Water and Wastewater Rate Study

City Council Work Session

May 14, 2009

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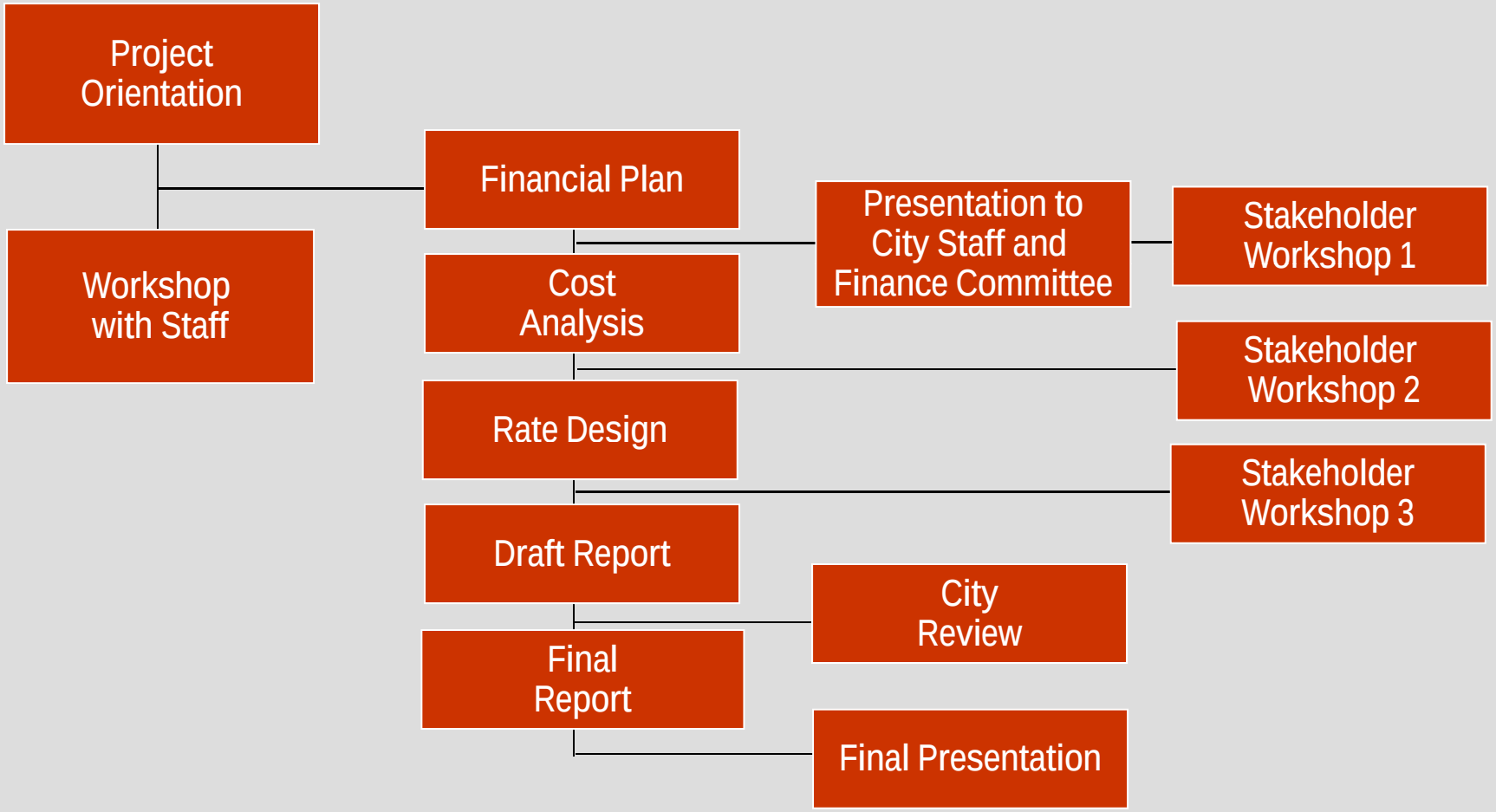
Agenda

1. Background / Objectives
2. Financial Plan
   - Key Issues Facing the Utilities
   - Stakeholder Involvement
3. Cost of Service Analysis
4. Rate Design / Proposed Rates
5. Impact on Customers
6. Closing Discussion

Background:
Rate Study Uses A Sequential Approach



Background

- Water & Sewer Enterprise Funds are self-sufficient
- Examine the utilities as separate enterprise operations, and establish the future revenue requirements for each utility.
- Develop a projection of cash flow and debt service coverage for the combined utilities over a ten-year study period.
- Study included three phases
  - Phase I - Prepare Financial Plan
  - Phase II - Cost of Service Analysis
  - Phase III - Design Rates

Today's Objectives – Guidance from Council

- Review the rate study fundamentals
- Policy direction on the timing and magnitude of revenue increases
  - Operation & Maintenance Expenses
  - Capital and Financing Plan
- Policy direction on cost of service rates
- Policy direction on rate design
  - Two or Four Block rates

10-YEAR FINANCIAL PLAN

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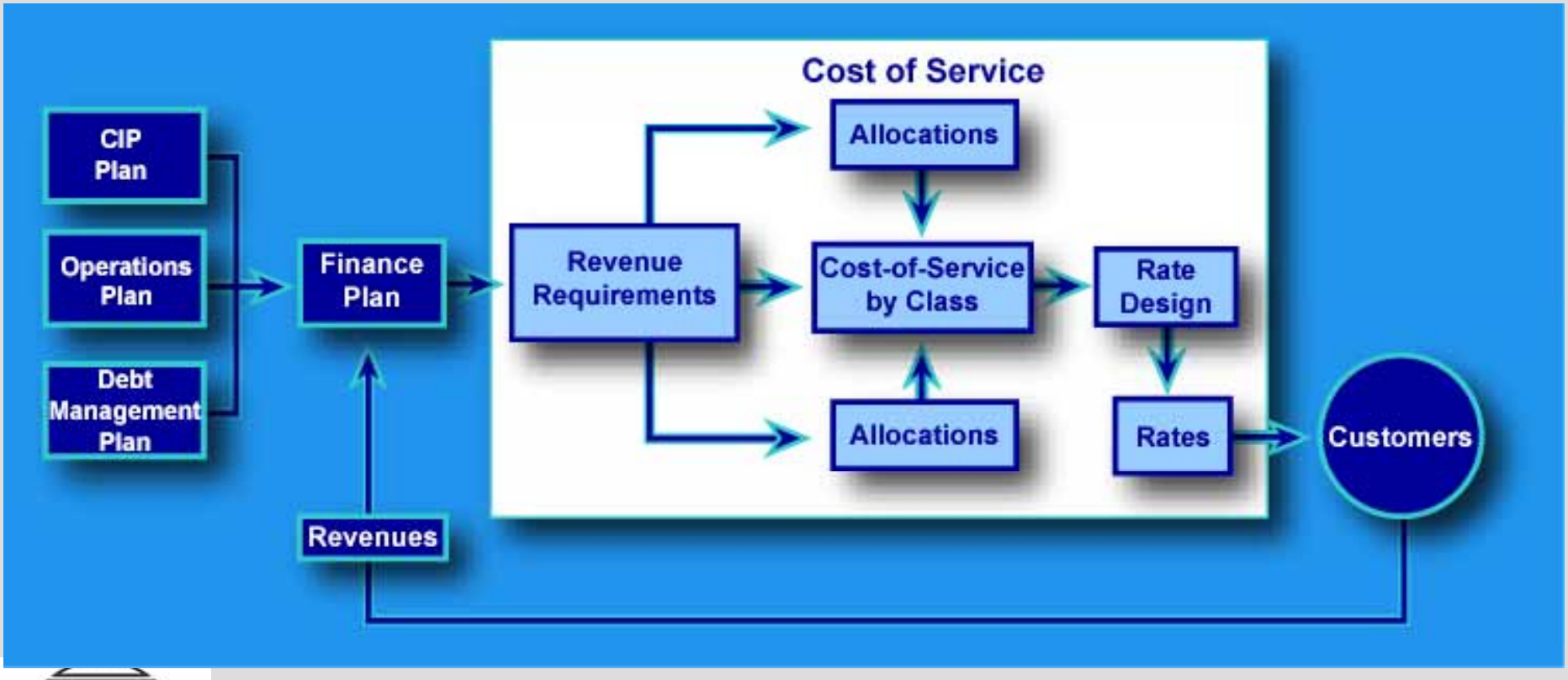
Overview of Cost-of-Service Rate Design Process



Financial Plan Summary

- Findings summarized in May 5, 2009 Memorandum.
- 10-year study period
- Cash flow of revenue and revenue requirements
- Reserves
  - Operating Fund
  - Capital Fund
- Annual revenue adjustments
- Debt service coverage

Revenue Requirements for Each Utility

- Develop revenue requirements for a 10-year study period for water and wastewater operations
- Identify the level and timing of replacement funding options
- Recognize saving for aging infrastructure needs
- Identify loans required - update the cash flow analysis

Assumptions: Beginning Balances

Description	Water	Wastewater
Unrestricted Cash	$6,369,268	$3,719,839
Accrued Vacation Pay	(99,572)	(34,810)
One Year Annual Debt Service Payments	(1,384,000)	(931,000)
90 Days of O&M Expenses	(868,000)	(470,000)
Investments (restricted)	(393,800)	(1,000,000)
One Percent of Fixed Assets	(720,000)	(313,000)
Total Beginning Fund Balances	**$2,903,869**	**$971,029**

Assumptions (cont.)

- Growth rate: 0.5% per year
- Inflation
  - O&M expenses: 3.5%
  - Routine capital, including vehicles: 4.0%
  - CIP: 10%
- Proposed bonds: 20 year, 5.0%
- Proposed state loans: 20 year, 4.0%
- Investment income: 0.5%
- Targeted Reserves
  - Operating Fund: 90 days of O&M expenses
  - Capital Fund: 1% of fixed assets

Financial Planning – Revenue Sufficiency

Revenue must be sufficient:

- To meet O&M, debt service, and capital requirements
- To meet established cash reserve or fund balance targets
- To meet debt service coverage requirements

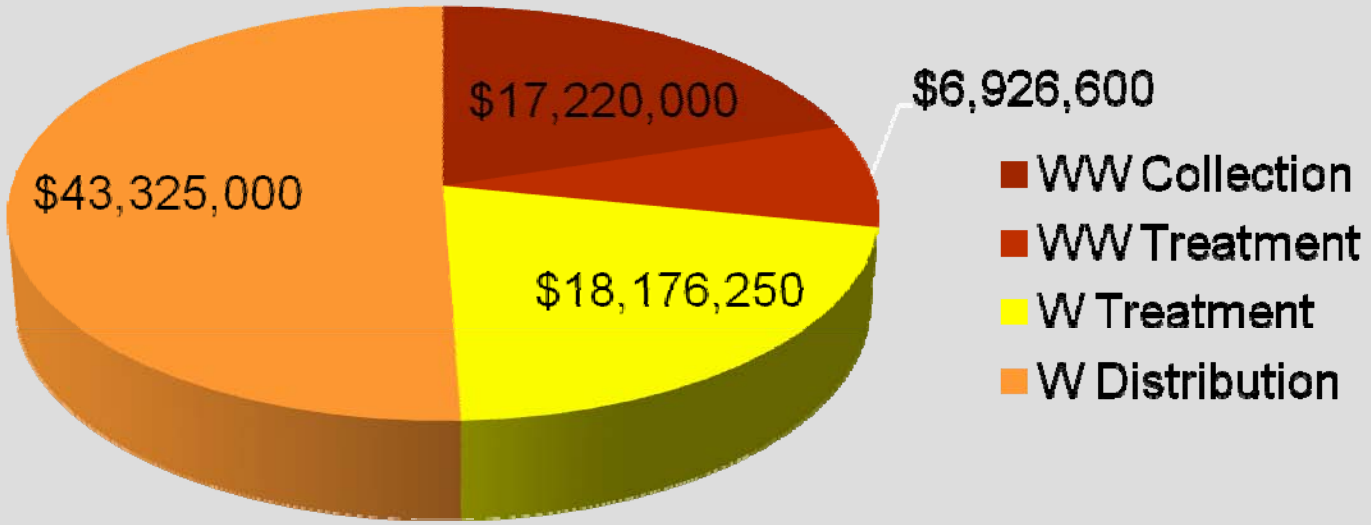
.....each year, over a 10-year period

Capital Funding

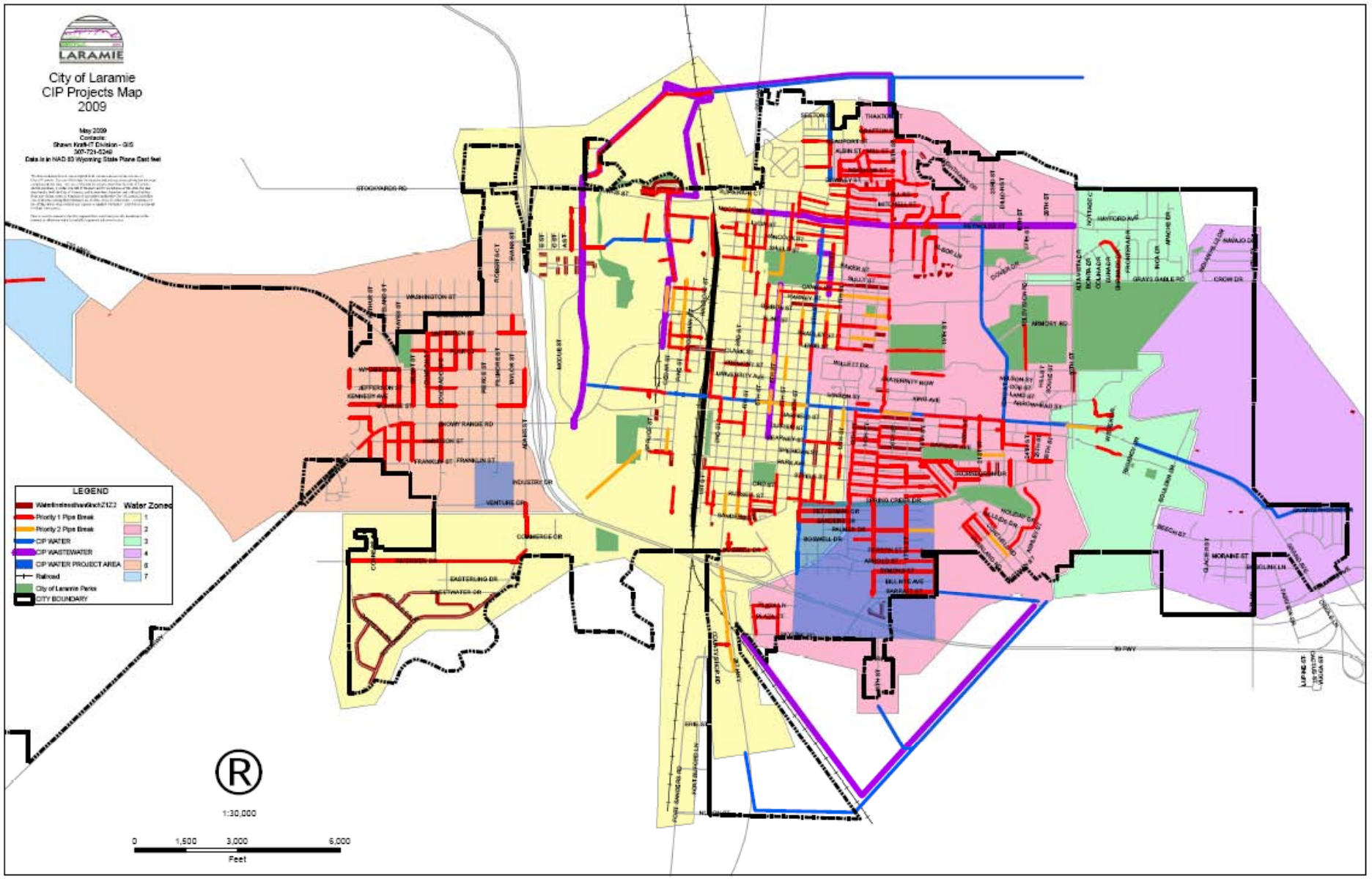
Types of capital needs:

- Growth Needs:
  - New demand
  - System expansion
- Renewal and Replacement Needs:
  - Provide for greater efficiency or system redundancy
  - Replace assets that become obsolete, wear out or otherwise exceed their useful life

Financial Plan Supports a Water and Wastewater CIP of $85,650,000 (2009 Dollars)



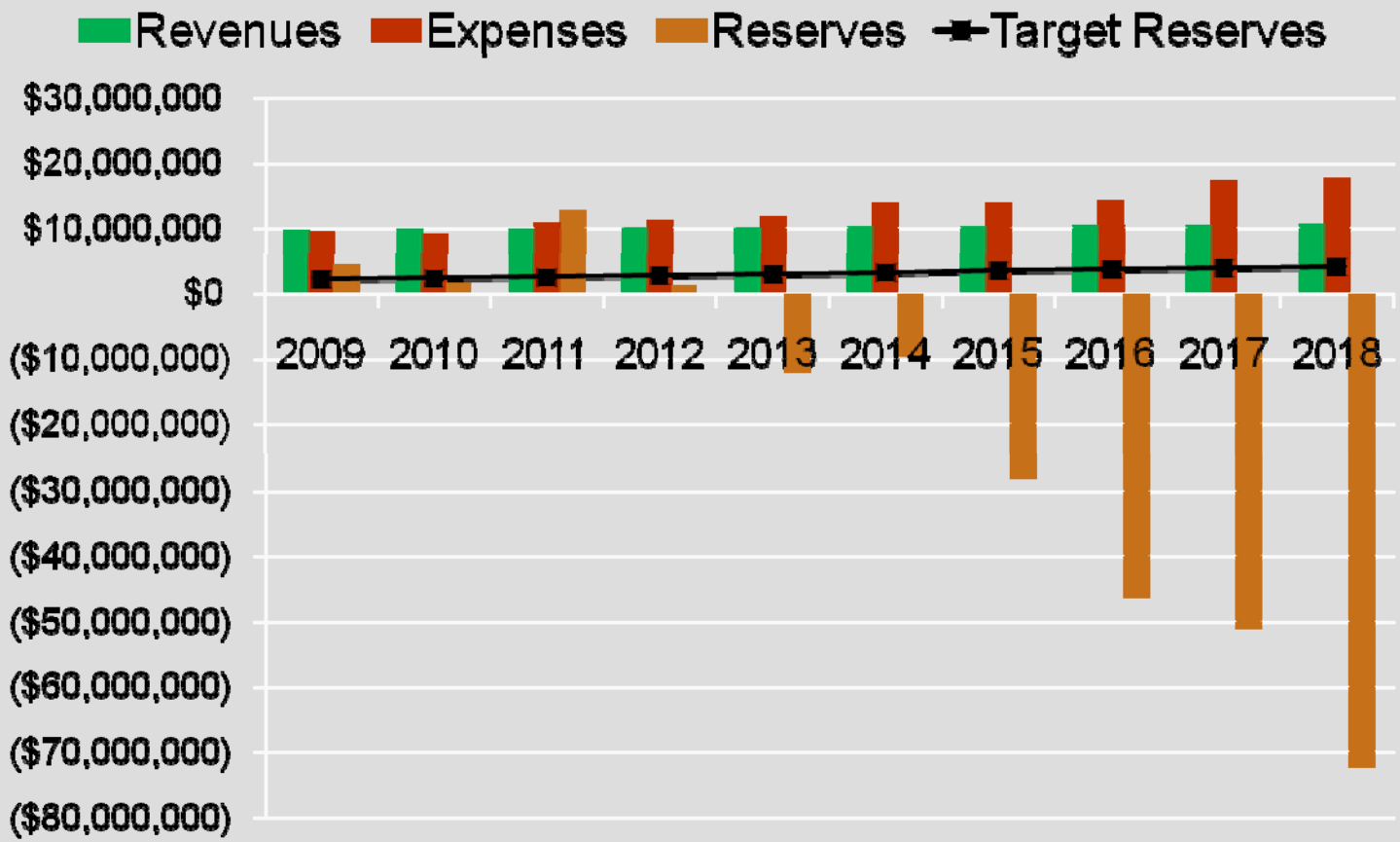
CIP Projects Map



Sources of Capital Financing

- User fees
- Federal, State grants and loans
- Specific Purpose Tax
- Bonding
- Plant investment fees
- Business Council, or other sources

Financial Forecast With Existing Revenues (Rates)

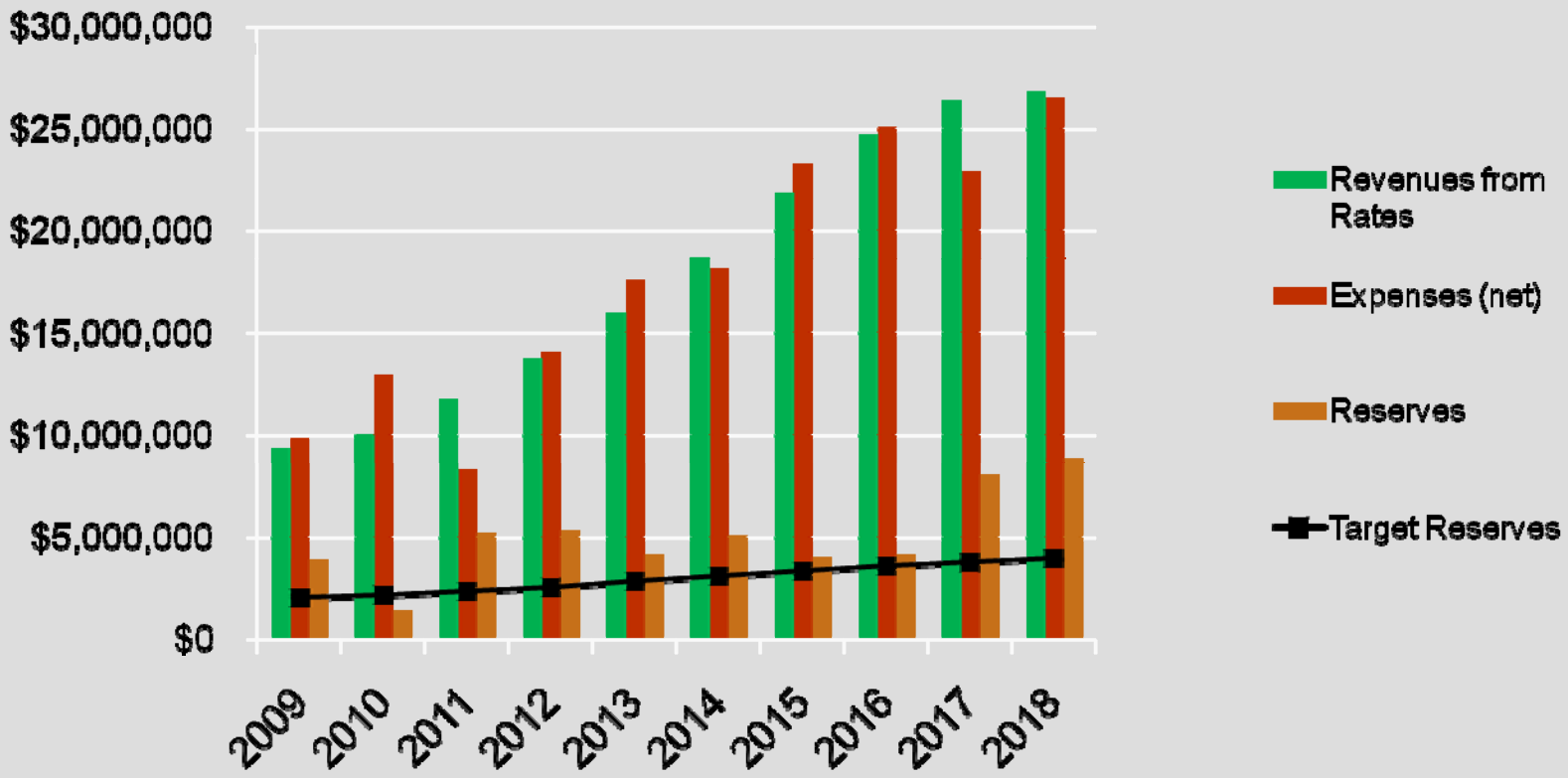


Annual *Revenue* Adjustments Needed to Sustain Financial Health

Year	Water	Wastewater
2009	0%	0%
2010	19%	19%
2011	17%	18%
2012	17%	17%
2013	17%	17%
Cumulative (5-year)	*91%*	*92%*
2014	17%	17%
2015	17%	17%
2016	8%	12%
2017	5%	0%
2018	0%	0%
Cumulative (10-year)	*196%*	*195%*

(Note: cumulative revenue increase – or rates as if applied across all classes)

Financial Forecast Under *Proposed* Revenues (Rates)



KEY ISSUES FACING THE UTILITIES AND INCLUDED IN THE FINANCIAL PLAN

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Key Issues

- Indirect Cost Reimbursement to the General Fund
- Monolith Ranch Expenses
- Communications
- Renewal and Replacement of Infrastructure
- Number of utility personnel (or “Employee Efficiency”)

Indirect Cost Reimbursement

Enterprise Fund	Indirect Expenses (City)	Indirect Expenses (Red Oak)
Water – Indirects		$450,347
Water – Usage	$187,100	(365,226)
Water - Net		$85,121
Wastewater	$102,700	$255,126
Total	**$289,800**	**$340,247**

- Similar utilities typically pay between 8 and 15 percent of the general fund internal services budget

Monolith Ranch

- The purpose of the ranch is to secure a long-term reliable water supply
- Available water from the ranch (various rights, approximate):
  - 30 cfs (21,700 AFA) agricultural
  - 15 cfs (10,800 AFA) municipal (50% conversion)
- Based on water rights valuations in comparable western states, water rights value between $10,000 and $40,000 per acre foot annually (AFA)
- Comparable value of $100,800,000 (at $10,000 per AFA)
- Red Oak included $275,000 in FY2009 and increasing to $546,000 over the study period to operate the ranch.
- “Insurance” or the cost of ownership - between 0.2% and 0.5% of the value.

Communication

- City is developing a communication strategy.
- City and Red Oak will prepare a City website to communicate findings.
- Other communication programs.

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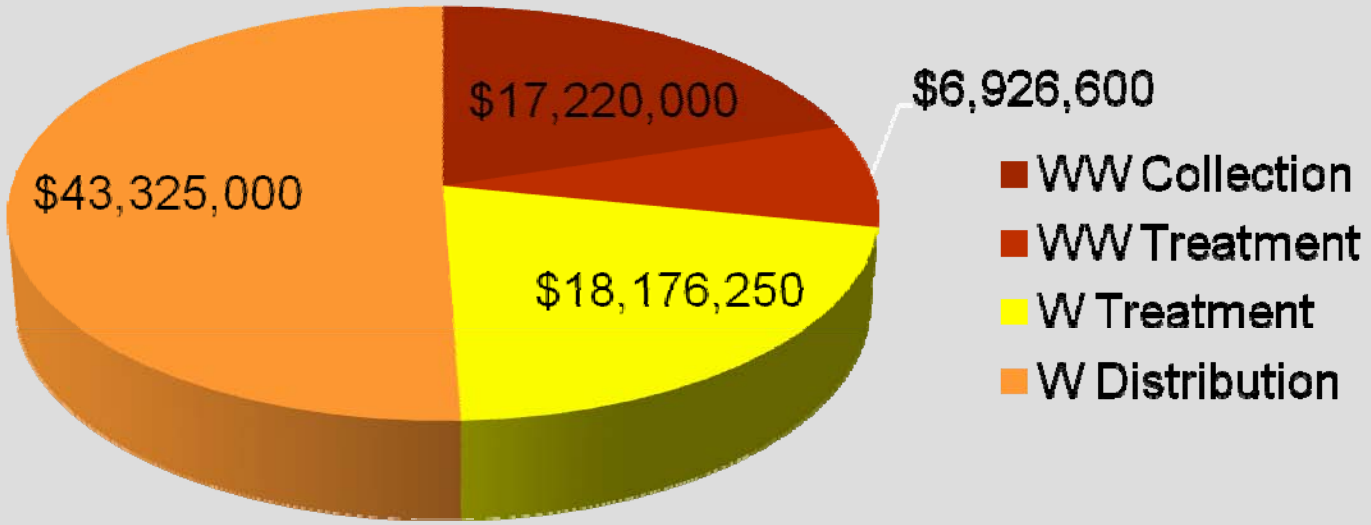
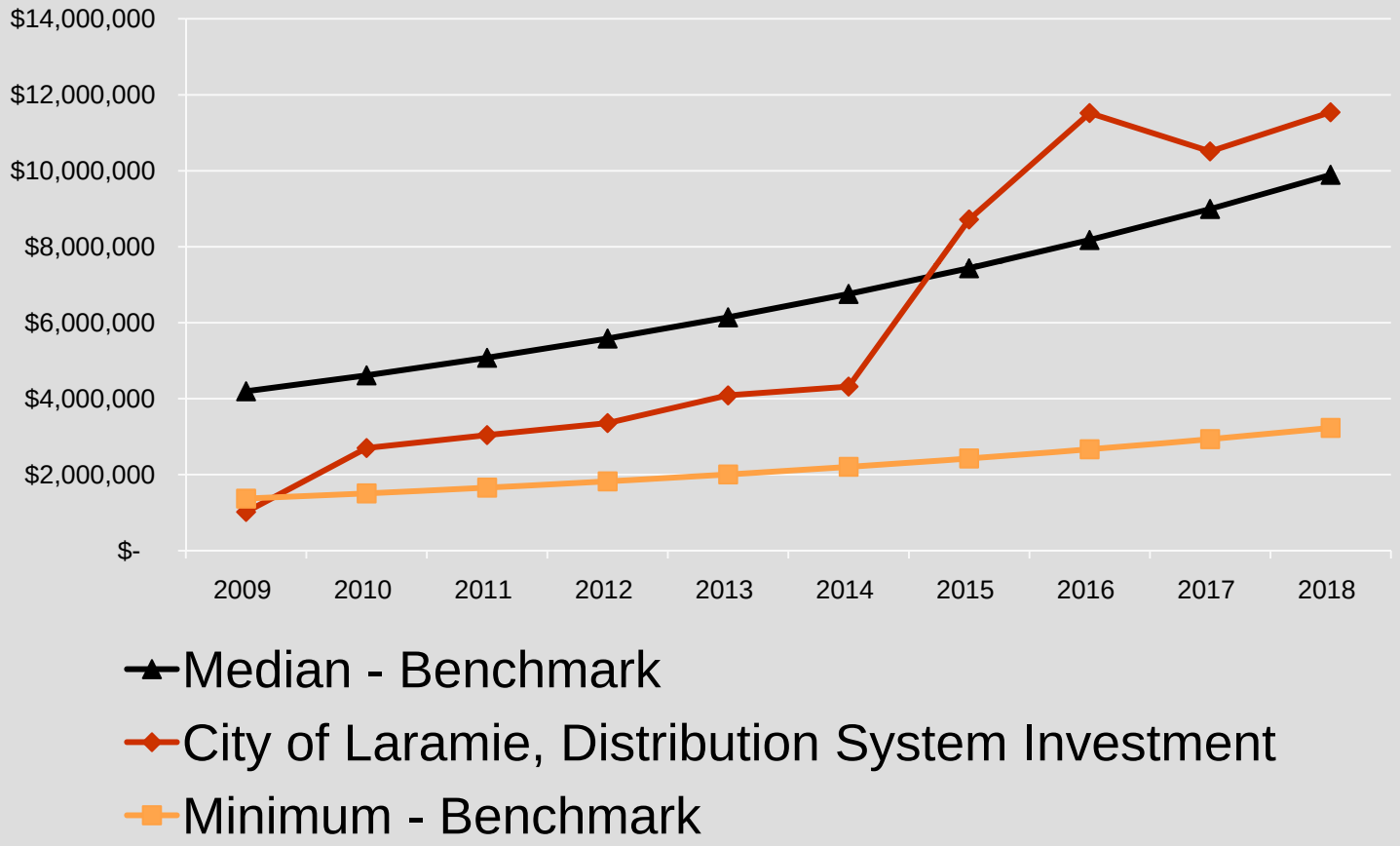
UTILITY PERFORMANCE – BENCHMARKS

Financial Plan Supports a Water and Wastewater CIP of $85,650,000 (2009 Dollars)



Renewal and Replacement - Water



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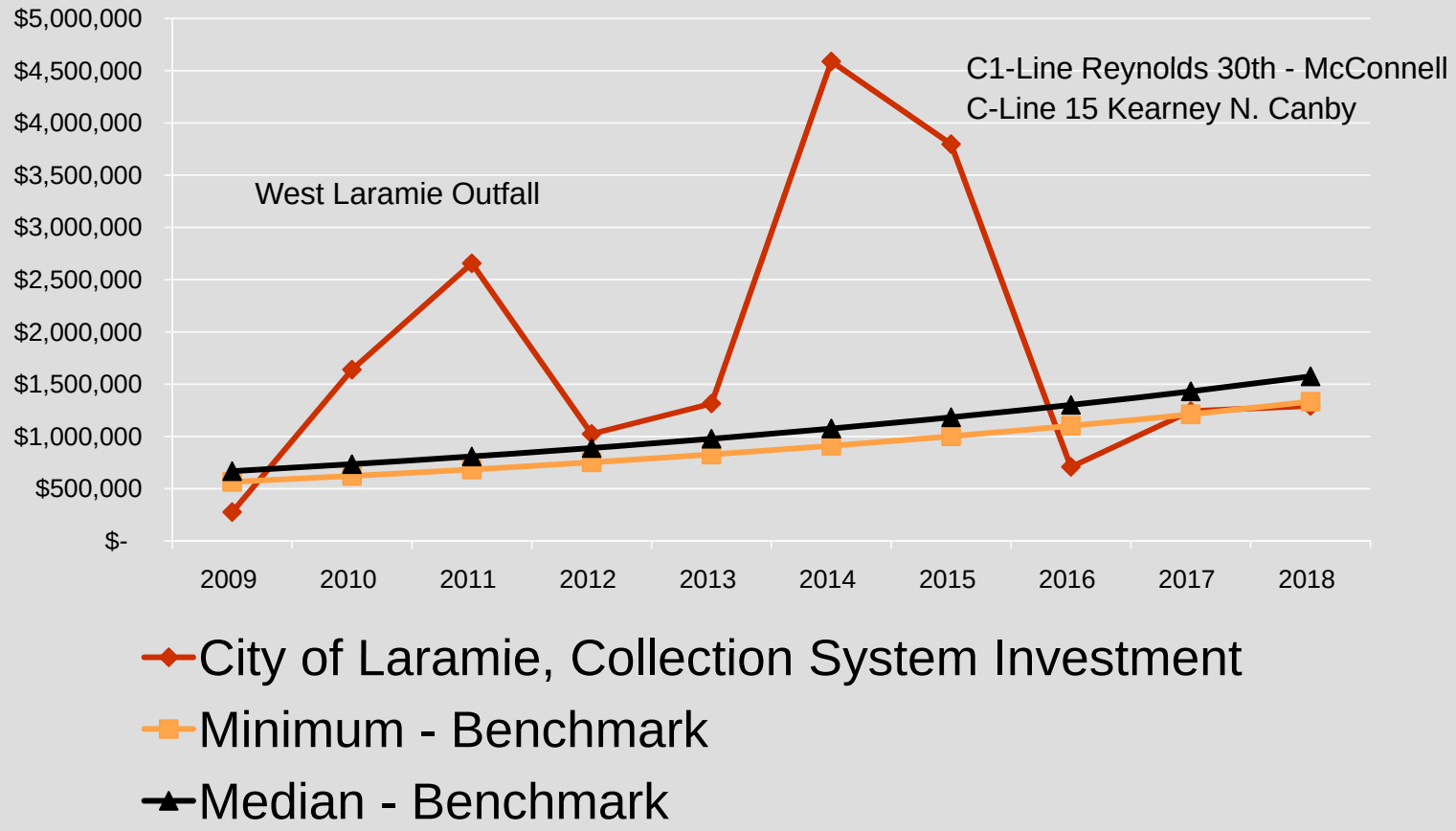
Renewal and Replacement - Wastewater



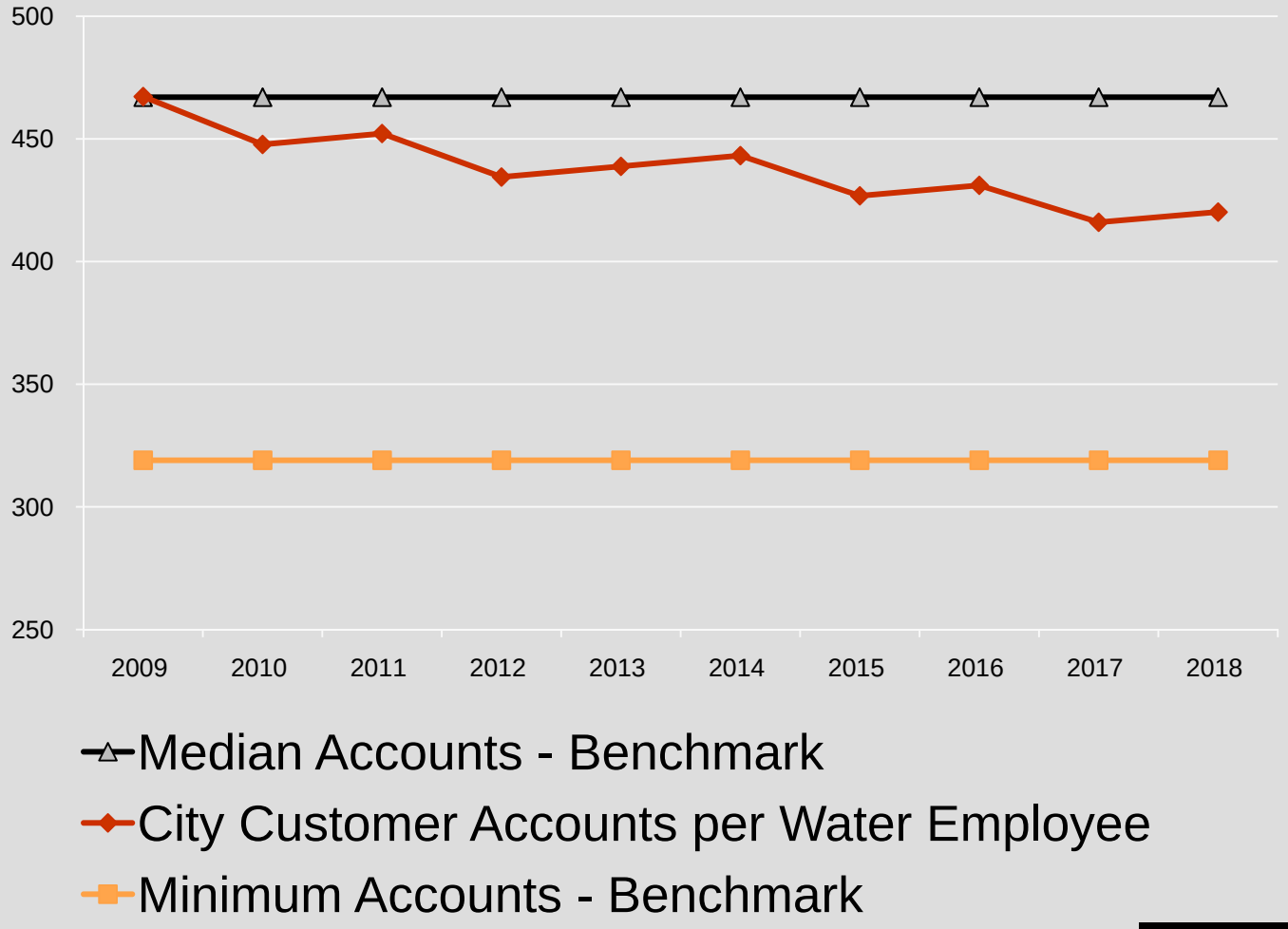
Renewal and Replacement - Overview

- Current Renewal and Replacement Charge:
  - $4.24 per account
- Generates approximately $400,000 annually
- Not based on cost of service
- Insufficient to fund renewal and replacement needs.
- Equivalent to fund approximately $5 million in new debt issuance.

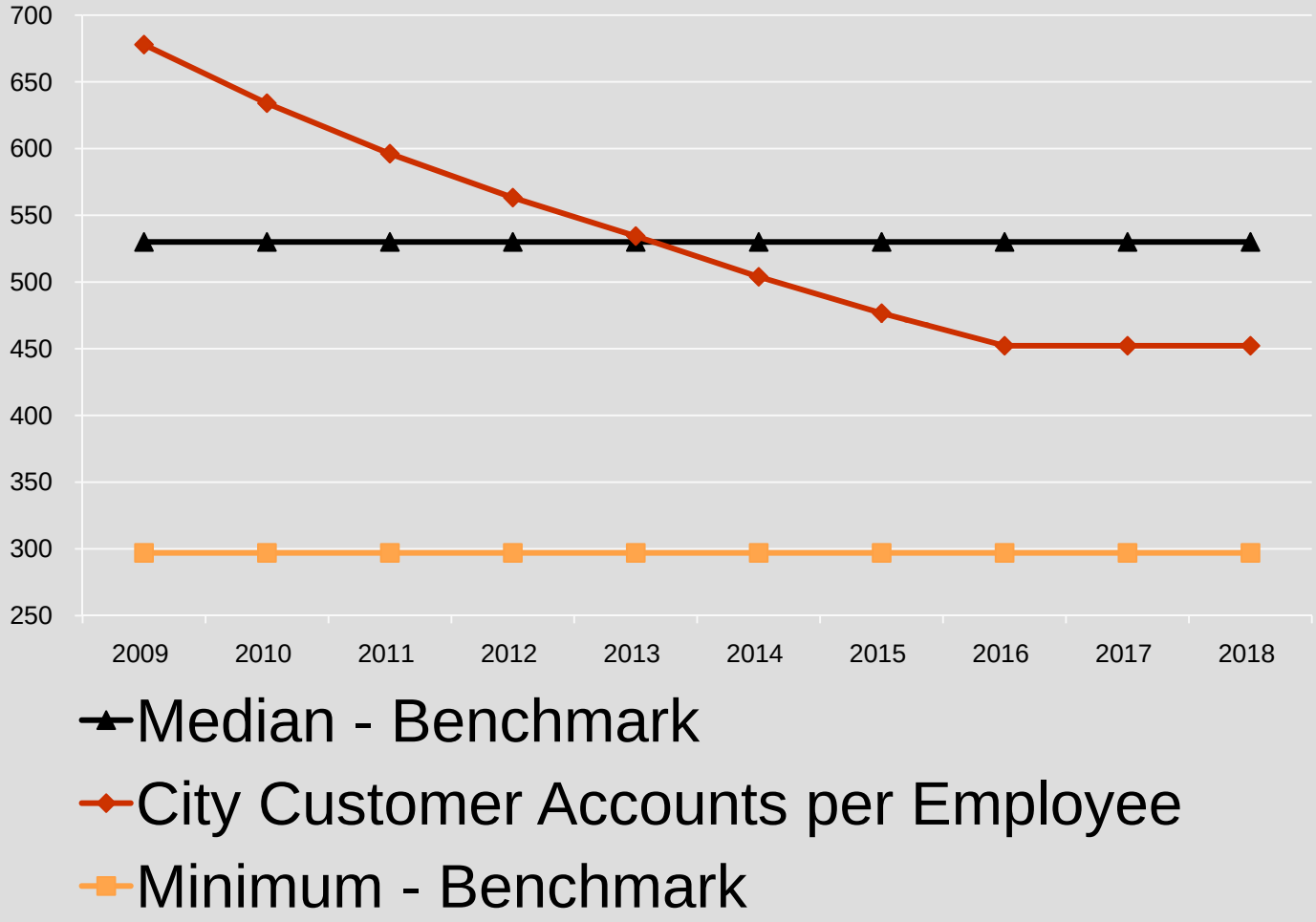
Financial Plan Supports 11 Additional Employees

Year	Water Utility Additional FTEs	Wastewater Utility Additional FTEs
2009-10	1.0	1.0
2010-11	0.0	1.0
2011-12	0.0	1.0
2012-13	1.0	1.0
2013-14	0.0	1.0
2014-15	0.0	1.0
2015-16	1.0	1.0
2016-17	0.0	0.0
2017-18	1.0	0.0
2018-19	0.0	0.0
Total	**4.0**	**7.0**

Employee Efficiency – Water
Customer Accounts per Employee

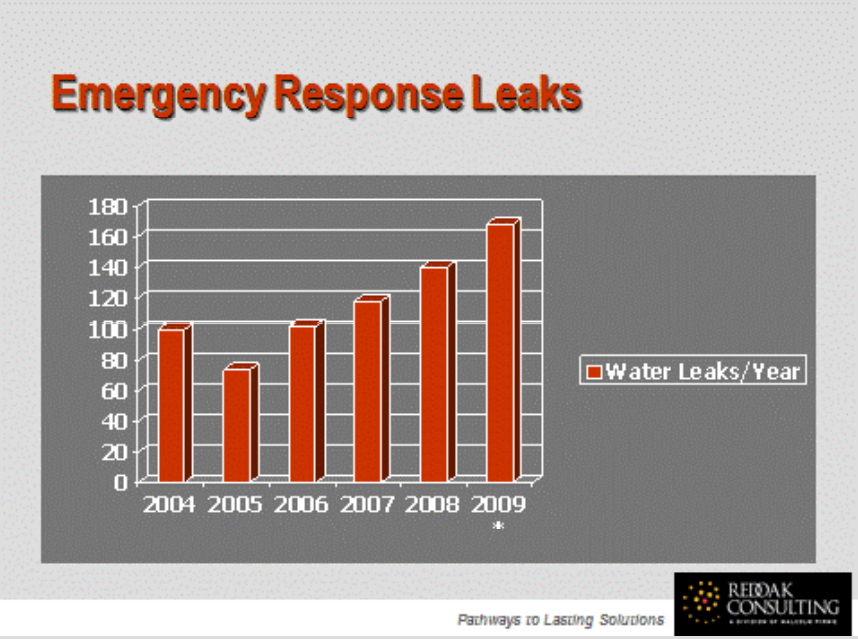


Employee Efficiency – Sewer Customer Accounts per Employee



Levels of Service

- No single right answer
- These are “level of service” questions
- What level of service is best for the City?
  - Pressure, Fire flow
  - Unplanned outages (reactive)
  - Line breaks
  - Regulatory compliance
- Does one benchmark (capital investment) allow for some offset of other benchmarks (employees)?



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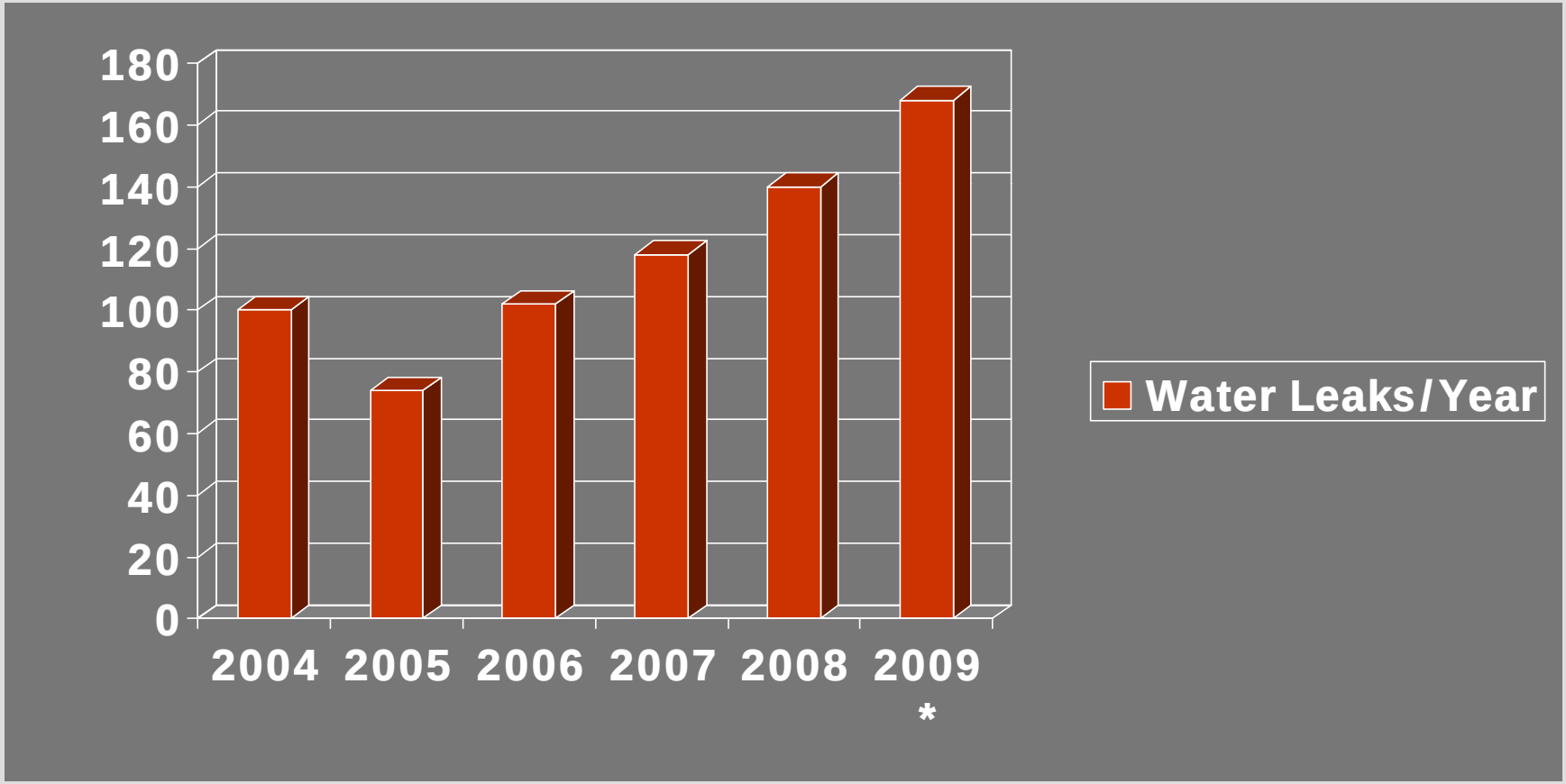
Emergency Response Leaks



STAKEHOLDER INVOLVEMENT

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Stakeholder Meeting Schedule

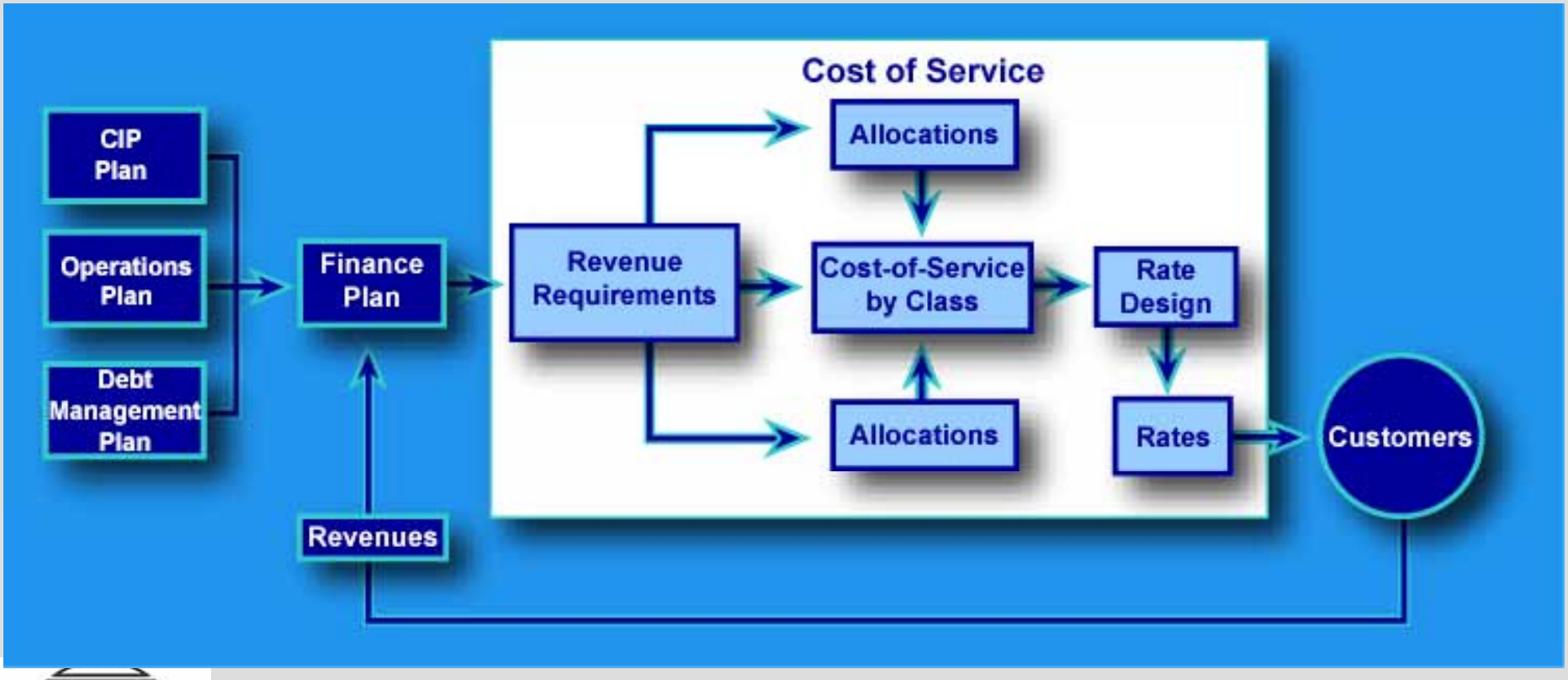
- Meeting #1: Financial Plan – April 9, 2009
- Meeting #2: Cost of Service – April 30, 2009
- Meeting #3: Rate Design – May 7, 2009

Stakeholder Discussions

- Monolith Ranch – cost of water “insurance”?
- Maintain the renewal and replacement charge?
- Are the level of service goals appropriate?
- How should service levels be communicated?
- “true cost of service” rates for each enterprise?
- Prepared to charge University accounts more?
- Should the City have an irrigation class?
- Maintain sewer rate classes?
- How do we handle multi-family accounts?

Cost of Service Analysis

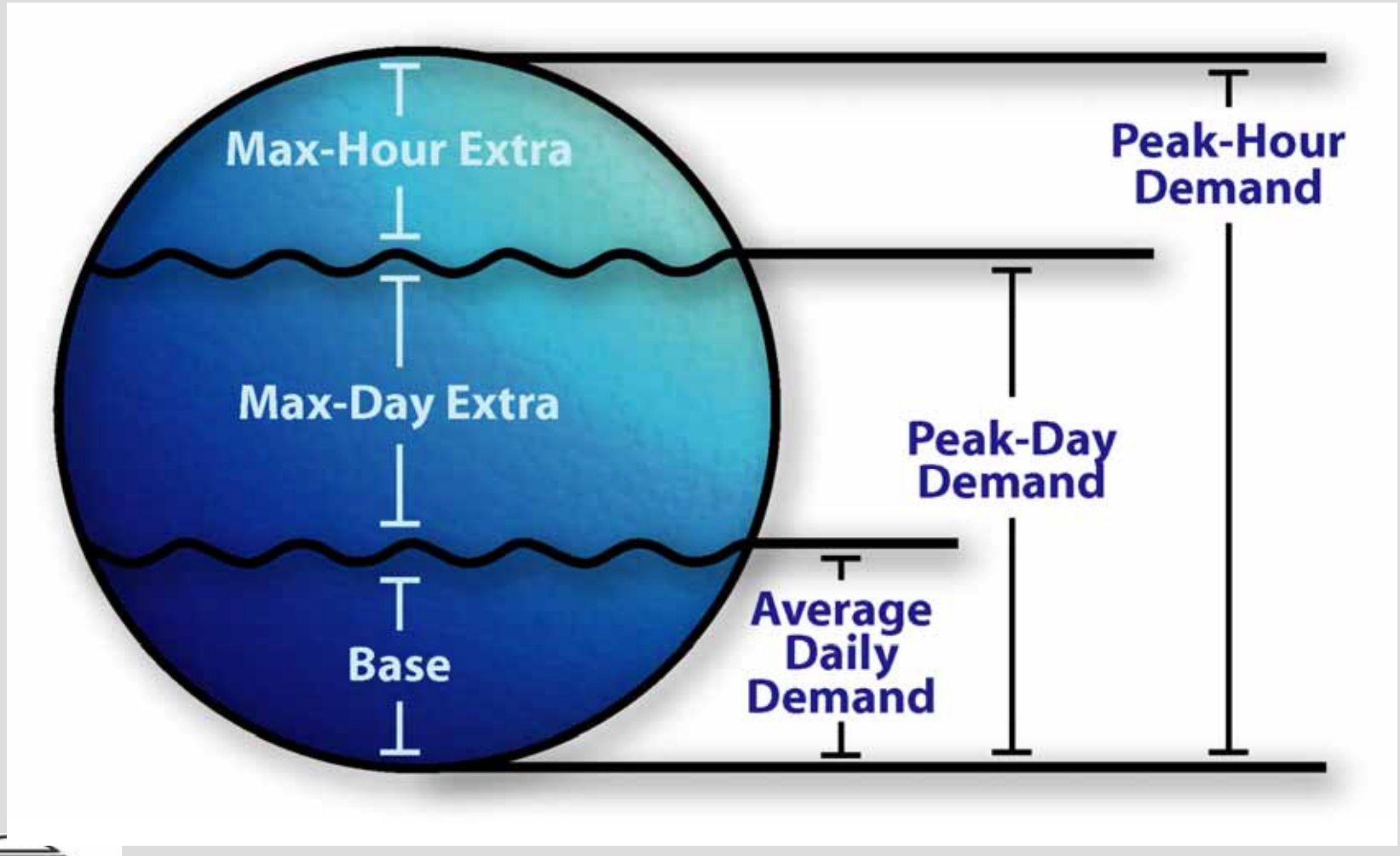
Overview of Cost-of-Service Rate Design Process



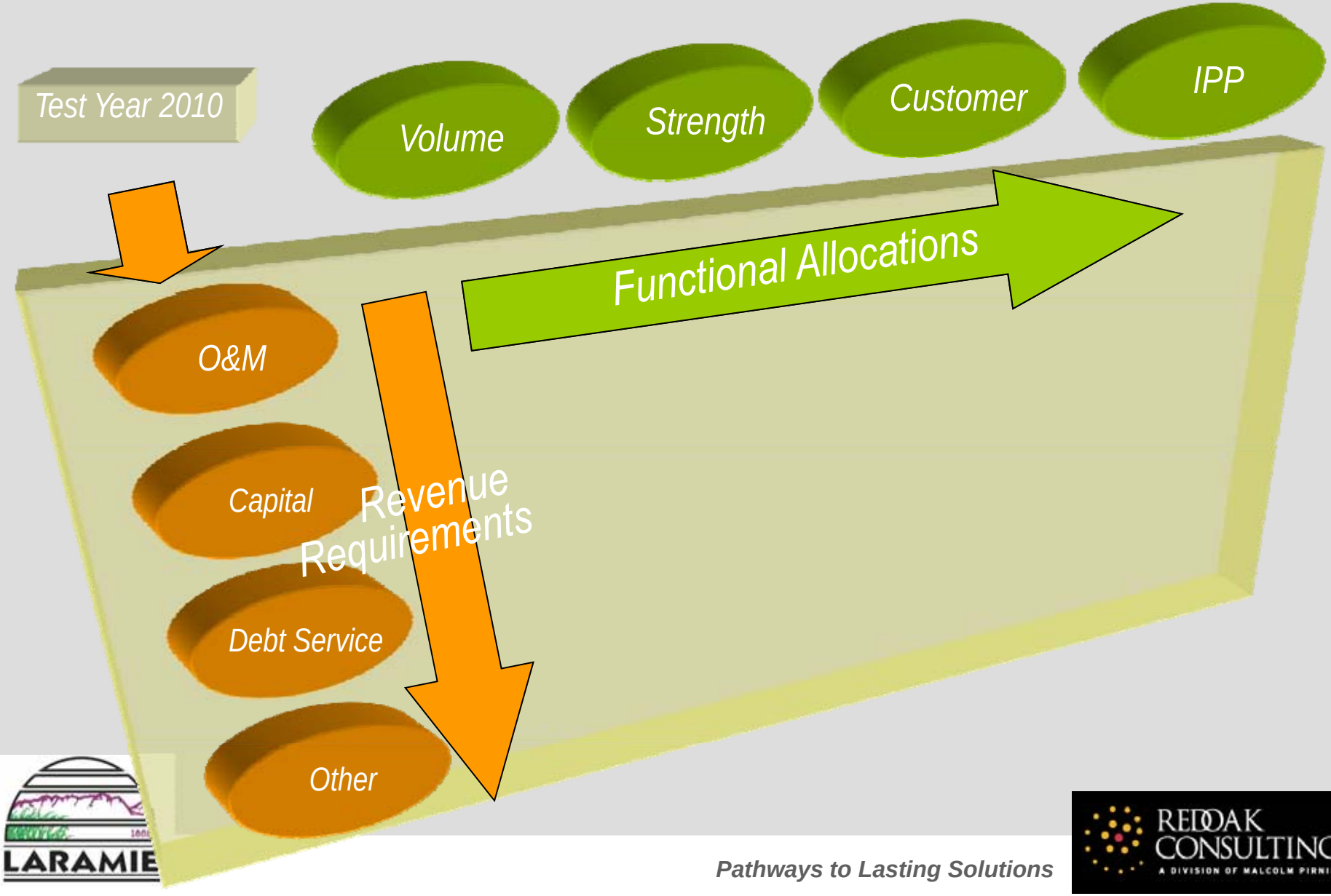
Rate Making Industry Standards References

- Principles of Water Rates and Fees Manual M1
  American Water Works Association, Fifth Edition, 2000
- Water Rates, Fees, and the Legal Environment
  American Water Works Association 2005
- Developing Rates for Small Systems Manual 54
  American Water Works Association, 2004

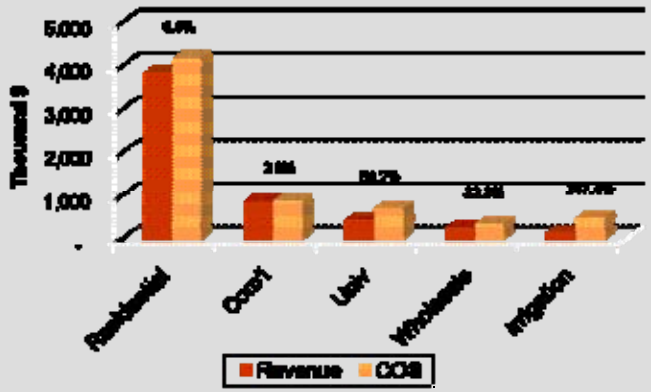
Customer Characteristics - Water



Customer Characteristics - Sewer



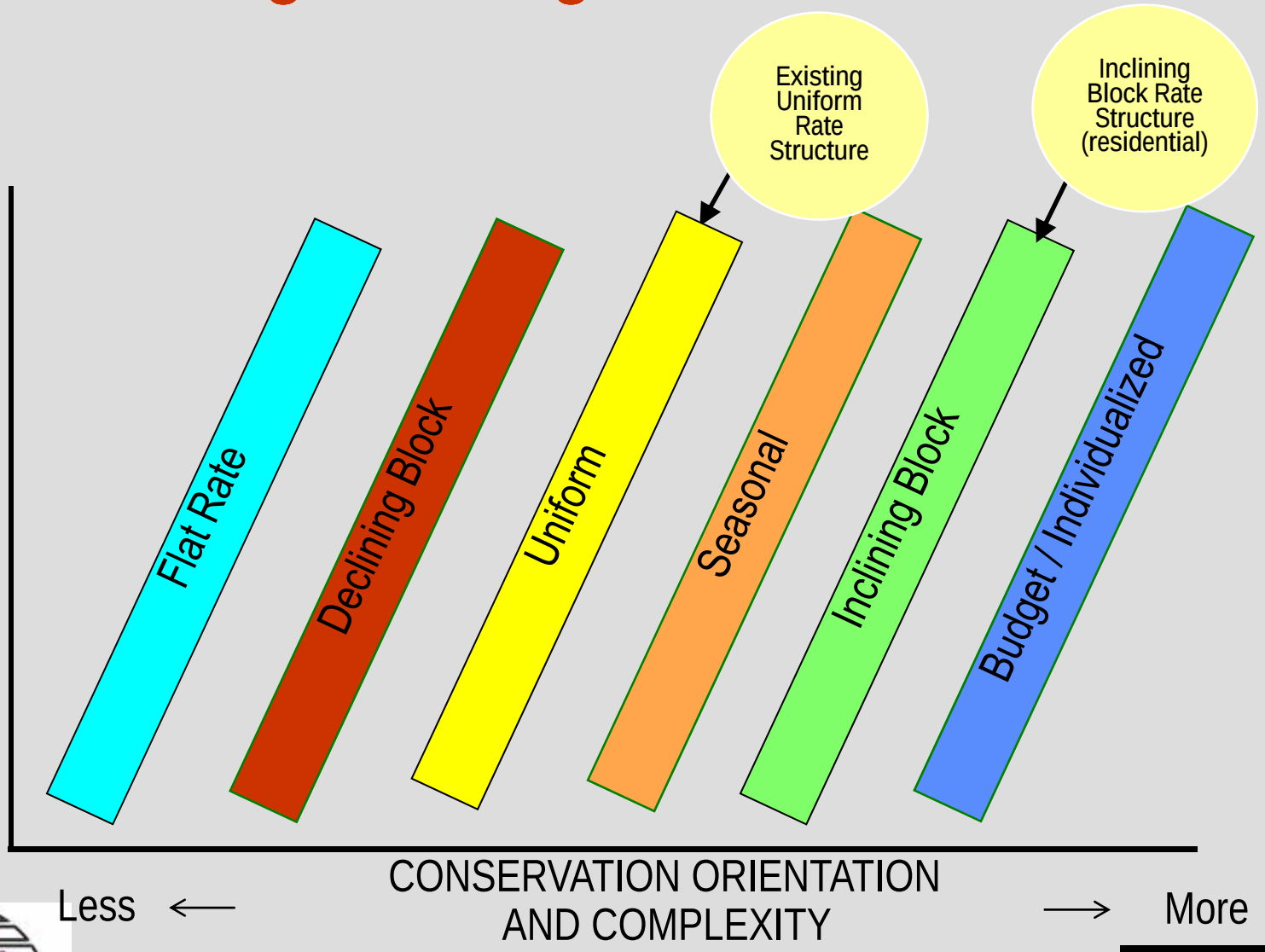
Who Pays?



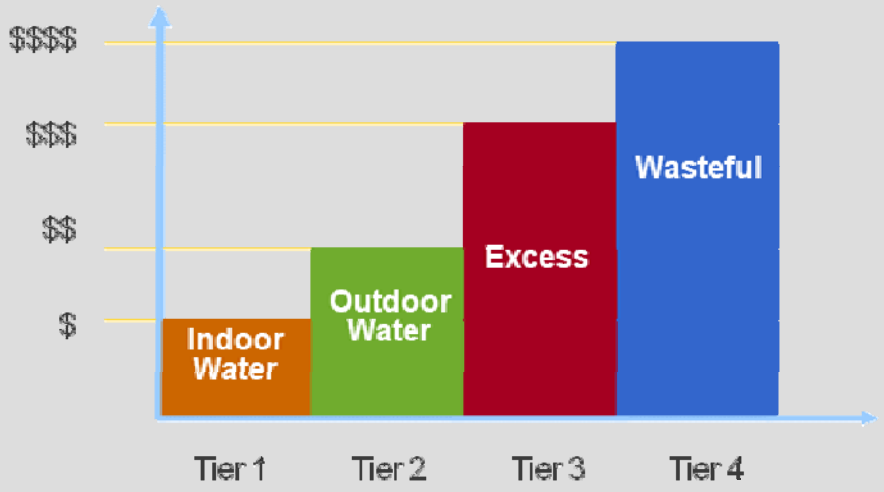
- City staff expressed a preference for “cost of service” rates for each enterprise.
- Red Oak designed tiered water conservation rates
  - Two-block
  - Four-block
  - Customer impact increases as consumption increases
- All of the rates presented today are DRAFT and subject to change following policy direction from Council.

PROPOSED RATES

Rate Design/Pricing Structure Continuum



Example: Water Block Rate Design



Cheyenne Example

Tier	Description	Rate
First 6,000 gallons	Average domestic use	$3.20
Next 18,000 gallons	Typical July irrigation	$3.98
Next 18,000 gallons	Large irrigators	$4.92
Over 42,000 gallons	Large water users	$6.14

Volume in Each Block Reflects Customer Class Characteristics

How Many Blocks or Tiers?

- The American Water Works Association M1 Manual of Water Supply Practices “Principles of Water Rates, Fees, and Charges” acknowledges that “no standard number or size of the blocks exists, nor is there a standard for how steeply the unit charges for each of the blocks increase.”

Current and Proposed Customer Classes – Water

Current Structure

- Uniform Water Rate
- Inside City / Outside City Differential

Proposed Structure

- Residential
  - Increasing by Block (either 2 block or 4 block)
- Multifamily (uniform for class)
- Commercial (uniform for class)
- Irrigation (uniform for class)
- Wholesale (uniform for class)
- Inside City / Outside City Differential

Current Customer Classes – Sewer
No Rate Structure Change Proposed

- Residential
- Commercial & University
  - CA - Restaurants
  - CB - Bars & Taverns
  - CC - Entertainment & Service ; UC – University Food Service
  - CD - Laundries, Schools & Stores
  - CE - Office Buildings; UE – University School Buildings
  - CF - Hotels & Motels
  - CG - Hospitals, Athletic Clubs, Apt, Daycares; UG – University Dorms, Residences
- Wholesale

Current and Proposed Water Base Fees Test Year 2010

Meter Size	Current	Proposed FY 2010
¾”	$ 13.67	$ 19.10
1”	$ 22.97	$ 30.10
1 ½”	$ 45.22	$ 55.10
2”	$ 73.21	$ 86.20
3”	$ 136.39	$ 167.00
4”	$ 227.53	$ 276.60
6”	$ 455.14	$ 539.50
8”	$ 727.94	$ 827.60

* Waterline replacement program monthly charge of $4.24 is assessed to each meter in addition to the base charge under the current fee.

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Current and Alternative 1: Four-Tier Proposed Water Metered Fees

Meter Size	Current	Proposed FY 2010
Residential		
First 3,000 gallons	$ 2.30	$ 3.03
Next 3,000 gallons	$ 2.30	$ 3.23
Next 9,000 gallons	$ 2.30	$ 3.45
Over 15,000 gallons	$ 2.30	$ 3.71
Multifamily	$ 2.30	$ 2.77
Commercial	$ 2.30	$ 2.84
University	$ 2.30	$ 2.92
Wholesale	$ 2.30	$ 3.62
Irrigation	$ 2.30	$ 3.71

* Outside city customers metered fees are 1.25 times greater tha
inside city customer metered fees.

Current and Alternative 2: Two-Tier Proposed Water Metered Fees

Meter Size	Current	Proposed FY 2010
Residential		
First 6,000 gallons	$ 2.30	$ 3.23
Over 6,000 gallons	$ 2.30	$ 3.45
Multifamily	$ 2.30	$ 2.77
Commercial	$ 2.30	$ 2.84
University	$ 2.30	$ 2.92
Wholesale	$ 2.30	$ 3.62
Irrigation	$ 2.30	$ 3.45

* Outside city customers metered fees are 1.25 times greater than inside city customer metered fees.

Current and Proposed Residential Wastewater Rates

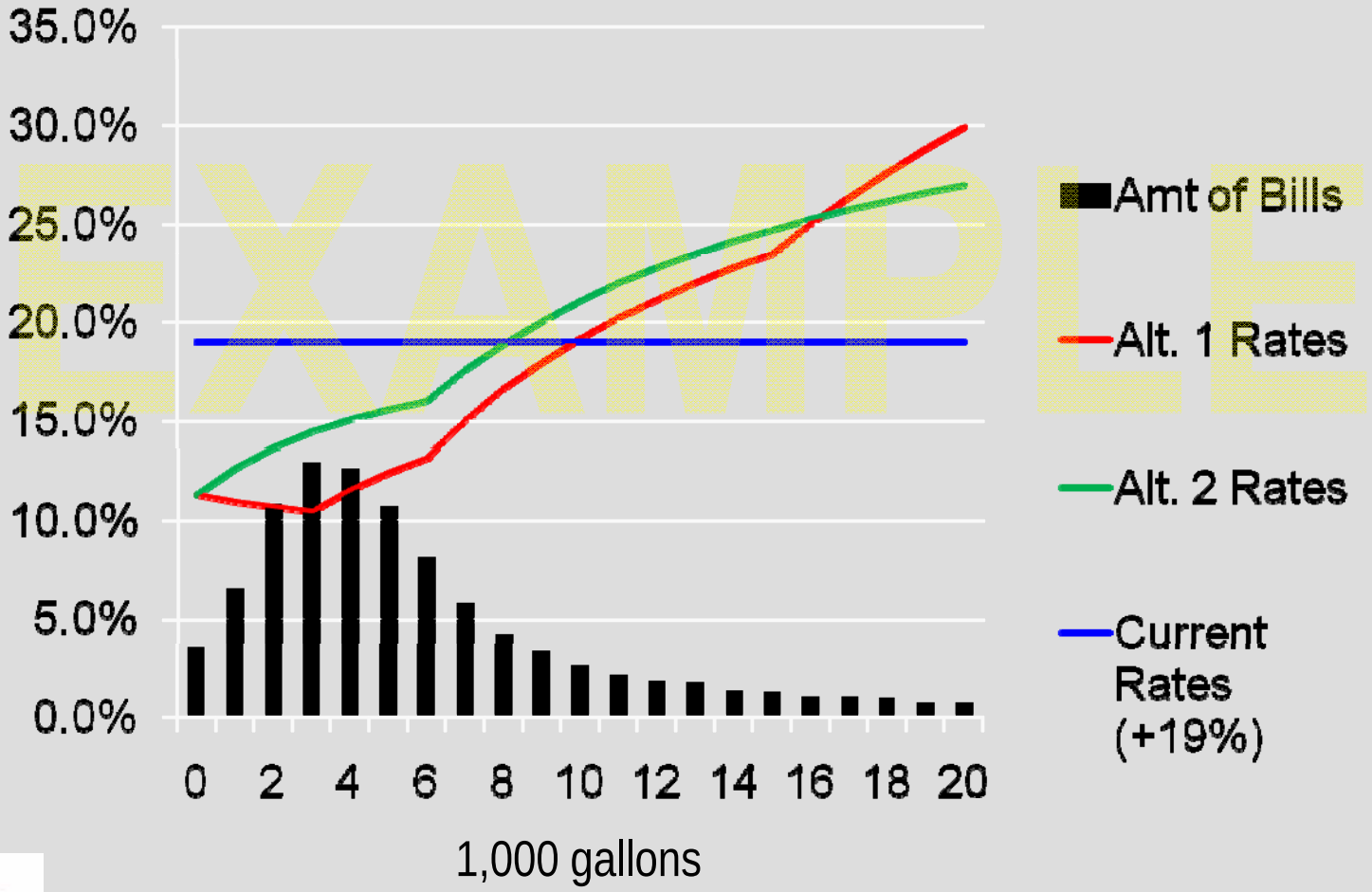
Charge	Current Amount	Proposed FY 2010
Base Fee – All Meter Sizes	$ 9.83	$11.80
Consumption Charge*	$2.22 per 1,000 gallons	$2.87 per 1,000 gallons
* Based on January, February and March water consumption from the previous year usage for the residence. The average of the three months is the consumption used each month for the entire year.		

Current and Proposed FY 2010 Commercial Wastewater Rates

Charge	Description	Current	Proposed
Base Rate		$9.83	$11.80
Consumption Rate			
CA	Restaurants	$ 3.73	$ 5.03
CB	Bars & Taverns	$ 4.75	$ 5.79
CC	Entertainment & Service	$ 3.55	$ 3.87
CD	Laundries, Schools & Stores	$3.23	$ 3.77
CE	Office Buildings	$ 2.98	$ 3.12
CF	Hotels & Motels	$ 2.59	$ 3.66
CG	Hospitals, Athletic Clubs, Apt, Daycares, Dorms, Residences	$2.21	$ 2.68

Customer Bill Impacts

Residential Monthly Bill Impact (%) EXAMPLE - 2010



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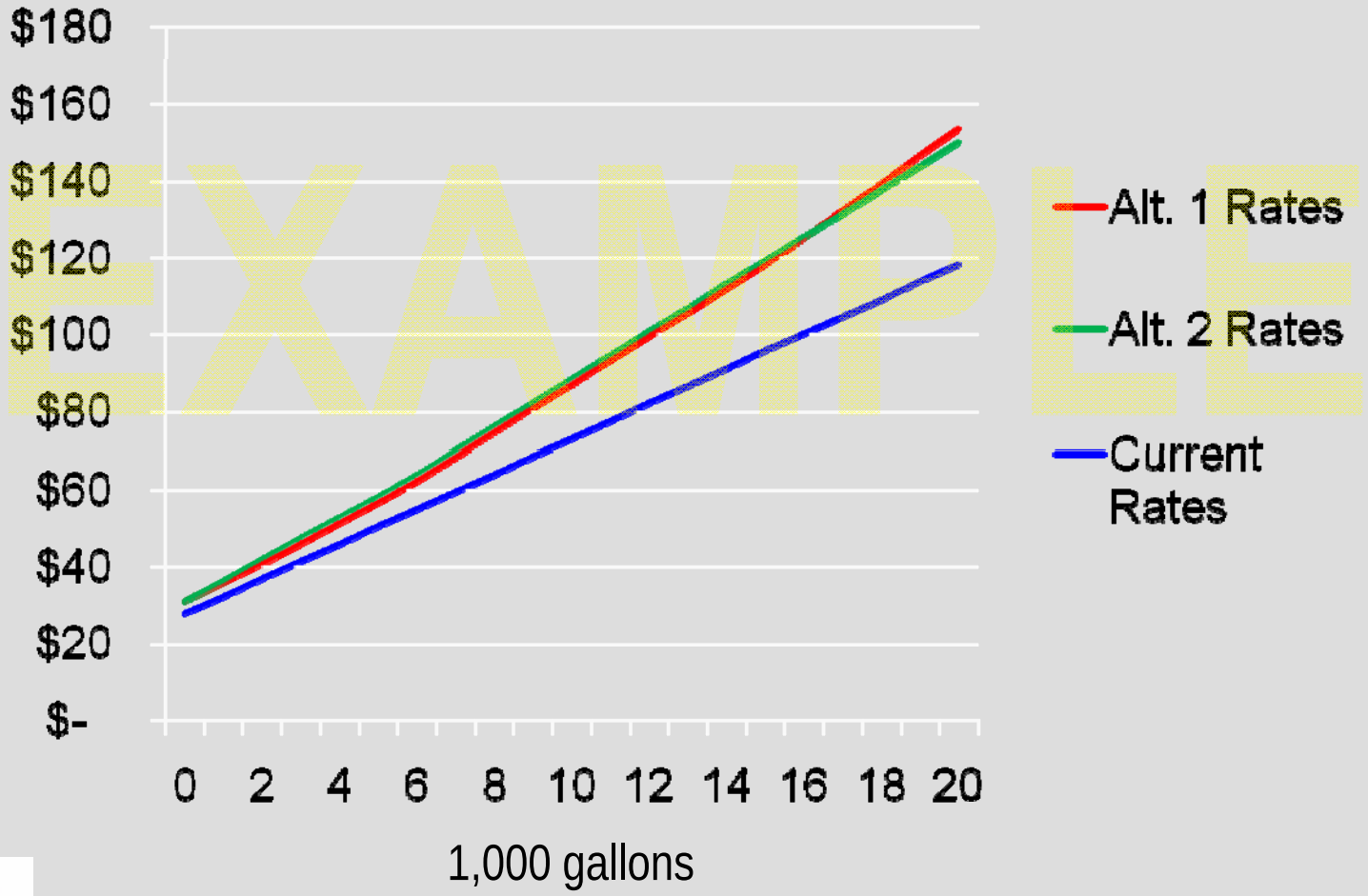
Residential Monthly Bill Impact ($)
EXAMPLE - 2010



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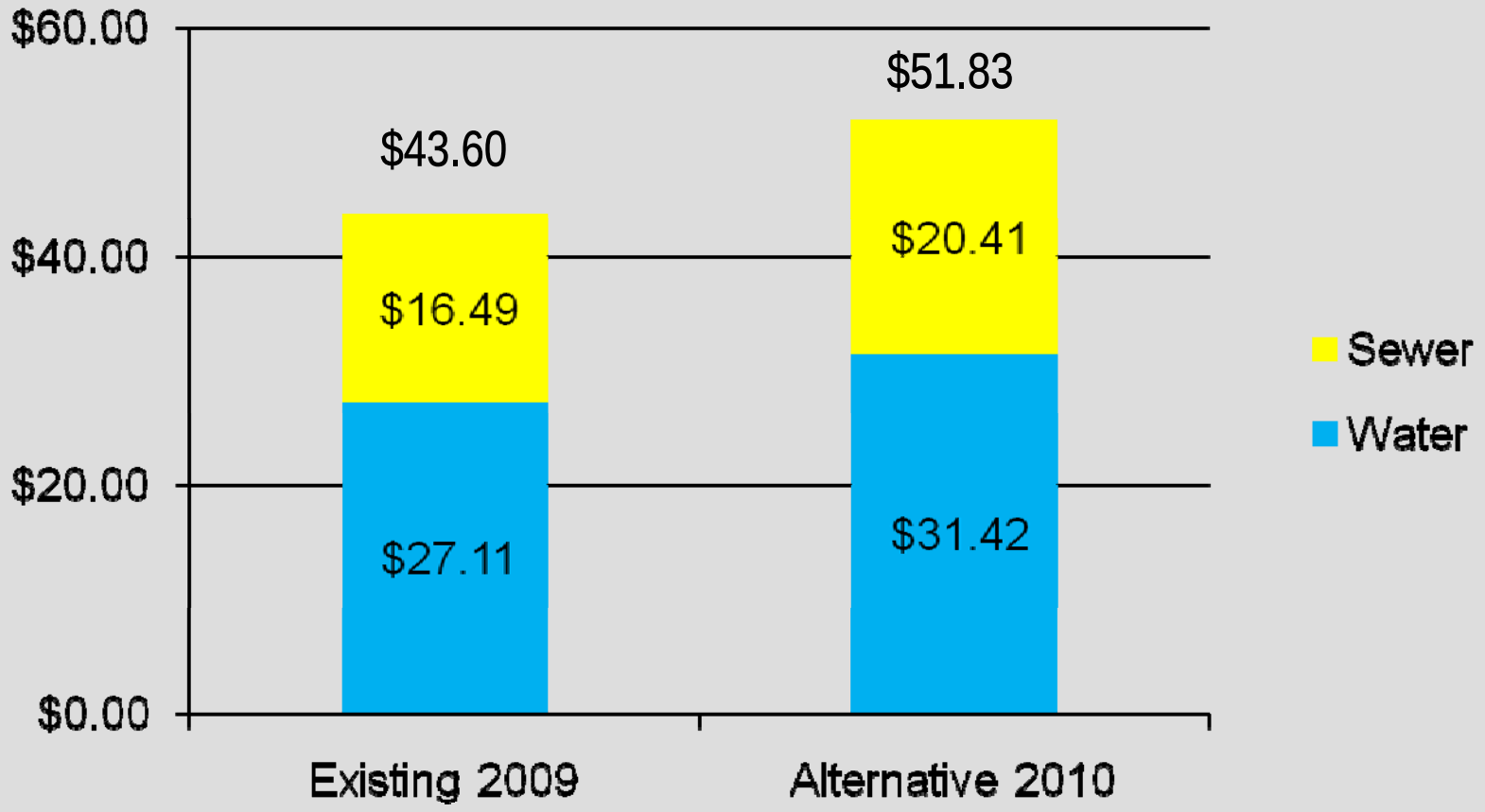
Comparison of Median Residential Monthly Bills – 4 Block*



* ¾ inch meter – water bill based on 4,000 gals.
Sewer bill based on 3,000 gals.

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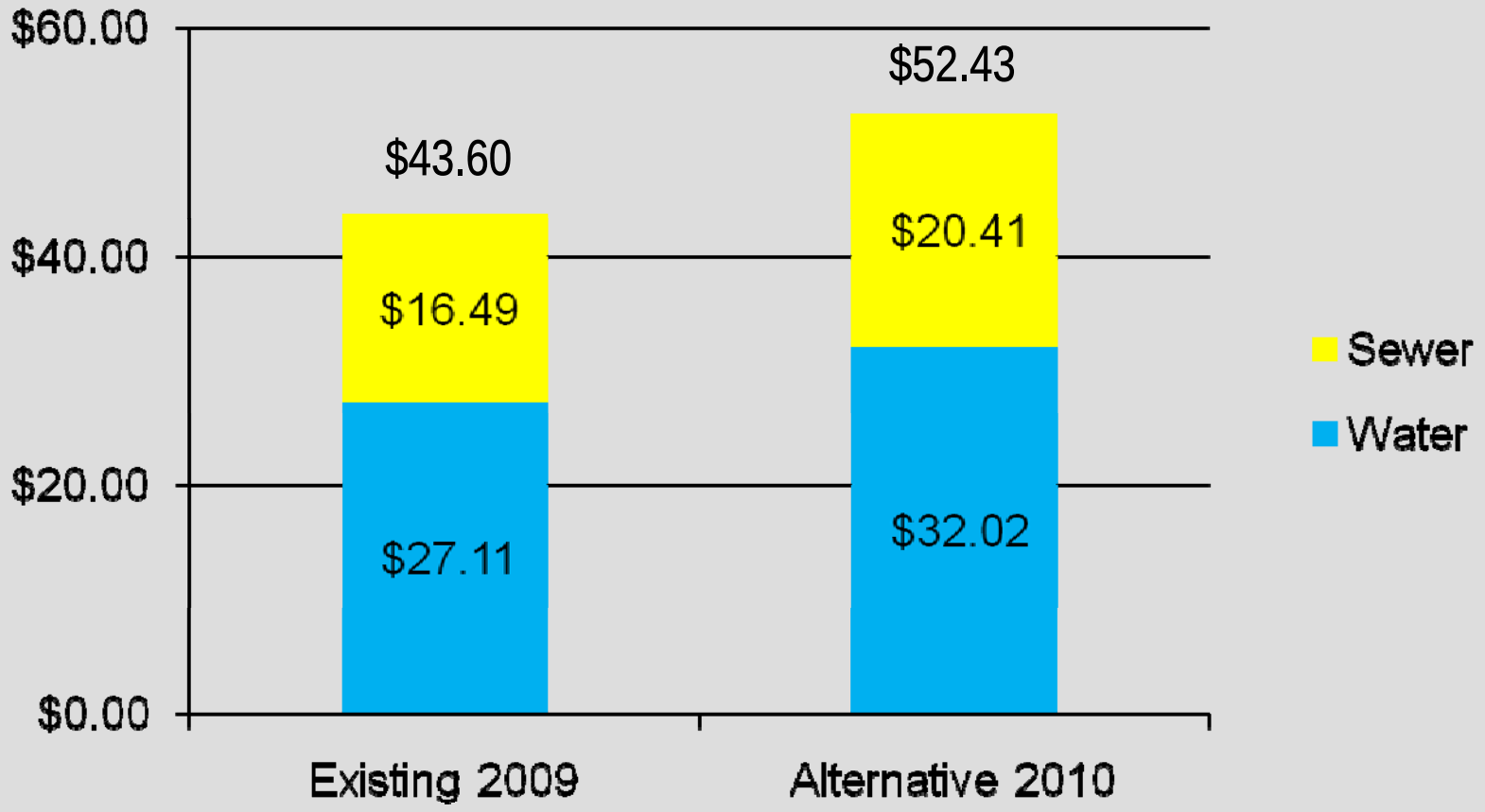
Comparison of Median Residential Monthly Bills – 2 Block*



* ¾ inch meter – water bill based on 4,000 gals.
Sewer bill based on 3,000 gals.

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Discussion and Guidance

- Policy direction on the timing and magnitude of revenue increases
  - Operation & Maintenance Expenses
  - Capital and Financing Plan
- Policy direction on cost of service rates
- Policy direction on rate design
  - Two Block or Four Block rates

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