Lead in Drinking Water
Can it Happen at WSSC?

Commission Presentation

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What Happened in Flint?

- Built in early 1900s, many cast iron water mains and lead service lines
- Flint switched from treated Detroit water to Flint River water in April 2014.
- Flint River contains high levels of highly corrosive chloride
- Flint did not add chemical to control corrosion
- This eroded coating on lead service lines to homes
- Lead leached into water

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Detroit Process with Corrosion Control

Source: Time.com

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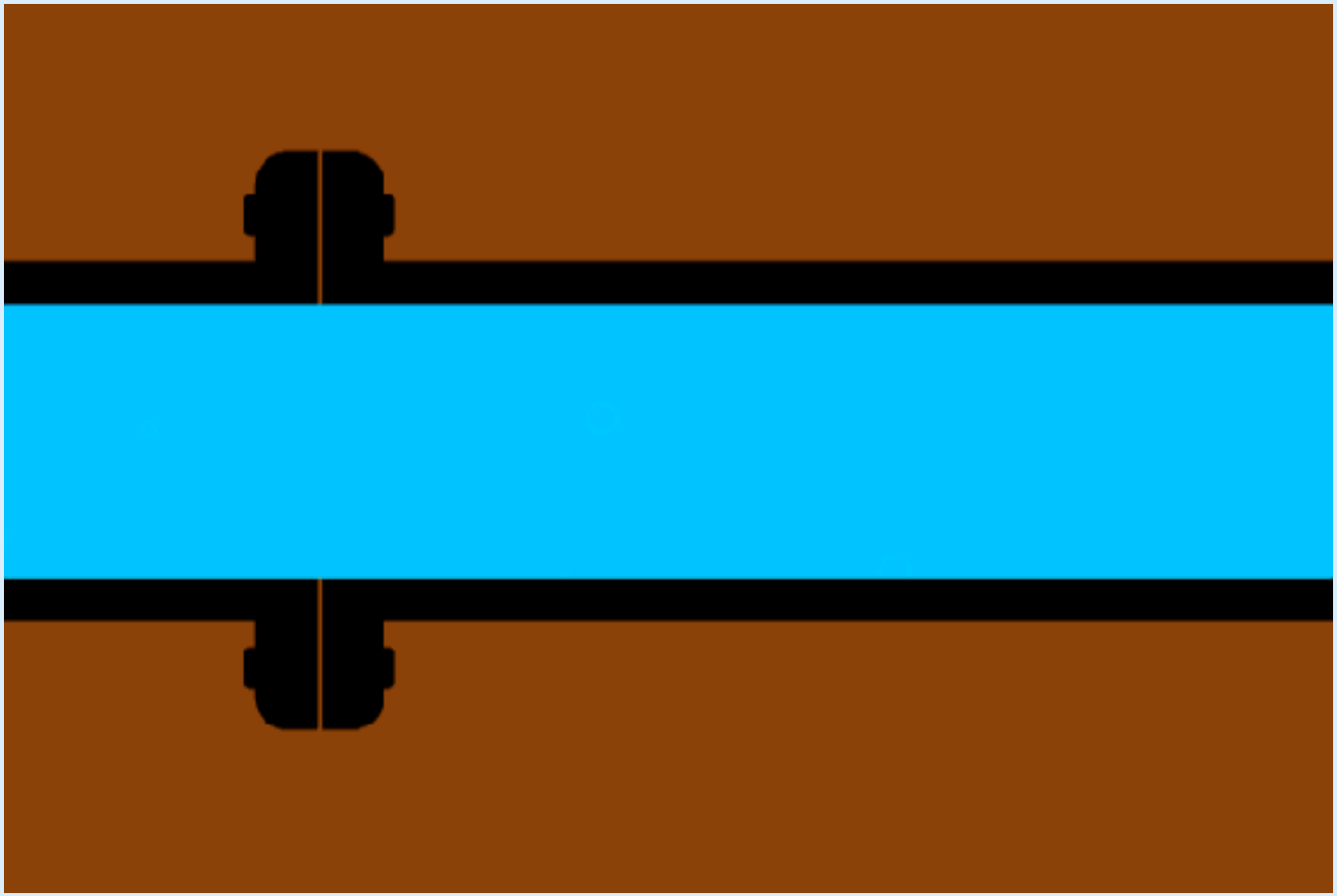
Flint Process without Corrosion Control



Source: Time.com

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What Happened in Flint?

- Failed to test properly
  - Flushed before sampling: downplays lead levels
  - Removed aerator screens: downplays lead levels
- Failed to listen to customers and stakeholders
- Failed timely corrective actions
  - Ignored warning signs
  - Problem not addressed until 18 months from the onset
- Failed to communicate risks to customers

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Can It Happen at WSSC?

Potential Sources within WSSC

- Lead is not present in the water WSSC delivers to customer residences
- WSSC does not have any known lead service lines
- In 2005, WSSC conducted aggressive search and replacement program for lead service lines
  - Under MOU, tested lead levels in county schools
- Insignificant but remaining sources include lead solder (banned in 1986 by EPA) and plumbing fixtures

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WSSC Corrosion Control Strategy

- Intent of Lead and Copper Rule is to optimize water quality to minimize corrosion
- Maintained effective corrosion control since 1992
  - Maintain pH and alkalinity
- Added orthophosphate as corrosion inhibitor since 2003
- WSSC corrosion control performance far exceeds regulatory requirements

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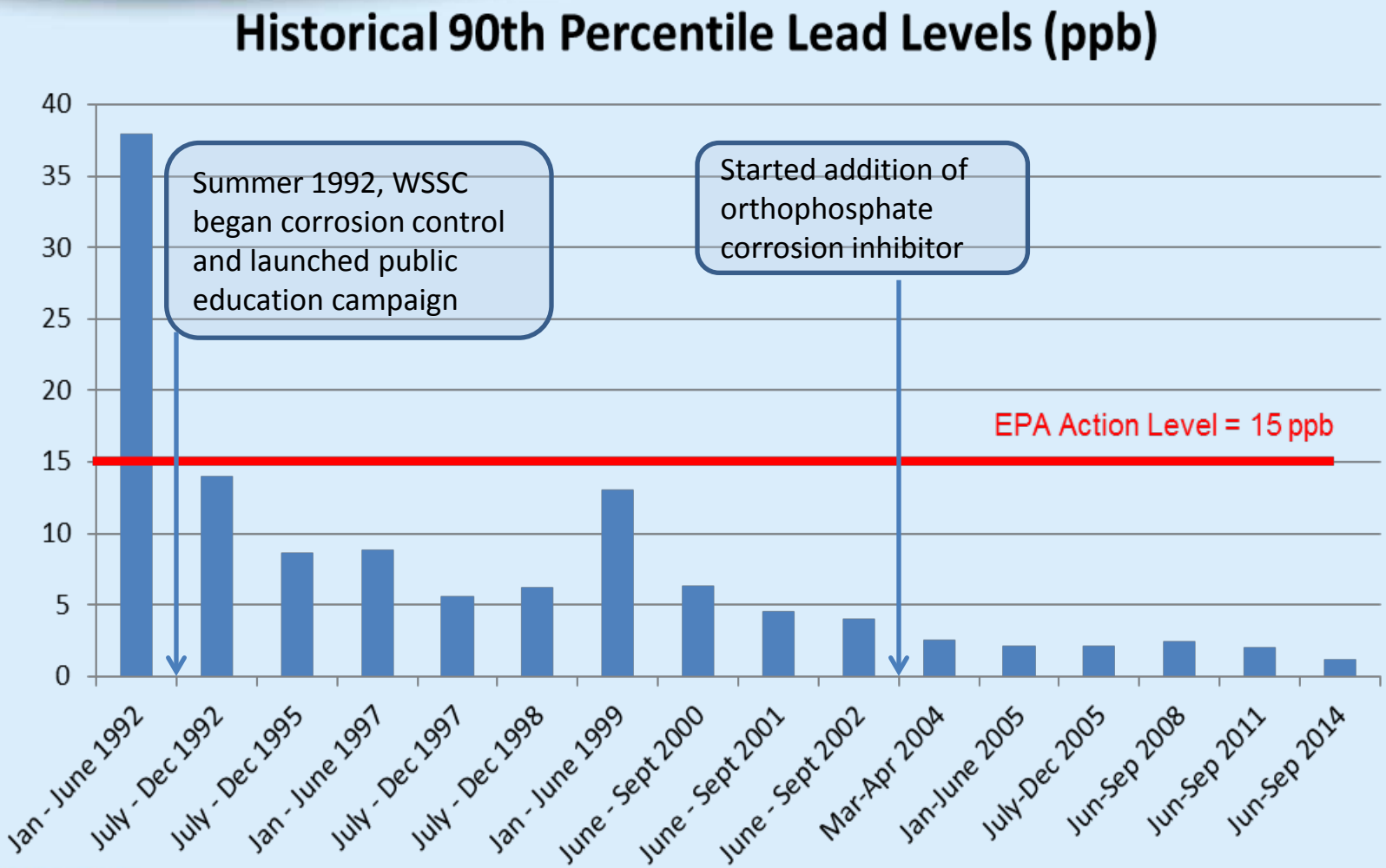
WSSC Lead Levels



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WSSC Lead Sampling Procedures

- Customers are asked to collect first-draw samples
  - Water in contact with potential lead sources
  - Water stagnant for at least 6 hours
  - Not allowed to run water before sampling
- WSSC never asked customers to remove aerator screens before sampling
- Following EPA's 2006 clarification memo, advised customers to remove and clean aerators twice a year to reduce exposure

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Can It Happen at WSSC?

Factors	Flint (2014)	WSSC (2014)
Lead service lines	Present	Not Present
Corrosion Control	No	Yes
Lead testing procedures	Not compliant	Compliant
90th Percentile lead levels	> 15	1.2

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Can It Happen at WSSC?

- Operational risk is extremely small
- Transparency: WSSC reports ALL lead data to MDE
- Treatment changes that potentially impact lead corrosion must be reported to and approved by MDE
- WSSC has resources, experience, and expertise for effective and timely risk prevention and management

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Can It Happen at WSSC?

- WSSC takes whatever actions are necessary to protect public health
- Customers' safety, health and well-being are WSSC's primary concern
- MDE is very vigilant in monitoring WSSC operation
- Both counties closely monitor WSSC services
- Very involved and vocal customer base
- Customers can call (301) 206-7575 for lead testing.

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Questions?