



CITY OF
SAN DIEGO
PUBLIC UTILITIES DEPARTMENT

**RECYCLED WATER
PRICING STUDY**

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Historical Context

- > Clean Water Act 1972 – requires secondary treatment
- > 1987 Lawsuit by EPA and Others
- > The Ocean Pollution Reduction Act of 1994
 - Allowed City to Reapply for Waiver, which was granted
 - City must build 45 MGD recycled water plant capacity
- > A 1995 Federal Court Order to Build an Optimized Distribution System

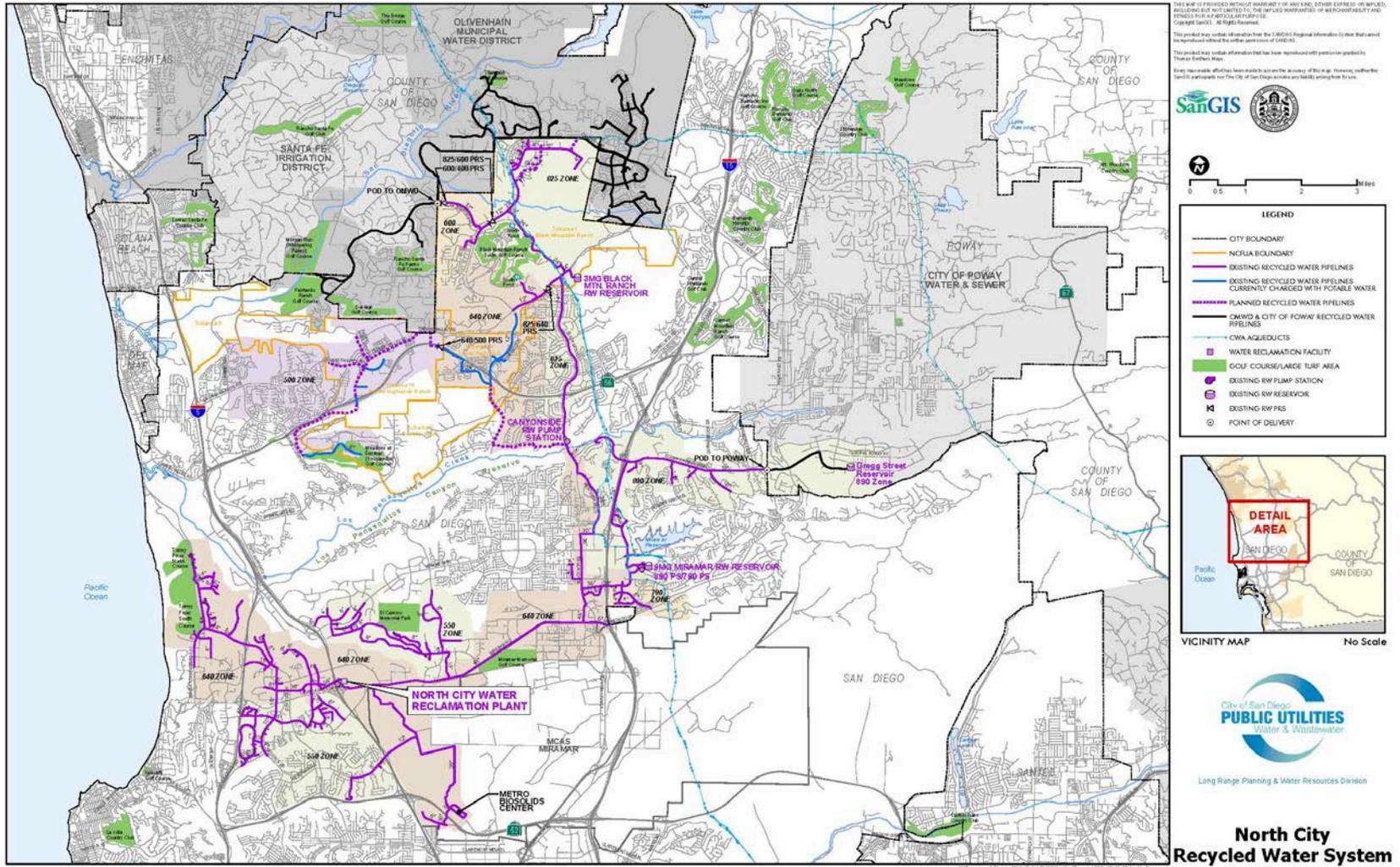


Current Recycled System

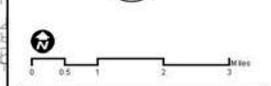
- North City Water Reclamation Plant (NCWRP)
- South Bay Water Reclamation Plant (SBWRP)
- Associated Distribution System
- Approximately 570 connections – including 3 wholesale customers
- 3 Wholesale customers have agreements
 - Otay – pays the same rate as City customers
 - Olivenhain – pays \$25/AF above City's rate
 - Poway – pays rates updated annually for inflation



Current North City Distribution System

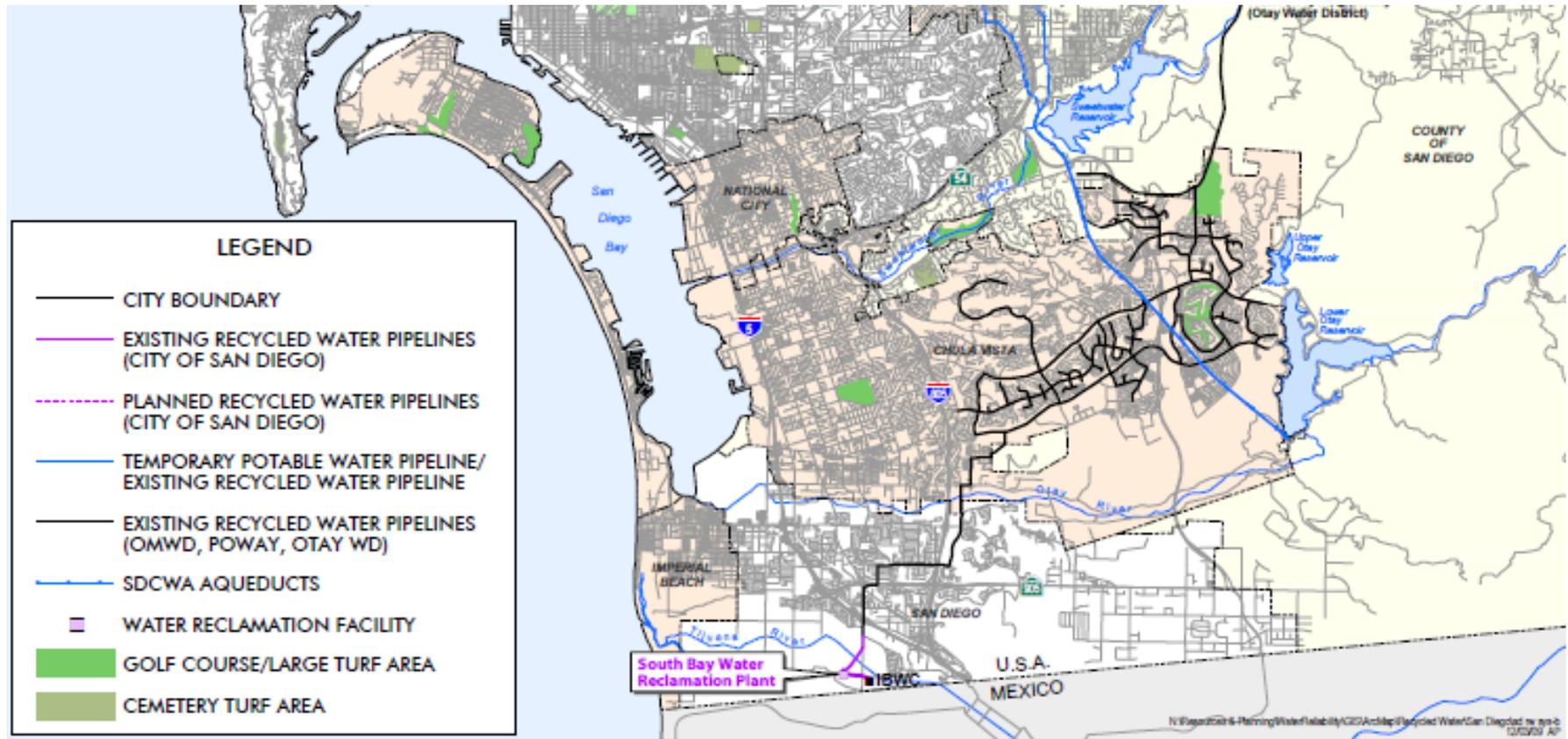


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North City Recycled Water System

Current South Bay Distribution System



Observations

- > Current rate is \$0.80 per hundred cubic feet (HCF)
- > City's potable water system has benefited from the expansion of the recycled water system
- > Recycled water is part of the City's long range water resources plan
- > Cost apportioned to water, wastewater and recycled water users





Modified Cost of Service

- > Consider only costs related to the production and distribution of recycled water
 - O&M expenses for the tertiary (recycled water) component of the wastewater treatment system
 - Future capital improvements
 - Debt Service
- > Reduce revenue requirements using offsetting revenues
 - MWD/CWA credits
 - Base Fees
 - Poway contract revenue
 - Other revenues



Recommendations

- > The commodity rate for recycled water should be lower than the potable water rate to incentivize sales
 - Alternative 1 - Unitary rate \$2.261/HCF, represents 56% of the potable irrigation rate
 - Alternative 2 - Zone rate \$3.208/HCF North City, \$1.30/HCF South Bay



Recommendations

- Current rate is \$0.80/HCF

Alternative	Proposed Commodity Rate (\$/HCF)	Proposed 1/1/2014	Proposed 1/1/2015	Proposed 1/1/2016	Proposed 1/1/2017
1	Unitary	\$2.261	\$2.261	\$2.261	\$2.261
2	Zone – North City	\$3.208	\$3.208	\$3.208	\$3.208
2	Zone – South Bay	\$1.300	\$1.300	\$1.300	\$1.300

- Update the recycled water base fee - includes costs of customer service, billing, meter maintenance and a portion to provide capacity
 - Based on meter size
 - Capacity ratio as defined in the AWWA M22 Manual – Sizing Water Service Lines and Meters



Questions ?



Backup Slides



Modified Cost of Service Rate Calculation (Unitary system)

	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
Revenue Requirements				
O&M Costs	\$ 2,966,987	\$ 3,010,580	\$ 3,106,970	\$ 3,231,249
Treatment Costs	\$ 4,032,913	\$ 4,073,242	\$ 4,113,975	\$ 4,278,534
Existing Debt Service	\$ 5,104,219	\$ 5,104,243	\$ 5,141,858	\$ 5,083,578
Proposed Debt Service	\$ 47,873	\$ 95,745	\$ 95,745	\$ 149,089
Pay-as-you-go Capital	\$ 755,828	\$ 759,106	\$ 811,235	\$ 815,872
Subtotal: Capital Costs	\$ 5,907,920	\$ 5,959,094	\$ 6,048,838	\$ 6,048,539
Total Revenue Requirements	\$ 12,907,820	\$ 13,042,917	\$ 13,269,782	\$ 13,558,322
Less: Revenue Offsets				
Credits from MWD and CWA	\$ 2,758,715	\$ 2,786,300	\$ 2,564,380	\$ 2,337,740
Base Fees	\$ 639,818	\$ 622,201	\$ 639,607	\$ 665,592
Poway Contract Revenue	\$ 462,046	\$ 471,332	\$ 480,806	\$ 505,038
Fees from Olivenhain	\$ 15,941	\$ 15,941	\$ 15,941	\$ 15,941
Interest Revenue	\$ -	\$ -	\$ -	\$ -
Meter Installation Revenue	\$ 100,000	\$ 105,000	\$ 25,000	\$ 25,000
Capacity Fee Revenue	\$ 73,128	\$ 73,128	\$ 24,376	\$ 24,376
Subtotal Revenue Offsets	\$ 4,049,647	\$ 4,073,902	\$ 3,750,110	\$ 3,573,687
TOTAL NET REVENUE REQUIREMENTS	\$ 8,858,172	\$ 8,969,014	\$ 9,519,672	\$ 9,984,635
Total Sales (HCF)	\$ 4,004,320	\$ 4,083,701	\$ 4,173,309	\$ 4,252,233
Calculated Recycled Water Rate, \$/HCF	\$ 2.21	\$ 2.20	\$ 2.28	\$ 2.35
Average 4 year rate	\$ 2.261	\$ 2.261	\$ 2.261	\$ 2.261



Modified Cost of Service Rate Calculation (Zone System) NCWRP

	Budgeted FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
Revenue Requirements				
O&M Costs	\$ 2,791,146	\$ 2,832,414	\$ 2,922,756	\$ 3,039,723
Treatment Costs	\$ 2,426,782	\$ 2,451,050	\$ 2,475,560	\$ 2,574,583
Existing Debt Service	\$ 4,965,919	\$ 4,965,943	\$ 5,003,558	\$ 4,945,278
Proposed Debt Service	\$ 47,873	\$ 95,745	\$ 95,745	\$ 149,089
Pay-as-you-go Capital	\$ 36,145	\$ 39,423	\$ 91,551	\$ 96,189
Subtotal: Capital Costs	\$ 5,049,936	\$ 5,101,111	\$ 5,190,854	\$ 5,190,556
Total Revenue Requirements	\$10,267,864	\$10,384,575	\$10,589,170	\$10,804,861
Less: Revenue Offsets				
Credits from MWD and CWA	\$ 2,754,702	\$ 2,782,248	\$ 2,560,287	\$ 2,333,607
Base Fees	\$ 619,565	\$ 602,890	\$ 619,874	\$ 645,178
Poway Contract Revenue	\$ 462,046	\$ 471,332	\$ 480,806	\$ 505,038
Fees from Olivenhain	\$ 15,941	\$ 15,941	\$ 15,941	\$ 15,941
Interest Revenue				
Meter Installation Revenue	\$ 100,000	\$ 105,000	\$ 25,000	\$ 25,000
Capacity Fee Revenue	\$ 73,128	\$ 73,128	\$ 24,376	\$ 24,376
Subtotal Revenue Offsets	\$ 4,025,382	\$ 4,050,539	\$ 3,726,284	\$ 3,549,139
TOTAL NET REVENUE REQUIREMENTS	\$ 6,242,482	\$ 6,334,036	\$ 6,862,887	\$ 7,255,722
Total Sales (HCF)	2,048,885	2,069,373	2,090,068	2,110,968
Calculated Recycled Water Rate, \$/HCF	\$ 3.05	\$ 3.06	\$ 3.28	\$ 3.44
Average 4 year rate	\$ 3.208	\$ 3.208	\$ 3.208	\$ 3.208



Modified Cost of Service Rate Calculation (Zone System) SBWRP

	Budgeted FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
Revenue Requirements				
O&M Costs	\$ 175,841	\$ 178,167	\$ 184,214	\$ 191,526
Tertiary Treatment Costs	\$ 1,606,131	\$ 1,622,193	\$ 1,638,415	\$ 1,703,951
Existing Tertiary Debt Service	\$ 138,300	\$ 138,300	\$ 138,300	\$ 138,300
Proposed Debt Service	\$ -	\$ -	\$ -	\$ -
Pay-as-you-go Capital*	\$ 719,684	\$ 719,683	\$ 719,684	\$ 719,683
Subtotal: Capital Costs	\$ 857,984	\$ 857,983	\$ 857,984	\$ 857,983
Total Revenue Requirements	\$ 2,639,956	\$ 2,658,343	\$ 2,680,612	\$ 2,753,460
Less: Revenue Offsets				
Credits from MWD and CWA	\$ 4,012	\$ 4,052	\$ 4,093	\$ 4,134
Base Fees	\$ 20,252	\$ 19,311	\$ 19,734	\$ 20,414
Subtotal Revenue Offsets	\$ 24,265	\$ 23,363	\$ 23,826	\$ 24,548
TOTAL NET REVENUE REQUIREMENTS	\$ 2,615,691	\$ 2,634,979	\$ 2,656,786	\$ 2,728,912
Total Sales (HCF)	1,955,435	2,014,328	2,083,241	2,141,265
Calculated Recycled Water Rate, \$/HCF	\$ 1.34	\$ 1.31	\$ 1.28	\$ 1.28
Average 4 year rate	\$ 1.300	\$ 1.300	\$ 1.300	\$ 1.300

*City is installing demineralization capacity at SBWRP at a cost of \$2,878,734 cash funded

