



# Update on Flint

Dave Coppes, Director of Waterworks  
Massachusetts Water Resources Authority

June 29, 2017



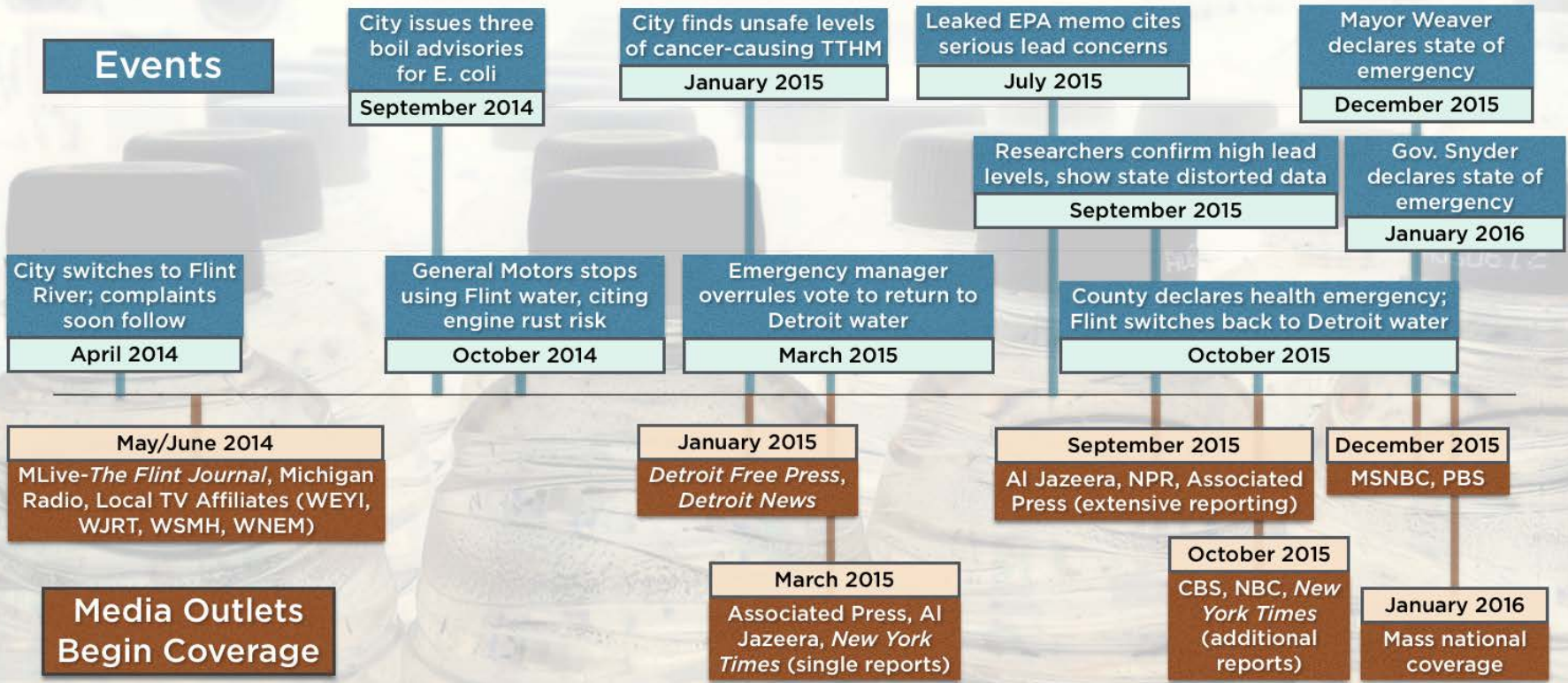


# Would You Drink This?





## TIMELINE: Key Events And Media Coverage Of The Flint Water Crisis



This timeline only includes events that were public knowledge at the time.



## Blood Lead Level Analysis

- Large sample size
  - N= 1746 for Flint children (pre n=906, post n=840)
  - N= 1670 for non-Flint children (pre n=943, post n=727)

### Flint results for children 5 years and under:

- PRE-SWITCH % EBL: **2.1%** (consistent with MDHHS data 2.2)
- POST-SWITCH % EBL: **4.0%**
- **$p < 0.05$ ; STATISTICALLY SIGNIFICANT CHANGE**





# Flint Water – Legionnaires Outbreak



Health » Flint water crisis likely the cause of deadly Legionnaires outbreak

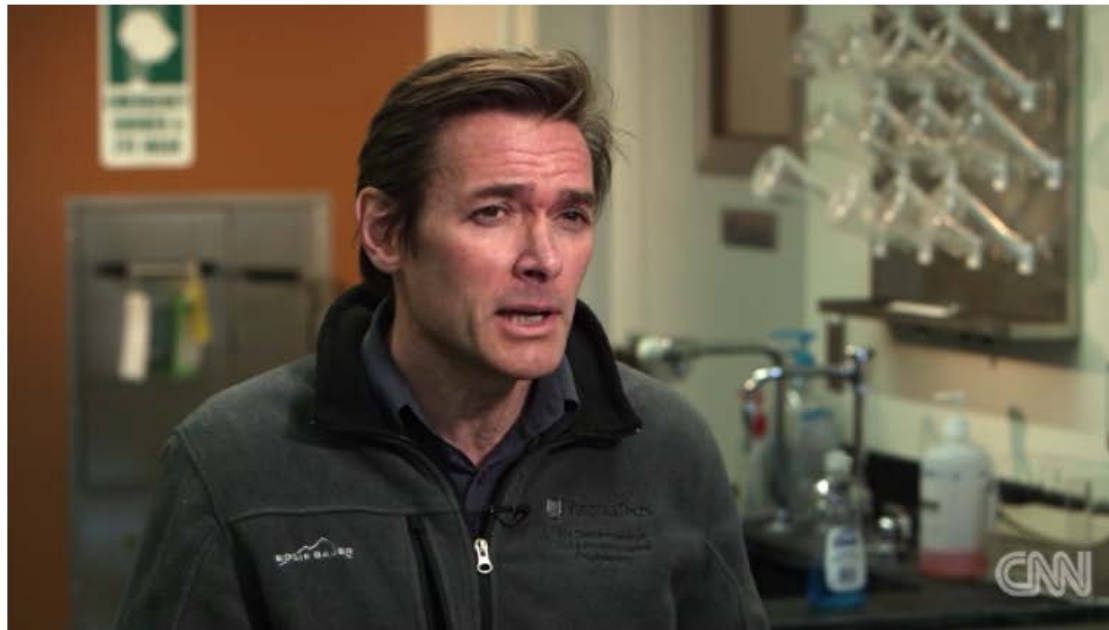
Live TV • U.S.

## Flint water crisis likely the cause of deadly Legionnaires outbreak



By Sara Ganim, CNN

Updated 9:43 AM ET, Thu March 30, 2017



Source: CNN

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Flint water crisis likely the cause of deadly Legionnaires outbreak 03:07

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# Flint – Involuntary Manslaughter Charges

## 5 Charged With Involuntary Manslaughter in Flint Water Crisis

By SCOTT ATKINSON and MONICA DAVEY JUNE 14, 2017



Jeff Seipenko, center, a special agent for the Michigan attorney general, listened as a judge authorized charges on Wednesday against Nick Lyon, the director of the state's Department of Health and Human Services, in the

### RELATED COVERAGE



2 Former Flint Emergency Managers Charged Over Tainted Water DEC. 20, 2016

For Flint, an 1882 Play About Bad Water Is 'Exactly What We're Living' JUNE 11, 2017



On This Block, Worries Run Deeper Than Flint's Tainted Water APRIL 25, 2017



Michigan Allots \$87 Million to Replace Flint's Tainted Water Pipes MARCH 27, 2017



Flint, and Michigan, Brace for More Charges in Water Inquiry OCT. 28, 2016



# Flint – Involuntary Manslaughter Charges

AROUND THE NATION

## Michigan Health Chief Charged With Involuntary Manslaughter In Flint Water Crisis

June 14, 2017 - 10:03 AM ET

RICK PLUTA



AMITA KELLY



Jessica Owens holds up a baby bottle of water from her home in Flint, Mich., while attending a hearing on Capitol Hill about Flint's water crisis.





# Flint Returns to Detroit Water Long Term

AMERICA



## 3 Years After Ill-Fated Switch, Flint Mayor Recommends Using Detroit Water

April 18, 2017 · 5:52 PM ET

LAUREL WAMSLEY



After three years of confusion and chaos, Flint, Mich., residents may go back to the water source they used before lead contamination showed up in their drinking water.

In a press conference today, Mayor Karen Weaver recommended the city get its water from Detroit's system long-term. Flint was using Detroit water [before switching in April 2014](#) to water from the Flint River as a cost-saving measure.

Using Flint River water was characterized as a temporary switch until the city's pipeline connecting to the Karegnondi Water Authority was complete. City officials didn't immediately treat the river water to ensure it didn't corrode pipes. Tests in 2015 showed elevated lead levels

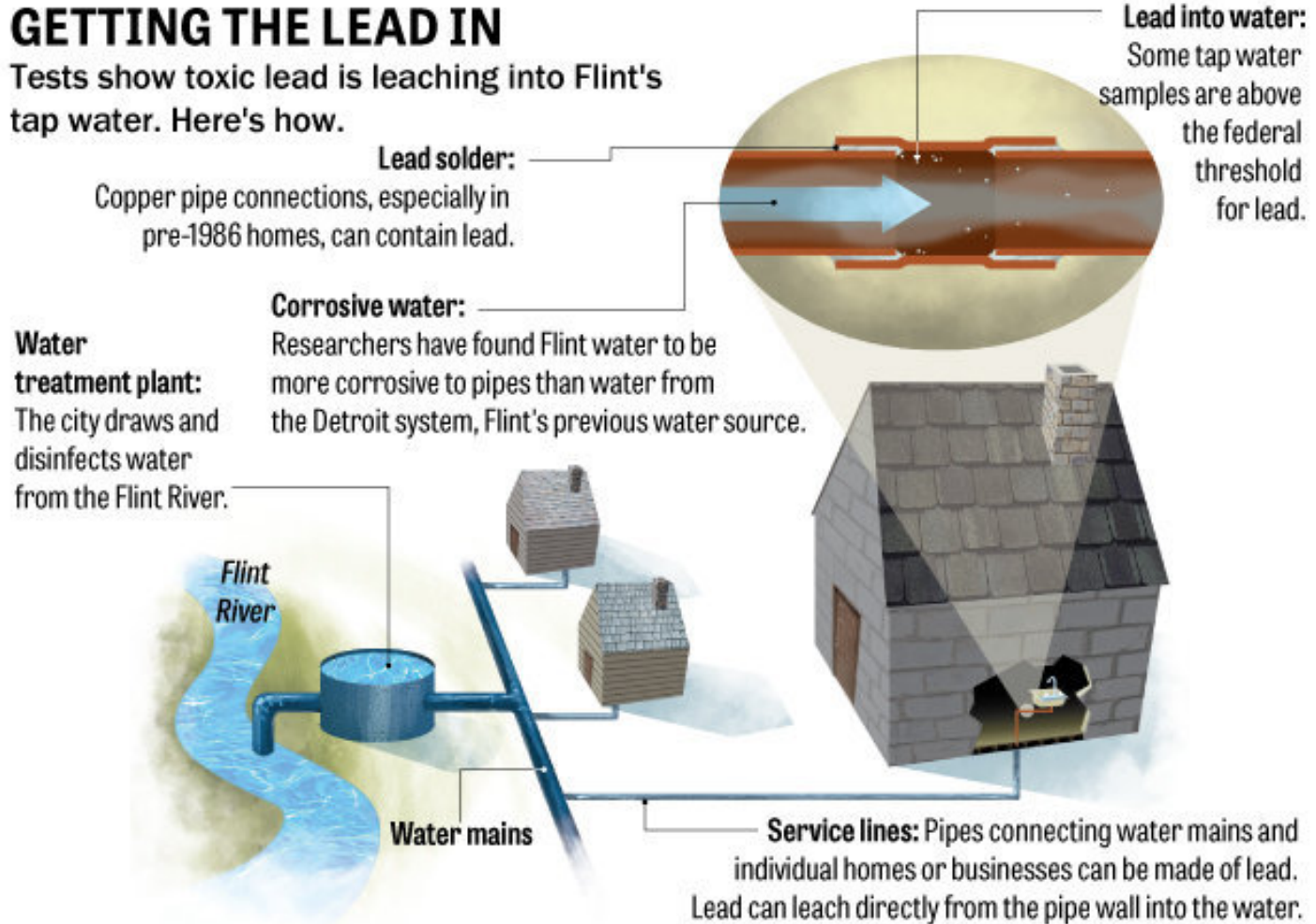




# Sources of Lead in Flint

## GETTING THE LEAD IN

Tests show toxic lead is leaching into Flint's tap water. Here's how.





# Flint Lead map

FLINT WATER SAMPLES

Overview

Feed

List

Query

Search

Bounds

Satellite

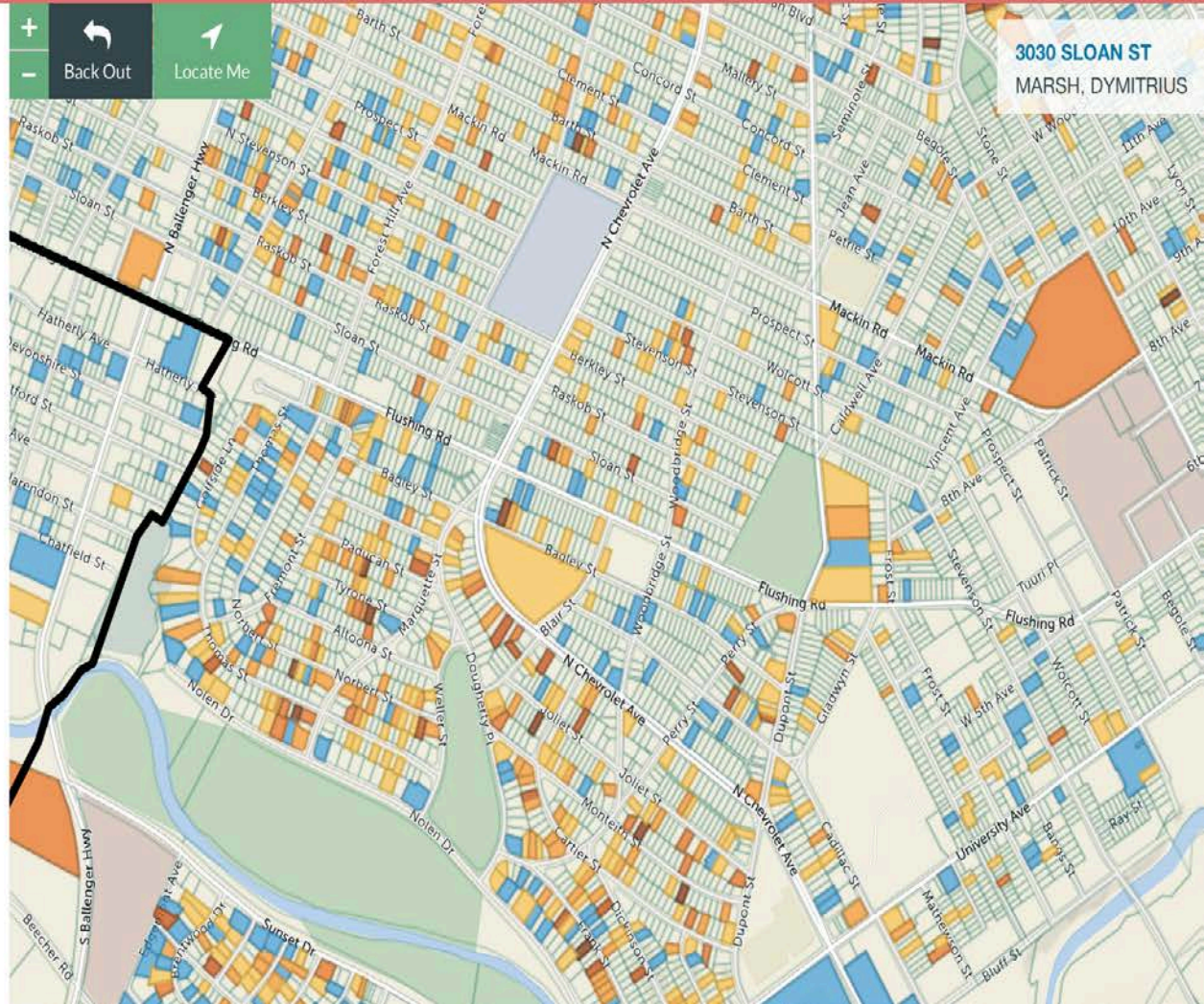
## FLINT

15,912 POSTS

10,259 PARCELS POSTED TO

### LEAD LEVELS:

- 186** 150ppb+: a range at which the federal government says water filters might not work
- 308** 50-149ppb: reaching dangerous levels, but can be treated by filters
- 883** 15-49ppb: a range above the federal action level for lead, but can be treated by filters
- 2039** 5-14ppb: exposure is a concern, but still below an EPA 'federal action level'
- 5069** 1-4ppb: the EPA deems this range as acceptable
- 7427** Oppb: no lead detected in the drinking water



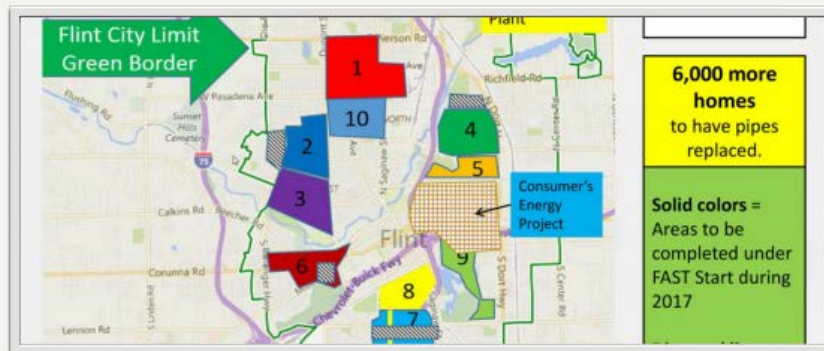


# Flint Moving Ahead with Lead Service Line Replacements

Press Releases

## Work to Begin Next Week to Replace 6,000 Lead-Tainted Service Lines in Flint This Year

Posted by: [Kristin Moore](#)



*AARP Volunteers to Bring Consent Cards to Residents' Homes Starting Saturday*

**FLINT, Mich.** — Mayor Karen Weaver announced today that dozens of Flint residents will have their water service lines replaced next week as crews begin working to replace lead-tainted pipes leading to 6,000 homes during the 2017 phase of her FAST Start replacement initiative.



# Some Good Press About Lead Service Lines

## Flint's pipe replacement may speed up in June

By STEVE CARMODY - MAY 28, 2017

[Tweet](#) [Share](#) [Google+](#) [Email](#)



STEVE CARMODY / MICHIGAN RADIO

Flint officials expect the city's pipe replacement program will **ramp up in the month of June**.

The city is removing lead and galvanized service lines connecting Flint homes and businesses to city water mains – and replacing them with copper pipes.

Mike McDaniel oversees [Flint's pipe replacement program](#). He says digging up the pipes is time consuming, especially when crews discover a copper pipe is already in place.

Next month, McDaniel hopes to start using specialized equipment to drill small holes to check to see whether the pipes in the ground are lead or copper. He says that should speed the process up.

"That's a priority for me to do that as soon as possible," says McDaniel.

McDaniel's goal is to replace more than 40 service lines a day. That will enable the city to replace 6,000 service lines this year.

## Michigan reaches deal with Flint to replace 18,000 lead-tainted water lines



Flint will replace at least 18,000 lead or galvanized-steel water lines by 2020, and the state will pick up the bill with state and federal money. (Carlos Osorio / AP)

By **Ed White**  
Associated Press

MARCH 27, 2017, 7:10 PM | DETROIT

**M**ichigan and the city of Flint agreed Monday to replace thousands of home water lines under a sweeping deal to settle a lawsuit by residents over lead-contaminated water in the struggling community.

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### In case you missed it



**Confederate monument in St. Louis to be removed this week**  
10:11 AM



**Detroit judge to consider U.S. freeze on Iraq deportations**  
JUN. 25, 2017



**Lawyer: Race a factor in St. Louis cop being mistakenly shot by fellow officer**  
JUN. 24, 2017