



MADISON WATER UTILITY'S LEAD SERVICE LINE REPLACEMENT



1

BACKGROUND

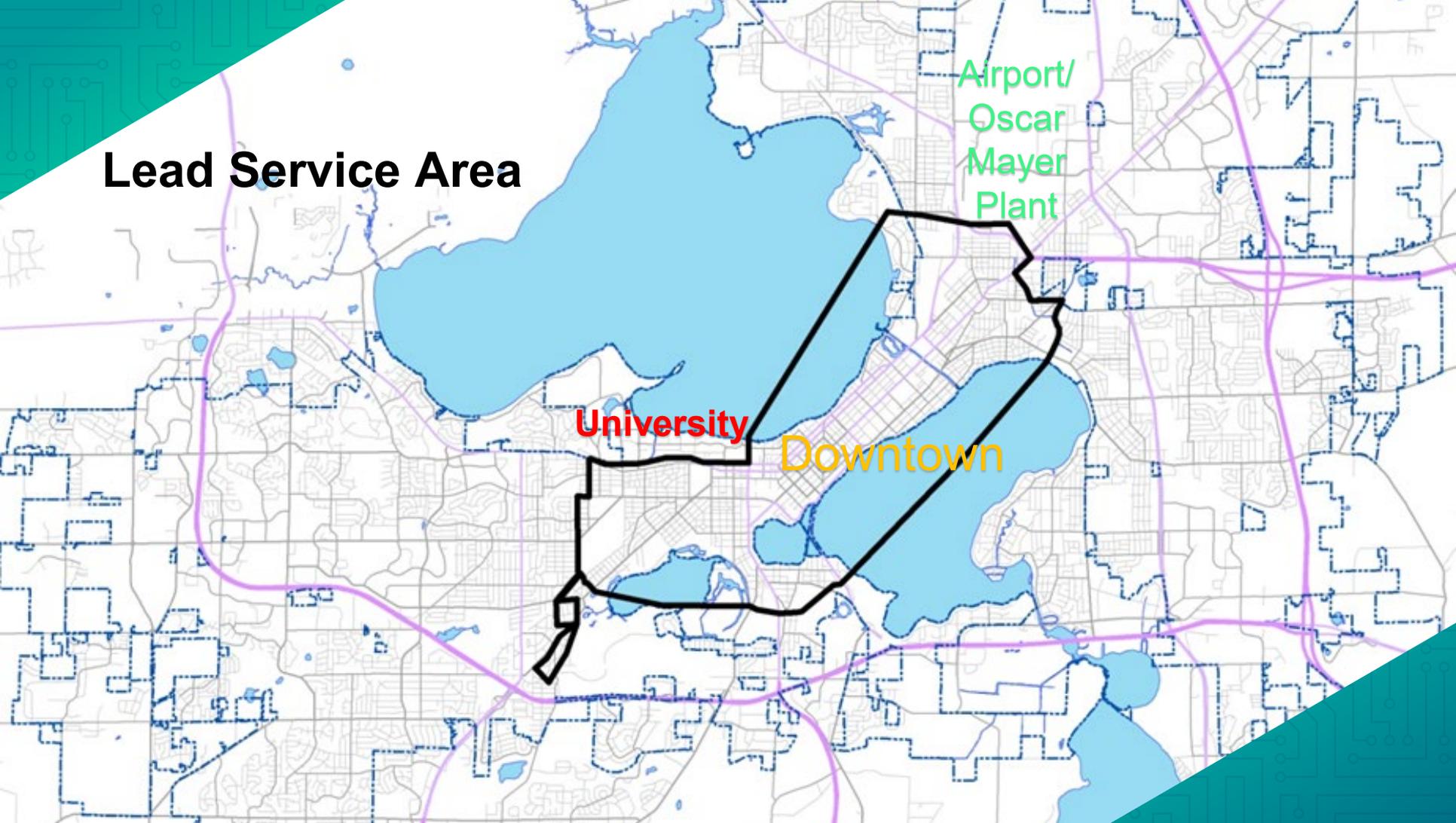
Why Lead Service Line Replacement?

Lead Service Area

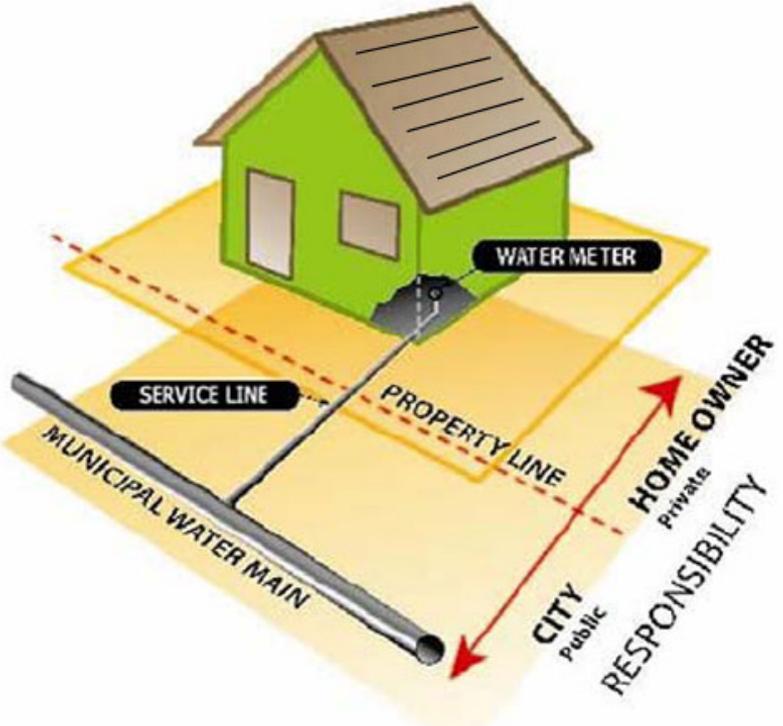
University

Downtown

Airport/
Oscar
Mayer
Plant



RESPONSIBILITY



BACKGROUND

1991 – Lead & Copper Rule Enacted

1992 – Initial Monitoring, 90th Percentile = 16 ppb lead

1994 – Corrosion Control Study Initiated

1997 – More Monitoring, 90th Percentile = 16/17 ppb lead

CORROSION CONTROL STUDIES 1994-1998

- ◆ Standard treatments were ineffective in controlling lead corrosion.
- ◆ Orthophosphate was shown to reduce lead levels, but would have negatively impacted lakes



LEAD SERVICE REPLACEMENT TIMELINE

2000 – Consent
Order with DNR

2000- City
ordinance
enacted

2000-2012- Lead
Services
Replaced

2011 – Lead
Monitoring, 90th
Percentile = <5
ppb lead

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HOW WE DID IT

Flashpoints and lessons learned

City to subsidize lead pipe project

■ After heated debate, City Council votes to have everyone share in the expense.

By Dean Mosiman
City government reporter

The city of Madison will subsidize property owners

Lead pipe options explored

State looks at taking financial burden of pipe replacement off homeowners

By Dean Mosiman
City government reporter

In a surprise move, the state will explore options to spare thousands of lead pipe property owners from replacement to replace water pipes.

Close vote, but pipes have to go

By Aaron Nathans
The Capital Times
Residents on the list will replace their lead pipes.

The Capital Times
Wednesday, Feb. 2, 2000

By Aaron Nathans
The Capital Times
Residents on the list will replace their lead pipes.

Safe water and clean lakes

By Aaron Nathans
The Capital Times
The city of Madison — which so often finds itself on the list — is at the bottom of this one.

The Capital Times
Monday, Jan. 31, 2000

By Aaron Nathans
The Capital Times
The city of Madison — which so often finds itself on the list — is at the bottom of this one.

LOCAL/STATE

Homeowners, start scratching those water pipes

By Aaron Nathans
The Capital Times
Your money is your pipe. Madisonians could face lines of up to 100 miles of pipe.

The Capital Times
Journal, Wednesday, January 5, 2000

By Aaron Nathans
The Capital Times
Your money is your pipe. Madisonians could face lines of up to 100 miles of pipe.

It's time to stand up to EPA

Once again, the Madison City Council is slated to do battle with the issue of lead pipe replacement.

On Jan. 4, council members listened to four hours of testimony and debate on whether all city water

Money spent eradicating a nonexistent lead threat is money wasted.

By Aaron Nathans
The Capital Times
The city of Madison — which so often finds itself on the list — is at the bottom of this one.

The Capital Times
Monday, Jan. 31, 2000

By Aaron Nathans
The Capital Times
The city of Madison — which so often finds itself on the list — is at the bottom of this one.

Council delays decision on lead pipe assistance

■ Council members struggled over whether to subsidize owners for 50 percent of the cost of replacing the water lines.

By Dean Mosiman
City government reporter

Lead pipe vote a thriller

■ Council members struggled over whether to subsidize owners for 50 percent of the cost of replacing the water lines.

By Dean Mosiman
City government reporter

So how much will taxpayers shell out for landlords' pipes?

By Aaron Nathans
The Capital Times
Madison taxpayers are expected to spend thousands of dollars

The Capital Times
Wednesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
Madison taxpayers are expected to spend thousands of dollars

Why should all pay for lead pipe fixes?

This is in response to the fact that the city of Madison will have to pay Madison Utility fees to also help replace 'why should all pay for lead pipe fixes?'

The Capital Times
Wednesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
This is in response to the fact that the city of Madison will have to pay Madison Utility fees to also help replace 'why should all pay for lead pipe fixes?'

Private pipes don't need public money

In a letter to the editor published on Wednesday's Opinion page, the manager of the Madison city's plan to

The Capital Times
Wednesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
In a letter to the editor published on Wednesday's Opinion page, the manager of the Madison city's plan to

Lead pipe removal could prove costly for homeowners

■ Madison officials introduce a plan that may be costly for about 10,000 homeowners

The Capital Times
Tuesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
Madison officials introduce a plan that may be costly for about 10,000 homeowners

Council can't decide who'll pay for pipe repairs

By Aaron Nathans
The Capital Times
It's no secret Madison City Council meetings are often contentious.

The Capital Times
Tuesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
It's no secret Madison City Council meetings are often contentious.

Meeting goes for nearly nine hours

By Aaron Nathans
The Capital Times
It's no secret Madison City Council meetings are often contentious.

The Capital Times
Tuesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
It's no secret Madison City Council meetings are often contentious.

It's lead pipe decision time

By Aaron Nathans
The Capital Times
The City Council is expected to finally vote tonight on whether all Madison water users should share the costs of lead pipe replacement.

The Capital Times
Tuesday, Jan. 5, 2000

By Aaron Nathans
The Capital Times
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Council agenda lengthy tonight

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The Capital Times
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Tuesday, Jan. 5, 2000

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Lead pipe risk rings hollow

When bad or incomplete science drives public policy, it's usually the taxpayers who wind up footing the bill. Such appears to be the case with the plan to make all city of Madison water users share in the cost of lead water lines.

The Capital Times
Tuesday, Jan. 5, 2000

Council OKs lead pipe replacement

■ Facing state fines, council approves plan but delays decision on homeowner subsidies.

By Dean Mosiman
City government reporter

Readers react to lead-pipe controversy

No proof that lead pipes are harmful
This is to add another voice to those who recognize the stupidity of wasting

First lead pipes, then sewer lines
The person who wrote the editorial Nov. 24 about the lead-pipe controversy

safeguarding the environment for future generations
But, inevitably, such an action by an arrogant City Council on Tuesday narrows it to a narrow choice.

MADISON'S ORDINANCE

- ① Property owners required to complete surveys regarding their service material.
- ① Replacement deadlines timed to coordinate with utility-side replacements and/or street improvement projects
- ① Property-owner replacements reimbursed for half the cost up to \$1,000, financing also available
- ① Fine of \$50-\$1,000/day for noncompliance

LEAD SERVICE REPLACEMENTS

- 80% of replacements completed between 2000 and 2006
- 8,000 services were replaced
- 5,600 included the privately-owned services



PROGRAM COSTS: 2000-2012

- ◎ **\$15.5 million:** Total cost to utility
- ◎ **\$1,997:** Avg. cost to replace utility's portion of a service
- ◎ **\$1340:** Avg. cost to replace property owner service
- ◎ **\$670:** Avg. reimbursement to property owners for half the cost

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EQUITY

Considerations and lessons learned

EQUALITY VS. EQUITY

Equality?

Evenly distributed tools and assistance



Equity

Custom tools that identify and address inequality



EQUITY FACTORS

- ① Affordability
- ① Health risks and protective measures
- ① Time poverty
- ① Renters vs. owners
- ① Consumer education and outreach



**More information at
madisonwater.org**

Or contact me at ademing@madisonwater.org