Waterworks Operator Training Newsletter

November 2017

Good afternoon! I'll be sending the newsletter out for the next two or three months because Lauren Behel is having her baby (a girl that she and Heath are naming Logan) on Monday, October 23. I know that Lauren and her family would appreciate your thoughts and prayers. She will be checking her email, so you can send her a note at lauren.behel@msstate.edu if you'd like.

Attached is the November 2017 Operator Training Newsletter for all MSDH-BPWS Regions and following this message are the trainings for your particular region. If you have questions about the counties in your MSDH region, please see the map on the third page of the attachment to this e-mail.

Also, remember to please contact the training agency to make sure the training will be held. The information contained in this document was gathered from the MSDH-BPWS Training Calendar, so we have no information about if a particular training may be cancelled due to unforeseen circumstances.

Measuring Fairness in Water Rate Increases

An overarching issue that public water system governing boards must address when considering rate adjustments is that of the "fairness" of rates to different customer classes. The majority of systems in Mississippi utilize some form of block rate structure with a minimum base bill combined with a flow rate. Governing boards should consider adjustments to both of these components and the effect that these adjustments have on all customer classes, including both small and large users.

The concept of fairness is usually defined as insuring that each customer pays his or her fair share of the system's total cost of providing water to its customers. The first step in accomplishing this involves calculating the total or "true" cost of water, including current production costs and future capital investment expenditures.

Once the total cost of providing water is calculated and the amount of additional revenue that needs to be raised determined, the system's governing board must determine how rate increases are to be applied to the different customer classes. Likely, the board will increase both the base minimum and the flow rate, but wishes to do so in as "fair" a manner as possible.

While there are several different definitions of fairness when considering water system rates, the system's governing board should consider the effect that a rate increase would have on all the system's customers. One measure of this effect is the customer's *effective rate*. While we are much more familiar with the *stated rate* (the rate that is used to calculate the customer's bill), the effective rate is the rate that the customer actually pays per usage block of water and is calculated by dividing the customer's total bill by the number of usage blocks consumed.

For example, assume that a particular water system utilizes a uniform block rate structure with a base minimum of \$25.00 for the first 2,000 gallons of consumption and a flow rate of \$5.00 per thousand gallons of water consumed after the first 2,000 gallons. Now let's compare two customers, one that consume 2,000 gallons of water in a month and the other consumes 10,000 gallons in the same month.

This is a common rate structure and ensures that the total bill paid by each customer varies with the amount of water that the customer consumes.

The stated rate lets us calculate the bills for these two customers. The monthly bill for Customer 1 is \$25.00 and the bill for Customer 2 is \$65.00. This means that the effective rate for Customer 1 is \$12.50 per 1,000 gallons of water consumed (\$25.00 divided by 2 usage blocks of 1,000 gallons each) and the effective rate of Customer 2 is \$6.50 per 1,000 gallons consumed (\$65.00 divided by 10 usage blocks).

The system's governing board is looking at two separate methods of raising revenue. The first method involves increasing the base minimum rate by \$5.00 and the second involves increasing the base minimum by \$1.00 *and* the flow rate by \$1.00 per 1,000 gallons.

Increasing the base minimum by \$5.00 means that the total bill for Customer 1 would increase from \$25.00 to \$30.00 and that the effective rate would increase from \$12.50 to \$15.00 per 1,000 gallons consumed (an increase of 20 percent). The total bill for Customer 2 would increase from \$65.00 to \$70.00 and the effective rate would increase from \$6.50 to \$7.00 per 1,000 gallons consumed (an increase of about 8 percent).

Increasing the base minimum by \$1.00 and the flow rate by \$1.00 per 1,000 gallons consumed would mean that the total bill for Customer 1 would increase from \$25.00 to \$26.00 and the effective rate would increase from \$12.50 to \$13.00 per 1,000 gallons consumed (an increase of 4 percent). The total bill for Customer 2 would increase by \$9.00 from \$65.00 to \$74.00 and the effective rate would increase from \$6.50 to \$7.40 (an increase of around 14 percent).

The following table provides a summary of the increase in effective rates for the two customers under the different rate increase scenarios.

	Percentage increase in the Effective Rate	
	Customer 1	Customer 2
Increase base minimum by \$5.00	20%	8%
Increase the base minimum by \$1.00 and the	4%	14%
flow rate by \$1.00 per 1,000 gallons		

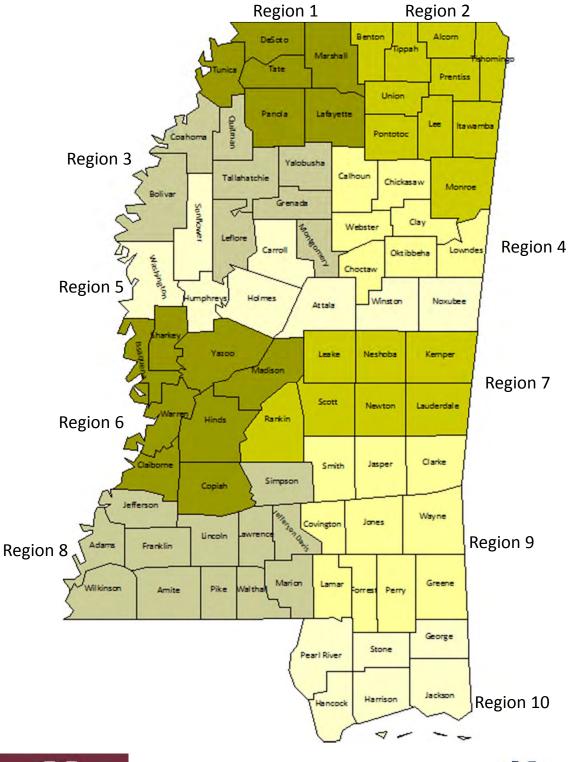
As can be seen from this simple example, the impact on customers' effective rates is very different depending on the type of rate increase that is decided upon. It would seem that this information would be very useful for the system's governing board in making the rate increase decision. For further information or assistance in determining the system's effective rates, please don't hesitate to contact Alan Barefield using the information provided below.

Thanks a lot and have a good month.

Alan Barefield

Mississippi State University Extension Service 662.325.7995 (office) 662.312.0874 (cell) alan.barefield@msstate.edu

MSDH-BPWS Region Map







MSDH Region 1 includes the counties of: Desoto, Lafayette, Marshall, Panola, Tate and Tunica

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Tuesday, November 7

MSRWA BOARD MANAGEMENT TRAINING

8:00 AM - 5:00 PM

Contact Person: Monica Adcock at 601-857-2433

Training Location: Batesville Civic Center, 290 Civic Center Drive, Batesville, MS (Panola County)

Training Topics:

Laws & Regulations

• Emergency Preparedness

Total Number of Hours: 8 with 2 Regulatory

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Tuesday, November 14

Sigma Consulting & Training Chemical Spill Response Training

8:00 AM - 5:00 PM

Contact Person: Chris Pappas at 863-232-2910

Training Location: Holiday Inn, 210 Power Drive, Batesville, MS (Panola County)

Training Topics:

• Emergency Planning for Chemical releases

Total Number of Hours: 8.5 Total with 1 Regulatory Hour

Wednesday, November 15 U.S. EPA Online Webinar 1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

MSDH Region 2 contains the counties of: Alcorn, Benton, Itawamba, Lee, Monroe, Prentiss, Pontotoc, Tippah, Tishomingo and Union

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

MSDH Region 3 contains the counties of: Bolivar, Coahoma, Grenada, Leflore, Montgomery, Quitman, Tallahatchie, and Yalobusha

Wednesday – Thursday, November 1 - 2

MSRWA Board Management Training

5:30 PM - 10:00 PM

Contact Person: Monica Adcock at 601-857-2433

Training Location: Mound Bayou City Hall, 106 Green Avenue, Mound Bayou, MS (Bolivar County)

Training Topics:

• Laws & Regulations

• Emergency Preparedness

Rate Setting

Total Number of Hours: 8 with 2 Regulatory Note: Class will be from 5:30pm-10:00pm

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 8

MSRWA TRAINING

8:00 AM - 3:30 PM

Contact Person: Robby Mayfield at 601-857-2433

Training Location: Coahoma Community College, 3240 Friars Point Road, Clarksdale, MS (Coahoma

County)

Training Topics:

- Revised Total Coliform Rule
- MSDH UPDATE
- Mapping the Operation of your Public Water system
- SCADA TECHNOLOGY

Total Number of Horus: 6 Total with 3 Regulatory

Wednesday, November 8 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

MSDH Region 4 contains the counties of: Calhoun, Chickasaw, Choctaw, Clay, Lowndes, Oktibbeha and Webster

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

MSDH Region 5 contains the counties of: Attala, Carroll, Holmes, Humphreys, Noxubee, Sunflower, Washington and Winston

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

MSDH Region 6 contains the counties of: Copiah, Claiborne, Hinds, Issaquena, Madison, Sharkey, Warren and Yazoo

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Thursday, November 2

MWPCOA District 3 Meeting

6:30 PM - 8:30 PM

Contact Person: Rusty Lyons at 601-572-7783

Training Location: Cock-of-the Walk Restaurant, Hwy 49 N, Pocahontas, MS (Hinds County)

Training Topics:

• Fixed Base Meter Reading

Total Number of Hours: 2 with 1 Regulatory

Wednesday, November 8 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Thursday, November 9

MSRWA TRAINING

8:00 AM - 3:30 PM

Contact Person: Robby Mayfield at 601-857-2433

Training Location: Public Service Commission of Yazoo City, Public Service Building, 210 South Mound

Street, Yazoo City, MS (Yazoo City)

Training Topics:

• Revised Total Coliform Rule

- Bacteriological Sampling
- Mapping GPS Points using GIS

Total Number of Hours: 6 Total with 3 Regulatory

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Thursday, November 16

MSRWA TRAINING

8:00 AM - 3:30 PM

Contact Person: Robby Mayfield at 601-857-2433

Training Location: MSRWA, Inc., Training Facility, 5400 North Midway Road, Raymond, MS (Hinds

County)

Training Topics:

- REVISED TOTAL COLIFORM RULE
- MSDH UPDATE
- FACTS ABOUT GROUNDWATER
- SOURCE WATER PROTECTION

Total Number of Hours: 6 Total with 3 Regulatory Hours

MSDH Region 7 contains the counties of: Kemper, Lauderdale, Leake, Neshoba, Newton, Rankin and Scott

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Tuesday, November 7

MWPCOA & Environmental Finance Center Training

8:30 AM - 4:00 PM

Contact Person: Rusty Lyons at 601-572-7783

Training Location: Brandon City Hall, 1000 Municipal Drive, Brandon, MS (Rankin County)

Training Topics:

- Workforce Recruitment
- Water Finance
- Assessing Financial Condition
- Capital Finance

Total Number of Hours: 6 with 3 Regulatory

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

• Responding to Contamination

• Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Thursday, November 16

Sigma Consulting & Training Chemical Spill Response Training

8:00 AM - 5:00 PM

Contact Person: Chris Pappas at 863-232-2910

Training Location: Hilton Garden Inn, 483 Riverwind Drive, Pearl, MS (Rankin County)

Training Topics:

• General Requirements for responding to a Chemical Release

Total Number of Hours: 1 Regulatory with 8.5 Total Hours.

MSDH Region 8 contains the counties of: Adams, Amite, Franklin, Jefferson, Jefferson Davis, Lawrence, Lincoln, Marion, Pike, Simpson, Walthall, Wilkinson

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15

MSRWA TRAINING

8:00 AM - 3:30 PM

Contact Person: Robby Mayfield at 601-857-2433

Training Location: Copiah-Lincoln Community College, Natchez Campus, Redd-Watkins Vocational

Technical Building, Natchez, MS (Adams County)

Training Topics:

- Revised Total Coliform Rule
- MSDH UPDATE
- Facts about Groundwater
- Source Water Protection

Total Number of Hours: 6 Total with 3 Regulatory

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 28

MSRWA HOOT TRAINING

8:00 AM - 3:00 PM

Contact Person: Randy Turnage at 601-422-8964

Training Location: Griner Drilling, 1014 Old Hwy 98 East, Columbia, MS (Marion County)

Training Topics:

• Energy Efficient Water Systems

- Health Department Updates
- Leak Detection
- Well Performance Test

Total Number of Hours: 6 Total with 3 Regulatory

MSDH Region 9 contains the counties of: Clarke, Covington, Forrest, Greene, Jasper, Jones, Lamar, Perry, Smith and Wayne

Thursday, November 2 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 8

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15

Sigma Consulting & Training Chemical Spill Response Training

8:00 AM - 5:00 PM

Contact Person: Chris Pappas at 863-232-2910

Training Location: Hilton Garden Inn, 133 Plaza Drive, Hattiesburg, MS (Forrest County)

Training Topics:

• Responding to a Chemical Release

Total Number of Hours: 1 Regulatory and 8.5 Non-Regulatory Hours

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Monday – Tuesday, November 27 – 28

MSRWA Board Management Training

5:30 PM - 10:00 PM

Contact Person: Monica Adcock at 601-857-2433

Training Location: Taylorsville Fire Department, 200 Eureka Street, Taylorsville, MS (Smith County)

Training Topics:

• Laws & Regulations

- Emergency Preparedness
- Rate Setting

Total Number of Hours: 8 with 2 Regulatory Note: Training will be from 5:30pm to 10:00pm

MSDH Region 10 contains the counties of: George, Hancock, Harrison, Jackson, Pearl River and Stone

Wednesday, November 1
Acts NOW Inc, OSHA Training

8:30 AM - 4:15 PM

Contact Person: Kerry Brown at 501-548-6363

Training Location: Golden Nugget Hotel & Casino, Biloxi, MS (Harrison County)

Training Topics:

OSHA Workshop

Total Number of Hours: 6.5 with NO Regulatory Hours

Wednesday, November 1

ACTS NOW Inc, Utility Training

8:30 AM - 4:30 PM

Contact Person: Kerry Brown at 501-548-6363

Training Location: Golden Nugget Hotel & Casino, Biloxi, MS (Harrison County)

Training Topics:

Utility Workshop

Total Number of Hours: 7 with 0 Regulatory

Wednesday, November 1

ACTS NOW Training

1:00 PM - 5:00 PM

Contact Person: Kerry Brown at 501-548-6363

Training Location: Golden Nugget Hotel & Casino, Biloxi, MS (Harrison County)

Training Topics:

• Damage Investigation Training Workshop

Total Number of Hours: 0 Regulatory with 4 Total Hours

Thursday, November 2

ACTS NOW Inc, MS811 Training

8:00 AM - 4:30 PM

Contact Person: Kerry Brown at 501-548-6363

Training Location: Golden Nugget Hotel & Casino, Biloxi, MS (Harrison County)

Training Topics:

- MSDIGLAW
- MS811
- Damage Prevention
- Emergency Preparedness

Total Number of Hours: 11.5 with 4 Regulatory Hours

Thursday, November 2

U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Friday, November 3

ACTS NOW Inc, MS811 Training

8:00 AM - 12:00 PM

Contact Person: Kerry Brown at 501-548-6363

Training Location: Golden Nugget Hotel & Casino, Biloxi, MS (Harrison County)

Training Topics:

- MSDIGLAW
- MS811
- Damage Prevention
- Emergency Preparedness

Total Number of Hours: 11.5 with 4 Regulatory Hours

Thursday, November 9

U.S. EPA Online Webinar 1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

- Emergency Preparedness
- Responding to Contamination
- Recovering from a Contamination Event

Total Number of Hours: 3 with 1.5 Reg Hours

Wednesday, November 15 U.S. EPA Online Webinar

1:00 PM - 2:00 PM

Contact Person: Andrew Tabas at 617-673-7189

Training Location: Online

Training Topics:

• Emergency Preparedness

- Responding to Contamination
- Recovering from a Contamination Event