

Regional Water Reuse Plan

and **Secondary Equivalency** for a

Smaller Point Loma Wastewater Treatment Plant

September 2013



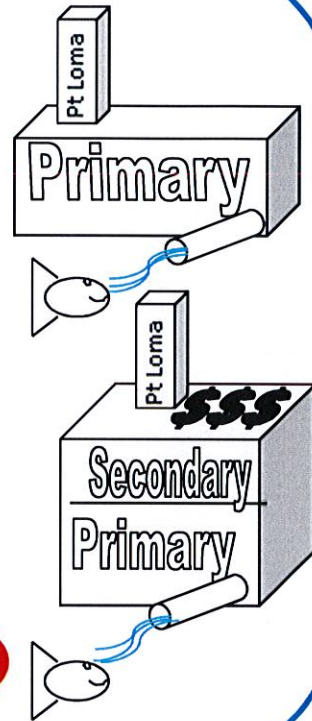
Background

- Point Loma Wastewater Treatment Plant
 - Operated by City of San Diego
 - Serves 12 member JPA (35% of flow)
- 240 mgd Permitted Capacity
- Advanced Primary Level Treatment
- Allowed by EPA Waiver of Secondary Treatment Requirement
- Peak demand to date: 180 mgd



Problem #1:

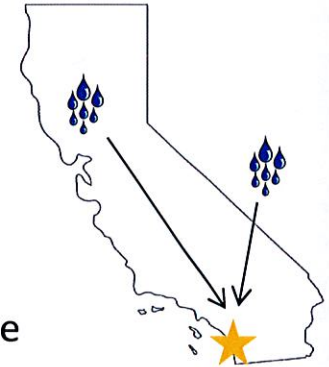
- Permit expires 2015
- Science says no environmental harm
- Therefore Modified Permit granted
- Modified Permit allows Advanced Primary



~~= \$3.5 Billion~~

Problem #2:

- San Diego at end of water supply pipeline
- Imported water at risk as competition for the resource rises
- Imported water expensive and prices continue to rise
- New, local, diversified water supply is the best solution

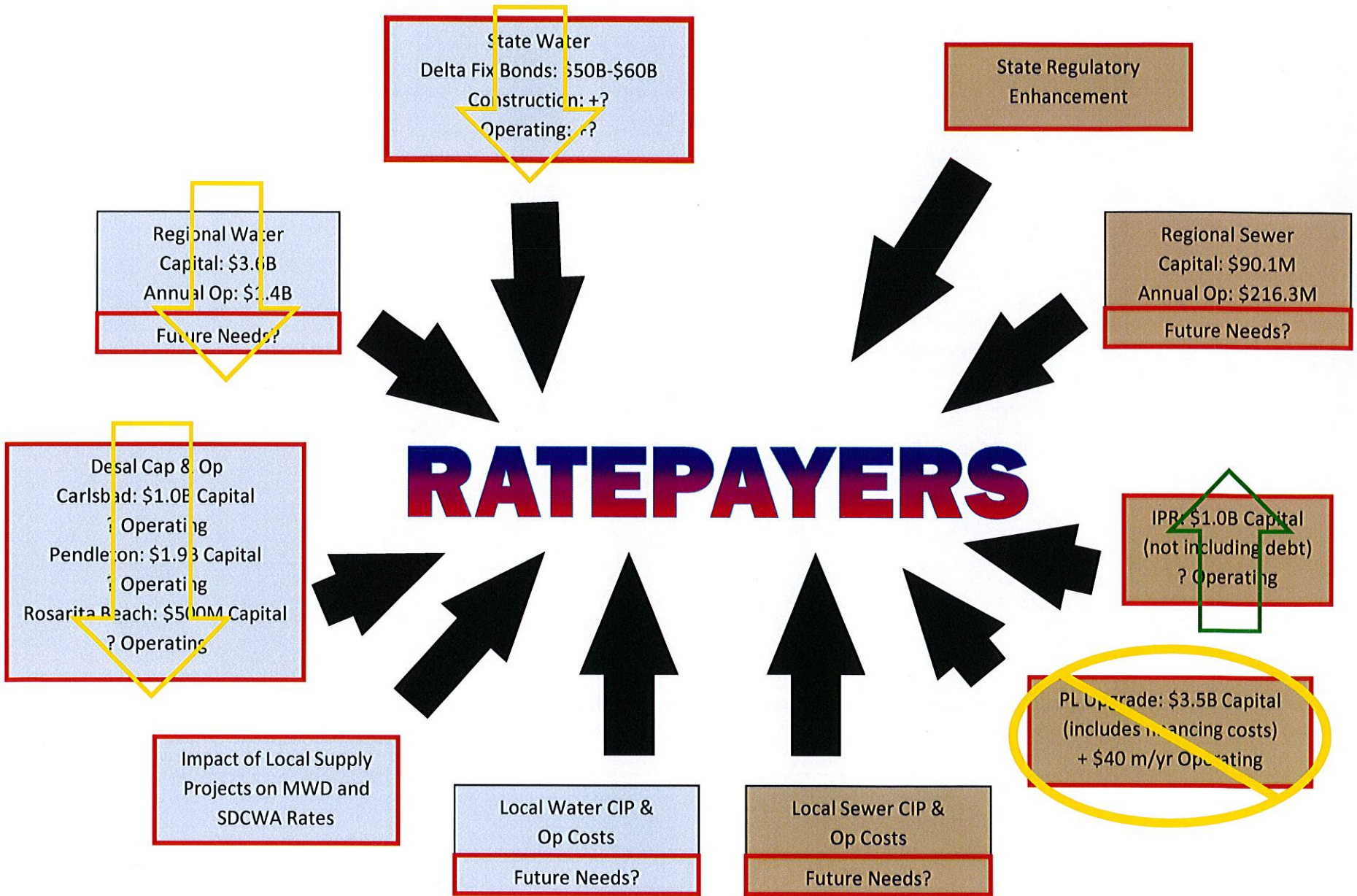


SOLUTION

Use Problem #1 To Fix Problem #2

- **Secondary Equivalency:** Offloading 100 mgd flow = 240 mgd treated to secondary level
- **Potable Reuse:** Offloads Point Loma **AND** increases local, diversified water supply

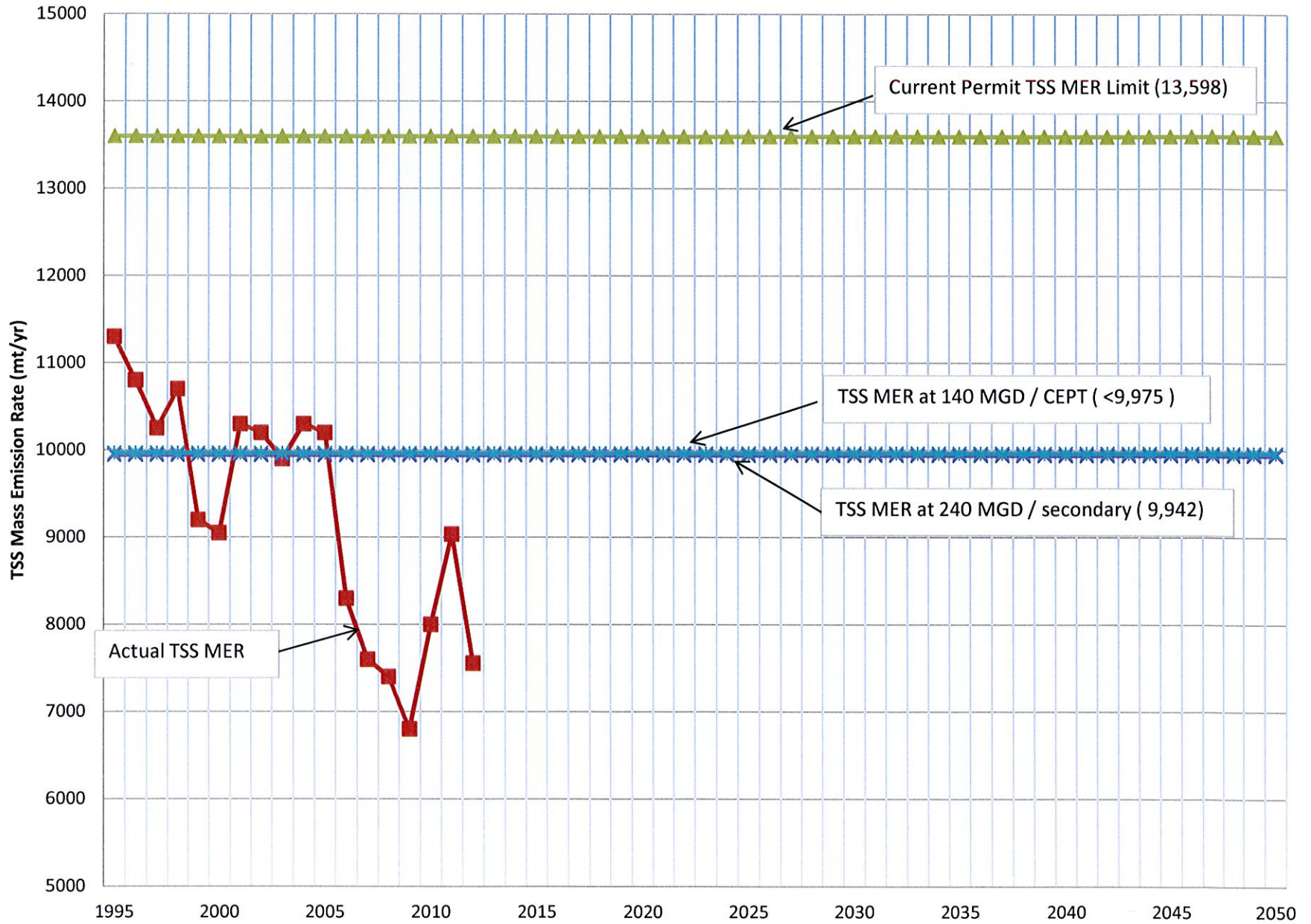
RATEPAYERS



Areas not currently included in rates

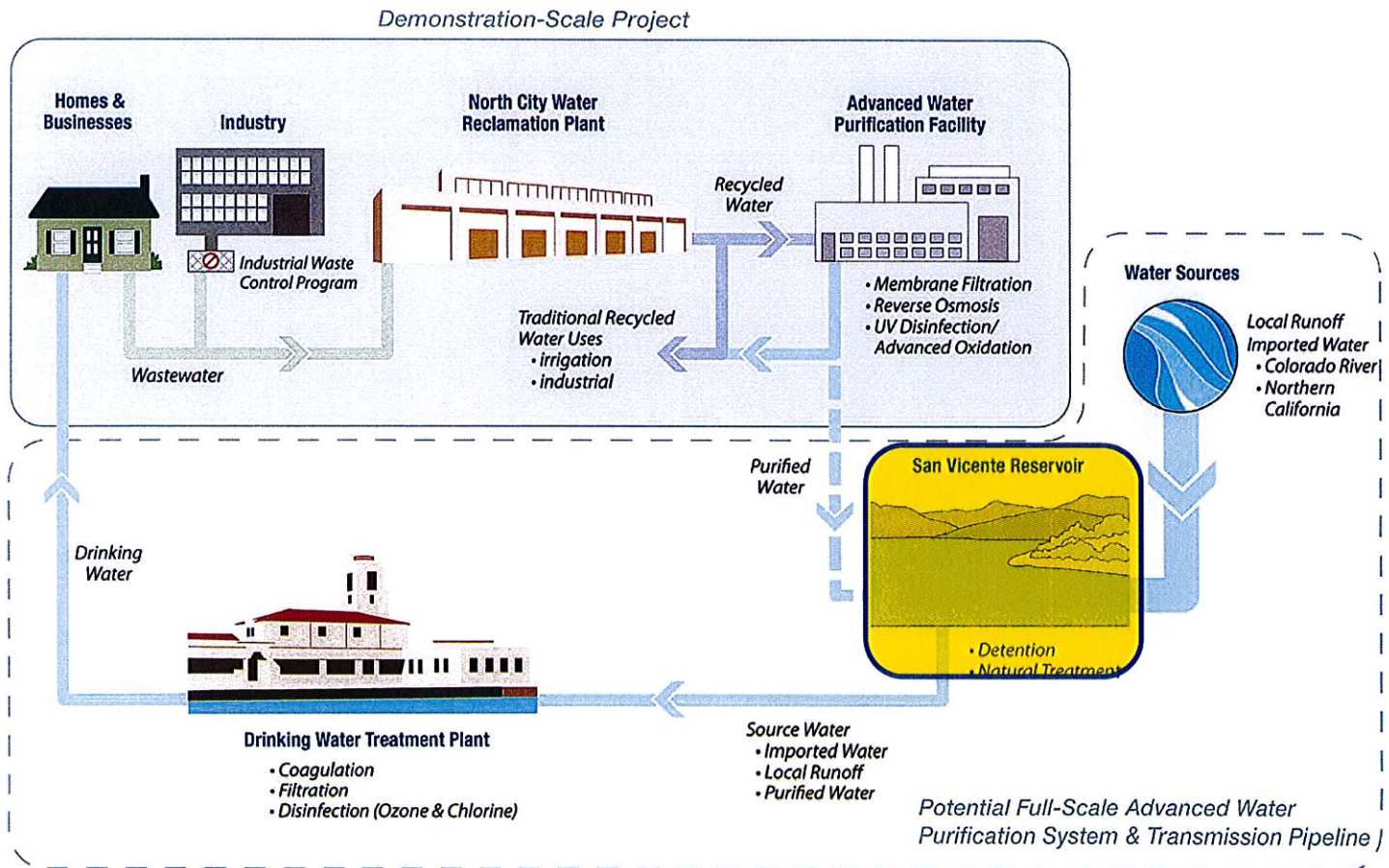
Cost estimates are currently wide-ranging and subject to change

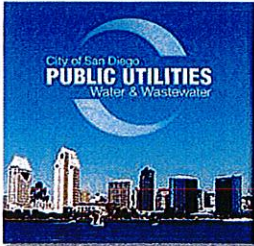
TSS MASS EMISSION RATE POINT LOMA WASTEWATER TREATMENT PLANT



Potable Reuse (IPR and DPR)

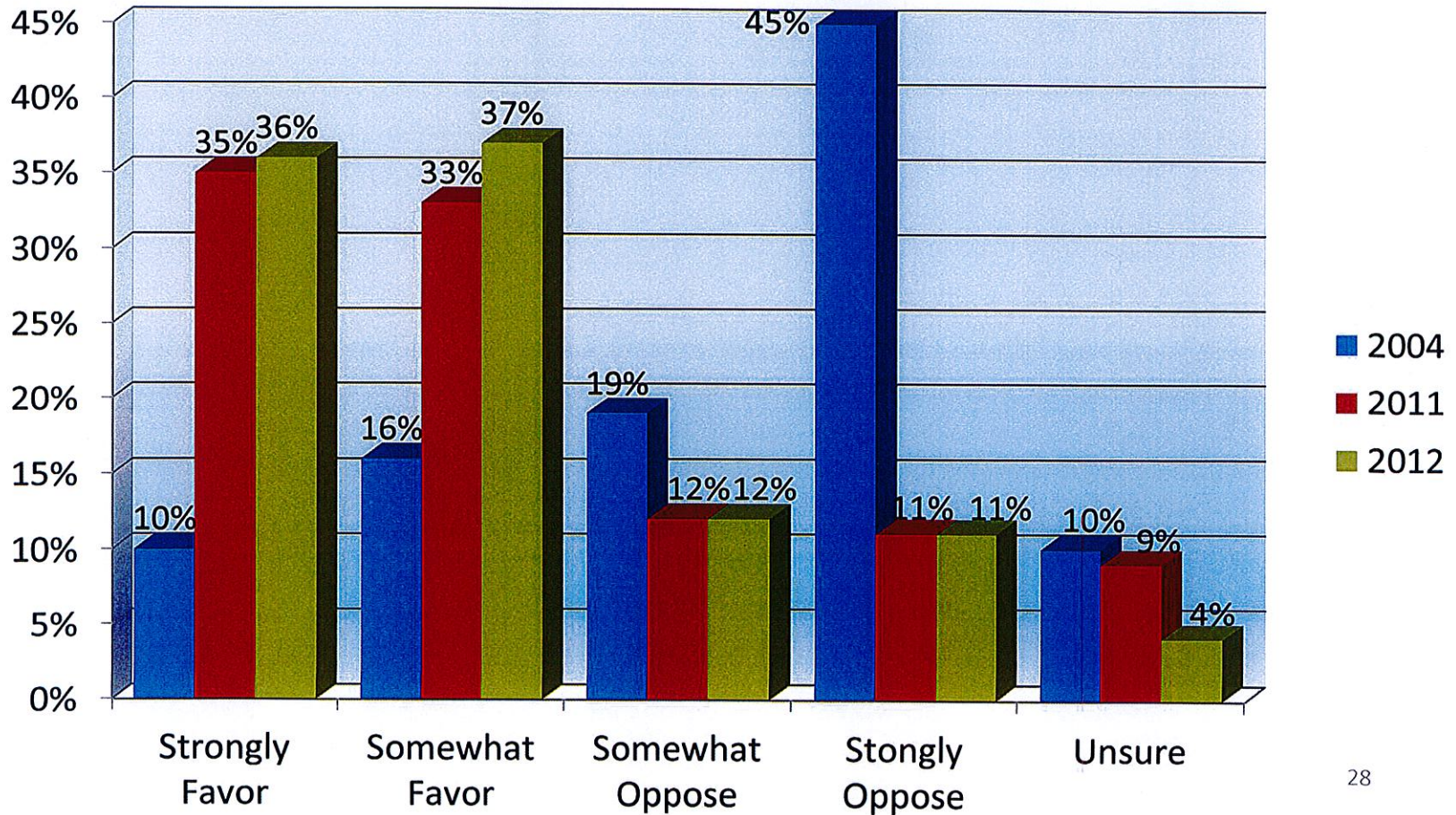
City of San Diego's Water Purification Demonstration Project Purification Process





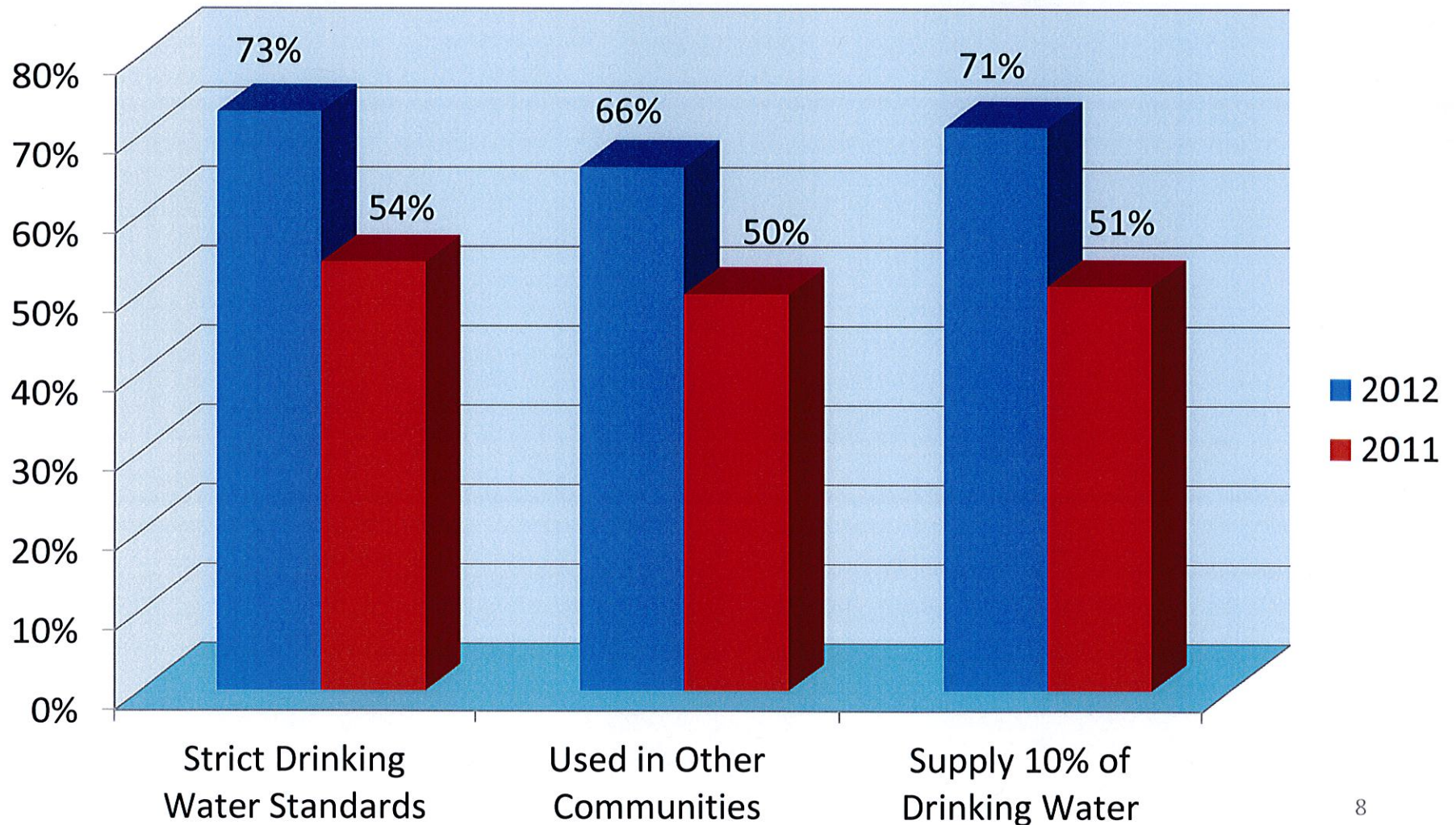
PUBLIC OUTREACH & EDUCATION PROGRAM RESEARCH RESULTS

USE ADVANCED TREATED RECYCLED WATER AS AN ADDITION TO DRINKING WATER SUPPLY



PUBLIC OUTREACH & EDUCATION PROGRAM RESEARCH RESULTS

ACCEPTING OF RECYCLED WATER TO SUPPLEMENT DRINKING WATER IF RESPONDENT LEARNED CERTAIN FACTS



Senate Bill 918

Directs CDPH to:

- Adopt regulations for IPR/groundwater replenishment
December 31, 2013
- Adopt regulations for IPR/reservoir augmentation
December 31, 2016
- Report on feasibility of DPR
December 31, 2016

Projected Cost Comparisons

	2016 - 2035	Notes
MET Treated Water Projection	\$1,522 - \$4,000	Does not include adjustment for 1.2 M AF of local water supply development or 650,000 AF in planned and state-mandated conservation
SDCWA Projection 03/15/2011		

	2012
Carlsbad Desal	\$2,257
SDCWA News Release 03/08/13	

	Gross Cost	Less Avoided CIP (-\$600)	Less Salinity (-\$100)	Less Pt Loma Upgrades (-\$400)
IPR	\$1,700 - \$1,900	\$1,100 - \$1,300	\$1,000 - \$1,200	\$600 - \$800
City of San Diego Recycled Water Study Presentation 05/03/12				

Potential Additional Avoided/Downsized Projects	Year	2013 Cost Projection
SDCWA: Camp Pendleton Desal	2025+	\$15.72 Billion
SDCWA: Colorado River Transmission	2035+	\$10.07 Billion
SDCWA: Local Pipeline Conveyance Constraints	2020+	YTBD
State: Bay Delta Conveyance	2025+	\$50 – \$60 Billion

Recommendations

- Create Long Range (20-30 year) Regional Water Reuse Program focused on potable water reuse that:
 - *Provides new, local, sustainable water supply (≈ 83 mgd)*
 - *Offloads PLWTP to ≈ 143 MGD*
- Obtain Legislation to permit SMALLER Secondary Equivalent PLWTP (≈ 143 MGD) that:
 - *Avoids billions of dollars in capital, financing, energy and operating costs*
 - *Continues to protect the ocean environment*

Current Activity

- Resolutions of Support
 - JPA Members
 - Metro JPA
- City of SD, Environmental & JPA Stakeholders
 - Secondary Equivalency
 - Federal Legislation/Judicial Action
 - January 2014

