

IMPACT FEES – PART 2 IMPACT FEE FINANCIAL PRESENTATION

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DEPARTMENT

AGENDA

- Background – why are we doing this?
- SFUE definition and diurnal conditions
- Definitions & types of impact fees
- Water: Equity Buy In & Incremental
- Sewer: Equity Buy-In & Incremental (total investment)
- Project Schedule
- Recommendations & Timeline Moving Forward

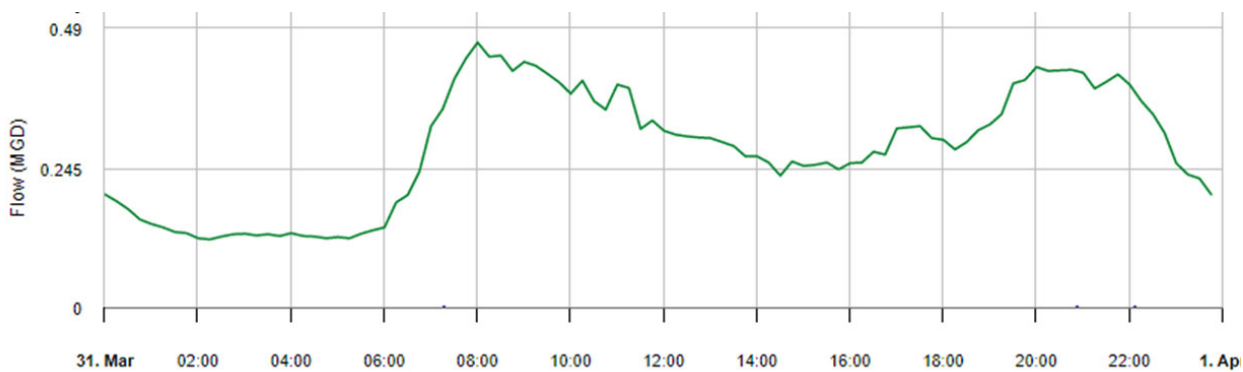
REFRESHER - WHY ARE WE DOING THIS?

- Meter size is not an equitable capture of the impacts to the system.
 - Proposing demand based rather than meter based.
- Why should we increase impact fees?
 - Increased asset costs (increasing pipe, pumps, facilities, etc.) for additional capacity
 - Future development drives additional required conveyance and treatment capacity.
- Overall reduction in rate-payer contribution to fund growth related infrastructure.

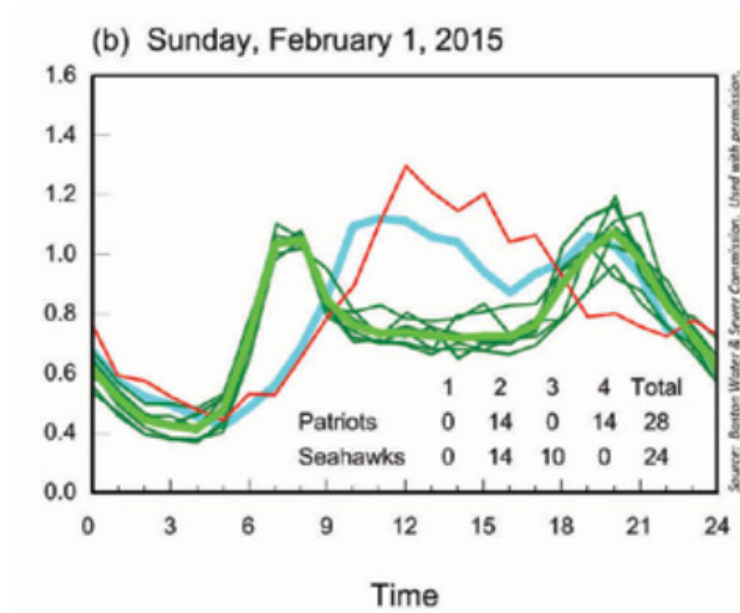
UNIT OF MEASURE (SFUE)

- Distribution and conveyance systems are sized based upon available capacity, not daily demand.
 - Diurnal demands peak in morning and evening based upon residential usage.
 - Water consumption (i.e. utility bills) are based off total consumption throughout the month, does not account for the peaking times when demand (water & sewer) is the highest.
- Example: TN Titans stadium (two football games/month), at half time the sewer system needs to accommodate the instantaneous demands of the system, not the overall sewer utility bill for the month.
 - Using this example, the Single-Family Unit Equivalent metric was developed to account for those peaked diurnal demands, not the average monthly consumption from a single house.

WHAT IS DIURNAL FLOW?



March 31 – April 1, 2022 – Westhaven flow meter



Super Bowl XLIX
New England Patriots vs. Seattle Seahawks
Glendale, Arizona

EXAMPLE COMPARISON (ACTUAL SCENARIO)

	BLDG A	BLDG B
Square footage of usable space	40,377 sq. ft	219,587 sq. ft
Typical water consumption & sewer demand (from utility bill)	101,725 gallons/month	372,333 gallons/month
Installed meter	3 inch	3 inch
Paid impact fee	\$111,825	\$111,825

IMPACT FEE - DEFINITION

- A contribution of capital toward existing or planned future plant facilities necessary to meet the service needs of new customers to which such fees apply.
- Two methods used to determine the amount of these charges are the buy-in method and the incremental-cost pricing method.
- Charges are intended to provide funds to be used to finance all or part of capital improvements necessary to serve new customers.

IMPACT FEES - TYPES

- Equity (Buy-In) Method – assesses new customers a fee to approximate the equity position of current customers. (AWWA M-1, 7th Edition, p199)
 - This approach was used on the water distribution and sewer collection system.
- Incremental Cost Method – assigns new development the incremental cost of system expansion needed to serve the new development. (AWWA M-1, 7th Edition, p202)
 - This approach was used on the Water Treatment Plant expansion and the Water Reclamation Facility expansion (Claude Yates Dr).
- Used actual Franklin customer accounts to determine number of SFUEs, current expansion costs, and assumed future expansion costs.



WATER



WATER – HYBRID RESULTS

HYBRID CONSOLIDATION

Equity (Buy-In) Method - Distribution	\$ 1,842
Incremental Cost - Treatment	\$ 1,782
Hybrid Approach - Cost per SFUE	\$ 3,624

WATER HYBRID CALCULATION (EQUITY BUY-IN + INCREMENTAL COST)

- Equity Buy-In Method = \$1,842
- Incremental Method = \$1,782
- **PROPOSED TOTAL = \$3,624 per SFUE**
- Current Impact Fee = \$2,089
- **Change = + \$1,535**



SEWER



SEWER – INCREMENTAL COST (CLAUDE YATES FACILITY)

- Additional capacity = 4 MGD
- Cost = \$33 M plus interest costs @ 1.47% for 30 yrs

INCREMENTAL COST METHOD

Capacity - North Plant	
Projected Treatment Investment	\$ 40,829,262
Projected Additional Capacity (4 MGD)	1,460,000,000
Annual Usage/Customer (Gals)	127,750
Percentage of Capacity	0.008750%
Average Cost/SFUE	\$ 3,573

SEWER – INCREMENTAL COST (SE CLEAN WATER FACILITY)

- Cost include (8 MGD facility) – Total Investment:

- Current Southeast Wastewater Capacity Evaluation PSA (engineering – Hazen, \$4.3M)
- Pilot plant construction cost (construction – TBD, \$1.65M)
- Anticipated design cost for SE Clean Water Facility (engineering – TBD, \$10M)
- Anticipated construction inspection cost for SE Clean Water Facility (inspection – TBD, \$12M)
- Anticipated construction cost for SE Clean Water Facility (construction – TBD, \$150M)
- Anticipated interest cost for SE Clean Water Facility (bond – 3.5% for 30 years)

INCREMENTAL COST METHOD	
South Plant Capacity - 8 MGD	
Projected Treatment Investment	\$286,795,281
Projected Additional Capacity (8 MGD)	2,920,000,000
Annual Usage/Customer (Gals)	127,750
Percentage of Capacity	0.004375%
Average Cost / SFUE	\$10,755

SEWER – HYBRID RESULTS (TOTAL INVESTMENT)

- Equity (Buy-In) Method – Collection = \$2,391
 - Incremental Method – Claude Yates Facility = \$3,573
 - Incremental Method - Southeast Clean Water Facility = \$10,755
 - **IMPACT FEE (TOTAL INVESTMENT) = \$16,719 per SFUE**
- Number reduced from 2020 presentation due to refined costs used for model
- Current Impact Fee = \$3,544
 - **Change = + \$13,172**
 - *Impact fees related to current treatment project and future treatment project total \$16,247 (~86% of total fee)

SE WASTEWATER CAPACITY - TIMELINE

Overall Timeline	Schedule (Anticipated) Dates of Project Milestones	Duration	2021				2022				2023				2024				2025				2026				2030			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SE WW Capacity Study	April 2020 - July 2023	3.25 years	█				█				█																			
Pilot Construction	July 2021 - July 2022	12 months					█		█																					
Pilot Operation	August 2022 - April 2023	9 months					█																							
SE CWF Design	August 2023 - February 2026	2.5 years									█				█				█											
Advertise & Award SE Construction Bid	March 2026 - July 2026	3 months																					█							
SE CWF Construction	July 2026 - July 2030	4 years																					█							
CWF Start-up/Testing	August 2030	1 month																					█							

RECOMMENDATIONS

- WMD recommends increasing water impact fees to include projects already completed totaling \$3,624.
- WMD recommends ultimately increasing sewer impact fees to recapture project costs totaling currently in progress totaling \$16,719.
 - Two total increases:
 - Effective immediately July 1, 2022 = \$8,359.50
 - Effective July 1, 2023 = \$16,719

WHY THIS CHANGE IS NEEDED

- Provide equitable assessment of fees based on projected demands by the developer as verified through City Staff.
- Tie fees to projected demands that drive capital investments and planning.
- Size meters based on demands and eliminate meter sizing decisions based on fees.
- Encourage the use of fire suppression systems.
- **Reduce the rate-payer demand to fund growth related infrastructure.**
 - **Action now will prevent future impact to rate-payers for the SE CWP.**

NEXT STEPS

- April 26 Worksession to review and answer any additional questions
- May 10th BOMA, present the Ordinance Change to Title 18, Waters & Sewers and Appendix A, Comprehensive Fees and Penalties.
- May 24th BOMA, first reading
- June 14th, BOMA, second reading
- June 28th BOMA, third & final reading
- July 1, implementation

- Questions?