City Of Manhattan Beach

Public Information Meeting
Water and Sewer Rates

Wednesday, October 7, 2009

and

Tuesday, October 13, 2009

City Council Chambers

7:00-9:00 p.m.

Agenda

- Purpose of Meeting
- How are utilities funded?
- Why are we faced with large rate increases now?
- How do we know infrastructure needs replacement and what are the costs?
- When faced with an increase in rates, what criteria did City Council give Staff about rates when developing various options?
- Given our needs for infrastructure, how much revenue is needed by each utility?
- With this information in hand, why did the City Council choose the rate structure now proposed?
- What are the impacts on my rates?
- Why not bonding for infrastructure? What are the pros/cons?
- What are the impacts on revenue/rates if we conserve water?
- What are the next steps in the process?
- What questions/issues has the City heard from residents?
- Questions?

Purpose of Meeting

- Review material available to City Council when deliberating on rates (available on City's website at www.citymb.info)
- Listen to questions/issues

How are utilities funded?

- **Each utility is funded exclusively by rates**
- **Each utility is a "stand alone" enterprise fund**
  - Similar to SCE, natural gas, etc.
  - No mixing of utility funds with City's General Fund
  - Utilities receive no property tax or proceeds from General Obligation Bonds
- **There is a difference between G.O. Bonds and Revenue Bonds**
  - G.O. Bonds voted
  - Revenue Bonds are not voted; debt is part of rate.

Why are we faced with large rate increases now?

- Water
  - Infrastructure deficiencies
  - Increase in wholesale water cost
- Sewer
  - Infrastructure deficiencies
  - Existing deficit in rate revenues and operating expenses

How do we know our infrastructure needs replacement and what are the costs?

- In August, 2008 the City hired AKM Engineers to perform extensive review of system condition.

How do we know our infrastructure needs replacement and what are the costs?

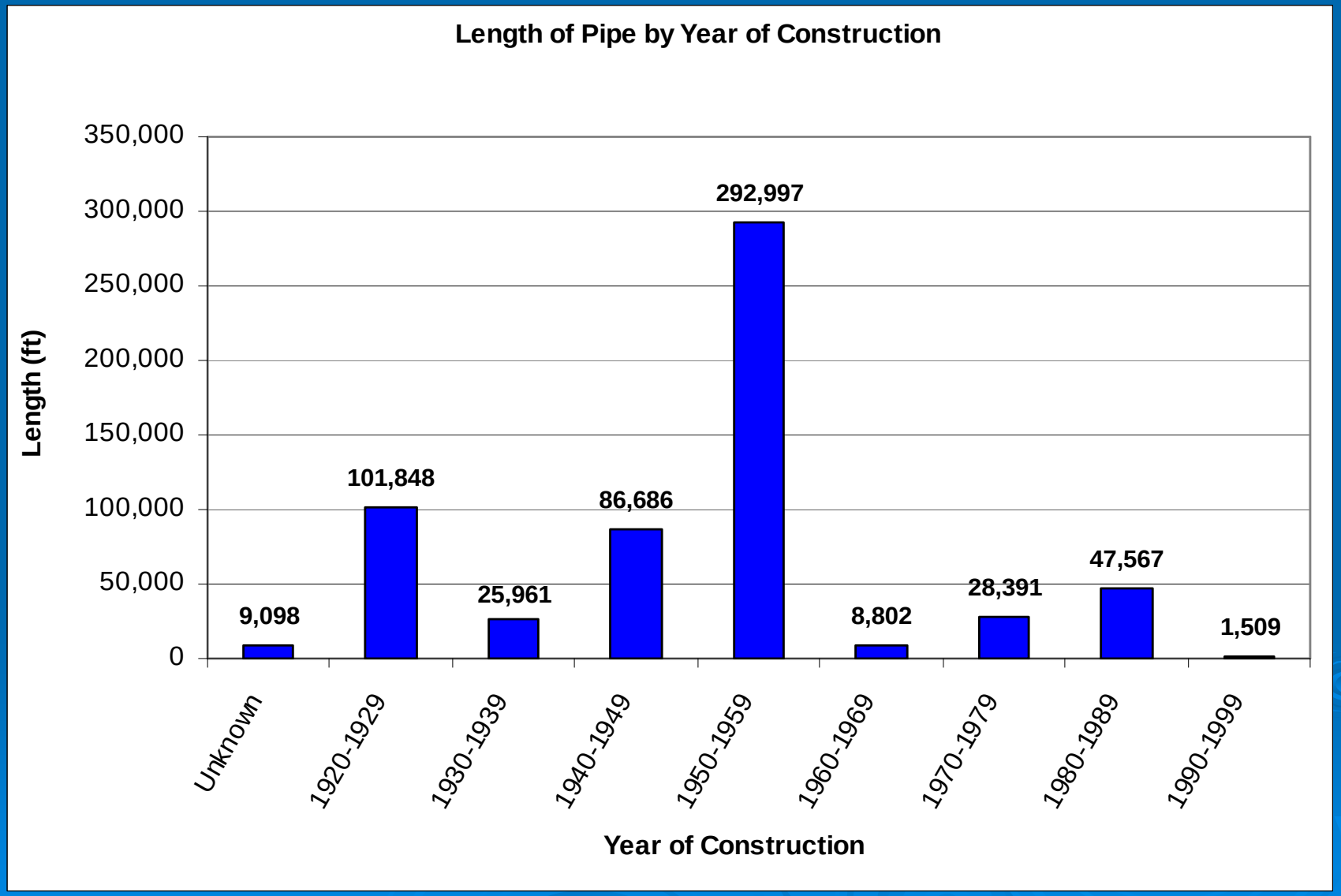
- Water
  - Water infrastructure is old, cast iron pipe, undersized
  - AKM recommends $126,000,000 in next 20 years

Water Evaluation

- **Transmission and Distribution System**
  - Constructed between 1920s and present
  - The System includes nearly 220,000 feet of pipe older than 60 years
  - Over 79% of the system is made up of unlined cast iron pipe
  - 22% of the pipes are 4-inch and smaller

Water

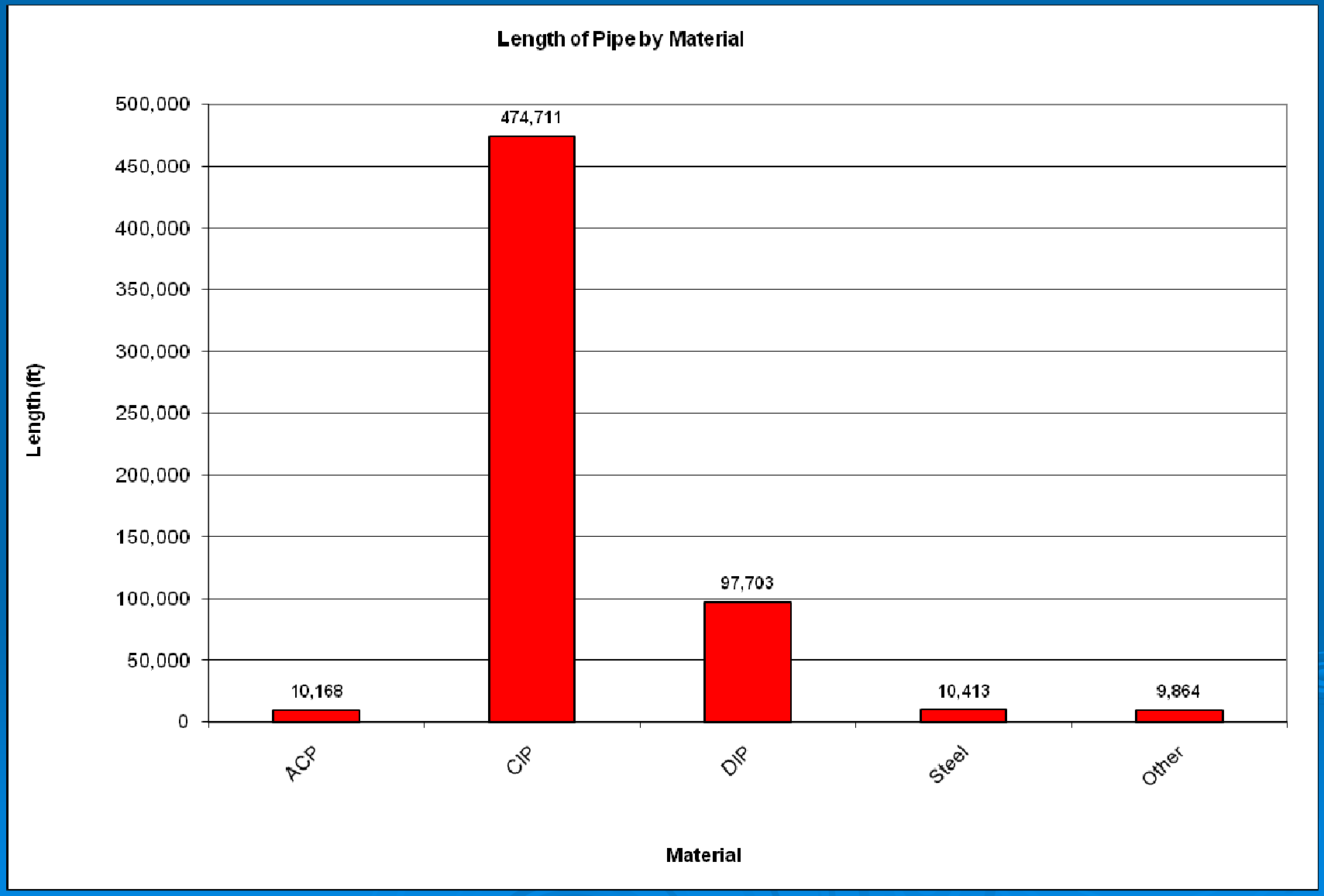
Year of Construction



8

Water

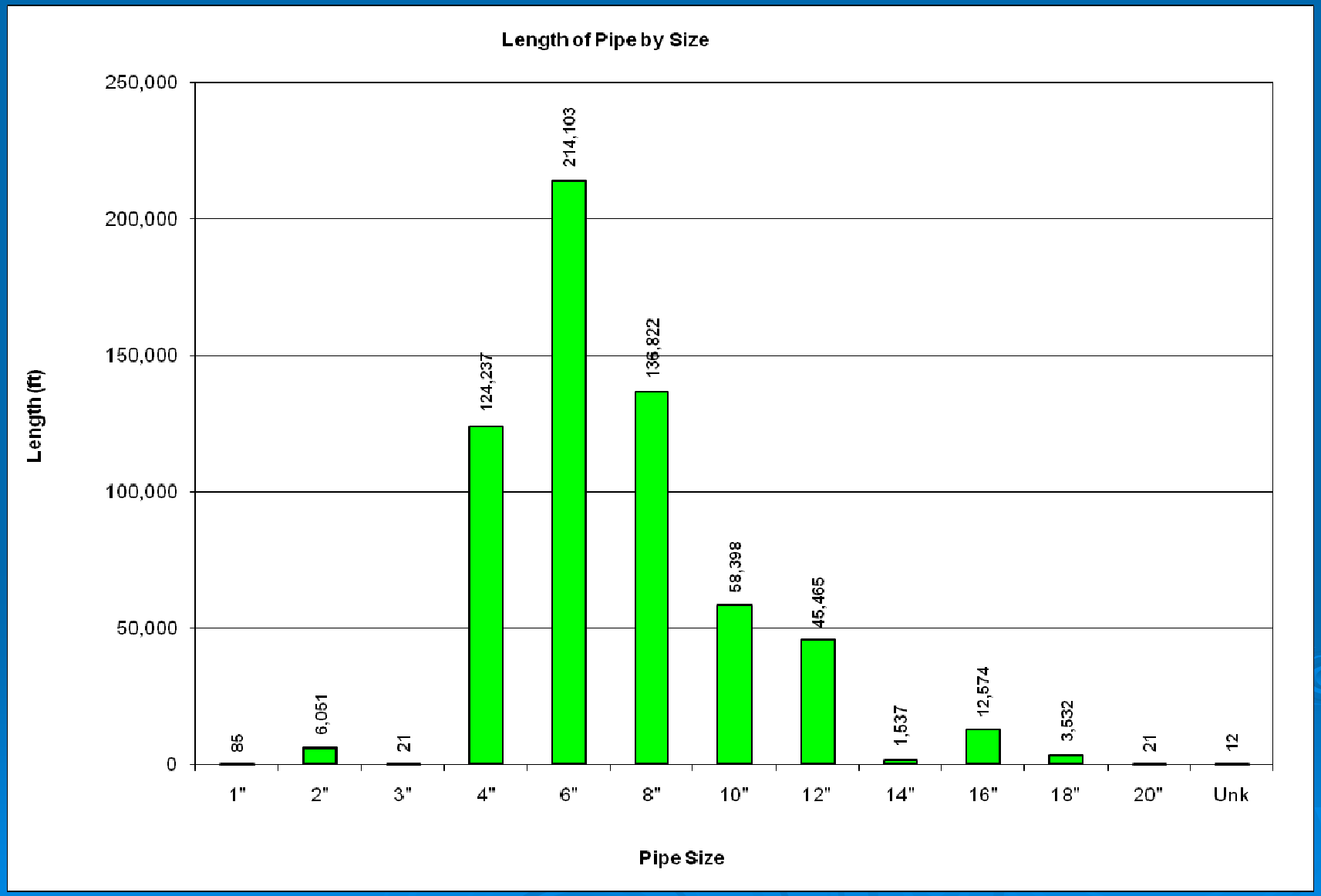
Pipe Material



9

Water

Pipe Size



10

Water

Tuberculation

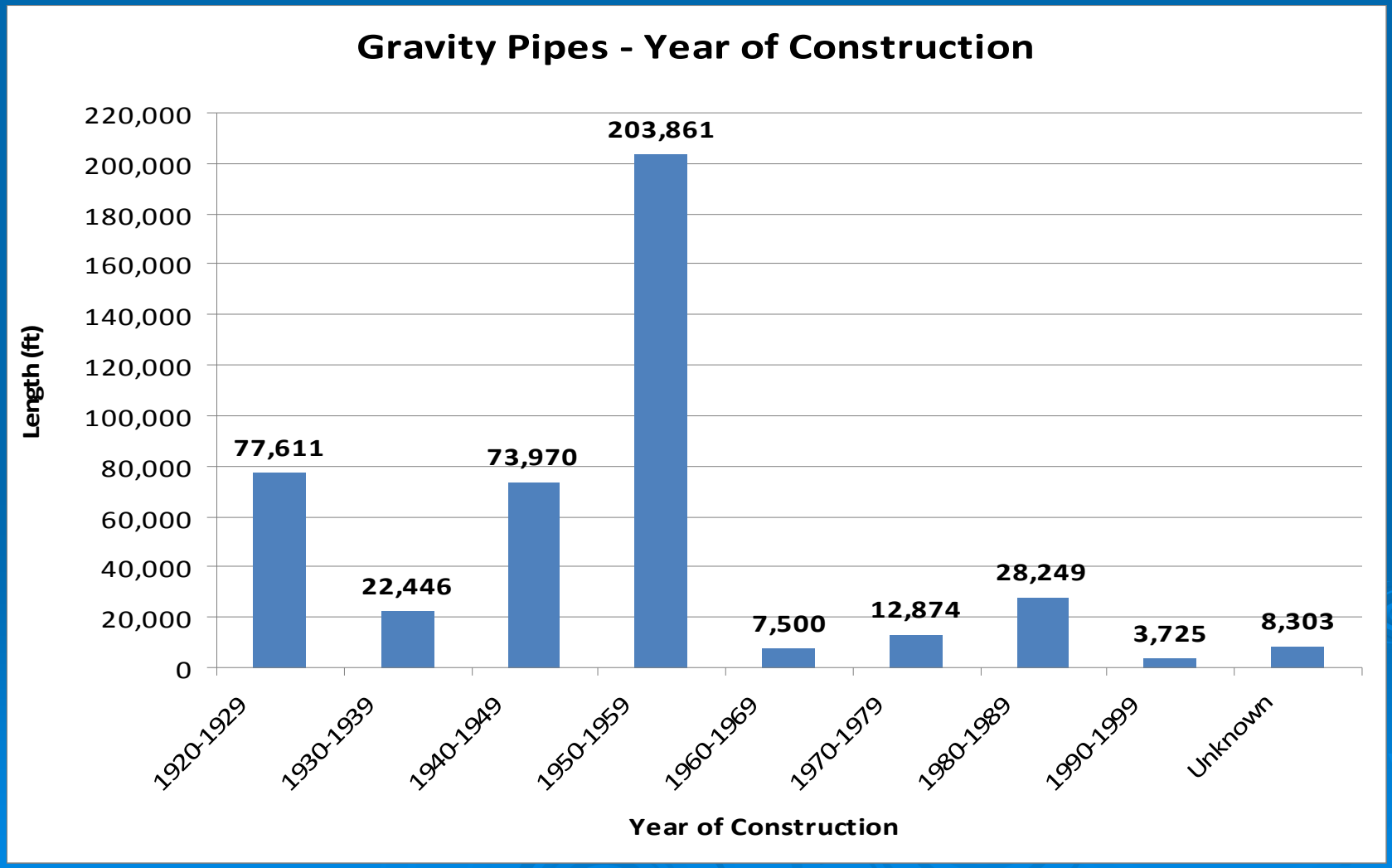
How do we know our infrastructure needs replacement and what are the costs?

- Sewer
  - Sewer infrastructure is old and contains broken pipe, offset joints, root problems, etc.
  - AKM recommends $39,000,000 expenditures in next 20 years

Wastewater

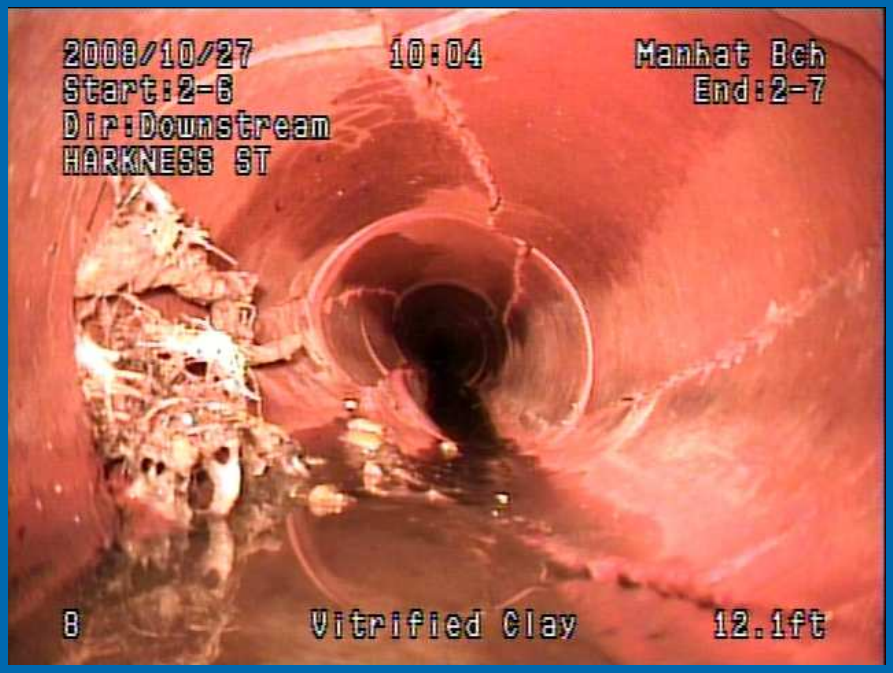
Age of Existing System

- Collection System



13

Wastewater Condition Evaluation



Broken Pipe

Large Offset Joint

14

When faced with an increase in rates, what criteria did City Council give Staff about rates when developing various options?

- Include component of rate that funds water and sewer infrastructure
- Acknowledge the City's goal to conserve water
- Establish tiered structure that increases unit price of water for increasing use
- Allow user to control their rate increase by conserving water
- Delay meeting infrastructure and reserve goals until last year of multi-year rate adjustments

Given our needs for infrastructure, how much revenue is needed by each utility?

- Water Revenue Requirements
  - System reinvestment
  - MWD water purchase (85% of City supply)

Manhattan Beach Updated Rate Scenarios - September 1, 2009
Water Revenue Plan: January 1, 2010 Implementation
Scenario #4 ($5m slow)

Summary of Water Revenue Requirements	FY 2009 2010	FY 2010 2011	FY 2011 2012	FY 2012 2013	FY 2013 2014
Assumptions:					
Rate Stabilization Reserve - (% of rate revenues)	**10%**	**10%**	**10%**	**15%**	**20%**
Rate Stabilization Reserve - Balance	$ 870,000	$ 1,116,765	$ 1,388,673	$ 2,533,381	$ 3,836,209
System Reinvestment - % of Target	***20%***	***40%***	***60%***	***80%***	***100%***
System Reinvestment - R&R Capital Funding	$ 1,000,000	$ 2,000,000	$ 3,000,000	$ 4,000,000	$ 5,000,000
Operating Reserve - Beginning Balance	$ 4,750,327	$ 2,592,259	$ 1,448,273	$ 1,183,420	$ 1,527,576
Operating Reserve - Ending Balance	$ 2,592,259	$ 1,448,273	$ 1,183,420	$ 1,527,576	$ 2,000,377
Operating Reserve - # of days of Operating Expenses	**111**	**65**	**48**	**55**	**63**
Revenues					
Water Rate Revenue (Current Rates)	$ 7,470,000	$ 7,470,000	$ 7,470,000	$ 7,470,000	$ 7,470,000
Other Operating Revenue	$ 147,800	$ 147,800	$ 147,800	$ 147,800	$ 147,800
Non-Operating Revenue	$ 61,988	$ 61,988	$ 61,988	$ 61,988	$ 61,988
Interest Earnings Operating Reserve	$ 56,788	$ 51,845	$ 28,965	$ 23,668	$ 30,552
Total	$ 7,736,576	$ 7,731,633	$ 7,708,753	$ 7,703,456	$ 7,710,340
Revenues From Rate Increases	$ 1,120,500	$ 3,697,650	$ 7,047,945	$ 9,967,314	$11,685,403
Total Projected Revenues w/ Rate Increase:	$ 8,857,076	$11,429,283	$14,756,698	$17,670,771	$19,395,742
Expenses					
Operating Expenses	$ 4,077,122	$ 4,305,832	$ 4,566,697	$ 4,796,318	$ 5,038,701
MWD Water Purchases	$ 4,854,708	$ 5,825,650	$ 6,990,780	$ 7,200,503	$ 7,416,518
Debt Service	$ 213,314	$ 212,422	$ 214,502	$ 212,859	$ 215,563
Rate-Funded System Reinvestment	$ 1,000,000	$ 2,000,000	$ 3,000,000	$ 4,000,000	$ 5,000,000
Subtotal:	$10,145,144	$12,343,904	$14,771,979	$16,209,680	$17,670,782
Additions(Subtractions) to(from) Operating Reserve	$ (2,158,068)	$ (1,143,986)	$ (264,853)	$ 344,156	$ 472,800
Additions to Rate Stabilization Reserve	$ 870,000	$ 229,365	$ 249,573	$ 1,116,935	$ -
Total:	$ 8,857,076	$11,429,283	$14,756,698	$17,670,771	$18,143,582
Test Driving Rate Increase	***Cash***	***Cash***	***Cash***	***Cash***	***Cash***
Fiscal Year Revenue Increase (w/ Scheduled Rate Increases Every January 1)	**15.0%**	**30.0%**	**30.0%**	**20.1%**	**9.9%**
Caldendar Year Rate Increase (January 1)	**30.0%**	**30.0%**	**30.0%**	**12.5%**	**7.5%**

Given our needs for infrastructure, how much revenue is needed by each utility?

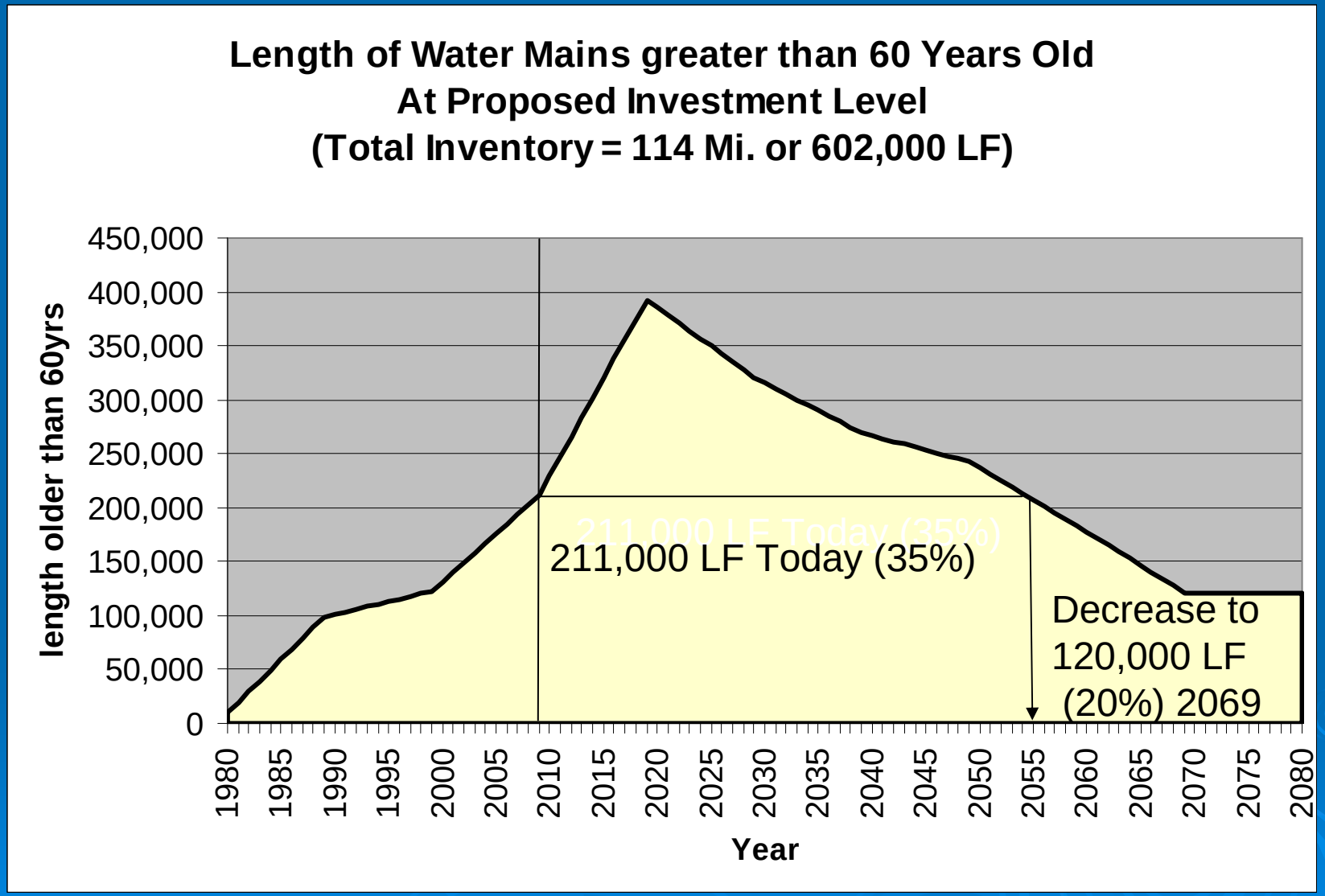
- Sewer Revenue Requirements
  - System reinvestment (none in first year)
  - Existing deficit

Manhattan Beach Updated Rate Scenarios - September 1, 2009
COUNCIL MEETING Sewer Revenue Plan: January 1, 2010 Implementation

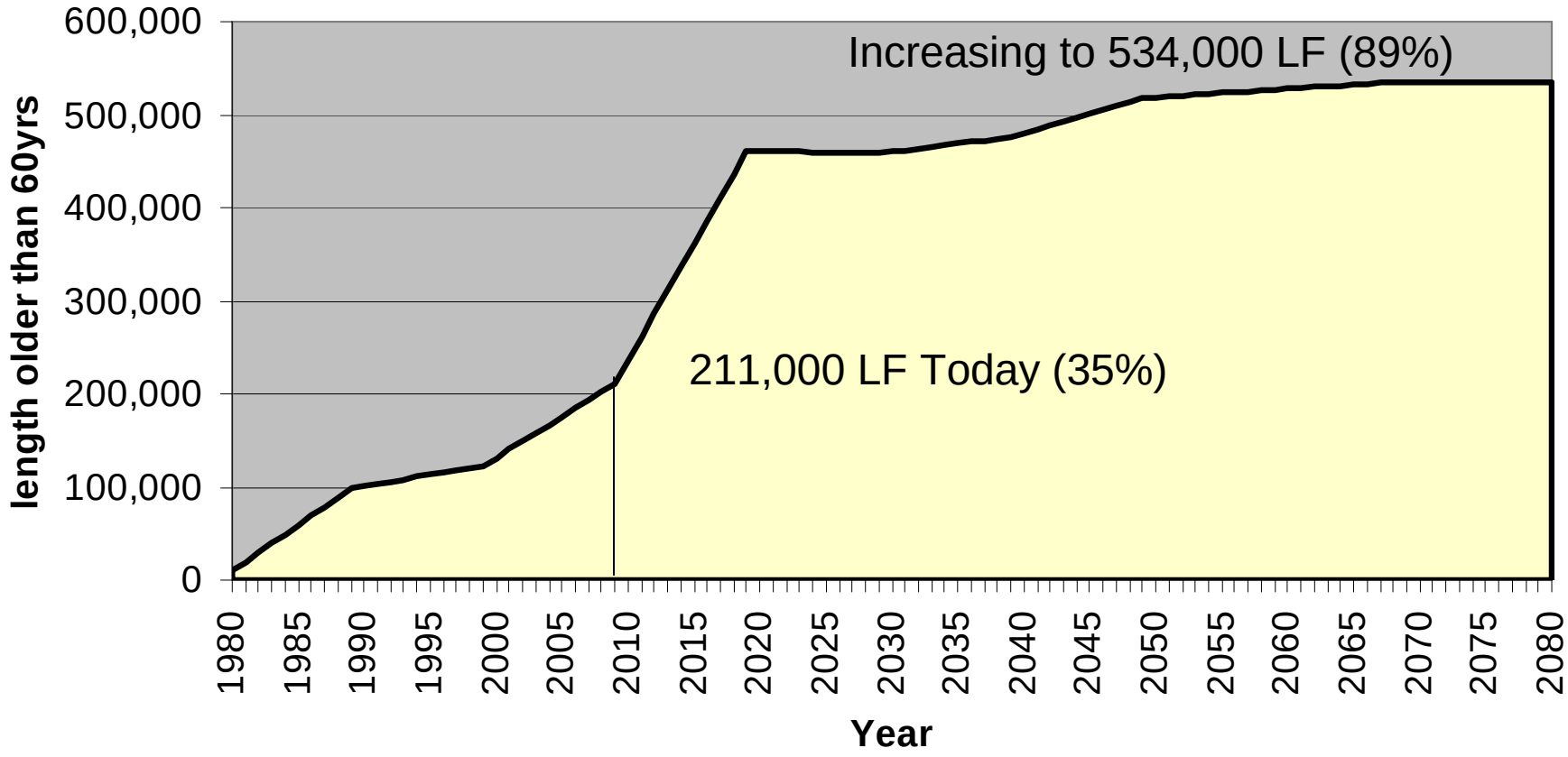
Summary of Sewer Revenue Requirements	FY 2009 2010	FY 2010 2011	FY 2011 2012	FY 2012 2013	FY 2013 2014
Assumptions:					
Rate Stabilization Reserve - (% of rate revenues)	**10%**	**15%**	**15%**	**20%**	**20%**
Rate Stabilization Reserve - Balance	$ 188,769	$ 428,625	$ 500,063	$ 733,425	$ 787,559
System Reinvestment - % of Target	**0%**	**50%**	**75%**	**75%**	**100%**
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)	$ 177,927	$ 223,175	$ 242,242	$ 382,828
Operating Reserve - Ending Balance	$ 177,927	$ 223,175	$ 242,242	$ 382,828	$ 190,426
Operating Reserve - # of days of Operating Expenses	**53**	**64**	**67**	**102**	**49**
Revenues					
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	$ 3,559	$ 4,464	$ 4,845	$ 7,657
Total	$1,309,500	$1,311,559	$ 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	$2,899,059	$ 3,376,214	$ 3,709,970	$ 3,983,450
Expenses					
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
New Debt Service	$ -	$ -	$ -	$ -	$ -
Direct Capital Project Funding From User Fees	$ -	$ -	$ -	$ -	$ -
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	$ 433,407	$ 45,248	$ 19,066	$ 140,586	$ (192,402)
Additions to Rate Stabilization Reserve	$ 188,769	$ 236,081	$ 62,865	$ 223,361	$ 39,465
Additions to Capital Reserve	$ -	$ -	$ -	$ -	$ 109,782
Total:	$1,944,500	$2,899,059	$ 3,376,214	$ 3,709,970	$ 3,983,450
Test Driving Increase	*Cash*	*Cash*	*Cash*	*Cash*	*Cash*
Fiscal Year Revenue Increase (w/ Scheduled Rate Increases Every January 1)	**50.0%**	**50.0%**	**16.7%**	**10.0%**	**7.4%**
Calendar Year Rate Increase (January 1)	**100.0%**	**25.0%**	**10.0%**	**10.0%**	**5.0%**

With this information in hand, why did the City Council choose the rate structure now proposed?

- Committed to begin rebuilding infrastructure by $7,500,000/year by end of five year rate adjustments
- Committed to conserving water
- Deliberated annual goal for infrastructure reinvestment funding and phasing options to meet that goal
- Level of expenditure will keep the system in approximately same condition by the year 2055


Length of Water Mains greater than 60 Years Old
At Proposed Investment Level
(Total Inventory = 114 Mi. or 602,000 LF)
length older than 60yrs
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
211,000 LF Today (35%)
Decrease to
120,000 LF
(20%) 2069
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
Year

Length of Water Mains greater than 60 Years Old
At Currrent Investment Level
(Total Inventory = 114 Mi. or 602,000 LF)



What are the impacts to my rates?

- Depends on your water consumption
- Median vs. Average
- Water meter size

Manhattan Beach Updated Rate Scenarios
September 1, 2009
Water Bill Impacts – Scenario 4 ($5m slow)

	Water Bill Impacts - Scenario 4 ($5m 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
5/8"							
25%	4	$ 18.05	$ 19.29	$ 1.24	6.9%	2945	22.4%
	7	$ 23.54	$ 25.30	$ 1.76	7.5%		
Median	8	$ 25.37	$ 28.07	$ 2.70	10.6%		
Average	11	$ 30.86	$ 36.37	$ 5.51	17.8%		
	31	$ 67.46	$ 93.41	$ 25.95	38.5%		
	40	$ 83.93	$ 133.73	$ 49.80	59.3%		
3/4"							
	4	$ 18.05	$ 19.29	$ 1.24	6.9%		
25%	7	$ 23.54	$ 25.30	$ 1.76	7.5%	6091	46.3%
	8	$ 25.37	$ 28.07	$ 2.70	10.6%		
Median	12	$ 32.69	$ 39.13	$ 6.44	19.7%		
	31	$ 67.46	$ 93.41	$ 25.95	38.5%		
	40	$ 83.93	$ 133.73	$ 49.80	59.3%		
1"							
	4	$ 28.78	$ 29.47	$ 0.69	2.4%		
25%	7	$ 34.27	$ 35.47	$ 1.20	3.5%	3502	26.6%
	8	$ 36.10	$ 38.24	$ 2.14	5.9%		
Median	13	$ 45.25	$ 52.07	$ 6.82	15.1%		
90%	31	$ 78.19	$ 103.58	$ 25.39	32.5%		
	40	$ 94.66	$ 143.90	$ 49.24	52.0%		

Manhattan Beach Updated Rate Scenarios
September 1, 2009

	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
5/8"							
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%		
3/4"							
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%		
1"							
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%		

Combined Water & Sewer Bill Impact 30% Increase

Scenario 1 (Original) Utility Bill Impacts*	2009	2010	2011	2012	2013	2014
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**
Total Monthly Utility Bill:	**$39.15**	**$52.22**	**$67.86**	**$79.33**	**$89.88**	**$94.11**
Annual Increase (%)		**33.4%**	**29.9%**	**16.9%**	**13.3%**	**4.7%**

Monthly Utility Bill with 10% Reduction	**$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**

Why not bonding for infrastructure? What are the pros/cons?

- **Bond by revenue bond…debt payment is paid by rates**
- **Assumes expenditure of $7,500,000/year for water/sewer infrastructure**
- **Pros**
  - Immediate source of funds for infrastructure
  - Use for large, immediate infrastructure needs
  - Spreads cost forward to users (20, 30 years)
- **Cons**
  - Over length of bond, available dollars for infrastructure is less
  - Uses up “emergency” capital needs debt
  - Large impact of construction throughout City

Size of Loan	Interest Rate	Term	Annual Debt Service	Annual Cash Funding	Annual Capital Expense	Total Capital Investment
$100,000,000	6.00%	30	$ 7,264,891	$ 235,109	$ 7,500,000	$107,053,266
$ 50,000,000	6.00%	30	$ 3,632,446	$ 3,867,554	$ 7,500,000	$166,026,633
$ 20,000,000	6.00%	30	$ 1,452,978	$ 6,047,022	$ 7,500,000	$201,410,653
$ ---	6.00%	30	$ ---	$ 7,500,000	$ 7,500,000	$225,000,000

Size of Loan	Interest Rate	Term	Annual Debt Service	Annual Cash Funding	Annual Capital Expense	Total Capital Investment
$100,000,000	6.00%	20	$ 8,718,456	$ (1,218,456)	$ 7,500,000	$ 75,630,886
$ 50,000,000	6.00%	20	$ 4,359,228	$ 3,140,772	$ 7,500,000	$112,815,443
$ 20,000,000	6.00%	20	$ 1,743,691	$ 5,756,309	$ 7,500,000	$135,126,177
$ ---	6.00%	20	$ ---	$ 7,500,000	$ 7,500,000	$150,000,000

Size of Loan	Interest Rate	Term	Annual Debt Service	Annual Cash Funding	Annual Capital Expense	Total Capital Investment
$100,000,000	4.00%	30	$ 5,783,010	$ 1,716,990	$ 7,500,000	$151,509,703
$ 50,000,000	4.00%	30	$ 2,891,505	$ 4,608,495	$ 7,500,000	$188,254,851
$ 20,000,000	4.00%	30	$ 1,156,602	$ 6,343,398	$ 7,500,000	$210,301,941
$ ---	4.00%	30	$ ---	$ 7,500,000	$ 7,500,000	$225,000,000

Size of Loan	Interest Rate	Term	Annual Debt Service	Annual Cash Funding	Annual Capital Expense	Total Capital Investment
$100,000,000	4.00%	20	$ 7,358,175	$ 141,825	$ 7,500,000	$102,836,499
$ 50,000,000	4.00%	20	$ 3,679,088	$ 3,820,912	$ 7,500,000	$126,418,250
$ 20,000,000	4.00%	20	$ 1,471,635	$ 6,028,365	$ 7,500,000	$140,567,300
$ ---	4.00%	20	$ ---	$ 7,500,000	$ 7,500,000	$150,000,000

What are the impacts on revenues/rates if we conserve water?

- City goal is to conserve water
  - Environmental Task Force
  - Conservation Ordinance
- Our conservation efforts to date
- What our rates included assuming conservation
- Large conservation revenue loss will be buffered by utility reserves

Conservation Impacts on Revenue

Water

Conservation Level	Projected Water Revenue Loss	Projected Water Purchase Savings	Projected Revenue Gain (Loss) Due to Conservation
0%	$ ---	$ ---	
10%	$ 894,271	$ 843,662	($50,609)
15%	$1,290,307	$1,119,639	($170,668)
20%	$1,686,343	$1,395,616	($290,727)
25%	$2,082,379	$1,671,593	($410,786)
30%	$2,478,415	$1,947,570	($530,845)

Sewer

Conservation Level	Projected Sewer-Eligible Usage	Projected Sewer Revenue Loss
0%	2,680,687 ccf	$235,704
10%	2,385,718 ccf	$0
15%	2,270,979 ccf	($91,685)
20%	2,156,240 ccf	($183,370)
25%	2,041,502 ccf	($275,056)
30%	1,926,763 ccf	($366,741)

What are the next steps in the process?

- Information Meeting ..... October 7 & 13
- Public Hearing ..... October 20
- Scheduled Council Action ..... October 20
- Rates effective with bills sent out after .. January 1, 2010

What questions/issues has the City received from residents?

- Billing format lacks information
- Rates increase too rapidly
- Not enough information about rate justification has been available
- Entire process has not allowed enough time to inform public
- Conservation will prevent adequate revenues from being raised, necessitating more rate increases
- Public notice was poor
- Prop 218: Process was not followed
- Purchase water from other sources
- Should use bonds to fund infrastructure

Questions?