

**Ann Arbor Water and Wastewater
Cost of Service Study and Rate Analysis
Advisory Committee Meeting Summary
Tuesday, July 11, 2017 – 4:00 p.m. to 6:00 p.m.**



1. Participant List – See Attachment #1

2. Introductions

3. Desired Outcomes Poll Results:

- Understand what constituents want in rate structure
- Understand how rate structure impacts billing
- Learn about affordability
- Learn what the key issues are in the rate analysis
- Define community's goals
- Here to observe
- Networking
- Understand the rate structure

4. Chartering Agreement Review – Lynne Chaimowitz, City of Ann Arbor

- Purpose of the Advisory Committee
 - i. Provide oversight of study process and related issues.
 - ii. Ensure consistency in project approaches.
 - iii. Focus on quality assurance by assessing work products and examining project recommendations.
 - iv. Identify gaps, conflicts, and/or deficiencies on topics relevant to the project.
 - v. Provide feedback from a community perspective.
- Membership and Leadership
 - i. Individuals with varied backgrounds and expertise regarding water and wastewater as they affect Ann Arbor and its residents.
 - ii. Create a group that effectively and respectfully provides feedback on complex issues relating to water and wastewater rates.
 - iii. The Advisory Committee Leader and main point of contact is Lynne Chaimowitz.
 - iv. Materials will be distributed at least one week before the meeting and Members are asked to review materials distributed prior the meetings for discussion.
- Schedule and Logistics
 - i. All meetings will be held from 4:00 to 6:00 p.m. on July 11, August 23, September 19, October 25, November 29, December 20.
 - ii. A web meeting option will be arranged going forward for those that aren't able to meet onsite or prefer to meet digitally. See Attachment #2 for information regarding the Go-To-Meeting web meeting.

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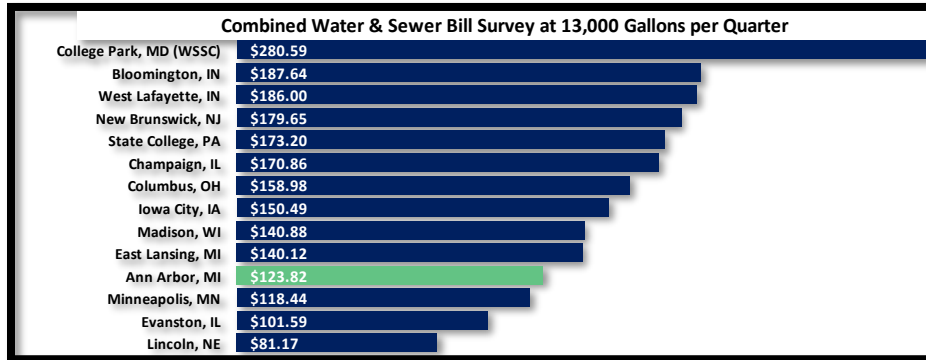
5. Project Review – Andy Burnham, Stantec

- Andy thanked the participants and stressed the importance of consistent participation in the process. It is critical to ensuring needs are met in a sustainable way.
- The Project:
 - i. Evaluate the needs of the system, values of the community, and expectations of the customers
 - ii. Engage the community to:
 - 1. Validate rate objectives (equity, affordability, conservation (or water efficiency))
 - iii. Goal: Recommendations to Council in December of 2017 for implementation in July of 2018 (next fiscal year)
- Background Information:
 - i. The last rate study was done 15 years ago by Carter Burgess. The evaluation included:
 - 1. Revenue Sufficiency
 - 2. Cost Allocation
 - 3. Rate Structure Alternatives
 - a. Use of Inclining Block Rate
 - b. Removed Minimum Use Allowance
 - 4. Rates have since evolved
 - a. Consolidated the 4th tier rate (concerns of large users)
 - b. Indexed annually to meet revenue requirements
 - ii. Summary of Current Rate Structure – See Attachment #3
 - a. Residential Water Rate Structure
 - i. \$1.55 per CCF for 1-7 CCFs
 - ii. \$3.37 per CCF for 8-28 CCFs
 - iii. \$5.89 per CCF for 29-45 CCFs
 - iv. Water Residential Customer Charge is \$11.25/quarter for standard 5/8” residential meter.
 - b. Water Commercial Rate
 - i. There are different rate structures for second water-only meter used in the home and for second water-only meter used for outdoor irrigation
 - c. Sewer Service Rate
 - i. \$4.58 per CCF/quarter

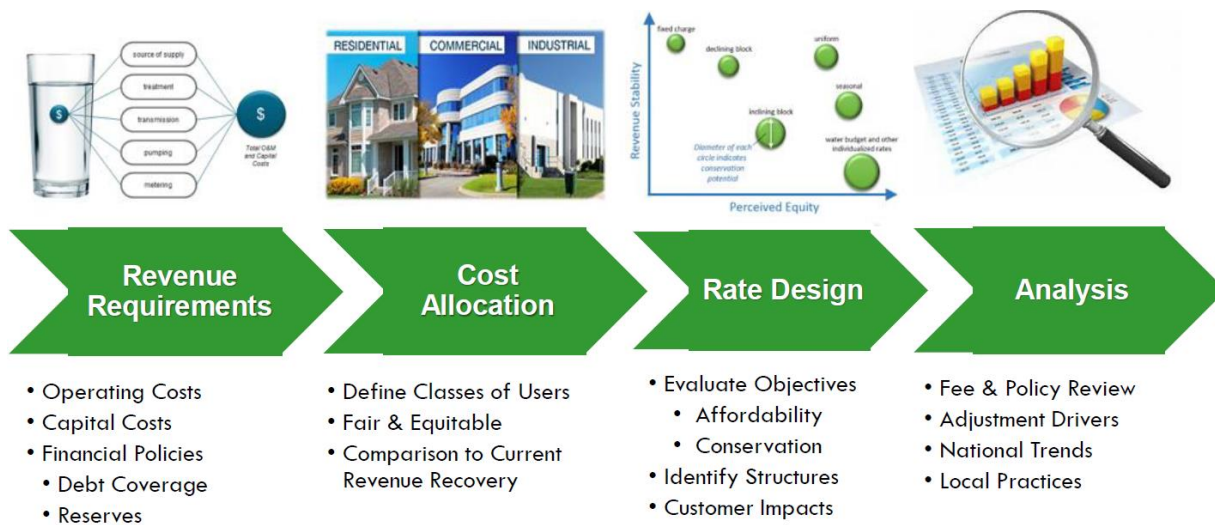
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iii. Quarterly Residential Fee Survey of similar cities with universities:



- Overview:
 - i. Study Objectives
 - 1. Project full cost of service
 - a. Refine multi-year financial management plan
 - b. Ensure full integration of capital and asset management needs
 - 2. Evaluate customer class cost allocations and rate structures with affordability in mind
 - 3. Engage community stakeholders
 - a. Solicit input and comments regarding community expectations related to water/sewer rates
 - 4. Develop dynamic model for future use
 - a. Long-term sustainability & ongoing financial management
- Steps in the Process:



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- Water and Economic Trends Observed:
 - i. Overall reduction in water use.
 - ii. Inflation has increased and household income has decreased.
 - iii. Water and Sewer Rates have increased at a rate 3x higher than inflation.
 - iv. \$1 Trillion needed for water and sewer infrastructure investment. Infrastructure costs alone could triple the size of a typical family's water bills.
 - v. Understanding these factors will be considered as affordability is addressed and linked to rates.
- Schedule and Path Forward
 - i. Currently populating financial models and initializing analysis
 - ii. Completion in late 2017 for 7/1/18 implementation.
 - iii. Council in Dec/Jan of 2017 – Hearings in April of 2018
 - iv. Advisory Committee Progress Meetings:
 - 1. Today is introductory
 - 2. August 23 – Revenue Requirements and Cost of Service
 - 3. September 19 – Cost of Service, Rate Structure and Affordability
 - 4. October 25 – Rate Structure and Affordability
 - 5. November 29 – Wrap-up / number finalization
 - 6. December 20 – Review presentation materials for Council
- Q/A
 - i. Q: Have rates always been adjusted through Council? A: Yes, rate changes are approved by Council.
 - ii. Q: How is sewer usage measured? A: Winter average water usage is used to bill for sewer charges.
 - iii. Q: How do you bill for multi-family complexes? A: The customer class is based on how the property is metered. One large meter is generally billed as commercial customer. Individual meters would be billed as individual customers. Setting a Multi-family rate class requires a big effort and valid data to confirm class.
 - iv. Q: Is their openness to creating new customer classes, such as, non-profits? A: It is always good to have the conversation. The key is grouping customers together in how they use water and how they place demand on the system. Some communities have many different classes in their commercial billing structure.
 - v. Q: If there is an apartment complex, do they pay at a higher commercial rate? A: The overall bill comparison would need to be done to understand it.
 - vi. Q: How did you select the communities in the billing survey? A: The criteria was of similar communities in the Midwest with a large university.
 - vii. Q: Do the compared communities belong to a regional authority or treat their own water? A: We can review and provide a differentiation between the two.

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6. Preliminary Survey Results – Lynne Chaimowitz

- Committee members were polled to ask if they had participated in the survey, only a few had completed the survey online. Lynne will send the survey link out to the committee to review and complete it.
- Of the 679 responses –
 - i. Geographic breakdown:
 1. 51% in 48103
 2. 28% in 48104
 3. 18% in 48105
 4. 3% in 48108
 - ii. 95% identified as residents.
 - iii. 46% rated infrastructure good or better; 31% rated it fair or poor.
 - iv. 31% are very satisfied with quality of water/sewer services; 47% are satisfied; and 8% are dissatisfied or very dissatisfied.
 - v. Top concerns about aspects of water and sewer:
 1. Being Able to Drink Water Straight from Tap (90%)
 2. Lakes and Rivers being safe for Swimming, Fishing, and Other Recreation (93%)
 3. Having a Robust Water Supply to Sustain my Community Through a Crisis (85%)
 - vi. Views regarding water bills:
 1. 73% are willing to pay higher water bill to improve and modernize the water systems to ensure safe and reliable water and sewer service.
 2. 27% believe their water bill is too high and would not be willing to pay more to sustain and modernize the water and sewer system.
 - vii. 277 Comments were received and currently being tabulated for review and discussion.
- Comments:
 - i. Water and sewer are really two different questions.
 - ii. I am concerned about the sample size and majority located in one area for the survey.
- Question/Answer:
 - i. Q: How was it distributed? A: Website, Social media channels (Facebook, NextDoor, and Twitter), Gov. Delivery, MLive Article, radio interview and press release.

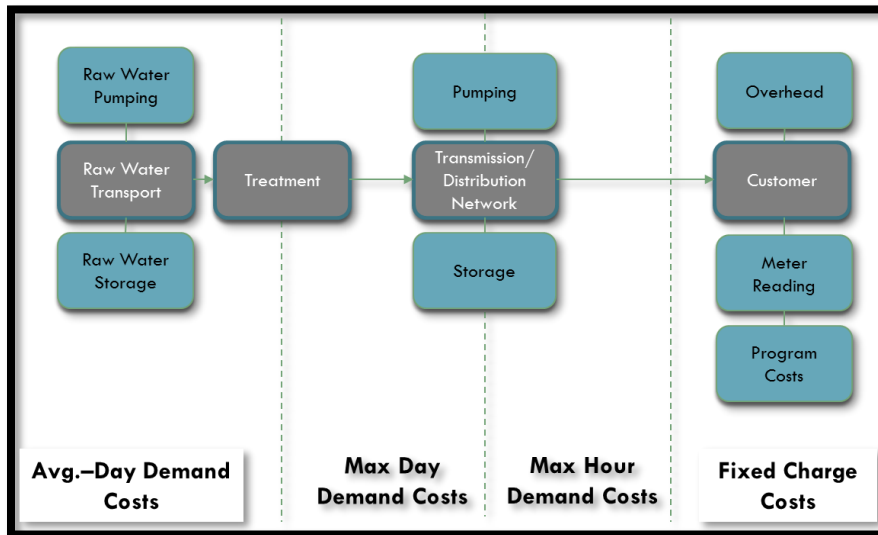
7. Initial Issues to be Addressed – Andy Burnham

- Traditional Cost of Service
 - i. M1 Principles of Water Manual provides detailed inter-class cost allocation (i.e. residential to commercial)
 - ii. Intra-class cost allocations in M1 are less specific (each tier)
 - iii. Communities rarely focus on tying conservation rates *directly* to costs
- How do we allocate cost to tiers?
 - i. Quantifying the marginal costs of water service
 1. Sources of supply

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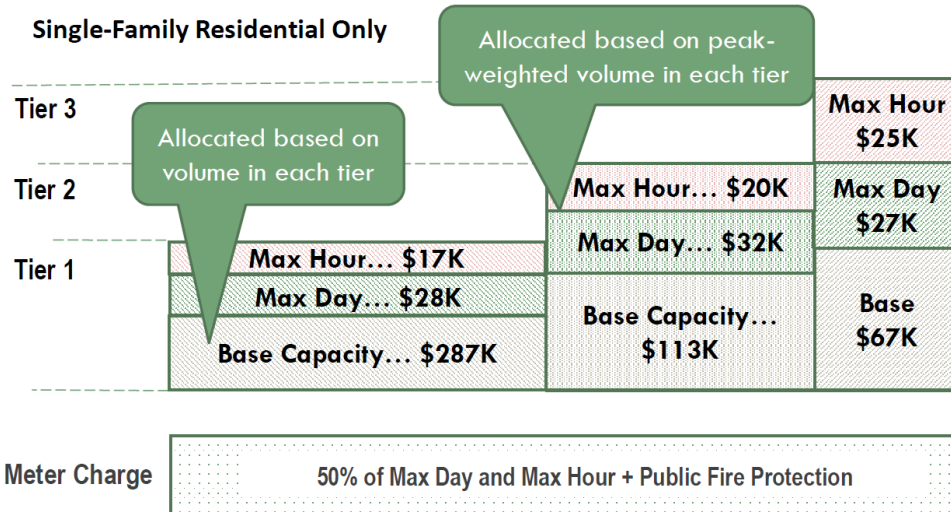
- 2. Allocation of max day and peak hour costs
- 3. Water conservation programs
- 4. Development of alternative supplies
- 5. Avoided costs
- ii. Other options: Use of unrestricted funds
- Why do we link costs to tier pricing?
 - i. Enhances intra-class equity
 - ii. Provides transparency
 - iii. Helps explain tiers to customers
 - iv. Helps utility understand its own costs
 - v. Enhances defensibility (some states)
- Cost Allocation Framework



- Example Distribution of Cost to Customer Classes

	Single-Family Residential	Multi-Family Residential	Commercial/ Institutional	Industrial	Landscape/ Irrigation
Base Capacity	\$467,672	\$89,326	\$55,276	\$5,622	\$30,755
Extra Capacity - Max Day	\$174,270	\$25,669	\$20,605	\$2,020	\$28,059
Extra Capacity - Max Hour	\$124,383	\$19,677	\$14,705	\$-	\$20,487
Public Fire Protection	\$17,234	\$4,706	\$2,309	\$370	\$-
Customer	\$469,924	\$42,768	\$20,990	\$1,443	\$9,315
Rate Revenue Requirement	\$1,253,490	\$182,147	\$113,887	\$9,456	\$88,616

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- What is a Representative Household?
 - Indoor Usage: 3 people using 59 gallons per person per day = 5,300 gallons a month
 - Outdoor Usage: 10,000 sqft lot with 2,500 sqft irrigable, 4,300 gallons for normal irrigation a month.
 - OR:
 - Outdoor Usage: 20,000 sqft lot with 5,000 sqft irrigable, 8,600 gallons for normal irrigation a month.
- Commercial Rate Structure
 - Commercial rate structure is effectively a uniform rate. Over 97% fall into the first tier.
 - Commercial customers have a profit motive to conserve

Commercial Tiers:	1 (Peaking <=5)	1 (Peaking >5,<8)	1 (Peaking >=8)
Rate:	\$3.81	\$7.26	\$12.44
Volume Distribution 2016:	97.8%	1.5%	.7%

- Readiness to Serve Charge
 - Readiness to serve charges based on meter size represent an equitable way to meet fixed cost recovery goals, while recognizing the greater potential instantaneous demands larger meters are capable of.

Meter Size:	5/8"	1"	2"	4"
Max Flow GPM:	20	50	160	1,000

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- Monthly Billing vs. Quarterly Billing
 - i. Benefits of Monthly Billing
 - 1. Affordability in the form of smaller more regular budget friendly bills
 - 2. Clear conservation signals stemming from a shorter consumption to bill generation time period
 - 3. Aligns with industry best practices
 - ii. Cost Considerations
 - 1. Increased resources for billing/collections. (Appx. 500k yr.)
- Summary of Key Issues
 - i. Cost Allocation Methodology
 - ii. Residential Tier Sizing
 - iii. Commercial Rate Structure
 - iv. Readiness to Serve Fee
 - v. Monthly vs Quarterly billing
- Comments:
 - i. Use the term conservation carefully and consider using efficiency. Conservation is a tough conversation in a water rich state. The idea is to optimize your system or be efficient with water usage.
 - ii. Data for Multi-family units include number of bedrooms.

8. Small Group Breakout Discussion

- Members were asked to break out and discuss concerns/questions that they have regarding the topics of Affordability, System Infrastructure, Residential and Commercial Rate Structures. Concerns/questions that were discussed are as follows:
 - Affordability
 - Legality
 - Data about usage
 - Identify type of user
 - What are other cities doing?
 - Efficiency vs. affordability
 - Jan Beecher suggested reviewing the report on the *Detroit Blue Ribbon Panel on Affordability* at:
[http://www.detroitmi.gov/Portals/0/docs/DWSD/BRPA%20Final%20Report%20\(incl%20Transmittal%20and%20App\).pdf?ver=2016-03-07-092812-797](http://www.detroitmi.gov/Portals/0/docs/DWSD/BRPA%20Final%20Report%20(incl%20Transmittal%20and%20App).pdf?ver=2016-03-07-092812-797)
 - System Infrastructure
 - Aging infrastructure
 - Transition of system from new/growth to built-out/stable
 - Wastewater Treatment Plant replacement/Water Treatment Plant is next
 - Area repairs → replacement costs

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- Systematic approach to Asset Management . . . consider level of service
- No accurate way to measure water production. It was noted that recent non-revenue water/water leak audits indicated that 92 to 94% of water is accounted.

- Residential Rate Structure
 - Multi-family rate – compare a co-op with 66 meters to single family
 - Sanitary
 - Footing Drain Disconnection - No incentives even though there are saving to the flow in the system.
 - Climate change needs to be considered

- Commercial Rate Structure
 - Equity between commercial and resident rate

9. Closing Comments – Liked Best and Need Next

LIKED BEST	NEED NEXT
● Respectful interaction	● End goal financially – Asset Management/Capital Improvement Plan
● Appreciated Affordability discussion	● Asset Management studies for Water/Sewer
● Participation (2 votes)	● City data on customer base
● On time	● Materials in advance for reviewing
● Found kindred spirits on equity	● Work arounds on affordability
● Overview (2 votes)	● Data on the City (3 votes)
● Presentation (2 votes)	● Definitions/glossary of terminology
● Knowledge	● BOLT explanation (3 votes)
● Snacks	● Know what information is wanted
● Break-out discussions (2 votes)	● More information (2 votes)
● Diversity of participants	● Learn rates
● Mix of individuals/staff/residents (2 votes)	● Multi-family structure
● Details on system	● Discuss Gelman Plume
● Organized	● Overview of # of customers, water production, usage changes
● Room environment – not too warm or cold	● More storm and sanitary discussion and equity
	● Current estimate for capital costs for W/S
	● Contact list of Advisory Committee
	● Value will reflect consistent involvement

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10. Action Item Review

- Committee Members to review and complete the survey at <https://www.surveymonkey.com/r/5CPPQTD>.
- Advisory Committee Members to provide a signed Charter Agreement to Lynne before the next meeting.
- Web meeting information will be included in the meeting invitation.
- Links to additional information will be sent immediately. Lynne sent the following links to the Committee on July 12:
 - i. The Project web page is: <http://www.a2gov.org/cos>
 - ii. The Billing Website is: <http://www.a2gov.org/services/Water-Billing/Pages/default.aspx>
 - iii. The Water Treatment Website is: <http://www.a2gov.org/departments/water-treatment/Pages/default.aspx>
 - iv. The Wastewater Treatment Site is: <http://www.a2gov.org/departments/waste-water-treatment/Pages/default.aspx>

11. Next Meeting

- Wednesday, August 23 at 4:00 p.m. at Ann Arbor Water Treatment Plant – 919 Sunset, Ann Arbor MI 48103.
- Note: The Financial Modeling Overview was moved to the next meeting agenda to provide time for the group to break out discuss the topics covered today.

12. Public Comment

- Peter Houk provided the following comments:
 - i. More participation by citizens
 - ii. Send survey again
 - iii. Sewer rate cost breakdown structure (similar to water presented today)
 - iv. Provide pricing signals with monthly billing
 1. Location and time could be improved to a central location and after work time.

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ATTACHMENT #1 – Participant List

Last Name	First Name	Organization Representing
Adams	Jim	U of M
Appel	Mike	Avalon Housing
Beecher	Janice	MSU Institute of Public Utilities
Burnham	Andy	Stantec
Byrd	Patricia	Arrowwood Hills Co-op
Cederquist	Jack	Orchard Hills/Maplewood Homeowners
Chaimowitz	Lynne	City of Ann Arbor
Demetriou	Marios	Ann Arbor Public Schools
Doughty	Joan	Community Action Network
Elias	Abigail	City of Ann Arbor
Glorie	Lou	Brooks Street Neighborhood Association
Graham	Christopher	East Aberdeen Drive Association
Houk	Peter	Resident
Hupy	Craig	City of Ann Arbor
Hutton	Susan	Environmental Commission
Kenzie	Earl	City of Ann Arbor
Maciejewski	Molly	City of Ann Arbor
Miller	Carol	Wayne State University/Resident
Naud	Matt	Resident
Newman	Teresa	Project Innovations
Praschan	Marti	City of Ann Arbor
Rosemurgy	Bill	Broadway Area Neighborhood Association
Slotten	Cresson	City of Ann Arbor
Stevens	Kyle	Stantec
Wingle	Aimee	City of Ann Arbor

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ATTACHMENT #2 – Web Meeting Instructions

Step 1: GoToMeeting Connection

You will receive a meeting invitation with information similar to this example:

Please join my meeting from your computer, tablet or smartphone.
<https://global.gotomeeting.com/join/191403749>

You can also dial in using your phone.
United States: +1 (872) 240-3412

Access Code: 191-403-749

First GoToMeeting? Try a test session: <https://care.citrixonline.com/g2m/getready>

For best audio results please dial in by phone and use the online connection to view the materials and use the chat function.

Links to the Advisory Committee web meetings will be distributed with the meeting invitation

Step 3: Mute and Unmute Functions

Control your audio feed using the **Audio button** at the top of your Control Panel or Grab Tab, which will glow green when you are unmuted and others can hear you. You'll see a Mic icon for Computer audio, or a Phone icon for phone call audio.

You can also switch between Computer and Phone audio if needed by opening the Audio pane in the Control Panel.

Note: Most Computer audio users are muted by default when they first join. If you are muted, click the red **Audio button** so that it glows green.

Step 2: Set-up Audio Source

When you first join, you'll be prompted to choose which method you'd like to use to listen to the meeting audio.

- Select **Computer audio** to use your computer's mic and speakers.
- Select **Phone call** to use your telephone to dial in to the audio conference.

Once you're in the session, you will see your audio controls on the Audio tab. You can switch audio modes at any time.

Step 4: Chat Function

The Control Panel includes a Chat pane where you can exchange messages with other attendees. You'll see message notifications appear if your Control Panel is minimized to the Grab Tab.

- » Use the **To** drop-down menu to select your recipients:
 - Select **Everyone** to send a public message to all participants.
 - Select **Organizer(s) only** to send a message only to organizers and co-organizers.
 - Select a specific individual to send a private message to just that person.

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ATTACHMENT #3 – Summary of Current Ann Arbor Rate Structure

	Residential 1 Rate is based on a single water meter used in a home	Residential 2 Rate when a second Water-Only ² meter is also used in a home	Water Only** Rate for the second meter for non sewer water uses, such as for irrigation	Commercial Rate (Locations may also have a second, Water Only** meter)
1-7 CCFs*	\$1.55 per CCF	\$1.55 per CCF	\$5.89 per CCF	Tier 1 = \$ 3.81 (peaking factor <=5)
8-28 CCFs*	\$3.37 per CCF	\$3.37 per CCF	\$5.89 per CCF	Tier 2 = \$ 7.26 (peaking factor >5<8)
29-45 CCFs*	\$5.89 per CCF	\$3.37 per CCF	\$5.89 per CCF	Tier 3 = \$ 12.44 (peaking factor >=8)
Over 46 CCFs*	\$5.89 per CCF	\$3.37 per CCF	\$5.89 per CCF	
Water Customer Charge	\$11.25/quarter for 5/8 th inch standard residential meter; charge varies by meter size	\$11.25/quarter for 5/8 th inch standard residential meter; charge varies by meter size	Residential: No charge ----- Commercial: Charge varies by size of meter	Customer charge varies by size of water meter
Sewer Service Rate per CCF*	\$4.58 per CCF Resident 1 Summer sewer usage is calculated at winter water use rate, so the water used for outdoor activities is not charged to sewer	\$4.58 per CCF	No sewer fees	\$4.58 per CCF
Sewer Customer Charge	\$11.25/quarter for 5/8 th inch standard residential meter; charge varies by meter size	\$11.25/quarter for 5/8 th inch standard residential meter; charge varies by meter size	No charge	Customer charge varies by size of water meter