

Rye Water District 2025 Water Rate Study Rye, NH

December 3, 2025

Underwood Engineers



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Goals/Purpose

- Review and update rate design with focus on rate equity
- Provide rate adjustment recommendations for 2026
- Estimate projections through 2030 based on anticipated WTP debt and O&M
- Review System Development Charges (SDCs)

Prior Rate Work & Background

- Prior rate study performed by Raftellis in 2024 and Wright Pierce in 2017
- Current rates are generally consistent with the recommendations from the 2024 report
- General Fund (Water District) funds 51% of budget

Existing Rates (Consumption)

- Current rate structure 50,000-gallon annual allotments and annual billing until allotment is exceeded

Rye Water Rate			
Tier I	0-50,000 Gal		\$0.00
Tier II	51-75,000 Gal		\$5.00
Tier III	76-100,000 Gal		\$6.50
Tier IV	101-200,000 Gal		\$8.00
Tier V	>201,000 Gal		\$10.00
Portsmouth Water Rate			
Tier I	0-50,000 Gal		\$0.00
Tier II	51-100,000 Gal		\$6.50
Tier III	101-200,000 Gal		\$8.00
Tier IV	>201,000 Gal		\$10.00

Existing Rates (Fixed)

Rye Water Rate		
5/8"	Fixed	\$146.00
3/4"	Fixed	\$179.00
1"	Fixed	\$213.00
1 1/4"	Fixed	\$253.00
1 1/2"	Fixed	\$297.00
2"	Fixed	\$432.00
3"	Fixed	\$869.00
4"	Fixed	\$1,745.00
Portsmouth Water Rate		
5/8"	Fixed	\$280.00
3/4"	Fixed	\$313.00
1"	Fixed	\$359.00
1 1/4"	Fixed	\$398.00
1 1/2"	Fixed	\$443.00
2"	Fixed	\$577.00
3"	Fixed	\$1,015.00
4"	Fixed	\$1,891.00

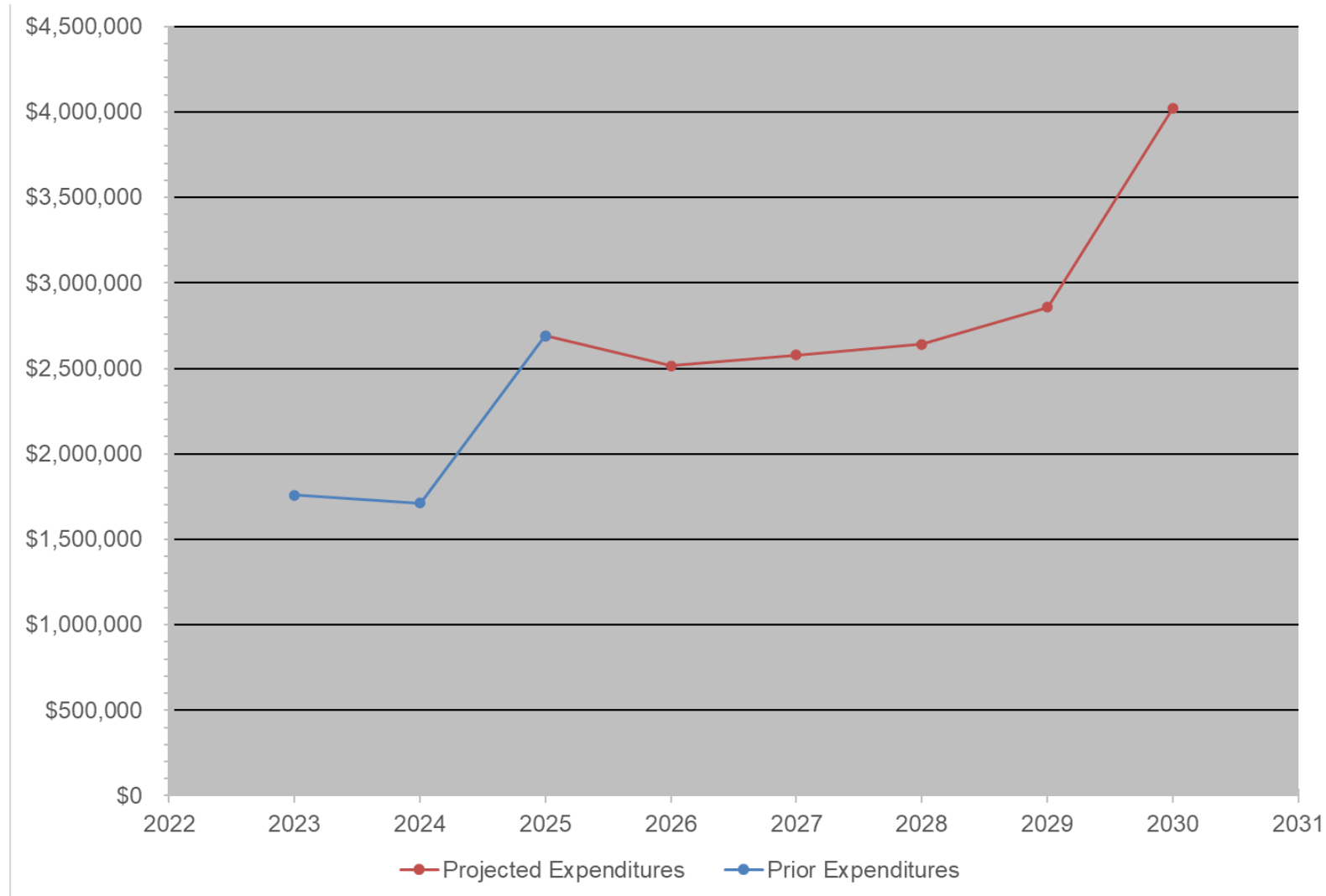
Existing Debt Service

- 2014 \$2.6M Route 1A
- 2024 \$800k Garland Road Pump House
- 2024 \$799k Wallis Road

Proposed Debt Service

- 2030 \$13.95M Water Treatment Plant

Prior & Projected Expenditures



Historical Rates and Rate Changes Rye (Est.)

Meter Size	2018	2019	2020	2021	2022	2023	2024	2025
5/8"	\$130	\$130	\$133	\$133	\$133	\$133	\$146	\$146
3/4"	\$160	\$160	\$163	\$163	\$163	\$163	\$179	\$179
1"	\$190	\$190	\$194	\$194	\$194	\$194	\$213	\$213
1 1/4"	\$225	\$225	\$230	\$230	\$230	\$230	\$253	\$253
1 1/2"	\$265	\$265	\$270	\$270	\$270	\$270	\$297	\$297
2"	\$390	\$390	\$393	\$393	\$393	\$393	\$432	\$432
3"	\$780	\$780	\$790	\$790	\$790	\$790	\$869	\$869
4"	\$1,560	\$1,560	\$1,586	\$1,586	\$1,586	\$1,586	\$1,745	\$1,745
Tier Size (1k gal)	Consumption Charges							
0 - 50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
51 - 75	\$3.30	\$3.30	\$3.40	\$3.40	\$3.50	\$5.00	\$5.00	\$5.00
76 - 100	\$3.85	\$3.85	\$3.95	\$3.95	\$4.05	\$6.50	\$6.50	\$6.50
101 - 200	\$4.95	\$4.95	\$5.05	\$5.05	\$5.20	\$8.00	\$8.00	\$8.00
> 201	\$6.10	\$6.10	\$6.20	\$6.20	\$6.40	\$10.00	\$10.00	\$10.00

Historical Rates Portsmouth (Est.)

Meter Size	2018	2019	2020	2021	2022	2023	2024	2025
5/8"	\$250	\$250	\$255	\$255	\$255	\$255	\$280	\$280
3/4"	\$270	\$270	\$285	\$285	\$285	\$285	\$313	\$313
1"	\$320	\$320	\$326	\$326	\$326	\$326	\$359	\$359
1 1/4"	\$255	\$255	\$362	\$362	\$362	\$362	\$398	\$398
1 1/2"	\$295	\$295	\$403	\$403	\$403	\$403	\$443	\$443
2"	\$515	\$515	\$525	\$525	\$525	\$525	\$577	\$577
3"	\$905	\$905	\$923	\$923	\$923	\$923	\$1,015	\$1,015
4"	\$1,685	\$1,685	\$1,719	\$1,719	\$1,719	\$1,719	\$1,891	\$1,891
Tier Size (1k gal)	Consumption Charges							
0 - 50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
51 - 100	\$5.50	\$5.50	\$5.80	\$5.80	\$5.80	\$6.50	\$6.50	\$6.50
101 - 200	\$6.05	\$6.05	\$6.40	\$6.40	\$6.40	\$8.00	\$8.00	\$8.00
> 201	\$6.05	\$6.05	\$6.40	\$6.40	\$6.40	\$10.00	\$10.00	\$10.00



Current Rates

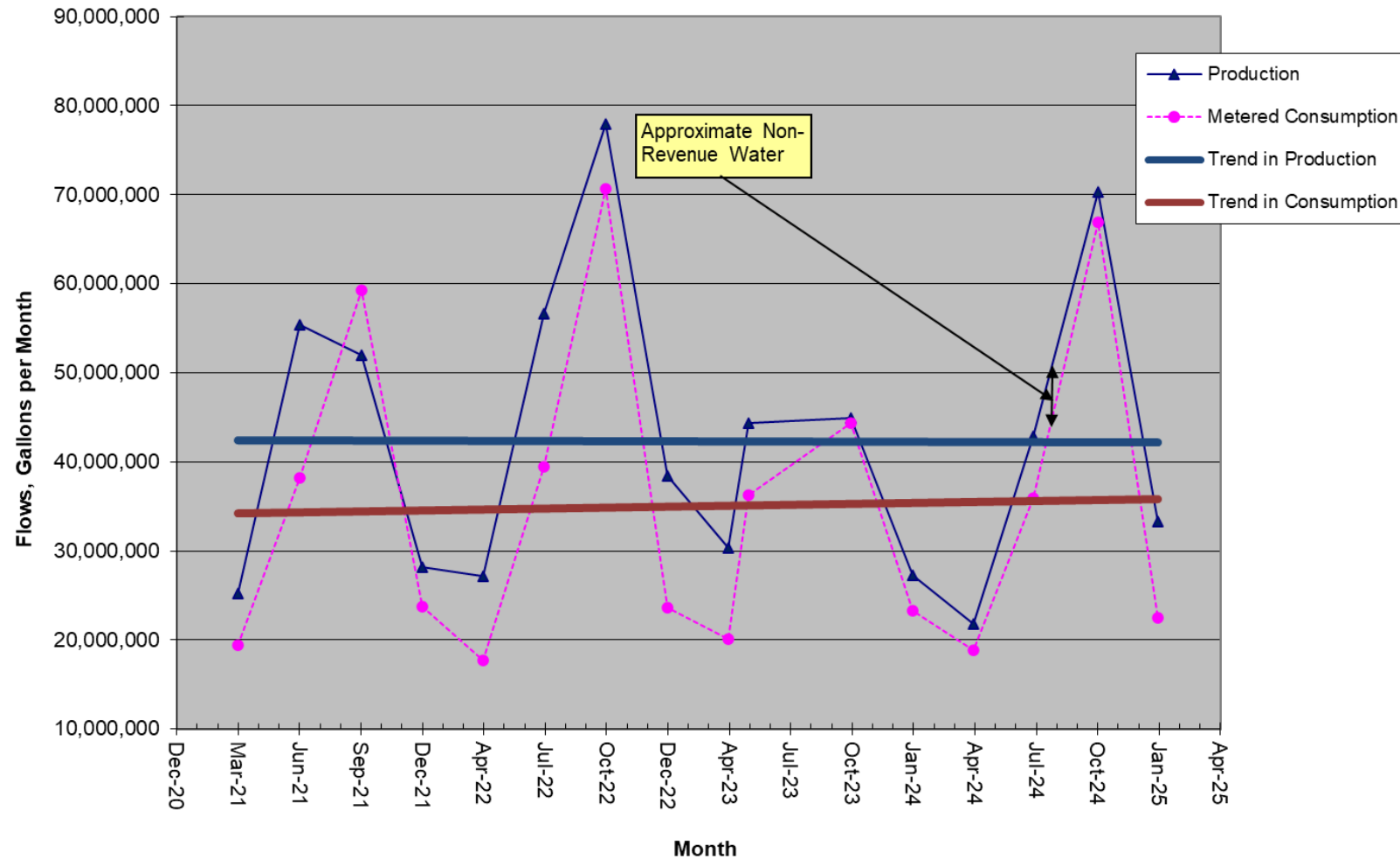
- Includes 50,000-gal annual allotment

Portsmouth fixed charges are currently \$134 to \$146 higher than Rye

Town	Yearly Unit Charge (5/8" meter)	Tier 1 Consumption Charge (\$/1000 gal)	Tier 2 Consumption Charge (\$/1000 gal)	Tier 3 Consumption Charge (\$/1000 gal)	Tier 4 Consumption Charge (\$/1000 gal)	Tier 5 Consumption Charge (\$/1000 gal)
Rye	\$146	\$0	\$5	\$6.50	\$8	\$10
Portsmouth	\$280	\$0	\$6.50	\$8	\$10	NA

Consumption & Production

5B. - Rye Water District, NH
Water Department - Production vs. Consumption



Select Assumptions

- Consumption is constant throughout model
- Tax portion is calculated at 51% of budget
- Projected expenditures out with 3% annual inflation (based on 2025 budget)
- For WTP, estimated debt schedule (interest rate 2.8% provided by State)
- Typical (average) user: 5/8" and 3/4" meter = 145 gpd

Rate Design

- UE recommends the following rate redesign:
 - Implement AWWA meter ratios
 - Match tier ratios for Rye and Portsmouth consumption
 - Establish a consistent adjustment between Rye and Portsmouth users (fixed and consumption)
 - Switch to quarterly billing
 - Switch to 12,000-gallon quarterly allotment (previously 50,000 gallons per year)
 - Assumed 51% GF Revenue until WTP costs are incurred (2030)

Ratios Rye & Portsmouth- Rate Design

Meter Size	Recommended Ratio (both)	Current Ratio Rye	Current Ratio Portsmouth
5/8"	1.0	1.0	1.0
3/4"	1.1	1.2	1.1
1"	1.4	1.5	1.3
1 1/2"	1.8	2.0	1.6
2"	2.9	3.0	2.1
3"	11.0	6.0	3.6
4"	14.0	12.0	6.8



Rye & Portsmouth- Rate Design

Fixed

Rye Unit Charge (Quarterly)		
5/8"	\$32.40	1.0
3/4"	\$35.64	1.1
1"	\$45.36	1.4
1 1/2"	\$58.32	1.8
2"	\$93.96	2.9
3"	\$356.40	11.0
4"	\$453.60	14.0
TOTAL Unit charge		
Portsmouth Unit Charge (Quarterly) with ratios	1.27	
5/8"	\$41.06	1.0
3/4"	\$45.16	1.1
1"	\$57.48	1.4
1 1/2"	\$73.90	1.8
2"	\$119.06	2.9
3"	\$451.61	11.0
4"	\$574.77	14.0

Rye & Portsmouth- Rate Design Consumption

<i>Rye Usage Charge (Volumetric) tier ratio shown</i>	
Tier I 0-12,000 Gal	\$0.00
Tier II 12-25,000 Gal	\$6.80
Tier III 25-50,000 Gal	\$8.71
Tier IV >50,000 Gal	\$11.15
Metered consumption, MGY	
Metered consumption, GPD	
<i>Usage charge subtotal, \$ per year</i>	
<i>Portsmouth Usage Charge (Volumetric) - Ports</i>	1.27
Tier I 0-12,000 Gal	\$0.00
Tier II 12-25,000 Gal	\$8.62
Tier III 25-50,000 Gal	\$11.04
Tier IV >50,000 Gal	\$14.13



2026 Projections

- Budget = \$2,515,000
- Revenue = \$2,534,000
 - District Generated = \$1,251,000
 - GF Generated = \$1,283,000 (51%)

Sample Bills (Water Portion)

User	2024 (Current)	2026
Residential (5/8") (55 gpd, low use residential user)	\$146	\$130
Residential (5/8") (178 gpd, high use residential user)	\$221	\$245
Commercial (2") (904 gpd, example account)	\$2,819	\$3,049

Sample Bills (Water Portion)

User	2024 (Current)	2026	2030 (EST)
Residential (5/8") (55 gpd, low use residential user)	\$146	\$130	\$190
Residential (5/8") (178 gpd, high use residential user)	\$221	\$245	\$359
Commercial (2") (904 gpd, example account)	\$2,819	\$3,049	\$4,664

Irrigation vs Non-Irrigation

	1st Qtr (gal)	2nd Qtr (gal)	3rd Qtr (gal)	4th Qtr (gal)	Meter size	Allotted Water (gal)	Total Water (gal)	GPD	Annual Bill
Irrigation	0	0	148,000	0	5/8	12,000	148,000	405	\$1425
Non-Irrigation	37,000	37,000	37,000	37,000	5/8	48,000	148,000	405	\$844

System Development Charge For New Service Connections

Meter Size	Equivalent EDUs	Estimated Use (gpd)	Water Equity Buy-In Cost
5/8" & 3/4"	1	145	\$622 Each
1"	2.5	363	\$1,556 Each
1-1/2"	5.0	725	\$3,112 Each
2" and Greater	Varies	As approved by Town	\$4.29 per gpd

Summary of Recommendations

- Next 1-2 Months
 - Update to quarterly billing & 12,000-gal quarterly allotment
 - Increase water rates and implement AWWA meter ratios
 - Update/implement SDC's
 - Eliminate irrigation rates now that we are charging quarterly
- Starting Spring/Summer 2026
 - Update model with 5-year CIP
 - Establish/update contribution from Town General Fund for WTP
 - Review/Refresh the model every year until WTP is online

Proposed Rates & SDC Sheet

2026 Rye Water District Existing vs Proposed Rates
12/3/2025

Existing Rates		Proposed Rates		% Change
Rye Unit Charge (Annual)		Rye Unit Charge (Quarterly)		
5/8"	\$146.00	5/8"	\$32.40	-11%
3/4"	\$179.00	3/4"	\$35.64	-20%
1"	\$213.00	1"	\$45.36	-15%
1 1/4"	\$253.00	1 1/4"	NA	
1 1/2"	\$297.00	1 1/2"	\$58.32	-21%
2"	\$432.00	2"	\$93.96	-13%
3"	\$869.00	3"	\$356.40	64%
4"	\$1,745.00	4"	\$453.60	4%
Portsmouth Unit Charge (Annual)		Portsmouth Unit Charge (Quarterly)		
5/8"	\$280.00	5/8"	\$41.06	-41%
3/4"	\$313.00	3/4"	\$45.16	-42%
1"	\$359.00	1"	\$57.48	-36%
1 1/4"	\$398.00	1 1/4"	NA	
1 1/2"	\$443.00	1 1/2"	\$73.90	-33%
2"	\$577.00	2"	\$119.06	-17%
3"	\$1,015.00	3"	\$451.61	78%
4"	\$1,891.00	4"	\$574.77	22%
Multi Unit Allotments (Annual)	\$146.00	Multi Unit Allotments (Quarterly)	\$32.40	-11%
Rye Usage Charge (per 1,000 gal)		Rye Usage Charge (per 1,000 gal)		
Tier I 0-50,000 Gal	\$0.00	Tier I 0-12,000 Gal	\$0.00	
Tier II 51-75,000 Gal	\$5.00			
Tier III 76-100,000 Gal	\$6.50	Tier II 12-25,000 Gal	\$6.80	5%
Tier IV 101-200,000 Gal	\$8.00	Tier III 25-50,000 Gal	\$8.71	9%
Tier V >201,000 Gal	\$10.00	Tier IV >50,000 Gal	\$11.15	11%
Portsmouth Usage Charge (per 1,000 gal)		Portsmouth Usage Charge (per 1,000 gal)		
Tier I 0-50,000 Gal	\$0.00	Tier I 0-12,000 Gal	\$0.00	
Tier II 51-100,000 Gal	\$6.50	Tier II 12-25,000 Gal	\$8.62	33%
Tier III 101-200,000 Gal	\$8.00	Tier III 25-50,000 Gal	\$11.04	38%
Tier IV >201,000 Gal	\$10.00	Tier IV >50,000 Gal	\$14.13	41%
System Development Charge				
Meter Size	Equivalent EDUs	Estimated Use (gpd)	Water Equity Buy-In Cost	
5/8" & 3/4"	1	145	\$622 Each	
1"	2.5	363	\$1,556 Each	
1-1/2"	5	725	\$3,112 Each	
2" and Greater	Varies	As approved by Town	\$4.29 per gpd	



Questions