Regionalization Challenges with Ohio EPA Lead Regulations

Jeffrey Kauffman March 7, 2019 jkauffman@delcowater.com

Sne Water

Government & Regulatory Affairs Workshop

Affairs Workshop



Opening Remarks

- Del-Co Water Historic Events
- Regionalization & Del-Co's Experience
- Lead Review & Ohio EPA Regulations
- Centerburg Acquisition & Lead Concerns
- Closing Remarks

Regionalization Benefits

- Managerial, Technical, Financial Capabilities
- Economies of Scale
- Regulatory Compliance (MCL, AL, EC)
- Cost Effective & Sustainable
- Better Option for Communities

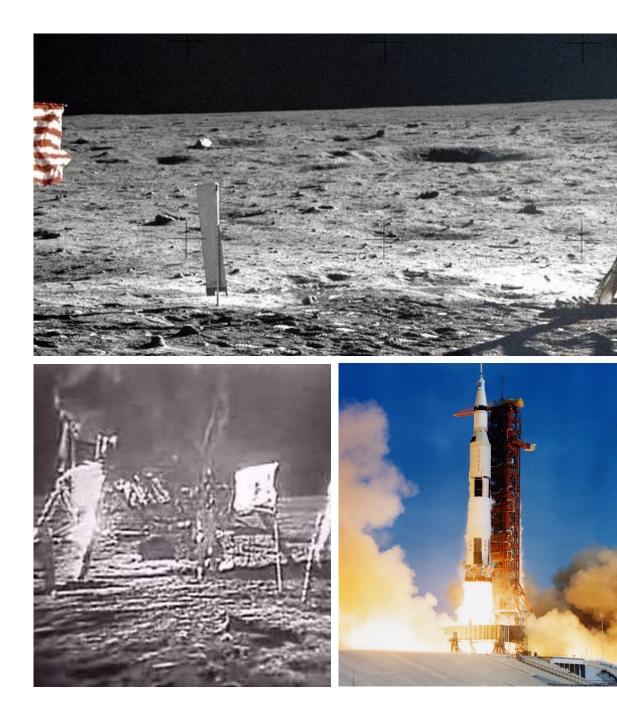
Regionalization Challenges

Political Opinions

Financial Agreement

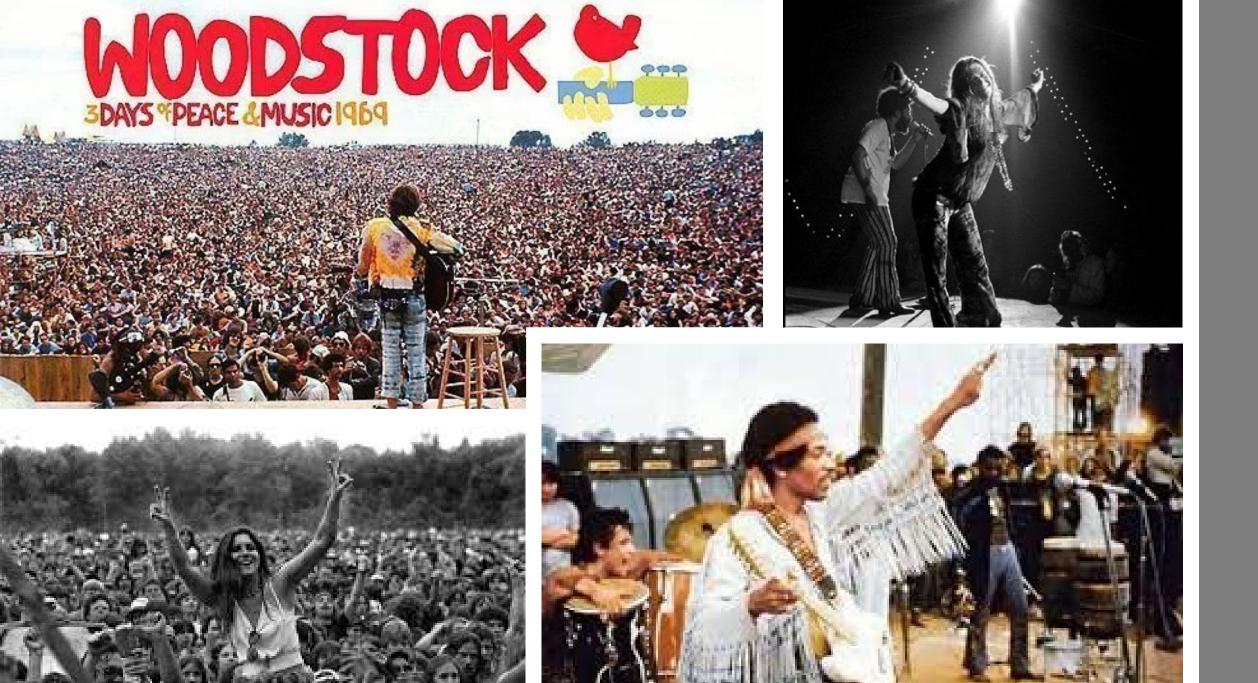
Infrastructure & Assets

Condition Assessment



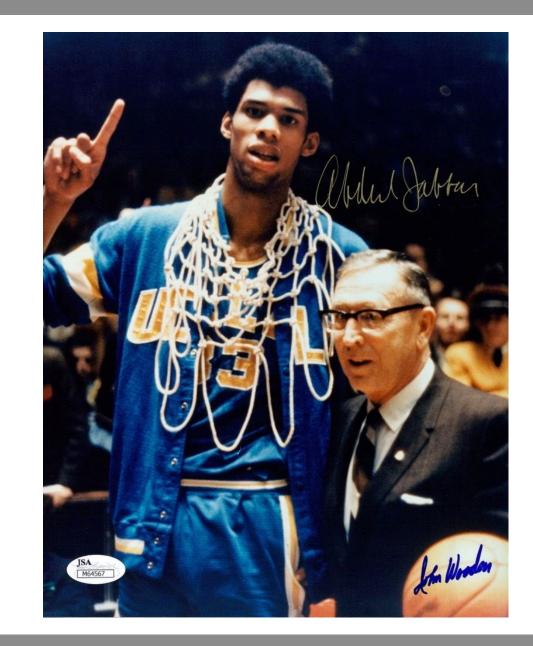


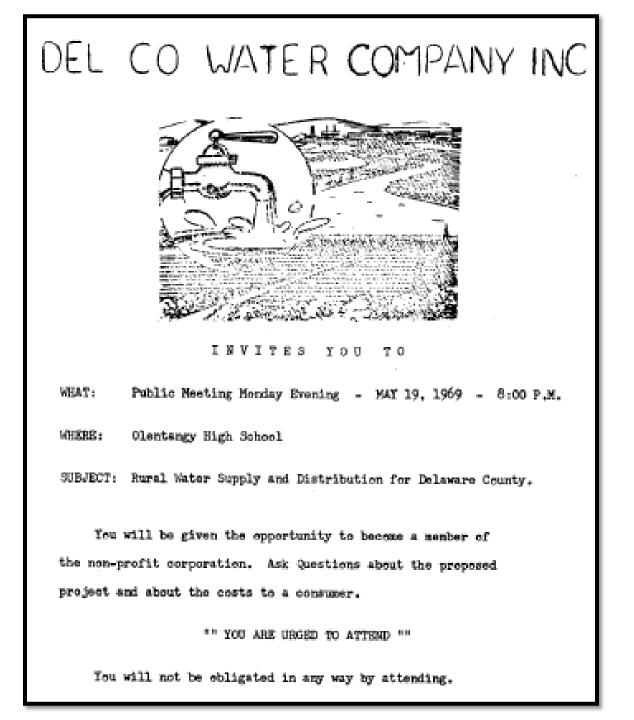
















President Nixon on TV as he announced his resignation

WASHINGTON, Aug. 8-1 will pledge to you tomorrow Vice President Ford praised and in the future, my best ef-president Nixon tonight Isr forts in cooperation, leadership 'one of the greatest personal and dedication to what's snot crifices for the country and for America and good for the

one of the finest personal db- world." he said. isions on behalf of all of us as The Vice President, who Mr. Ford, who will take d-ice as the 38th President at interction of setking it after Mr. The as the JARD President 4 interview of earling is after Me. non interview, words to cm. Ninosi term, will sube the oth time MR. Nisari foreign policy of office is a private ceremony announced that Strettery is the White Mouse. Thus will be become the first main the sew Admini-ria pledge to you tonight, as a poly in the set of the s

morrow night he will address the nation on radio and tel

ision. It is expected that will speak at 6 P.M.

All day today the signs of The New York Tomor T

Apocial to The New York Times WASHINGTON, Aug. 8-Richard Milhous Nixon, the 37th President of the United States, announced tonight that he had given up his long and arduous fight to remain in office and would resign, effective at noon tomorrow,

At that hour, Gerald Budoloh Ford, whom Mr. Nixon nominated for Vice President last Oct, 12, will be sworn in as the 38th President, to serve out the 895 days remaining in Mr. Nixon's second term-

Less that two years after his landslide re-election victory, Mr. Nixon, in a conciliatory address on national

Text of the address will be found on Page 2.

television, said that he was leaving not with a sense of bittemess but with a hope that his departure would start a "process of healing that is so despcrately needed in America." He spoke of regret for any "injuries" done "in the course of the events that led to this decision." He acknowledged that some of his judgments had been wrong.

The 61-year-old Mr. Nixon, appearing calm and resigned

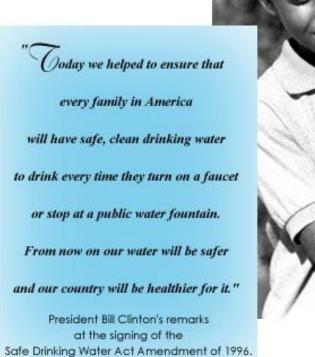


Safe Drinking Water Act (SDWA)of 1974

- Across the country, drinking water quality was uneven;
- Standards varied widely from state to state, and sometimes even in different areas of the same state.
- The SDWA established the first comprehensive program to eliminate these inconsistencies and set nationwide standards for drinking water quality

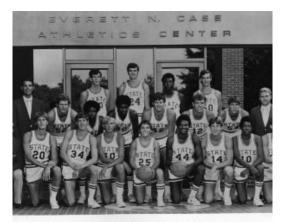
The Safe Drinking Water Act

Success in Advancing Public Health Protection



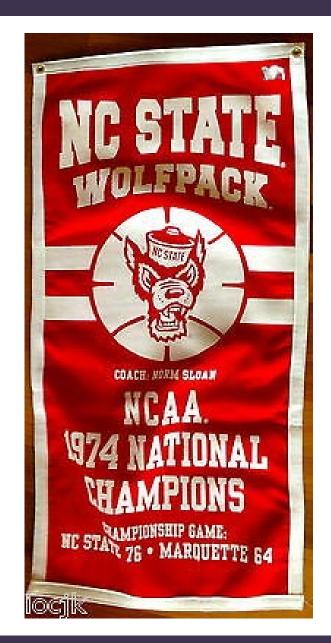


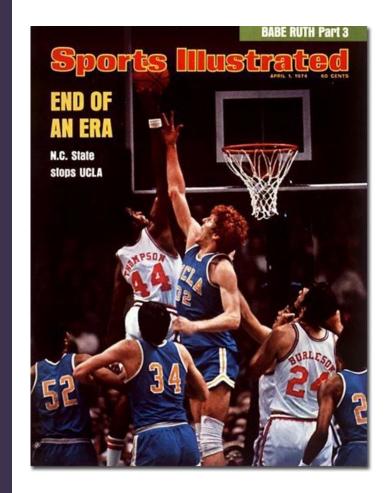


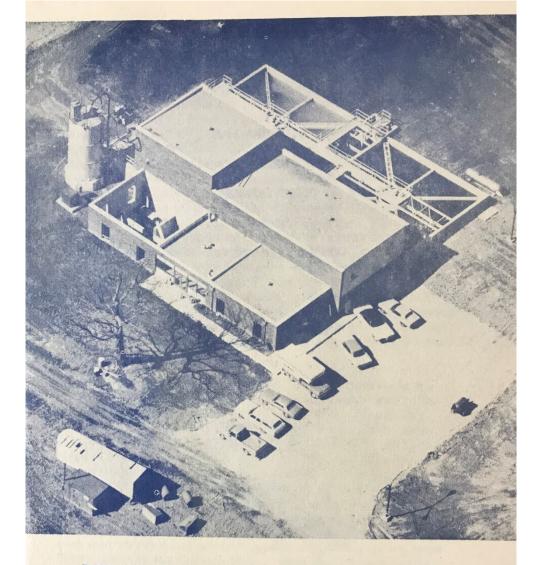


1973-74 NORTH CAROLINA STATE UNIVERSITY BASKETBALL TEAM

n Row (Left to Right): Stofent Manager Mile Sloan, Steve Smoral, Craig Kossmaul, ? Moeller, Monte Towe, David Thompson, Greg Hawkins, Moe Rivers, Bruce Dayhaf, on Row: Anateant casch Eddie Biefenhach, Asaletant caach Art Musselman, Steve N Dwight Johnson, Jerry Hunt, Tim Stöddard, Sheve Smith, Ken Gehring, Asalstant coa Sam Espoaten, Stead Coach Normas Sloan. d Row: Bill Lake, Tommy Burleson, Fhil Spance, Mike Buurma.

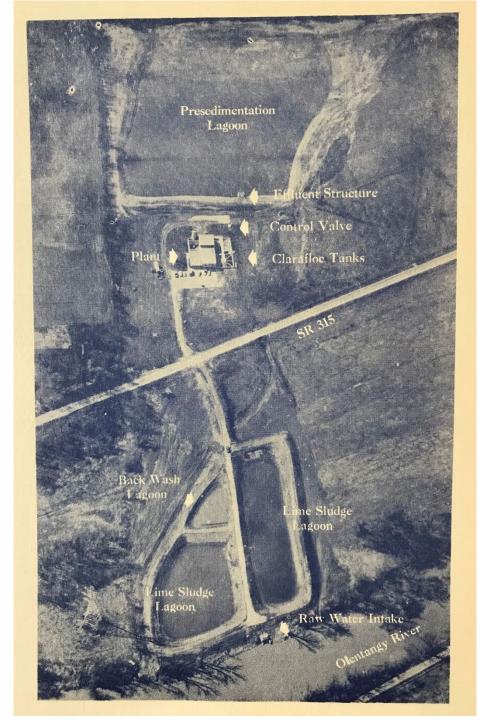






DEL-CO WATER TREATMENT FACILITIES Delaware County, Ohio

> DEDICATION Sunday, August 18, 1974

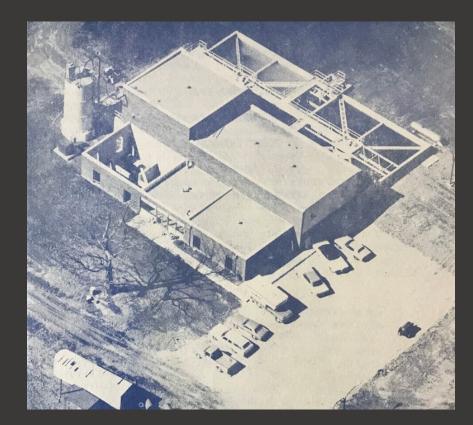


Where Del-Co Began

Del-Co General Information

Member-owned Cooperative

- 501 (c) Not-for-Profit Corporation
- Established in 1969
- Served 1st customer in 1974
- Initial Employees = 4
- Initial Customers = 2000



Delco West Water Company Initial sign up ends February 28, 1973 at 7 p.m.

Join now and save \$100.00

Fees up to and including February 28, 1973 are: Membership \$10.00, Residential 5/8" Tap \$65.00

Fees after February 28, 1973 Membership \$10.00, Residential 5/8" Tap \$165.00

Office Hours: 8:30 a.m. to 7 p.m. (until 2/28/73)

Delco West Water Company 5810 Columbus Pike (US 23) Delaware, Ohio 43015 Phone 240-548-7746



Lester Stone of FHA, Dean Miller – County Commissioner, Ralph Scott – President of Del-Co, and Ted Woldorf of the Ohio Department of Natural Resources examine approval papers of the \$44 million dollar loan August 17, 1970.

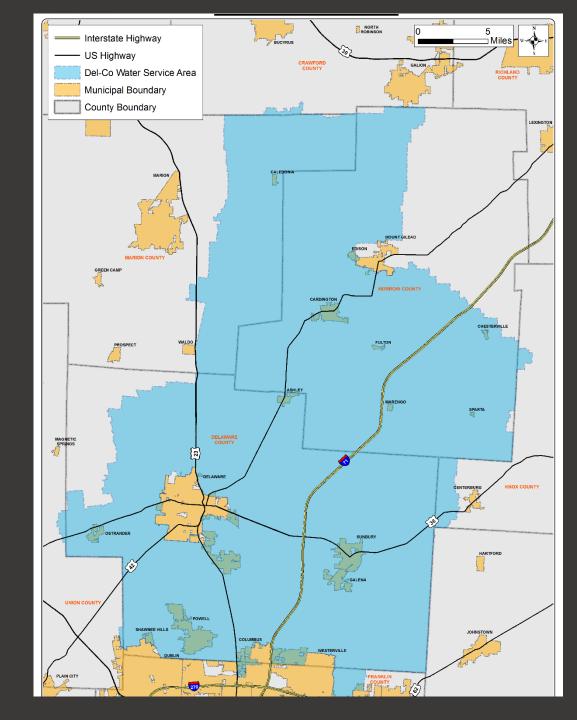
Del-Co Water Plans to Begin Construction in 1971

RECEIVES LOAN FROM FARMERS ADMINISTRATION; PLANS PUBLIC MEETINGS FOR TAP FEES, EASEMENTS

Farmers Home Administration approved a \$4,000,000 loan to Del-Co Water Company, Inc., last week for construction of a rural water system in southern Delaware county. According to Del-Co President Ralph E. Scott, the construction is expected to begin in the spring of 1971 and will be completed in 12 to 15 months. vine, Lester M. Stone, state director of the Farmers Home Administration, Deam Miller, chairman of the county commissioners, Alfred F. Myers, president of the Delaware Chamber of Commerce, Warren Bale, district supervisor of FHA and Arthur F. Woldorf, representative of the Ohio Department of Natural Resources. All except Devine were present at Monday's press

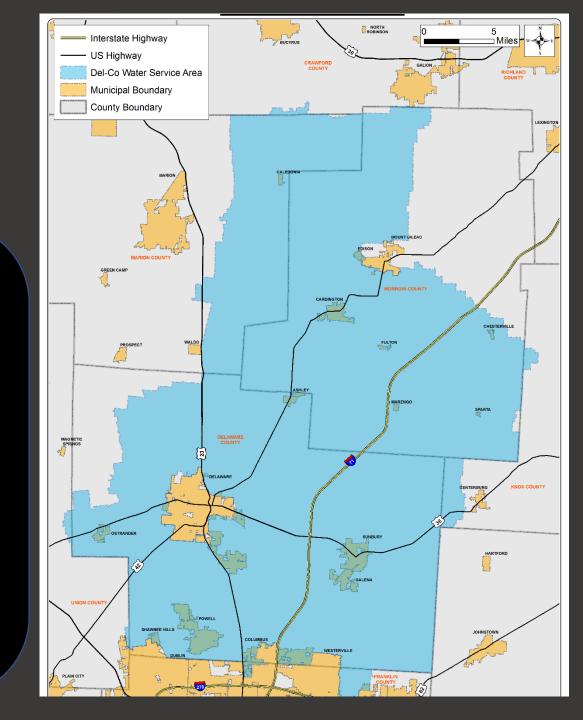
Del-Co Water Service Area

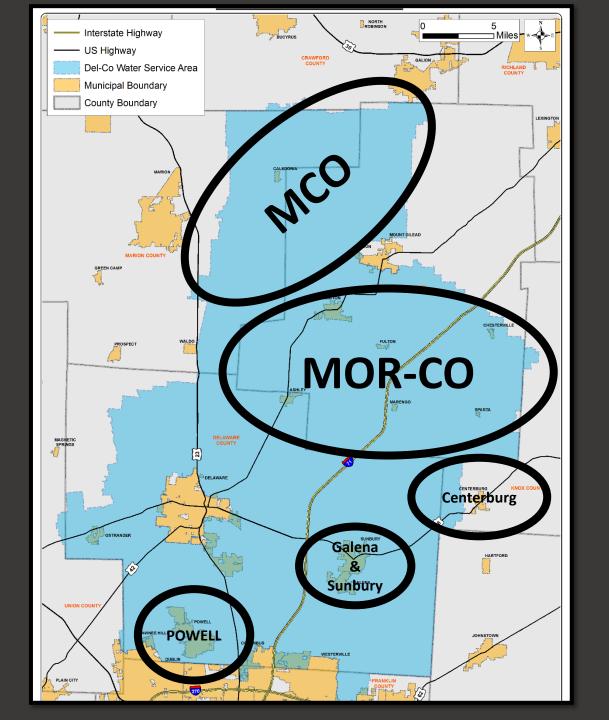
Significant Additions



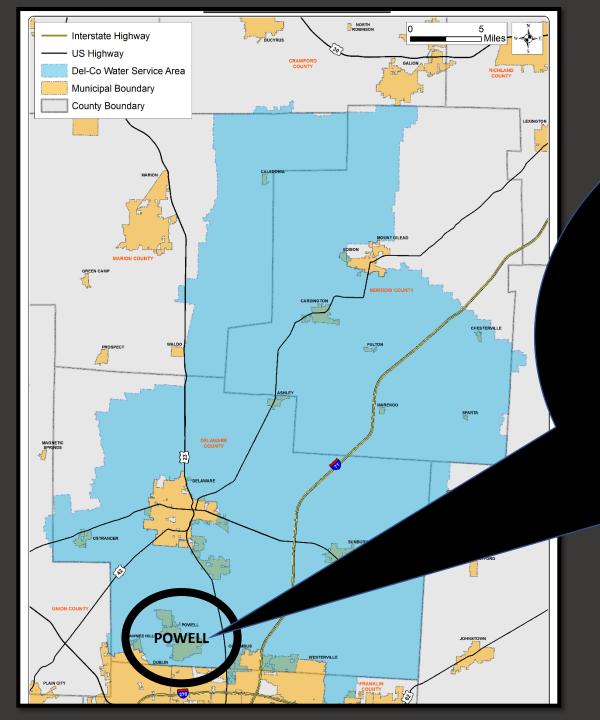
Significant Additions

Powell Sunbury Galena Centerburg **Morrow County Marion County**



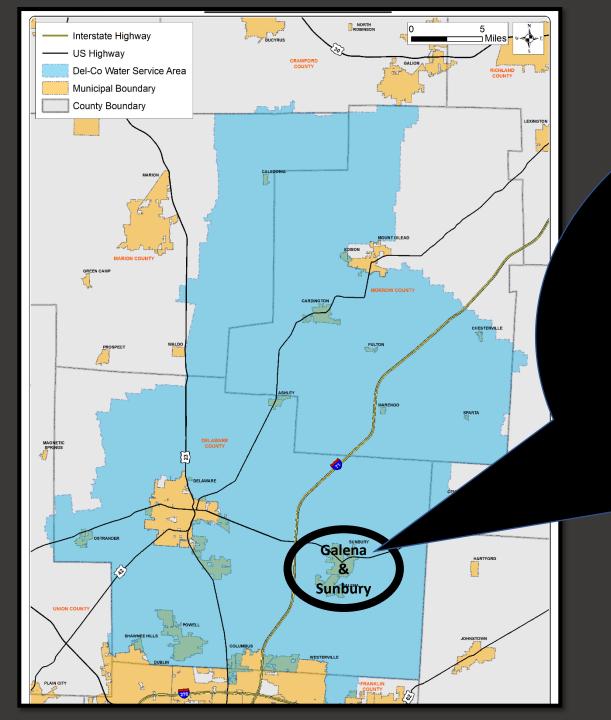


City	Service Connections	Population	History	Acquisition Date
Powell	4,069	12,000	PWS & Dist. System	Early 1980s
Galena	297	660	PWS & Dist. System	Early 1990s
Mor-Co	USDA Loans		Dist. System Only	1993
МСО			Dist. System Only	Early 2000s
Sunbury	1,992	5,100	PWS & Dist. System	2005
Centerburg	650	2,200	PWS & Dist. System	2018



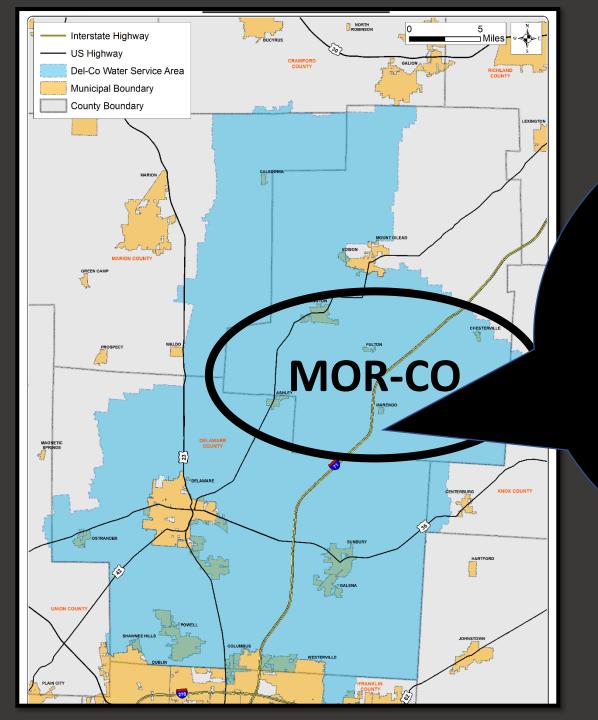
Powell

Early 1980s
4,069 Services
12,000 Customers
PWS & Dist. System



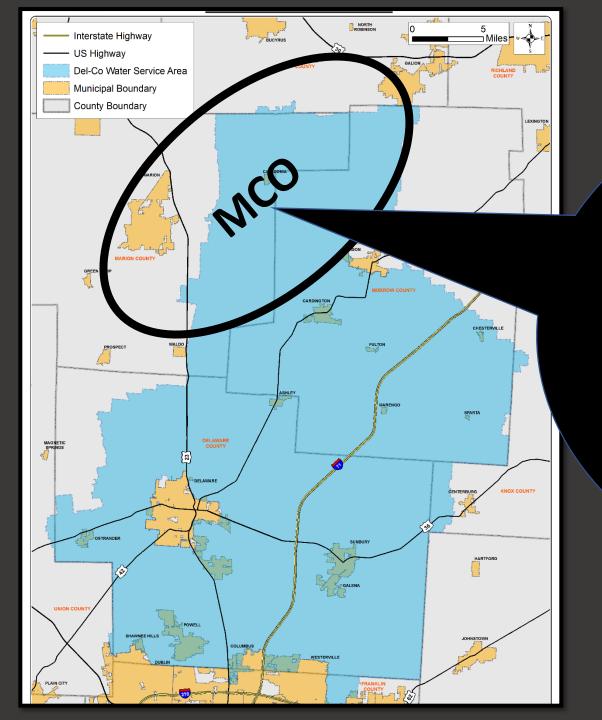
<u>Galena</u>

Early 1990s
297 Services
660 Customers
PWS & Dist. System



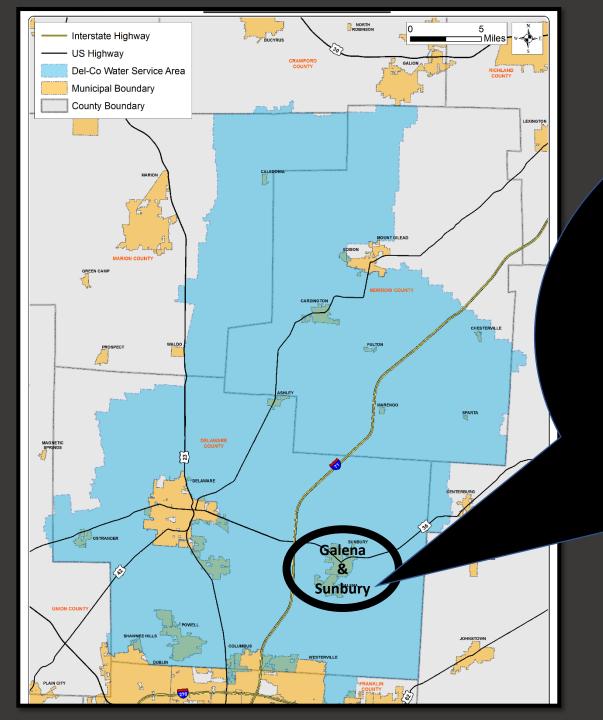
MOR-CO

Early 1990s
Dist. System Only
Secured USDA Funding



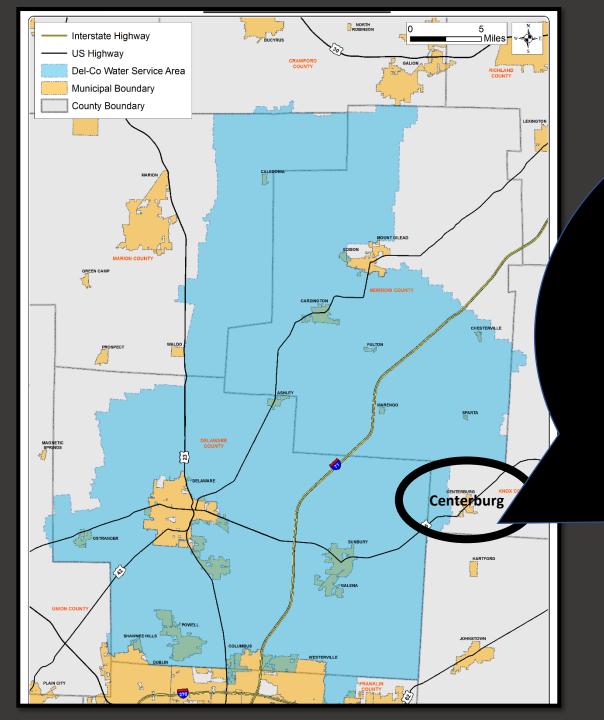
MCO

Early 2000s
Dist. System Only
Secured USDA Funding



<u>Sunbury</u>

2005
1,992 Services
5,100 Customers
PWS & Dist. System



Centerburg

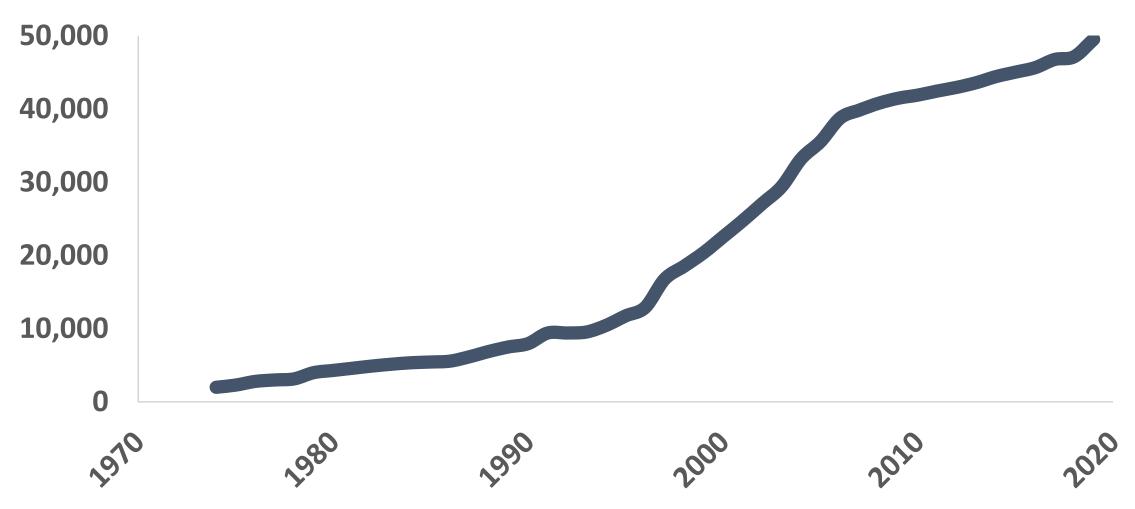
2018
650 Services
2,200 Customers
PWS & Dist. System

Del-Co Today

Del-Co General Information

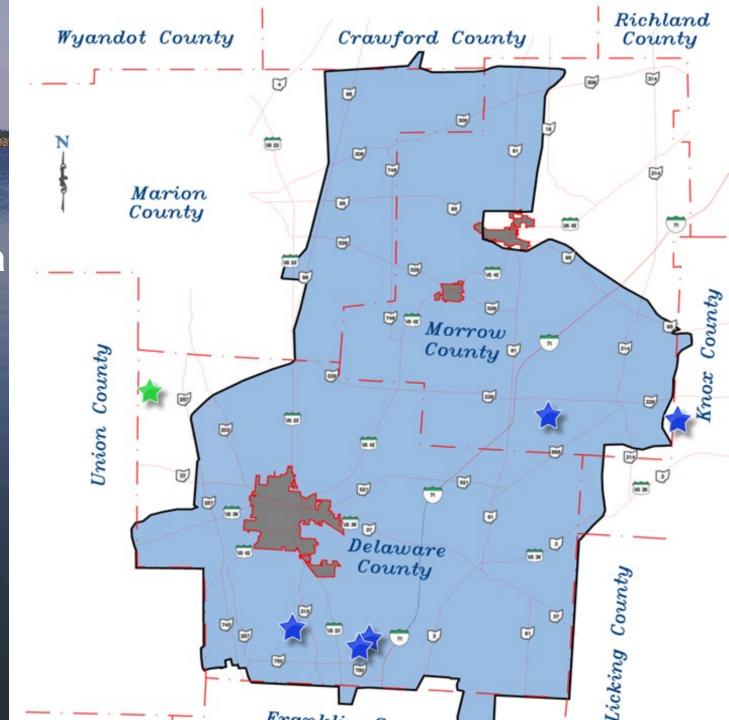
- 7th largest PWS in Ohio
- Largest 'Rural' Ohio system
- One of largest regional systems in Ohio
- Employees = 100
- Customers = 49,000
- **Population = 150,000**

Service Connections



Del-Co System

- 4 Treatment Plants
 800 Sq. Mi. Service Area
 1850 Miles of Pipeline
- 30 Elevated Tanks
- 18 Booster Stations
- Serve 7 Counties
- 7 Off-stream Reservoirs



1. Olentangy Plant / Reservoirs

2. Ralph E. Scott Plant

3. Timothy F. McNamara Plant/Reservoirs

4. Thomas E. Steward Plant

5. City Columbus/Del-Co Upground Reservoir

Olentangy Plant - Source: Olentangy & Scioto River - 4 Off-stream Reservoirs (1.6 Billion Gallons)

Ralph Scott Plant

Source: Alum Creek & McNamara Reservoirs
 2 Off-stream reservoirs (0.9 Billion Gallons)



Thomas Steward Plant Source: 4 Groundwater Wells Capacity: 6.0 MGD Supplies 10% of Del-Co customers

Del-Co's Future Growth & Projected Demand



MID-OHIO REGIONAL MORPC PLANNING COMMISSION

CONTACT US

HOME » NEWS » CENTRAL OHIO POPULATION TO REACH 3 MILLION BY 2050

Central Ohio Population to Reach 3 Million by 2050

December 19, 2018

Growth of the Region

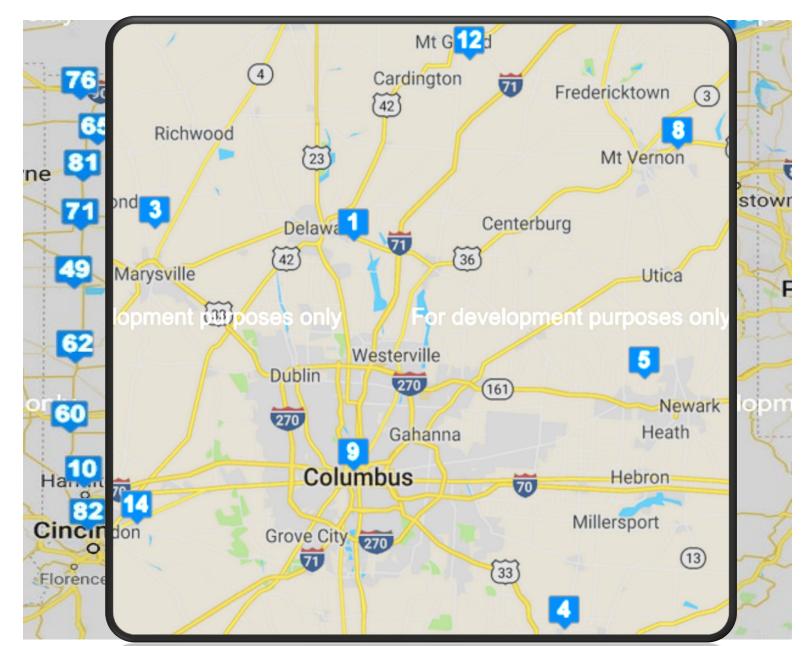


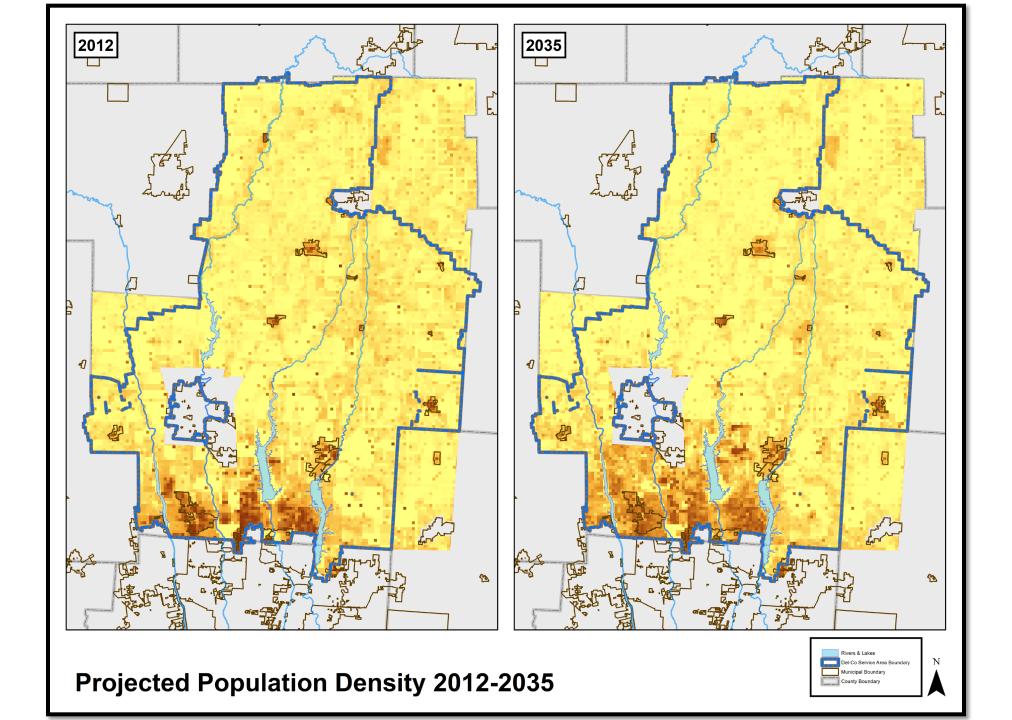
Adding systems (when beneficial)

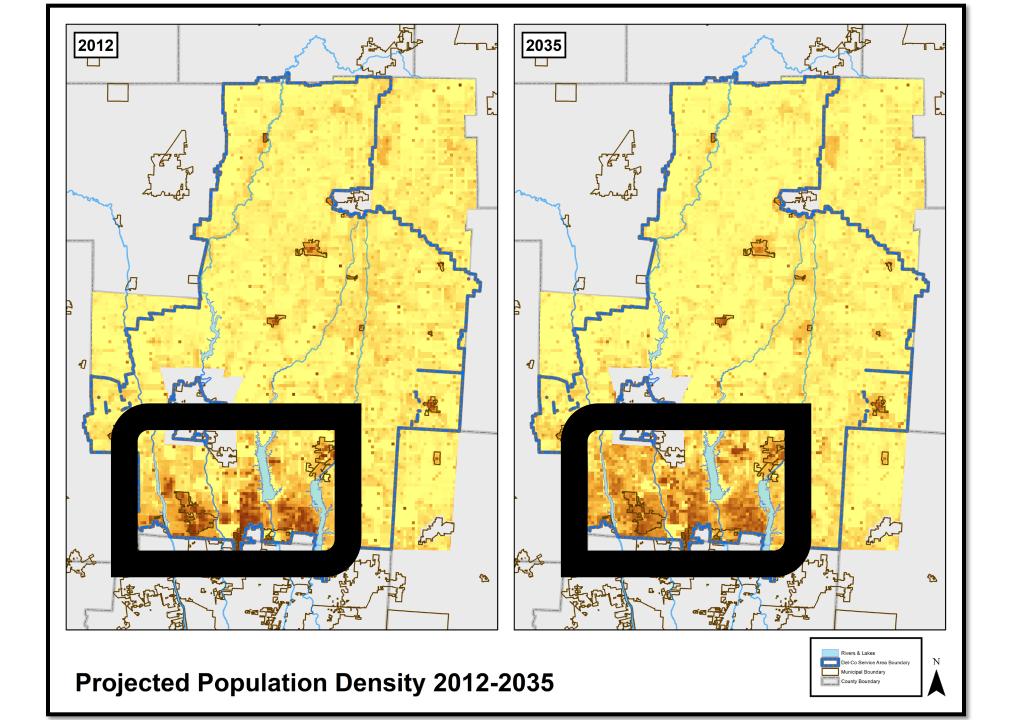


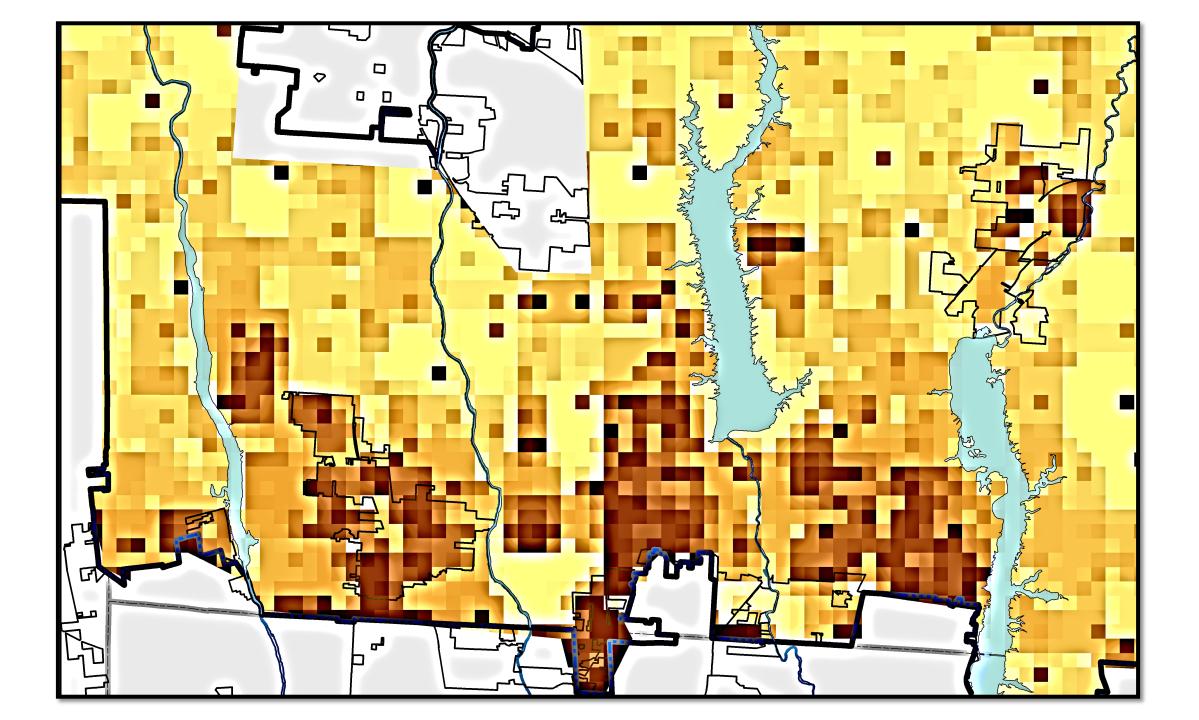
4th largest PWS in Ohio ???

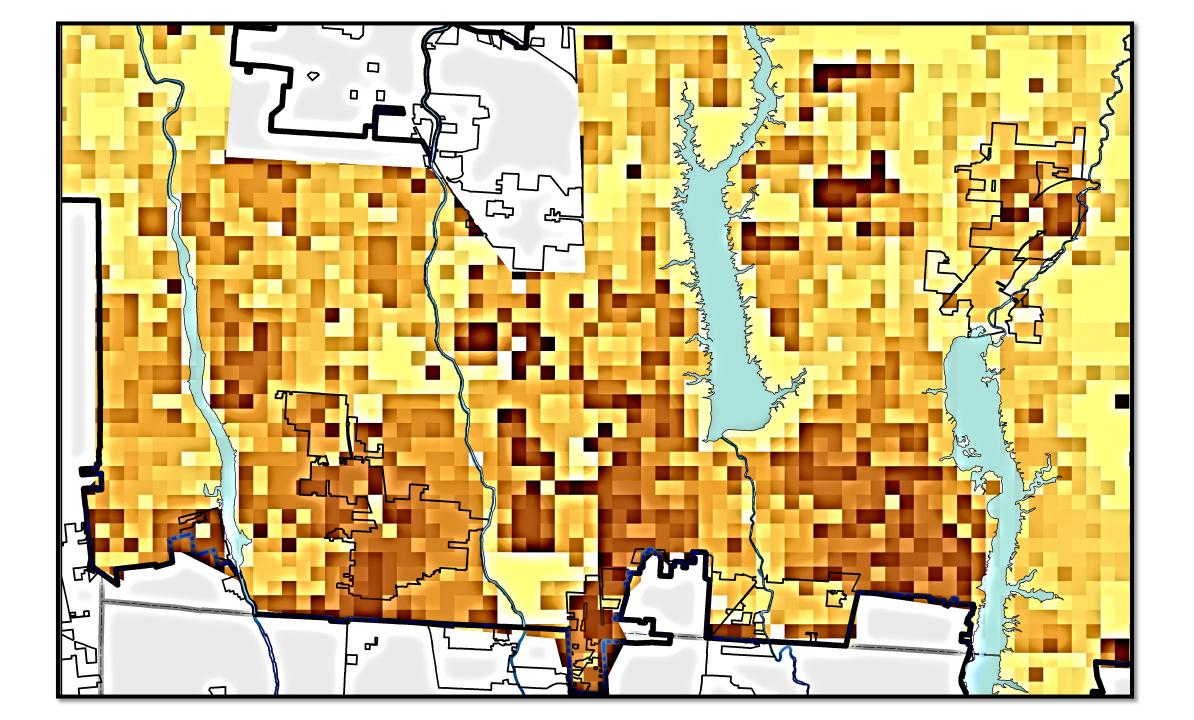
Ohio Population Growth Rates (2000 – present)











Projected Demand



Average Day



Peaking Factors

Master Planning Projected Demand

	Projected Demand (mgd)						
Service Area	Baseline	2015	2020	2025	2035		
Within Current Service Area	12.68	15.34	18.42	21.20	26.86		
Within the Additional Future Service Area Only	-	-	-	0.48	0.59		
Total Average Demands	12.68	15.34	18.42	21.68	27.45		
Total Max Day (2x Average)	25.35	30.69	36.83	43.36	54.90		

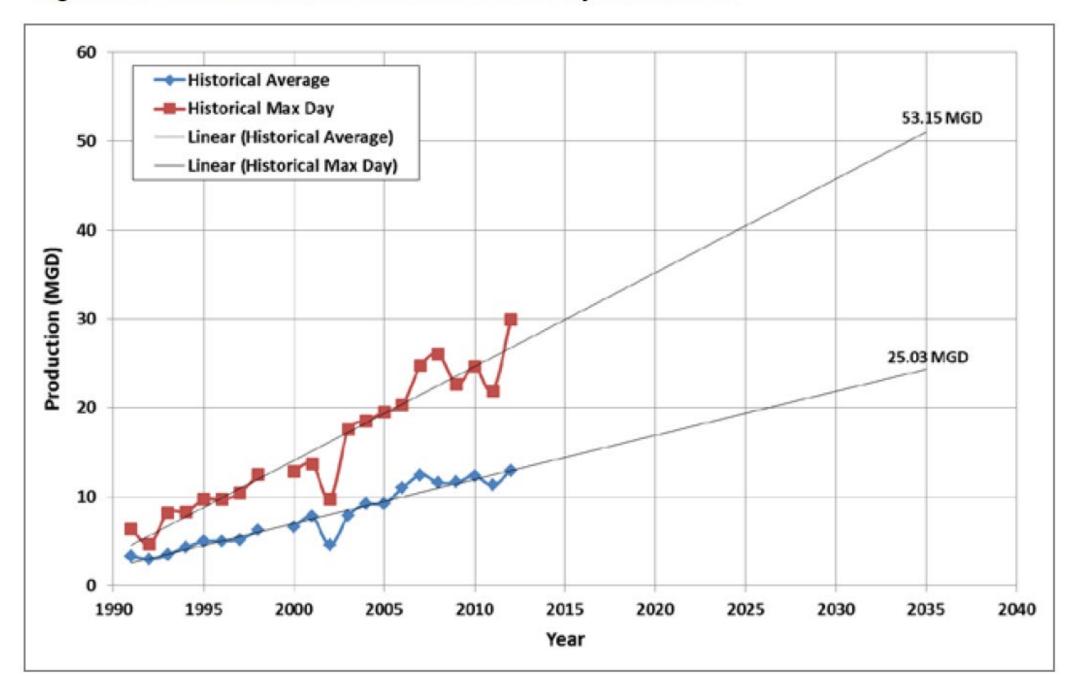


Figure 4-3 Historical Demand Trends and Future Projected Demand

Lead Review

Lead Review

Lead is a Public Health Issue
CDC vs. EPA Perspective
Challenges with Customer Education

CDC Perspective

- No known safe blood lead concentration
- Cumulative poison with permanent effects
- CDC recommends children and pregnant women use bottled or filtered water if above 15 ppb
- Infants, children and pregnant women most susceptible
- ~ 85% of exposure to infants from tap water

EPA Regulations

- USEPA regulation is an Action Level of 15 ppb
- An AL is not an MCL; is not health-based
- An AL exceedance is 'not a violation' and a 'Do Not Drink' notification is not required
- EPA's Maximum Contaminant Level Goal is zero

Del-Co Lead Review Concerns

- Rules have changed since prior additions
- Was not a previous concern
- Always removed any lead (if found)
- 100% Replacement

Rarely found in other system additions

Lead – Customer Expectations

- Issues are not going away
- Aging Infrastructure
- Lead in Schools
- Expectations have risen

As have response protocols

Public Notice & Lead Testing

AP Pittsburgh water authority charged criminally over lead

By MICHAEL RUBINKAM February 1, 2019

Lead in Ohio Schools

	All schools providing drinking water quality testing results	Public schools serving grades PK-12 providing drinking water lead testing results*
School-Level Summary		
Number of schools with test result for lead	553	443
Average (min/max) number of samples taken at each school	26.5 (1,233)	29.1 (1, 233)
Number (%) of schools with one or more samples at or above the State's "action level"	203 (37%)	182 (41%)
Outlet/Tap-Level Summary		
Number of samples	14,663	12,893
Number (%) of samples at or above the State's "action level"	1,408 (10%)	1,304 (10%)
2018 and communication with Ohio state contacts.		

Ohio EPA Lead Rules Review

Del-Co Current Focus

Lead Revisions

Disruption of Service

Guidelines for Repairs & Replacements





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Lead and Coppe

The Ohio Legislature amended Ohio and copper for public water systems reviewing standards for lead and cop results, and ensuring public water sys address some of the recent changes, additional resources.

Rules, Laws, Policies and Guidance



The Division of Drinking and Ground Waters (DDAGW) rules were promulgated under U.S. EPA's Safe Drinking Water Act (SDWA). Rules for Ohio public drinking water systems are adopted under Ohio Revised Code (ORC) Section 6109, and rules for Underground Injection Control, under ORC 6111.043. Ohio Administrative Code (OAC) rules administered by DDAGW are located on this page. More information about DDAGW's rule-making process is available under the "DDAGW Rules Process" section below.

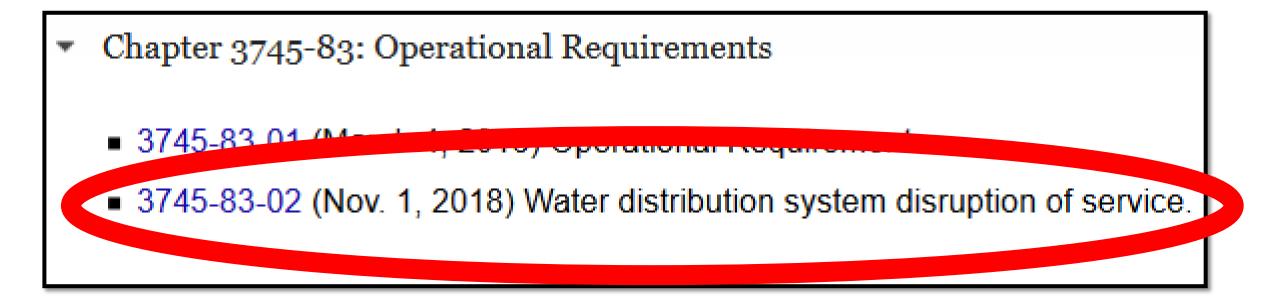
Electronic versions of policies and guidance may be viewed by clicking on the appropriate tab. Join a rules electronic mailing list to stay informed about current

rule-making and opportunities to provide comment during the process.

Control of Lead & Copper (3745-81-80 to -90)

- 3745-81-80 (May 1, 2018) Control of Lead and Copper General Requirements
- 3745-81-81 (May 1, 2018) Control of Lead and Copper; Applicability of Corrosion Control Treatment Steps to Small, Medium-size and Large Water Systems.
- 3745-81-82 (July 24, 2009) Control of Lead and Copper; Description of Corrosion Control Treatment Requirements
- 3745-81-84 (May 1, 2018) Control of Lead and Copper Lead Service Line Replacement Requirements
- 3745-81-85 (May 1, 2018) Control of Lead and Copper Public Education, Supplemental Monitoring Requirements and Consumer Notification of Results
 - 3745-81-87 (May 1, 2018) Control of Lead and Copper Monitoring Requirements for Water Quality Parameters
 - 3745-81-88 (July 24, 2009) Control of Lead and Copper Monitoring Requirements for Lead and Copper in Water Entering the Distribution System
 - 3745-81-89 (May 1, 2018) Analytical Methods
 - 3745-81-90 (May 1, 2018) Control of Lead and Copper Reporting and Recordkeeping Requirements

Disruption of Service (3745-83-02)



Disruption of Service (3745-83-02)

- (6) In affected areas that are known or likely to contain lead service lines, that experience a disruption of service event, public water systems shall provide public notification as follows:
 - (a) In areas where repairs are conducted in Type 2, 3 and 4 events, the public water system shall provide a notice acceptable to the director.
 - (b) In areas where replacement is conducted, the public water system shall comply with provisions contained in rule 3745-81-84 of the Administrative Code.

Policies & Guidance

Announcements and Resources

DDAGW Rules Process

s Early Stakeholder Outreach

- PWS-06-001: Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines
 - Engineering
 - Ground Water
 - Laboratory Certification
 - Operations
 - Public Water Systems
 - PWS-01-003: Clarification of Public Water Systems Definition and Exemption Criteria
 - PWS-02-003: Alternative to the Installation of an Approved Backflow Preventer on Service Connections Where There is an Auxiliary Water System
 - PWS-04-001: Guidelines for Lead Mapping in Distribution Systems
 - PWS-05-001: Guidelines for Mapping Lead Plumbing and Fixtures for Individual Buildings
 - PWS-06-001: Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines



Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines

PWS-06-001

Division of Drinking and Ground Waters Issued: November 1, 2018

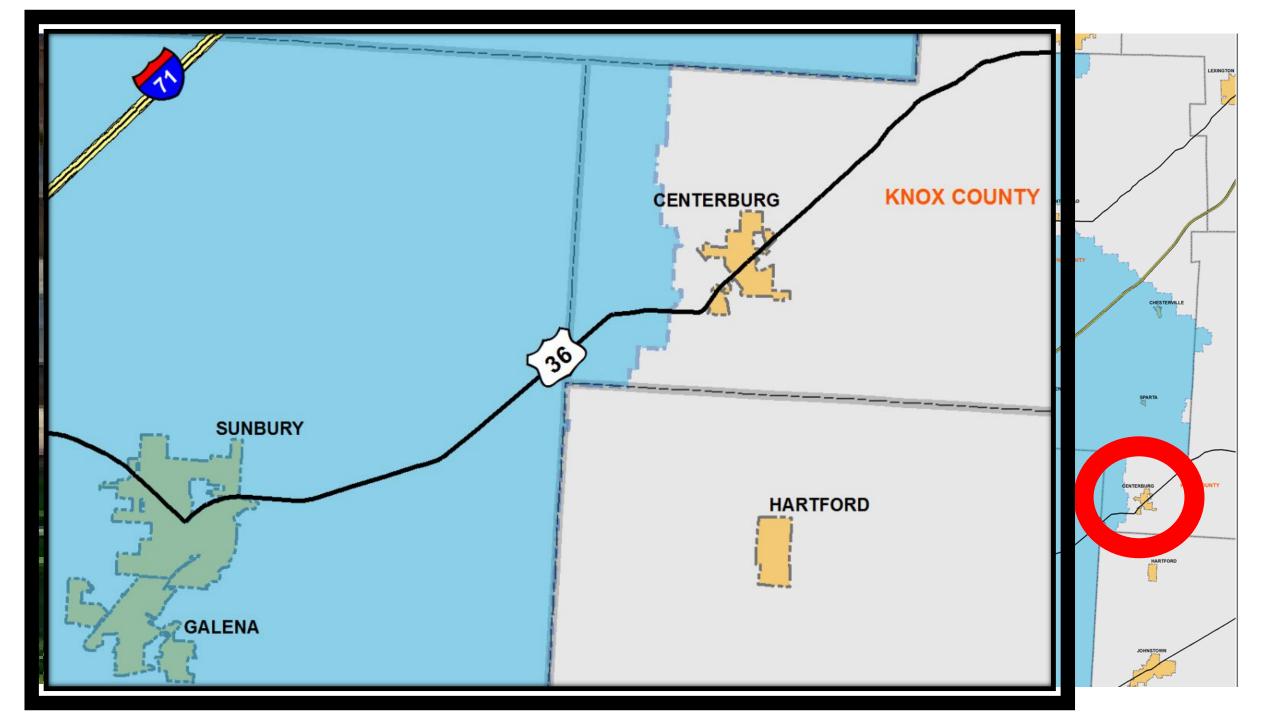
1.3 Definitions

Below are definitions of terms used throughout this guidance document.

Table 1: Definitions

OAC Rule 3745-83-02

Affected Area (Main Repair)	The portion of the distribution system where the pressure of the system has dropped below 20 pounds per square inch gauge (psig) at ground level.
Main Repair	Any incident that requires the installation of pipe which does not exceed one section of pipe or 20 feet when using fusible pipe material.
Main Replacement	Any incident that requires installation of pipe which exceeds one section of pipe or 20 feet when using fusible pipe material. An emergency main replacement is a disruption of service that requires the replacement of more than one section of pipe.
	OAC Rule 3745-81-84
Full LSL Replacement	Replacing both the PWS-owned portion of the LSL and the consumer-owned portion of the service line or replacing the entirety of the portion of the service line made of lead where no lead pipe remains in any portion of the service line.
Impacted Area (Main Replacement)	Any service lines that are moved, replaced, or reconnected to the main during the main replacement.
Impacted Area (LSL replacement)	Buildings, residences, or lines served by the service line being replaced (either partially or fully)
Partial LSL Replacement	Replacing only the portion of an LSL necessary to make the repair and/or reconnection to a service line or the replacement of just the portion of an LSL owned by the water system, where lead pipe remains in any portion of the service line between the water main and the structure.
Main Replacement	Any incident that requires installation of pipe which exceeds one section of pipe or 20 feet when using fusible pipe material. An emergency main replacement is a disruption of service that requires the replacement of more than one section of pipe.



Centerburg Merger

- Serious discussions began about 10 years ago
- Have been ongoing since
- There was mutual agreement around 2015 that an acquisition was best

Centerburg Merger

- Made financial (and managerial, technical) sense for Centerburg
- Terms & Conditions discussed for 2 years (2016-2018)
- Sent Tap Packets that included Membership Packet & Easement (Required)
- Significant cost and resources to remain an independent PWS

Village of Centerburg Residents Required **Customer Registration** Stop in Anytime Between 9am & Noon Saturday, August 18th

Church of Christ - 3830 Columbus Rd - Centerburg



Page	Inbox	Notifications	Insights	Publishing T		Ad Center		
			W A) A T	↓ E	R	C	C
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Home								
About		_						
Events		Ð	Like 🐊 Fo	llow 🍌 Share	•••			
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Delco Water

Published by Jeffrey Kauffman [?] · August 16, 2018 · G

Please come fill out your required paperwork to become a Del-Co Water Member!

There are no meetings to sit through, however Del-Co Staff will be on hand to answer any questions you may have!

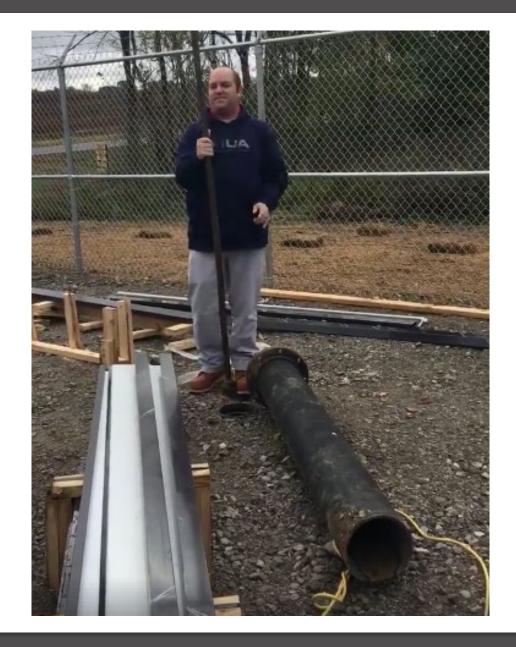
Completed paperwork is required. The next meeting will be held on September 8 from 9:00 am –Noon. If you cannot attend a meeting, please call our Marengo office at 419-253-6003 to have your paperwork mailed to you!

Village of Centerburg Residents

Required Customer Registration

Stop in Anytime Between 9am & Noon Saturday, August 18th





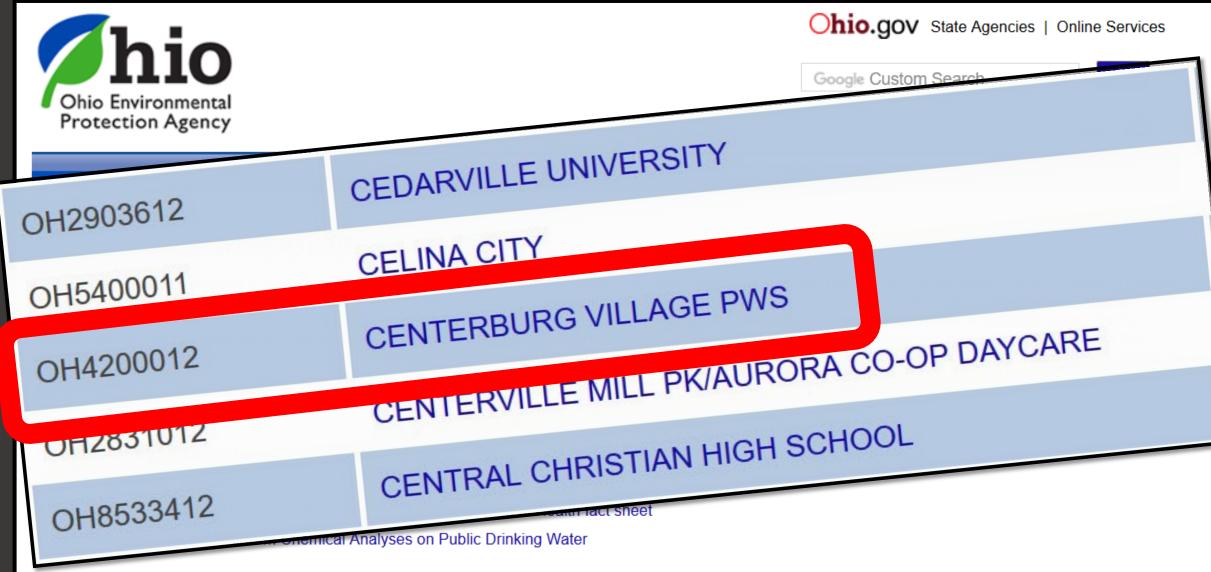
Centerburg Lead Concerns

Centerburg Lead Research

Discussions with Superintendent

Review previous LCR analysis

Review Lead Map



Below is an alphabetical list of all public water systems (PWS) that are required to comply with this new requirement. Maps received by Ohio EPA can be accessed by clicking the link on the public water system name in the chart below. If you have questions about the service lines in your home or business's area, please call the contact listed below for your public water system.



Home Abo

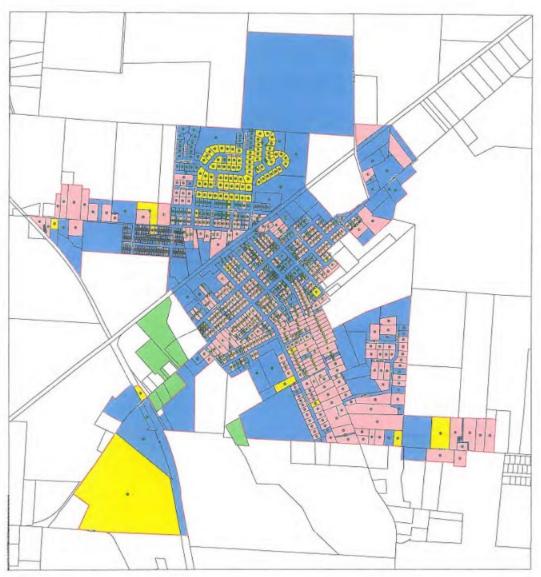
Lead Lines Map

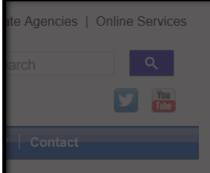
Under a new Ohio law enacted in Jur or likely to contain lead service lines it known or likely to contain lead service system that may contain lead solder, system that have solder, fixtures and lead service lines.

More Information

- Lead in Drinking Water fact sheet
- Learn About Lead webpage
- Questions and Answers About Lease 1
- Laboratories Certified to Perform

Below is an alphabetical list of all pu clicking the link on the public water s contact listed below for your public w



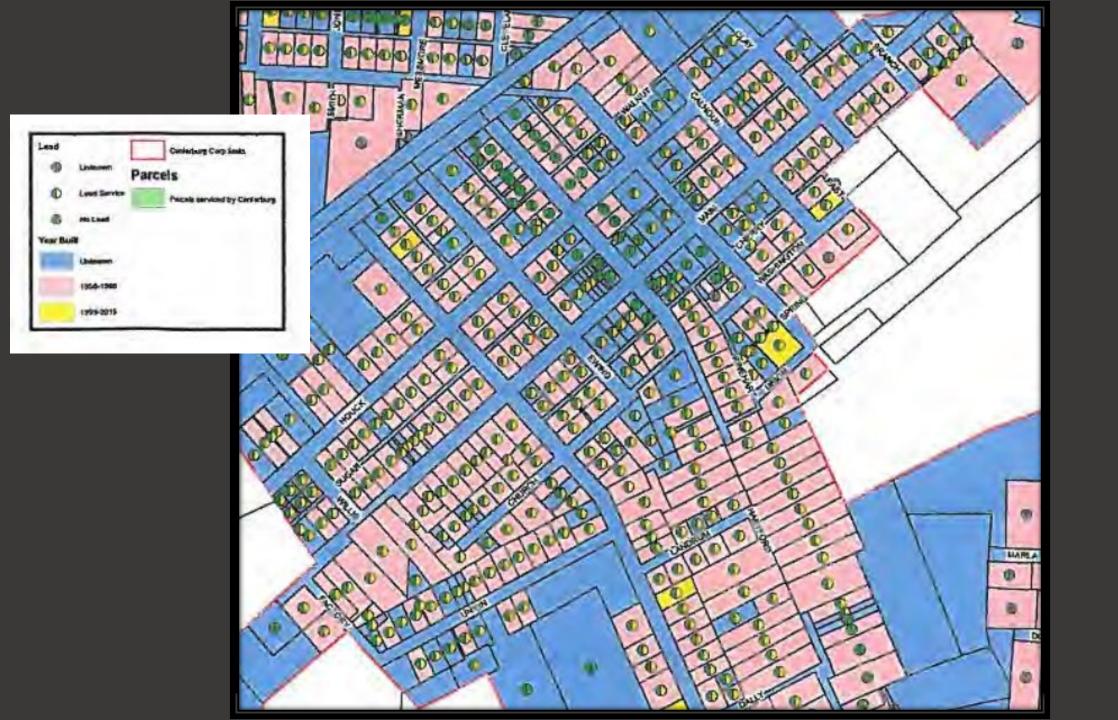


areas that are known to contain listribution systems that are s of buildings served by the equired to map areas of the oper sampling is done in areas of

y Ohio EPA can be accessed by iness's area, please call the









Key Provisions Reviewed

Partial Replacements

Customer Notifications

Lead Testing

Providing Filters

Meter Repair Project

Meter Repair Project

Replace all meters

Placement outside of the home

Concerned with LSLs

Contacted OEPA for guidance

3745 81 80 (May 1, 2018) Control of	Load and Coppor	Conoral Poquiromont
Announcements and Res	ources DDAG	GW Rules Proces

Interested Party Review

Proposed Rules

Effective Rules



Policies and Guidance



3

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Currently effective policy and guidance documents related to a listed below by general topic.

Engineering

 PWS-06-001: Guidelines for Wate Lead Service Lines

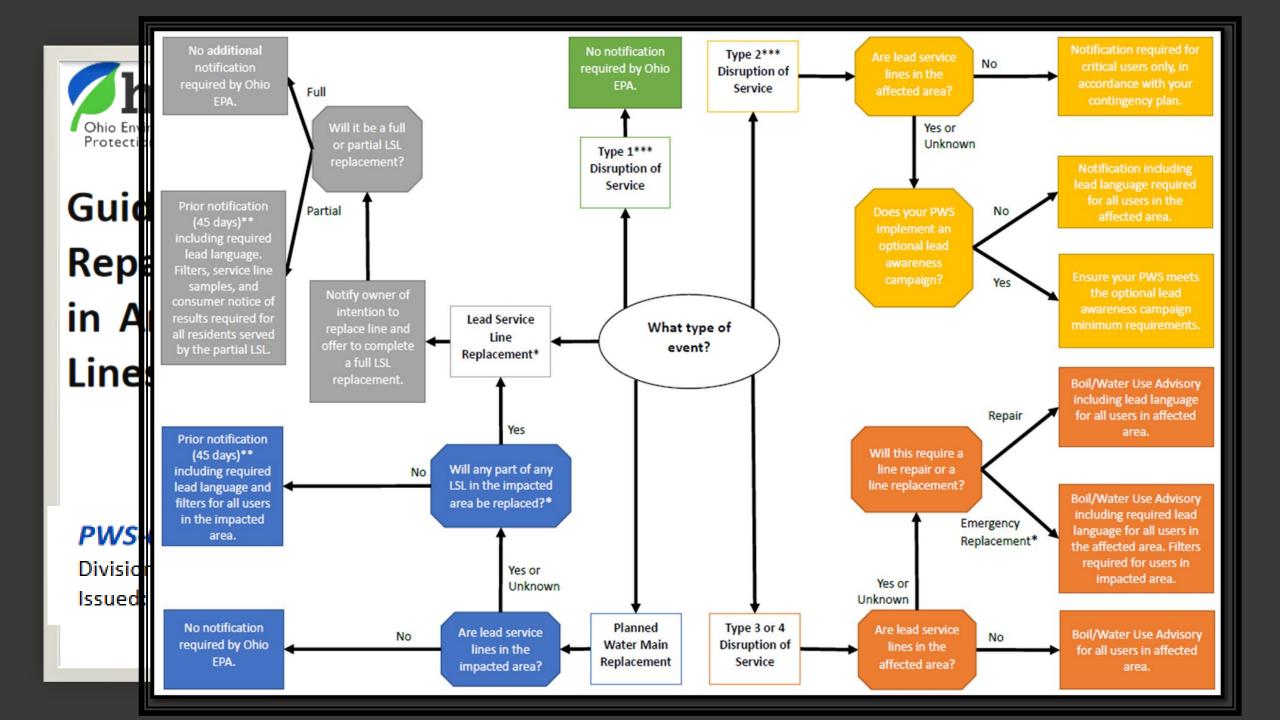
Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines

with

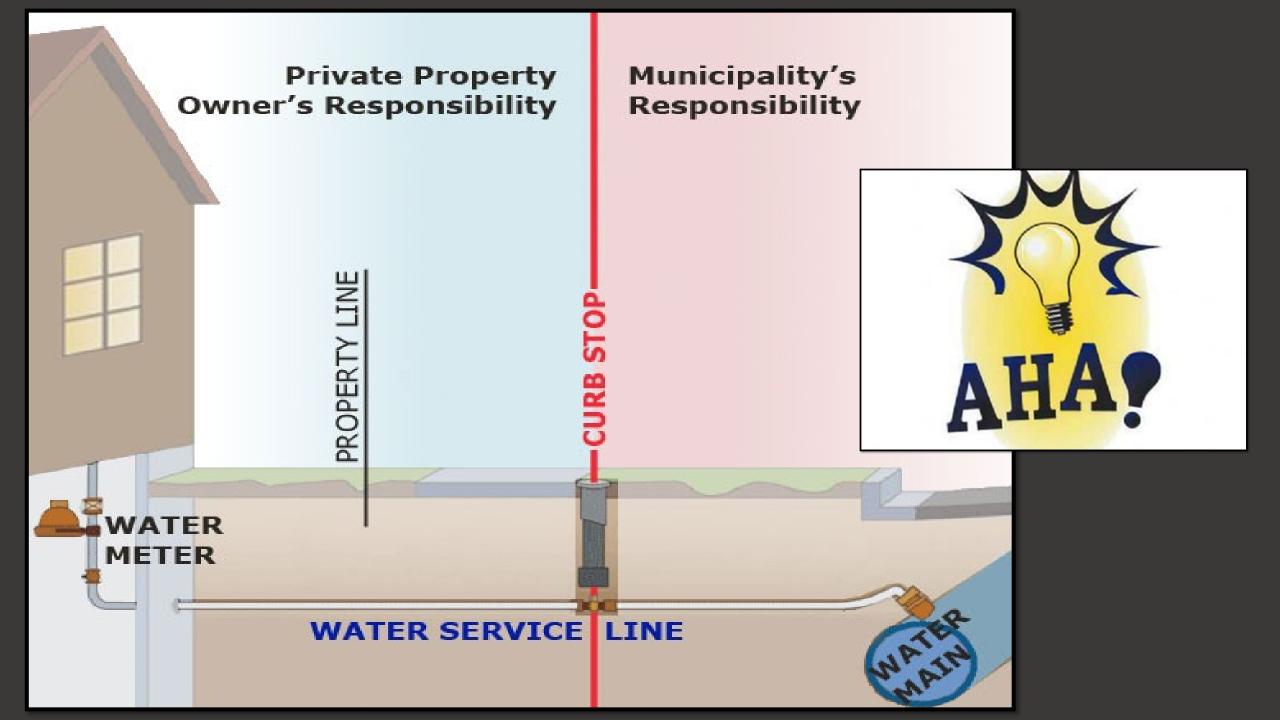
PWS-01-003: Clarification of Public Water Systems D

- PWS-02-003: Alternative to the Installation of an Appr Service Connections Where There is an Auxiliary Wat
- PWS-04-001: Guidelines for Lead Mapping in Distribution
- PWS-05-001: Guidelines for Mapping Lead Plumbing Buildings
- PWS-06-001: Guidelines for Water Line Repairs and I Lead Service Lines











Lead Service Line Response Procedures Village of Centerburg

<u>Contractor</u>

If the contractor installing meter pits inside the Village of Centerburg encounters a service line that is suspected to be <u>lead</u>, they are to do the following:

- 1. Use lead testing swabs to verify if the exposed service line is lead.
- If the service line is positive for lead, contact Del-Co Water immediately. The first contact is the Project Manager, Natalie Linkous at 614-679-0056; the second contact is Rusty Griffith at 740-272-2220.
- 3. Move forward with the installation of the proposed meter pit.
- 4. Notate that the service line is lead on the New Meter Installation Form.

Project Manager

If a service line has been confirmed as lead, perform the following:

- Contact Del-Co Water management immediately. The first contact is the Compliance Manager, Jeff Kauffman at 614-565-8733 (mobile) or 740-548-7746 Ext. 2258; the second contact is Spencer Sheldon at 740-627-1306 (mobile) or 740-548-7746 Ext. 3301
- Confirm that the contractor has notated the lead service line (LSL) on the New Meter Installation Form.

Compliance Manager

If the Compliance Manager is notified of a lead service line, and a partial lead service lin replacement was completed, perform the following:

- Coordinate with GIS Department to indicate locations of existing LSLs and moni if there is a larger area where lead is an issue.
- If any areas are determined to contain clusters of LSLs, provide recommendation management if areas should be skipped for outside meter installation.
- Determine necessary response protocols and notifications in accordance with 0 Administrative Code 3745-83-02, Ohio Administrative Code 3745-81-84, and Ol Guidelines for Water Line Repairs and Replacements in Areas with Lead Service

References

Ohio Administrative Code 3745-83-02. Water Distribution System Disruption of Service. https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-83-02_effective 18.pdf?ver=2018-11-27-115359-193

Ohio Administrative Code 3745-81-84. Control of Lead and Copper – Lead Service Line R Requirements. <u>https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-82</u> 84 Rule AM 5-1-18.pdf

Ohio EPA. Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines. https://epa.ohio.gov/Portals/28/documents/pws/PWS-06-001.pdf

References

Ohio Administrative Code 3745-83-02. *Water Distribution System Disruption of Service*. <u>https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-83-02</u> effective 11-1-18.pdf?ver=2018-11-27-115359-193

Ohio Administrative Code 3745-81-84. *Control of Lead and Copper – Lead Service Line Replacement Requirements*. <u>https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-81-</u> 84 Rule AM 5-1-18.pdf

Ohio EPA. *Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines.* <u>https://epa.ohio.gov/Portals/28/documents/pws/PWS-06-001.pdf</u>

SORRY WE MISSED YOU



6658 OLENTANGY RIVER ROAD DELAWARE, OHIO 43015 (740) 548-7746 • (800) 521-6779

OVER FOR DETAILS

Your water service was disrupted today to allow for the installation of a new water meter. We apologize for any inconvenience. During the meter installation, we discovered that you have a lead service line.

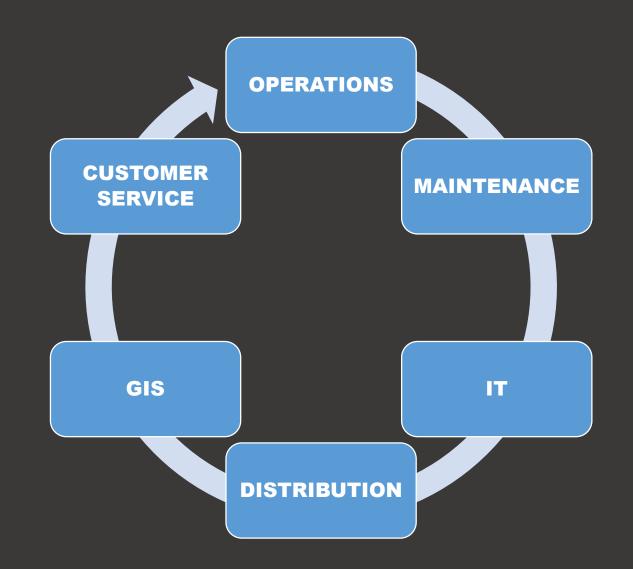
This disruption may cause short-term changes in water quality including discolored or cloudy water and/or potentially a temporary increase in lead levels in the drinking water.

As a standard practice the USEPA recommends the following actions to reduce possible lead exposure in drinking water:

- If water has not been used for several hours, run the tap until there is a noticeable temperature drop. Then, run water for 30 seconds to 3 minutes before using it for drinking and cooking. This helps flush water that may have contained lead that may have leached from plumbing.
- Use cold water for cooking, drinking, and preparing baby formula. Boiling the water will not reduce lead.
- Clean your faucet aerator regularly.

As a precaution, Del-Co Water is offering water filters which are certified to remove lead. We are also offering to test your water for lead. To request a filter and/or testing of your water, or if you have any other questions, please contact Jeff Kauffman or Natalie Linkous at (800) 521-6779. For additional information visit drinktap.org or epa.gov/safewater/lead.

Acknowledgements



QUESTIONS

Jeffrey Kauffman March 7, 2019 jkauffman@delcowater.com

Sne Water

Government & Regulatory Affairs Workshop

Affairs Workshop

