

City of Waukesha Wastewater Treatment Facility and Sewer Conveyance System Financial Plan

Jonathan Cameron
Economic Consultant
Municipal Economics & Planning, a
division of Ruekert/Mielke
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History/Background of Sewer Utility Planning

- Why Facility Planning?
 - ▶ Equipment/Facilities Age—Need for Replacement:
 - ◆ Mechanical: pumps, Tanks, Pipes, Filters,...
 - ◆ Electrical: Control Systems, Power Distribution,
 - ◆ Buildings



History/Background of Sewer Utility Planning

- Why Facility Planning?
 - ▶ Equipment & Other Components Become Inefficient:
 - ◆Energy Use/Cost
 - ◆Labor



History/Background of Sewer Utility Planning

- Why Facility Planning?

- ▶ DNR Requirement

- ▶ New Regulations By EPA/DNR:

- ◆ UV Disinfection System

- ◆ Phosphorus Removal Limits



History/Background of Sewer Utility Planning

- Major Plant Upgrades Average Every 17 Years:
 - ▶ Plant Built in About 1890
 - ▶ Upgrades: 1917, 1928, 1947, 1967, 1981, 1991



History/Background of Sewer Utility Planning

- Facility Planning Conducted for 20-Year Period
- Last Plan Prepared in 1990-1991
 - About \$37 Million: buildings, equipment, tanks, electrical,.....



City Council Action/Approval process

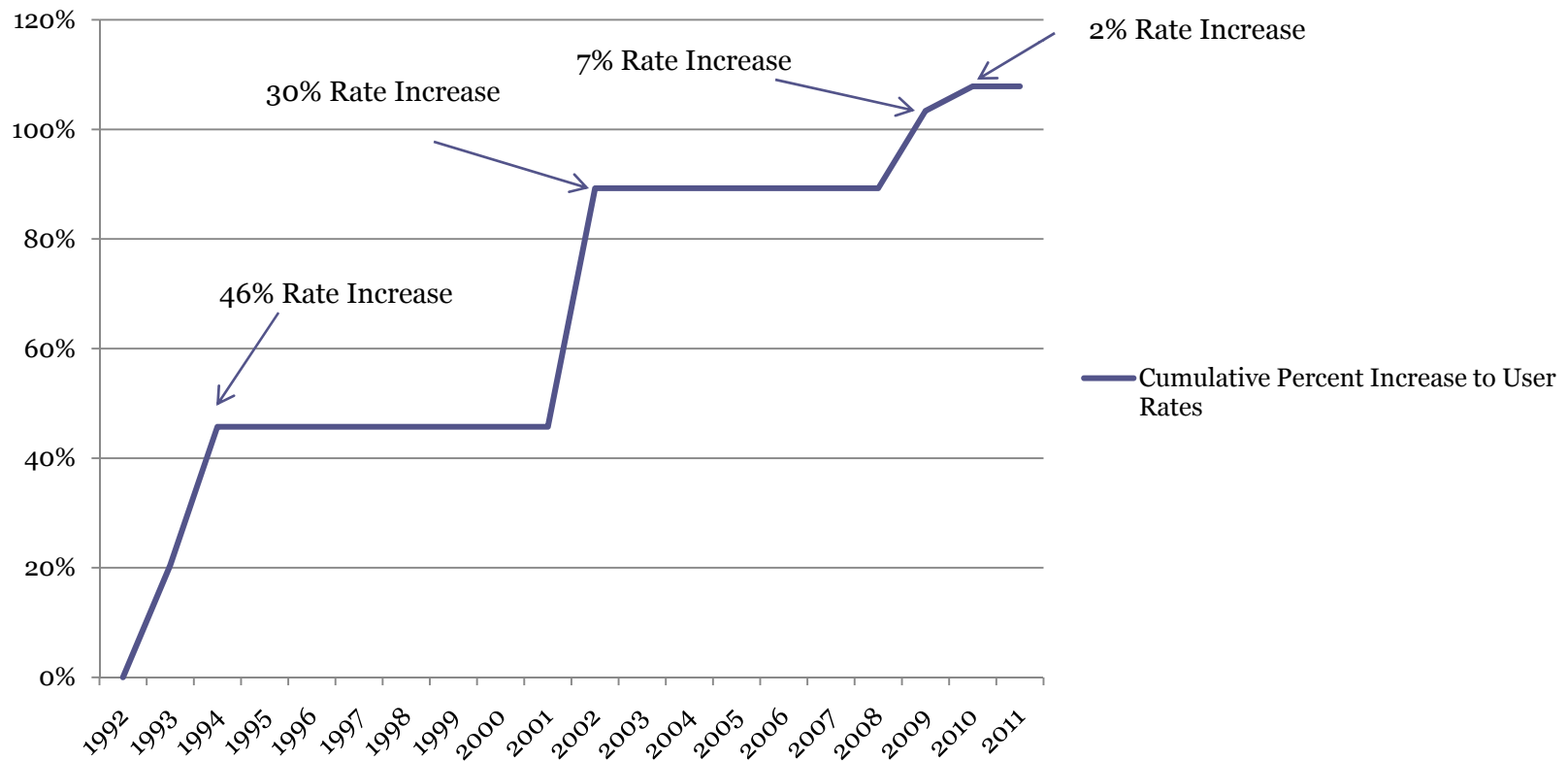
- No Council Action At This Time
- Staff Draft Schedule, Financing Plan, Project List for 0-5 Year for BOPW & City Council Consideration



Financial Plan Analysis

Historical Look at Sewer User Rates

Cumulative Percent Increase to User Rates (For Average SF-Home)





Study Goal

- Necessary impacts of collection system and Treatment Plant projects on the finances of the sewer utility including:
 - The necessary debt
 - User rate impacts
 - Utility reserves
- Primary Objective: look at the timing and magnitude of project costs to level and minimize potential spikes to the user rates



Why Do a Long-Term Financial Plan?

- Avoid a large user rate spike in any particular year
- Since projects are being completed over a 20-year period, there is the potential for multiple rate spikes.
- Gradual rate increases are much easier for the rate payer vs. large unexpected increases
- Rate increases in next 5 years are critical
 - Results compounded over next 20 years



Sewer Utility Capital Plan

- Wastewater Treatment Facility Projects (WWTF)
- Collection System Projects
 - Base level projects
- User rate impacts for collection system and WWTF projects analyzed separately, then combined to compute the overall rate impacts



Financial Analysis Assumptions

- 20-Year borrowings for all projects at current rate of 4.6% interest with level debt payments
- Assumed low amount of customer growth
- Operating & maintenance costs increase 3.0% annually
- Very low interest rate earnings – tied to LGIP



Financial Analysis Assumptions

- Recommended reserve levels equal to:
 - 3 months operating and maintenance costs plus;
 - 1 year of annual principal and interest payment
- This is a conservative standard set by the American Water Works Association (AWWA)



Analysis Goals and Criteria

- Set annual user rate increases to minimize rate spikes and keep increases level from one year to another
- User Rates Recover:
 - O&M costs
 - Pay debt service
 - Replacement fund deposit
 - Maintain a minimum reserve balance

Collection System Analysis

Sewer Conveyance System

2011-2030 Annual Needed Replacement/Repairs

Project	Range of Annual Costs	
	Low	High
Televising	\$80,000	\$130,000
Inflow/Infiltration Elimination	\$300,000	\$490,000
Forcemain Replacement	\$230,000	\$375,000
Pump Station Upgrades	\$500,000	\$800,000
Gravity Sewer Rehabilitation	\$1,000,000	\$1,650,000
Total	\$2,110,000	\$3,445,000

Wastewater Treatment Facility

2011-2030 Needed Infrastructure Costs

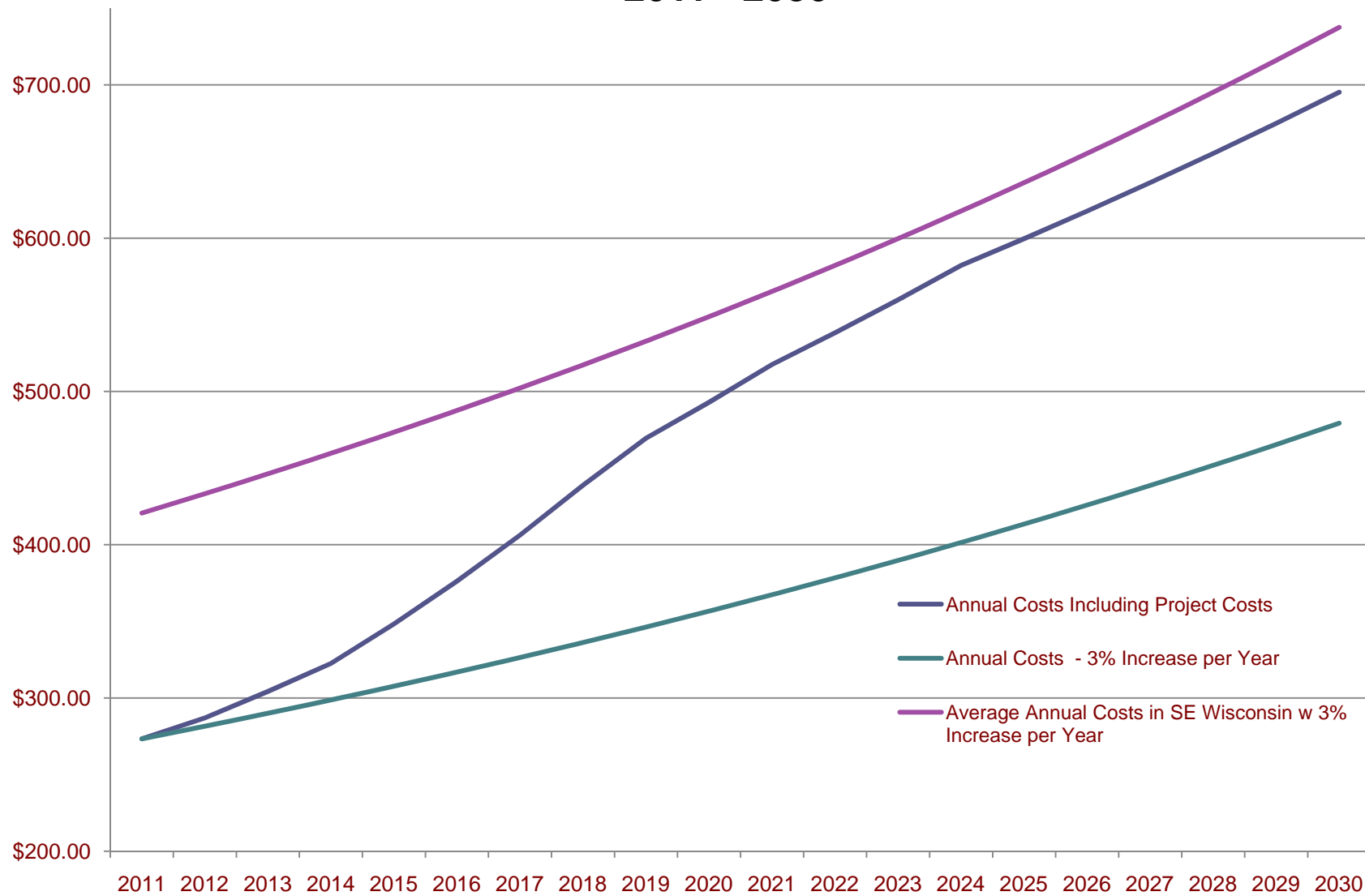
	Cost	Percent of Total
Years 0 - 5	\$39,789,300	55%
Years 6 - 10	\$18,898,700	26%
Years 11 - 15	\$7,900,000	11%
Years 16 - 20	\$5,420,000	8%
Total	\$72,008,000	
Replacement Fund Projects	\$3,764,000	



Results of Financial Analysis

- User Rate Increases Range from 3.0% to 8.0% Annually through 2030.
- Key is user rate increases adopted within next 5-years
 - Range from 5.0% to 8.0% Annually
 - Key to keeping rate increases in years 6 and beyond below 10%

Estimated Average Annual Residential User Charge Payment - 2011 - 2030



Estimated Increase - Next 5 Years

Year	Average Annual Payment- SF Home	Percent Rate Increase	Increase to Quarterly Bill
2011	\$273		
2012	\$287	5%	\$3.50
2013	\$304	6%	\$4.25
2014	\$323	6%	\$4.75
2015	\$348	8%	\$6.25
2016	\$376	8%	\$7.00
Average			\$5.15

How do Waukesha's Sewer Rates Compare?

Community	Average Annual User Rate Payment
Kenosha	\$194
Brookfield, Town	\$218
Racine	\$249
Waukesha, City	\$273
Burlington	\$283
Hartland	\$298
Oconomowoc	\$314
Waterford, Village	\$385
Pewaukee, Village	\$387
Grafton	\$391
Pewaukee, City	\$416
Mukwonago	\$417
Port Washington	\$421
Cedarburg	\$449
Saukville	\$515
Menomonee Falls	\$646
Muskego	\$671
East Troy, Village	\$898

Notes:

(1) Based upon 64,000 gallons per year.

Questions?

