



**BOARD OF COUNTY COMMISSIONERS  
WARREN COUNTY, OHIO**

**406 Justice Drive, Lebanon, Ohio 45036**

**[www.co.warren.oh.us](http://www.co.warren.oh.us)**

**[commissioners@co.warren.oh.us](mailto:commissioners@co.warren.oh.us)**

**Telephone (513) 695-1250**

**Facsimile (513) 695-2054**

**TOM GROSSMANN  
PAT ARNOLD SOUTH  
DAVID G. YOUNG**

**BOARD OF COUNTY COMMISSIONERS  
WARREN COUNTY, OHIO**

**MINUTES: Regular Session – November 8, 2016**

The Board met in regular session pursuant to adjournment of the November 1, 2016, meeting.

David G. Young – present

Pat Arnold South – present

Tom Grossmann – present

Tina Osborne, Clerk – present

Minutes of the November 1, 2016 meeting were read and approved.

- 16-1734A      A resolution was adopted to designate Family and Medical Leave of Absence to Tom Maloney, Building and Electrical Supervisor, within the Building and Zoning Department. Vote: Unanimous
- 16-1735      A resolution was adopted to designate Family and Medical Leave of Absence to Cynthia West, Fraud Investigator, within the Department of Job and Family Services, Human Services Division. Vote: Unanimous
- 16-1736      A resolution was adopted to designate Family and Medical Leave of Absence to Jennifer Stacy, Screener I, within the Job and Family Services, Children Services Division. Vote: Unanimous
- 16-1737      A resolution was adopted to hire Bryon Z. Mays as Service Worker I within the Warren County Facilities Management Department. Vote: Unanimous
- 16-1738      A resolution was adopted to authorize the President of the Board to sign the Application for Administrative Services Contract with Dental Care Plus and adopt the summary plan description relative to each plan. Vote: Unanimous

- 16-1739 A resolution was adopted to approve and authorize the Board of Commissioners to enter into agreements and addendums with Advanced Water Solutions on behalf of Facilities Management. Vote: Unanimous
- 16-1740 A resolution was adopted to approve and authorize the Warren County Juvenile Court to submit a grant application for Victims Assistance Funds. Vote: Unanimous
- 16-1741 A resolution was adopted to amend the Subgrant Agreement between the Ohio Department of Job and Family Services and Warren County Department of Job and Family Services, Human Services Division. Vote: Unanimous
- 16-1742 A resolution was adopted to approve and authorize President of the Board to sign Zoning Permit Application on behalf of American Tower/Verizon Wireless. Vote: Unanimous
- 16-1743 A resolution was adopted to approve various refunds. Vote: Unanimous
- 16-1744 A resolution was adopted to affirm “Then and Now” requests pursuant to Ohio Revised Code 5705.41 (D) (1). Vote: Unanimous
- 16-1745 A resolution was adopted to acknowledge receipt of October 2016 Financial Statement. Vote: Unanimous
- 16-1746 A resolution was adopted to acknowledge payment of bills. Vote: Unanimous
- 16-1747 A resolution was adopted to enter into Street and Appurtenances (including sidewalks) Security Agreement with the Drees Company for installation of certain improvements in Legacy at Elliott Farm, Section 1, Block “A” situated in Deerfield Township. Vote: Unanimous
- 16-1748 A resolution was adopted to enter into a Subdivision Public Improvement Performance and Maintenance Security Agreement with the Drees Company for installation of certain improvements in Legacy at Elliott Farm, Section 1, Block “A” in Deerfield Township. Vote: Unanimous
- 16-1749 A resolution was adopted to enter into Subdivision Public Improvement Performance and Maintenance Security Agreement with M/I Homes of Cincinnati, LLC for installation of certain improvements in Rivercrest Section Three, Phase B situated in Hamilton Township. Vote: Unanimous
- 16-1750 A resolution was adopted to enter into Street and Appurtenances (including sidewalks) Security Agreement with M/I Homes of Cincinnati, LLC for installations of certain improvements in Rivercrest, Section Three, Phase ‘B’ situated in Hamilton Township. Vote: Unanimous

- 16-1751 A resolution was adopted to approve the following record plats. Vote: Unanimous
- 16-1752 A resolution was adopted to approve appropriation decreases within various funds. Vote: Unanimous
- 16-1753 A resolution was adopted to approve repayment of cash advances from Fund #479 into General Fund #101. Vote: Unanimous
- 16-1754 A resolution was adopted to approve operational transfer from Commissioners Fund #101-1112 into Child Support Enforcement Agency Fund #263. Vote: Unanimous
- 16-1755 A resolution was adopted to approve supplemental appropriation into Commissioners Fund #101-1110. Vote: Unanimous
- 16-1756 A resolution was adopted to approve supplemental appropriation into County Court Fund #253. Vote: Unanimous
- 16-1757 A resolution was adopted to approve supplemental appropriation into the RID Bond, Greens of Bunnell Hill Fund #393. Vote: Unanimous
- 16-1758 A resolution was adopted to approve an appropriation adjustment within the Clerk of Courts General Fund #101-1260. Vote: Unanimous
- 16-1759 A resolution was adopted to approve appropriation adjustments within Juvenile Probation Fund #101-2500. Vote: Unanimous
- 16-1760 A resolution was adopted to approve appropriation adjustments within Emergency Services/Communications Center Fund #101-2850. Vote: Unanimous
- 16-1761 A resolution was adopted to approve and appropriation adjustment within Prosecutor Fund #245. Vote: Unanimous
- 16-1762 A resolution was adopted to approve appropriation adjustments within the Water Revenue Fund No. 510. Vote: Unanimous
- 16-1763 A resolution was adopted to approve appropriation adjustments within Child Support Enforcement Agency Fund #263. Vote: Unanimous
- 16-1764 A resolution was adopted to authorize payment of bills. Vote: Unanimous
- 16-1765 A resolution was adopted to continue public hearing to consider Text Amendments to the Warren County Rural Zoning Code to amend Article 2 Sections 2.205, 2.611.3, Article 3 Section 3.102, 3.202.3, 3.202.7 and Article 4 Definitions. Vote: Unanimous

## DISCUSSIONS

On motion, upon unanimous call of the roll, the Board accepted and approved the consent agenda.

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James Hahn, Infrastructure Development Engineering, was present to introduce himself and his company located in Sharonville, Ohio.

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## PUBLIC HEARING

CONSIDER TEXT AMENDMENTS TO THE WARREN COUNTY RURAL ZONING CODE TO AMEND ARTICLE 2 SECTIONS 2.205, 2.611.3, ARTICLE 3 SECTION 3.102, 3.202.3, 3.202.7 AND ARTICLE 4 DEFINITIONS

The public hearing to consider text amendments to the Warren County Rural Zoning Code to amend Article 2, Sections 2.205 (Table of Uses), 2.611.3(Uses within the I-71/SR 123 JEDD Overlay District), Article 3 Sections 3.102 (Accessory Uses, Buildings and Structure Standards), Section 3.202.3 (Farm Based Tourism) and Section 3.202.7 (Winery (Non-Exempt Agriculture) was convened this 8<sup>th</sup> day of November 2016, in the Commissioners' Meeting Room.

Michael Yetter, Zoning Supervisor, stated the Regional Planning Commission recommendation to approve the proposed text amendments and the Rural Zoning Commission recommendation to approve a modification to exclude Section 3.102 "Accessory Uses, Building and Structure Standards".

Mr. Yetter stated that the proposed Table of Uses changes relative to Article 3 Section 3.205 are to align the table to reflect the text amendments approved by the Board relative to Telecommunications Towers.

Mr. Yetter stated that the proposed amendments to the I-71/SR 123 JEDD Overlay were drafted at the request of the Turtlecreek Township Trustees. He stated that Turtlecreek Township and the City of Lebanon are requesting to prohibit distribution centers and warehousing depots from locating on properties within the JEDD Overlay.

Tammy Boggs, Turtlecreek Township Administrator, stated the Trustees are requesting the best economic use for the property and desire to protect the surrounding residents from an increase in truck traffic.

Commissioner Grossmann stated his concern with changing zoning on individual properties without their consent.

There was discussion relative to the legal notice that was sent to the property owners. The Board stated their desire to send a letter to each property owner to specify in detail what the proposed amendments will do to their property.

Commissioner Grossmann stated he does not have a problem with the amendment to the JEDD Overlay but wants to ensure that property owners are adequately informed.

Dillon Sizemore, representing a property owner within the JEDD Overlay area, stated that he objects to the addition of prohibited uses.

Upon discussion, the Board stated their desire to continue this public hearing until after property owners have received the requested letter.

Mr. Yetter then stated that because the Rural Zoning Commission recommended to exclude Section 3.102 "Accessory Uses, Building and Structure Standards" from the recommendation of approval, he is recommending the Board skip this section and exclude it from the final decision.

Mr. Yetter then reviewed the proposed amendments to Article 2 Section 2.205 Table of Uses by Zoning District are to address "agritourism" in conformance with the recent changes to state law.

Mr. McGary explained that the intent of the state legislature is to expand the agricultural exemptions.

There was discussion relative to certain language used within the proposed amendments and the Board stated their desire to change the word "modulate" to "regulate" and change the word "vernacular" to "character".

Mr. Yetter then reviewed the addition to Article 4 definitions.

Upon further discussion, the Board resolved (Resolution #16-1765) to continue this public hearing to November 29, 2016, at 9:00 a.m.

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Chris Brausch, Sanitary Engineer, was present along with staff for a work session relative to the Warren County Water Master Plan (PowerPoint attached).

Chris Wojnicz, Assistant Sanitary Engineer, reviewed the results of a customer survey recently completed via social media and email and stated the majority of the customer support the \$3.75 (\$7.50 per bill) flat fee in order to receive softened water. He stated that they had 600 customers complete the survey and 71% soften water at home. He stated that 80% of the replies are in favor of the softened water and 20% are not with the majority stating they just replaced their system or their softener works fine.

Mr. Brausch reviewed the background of our water system and the cost models associated with the three options. He then stated his recommendation to pursue Option 1 and reviewed the timeline associated with the improvements should the Board agree.

Mr. Brausch stated his desire to solicit Request for Qualifications (RFQ) to begin engineering services to pursue Option 1.

Tiffany Zindel, County Administrator, stated her agreement with Mr. Brausch that Option 1 is the best option due to the ability to control our own destiny. She then reminded the Board that Option 1 has the potential to create revenue from the sale of wholesale water and the ability to provide our own softened water at the same or cheaper cost than the purchase through Greater Cincinnati Water Works.

The Board stated their agreement to begin the RFQ process but requested Mr. Brausch to continue conversations with Greater Cincinnati Water Works in order to solicit their lowest price for the purchase of wholesale water and also maintain good communications and working relationships with both Greater Cincinnati Water Works and Butler County for possible future wholesale water purchases.

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Jim Aumann, County Treasurer, was present along with Treasurer-Elect Bernard Wright and Clerk of Courts James L. Spaeth for a meeting of the Investment Advisory Board.

Mr. Aumann presented the following information as of September 30, 2016:

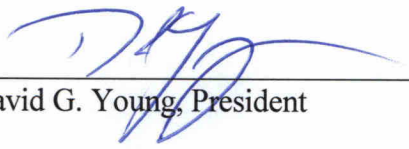
Total Agency Securities	\$ 73,100,499
Total LCNB Brokered CD's	\$ 11,270,000
Total LAM Holdings	\$ 68,855,018
Total Star Ohio/Star Plus	\$ 42,728,608
Total Various Purpose Special	\$ 3,596,884
Total Accounts	\$207,551,009
Total Interest to General Fund	\$ 1,483,120

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Tiffany Zindel, County Administrator, was present along with Martin Russell, Deputy County Administrator and Tina Osborne, Clerk of Commissioners, for a work session to discuss the 2017 annual appropriations.

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Upon motion the meeting was adjourned.

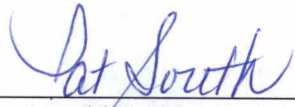


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David G. Young, President

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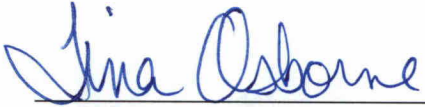
Tom Grossmann



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Pat Arnold South

I hereby certify that the foregoing is a true and correct copy of the minutes of the meeting of the Board of County Commissioners held on November 8, 2016, in compliance with Section 121.22 O.R.C.



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Tina Osborne, Clerk  
Board of County Commissioners  
Warren County, Ohio



# WATER & SEWER DEPARTMENT

## Water Master Plan

Warren County Commissioners

November 8, 2016

### AGENDA

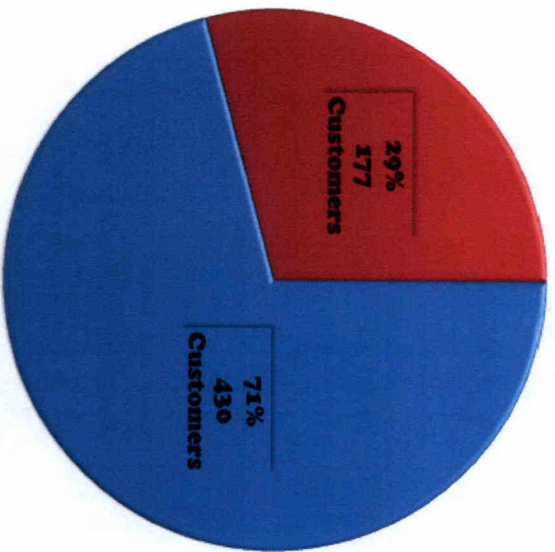
1. Customer Survey
2. Master Plan Review
3. GCWW Negotiations
4. Next Steps



**Water & Sewer Department**



DO YOU CURRENTLY SOFTEN WATER AT HOME?



■ Yes  
■ No

\* 607  
10/2

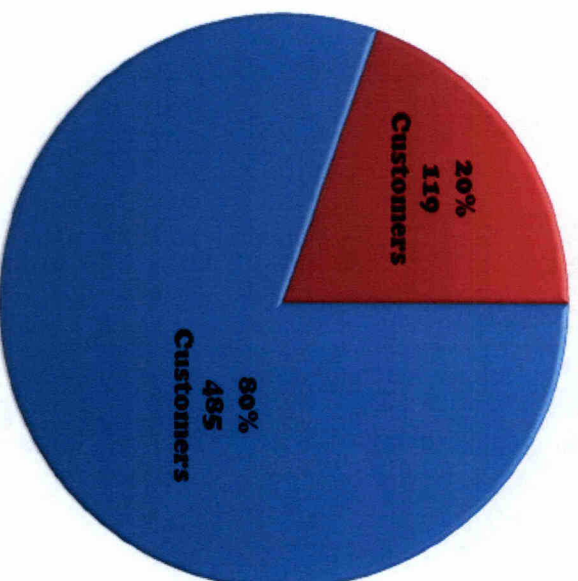
Survey Size: Approx 600 Customers  
Survey Period: 10/21/16 to 10/27/16

## Customer Survey

# Customer Survey

The majority of customers support a \$3.75/Month (\$7.50/billing period) flat fee to receive softened water.

WOULD YOU BE WILLING TO PAY AN ADDITIONAL \$3.75/MONTH TO RECEIVE SOFTENED WATER?



■ Yes  
■ No

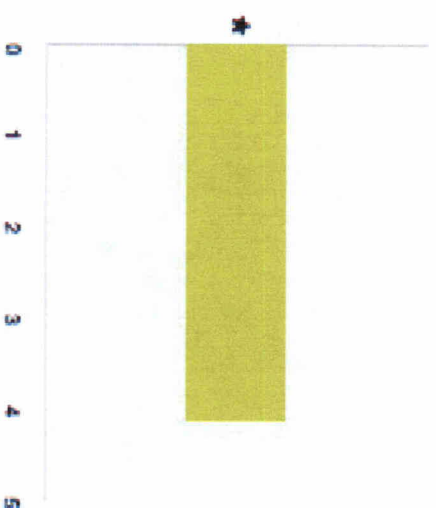
\* 604 Customers Surveyed  
10/21/16-10/27/16

# Customer Service

We care about the individual customers and strive to provide quality customer service.

**Q5 How would you rate your past customer service experiences with Warren County Water & Sewer?**

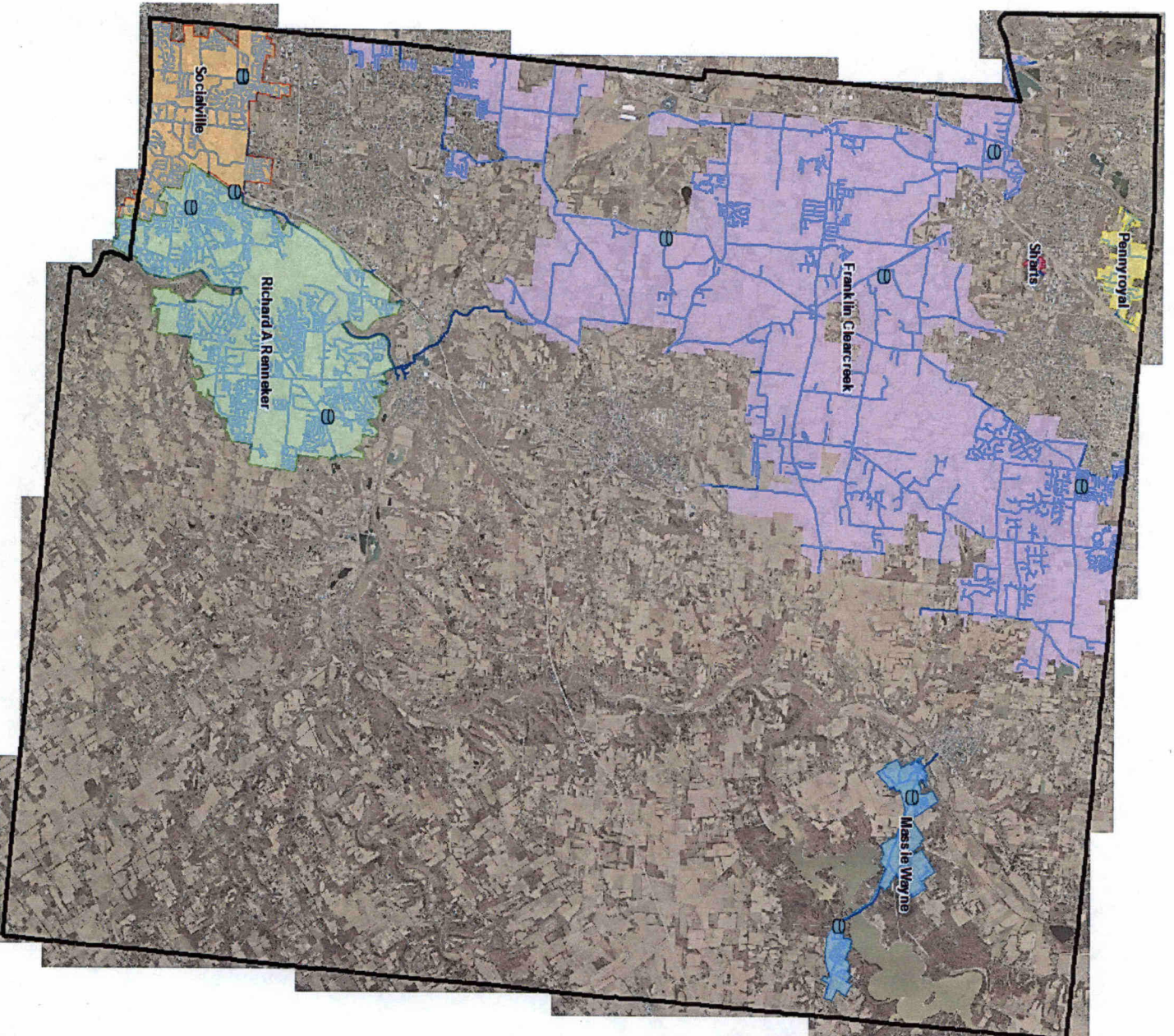
Answers: 747 Skipped: 19

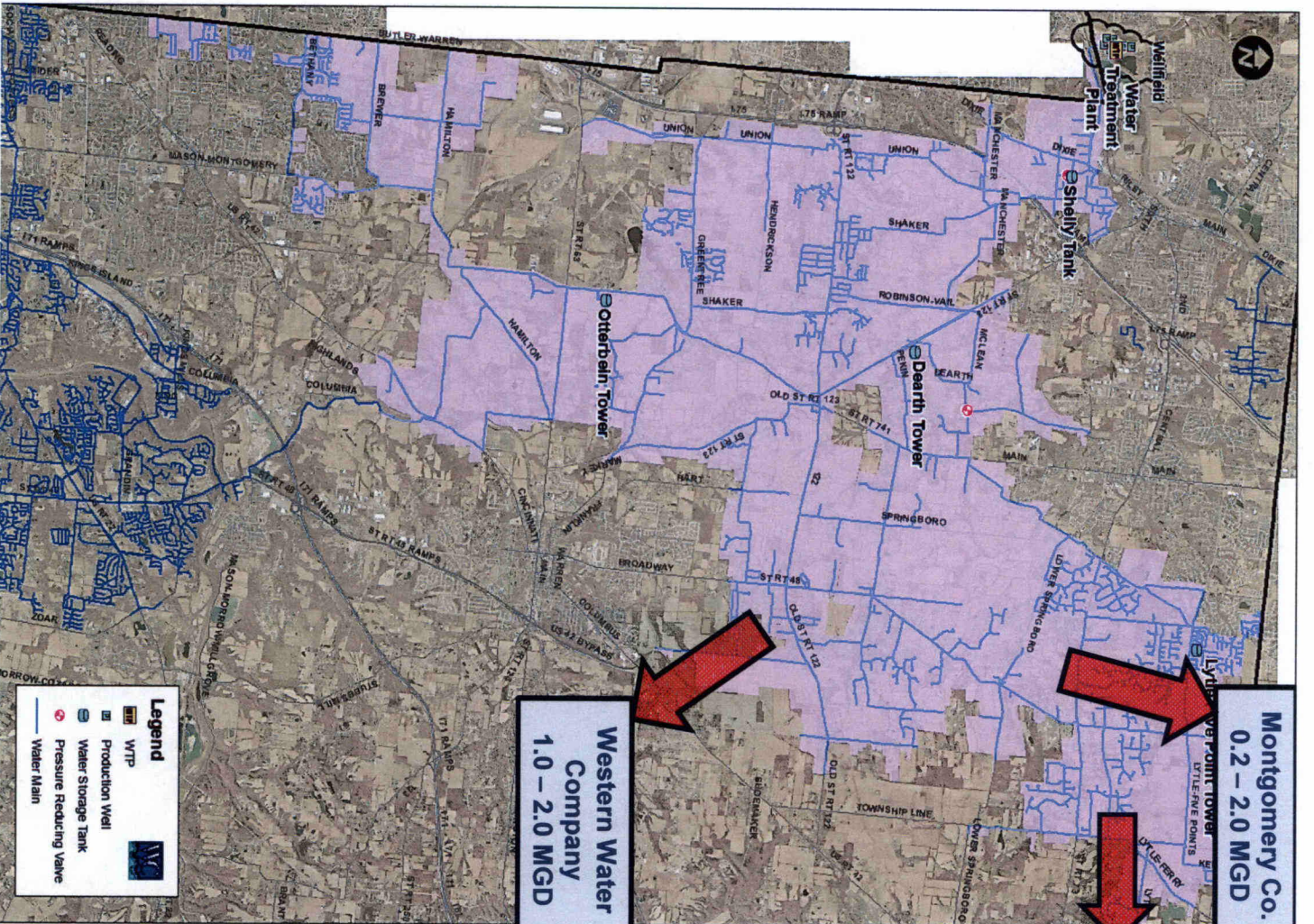


	Poor/Unsatisfactory	Could've Been Better	Average/Satisfactory	Good	Excellent	N/A - No Prior Experience	Total	Weighted Average
★	1.47% 11	2.95% 22	12.95% 96	30.09% 292	30.66% 229	12.99% 97	747	4.09

# Water Systems

We operate six Ohio EPA regulated Public Water Systems (PWS) located throughout the County.





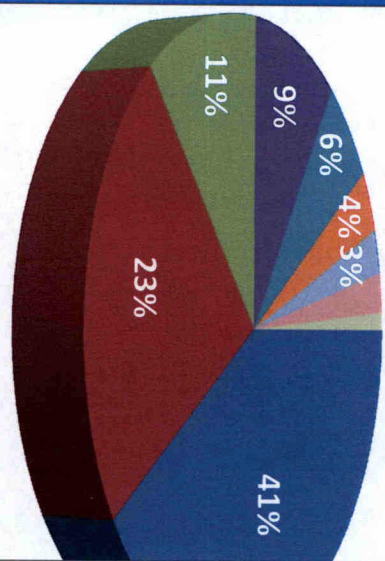
**Softened Water**  
 Wholesale water to neighboring communities becomes viable with softening facilities.

*Water Master Plan*

# Fiscal Responsibility

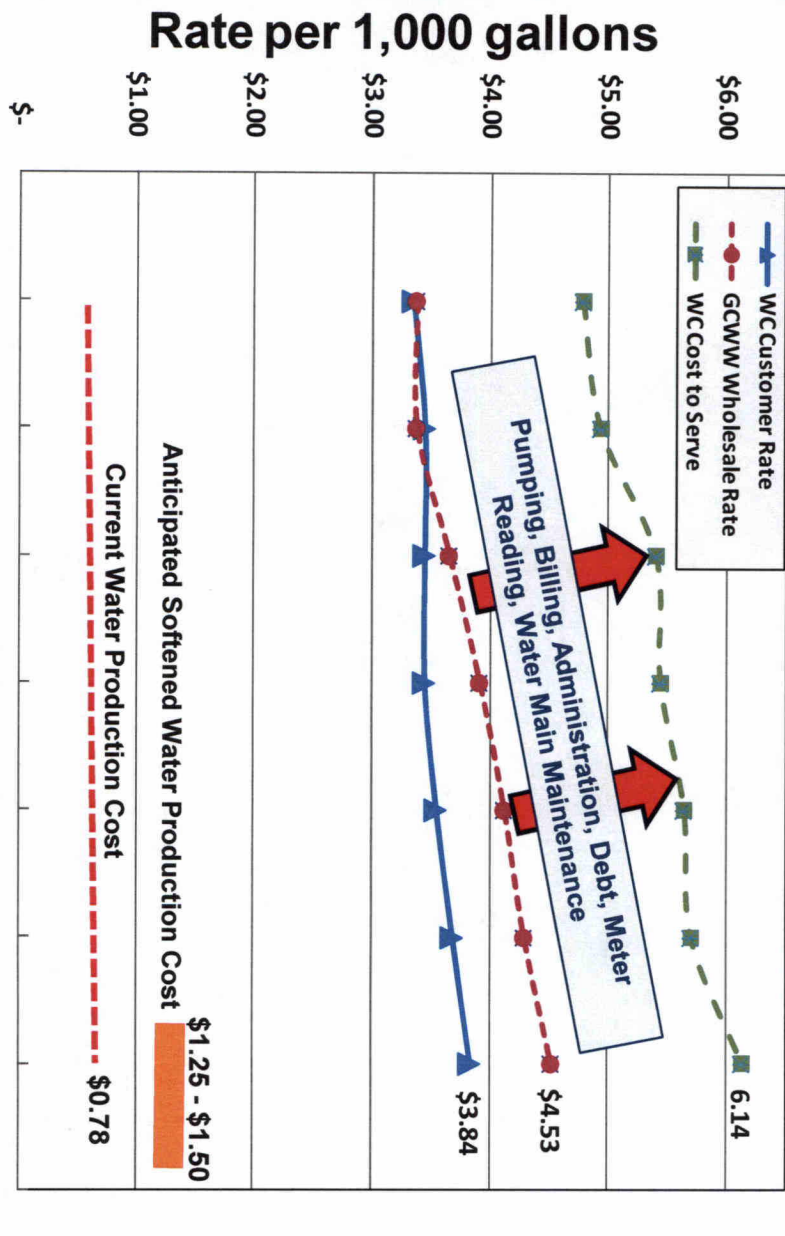
Purchased water from GCWW for the Socialville water system is the largest single expenditure for the Department and our biggest concern to fiscal stability.

2015 Expenses \$8,4



Over 40% of o

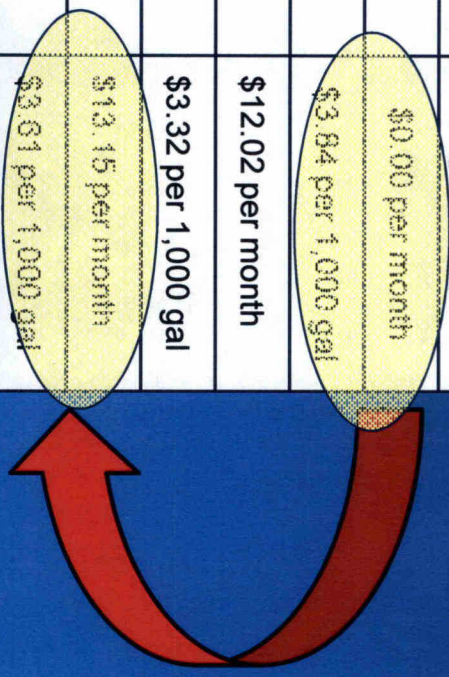
## Socialville Public Water System



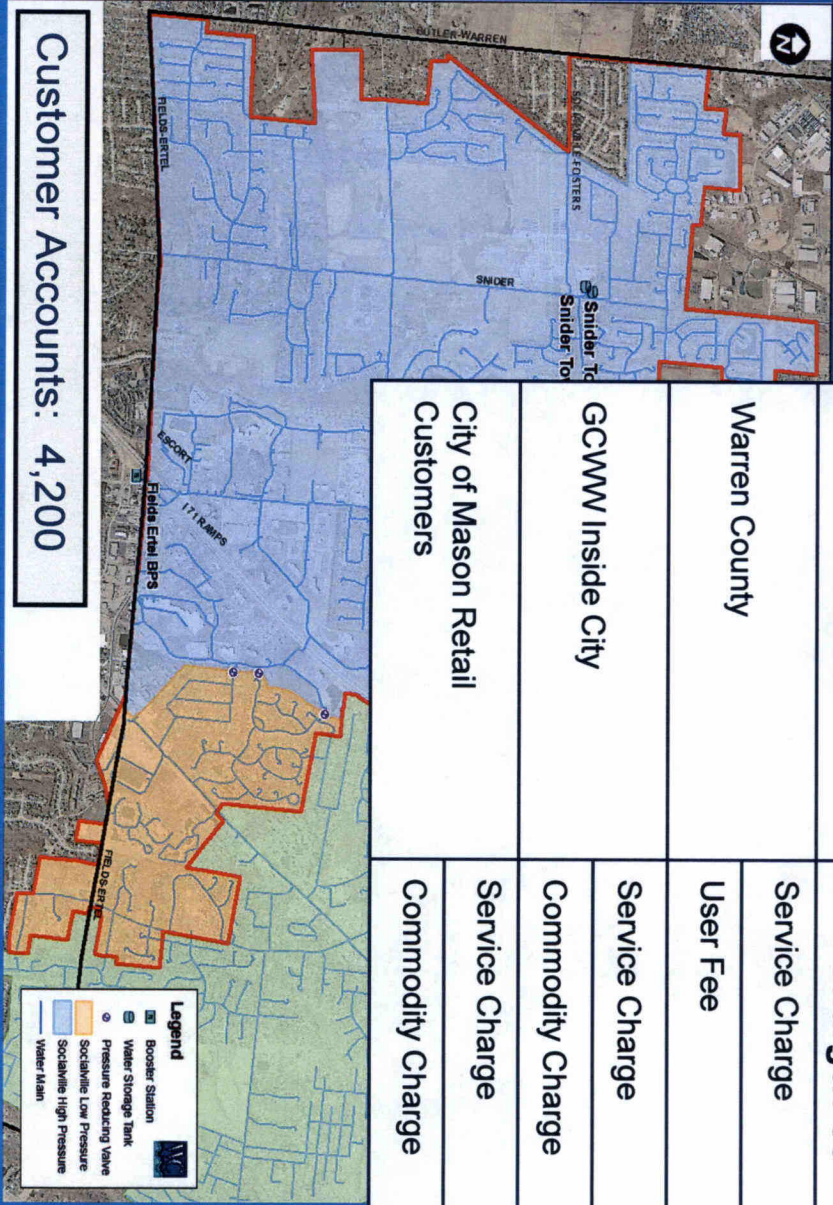
# Fiscal Responsibility

Transferring customers and assets to GCWW for retail water service would resolve the financial concern but may not be favorable to Socialville residents.

Provider	Charge/Fee	Rate (\$/1,000 gallons)
Warren County	Service Charge	\$0.00 per month
	User Fee	\$3.84 per 1,000 gal
	Service Charge	\$12.02 per month
GCWW Inside City	Commodity Charge	\$3.32 per 1,000 gal
	Service Charge	\$13.15 per month
	Commodity Charge	\$3.61 per 1,000 gal
City of Mason Retail Customers	Service Charge	\$13.15 per month
	Commodity Charge	\$3.61 per 1,000 gal
	Commodity Charge	\$3.61 per 1,000 gal



Customer's typical monthly cost would increase from Warren County's \$23 to somewhere around \$35



Customer Accounts: 4,200

# Future Options

Option 1 – **ARMY.  
BE ALL YOU CAN BE.**

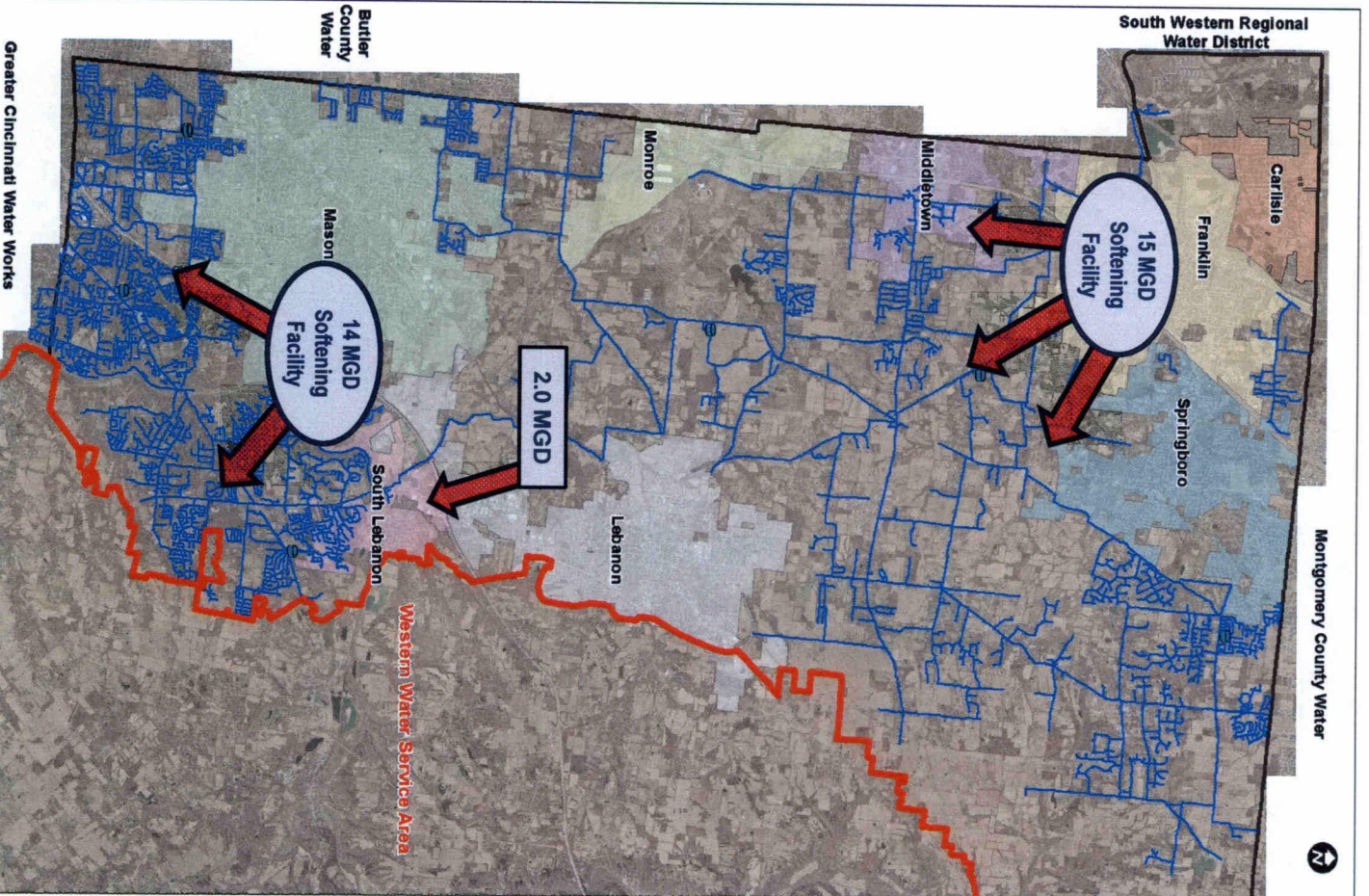
- Construct Softening Facilities
- Minimize the wholesale purchase of water

Option 2 – 

- Construct Softening Facilities
- Continue purchasing GCWW water for Socialville

Option 3 – 

- Construct North Water Treatment Softening Facility
- Retire South Treatment Plant and use it as a Booster Pump Station
- Purchase GCWW water for Socialville, Hamilton & Deerfield Twp



## Water Master Plan

# OPTION 1

**ARMY.  
BE ALL YOU CAN BE.**

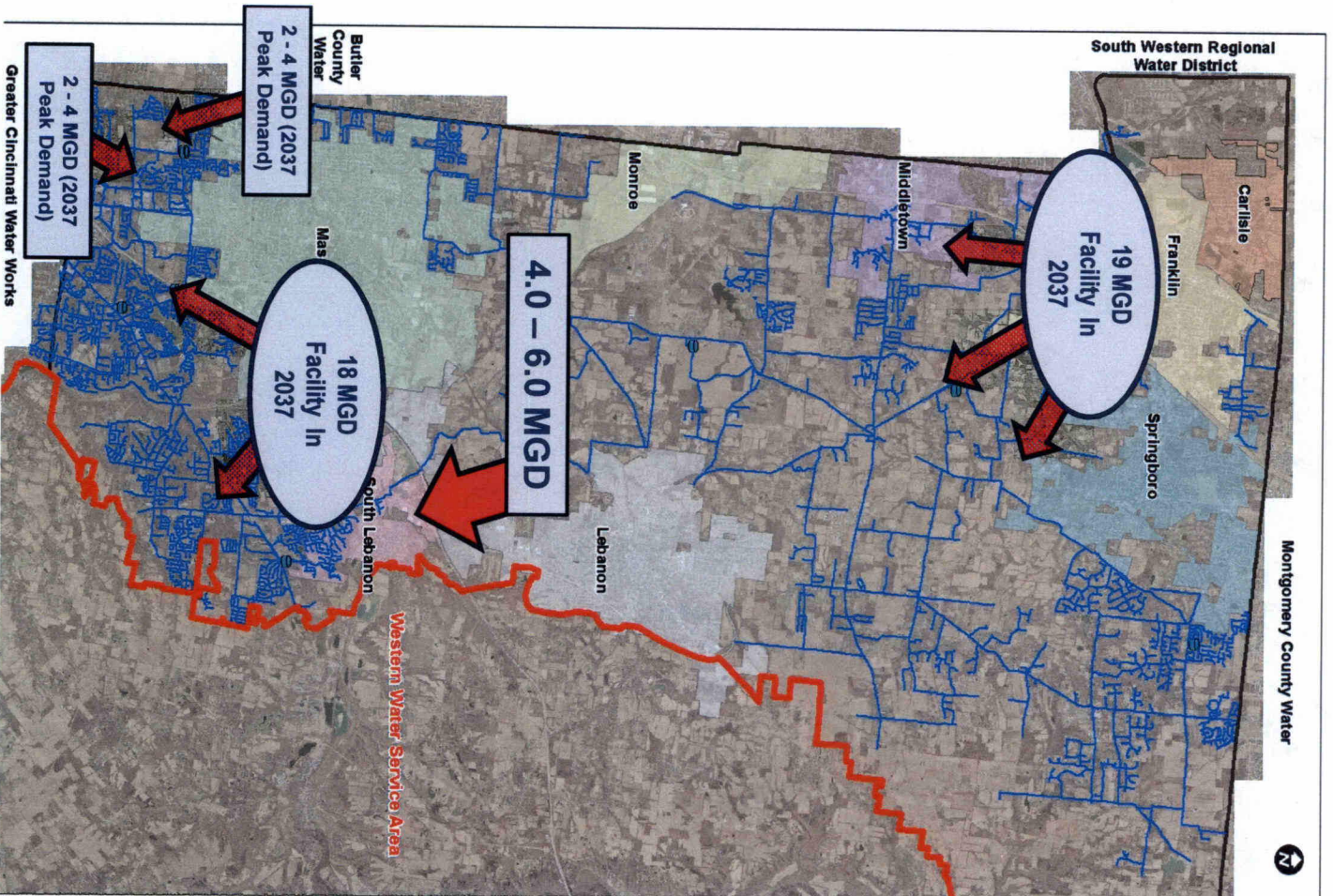
### Finances

- Cash: \$20 Million
- Loan: \$42 Million in 2020
- Annual Service Payment: \$3M

### Customer Fees

- User Rate: 3% Increases
- Capital Fee: \$3.75/month
- Capital Fee Period: 2017-2026





## Water Master Plan

# OPTION 1

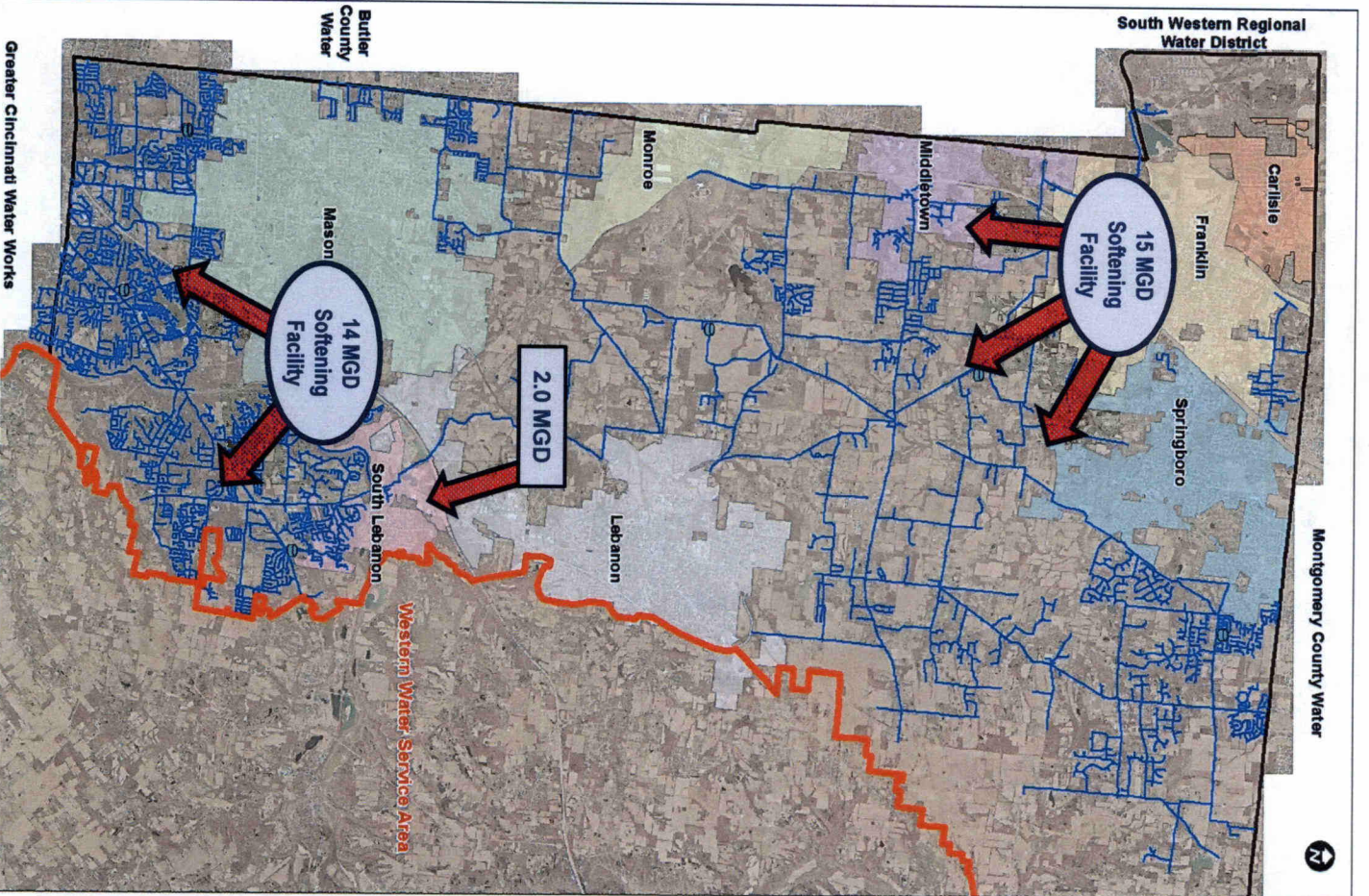
**ARMY.  
BE ALL YOU CAN BE.**

Long Term (2027-2037)

- South Peak Summer Demand

Long Term Options (2027-2037)

1. Purchase peak water from GCWW or Butler County
2. Expand South Treatment Plant
3. Expand North Treatment Plant and push more water South



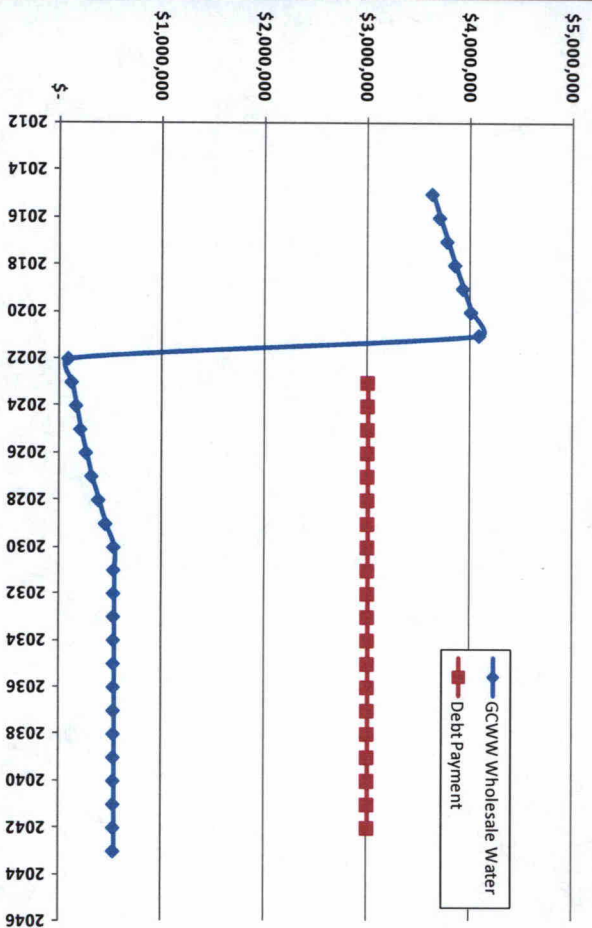
Greater Cincinnati Water Works

*Water Master Plan*

# OPTION 1

**ARMY.  
BE ALL YOU CAN BE.**

This option invests in Warren County assets instead of GCWW wholesale water.

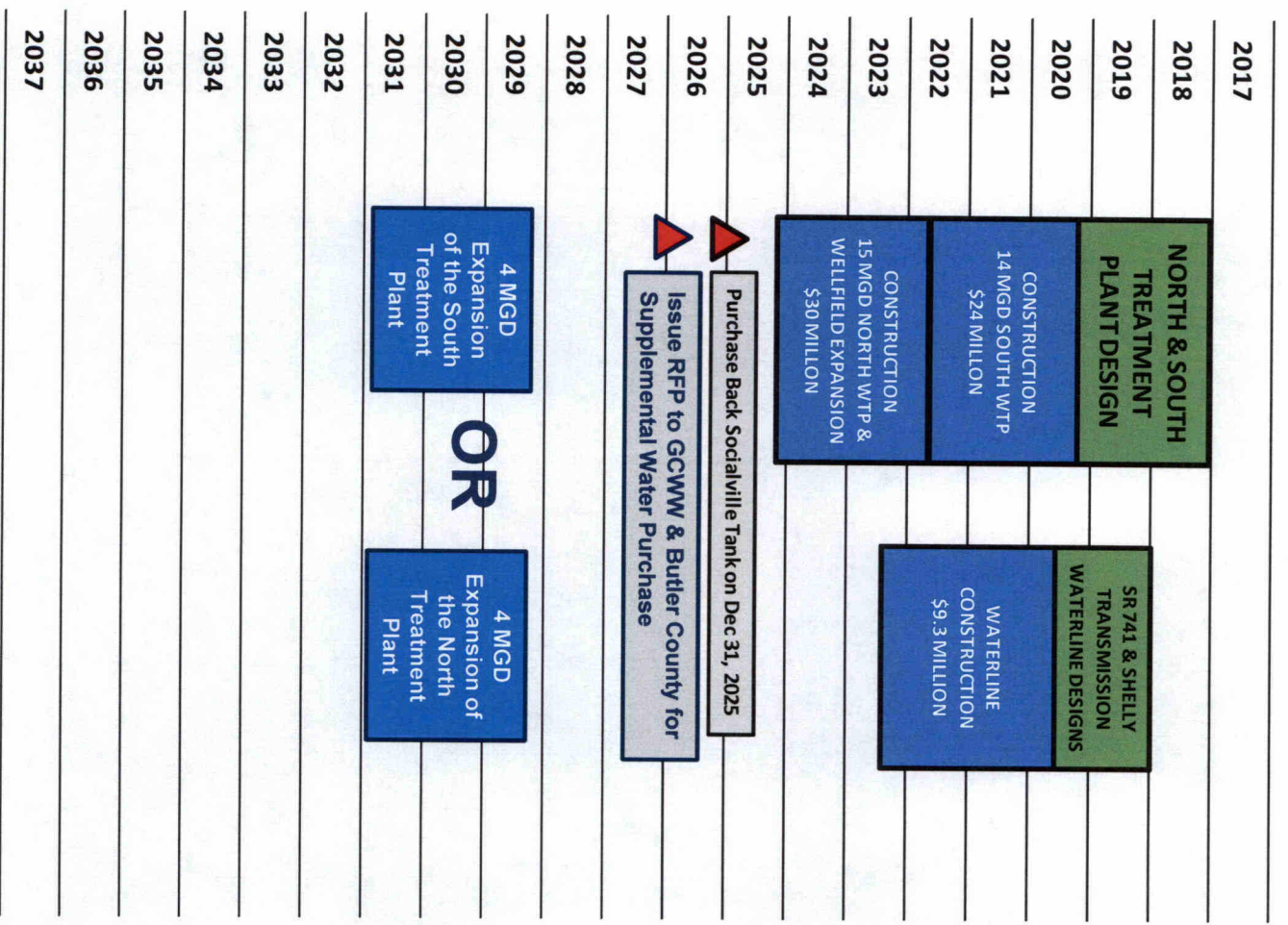


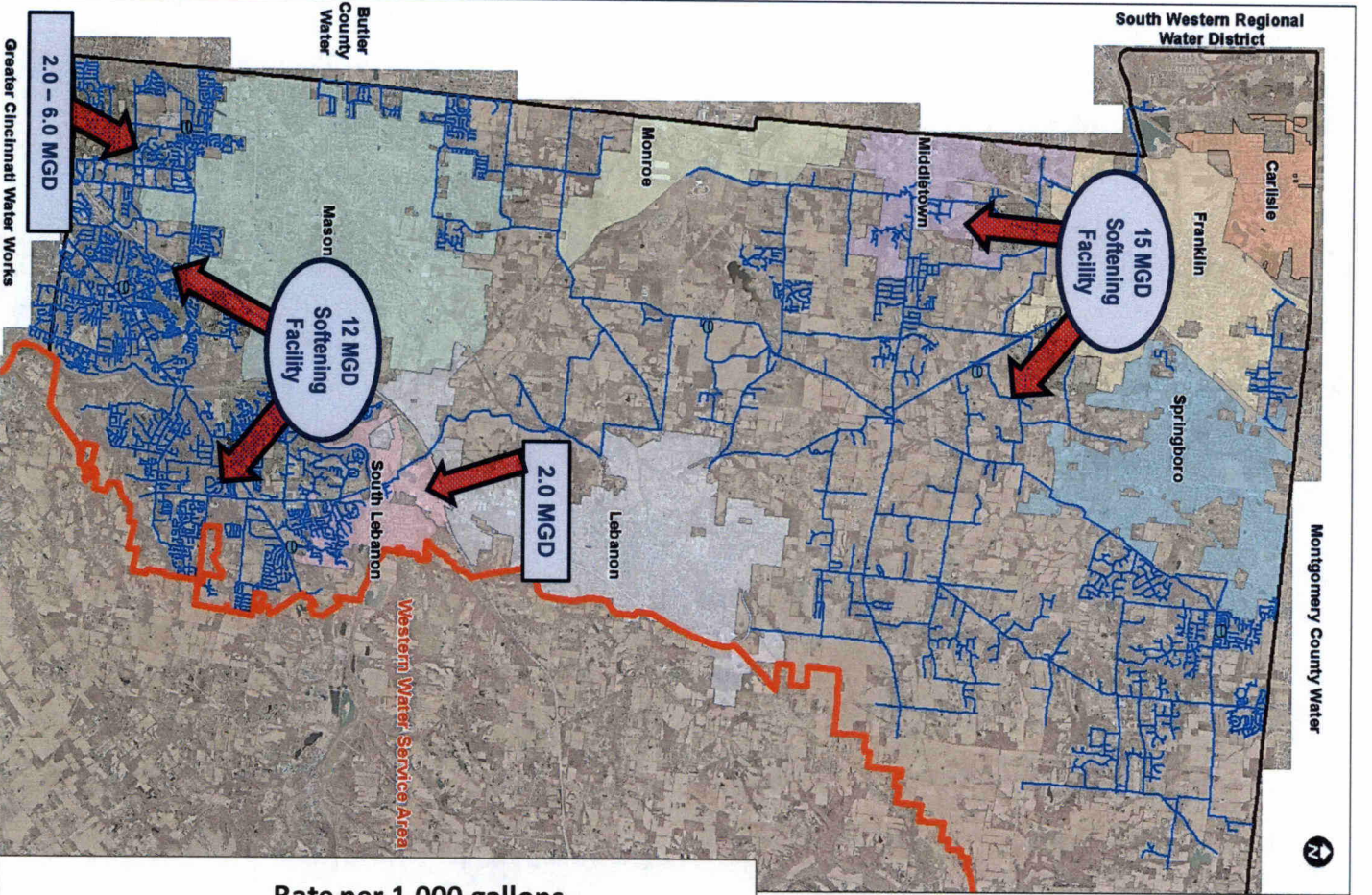
**KEY ADVANTAGE:** Financially strong in the long term. Annual surplus of \$2-3 million after 2024 can be reinvested in the Water System.

# Water Master Plan

## OPTION 1


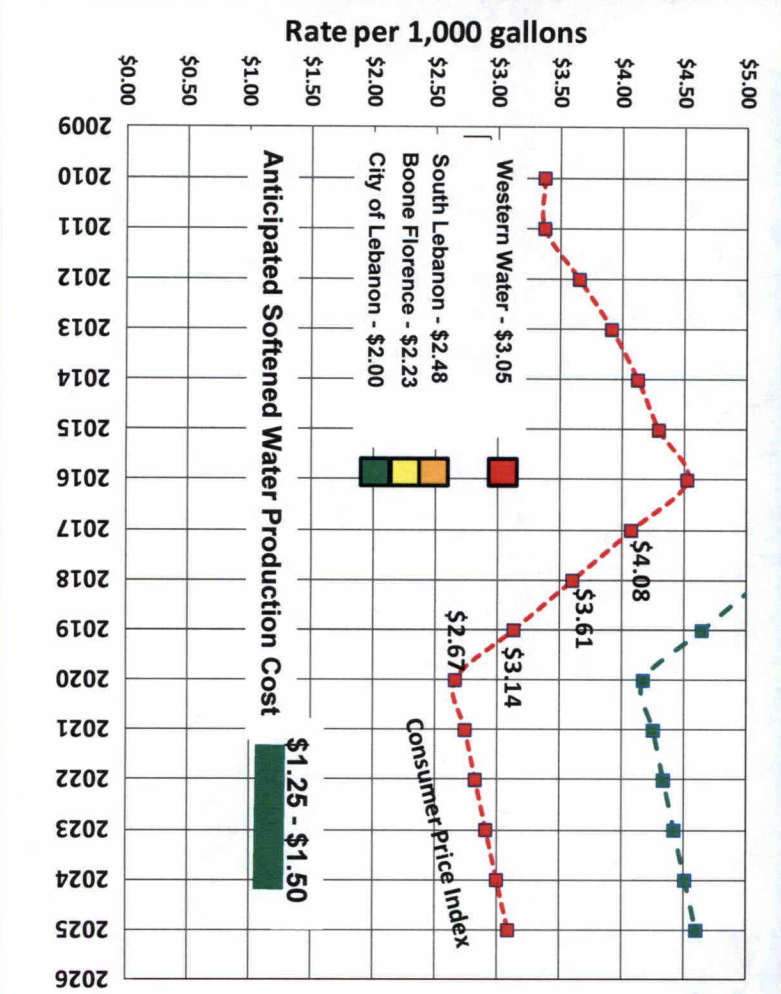
ARMY.  
BE ALL YOU CAN BE.

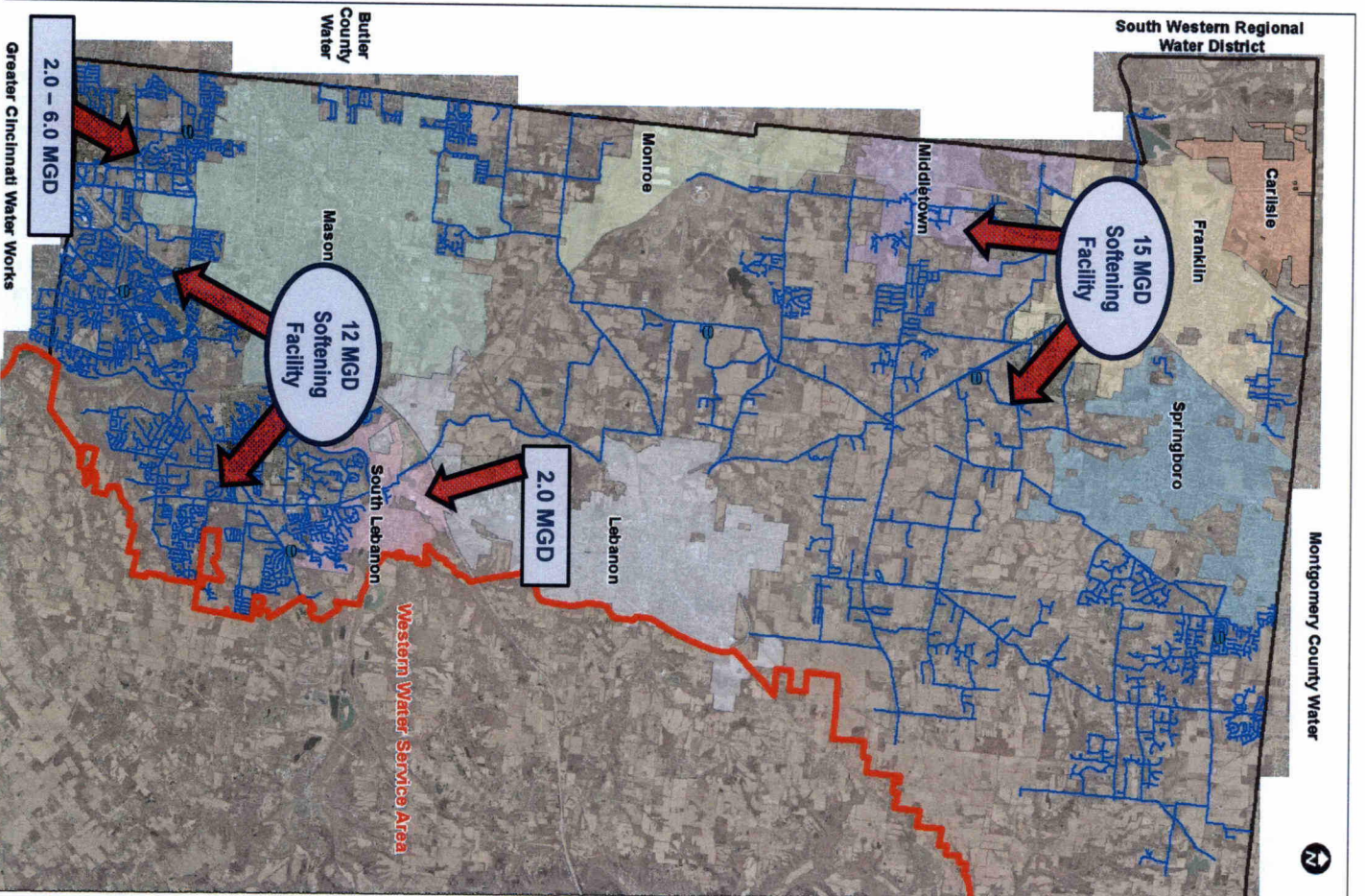




# Water Master Plan

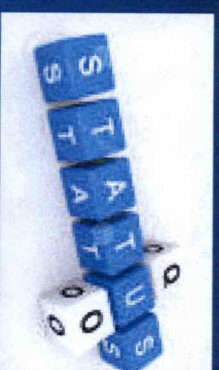
## OPTION 2



## Water Master Plan

# OPTION 2

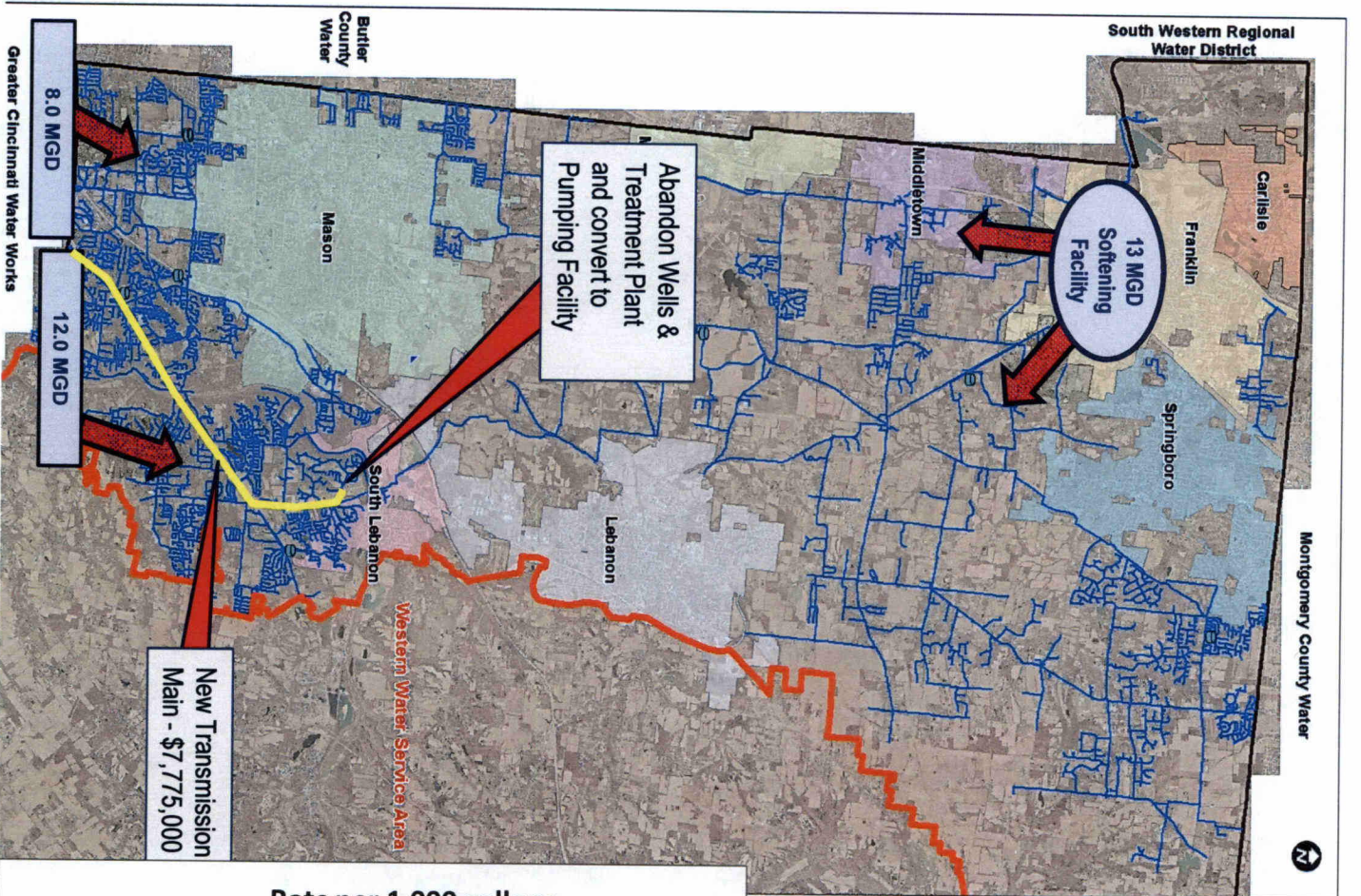


### Finances

- Cash: \$20 Million
- Loan: \$32 Million in 2020
- Annual Service Payment: \$2.3M

### Customer Fees

- User Rate: 3% Increases
- Capital Fee: \$3.75/month
- Capital Fee Period: 2017-2026



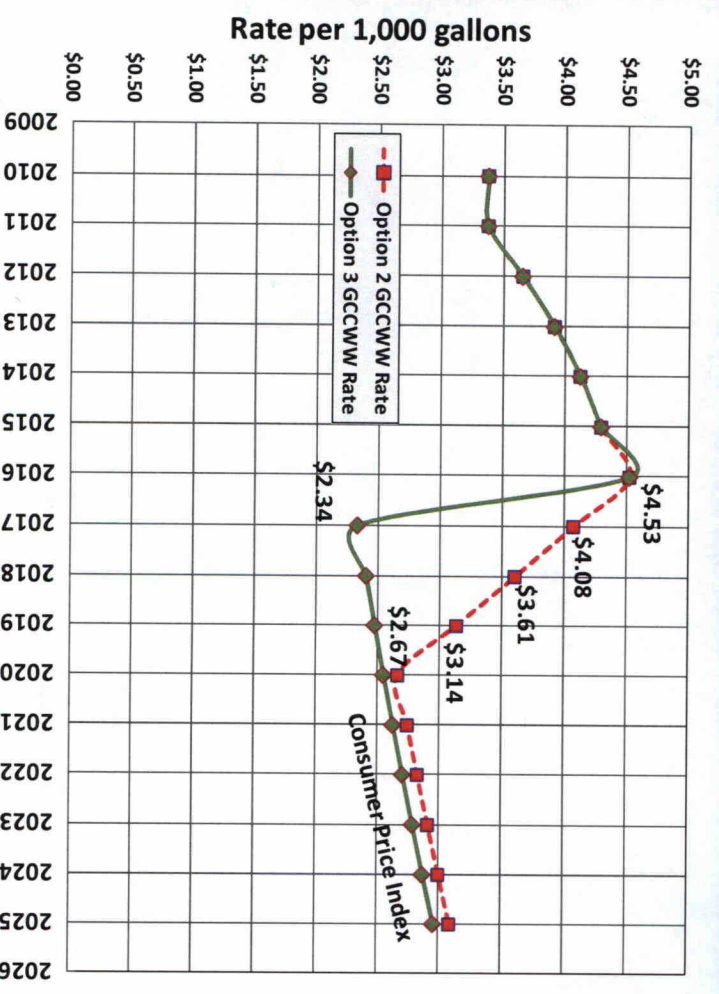
*Water Master Plan*

# OPTION 3

A Service of The City of Cincinnati  
GREATER CINCINNATI  
WATER WORKS

## Improvements

2017 Improvements: \$7,775,000  
2022 Improvements: \$10,160,000  
2030 Improvements: \$8,755,000



# GCWW Negotiations

- 3/8/16 Master Plan Presentation to BOCC
- 5/13/16 Initial Proposal Received from GCWW
- 5/24/16 GCWW presented to BOCC
- 10/4/16 Master Plan Presentation to BOCC
- 10/5/16 Staff met with GCWW requesting updated wholesale proposal
- 10/31/16 Letter received from GCWW requesting a meeting
- 11/4/16 Water/Sewer and OMB met with GCWW, reviewed their financial model, and requested a revised proposal.

# Recommendations

1. Proceed forward with Option 1.
2. Issue an Request for Qualifications for design of softening facilities for both the North and South Water Treatment Plants.
3. Continue discussions/negotiations with GCWMW.
4. Continue Discussions with Butler County.





READY FOR

Pedro

ISMOCO

★ 2 0 1 6 ★

Vote for Pedro

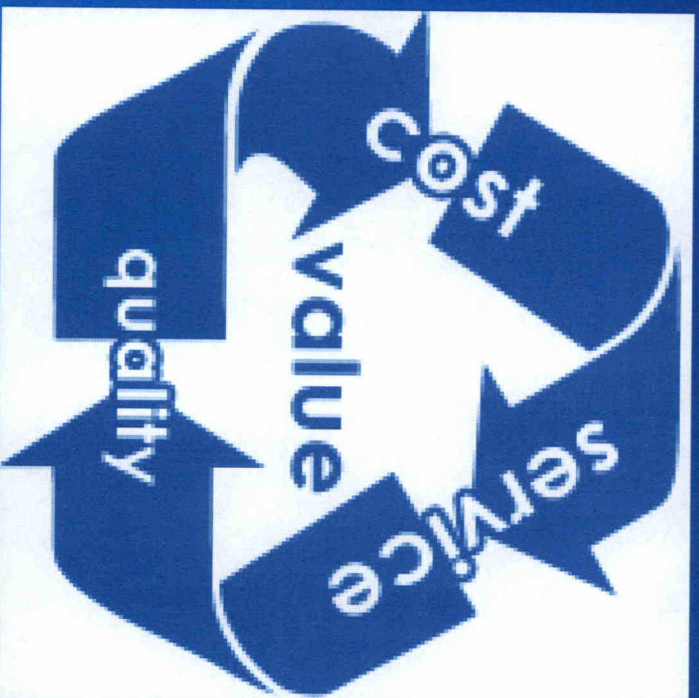
**Warren County is the largest water provider in the County, the 15th largest in Ohio, ..... and we are growing.**

- 2015 Department Budget of \$15.8M
- 70 Employees
- Largest Department under the Commissioners

Rank	Public Water System	Customer Population
1	City of Cleveland	1,262,955
2	City of Columbus	1,159,817
3	City of Cincinnati	749,000
4	City of Toledo	360,000
5	City of Akron	280,000
6	Montgomery County	260,805
7	Aqua Ohio	173,000
8	City of Youngstown	148,000
9	City of Dayton	142,000
10	Del-Co Water Company	141,407
11	Lake County	115,835
12	Clermont County	113,000
13	Butler County	109,988
14	City of Canton	98,260
15	Warren County	77,000
16	Lorain County	71,074
17	City of Elyria	68,000
18	City of Lima L	65,619
19	City of Lorain	64,152
20	City of Hamilton	62,477
21	City of Springfield	59,357
22	City of Lakewood	52,100
23	City of Mansfield	51,000
24	City of Cuyahoga Falls	49,652
25	City of Middletown	48,694

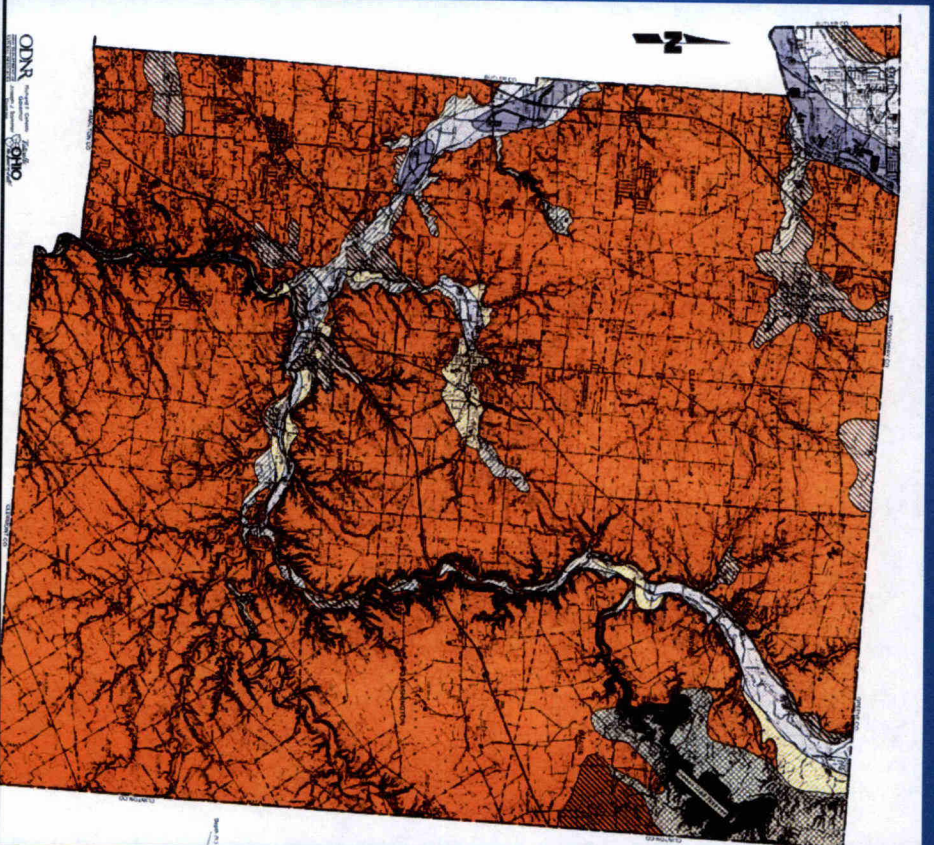
# Mission Statement

We strive to provide quality water service to Warren County residents in a cost-effective manner; to treat all customers with respect, courtesy and professionalism; and provide the highest quality of customer service.



# QUALITY

We utilize the highest quality source water coupled with effective treatment to provide our customers with safe, reliable water.

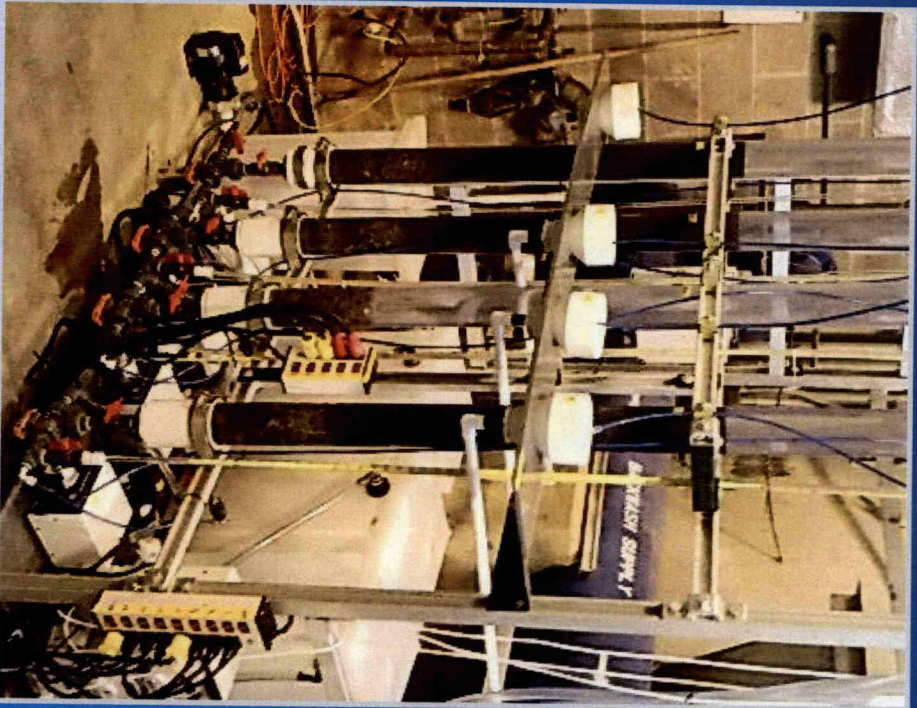


**Aquifer Map of Warren County**  
Ohio Dept. of Natural Resources

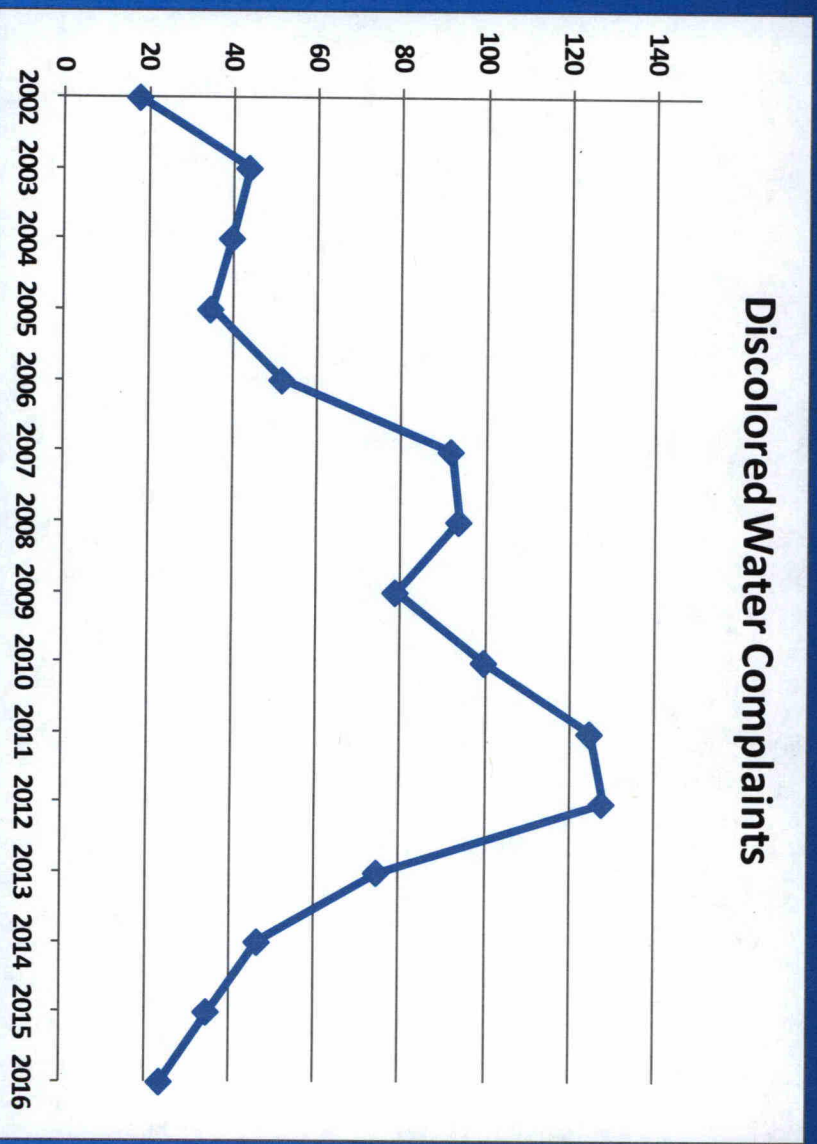
~~Harmful Algae Blooms  
Lead Levels  
Trihalomethane  
HAA5S  
Cryptosporidium  
Giardia~~

# QUALITY

Optimizing the treatment process has improved manganese removal and nearly eliminated brown water complaints in the Deerfield and Hamilton Township service areas



USEPA Pilot Study Testing



# QUALITY

The County's treatment plants and water distribution system are run by the best qualified Ohio EPA certified operators and technical staff.

State of the Water System



## Water Fluoridation Quality Award

Warren Co.-Hamil  
State of Ohio

The Centers for Disease Control and Prevention commends this state adjustment of the water fluoride content to the optimum level for oral high quality water fluoridation practice, as demonstrated by this state's present tooth decay improving the oral health of community residents.



Center for Disease Control and Prevention  
National Center for Chronic Disease Prevention and Health Promotion

National Institute of Dental and Craniofacial Research

Centers for Disease Control and Prevention  
United States Department of Health and Human Services

# 2013



Ohio Environmental Protection Agency

Certificate

This certifies that the Ohio Environmental Protection Agency, having primary enforcement responsibility for the Safe Drinking Water Act, has evaluated and approved the performance of chemical or microbiological analyses on potable water by:

Warren County - Richard Remender WTP Laboratory

by the following laboratory analyst:

Ed Turner (4535) Operationally Certified

Major Operator

Pursuant to this approval, the Ohio EPA accepts as valid the results of the following analyses on potable water:

Chlorine(SM 4509 Cl-04), Fluoride(SM 4501 F-0)

This certificate may be rendered for failure to conform to the provisions of the Ohio Revised Code, failure to generate acceptable results on performance evaluations, failure to maintain an acceptable laboratory facility in accordance with state approval requirements, failure to maintain laboratory records, failure to report the results of analyses conducted on public water systems and source water by personnel not certified for such analyses. This certificate remains the property of the State of Ohio and shall be surrendered to the Director of the Ohio EPA or authorized representative upon request.

Date of Issuance: 11/17/2013  
Date of Expiration: 11/17/2015  
Lab Certification Number: 608

*Carly W. Butler*



This certificate is the property of the State of Ohio and in the event of its suspension, revocation, or expiration, it must, upon demand, be returned to the State of Ohio Environmental Protection Agency.

WES-1018387-07  
CERTIFICATE NUMBER



State of Ohio Environmental Protection Agency



Be it known that JOHN L. WARE is hereby certified as a

CLASS III  
WATER SUPPLY OPERATOR

WHO IS QUALIFIED AS REQUIRED BY LAW IN ACCORDANCE WITH REGULATIONS PROMULGATED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY RELATIVE TO RATING PERSONNEL OF WATER AND WASTEWATER TREATMENT WORKS

In witness whereof, I have subscribed my name and affixed the seal of the Ohio Environmental Protection Agency, State of Ohio, this 17th day of June, 2007 in the City of Columbus.

*John L. Ware*  
DIRECTOR



We're big enough to quickly respond to major issues but small enough to care about the individual customer.

# SERVICE

*For Helping Me With A Water Problem  
 I'd Like To Thank Ed And Kevin  
 From The Water Department  
 For Helping Me With A Water Problem  
 I'd Like To Thank Ed And Kevin  
 From The Water Department  
 For Helping Me With A Water Problem  
 I'd Like To Thank Ed And Kevin  
 From The Water Department*

*Or-Original message-----  
 From: Norma Bennett Woolf [mailto:[nbennett@water.com](mailto:nbennett@water.com)]  
 Sent: Wednesday, December 26, 2012 9:38 AM  
 Subject: Thanks  
 a note to let you know we appreciate the crew that worked through  
 the night to restore water after the water main break on route 48.  
 For such quick and efficient service.*

*On 2/2/2016 the contractor hired by Duke Energy to install new underground  
 water lines struck the water line coming from the main line to my meter, cutting off my water  
 service. I called your department to report it was without service. In less than about 45  
 minutes, it was approximately 4:30pm, a crew from your office arrived at my home. They were  
 professional, polite, and very helpful. They were very kind and efficient in resolving the  
 problem. They were very kind and efficient in resolving the issue as quickly and thoroughly as  
 possible.  
 It turned out the line was damaged under my driveway. They had to saw through the concrete,  
 bring in a bucket to remove the concrete, and dig down to find the damaged pipe. They tried  
 to minimize the amount of concrete removed but ended up having to remove a four foot strip  
 across my driveway. They repaired the pipe, backfilled the ditch, and finished it off with gravel.  
 The repair was completed about 10:00pm. Mike provided updates as the work progressed.  
 I couldn't be more pleased with the work of your crew. I'm sure you hear complaints but I want  
 to convey my appreciation for the professional and courteous manner of these men as they  
 worked so hard on an extremely hot day, until well after what I'm sure was their usual time to  
 go home. Kudos to all of them.  
 I appreciate it if the driveway replacement concrete work would be completed by  
 the end of the week. Please contact me at 513-398-2041 (home) or 513-310-6587 (cell) a week or  
 so if you need any more information. Thank you for your help and service.  
 Norma Bennett Woolf  
 48096  
 Water and Sewer Department*

*From: Sukhron, Wendy  
 Sent: Thursday, April 16, 2008 10:12 AM  
 To: 'Pat South; Sam, Pat; Andy; Debra; [mailto:[dsouth@water.com](mailto:dsouth@water.com)]; Dave; Tim; Gail; David R.; Bruce; Chris G.  
 Subject: Phone Message  
 Vicki Warncke (598-0244) called to let us know that Doug Ingram (Water/Sewer) is an  
 outstanding employee and she had a great dealing with him. She wanted to let you know  
 that you have a wonderful employee working for you. Please call her if you have any  
 questions.*

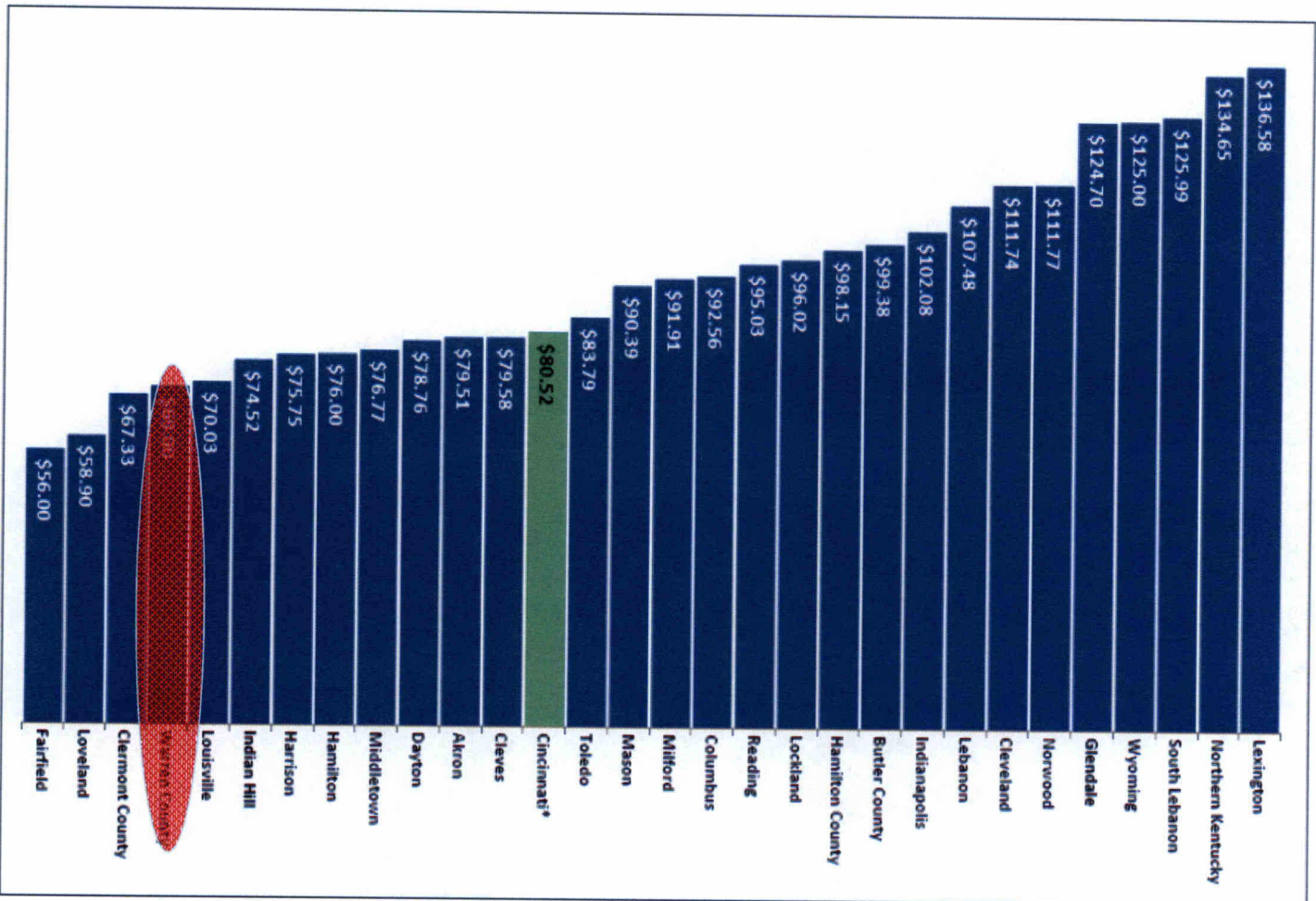
*-----Original message-----  
 From: [mailto:[dsouth@water.com](mailto:dsouth@water.com)]  
 Sent: Thursday, April 16, 2008 10:12 AM  
 Subject: Phone Message  
 Vicki Warncke (598-0244) called to let us know that Doug Ingram (Water/Sewer) is an  
 outstanding employee and she had a great dealing with him. She wanted to let you know  
 that you have a wonderful employee working for you. Please call her if you have any  
 questions.  
 We just wanted to say that we had  
 a great experience with the crew that worked on our  
 issue last night at 5297 Orchard Way. we are happy our  
 crew was very nice and reassuring about the whole  
 experience. We are happy our crew  
 was so hard working and we appreciate the  
 service. We are happy our crew  
 was so hard working and we appreciate the  
 service. We are happy our crew  
 was so hard working and we appreciate the  
 service.  
 Mike  
 513-398-2041  
 1 phone*

State of the Water Department

**COST**

Our focus on strong fiscal management, operating with a minimal staff, and building quality treatment plants has resulted in low user rates for our customers.

**Quarterly Water Cost for the Average Single-Family Household**  
Water Utility/Cost per Quarter (18,700 gallons)  
Survey provided courtesy of Greater Cincinnati Water Works





# Financial Stability

The Water Department is financially stable with minimal debt and a fund reserve of \$ 7.2 Million.

Long Term Debt: \$3.4 Million

Annual Debt Payment: \$304,000 payoff in 2030

Capital Reserve Fund: \$7.2 Million

“Clean Opinion” State Audits: 25 years in a row

# Fiscal Responsibility

Purchased water from GCWW for the Socialville water system is the largest single expenditure for the Department and our biggest concern to fiscal stability.

## WARREN COUNTY WATER AREA CONTRACT

THIS CONTRACT, entered into as of this 14<sup>th</sup> day of Feb. 1995, between the City of Cincinnati, hereinafter designated "Cincinnati," acting through its City Manager, and the Board of County Commissioners of Warren County, Ohio, hereinafter designated "County Commissioners" or "County," acting pursuant to Chapter 307 and 6103 of the Revised Code.

### WITNESSETH:

WHEREAS, Cincinnati has been supplying surplus water and water service to Warren County pursuant to a contract entered into on February 25, 1967 as extended by Warren County Resolution 84-784 and enacted on December 18, 1984 and Ordinance No. 562-1984 passed by Cincinnati City Council on December 19, 1984; and

WHEREAS, the County Commissioners desire to continue to receive surplus water and water service from the City pursuant to this contract, on behalf of the consumers which they represent and the City is willing to sell surplus water to consumers in the Warren County Water Area subject to the terms and conditions of this agreement; and

WHEREAS, the County Commissioners pursuant to Chapter 307 and 6103 of the Ohio Revised Code have the power to contract for the purchase of surplus water and water service from Cincinnati; and Cincinnati, pursuant to the Constitution of the State of Ohio and the relevant provisions of the Ohio Revised Code, the Cincinnati Municipal Code and Charter, has the power to sell such surplus water and water service to the County Commissioners;

NOW, THEREFORE, for and in consideration of the mutual promises, covenants and agreements contained herein, Cincinnati and the County Commissioners do hereby agree as follows:

Section 1. **Definitions.** For the purpose of this contract, the terms defined in this section shall have the meanings therein ascribed to them, unless, in any particular part of the contract, a different meaning shall be clearly indicated.

a) **City Water System.** The water supply, production, treatment transmission, storage, distribution and related facilities owned and/or operated by the City of Cincinnati for itself, its inhabitants, the Warren County Retail Water Area and Wholesale Water area and for all other areas served, in accordance with powers conferred upon municipalities by the Constitution and the laws of the State of Ohio.

b) **Warren County Retail Water Area** (hereinafter sometimes referred to as the Retail Area). The Warren County Retail Water Area means the area delineated on the plans attached hereto and made a part hereof and designated "Appendix C".

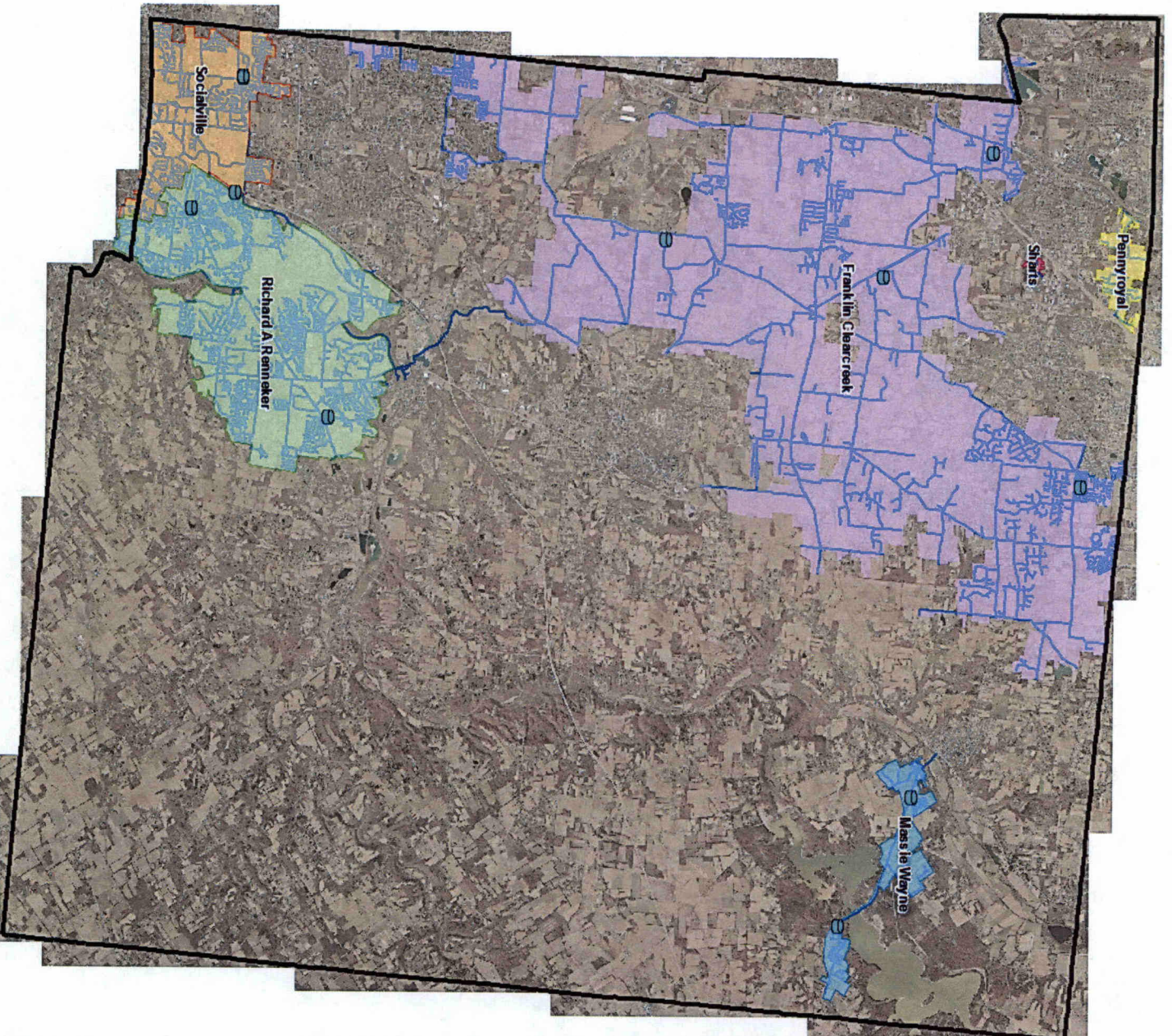
c) **Warren County Wholesale Water Area** (hereinafter sometimes referred to as the

- 1995 Wholesale Contract
- Contract ends on 12/31/2025.
- County rate is 1.62 times the rate paid in Cincinnati in the second highest monthly consumption bracket.
- County can buy back the Socialville ground storage tank by giving notice on 12/31/2023.

*State of the Water System*

# Water Systems

We operate six Ohio EPA regulated Public Water Systems (PWS) located throughout the County.



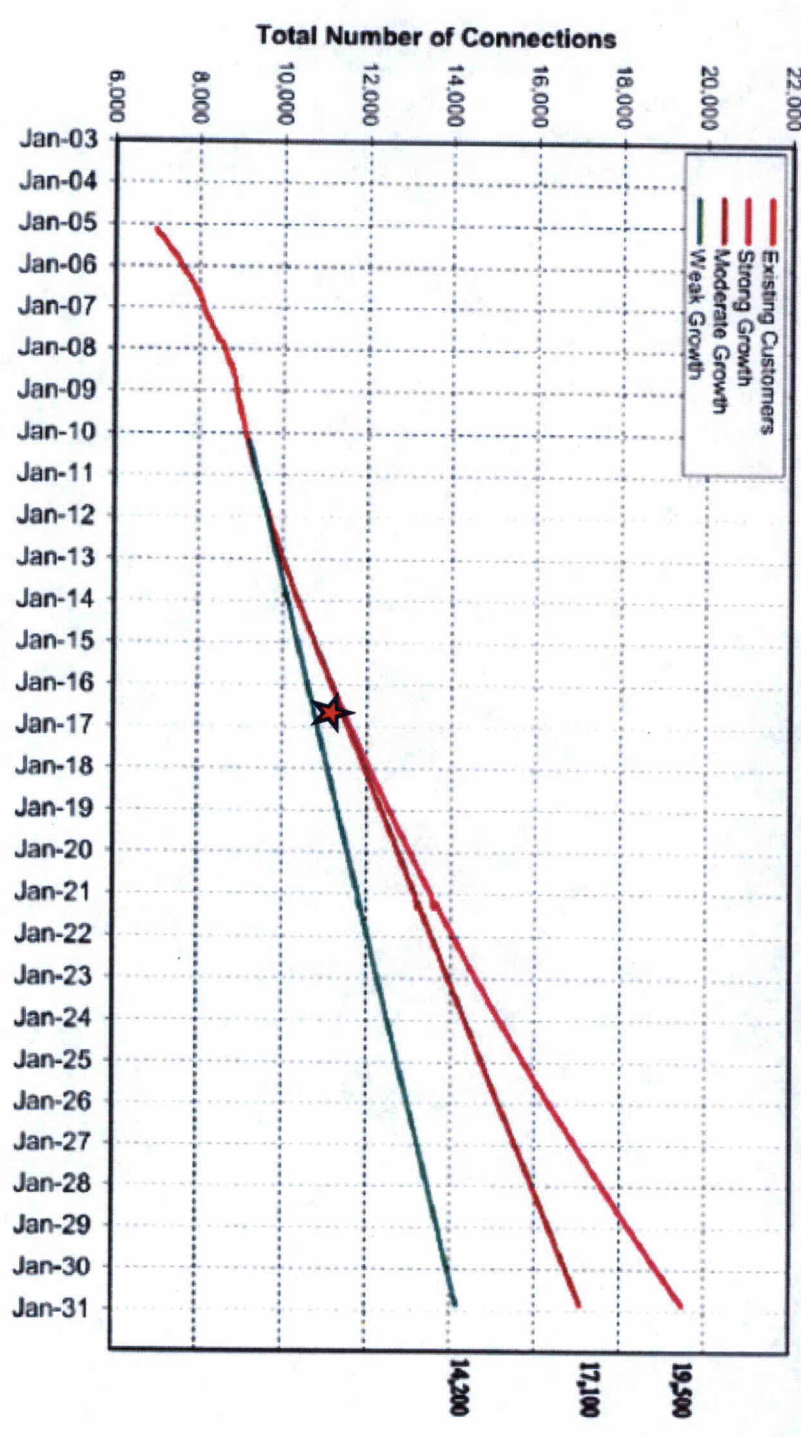
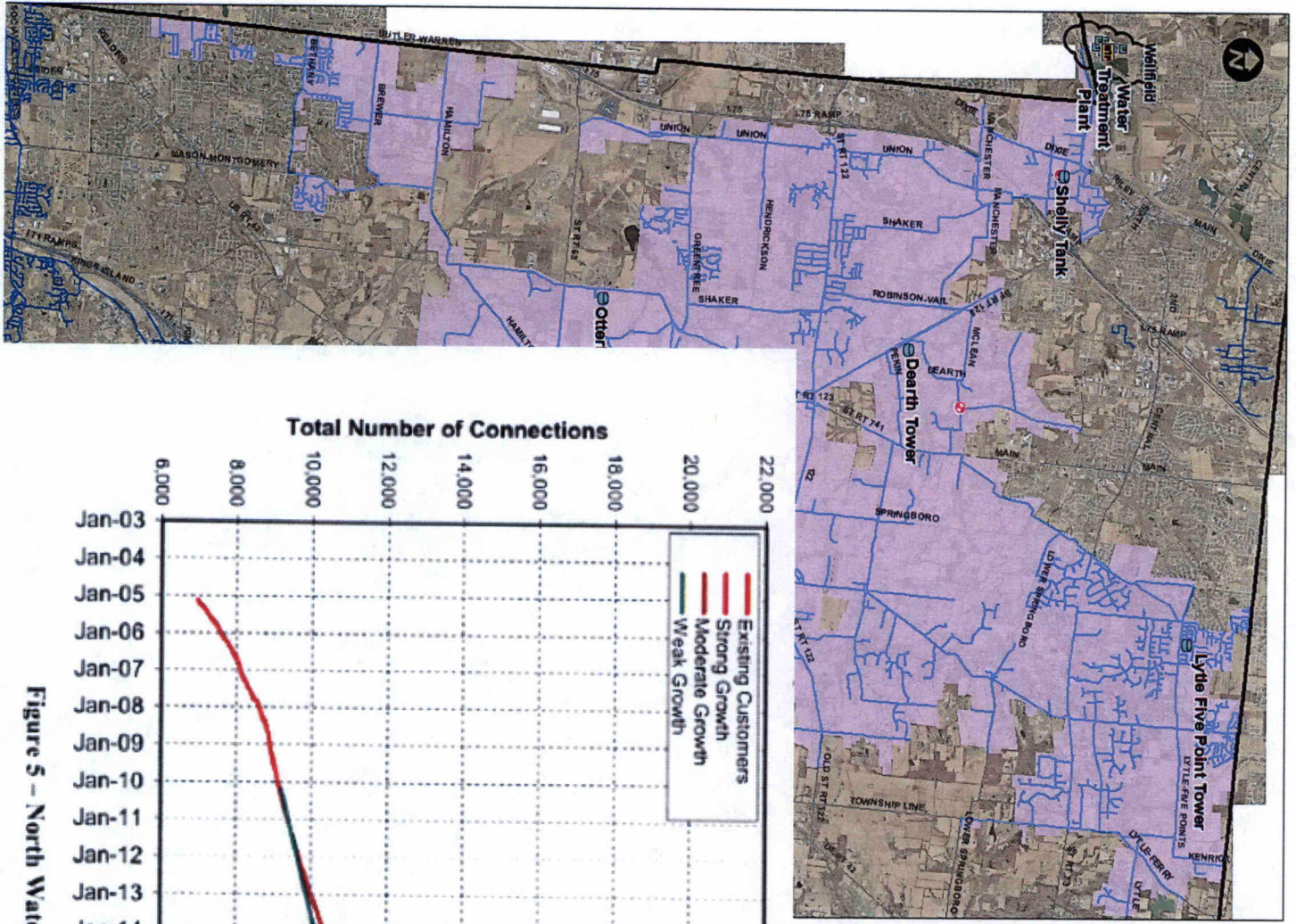
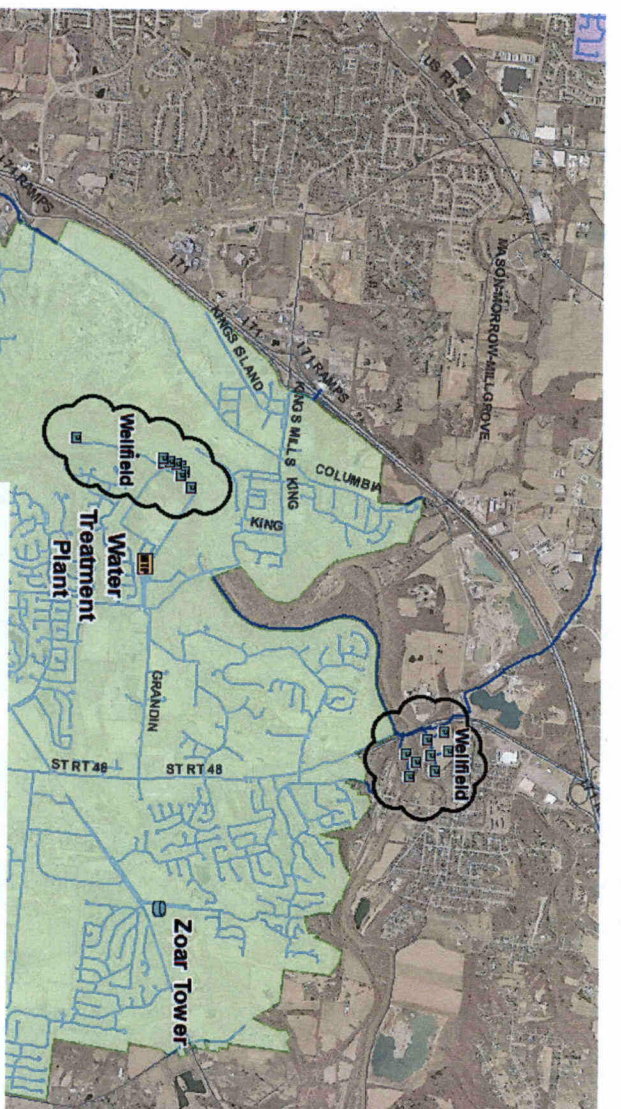


Figure 5 - North Water System Total Service Connections

State of the Water System

# North Water System

Customer Accounts: 11,000



*State of the Water System*  
**Renneker**  
**Public Water**  
**System**  
 Customer Accounts: 12,500

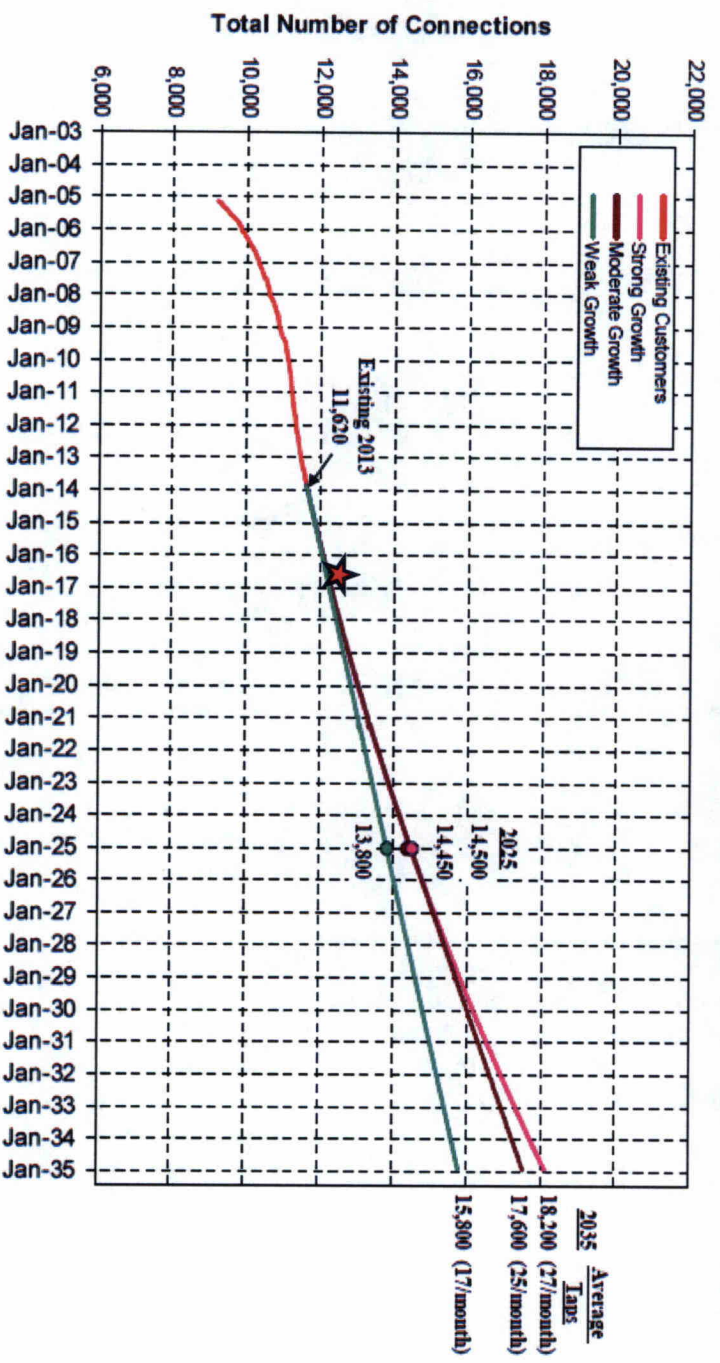


Figure 8 – Richard A. Renneker Water System Total Service Connections

*State of the Water System*

# Socialville Public Water System

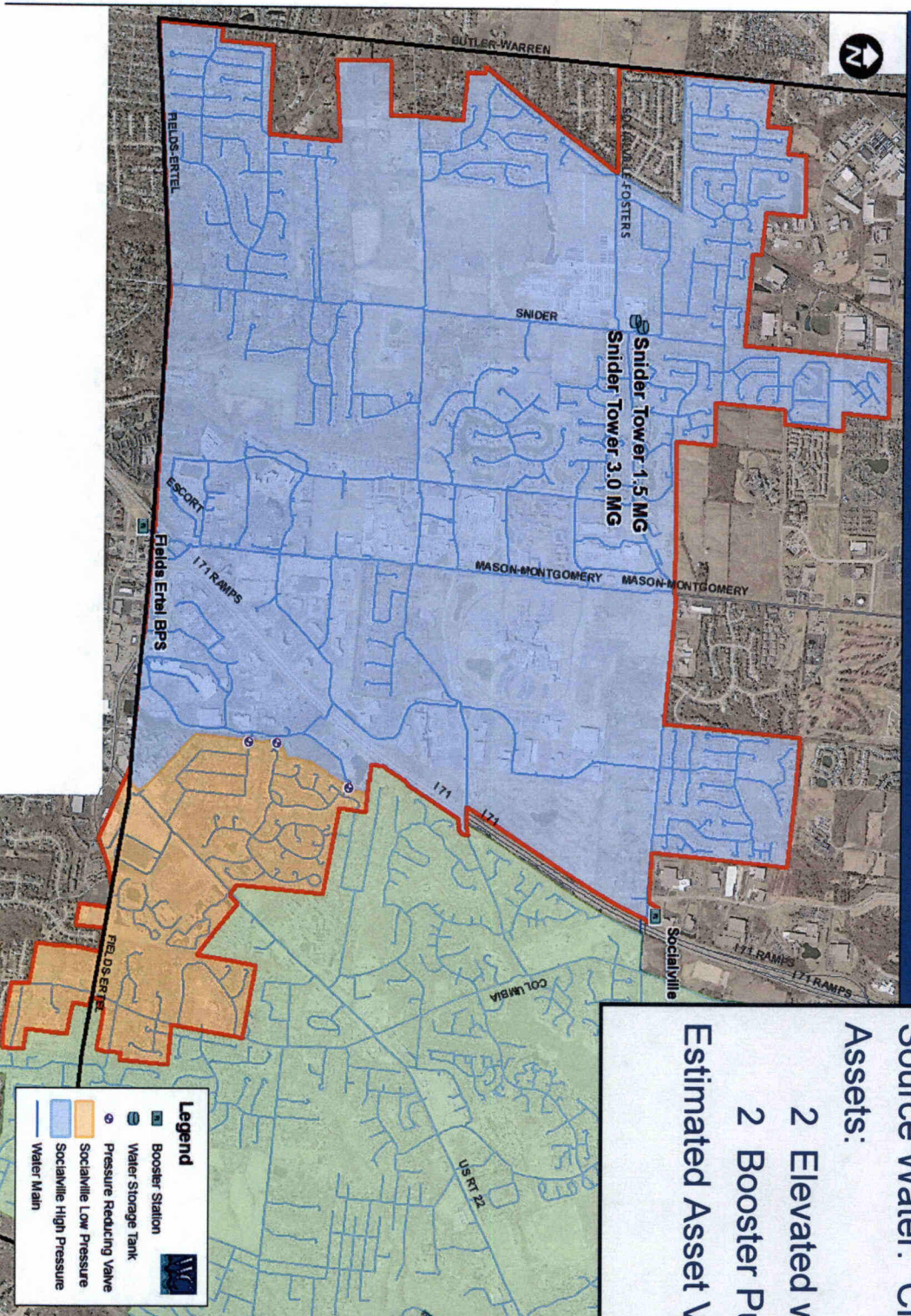
Customer Accounts: 4,200

Source Water: Cincinnati Water Works

Assets:

- 2 Elevated water tanks
- 2 Booster Pump Stations

Estimated Asset Value: \$15-\$20 Million



# **Issues & Challenges**

**GROWTH**

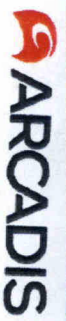
**LEVEL OF SERVICE – Softened Water**

**FISCAL RESPONSIBILITY**

# Growth

Issues & Challenges

Effective growth and the avoidance of pitfalls occur through proper planning using GIS, water system modeling, and financial planning.



Design & Consultancy  
for natural and  
built assets

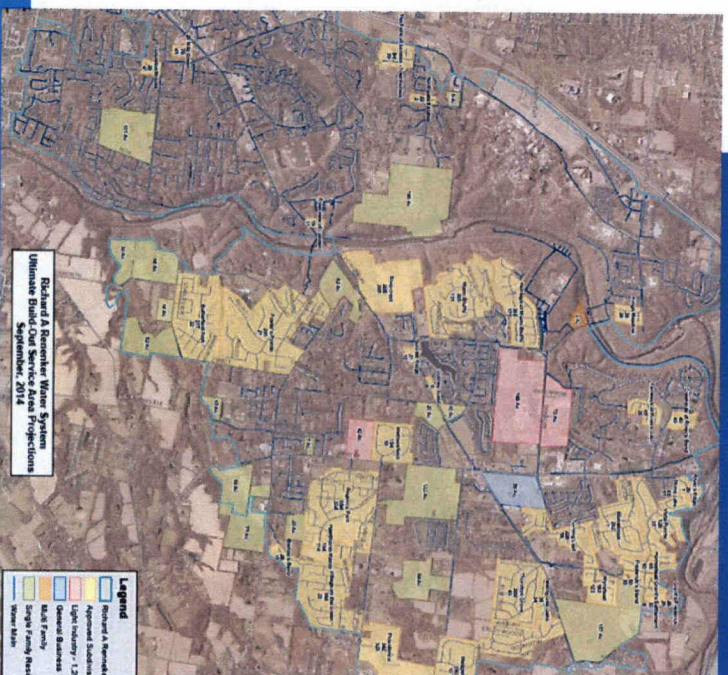


Warren County, Ohio

2015 Water Master Plan

DRAFT REPORT

January 2016

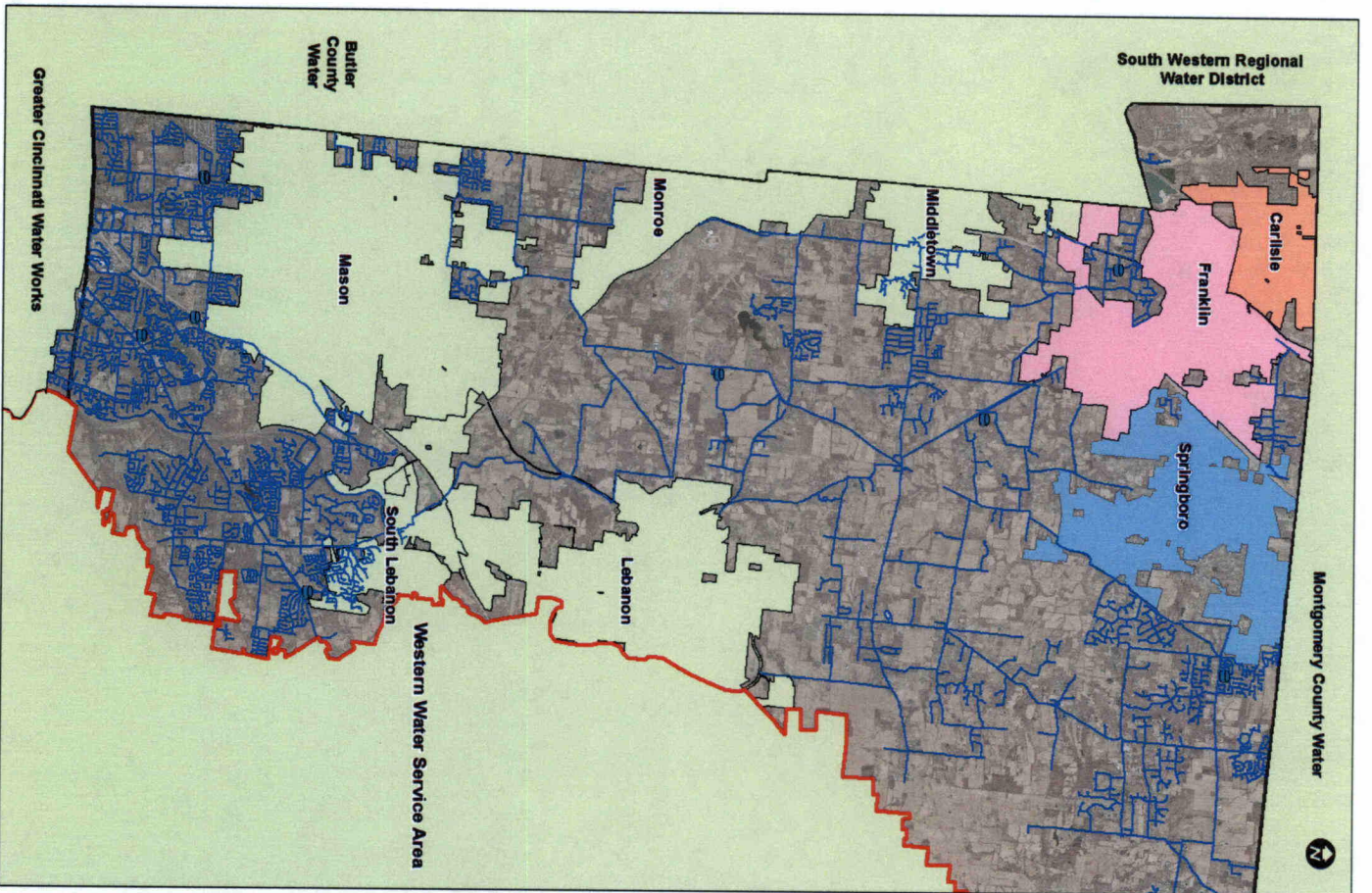


Richard A. Rosenthal Water System  
Ultimate Build-Out Service Area Projections  
September, 2014

Legend	
Richard A. Rosenthal Boundary	
Approved Subdivisions	
Light Industry - 1,200 GPD/acre	
General Business - 1,200 GPD/acre	
Multi Family	
Single Family Residential - 80 GPD/Household, 2.51MGD/acre	
Water Mains	
Sewer Mains	

Warren County, Ohio 2015 Water Master Plan Richard A. Rosenthal Water Treatment Plant Reverse Osmosis Softening Plant Columbus Water & Sewer Company Alternative C1-3025 Project (1.2 MGD Phase 2 Capacity) Membrane/Reverse Osmosis Softening Capital Cost				
Line Item	Description	Quantity	Unit Price	Total Cost
1.0	Reverse Osmosis Membranes	112,412	\$1	\$112,412
2.0	Reverse Osmosis Membrane Spacers	112,412	\$1	\$112,412
3.0	Reverse Osmosis Membrane Support Structures	112,412	\$1	\$112,412
4.0	Reverse Osmosis Membrane Cleaning Chemicals	112,412	\$1	\$112,412
5.0	Reverse Osmosis Membrane Housing	112,412	\$1	\$112,412
6.0	Reverse Osmosis Membrane Installation	112,412	\$1	\$112,412
7.0	Reverse Osmosis Membrane Replacement	112,412	\$1	\$112,412
8.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
9.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
10.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
11.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
12.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
13.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
14.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
15.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
16.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
17.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
18.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
19.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
20.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
21.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
22.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
23.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
24.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
25.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
26.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
27.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
28.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
29.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
30.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
31.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
32.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
33.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
34.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
35.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
36.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
37.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
38.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
39.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
40.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
41.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
42.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
43.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
44.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
45.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
46.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
47.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
48.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
49.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
50.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
51.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
52.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
53.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
54.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
55.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
56.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
57.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
58.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
59.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
60.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
61.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
62.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
63.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
64.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
65.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
66.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
67.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
68.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
69.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
70.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
71.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
72.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
73.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
74.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
75.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
76.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
77.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
78.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
79.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
80.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
81.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
82.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
83.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
84.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
85.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
86.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
87.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
88.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
89.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412
90.0	Reverse Osmosis Membrane Ongoing Support	112,412	\$1	\$112,412
91.0	Reverse Osmosis Membrane Spare Parts	112,412	\$1	\$112,412
92.0	Reverse Osmosis Membrane Insurance	112,412	\$1	\$112,412
93.0	Reverse Osmosis Membrane Contingency	112,412	\$1	\$112,412
94.0	Reverse Osmosis Membrane P&G	112,412	\$1	\$112,412
95.0	Reverse Osmosis Membrane Operation	112,412	\$1	\$112,412
96.0	Reverse Osmosis Membrane Maintenance	112,412	\$1	\$112,412
97.0	Reverse Osmosis Membrane Training	112,412	\$1	\$112,412
98.0	Reverse Osmosis Membrane Testing	112,412	\$1	\$112,412
99.0	Reverse Osmosis Membrane Start-up	112,412	\$1	\$112,412
100.0	Reverse Osmosis Membrane Commissioning	112,412	\$1	\$112,412





## *Issues & Challenges*

# Softened Water

The expectation of softened water grows with each surrounding community that moves toward the higher level of service.

# Softened Water

Surrounding communities have adopted a water hardness standard that meets consumer expectations

Water Hardness Scale		
Grains/Gallon	mg/L & ppm	Classification
Less than 1	Less than 17.1	Soft
1 to 3.5	17.1 to 60	Slightly hard
3.5 to 7.0	60 to 120	Moderately hard
7.0 to 10.5	120 to 180	Hard
10.5 and over	180 and over	Like a stone

Note - one grain per gallon = 17.1 parts per million (ppm)

Target Range Between 75 and 150 mg/L

Nearby Communities 140 mg/L

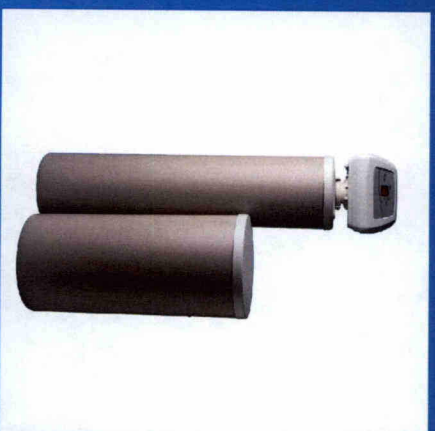
Warren County  
Average 385 mg/L

## Softened Water

Customers that currently soften will save on plumbing expense and monthly operating costs.

Residential Home Softener

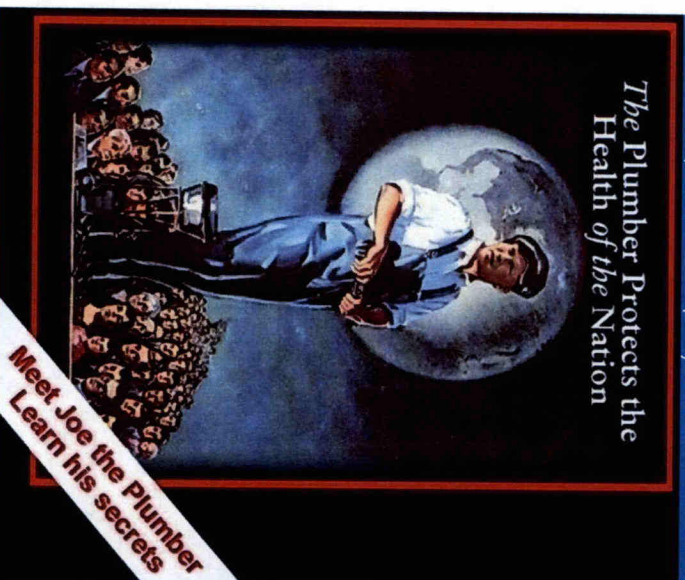
\$500 - \$1,300



Salt Replacement  
\$10 to \$15 / month  
\$120 to \$180 / year



Plumbing Contractor  
\$500 - \$1,000



*The Plumber Protects the  
Health of the Nation*

**Meet Joe the Plumber  
Learn his secrets**

Approximately

50% of

customers

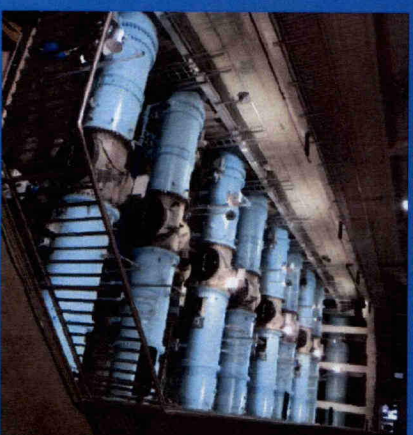
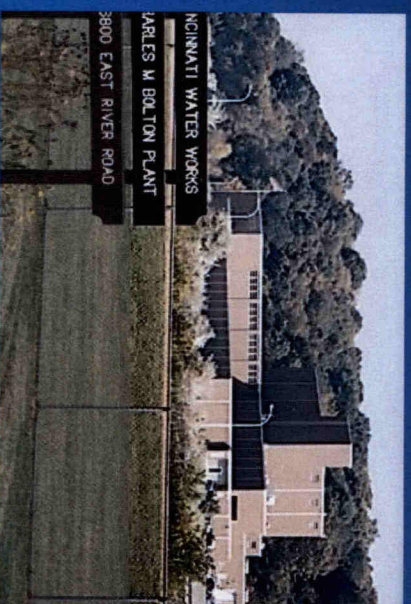
soften their

water.

# Option 3



- Current treatment capacity of 260 to 280 MGD.
- Average daily production 126 MGD.
- Conventional treatment, plus GAC treatment and UV Disinfection, of the Ohio River Water at the Richard Miller Treatment Plant.
- Lime softening of Great Miami River aquifer water at the Charles M. Bolton Plant.



Note: MGD = Million Gallons per Day

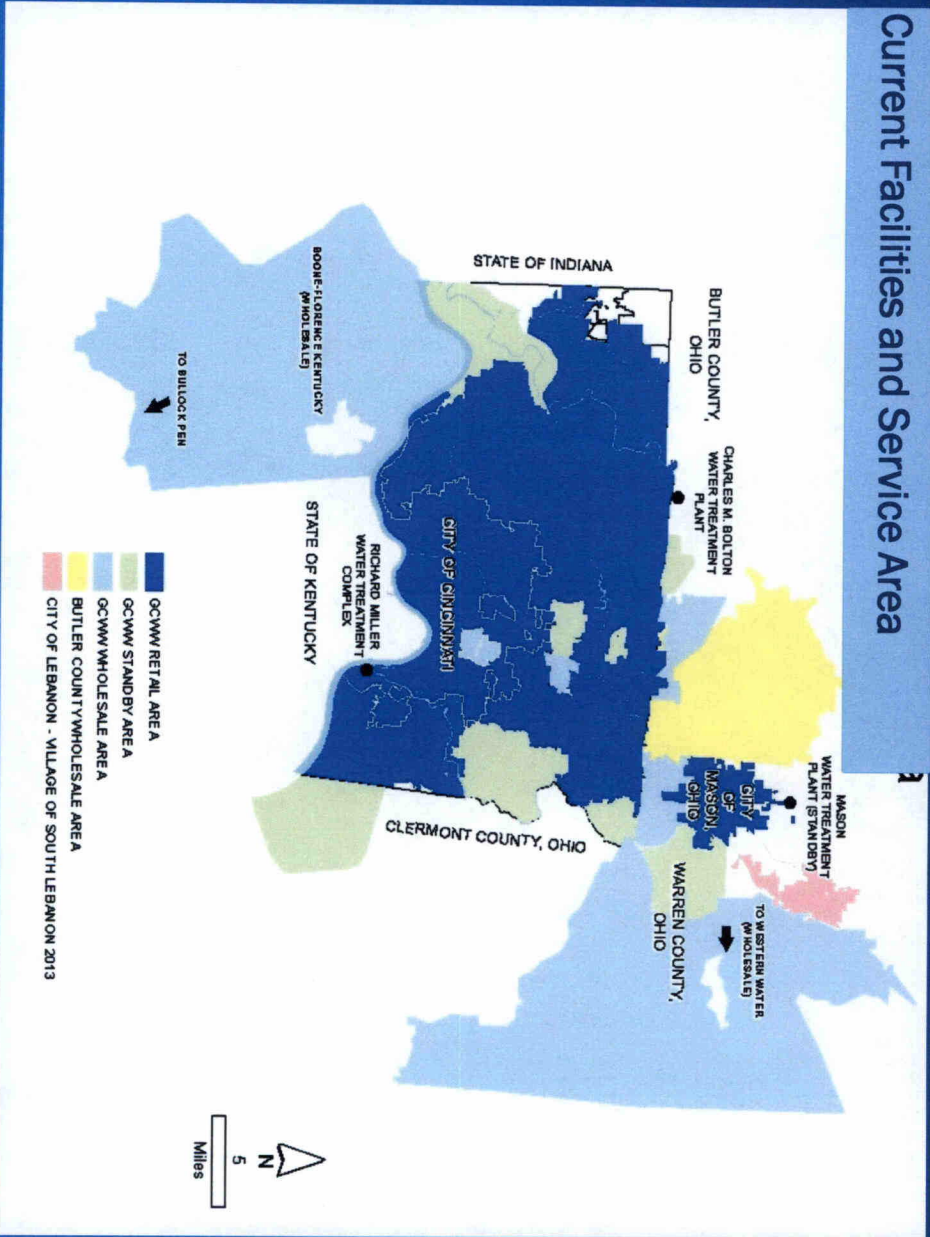


# Option 3

## Utility Service Area and Customer Base

- Service area in 1998 = 350 square miles
- Service area in 2015 = 830 square miles
- GCWW Supplies over 45 billion gallons of water per year.

Current Facilities and Service Area





# Option 3

## GCWW System Growth

- ABUNDENT WATER SUPPLY GCWW has an abundant raw water supply and excess water treatment capacity that can accommodate additional growth.
- ADVANCED TREATMENT Advanced processes like GAC and UV treatment are best available technologies to produce high quality water.
- STABLE WATER Finished water is stable and can be transported over great distances.
- RELIABLE SUPPLIER System and source water redundancy and reliability ensure a continuous water service during all conditions.