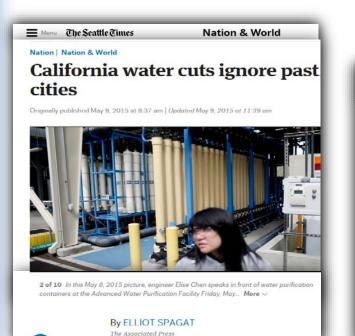
- 25 members representing a diverse group of San Diego organizations
- 8 meetings in 2014 to develop recommendations for City Council
- Meeting topics included San Diego's water portfolio, program costs, the Point Loma waiver, outreach, IPR/DPR regulations





- National television morning news
- Associated press coverage
- National print coverage

**PUBLIC UTILITIES** 





#### The New York Times



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## Pure Water in the News





#### San Diego City Council says 'yes' to recycling waste water for drinking

BY: City News Service , 10News Digital Team POSTED: 7:11 AM, Nov 18, 2014 UPDATED: 8:31 PM, Nov 18, 2014





#### San Diego City Council Approves Wastewater Recycling Deal

#### 🗲 Facebook 🐭 Twitter 🥴 Email 🖾 Comments Wednesday, November 19, 2014 City News Service





that has plenty of fresh drinking water.

#### 🖪 Recommend 🚹 🛉 💆 🖾 📼 🗟 🕂 🕇 1

Mayor backs plan to increase use of recycled water

#### Posted: Nov 13, 2014 12:56 PM PST Updated: Nov 13, 2014 1:10 PM PST





# CURRENT ISSUE PRODUCTS STOREFRONTS TOP PROJECTS WEBINARS EVENTS

#### Creating a Drought-Proof Water Supply

Industrial

By Halla Razak Mon, 2015-02-09 12:49

#### f 🕒 8- in

Pipes

Maters

#### San Diego works to establish a local source of drinking water

Membranes



Archives Buyer's Guide

With title rain and limited local water supplies, 5an Diego imports 85% of its water from the Colorado River and Northern California. The city is working to develop a local source of drinking water to lessen dependence on imported water, keep up with population growth and combat water supply reliability challenges, including recurring drought conditions.

Pump

#### From 2009 to 2013, the Water Purification Demonstration Project explored

the feasibility of using water punctation technology to punty recycled water and provide a sustainable source of drinking water for San Diego. The demonstration project proposed that punified water become part of the local water supply through indirect potable reuse (PR). In IPR, purified water is added to an environmental buffer to combine with imported water sources before going through traditional drinking water treatment. In San Diego's case, the environmental buffer would be the San Vicente Reservoir.

As part of the demonstration project, the city built and operated an advanced water purits dation (AWP) facility at the North City Water Reclamation Plant that purited 1 million gail of recycled water prod w for one year using membrane filtration, reverse esmosis and advanced axidation with ultraviolet light and hydrogen peroxide. After more than 9,000 water quality tests, the city confirmed that recycled water can be purified and safely added to the San Vicente Reservoir. In addition, multiple reservoir studies, regulatory coordination, an energy and cost analysis, and an



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## Questions?

- Visit our website: PureWaterSD.org
- **Register for tours: PureWaterSD.org/tours**
- Join our mailing list or sign a support card







**Pure Water San Diego** 

#### purewatersd



- □ I would like to receive updates about Pure Water San Diego.
- I would like a presentation given to my organization.

#### Please send information to:

Name:	Organization:	Organization:	
Address:		0.5	
City:	State:	Zip:	
Phone:	E-mail:		
purewatersd@sand	liego gov (619) 533-75	2 www.purewater	sd ora

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## **Back-up Slides**

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# **USD Videos**

- Target Demographic: Women ages 30-40
- Target Demographic: Men and Women ages 18-26

Safe Reliable Drought-Proof 0:43 / 1:50 PURE WATER 20-YEAR PROGRAM



VideoScribe