

CITY OF NEWTON

IN BOARD OF ALDERMEN

PUBLIC FACILITIES COMMITTEE REPORT

WEDNESDAY, OCTOBER 1, 2014

Present: Ald. Crossley (Chairman), Lennon, Albright, Gentile, Danberg, and Laredo; absent: Ald. Lappin; also present: Ald. Baker, Blazar, Fuller, Johnson, Leary, Norton, Rice, and Yates
City staff present: Maureen Lemieux (Chief of Staff/Chief Financial Officer), David Turocy (Commissioner of Public Works), Lou Taverna (City Engineer), Rob Symanski (Financial Analyst), and Jack Cowell (Capital Analyst)

#131-13 ALD. CROSSLEY, FULLER, SALVUCCI, JOHNSON, CICCONE requesting periodic updates and discussion, at the discretion of the members of the Public Facilities Committee or the Commissioner of Public Works, on the condition functioning, operations and management of all elements of the City sewer, water and storm water systems including the following:

- Water meters
- Implementation of the ten project area strategic plan to remove infiltration in the City sewer system
- Implementation of the long range strategic plan to repair and replace City water mains, especially to correct for fire flow
- Status of the City's Private Inflow Removal Program to resolve and disconnect illegal storm water connections to the City sewer system
- Current billing practices
- Rates analyses needed to facilitate an informed comparison of billing options to include the following options either alone or in combination: seasonal rates, second meters, tiered rates, frequency of billing, low income credits. [03/23/13 @ 11:13 AM]

ACTION: **HELD 6-0**

NOTE: Chief of Staff Maureen Lemieux and Commissioner of Public Works David Turocy provided the attached PowerPoint presentation on the City's current water and sewer rate structure and a restructure of the water and sewer rate system that includes a rate tier for water used for outdoor use, like irrigation.

Commissioner Turocy explained that the utilities budget is critical to the City. The utilities budget MUST BE self-sustaining, which means that the City must raise enough funds through the water sewer rates to fund that budget. The City charges water rates based on the actual hundred cubic feet (HCF), of water used as captured by each property's water meter. One HCF is equal to 748 gallons. The sewer rate charges are more complicated, as there is no way to measure individual property sewer use. The City currently charges property owners sewer assessments based on their water usage during July and August whether the water used makes its way into the sewer system or not, which does not seem fair. The Administration is aware that there needs to be a change to make the rates more equitable through new rate structures and the

addition of second water meters to measure outside water that does not enter the sewer system; therefore, should not be subject to a sewer use charge.

The presentation provided information on what most property owners currently pay for water and sewer and how much water most properties use. 80% of the city's customers or property owners use less than 125 HCF's and pay less than \$2,000 a year for water and sewer, which means that 44% pay between \$1,000 and \$2,000, and 36% of property owners pay less than \$1,000. 63% of the City's water customers use less than 90 HCFs per year.

When looking at restructuring the rates, the Administration took into consideration the need to generate enough funding for the Utilities Division operations, fairness to rate payers including the small users, and promotion of water conservation. The Administration looked at three options for a new rate structure and determined that a tiered structure for water and sewer rates is the most viable. By going with a tiered structure, the City can provide some protection to the small user, apportion capital costs, and still promote water conservation.

It is important to remember that the City must fully fund the water and sewer budgets through its rates whether OR NOT the City offers a second water meter. If a second water meter is allowed and fully implemented, approximately \$6.7 million in sewer fees, now collected based on outdoor water usage must be recaptured through adjustments to the sewer rates.

The Administration has calculated that approximately 6,000 property owners would benefit from installing a second meter. It is not expected that all 6,000 owners would install the second meters immediately but the presentation provided details on the impact to the sewer budget if all of the 6,000 customers installed the second meter in the first year. In addition, there was information included that illustrated the impact if the 1,000 largest water customers switched to the second meter in year one. **It is impossible for the Administration to know how many property owners will opt to install the second water meters and whether they will decide to install in the first year or wait.** Chief of Staff Maureen Lemieux informed the Committee that it is her intention to add a calculator to the City website that will allow property owners to determine if they will benefit from a second meter.

The restructured tiers would include the addition of two tiers. A micro-tier (lowest) rate would be applied to the first 0-10 HCFs of usage for every property owner, and a separate (highest) tier rate would be applied only to metered outdoor water use. The rates within the tiers would depend on how many property owners opt for second water meters.

The second water meter option and the restructure of the rate tiers would require ordinance changes. The option to install second meters and to add new tiers to the current rate structure for sewer and water needs to be approved by the end of the year or in January at the latest. Before the Administration can propose new rates it must understand the number of property owners that will be installing second meters for the next fiscal year and adjust the proposed rates to mitigate the impact to the sewer budget.

QUESTIONS & COMMENTS

1. Will there be any consideration of a tiered rate structure for the outdoor water? In order to understand whether to support second meters, need to be able to compare the rate structure that is being proposed, and you say that rates cannot be considered yet but they really need to be part of the conversation in order to understand the choice between what we have in some modified form versus adding the second meter model because it is very hard to say yes lets go to second meters and we will wait and see what the rate ought to be later without understanding what the impact of that is going to be. I remember doing an analysis of what the impact of the shift to second meters would have been several years back and it was quite substantial, in the sense of the savings that were effected but also there was a shift to other users. I hope that part of the analytic work will enable us to somehow compare apples to apples and understand what we are going to do as a shift, because to say to someone with a second water meter your water bill will go down if use water outside does not really tell people without a second meter how much their sewer bill is going to go up if we make this shift. It is important that the Board be informed about that shift in advance. (Baker)

The short answer is that if we lose 15% of the sewer revenue because people switched to second meters the City must make that loss up within the sewer budget. The City has to end up with the exact same amount of revenue whether second meters are implemented or not. By being able to lower the water rates a little bit and charging more for water that is going out the second meters, the city is able to somewhat soften the blow in customers' bills. There are additional slides in the presentation that detail the total impact of the second water meters and the proposed changes to the storm water fee.

2. Historically, one of the reasons that the sewer rates have stayed on the single meters is because a large part of the cost is not related to flow at all. It is a matter that has to be allocated somehow and the City has said that because there are fixed costs that are unrelated to flow, they will be recovered by putting them on the water bill. The second water meters are a major policy shift and it does mean that when people say "I am paying for things that are not flowing in the sewer" that is true but the City as a whole is paying for a lot of costs that are not flowing to the sewer because of the way the sewer bill is handed to the City from the Massachusetts Water Resource Authority (MWRA). I think it is important to understand what the impact of that piece of it because so much of it is not flow related. (Baker)

3. What does strength of flow mean as it relates to sewer? (Albright)

It is related to composition and types of solids in the sewer flow. The reason that there is a portion of the MWRA assessment associated with strength of flow is to capture the cost of material put into the sewer by communities with a significant amount of manufacturing. The material associated with manufacturing requires

much more treatment than sewerage generated by the average residential household.

4. The city assumes that its low water users are also the low sewer users, is that a comfortable assumption? (Albright)

Yes

5. Is there any consideration given to providing sewer and water bill discounts to people who participate in federal and state programs that provide assistance? Does the City offer any discount based solely on income? (Yates)

The Administration expects to keep the same discount structure that it currently offers in place with the new rate structure. The City does not offer any discount based on income but Commissioner Turocy will investigate to see if that type of discount is allowable.

6. What is the average strength of flow assessment in other communities? (Danberg)

The City Engineer does not have the information readily available but can provide later.

7. What is the break even in terms of the cost of installing a second meter compared to generated savings in utility bills? (Danberg)

About 6,000 accounts would benefit from the switch to second meters. The estimated cost of installing a second meter is \$750 but some properties will require more plumbing than others. If a property owner uses more than 25 HCFs per year, it would be about a three year payback.

8. Will there be any difference in how property owners who do not occupy their property on a full-time basis are charged? (Danberg)

There is no consideration or impact if a property owner is a part-time resident. The charge for the water/sewer use will reflect the exact use per quarter.

9. I take it that if you are a heavy (manufacturing) user, you are not paying a higher rate due to the fact that you are contributing to the “strength of flow”, is that correct? (Laredo)

That is correct because the City does not know that and cannot measure that on an individual basis. It is really a communitywide basis. Certain users contribute more to the City’s flow rate and the City is not able to assess differently.

10. I would like to have a better understanding of what the utility discount programs are, why they are established that way, what the logic is behind it, what the cost is to the other rate payers by offering it. If we are examining this, we ought to look at that and try to understand the rationale behind it. (Laredo)

The information will be provided.

11. I think we should pay attention to the question Ald. Baker posed. I think that is the fundamental one about switching the way that the policies work. It is the one that is an aldermanic big picture policy question. The shift in my mind makes sense but it should be talked through. Fundamentally, we have a water enterprise fund that is completely separate from a sewer enterprise fund. For years now, the City has been co-mingling how the City pays for things in those accounts. The fees that are charged for sewer should be related to the sewer usage and for years the water used outside has been included in the sewer usage fee. It is inconsistent and not how fees are supposed to be charged but this shift is a little bit painful as people adjust to what is a more correct way of charging fees. What is so elegant about the way that the new rate structure is designed is that there is an understanding that water use is water use and sewer use is sewer use but the small user has been taken into consideration. I think the whole water conservation thing is important. The fee for the irrigation water is also the other one we should return to. It is a really tricky one. Should folks who use a small amount of water outside pay less than people who use a lot. Should the City be charging one flat rate for outside water to discourage everyone to conserve water or should the City be sensitive to people who use a small amount of water outside. Those are the two things to sort through, discuss, and debate. (Fuller)
12. I like that there is a premium on the water for outside usage because that is the non-conservation aspect of the City's water usage. (Albright)
13. The challenge is that the City aggregated and disaggregated and is now proposing to aggregate again. If there were a way to measure how much actually went down the sewer and you had a sewer meter opposed to a water meter, we would have a sewer rate tied to use and everyone would say that is fair even though population and flow play into the sewer rates. There needs to be a mechanism for assessing that and you could just say that the sewer cost is partially a City cost because it is a population cost. We assess a chunk of the sewer cost to the taxpayers and we would put a piece of it that represents flow on a sewer meter if we had them and that conversation gets very messy. The advantage of the current system is that it said that the City cannot get at what sewer flow is but we can get a proxy for it by looking at the water that comes in and the assumption is that some of it will go down the sewer and be charged and the customer will pay a portion of that. I am not willing to take the Commissioner's characterization that our current system is unfair. It is a system that allocates some of the costs that are fixed and unrelated to flow all over the City based on the water use. It is not an ideal system, necessarily, but the problem is whether it is better than the alternative. If you think a second meter is really a good idea, you need to remember that there are sewer charges that are going to be picked by

everybody that are not flow related. The City is saying that it is going to make it more expensive for everybody who does not have a second meter on their sewer charge because you have got that big chunk of \$9 million that you have to recover but we think that your water use is going to go down so you are going to be somewhat less worse off than you might have been. Part of the challenge is figuring out who is going to be less worse off and how much are they going to be less worse off and were does this outside meter rate go. I tend to agree with Ald. Albright, if we do go to that there ought to be a sense that the outside use is not a preferred use. The irony is that there may be internal uses that are not conserving at all because of the way people use it but we have at least made the distinction between what you might call household and life use as opposed to more of an amenity use. I think that it is very important to not lose sight of the fact that we are using the existing water rate as a proxy for allocating the sewer costs, which are not flow related and so if we go to a situation that puts all of those on somebody because of their water use in one case and not on water use in another case, we are still not doing exactly what the system is doing to the City, which is imposing costs that are not flow related on everything. (Baker)

14. Earlier this evening, heard that this was not a discussion on rates but it is turning into that. I understand why people want to do that but I think that is premature and the first issue the Aldermen need to decide is whether or not to go to a second meter system. As everybody knows, the Board plays a major role in the setting of the rates, and there will be plenty of time to have that discussion. The Aldermen are going to have to get some knowledge of how this is all going to work if we go to work if we go to a second meter. If we are going to get this done in the timeframe that has been laid out, we are not going to have all the information that we hope to have and I hope it does not turn into that. To me, either you are comfortable with the current system as it is or you believe that it is unfair and therefore I assume you would vote to go to a second meter. I hope we are not going to get bogged down talking about every piece of minutia. I for one am sick and tired of being asked when we are going to take some action on this. I think the Board needs to bear down and decide whether to go to the second meter or not and deal with the rates, as the Board sets them. (Gentile)
15. How would second meters and a new rate structure impact municipal buildings and the budget? (Leary)

Right now it will be about a \$90,000 increase to the municipal operating budget that is as much due to the sewer costs that would increase because some of the City's buildings use a significant amount of water indoors, like the schools. this as well assumes the impact as a result of changes to the storm water rates. The whole package will have a significant increase to the general fund budget for the City but the revenue then goes back to the enterprise funds. The City will be putting in second meters in every building.

16. Could you provide information from other communities that have converted to second water meters that includes the process, what they learned, and what they feel are best practices? (Johnson)

The Administration will provide the requested information. The Commissioner gave a rough estimate that about half the MWRA communities allow second meters.

17. This is new to some Aldermen. I think the problem we need to solve is to think through the rate structure because if we make a decision to go to second meters we are creating a constituency, who are going to come to us looking for a situational advantage and certainly anyone that is in the business of installing outside irrigation systems is going look at this as an opportunity. We really need to understand what the rate impacts are going to be before we go to second meters. I think it is a big mistake to try to make the decision on second meters without understanding what the impacts are going to be, because people are going to ask us. (Baker)

It is the Water/Sewer Working Group and the Administration's intention to get as much information to the Board as members need to make the decision about restructuring the rates. Some of that will involve showing scenarios about impacts to the rates. The final rates will not be set until the Board has decided to do the second meters and the City knows how many second meters will be installed for the next Fiscal Year.

18. The Board is not going to know the exact impact of going to the second meters until people have second meters and the City understands the usage. The City will be adjusting its rates for probably the next several years. (Gentile)
19. It seems it would be very helpful to talk to municipalities that have second meters to determine what happened to their rates when they went with the second meters and how many people converted. (Blazar)

#153-13 PUBLIC FACILITIES COMMITTEE requesting periodic updates on the progress of the citywide storm water system assessment needed to define the scope of repairs to the system, as well as methods of financing the assessment and an accounting of the storm water enterprise fund. [04/02/13 @ 11:02 AM]

ACTION: HELD 6-0

NOTE: Chief of Staff Maureen Lemieux and Commissioner of Public Works David Turocy' presentation included the attached slides proposing a restructuring of the storm water fee based on impervious surface. The City was one of the first communities to establish a storm water fee in 2006. It is now a fixed fee of \$25 per residential property and \$150 for commercial properties, which generates \$750,000 annually for the storm water budget. The storm water revenue is used to support a 6-person crew, storm water operations and originally to provide \$150,000 in capital funds; however, the fund is currently insufficient to cover these costs. In addition, a goal is to more carefully account for separating storm water and sewer operations in

the budget. The Administration would like to increase the storm water fee to cover operations as well as to fund capital needs. In addition, the Environmental Protection Agency is implementing a new permit program that will increase operational costs.

The City is currently awaiting completion of a storm water infrastructure assessment being performed by Weston & Sampson that will provide the City with what infrastructure repairs are needed and what the capital costs are for those repairs. Weston & Sampson has completed the field work needed for the assessment and provided an Executive Summary that was attached to the agenda. The intention is to develop a multi-year plan to address the infrastructure needs similar to the sewer and water capital plans. The City will prioritize the storm water capital projects and will likely begin by addressing flood prone areas of the City. It is expected that in order to address the storm water capital needs the City will need to generate \$2.3 million per year in revenue over multiple years.

The Administration would like to base the storm water fees on impervious surface area. Impervious surface is any material or structure that prevents water infiltrating into soil. To do this the proposal is to have a fee based on Equivalent Residential Units (ERU). An ERU equals 2,600 square feet. The City has the data necessary to calculate impervious surface for each commercial or tax exempt property in the City.

In order to generate the needed \$2.3 million in storm water revenue the Administration is proposing an increase from \$25 to \$60 for a single family residential property. For commercial and institutional (tax exempt) properties, the proposal is to charge \$60 for the first ERU plus \$25 per each additional ERU – instead of the flat \$150 fee. By increasing the rates, and charging by impervious surface area, the City will generate enough funding to run the storm water operation and fund \$1 million in capital projects. The Administration is planning on providing notice to all commercial and tax-exempt properties well in advance of any implemented change to the rates.

The Administration intends to work within its commitment to only increase utility rates overall 3.9% per year. The restructuring of the water, sewer and storm water rates have been evaluated and meet that commitment. The presentation included the estimated overall impact of the proposed total rate restructures to property owners. 87% of property owners will see less than a \$200 increase and 63% will see less than a \$100 increase in their utility bills. The City has saved significantly on the MWRA sewer assessment as a result of all of the work done to reduce infiltration into the system. Those savings have mitigated some of the impact to the rate payers. It was pointed out that the figures are all based on 2015 rates.

The Administration is planning on having additional discussions in the near future on both rate restructure proposals but really needs to know whether the Board would like to move forward with the second water meters and the rate restructures for water, sewer and storm water. The sense of all the Aldermen present was that they would like the Administration to proceed with the proposals. The Administration will return in November with the answers to questions, draft ordinance language for rate restructures, strategy for public outreach and any other further information.

QUESTIONS & COMMENTS

1. It seems to me that the Administration is trying to tie storm water into the discussion on the water/sewer rate structure discussion from an overall rate increase perspective. I personally would separate out the discussion. Here is why – It seems to me that we have an unmet need in the storm water side that is being quite clearly illustrated by some of the work we are doing. It is a very substantial need and an extremely compelling need and a need that has to be met irrespective of what the City does with the water and sewer rates. It seems to me the water and sewer rates are an argument about various aspects of fairness. The storm water is different. It is a need that we have identified that we have not taken care of that we need to devote a significant amount of funds. I am not sure that the number (\$2.3 million) while a vast increase over what we are doing is going to be nearly enough. I for one would be completely supportive of raising the rates to almost whatever we need to do within reason to start getting this work taken care of. We have done such a good job on the water and sewer piece in terms of starting to make improvements and are reaping rewards from that. I am concerned about tying the different rate structures together. I am concerned that we are not allocating enough money to the storm water infrastructure. (Laredo, Baker)
2. If we start putting more money into storm water what is that going to do to our plans for the water and sewer infrastructure? (Albright)

It would not impact it at all. As the Board is aware, the City has accelerated its sewer work because of the success. Where the City is able to pick up the delta is that the City's MWRA assessment has not been increasing at the forecasted amount and because of that the City can repurpose those funds to storm water. The issue with all of the capital work is that the City is bound by how much street work it can do in one construction season.

3. Please describe the abatement process for the storm water assessment fee? (Crossley)

There will be an abatement process for storm water depending upon how much of the storm water is captured and/or treated on site.

4. The city will need to determine how to fund and the timeframe that is appropriate to address the storm water infrastructure once the assessment is complete. The City will need to evaluate as it moves forward. Newton is also in line for significant MWRA grants and loans in the next few years.
5. Is there any way to include citizens in projects for storm water infrastructure? (Yates)

Yes, in the aspect of the EPA permit requirements. The City and conservancy groups will be providing information on what citizens can do on private property but the types of physical work needed is beyond what is normally done with volunteers.

6. I understand why Ald. Laredo raised the point he did on the storm water and the possibility of increasing the fees even more. I just happen to think that we need to stick to the plan we outlined for our constituents a few years back and I don't think it is going to be so hard to raise the money we need for storm water because of the success that we are having with our sewer program. In addition, I understand why we have to restructure the storm water rates. I just want to remind everyone that since we started talking about this I and a few other have stated that we really need to have a public hearing outside of our regular setting of rates because it is going to be quite a shock to some of our commercial and non-profits. (Gentile)

The Administration has not identified the timeframe yet. The Administration is waiting for a sense of how the Board of Aldermen would like to proceed with both the storm water fees and the second meters before determining how to get information out and do outreach to residents, businesses and tax exempt organizations.

7. Storm water improvements are so long overdue. I would be interested to hear, once you start talking to the larger commercial users, about their reaction the tremendous opportunity for mitigation. Also think you need to stress to people the tremendous water quality improvements you will see in our local waters. (Leary)

This \$30 million or so we may need to repair infrastructure will need to be paid for by someone, so while it is nice for large commercial properties to mitigate storm water, they will get huge abatements for it and drive the rate up for residential properties. The Administration may need to look again at the abatement program and reassess whether the abatement is too much. There are a number of conversations that still need to happen.

8. The City needs to take into account the years that commercial properties and tax exempt properties that have created storm water problems. I would advocate looking at the impact and talking to business regarding mitigating down the road. I think we have some stuff to do before we get to that point. I would like people to think about that in terms of the bigger picture (Johnson)
9. Are there any grants available for storm water work?

The Commissioner is not aware of any programmatic grants like the MWRA offers but the Administration does look for those opportunities. The City currently has a FEMA grant for \$500,000 for storm water. There is not a lot of grant fund available right now for storm water but opportunities may grow.

If there are any further questions for the meeting in November, they should be forwarded to Committee Clerk Shawna Sullivan in the next week or two. The Committee adjourned at 9:25 PM.

Respectfully submitted,

Deborah Crossley, Chairman

Utilities



Water / Sewer / Stormwater
Rate Restructures

Utilities – Water/Sewer/Stormwater



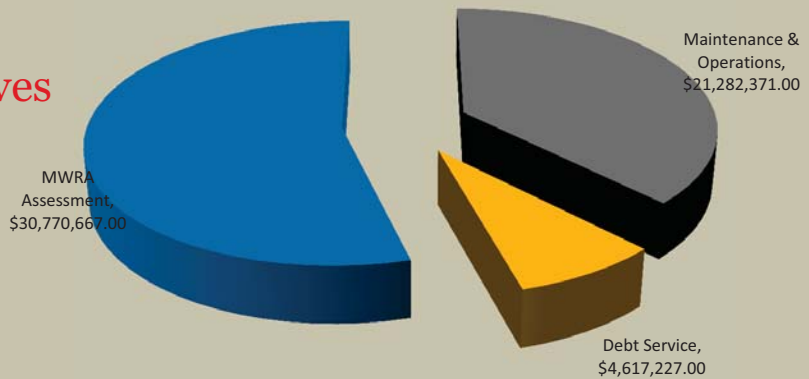
Water / Sewer
Rate Restructure

Water/Sewer Rate Restructure



• Water/Sewer Budget- \$56,670,265

- MWRA Assessment
 - ✦ \$30,770,667
- Ops/Maint & Reserves
 - ✦ \$21,232,371
- Debt Service
 - ✦ \$4,617,227

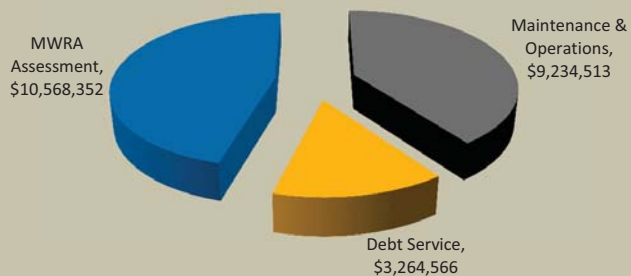


Water/Sewer Rate Restructure



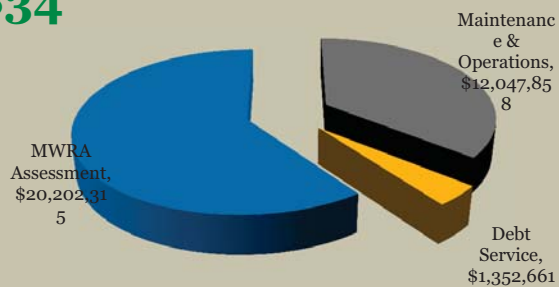
Water Budget - \$23,067,431

- MWRA Assessment –
 - ✦ \$10,568,352
- Ops/Maint & Reserves
 - ✦ \$9,234,513
- Debt Service
 - ✦ \$3,264,566



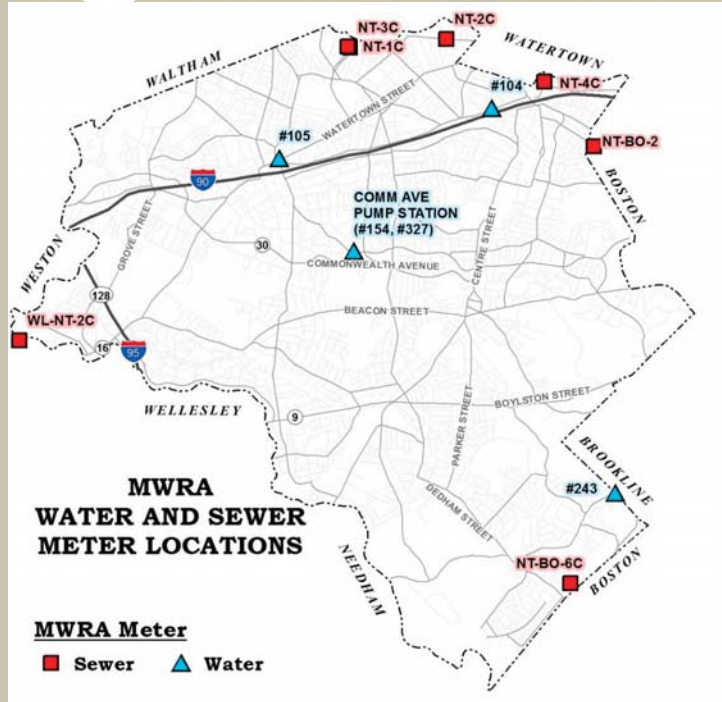
Sewer Budget - \$33,602,834

- MWRA Assessment –
 - ✦ \$20,202,315
- Ops/Maint & Reserves
 - ✦ \$12,047,858
- Debt Service
 - ✦ \$1,352,661



Water/Sewer Rate Restructure

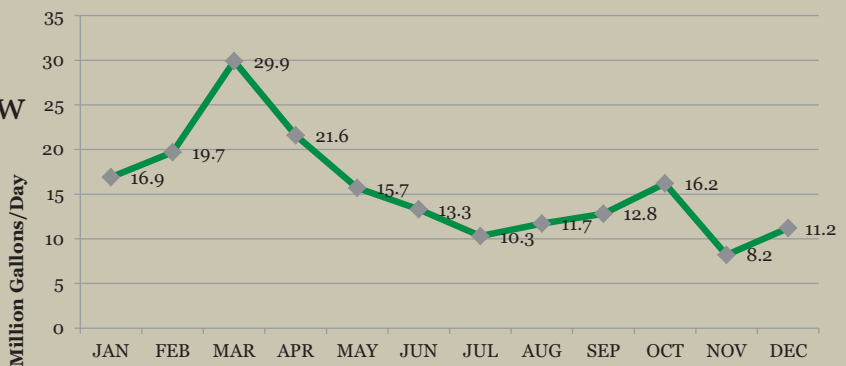
- **MWRA**
 - Meters Water at 5 locations
 - Based on Previous Year
- **MWRA**
 - Meters Sewer at 7 locations
 - Based on 3-year ave. Flow/Pop./Strength
- **City**
 - Meters Water only at Residence/Business
 - Sewer metering is not feasible



Water/Sewer Rate Restructure

Sewer Flow M Gallons/Day

- Peak in March and October
- Infiltration & Inflow



Water/Sewer Rate Restructure

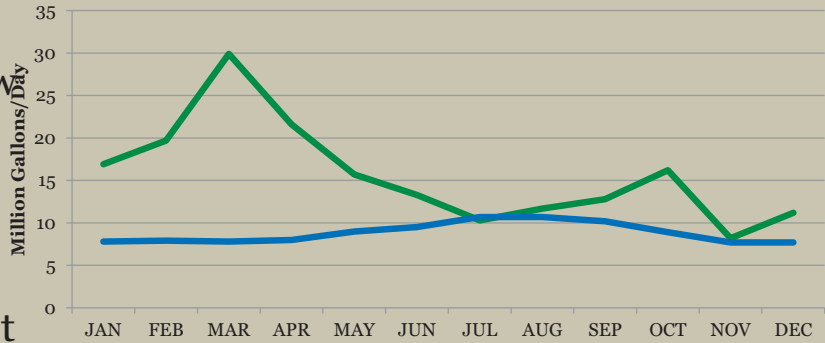


Sewer Flow

M Gallons/Day

- Peak in March and October

- Infiltration & Inflow



Water Flow

M Gallons/Day

- Peak in July/August

- Irrigation use

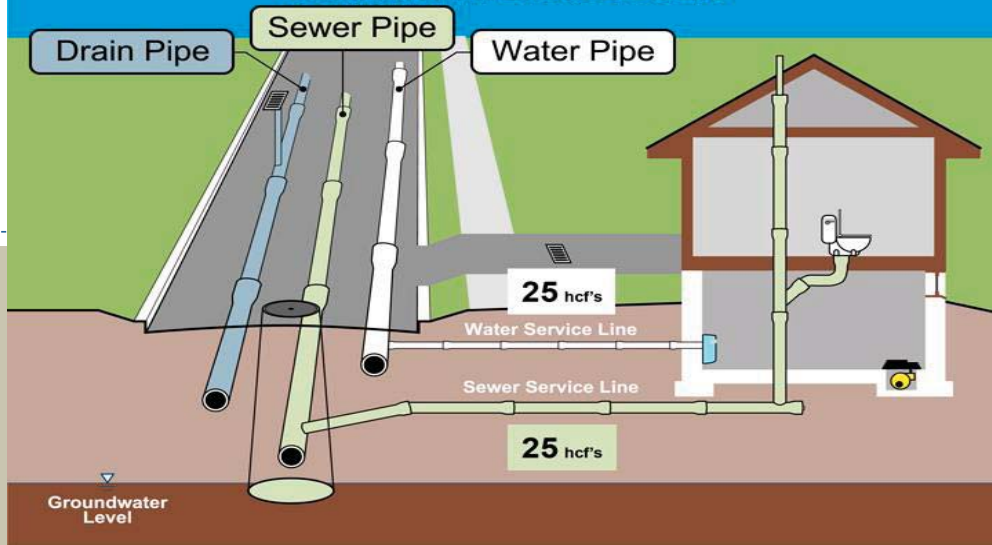
Water/Sewer Rate Restructure



FY 2015 Water/Sewer Rates

<u>HCF</u>	<u>Projected Consumption</u>	<u>Water Rate</u>	<u>Sewer Rate</u>	<u>Water Revenue</u>	<u>Sewer Revenue</u>
0 - 20	1,100,000	6.07	8.81	6,674,536	9,687,040
21 - 70	1,300,000	7.27	10.58	9,454,900	13,751,296
> 70	775,000	8.74	12.70	6,771,942	9,840,640
TOTALS:	3,175,000			22,901,378	33,278,976

2nd Meter (Irrigation) CURRENT AVERAGE USER



Scenario #1

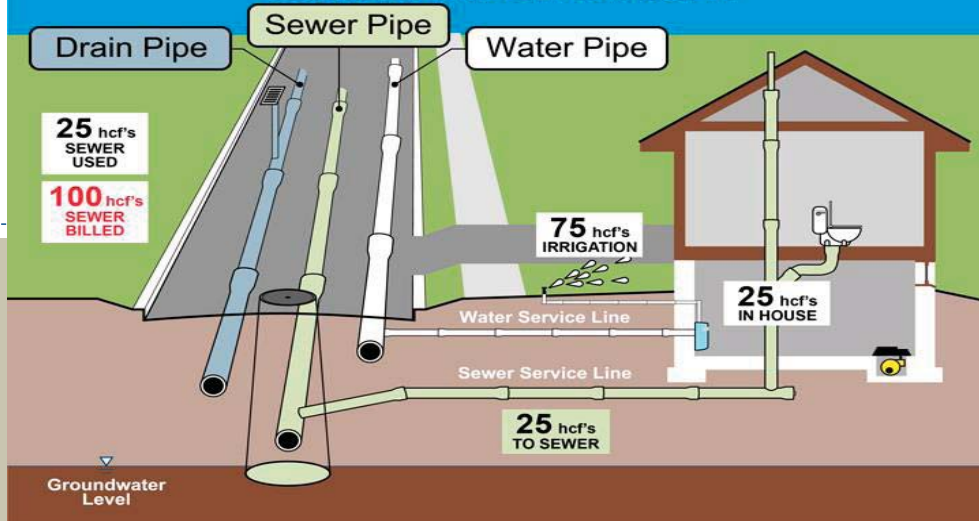
Current resident

No irrigation use

25 hcf's/qtr; 100hcf's/yr

	Quarter	Annual
Water	\$ 152	\$ 608
Sewer	\$ 224	\$ 896
Total	\$ 376	\$ 1,504

2nd Meter (Irrigation) CURRENT IRRIGATION USER



Scenario #2

Current resident

Uses irrigation - 1/2 year

25 hcf's/2 qtr; 100hcf's/2 qtr
250 hcf's/yr

	Quarter	Annual
Water	\$ 719	\$ 1,742
Sewer	\$ 1,061	\$ 2,570
Total	\$ 1,780	\$ 4,312

Current Sewer Structure



Scenario #1			Quarter	Annual
Current resident		Water	\$ 152	\$ 608
No irrigation use		Sewer	\$ 224	\$ 896
25 hcf's/each quarter		Total	\$ 376	\$ 1,504
Scenario #2			Quarter	Annual
Current resident		Water	\$ 719	\$ 1,742
Uses irrigation 1/2 year		Sewer	\$ 1,061	\$ 2,570
25 hcf's/2 quarters; 100hcf's/2 quarters		Total	\$ 1,780	\$ 4,312

Water/Sewer Rate Restructure



- **Primary Considerations:**
 - **Provide sufficient resources for Utilities operations**
 - **Fairness to rate payers – pay for services rendered**

- **Secondary Considerations:**
 - **Sensitive to small users**
 - **Promote water conservation**

Water/Sewer Rate Restructure



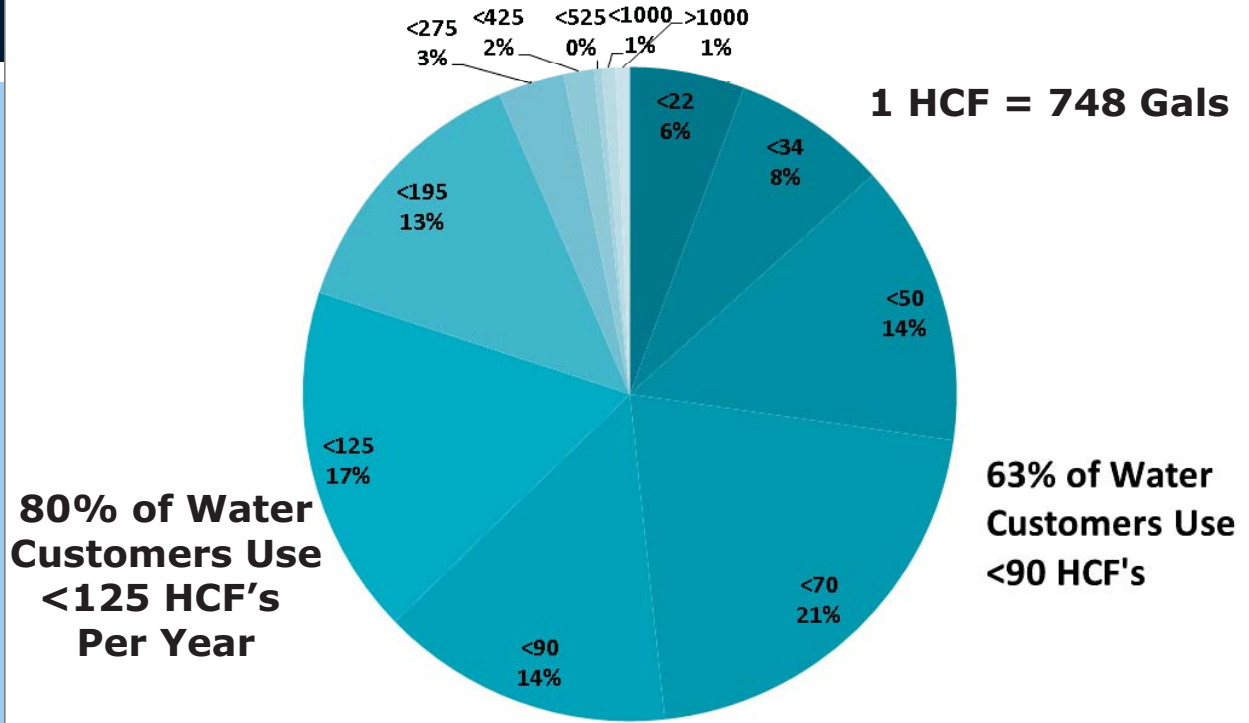
- Revised rate information

RATE STRUCTURE WITH 2ND METERS

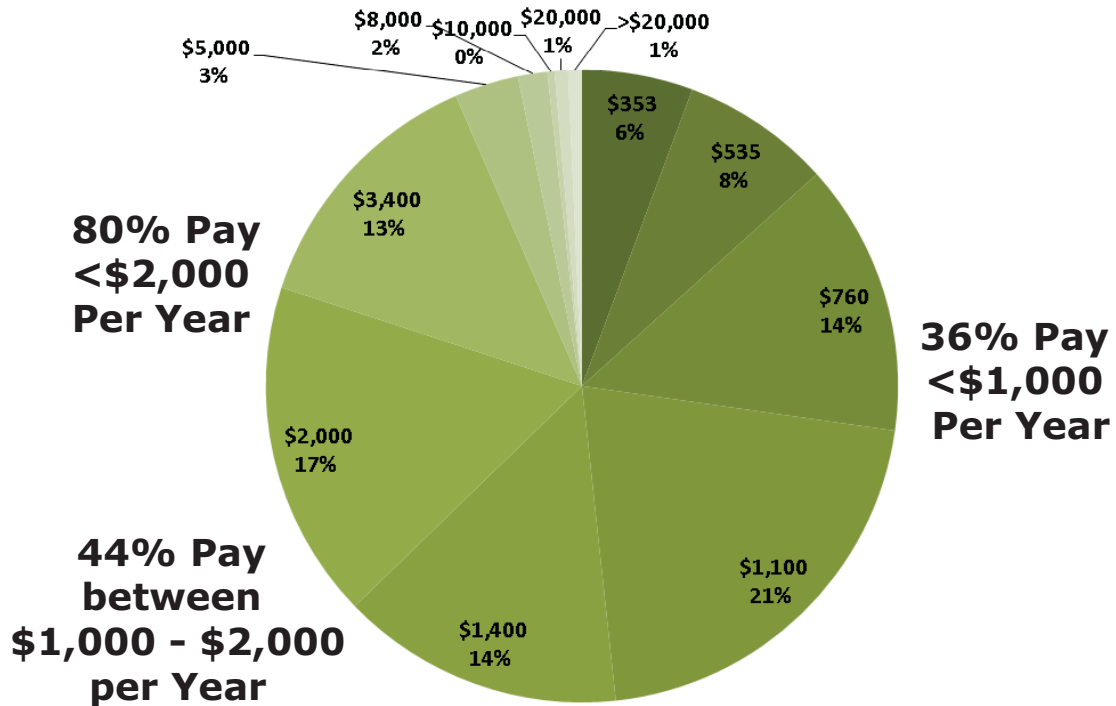
City of Newton, Massachusetts
Setti D. Warren, Mayor
October 1, 2014



How Much Water Do People Use??

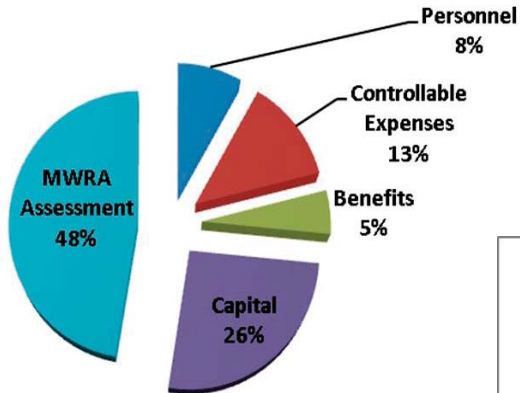


How Much Do Most People Pay



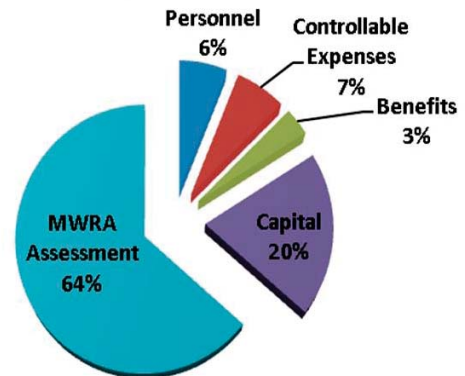
WATER & SEWER BUDGETS

Water Budget - \$22 Million



MWRA Sewer Assessment Based On:
Population – 46.3%
Flow – 38.4%
Strength of Flow – 15.3%

Sewer Budget - \$32 Million



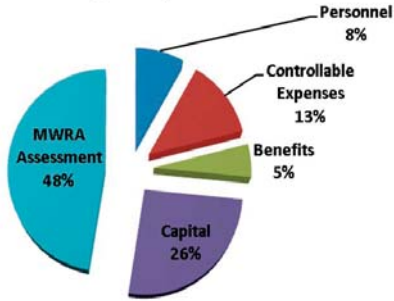
SETTING WATER & SEWER RATES

OPTIONS

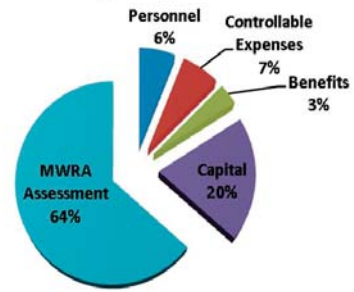
- FIXED FEE PLUS COST FOR UTILIZATION
- SINGLE RATE
- TIERED STRUCTURE

WATER & SEWER BUDGETS FIXED FEE PLUS USAGE

Water Budget - \$22 Million



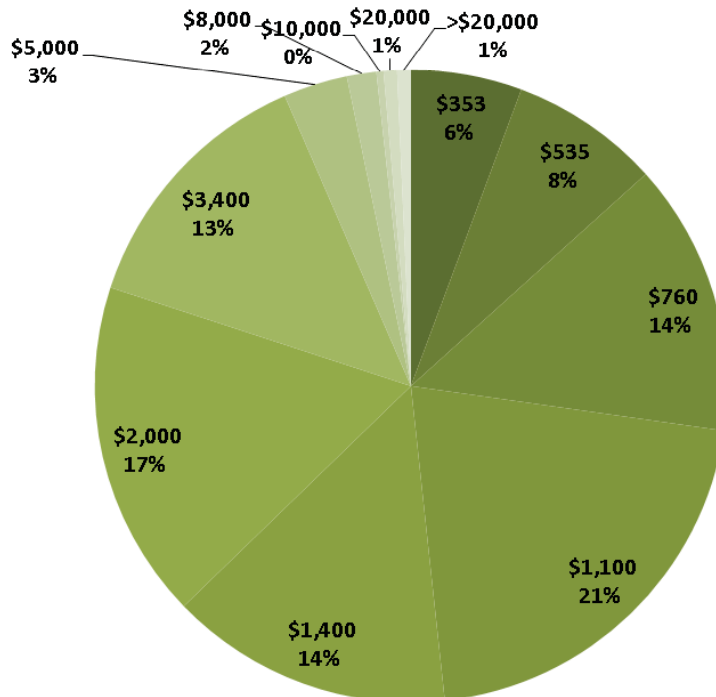
Sewer Budget - \$32 Million



**MWRA ASSESSMENT
NO FIXED COSTS
HOWEVER,
\$10 MILLION
≈\$312 PER RESIDENCE**

**FIXED COSTS
SEWER
\$17 MILLION
>\$531 PER
RESIDENCE**

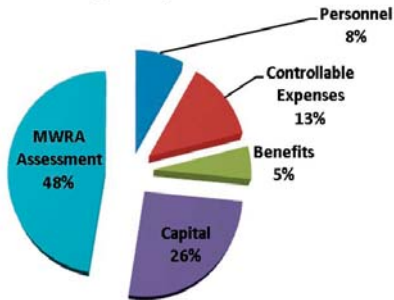
How Much Do Most People Pay



**≈9,000 Accts
Pay < \$843**

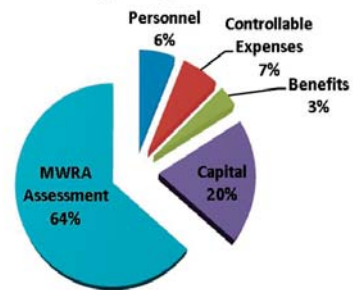
SINGLE RATES BASED ON 3,090,000 HCF'S

Water Budget - \$22 Million



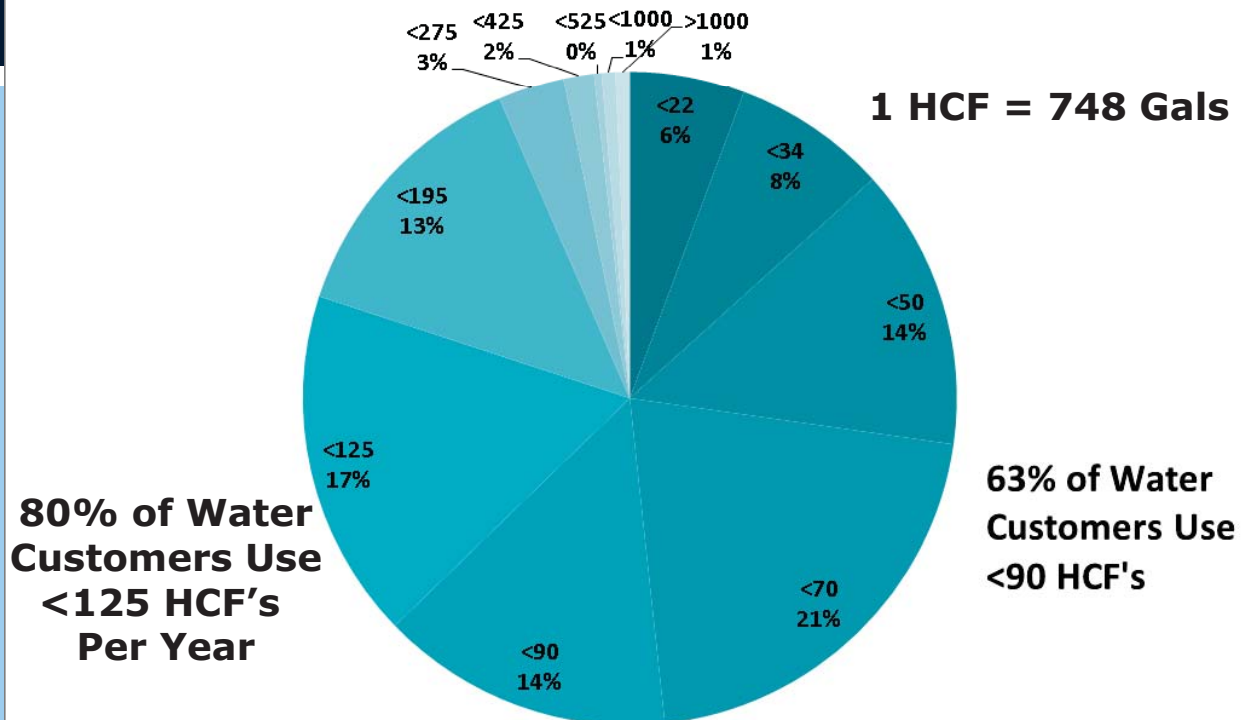
**WATER RATE
\$7.12 PER HCF**

Sewer Budget - \$32 Million

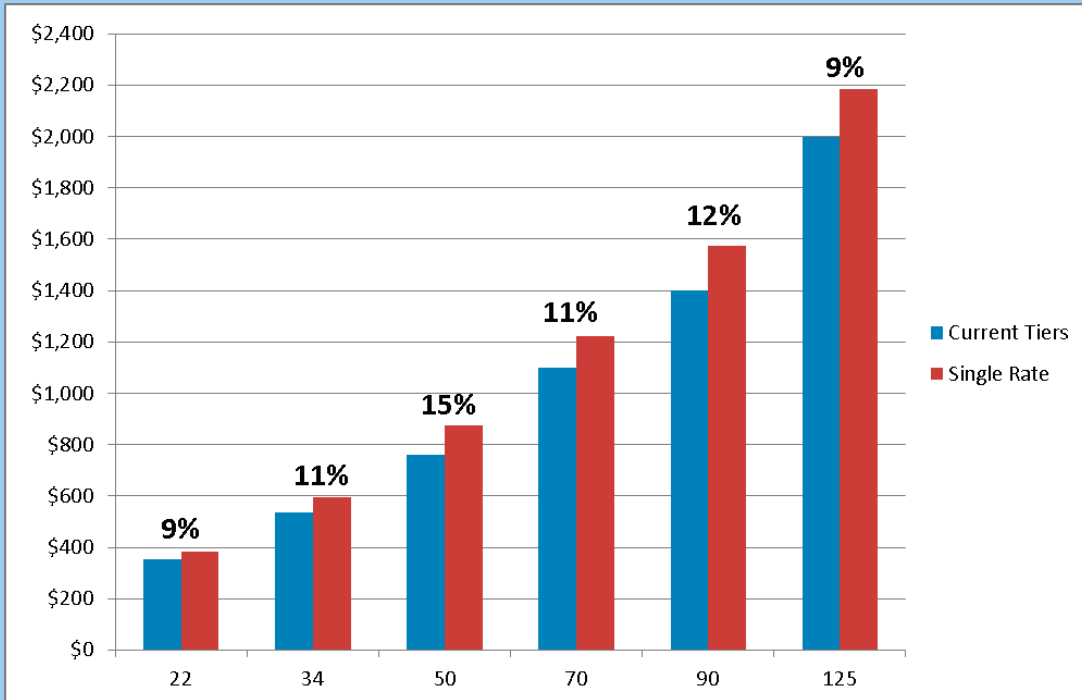


**SEWER RATE
\$10.36 PER HCF**

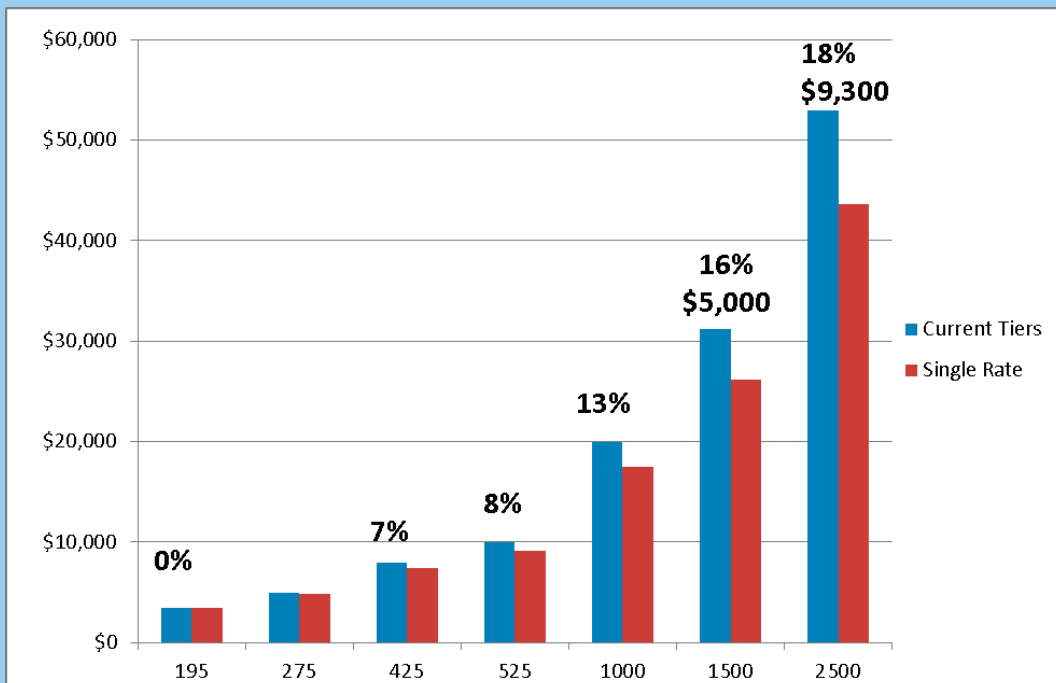
How Much Water Do People Use??



SINGLE RATE - LOSERS



SINGLE RATE - WINNERS



TIERED STRUCTURE

WHY USE TIERS??

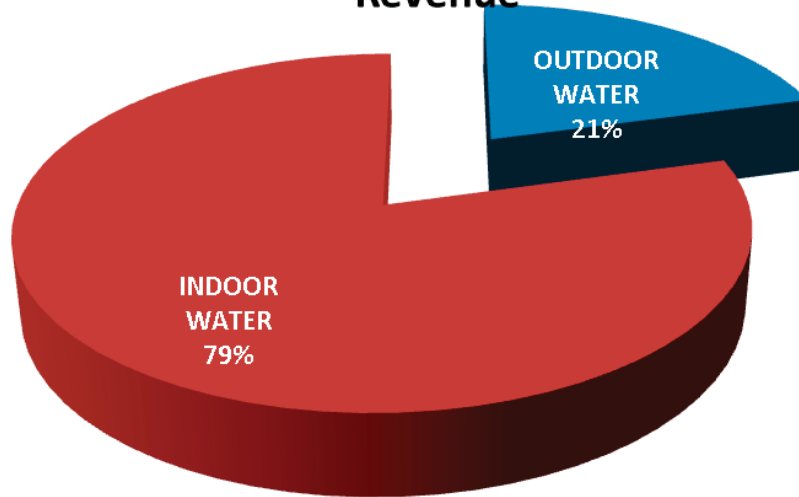
- ❑ PROTECT THE SMALL USER – LIFE SUSTAINING USAGE
- ❑ APPORTIONING THE CAPITAL COSTS
- ❑ PROMOTE WATER CONSERVATION

SETTING THE RATES WITH 2ND METERS

- UNDERSTANDING USAGE
- UNDERSTANDING THE BUDGET
- WHAT ARE THE CORRECT TIERS
- WHAT IS THE IMPACT OF 2ND METERS

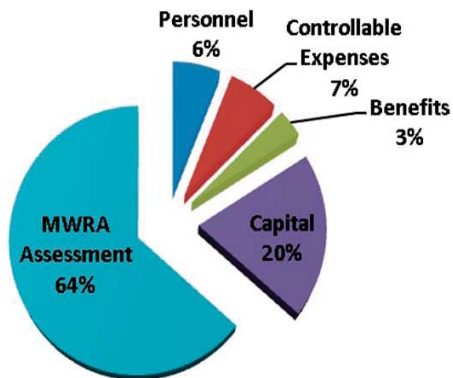
APPROXIMATELY 650,000 HCF'S OR 21%

Outdoor Water = \$6,700,000 of Sewer Revenue

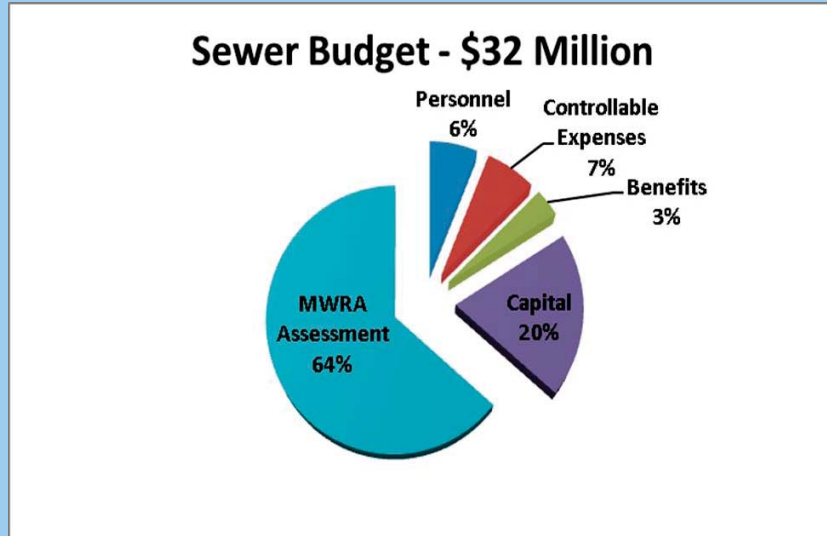


SEWER BUDGETS

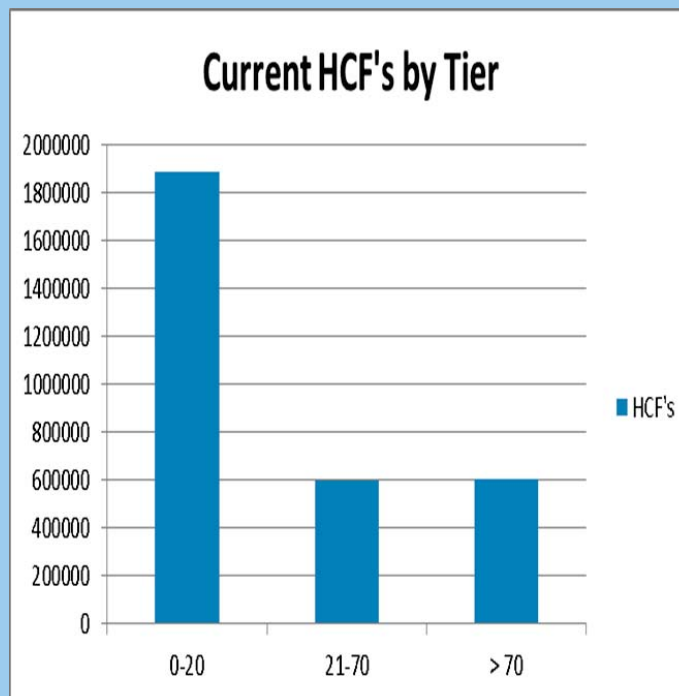
Sewer Budget - \$32 Million



SEWER BUDGETS



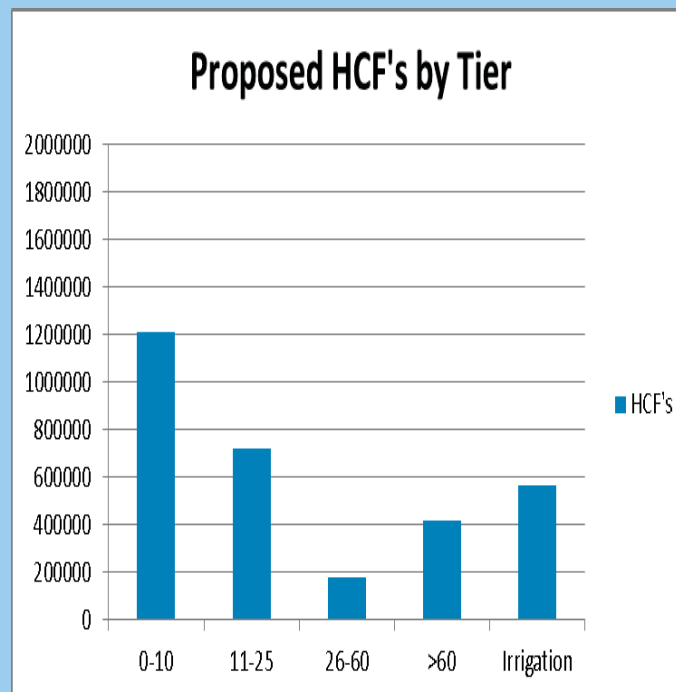
CURRENT TIERS



CURRENT RATE STRUCTURE

<u>HCF'S</u>		<u>WATER</u>	<u>% Incr</u>		<u>SEWER</u>	<u>% Incr</u>
0 - 20		\$ 5.84			\$ 8.60	
21 - 70		\$ 7.00	20%		\$10.33	20%
>70		\$ 8.41	20%		\$12.40	20%

WHAT SHOULD THE TIERS LOOK LIKE??



WHAT SHOULD ADDITIONAL TIERS LOOK LIKE???

<u>HCF'S</u>		<u>WATER</u>	<u>% Incr</u>		<u>SEWER</u>	<u>% Incr</u>
0 - 10		\$ 5.50			\$ 9.25	
10.1 - 25		\$ 6.40	16%		\$10.75	16%
25.1 - 60		\$ 7.70	20%		\$12.90	20%
> 60.1		\$ 9.25	20%		\$15.50	20%
Outdoor		\$ 9.00				

IMPACT IF ALL 6,000 MOVE AT ONCE????

Approx 600,000 HCF's

or

Approx 20%

IMPACT IF 1,000 CUSTOMERS MOVE EACH YEAR????

Year 1 - Approx 350,000 HCF's
or

Approx 10%

Process for 2nd meters



- Homeowner purchase meter & transponder from City vendor
- Homeowner contracts plumber to install meter and plumb necessary lines
- Utilities Division inspects/approves installation

- Notify City of intent by April 1st
- Rates take affect 1 July following installation

DISCUSSION

Utilities – Water/Sewer/Stormwater



Stormwater Fee Restructure

Stormwater Fee Restructure



- City established a Stormwater Fee in 2006
- Fixed Fee
 - \$25/Year – residential
 - \$150/Year – commercial
 - Annual Income - \$750,000
- Program Support
 - 6-person crew
 - Stormwater operations
 - \$150,000 Capital Funds

Stormwater Fee Restructure



- Program Support
 - 6-person crew –
 - Routinely augmented by Sewer Division personnel
 - Stormwater Operations –
 - ✦ Costs have increased to extent of using all capital funds
 - ✦ New EPA Permit will increase Operational costs
 - Capital Funds - \$150,000 Originally - \$0 Available Now
 - ✦ Stormwater Assessment underway
 - ✦ Capital Equipment needs

Stormwater Fee Restructure



Stormwater Assessment

- Localized Flooding
- Stream Maintenance
- Culvert Maintenance



Stormwater Fee Restructure



- Based on Impervious Surface
 - Residential (single family)
 - ✦ ERU – Equivalent Residential Unit
 - Commercial, multi-family
 - ✦ Ratio to ERU's

Impervious Surface:

- Any material or structure on or above the ground that prevents water infiltrating into the underlying soil.
- Impervious surface includes without limitation roads, paved parking lots, sidewalks, and roof tops.
- One ERU equals 2,600 square feet

Stormwater Fee Restructure



Both
businesses
currently pay
\$150

STORMWATER

CURRENT STORMWATER REVENUE

\$750,000

Current Impervious Area Breakout and Rates:

Customer Class	Approximate Impervious Area	Cost	%
Residential	73,000,000	\$25	65%
Commercial	20,000,000	\$150	18%
<u>Tax Exempt</u>	<u>19,000,000</u>	<u>\$150</u>	<u>17%</u>
Total	112,000,000		100%

SETTING WATER & SEWER RATES

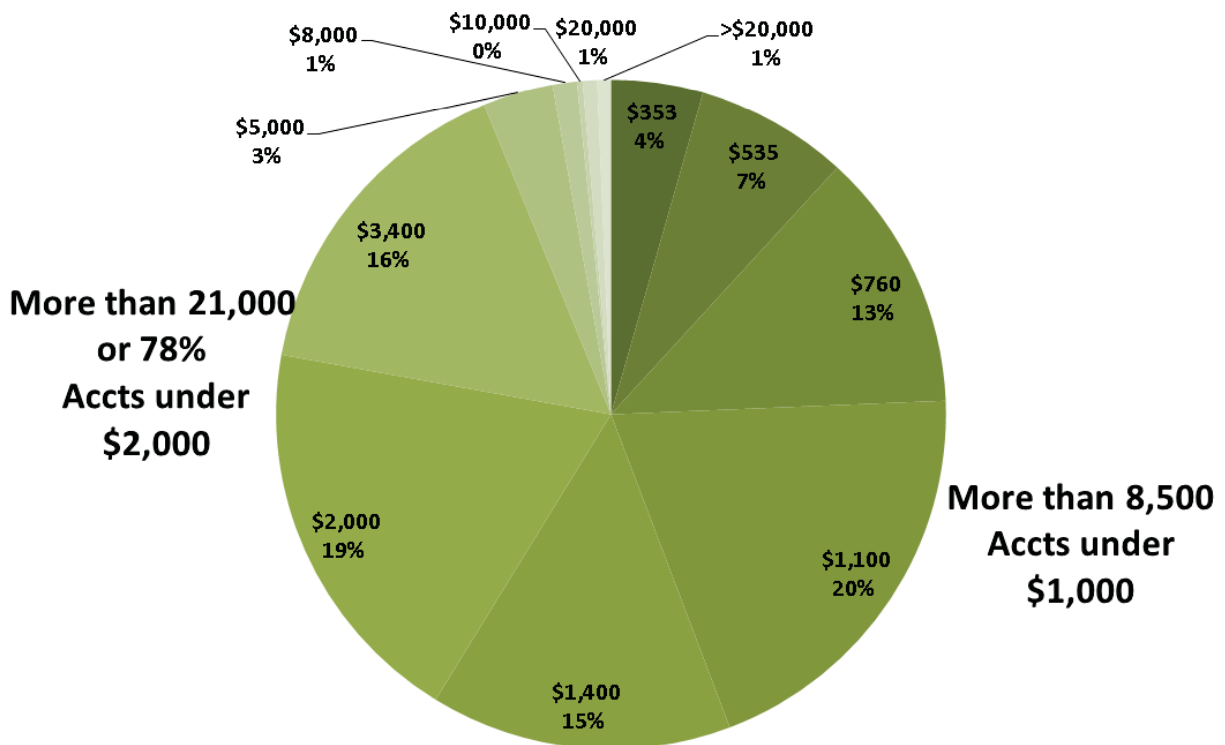
STORM WATER NEEDS
ANNUAL BUDGET \$2.3 MILLION

REQUIRED STORMWATER REVENUE \$2,300,000

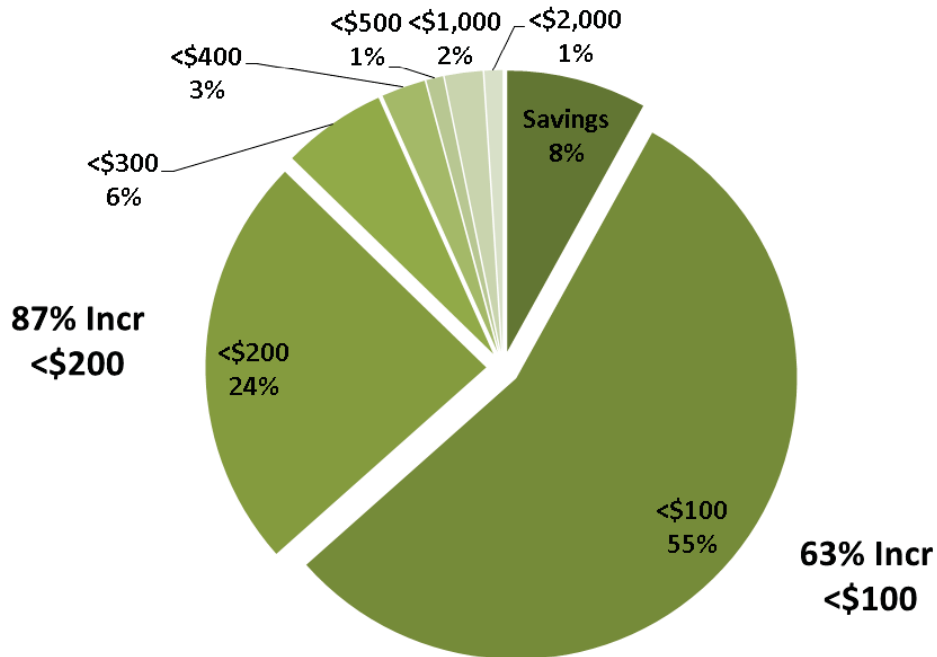
Current Impervious Area Breakout and Rates:

Customer Class	Approximate Impervious Area	Cost	%
Residential	73,000,000	\$60/Residence	65%
Commercial	20,000,000	\$25/extra ERU	18%
<u>Tax Exempt</u>	<u>19,000,000</u>	<u>\$25/extra ERU</u>	<u>17%</u>
Total	112,000,000		100%

How Much Will People Pay???



How Much More Will This Cost????



Revised Sewer Structure



Scenario #1		Quarter	Annual
Current resident	Water	\$ 152	\$ 608
No irrigation use	Sewer	\$ 224	\$ 896
25 hcf's/qtr; 100hcf's/yr	Total	\$ 376	\$ 1,504
Scenario #2		Quarter	Annual
Current resident	Water	\$ 719	\$ 1,742
Uses irrigation 1/2 year	Sewer	\$ 1,061	\$ 2,570
25 hcf's/2 qtr; 100hcf's/2 qtr	Total	\$ 1,780	\$ 4,312
250 hcf's/yr			
Scenario #3		Quarter	Annual
Future resident, 2nd meter	Water	\$ 719	\$ 1,742
Uses irrigation 1/2 year	Sewer	\$ 224	\$ 896
25 hcf's/2 qtr; 100hcf's/2 qtr	Total	\$ 943	\$ 2,638
250 hcf's/yr water			
100 hcf's/yr sewer			

Utilities – Water/Sewer/Stormwater



- Questions?