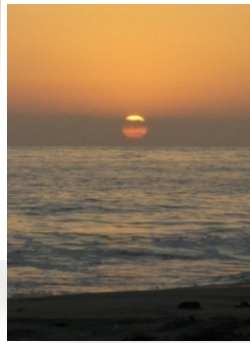


# City of Manhattan Beach



## Water and Sewer Rate Analysis

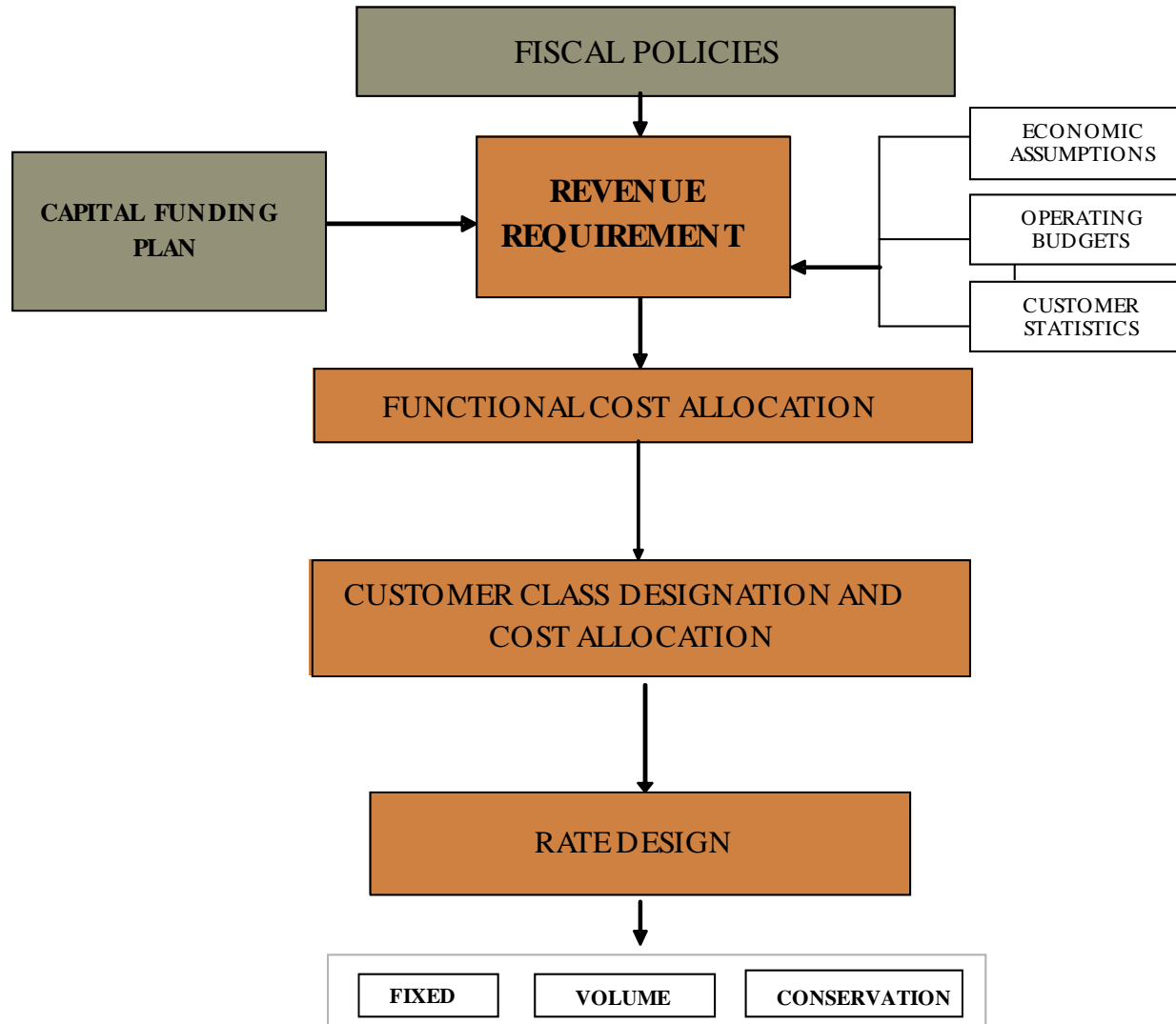
September 1,  
2009



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# Rate Study Flow Chart



# Major Drivers of Rate Increases

- Water Purchase Costs -
  - ✓ 20% annual increases
- System Depreciation Funding-
  - ✓ \$4-5m annual reinvestment target
- Financial Policy Objectives -
  - ✓ Operating Reserve
  - ✓ Rate Stabilization Reserve
  - ✓ Bond Coverage

# Recommendations

## **General:**

- ❖ *Choose Level of System Reinvestment Funding*
- ❖ *Implement/Adopt 5-year series of water and sewer rate increases effective each January 1*
- ❖ *Adopt conservation water rates*
- ❖ *Begin implementation of capital reinvestment funding strategy*

# Sewer Forecast

<b>Summary of Sewer Revenue Requirements</b>	<b>FY 2009 2010</b>	<b>FY 2010 2011</b>	<b>FY 2011 2012</b>	<b>FY 2012 2013</b>	<b>FY 2013 2014</b>
<b>Assumptions:</b>					
Rate Stabilization Reserve - (% of rate revenues)	<b>10%</b>	<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>20%</b>
Rate Stabilization Reserve - Balance	\$ 190,500	\$ 428,625	\$ 500,063	\$ 733,425	\$ 787,559
System Reinvestment - % of Target	<b>0%</b>	<b>50%</b>	<b>75%</b>	<b>75%</b>	<b>100%</b>
System Reinvestment - R&R Capital Funding	\$ -	\$ 1,250,000	\$ 1,875,000	\$ 1,875,000	\$ 2,500,000
Capital Reserve Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ 109,782
Operating Reserve - Beginning Balance	\$ (255,480)	\$ 176,196	\$ 223,175	\$ 242,242	\$ 382,828
Operating Reserve - Ending Balance	\$ 176,196	\$ 223,175	\$ 242,242	\$ 382,828	\$ 190,426
Operating Reserve - # of days of Operating Expenses	<b>53</b>	<b>64</b>	<b>67</b>	<b>102</b>	<b>49</b>
<b>Revenues</b>					
Sewer Rate Revenue	\$ 1,270,000	\$ 1,270,000	\$ 1,270,000	\$ 1,270,000	\$ 1,270,000
Other Operating Revenue	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000
Interest Earnings Operating Reserve	\$ 1,500	\$ 3,524	\$ 4,464	\$ 4,845	\$ 7,657
Total	\$ 1,309,500	\$ 1,311,524	\$ 1,312,464	\$ 1,312,845	\$ 1,315,657
Revenues From Rate Increases	\$ 635,000	\$ 1,587,500	\$ 2,063,750	\$ 2,397,125	\$ 2,667,794
Total Projected Revenues w/ Rate Increase:	\$ 1,944,500	\$ 2,899,024	\$ 3,376,214	\$ 3,709,970	\$ 3,983,450
<b>Expenses</b>					
Operating Expenses	\$ 1,216,006	\$ 1,263,221	\$ 1,313,750	\$ 1,366,300	\$ 1,420,952
Existing Debt Service	\$ 106,318	\$ 104,508	\$ 105,532	\$ 104,722	\$ 105,654
System Reinvestment Expense	\$ -	\$ 1,250,000	\$ 1,875,000	\$ 1,875,000	\$ 2,500,000
Subtotal:	\$ 1,322,324	\$ 2,617,729	\$ 3,294,282	\$ 3,346,022	\$ 4,026,606
Additions(Subtractions) to(from) Operating Reserve	\$ 431,676	\$ 46,980	\$ 19,066	\$ 140,586	\$ (192,402)
Additions to Rate Stabilization Reserve	\$ 190,500	\$ 234,314	\$ 62,865	\$ 223,361	\$ 39,465
Additions to Capital Reserve	\$ -	\$ -	\$ -	\$ -	\$ 109,782
Total:	\$ 1,944,500	\$ 2,899,024	\$ 3,376,214	\$ 3,709,970	\$ 3,983,450
<b>Test Driving Increase</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>
<b>Fiscal Year Revenue Increase (w/ Scheduled Rate Increases Every January 1)</b>	<b>50.0%</b>	<b>50.0%</b>	<b>16.7%</b>	<b>10.0%</b>	<b>7.4%</b>
<b>Calendar Year Rate Increase (January 1)</b>	<b>100.0%</b>	<b>25.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>5.0%</b>

*\*Reflects impact of January 1 implementation of annual rate increases*

# Sewer Rate Structures

## ■ Increase to Fixed Charges

- ✓ From \$1.66/month to \$3.50/month per Cost of Service

## ■ Increase Uniform Volume Rate per Cost of Service

- ✓ Each unit of wastewater is charged an equal collection rate

## ■ January 1, 2010 Implementation

- ✓ Annual rate increases at start of calendar year

# Proposed Sewer Rates : Jan. 1, 2010

<b>Current Sewer Rates</b>		
	Monthly Fixed Charge	
5/8" or 3/4"	\$	1.66
1"	\$	3.32
1 1/2"	\$	4.98
2"	\$	6.64
3"	\$	16.60
4"	\$	21.07
6"	\$	31.69
8"	\$	43.81
10"	\$	58.07
Volume (per ccf)	\$	0.40

<b>Proposed Sewer Rates: Jan. 1, 2010</b>		
	Monthly Fixed Charge	
5/8" or 3/4"	\$	3.50
1"	\$	4.90
1 1/2"	\$	7.23
2"	\$	10.03
3"	\$	17.49
4"	\$	25.88
6"	\$	49.19
8"	\$	77.17
10"	\$	109.80
Volume (per ccf)	\$	0.80

# Sample Sewer Bill Impacts – 2010

	Sewer Bill Impacts						
	Usage (ccf)	Monthly Bills Under Current Rates	Monthly Bills Under Proposed 2010 Rates	Monthly Bill Increase (Decrease)	Bill Increase (%)	Number of Customers	% of Total
<b>5/8"</b>							
25%	4	\$ 3.26	\$ 6.70	\$ 3.44	105.5%	2934	22.5%
Median	8	\$ 4.86	\$ 9.90	\$ 5.04	103.6%		
Average	11	\$ 5.86	\$ 11.89	\$ 6.03	103.0%		
90%	21	\$ 10.06	\$ 20.28	\$ 10.22	101.6%		
<b>3/4"</b>							
25%	7	\$ 4.46	\$ 9.10	\$ 4.64	104.0%	6073	46.5%
Median	12	\$ 6.46	\$ 13.09	\$ 6.63	102.7%		
Average	14	\$ 7.26	\$ 14.69	\$ 7.43	102.3%		
90%	26	\$ 11.86	\$ 23.88	\$ 12.02	101.3%		
<b>1"</b>							
25%	7	\$ 5.92	\$ 10.10	\$ 4.18	70.5%	3485	26.7%
Median	13	\$ 8.32	\$ 14.89	\$ 6.57	79.0%		
Average	16	\$ 9.52	\$ 17.29	\$ 7.77	81.6%		
90%	30	\$ 15.12	\$ 28.47	\$ 13.35	88.3%		



# Neighbors Sewer Rate Comparison

Community	Meter Size	Meter Charge	Monthly Consumption (ccf)	Tiers	Volume Charge	Monthly Bill
<b>Huntington Beach</b>	5/8" or 3/4"	\$ 5.30	Flat Fee	None		\$ 5.30
<b>Manhattan Beach - Current Rates</b>	5/8" and 3/4"	\$ 1.66	12	All Usage	\$ 0.40	\$ 6.46
<b>Redondo Beach</b>	Single Family	\$ 7.00	Flat Fee	None	None	\$ 7.00
<b>Torrance Municipal Water Department</b>	3/4"	\$4.44 (Included in Water RTS)	12	None	\$ 0.32	\$ 8.28
<b>El Segundo</b>	5/8" and 3/4"	\$ 4.49	12	All Usage	\$ 0.50	\$ 10.49
<b>Seal Beach</b>	Single Family					
	22% of Water + Capital Fee	\$ 4.68	Flat Fee	None		\$ 10.51
	Master Plan Fee	\$ 5.83				
<b>Manhattan Beach - Proposed Rates</b>	5/8" and 3/4"	\$ 3.50	12	All Usage	\$ 0.80	\$ 13.09
<b>Santa Monica</b>	5/8" & 3/4"	\$ 4.75	12	51% of usage, at \$2.94 per ccf		\$ 22.74

# Water Forecast Scenarios

<b>Water Revenue Requirement Forecasts</b>	<b>FY 2009 2010</b>	<b>FY 2010 2011</b>	<b>FY 2011 2012</b>	<b>FY 2012 2013</b>	<b>FY 2013 2014</b>	<b>Total 5-Year</b>
<b>Scenario 1</b>						
System Reinvestment Funding	\$ 861,000	\$1,645,750	\$2,430,500	\$3,215,250	\$4,000,000	<b>\$12,152,500</b>
<i>Calendar Year Rate Increase</i>	<b>30.0%</b>	<b>30.0%</b>	<b>20.0%</b>	<b>15.0%</b>	<b>5.0%</b>	
<b>Scenario 2</b>						
System Reinvestment Funding	\$ 800,000	\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000	<b>\$10,800,000</b>
<i>Calendar Year Rate Increase</i>	<b>25.0%</b>	<b>25.0%</b>	<b>25.0%</b>	<b>25.0%</b>	<b>5.0%</b>	
<b>Scenario 3</b>						
System Reinvestment Funding	\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000	\$4,000,000	<b>\$14,000,000</b>
<i>Calendar Year Rate Increase</i>	<b>30.0%</b>	<b>30.0%</b>	<b>30.0%</b>	<b>12.5%</b>	<b>0.0%</b>	
<b>Scenario 4</b>						
System Reinvestment Funding	\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000	\$5,000,000	<b>\$15,000,000</b>
<i>Calendar Year Rate Increase</i>	<b>30.0%</b>	<b>30.0%</b>	<b>30.0%</b>	<b>12.5%</b>	<b>7.5%</b>	
<b>Scenario 5</b>						
System Reinvestment Funding	\$1,250,000	\$2,500,000	\$3,750,000	\$5,000,000	\$5,000,000	<b>\$17,500,000</b>
<i>Calendar Year Rate Increase</i>	<b>35.0%</b>	<b>35.0%</b>	<b>25.0%</b>	<b>12.5%</b>	<b>0.0%</b>	

# 30% Increase Rate Structure

Current Water Rates		Proposed Scenario 1, 3 & 4 Rates - Jan. 1, 2010		Monthly Thresholds (ccf)		
	Monthly Fixed Charge		Monthly Fixed Charge	Tier 1 0 - 7	Tier 2 8 - 30	Tier 3 31 +
5/8" or 3/4"	\$ 10.73	5/8" or 3/4"	\$ 11.29	\$ 2.00	\$ 2.77	\$ 4.48
1"	\$ 21.46	1"	\$ 21.46	\$ 2.00	\$ 2.77	\$ 4.48
1 1/2"	\$ 32.19	1 1/2"	\$ 32.19	\$ 2.53	(All Usage)	
2"	\$ 42.92	2"	\$ 42.92	\$ 2.53	(All Usage)	
3"	\$ 107.30	3"	\$ 107.30	\$ 2.53	(All Usage)	
4"	\$ 136.26	4"	\$ 136.26	\$ 2.53	(All Usage)	
6"	\$ 204.95	6"	\$ 204.95	\$ 2.53	(All Usage)	
8"	\$ 283.25	8"	\$ 309.31	\$ 2.53	(All Usage)	
10"	\$ 375.54	10"	\$ 441.34	\$ 2.53	(All Usage)	
Volume (per ccf)	\$ 1.83					

# 25% Increase Rate Structure

Current Water Rates		Proposed Scenario 2 Rates - Jan. 1, 2010		Monthly Thresholds (ccf)		
	Monthly Fixed Charge		Monthly Fixed Charge	Tier 1 0 - 7	Tier 2 8 - 30	Tier 3 31 +
5/8" or 3/4"	\$ 10.73	5/8" or 3/4"	\$ 10.85	\$ 2.00	\$ 2.54	\$4.35
1"	\$ 21.46	1"	\$ 21.46	\$ 2.00	\$ 2.54	\$4.35
1 1/2"	\$ 32.19	1 1/2"	\$ 32.19	\$ 2.41	(All Usage)	
2"	\$ 42.92	2"	\$ 42.92	\$ 2.41	(All Usage)	
3"	\$ 107.30	3"	\$ 107.30	\$ 2.41	(All Usage)	
4"	\$ 136.26	4"	\$ 136.26	\$ 2.41	(All Usage)	
6"	\$ 204.95	6"	\$ 204.95	\$ 2.41	(All Usage)	
8"	\$ 283.25	8"	\$ 297.41	\$ 2.41	(All Usage)	
10"	\$ 375.54	10"	\$ 424.37	\$ 2.41	(All Usage)	
Volume (per ccf)	\$ 1.83					

# 35% Increase Rate Structure

Current Water Rates		Proposed Scenario 5 Rates - Jan. 1, 2010		Monthly Thresholds (ccf)		
	Monthly Fixed Charge		Monthly Fixed Charge	Tier 1 0 - 7	Tier 2 8 - 30	Tier 3 31 +
5/8" or 3/4"	\$ 10.73	5/8" or 3/4"	\$ 11.72	\$ 2.00	\$ 2.99	\$4.63
1"	\$ 21.46	1"	\$ 21.46	\$ 2.00	\$ 2.99	\$4.63
1 1/2"	\$ 32.19	1 1/2"	\$ 32.19	\$ 2.65	(All Usage)	
2"	\$ 42.92	2"	\$ 42.92	\$ 2.65	(All Usage)	
3"	\$ 107.30	3"	\$ 107.30	\$ 2.65	(All Usage)	
4"	\$ 136.26	4"	\$ 136.26	\$ 2.65	(All Usage)	
6"	\$ 204.95	6"	\$ 204.95	\$ 2.65	(All Usage)	
8"	\$ 283.25	8"	\$ 321.20	\$ 2.65	(All Usage)	
10"	\$ 375.54	10"	\$ 458.31	\$ 2.65	(All Usage)	
Volume (per ccf)	\$ 1.83					

# Other Water Customers – 30% Scenarios (1,3,4)

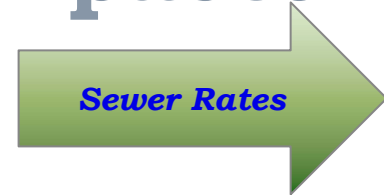
## Reclaimed Rate: January 1, 2010

(per ccf)	\$	1.61
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## Fireline Rates: January 1, 2010

	Fireline Fixed	
2"	\$	12.04
3"	\$	16.57
4"	\$	21.66
6"	\$	35.81
8"	\$	52.78
10"	\$	72.59
(per ccf)	\$	4.48

# Sample Water Bill Impacts



	Usage (ccf)	Monthly Bills Under Current Rates	Monthly Bills Under Proposed Rates	Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
<b>Water Bill Impacts - Scenario 1, 3 &amp; 4 - 30% Rate Increase (Tier 0-7 ccf)</b>							
<b>3/4"</b>							
25%	4	\$ 18.05	\$ 19.29	\$ 1.24	6.9%	6091	46.3%
	7	\$ 23.54	\$ 25.30	\$ 1.76	7.5%		
	8	\$ 25.37	\$ 28.07	\$ 2.70	10.6%		
Median	12	\$ 32.69	\$ 39.13	\$ 6.44	19.7%		
90%	26	\$ 58.31	\$ 77.86	\$ 19.55	33.5%		
	40	\$ 83.93	\$ 133.73	\$ 49.80	59.3%		
<b>Water Bill Impacts - Scenario 2 - 25% Rate Increase (\$4m slow) (Tier 0-7 ccf)</b>							
<b>3/4"</b>							
25%	4	\$ 18.05	\$ 18.85	\$ 0.80	4.4%	6091	46.3%
	7	\$ 23.54	\$ 24.84	\$ 1.30	5.5%		
	8	\$ 25.37	\$ 27.39	\$ 2.02	8.0%		
Median	12	\$ 32.69	\$ 37.57	\$ 4.88	14.9%		
90%	26	\$ 58.31	\$ 73.19	\$ 14.88	25.5%		
	40	\$ 83.93	\$ 126.89	\$ 42.96	51.2%		
<b>Water Bill Impacts - Scenario 5 35% Rate Increase (\$5m Fast) (Tier 0-7 ccf)</b>							
<b>3/4"</b>							
25%	4	\$ 18.05	\$ 19.73	\$ 1.68	9.3%	6091	46.3%
	7	\$ 23.54	\$ 25.74	\$ 2.20	9.4%		
	8	\$ 25.37	\$ 28.73	\$ 3.36	13.2%		
Median	12	\$ 32.69	\$ 40.68	\$ 7.99	24.4%		
90%	26	\$ 58.31	\$ 82.51	\$ 24.20	41.5%		
	40	\$ 83.93	\$ 140.71	\$ 56.78	67.7%		

**30% Increase Details**

**25% Increase Details**

**35% Increase Details**

# Detailed Sample Water Bill Impacts – 30% Rate Increase

	Usage (ccf)	Monthly Bills Under Current Rates	Monthly Bills Under Proposed Rates	Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
<b>Water Bill Impacts - Scenario 1, 3 &amp; 4 - 30% Rate Increase (Tier 0-7 ccf)</b>							
<b>5/8"</b>	25%	4	\$ 18.05	\$ 19.29	\$ 1.24	2945	22.4%
		7	\$ 23.54	\$ 25.30	\$ 1.76		
	Median	8	\$ 25.37	\$ 28.07	\$ 2.70		
		30	\$ 65.63	\$ 88.93	\$ 23.30		
		31	\$ 67.46	\$ 93.41	\$ 25.95		
		40	\$ 83.93	\$ 133.73	\$ 49.80		
<b>3/4"</b>	25%	4	\$ 18.05	\$ 19.29	\$ 1.24	6091	46.3%
		7	\$ 23.54	\$ 25.30	\$ 1.76		
	Median	12	\$ 32.69	\$ 39.13	\$ 6.44		
		31	\$ 67.46	\$ 93.41	\$ 25.95		
		40	\$ 83.93	\$ 133.73	\$ 49.80		
<b>1"</b>	25%	4	\$ 28.78	\$ 29.47	\$ 0.69	3502	26.6%
		7	\$ 34.27	\$ 35.47	\$ 1.20		
		8	\$ 36.10	\$ 38.24	\$ 2.14		
	Median	13	\$ 45.25	\$ 52.07	\$ 6.82		
	90%	31	\$ 78.19	\$ 103.58	\$ 25.39		
		40	\$ 94.66	\$ 143.90	\$ 49.24		



# Combined Water & Sewer Bill Impact 30% Rate Increase

<b>Scenario 1 (Original) Utility Bill Impacts*</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Median Monthly Water Bill: (3/4" meter)	\$32.69	\$39.13	\$51.49	\$61.33	\$70.08	\$73.32
Median Monthly Sewer Bill: (3/4" meter)	\$6.46	\$13.09	\$16.36	\$18.00	\$19.80	\$20.79
<b>Total Monthly Utility Bill:</b>	\$39.15	\$52.22	\$67.86	\$79.33	\$89.88	\$94.11
Annual Increase (%)		33.4%	29.9%	16.9%	13.3%	4.7%

<b>Monthly Utility Bill w/ 10% Reduction:**</b>	\$39.15	\$45.07	\$62.17	\$72.56	\$82.22	\$86.11
Annual Increase (%)		15.1%	37.9%	16.7%	13.3%	4.7%

*\*FY 2009/10 Reflects Jan. 1, 2010 Implementation*

*\*\*2010 and Beyond Reflect Achievement of 10% Curtailment Goal*

# Top 10 Users Sample Water Bills

## 30% Rate Increase

<b>Large Users:</b>	<b>Usage (ccf)</b>	<b>Existing Monthly Bill</b>	<b>Proposed FY 2009/10 Monthly Bill</b>	<b>Monthly Bill Increase (Decrease)</b>	<b>Bill Increase (%)</b>
#1 6" Northrop Meter	9874.42	\$ 18,275.13	\$ 25,171.89	\$ 6,896.76	37.7%
#2 10" Northrop Meter	6066.92	\$ 11,478.00	\$ 15,781.22	\$ 4,303.22	37.5%
#3 8" Hotel Meter	2034.67	\$ 4,006.69	\$ 5,453.85	\$ 1,447.16	36.1%
#4 4" Hotel Meter	1670.08	\$ 3,192.51	\$ 4,358.98	\$ 1,166.47	36.5%
#5 2" LA County Meter	866.75	\$ 1,629.07	\$ 2,234.45	\$ 605.38	37.2%
#6 2" Business Meter	831.917	\$ 1,565.33	\$ 2,146.38	\$ 581.05	37.1%
#7 3" Business Meter	674.75	\$ 1,342.09	\$ 1,813.37	\$ 471.28	35.1%
#8 2" Car Wash Meter	610.667	\$ 1,160.44	\$ 1,586.96	\$ 426.52	36.8%
#9 2" Mall Meter	523.5	\$ 1,000.93	\$ 1,366.56	\$ 365.64	36.5%
#10 4" Business Meter	509.917	\$ 1,069.41	\$ 1,425.56	\$ 356.15	33.3%

# Neighborhood Rate Comparison

## 30% Rate Increase

Community	Meter Size	Meter Charge	Monthly Consumption (ccf)	Tiers	Volume Charge	Monthly Bill
<b>Santa Monica</b>	Single Family	None	12	Tier 1 (0 - 14 ccf) Tier 2 (15 - 40 ccf) Tier 3 (41 - 148 ccf) Tier 4 (149+ ccf)	\$ 1.65 \$ 2.47 \$ 3.70 \$ 5.78	\$ 19.80
<b>Huntington Beach</b>	5/8" or 3/4"	\$ 10.75	12	All Usage	\$ 1.56	\$ 29.44
<b>El Segundo</b>	5/8" x 3/4"	\$ 11.26	12	Tier 1 (2 ccf) Tier 2 (3-5 ccf) Tier 3 (6-10 ccf) Tier 4 (11+ ccf)	\$ 1.51 \$ 1.67 \$ 1.75 \$ 1.83	\$ 31.69
<b>Manhattan Beach - Scenario 1 (Original)</b>	5/8" & 3/4"	\$ 11.29	12	Tier 1 (0-7 ccf) Tier 2 (8 - 30 ccf) Tier 3 (31+ ccf)	\$ 2.00 \$ 2.77 \$ 4.48	\$ 39.13
<b>Hermosa Beach, Redondo Beach</b>	3/4"	12.97	12	Tier 1 (0 - 10 ccf) Tier 2 (11 - 16 ccf) Tier 3 (17+ ccf)	\$ 2.16 \$ 2.73 \$ 3.21	\$ 40.00
<b>Claremont, Pomona, Cypress, Los Alamitos, Placentia, Seal Beach, Stanton, San Dimas, Arcadia</b>	3/4"	\$ 22.70	12	Tier 1 (0 - 12 ccf) Tier 2 (13+ ccf)	\$ 2.15 \$ 2.47	\$ 48.48
<b>Palos Verdes, Rolling Hills, Lomita, Rancho Palos Verdes</b>	3/4"	17.67	12	Tier 1 (0 - 15 ccf) Tier 2 (16 - 36 ccf) Tier 3 (37+ ccf)	\$ 2.61 \$ 2.80 \$ 3.36	\$ 49.05
<b>Carson, Los Angeles, Long Beach</b>	3/4"	17.67	12	Tier 1 (0 - 15 ccf) Tier 2 (16 - 36 ccf) Tier 3 (37+ ccf)	\$ 2.61 \$ 2.80 \$ 3.36	\$ 49.05
<b>Cerritos, Compton, Culver City, Gardena, Hawthorne, Inglewood</b>	3/4"	\$ 18.65	12	Tier 1 (0 - 16 ccf) Tier 2 (17+ ccf)	\$ 2.69 \$ 3.10	\$ 50.95

**Return To Scenarios Slide**

# Detailed Sample Water Bill Impacts

## 25% Rate Increase

		Water Bill Impacts - Scenario 2 (\$4m slow) (Tier 0-7 ccf)						
		Usage (ccf)	Monthly Bills Under Current Rates	Monthly Bills Under Proposed Rates	Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
<b>5/8"</b>	25%	4	\$ 18.05	\$ 18.85	\$ 0.80	4.4%	2945	22.4%
		7	\$ 23.54	\$ 24.84	\$ 1.30	5.5%		
	Median	8	\$ 25.37	\$ 27.39	\$ 2.02	8.0%		
	Average	11	\$ 30.86	\$ 35.02	\$ 4.16	13.5%		
		31	\$ 67.46	\$ 87.72	\$ 20.26	30.0%		
		40	\$ 83.93	\$ 126.89	\$ 42.96	51.2%		
<b>3/4"</b>	25%	4	\$ 18.05	\$ 18.85	\$ 0.80	4.4%	6091	46.3%
		7	\$ 23.54	\$ 24.84	\$ 1.30	5.5%		
		8	\$ 25.37	\$ 27.39	\$ 2.02	8.0%		
	Median	12	\$ 32.69	\$ 37.57	\$ 4.88	14.9%		
		31	\$ 67.46	\$ 87.72	\$ 20.26	30.0%		
		40	\$ 83.93	\$ 126.89	\$ 42.96	51.2%		
<b>1"</b>		25%	4	\$ 28.78	\$ 29.46	\$ 0.68	2.3%	3502
	7		\$ 34.27	\$ 35.45	\$ 1.18	3.4%		
	Median	13	\$ 45.25	\$ 50.72	\$ 5.47	12.1%		
	90%	31	\$ 78.19	\$ 98.33	\$ 20.14	25.8%		
		40	\$ 94.66	\$ 137.50	\$ 42.84	45.3%		

# Combined Water & Sewer Bill Impact 25% Rate Increase

<b>Utility Bill Impacts Scenario 6 (Slow)*</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Median Monthly Water Bill: (3/4" meter)	\$32.69	\$37.57	\$47.42	\$59.24	\$73.53	\$76.87
Median Monthly Sewer Bill: (3/4" meter)	\$6.46	\$13.09	\$16.36	\$18.00	\$19.80	\$20.79
<b>Monthly Utility Bill:</b>	\$39.15	\$50.66	\$63.79	\$77.24	\$93.33	\$97.66
Annual Increase (%)		29.4%	25.9%	21.1%	20.8%	4.6%

<b>Monthly Utility Bill w/ 10% Reduction:**</b>	\$39.15	\$47.16	\$58.63	\$70.86	\$85.63	\$89.61
Annual Increase (%)		20.4%	24.3%	20.9%	20.8%	4.6%

*\*FY 2009/10 Reflects Jan. 1, 2010 Implementation*

*\*\*2010 and Beyond Reflect Achievement of 10% Curtailment Goal*

# Top 10 Users Sample Water Bills

## 25% Rate Increase

<b>Large Users:</b>	<b>Usage (ccf)</b>	<b>Existing Monthly Bill</b>	<b>Proposed FY 2009/10 Monthly Bill</b>	<b>Monthly Bill Increase (Decrease)</b>	<b>Bill Increase (%)</b>
#1 6" Northrop Meter	9874.42	\$ 18,275.13	\$ 24,018.39	\$ 5,743.26	31.4%
#2 10" Northrop Meter	6066.92	\$ 11,478.00	\$ 15,055.53	\$ 3,577.53	31.2%
#3 8" Hotel Meter	2034.67	\$ 4,006.69	\$ 5,204.27	\$ 1,197.58	29.9%
#4 4" Hotel Meter	1670.08	\$ 3,192.51	\$ 4,163.88	\$ 971.37	30.4%
#5 2" LA County Meter	866.75	\$ 1,629.07	\$ 2,133.20	\$ 504.13	30.9%
#6 2" Business Meter	831.917	\$ 1,565.33	\$ 2,049.20	\$ 483.87	30.9%
#7 3" Business Meter	674.75	\$ 1,342.09	\$ 1,734.55	\$ 392.46	29.2%
#8 2" Car Wash Meter	610.667	\$ 1,160.44	\$ 1,515.62	\$ 355.18	30.6%
#9 2" Mall Meter	523.5	\$ 1,000.93	\$ 1,305.41	\$ 304.48	30.4%
#10 4" Business Meter	509.917	\$ 1,069.41	\$ 1,365.99	\$ 296.58	27.7%

# Neighborhood Rate Comparison

## 25% Rate Increase

Community	Meter Size	Meter Charge	Monthly Consumption (ccf)	Tiers	Volume Charge	Monthly Bill
<b>Santa Monica</b>	Single Family	None	12	Tier 1 (0 - 14 ccf) Tier 2 (15 - 40 ccf) Tier 3 (41 - 148 ccf) Tier 4 (149+ ccf)	\$ 1.65 \$ 2.47 \$ 3.70 \$ 5.78	\$ 19.80
<b>Huntington Beach</b>	5/8" or 3/4"	\$ 10.75	12	All Usage	\$ 1.56	\$ 29.44
<b>El Segundo</b>	5/8" x 3/4"	\$ 11.26	12	Tier 1 (2 ccf) Tier 2 (3-5 ccf) Tier 3 (6-10 ccf) Tier 4 (11+ ccf)	\$ 1.51 \$ 1.67 \$ 1.75 \$ 1.83	\$ 31.69
<b>Manhattan Beach - Scenario 2 (\$4m slow)</b>	5/8" & 3/4"	\$ 10.85	12	Tier 1 (0-7 ccf) Tier 2 (8 - 30 ccf) Tier 3 (31+ ccf)	\$ 2.00 \$ 2.54 \$ 4.35	\$ 37.57
<b>Hermosa Beach, Redondo Beach</b>	3/4"	12.97	12	Tier 1 (0 - 10 ccf) Tier 2 (11 - 16 ccf) Tier 3 (17+ ccf)	\$ 2.16 \$ 2.73 \$ 3.21	\$ 40.00
<b>Claremont, Pomona, Cypress, Los Alamitos, Placentia, Seal Beach, Stanton, San Dimas, Arcadia</b>	3/4"	\$ 22.70	12	Tier 1 (0 - 12 ccf) Tier 2 (13+ ccf)	\$ 2.15 \$ 2.47	\$ 48.48
<b>Palos Verdes, Rolling Hills, Lomita, Rancho Palos Verdes</b>	3/4"	17.67	12	Tier 1 (0 - 15 ccf) Tier 2 (16 - 36 ccf) Tier 3 (37+ ccf)	\$ 2.61 \$ 2.80 \$ 3.36	\$ 49.05
<b>Carson, Los Angeles, Long Beach</b>	3/4"	17.67	12	Tier 1 (0 - 15 ccf) Tier 2 (16 - 36 ccf) Tier 3 (37+ ccf)	\$ 2.61 \$ 2.80 \$ 3.36	\$ 49.05
<b>Cerritos, Compton, Culver City, Gardena, Hawthorne, Inglewood</b>	3/4"	\$ 18.65	12	Tier 1 (0 - 16 ccf) Tier 2 (17+ ccf)	\$ 2.69 \$ 3.10	\$ 50.95

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# Detailed Sample Water Bill Impacts

## 35% Rate Increase

Water Bill Impacts - Scenario 5 (\$5m Fast) (Tier 0-7 ccf)								
	Usage (ccf)	Monthly Bills Under Current Rates	Monthly Bills Under Proposed Rates	Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total	
<b>5/8"</b>	25%	4	\$ 18.05	\$ 19.73	\$ 1.68	9.3%	2945	22.4%
		7	\$ 23.54	\$ 25.74	\$ 2.20	9.4%		
	Median	8	\$ 25.37	\$ 28.73	\$ 3.36	13.2%		
	Average	11	\$ 30.86	\$ 37.69	\$ 6.83	22.1%		
		31	\$ 67.46	\$ 99.08	\$ 31.62	46.9%		
		40	\$ 83.93	\$ 140.71	\$ 56.78	67.7%		
<b>3/4"</b>	25%	4	\$ 18.05	\$ 19.73	\$ 1.68	9.3%	6091	46.3%
		7	\$ 23.54	\$ 25.74	\$ 2.20	9.4%		
		8	\$ 25.37	\$ 28.73	\$ 3.36	13.2%		
	Median	12	\$ 32.69	\$ 40.68	\$ 7.99	24.4%		
		31	\$ 67.46	\$ 99.08	\$ 31.62	46.9%		
		32	\$ 69.29	\$ 103.71	\$ 34.42	49.7%		
<b>1"</b>	25%	4	\$ 28.78	\$ 29.47	\$ 0.69	2.4%	3502	26.6%
		7	\$ 34.27	\$ 35.48	\$ 1.21	3.5%		
		8	\$ 36.10	\$ 38.47	\$ 2.37	6.6%		
	Median	13	\$ 45.25	\$ 53.41	\$ 8.16	18.0%		
	90%	31	\$ 78.19	\$ 108.82	\$ 30.63	39.2%		
		40	\$ 94.66	\$ 150.45	\$ 55.79	58.9%		



# Combined Water & Sewer Bill Impact

## 35% Rate Increase

<b>Utility Bill Impacts - Scenario 5 (\$5m Fast)*</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Median Monthly Water Bill: (3/4" meter)	\$32.69	\$40.68	\$55.69	\$69.18	\$77.86	\$77.86
Median Monthly Sewer Bill: (3/4" meter)	\$6.46	\$13.09	\$16.36	\$18.00	\$19.80	\$20.79
<b>Monthly Utility Bill:</b>	\$39.15	\$53.77	\$72.06	\$87.18	\$97.66	\$98.65
Annual Increase (%)		37.4%	34.0%	21.0%	12.0%	1.0%

<b>Monthly Utility Bill w/ 10% Reduction:**</b>	\$39.15	\$49.83	\$65.82	\$79.46	\$89.02	\$89.94
Annual Increase (%)		27.3%	32.1%	20.7%	12.0%	1.0%

*\*FY 2009/10 Reflects Jan. 1, 2010 Implementation*

*\*\*2010 and Beyond Reflect Achievement of 10% Curtailment Goal*

# Top 10 Users Sample Water Bills

## 35% Rate Increase

<b>Large Users:</b>	<b>Usage (ccf)</b>	<b>Existing Monthly Bill</b>	<b>Proposed FY 2009/10 Monthly Bill</b>	<b>Monthly Bill Increase (Decrease)</b>	<b>Bill Increase (%)</b>
#1 6" Northrop Meter	9874.42	\$ 18,275.13	\$ 26,325.44	\$ 8,050.31	44.1%
#2 10" Northrop Meter	6066.92	\$ 11,478.00	\$ 16,506.94	\$ 5,028.94	43.8%
#3 8" Hotel Meter	2034.67	\$ 4,006.69	\$ 5,703.44	\$ 1,696.75	42.3%
#4 4" Hotel Meter	1670.08	\$ 3,192.51	\$ 4,554.08	\$ 1,361.57	42.6%
#5 2" LA County Meter	866.75	\$ 1,629.07	\$ 2,335.71	\$ 706.63	43.4%
#6 2" Business Meter	831.917	\$ 1,565.33	\$ 2,243.56	\$ 678.24	43.3%
#7 3" Business Meter	674.75	\$ 1,342.09	\$ 1,892.20	\$ 550.10	41.0%
#8 2" Car Wash Meter	610.667	\$ 1,160.44	\$ 1,658.30	\$ 497.86	42.9%
#9 2" Mall Meter	523.5	\$ 1,000.93	\$ 1,427.72	\$ 426.79	42.6%
#10 4" Business Meter	509.917	\$ 1,069.41	\$ 1,485.13	\$ 415.72	38.9%

# Neighborhood Rate Comparison

## 35% Rate Increase

Community	Meter Size	Meter Charge	Monthly Consumption (ccf)	Tiers	Volume Charge	Monthly Bill
<b>Santa Monica</b>	Single Family	None	12	Tier 1 (0 - 14 ccf) Tier 2 (15 - 40 ccf) Tier 3 (41 - 148 ccf) Tier 4 (149+ ccf)	\$ 1.65 \$ 2.47 \$ 3.70 \$ 5.78	\$ 19.80
<b>Huntington Beach</b>	5/8" or 3/4"	\$ 10.75	12	All Usage	\$ 1.56	\$ 29.44
<b>El Segundo</b>	5/8" x 3/4"	\$ 11.26	12	Tier 1 (2 ccf) Tier 2 (3-5 ccf) Tier 3 (6-10 ccf) Tier 4 (11+ ccf)	\$ 1.51 \$ 1.67 \$ 1.75 \$ 1.83	\$ 31.69
<b>Hermosa Beach, Redondo Beach</b>	3/4"	12.97	12	Tier 1 (0 - 10 ccf) Tier 2 (11 - 16 ccf) Tier 3 (17+ ccf)	\$ 2.16 \$ 2.73 \$ 3.21	\$ 40.00
<b>Manhattan Beach - Scenario 5 (\$5m fast)</b>	5/8" & 3/4"	\$ 11.72	12	Tier 1 (0-7 ccf) Tier 2 (8 - 30 ccf) Tier 3 (31+ ccf)	\$ 2.00 \$ 2.99 \$ 4.63	\$ 40.68
<b>Claremont, Pomona, Cypress, Los Alamitos, Placentia, Seal Beach, Stanton, San Dimas, Arcadia</b>	3/4"	\$ 22.70	12	Tier 1 (0 - 12 ccf) Tier 2 (13+ ccf)	\$ 2.15 \$ 2.47	\$ 48.48
<b>Palos Verdes, Rolling Hills, Lomita, Rancho Palos Verdes</b>	3/4"	17.67	12	Tier 1 (0 - 15 ccf) Tier 2 (16 - 36 ccf) Tier 3 (37+ ccf)	\$ 2.61 \$ 2.80 \$ 3.36	\$ 49.05
<b>Carson, Los Angeles, Long Beach</b>	3/4"	17.67	12	Tier 1 (0 - 15 ccf) Tier 2 (16 - 36 ccf) Tier 3 (37+ ccf)	\$ 2.61 \$ 2.80 \$ 3.36	\$ 49.05
<b>Cerritos, Compton, Culver City, Gardena, Hawthorne, Inglewood</b>	3/4"	\$ 18.65	12	Tier 1 (0 - 16 ccf) Tier 2 (17+ ccf)	\$ 2.69 \$ 3.10	\$ 50.95

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# Revenue Risk Assessment

- Water Conservation poses a distinct revenue risk for both the Water and Sewer utilities
  - ✓ MWD Water purchases costs will decrease with conservation
  - ✓ Fixed utility costs will not decrease with conservation
  - ✓ Conservation will likely come from high-end (Tier 3) usage
  
- Variable volume revenues might decrease substantially
  - ✓ Water Utility projected to collect ~75% of revenues in volume charges
  - ✓ Sewer Utility projected to collect ~75% of revenues in volume charges

# Water & Sewer Revenue Risk Assessment

## Water Reduction Scenario

<b>Aggregate Usage Reduction:</b>		15%
Baseline Volume Revenues	\$	7,030,984
Projected Volume Revenues	\$	5,640,217
Revenue Loss:	\$	1,390,767
Baseline MWD Purchase Costs:	\$	4,854,708
Projected MWD Purchase Costs:	\$	3,735,069
Purchased Water Cost Saving:	\$	1,119,639
Potential Revenue Risk:	\$	(271,128)

**\*\*Water Rate Stabilization Reserve FY  
2009/10 Balance: \$870,000**

## Sewer Reduction Scenario

<b>Aggregate Usage Reduction:</b>		15%
Baseline Volume (w/ 10% curtailment):		2,385,718 ccf
Further Reduced Volume:		2,278,584 ccf
Baseline Volume Revenues:	\$	1,906,376
Reduced Volume Revenues:	\$	1,820,768
Revenue Loss:	\$	(85,608)
Potential Revenue Risk:	\$	(85,608)

**\*\*Sewer Rate Stabilization Reserve FY  
2009/10 Balance: \$190,500**

# Questions and Answers