

LWD Rate Hearing

(Rate discussion continued from January 21, 2020 Special Meeting and February 4, 2020 Regular Meeting)

- Basic Assumptions of Rate Analysis
- Examples of Rate Increases to Meet Financial Goals with and without Assessing End-users in Multi-unit Dwellings a Fixed “Meter” Charge
- Current Town Comparison Including Fixed Costs
- Recommendation and Vote

Recall: Operating Ratio is the Total Revenue divided by Total Expenses (Total Operating Budget including Debt Servicing but not including Additions to Reserves and/or Retained Earnings) and the Debt Service Coverage Ratio is Total Revenues minus Operation and Maintenance Expense (Not Including Debt Servicing or Additions to Reserves or Retained Earnings) divided by Annual Principle and Interest Charges (“Debt Servicing”). NEWWA recommends the former be greater than one and the latter greater than 1.5.

Analysis Assumptions

- Must generate revenue equal to the voted-on FY2021 Operating Budget amount of \$1,835,468 plus an amount for rebuilding depleted “Retained Earnings” and for future improvements and repairs.
- \$150K going into “Retained Earnings” (including \$50K “Reserve Fund”) to rebuild Retained Earnings and to achieve a debt service ratio of at least 1.5.
- Relative to prior two meetings’ rate discussions, analysis now includes Oriole Landing Meters coming online (61).
- Analysis includes a comparison of:
 1. No change in rates;
 2. 40% increase in variable rates and increase in annual meter charge to \$200 with no implied “meter” charge to multi-unit dwelling end-users;
 3. 28% increase in variable rates and increase in net meter/multi-unit dwelling unit annual charge of \$200; and
 4. 34% increase in variable rates, increase in annual meter charge to \$200 for all meters and an annual increase in (net of meter) multi-unit dwelling unit charges to \$100 (phasing in the implied “meter” charge for multi-unit dwellings without meters).

	0% Variable Rate Increase/Fixed at \$140 per year	39% Variable Rate Increase/Fixed at \$200 per year	28% Variable Rate Increase/Fixed at \$200 per year	34% Variable Rate Increase/Fixed at \$200/\$100 per year
<u>Variable Revenues</u>				
Tier 1	\$5.08	\$7.06	\$6.52	\$6.79
Tier 2	\$10.71	\$14.89	\$13.75	\$14.32
Tier 3	\$25.03	\$34.80	\$32.13	\$33.46
<u>Fixed Revenues</u>				
Base/Meter	\$140	\$200	\$200	\$200
Number of Meters	1,796	1,796	1,796	1,796
Number of Units	N/A	N/A	615@ \$200	615 @ \$100
<i>Projected FY21 Total Revenue</i>	<i>\$1,427,747</i>	<i>\$1,985,470</i>	<i>\$1,985,470</i>	<i>\$1,985,470</i>
<i>FY21 Operating Budget</i>	<i>\$1,835,468</i>	<i>\$1,835,468</i>	<i>\$1,835,468</i>	<i>\$1,835,468</i>
<i>Retained Earnings</i>	<i>-\$407,721</i>	<i>\$150,000</i>	<i>\$150,000</i>	<i>\$150,000</i>
<i>Operating Ratio</i>	<i>0.78</i>	<i>1.08</i>	<i>1.08</i>	<i>1.08</i>
<i>Debt Service Coverage Ratio</i>	<i>-0.53</i>	<i>1.56</i>	<i>1.56</i>	<i>1.56</i>
<i>Fixed & Var. Rev. per Meter</i>	<i>\$782</i>	<i>\$1,093</i>	<i>\$1,093</i>	<i>\$1,093</i>

Assumptions: Miscellaneous revenue stays the same at \$23.2K. Per unit and/or meter charge held fixed at \$200 per except for last column where the (net of meter) per unit charge is \$100. Principle and Interest on Long-term Debt is \$267,000. Includes Oriole Landing's 61 meters (60 unit meters plus one irrigation meter).

Current Rate Comparison with Nearby Towns (Including Fixed Costs)

Town	Variable and Fixed Cost/Revenue					
	50,000 gpy	100,000 gpy	150,000 gpy	23,725 gppy	47,450 gppy	71,175 gppy
<i>Lincoln - Now</i>	\$706	\$1,958	\$3,209	\$281	\$642	\$1,236
<i>Lincoln - Recommended</i>	\$927	\$2,533	\$4,140	\$382	\$845	\$1,607
Bedford	\$472	\$1,047	\$1,621	\$170	\$443	\$715
Concord	\$850	\$1,849	\$2,849	\$325	\$799	\$1,273
Lexington	\$329	\$845	\$1,387	\$130	\$308	\$532
Sudbury	\$490	\$1,260	\$2,060	\$240	\$462	\$799
Wayland	\$570	\$1,459	\$2,425	\$269	\$540	\$901
<i>Med. exc. Lincoln</i>	\$490	\$1,260	\$2,060	\$240	\$462	\$799
<i>Avg. exc. Lincoln</i>	\$542	\$1,292	\$2,068	\$227	\$510	\$844
<i>Med. exc. Lincoln & MWRA</i>	\$530	\$1,359	\$2,243	\$254	\$501	\$850
<i>Avg. exc. Lincoln & MWRA</i>	\$560	\$1,353	\$2,180	\$241	\$527	\$876

NB: DEP state-wide goal of 65 gallons per person per day (gppd) residential use. This amounts to 23,725 gppy. 47,450 gppy is twice that limit and 71,175 gppy is three times that limit. This assumes consumption in column is done by one meter. Annual consumption for an household of 2.9 people consuming 65 gppd residential use amounts to 68,802 gpy.
Source: Tata & Howard, town water department websites and author's calculations.

Current Rate Comparison with Other Small Towns (Including Fixed Costs)

Town	Variable and Fixed Cost/Revenue					
	50,000 gpy	100,000 gpy	150,000 gpy	23,725 gppy	47,450 gppy	71,175 gppy
<i>Lincoln - Now</i>	\$706	\$1,958	\$3,209	\$281	\$642	\$1,236
<i>Lincoln - Recommended</i>	\$927	\$2,533	\$4,140	\$382	\$845	\$1,607
Dover***	\$1,070	\$1,660	\$2,300	\$749	\$1,038	\$1,330
Groveland*	\$865	\$1,691	\$2,517	\$430	\$822	\$1,214
Mendon***	\$730	\$1,345	\$1,960	\$407	\$699	\$991
Merrimac*	\$540	\$1,020	\$1,500	\$288	\$516	\$743
Newbury (Byfield)**	\$755	\$1,577	\$2,399	\$323	\$713	\$1,103
Rockport**	\$635	\$1,270	\$1,905	\$301	\$603	\$904
Rowley (FY20 rates)**	\$1,148	\$2,398	\$3,648	\$510	\$1,084	\$1,677
Topsfield*	\$1,213	\$2,504	\$3,903	\$508	\$1,144	\$1,783
Med. exc. Lincoln	\$810	\$1,618	\$2,349	\$419	\$768	\$1,159
Avg. exc. Lincoln	\$869	\$1,683	\$2,516	\$440	\$827	\$1,218
Med. exc. Lincoln & Rowley	\$742	\$1,461	\$2,180	\$365	\$706	\$1,047
Avg. exc. Lincoln & Rowley	\$790	\$1,568	\$2,364	\$376	\$749	\$1,123

NB: DEP state-wide goal of 65 gallons per person per day (gppd) residential use. This amounts to 23,725 gppy. 47,450 gppy is twice that limit and 71,175 gppy is three times that limit. This assumes consumption in column is done by one meter. Annual consumption for an household of 2.9 people consuming 65 gppd residential use amounts to 68,802 gpy. *, **, and *** indicate +-250, +-500 and +-750 people in the 2018 census, respectively. Source: Tata & Howard, town water department websites and author's calculations.

Next Steps

- Last Meeting's Recommendation: Increase variable rates by 30%, increase annual meter charges from \$140 to \$200, and assess meter-less end-users at multi-unit dwellings an annual "meter" charge of \$200 (*c.f.* third column of page 2, highlighted in darker blue).
- Vote