



Department of Environmental Quality

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Eric Oswald, Drinking Water and Municipal Assistance Division

April 18, 2019

Natural Resources and Environmental Quality
Subcommittee on Appropriations



1

Agenda

- Background Information
- Key Lead and Copper Rule Changes



2

2

Background

3



3

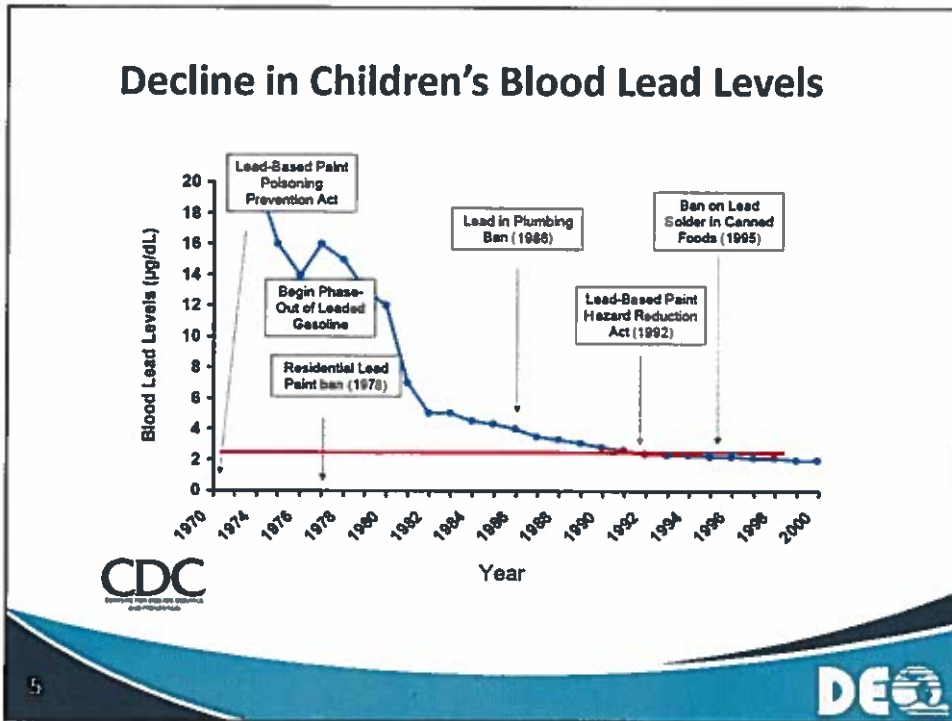
Lead Exposure

- Lead exposure is known to have adverse health impacts
- No known safe level of lead in blood
- Children are more susceptible than adults
- Significant progress has occurred in recent decades in reducing major sources of lead exposure, including gasoline, paint, etc.
- Lead components in drinking water distribution systems can leach lead into drinking water
- Older homes are more likely to have lead service lines and therefore more potential for lead exposure

4



4



5

Health Effects

Health Effects of Lead

- Biggest concern is young children and infants, who absorb more lead than the average adult
- Health effects in children include:
 - Impaired mental development, IQ deficits
 - Shorter attention spans
 - Low birth weight

Health Effects of Copper

- Stomach and intestinal distress
- Complication of Wilson's Disease
- Chronic exposure can cause liver disease in predisposed individuals

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6

Sources of LEAD in Drinking Water

Copper Pipe with Lead Solder: Solder made or installed before 1986 contained high lead levels.

Galvanized Pipe: Lead particles can attach to the surface of galvanized pipes. Over time, the particles can enter your drinking water, causing elevated lead levels.

Lead Service Line: The service line is the pipe that runs from the water main to the home's internal plumbing. Lead service lines can be a major source of lead contamination in water.

Lead Coarse Nicks: Coarse nicks and ragtags are shorter pipes that connect the lead service line to the main.

Faucets/Fixtures: Faucets, fixtures inside your home may contain lead.

EPA

7

Lead & Copper Rule (LCR)

- Purpose - Protect public health by minimizing lead and copper levels in drinking water, primarily by reducing corrosivity.
- Prior Rule - Not as protective of public health as we once thought

EPA

8

Lead & Copper Rule (LCR)

- Enacted in Federal Safe Drinking Water Act in 1991
- Michigan incorporated into state law
- LCR is a treatment technique rule
- Establishes action levels (AL), which when exceeded, require supplies to take certain actions
- Updated in June 2018

9



LCR Applies to...

Community Water Supplies (CWS)

- Provide year-round service to 25 or more people or 15 or more living units (municipalities, apartments, mobile home communities)
- Approximately 1,390 in Michigan serving 75% of population

Nontransient Noncommunity Water Supplies (NTNCWS)

- Serve 25 or more of the same people for more than six months of the year (schools, daycares, industries)
- Approximately 1,300 in Michigan

DOES NOT APPLY to Transient Noncommunity Systems or Private Wells

10



10

Action Levels (AL)

- Screening tool to determine an action is needed
- Based on ability to reduce exposure by controlling corrosion
- Lead Action Level = 15 parts per billion (ppb)
- Lead Maximum Contaminant Level Goal = 0 ppb
- Copper Action Level = 1,300 ppb
- Occurs if the 90th percentile value of a water supply's compliance samples are over the Action Level

11



11

State Lead Elimination Efforts

- Numerous state efforts to reduce lead exposure
 - Child Lead Exposure Elimination Commission
 - Expanded services by DHHS
 - Regulatory revisions
 - And other efforts
- New LCR is one task among many designed to reduce lead exposure

12



12

Key Lead and Copper Rule Changes

13



13

Summary of Changes

- Requires removal of Lead Service Lines (20 yrs. - 2021)
- Bans Partial LSL removals (Now)
- Changes Testing Methods to Reflect Highest Risk (Now)
- Material Inventory (2 Steps)
- Reduce Action Level (2025)
- Increase Sampling (Now)
- Increase Transparency (Now)

14



14

Distribution System Materials Inventories

- Piping and components through which water is distributed for use
 - water mains
 - service lines
 - storage tanks
- May be decades old and contain lead
- Water supply records of distribution materials vary
- Rules require distribution system materials be identified and communication occur to those served by a lead service line

15



15

Distribution System Materials Inventories (cont.)

Old Rule:

- Requires supplies to evaluate distribution materials to identify proper sampling sites
- No requirement to submit to state

New Rule:

- By Jan 1, 2021: Supplies must complete a preliminary distribution inventory based on existing sources of information, and submit to the state
- By Jan 1, 2025: Supplies must complete a verified inventory, and submit to the state
- Require annual report to state on status on lead service line replacements
- Require inventory be updated every five years
- Require owner/occupant be notified if home found to have a lead service line

16



16

Lead Service Line (LSL) Replacement

- A service line is the piping that connects the water main to the building
- A few supplies own entire service line, but most only own to the property line, with portion on private property owned by building owner
- Lead service lines were commonly installed prior to 1950s
- Rule changes will require lead service lines be replaced when supplies exceed a threshold level



17

17

Lead Service Line (LSL) Replacement (cont.)

Old Rule:

- Only requires LSL replacement if supply exceeds lead action level after corrosion control treatment installed

New Rule:

- Proactively address LSL replacement in AMP with a criticality assigned
- Systems replace LSLs at 5% per year starting in 2021
- AMP may be used to extend time if approved by the state
- Replace galvanized service lines if are/were connected to lead lines
- Supply must offer to replace private portion of LSL **at supply expense**

18

18

Sample Collection Location

- Supplies must select sample sites based on high risk, giving priority to sites served by LSL or copper with lead solder
- Sites originally identified in 1990s and may have changed over time as service lines replaced, homeowners decline to participate, etc.
- The changes will require supplies to review sites and submit to the state

19



Sample Collection Locations (cont.)

Old Rule:

- Stagnant sampling pools established in 1990s
- No requirement to submit sampling pool to state

New Rule:

- Update rules to include guidance that lead “goosenecks” or “pigtailed” are considered priority sites and should be considered for sampling
- Update site selection criteria to ensure highest risk sites are selecting for sampling
- Require supplies review/update sampling locations, provide basis for choosing locations, and submit to state by January 1, 2020
- Confirm & prioritize site selection based on risk of exposure

20



20

Questions

21



21



From: Michigan Environmental Council
To: House DEQ and DNR Appropriations Subcommittee Members
Date: April 18th, 2019
Re: Environmental and Public Health Budget Recommendations

Department of Energy, Great Lakes, and the Environment (EGLE)

Energy

- Michigan should look for ways to encourage solar development on brownfields. A first step in that process is to determine which brownfields would be most suitable for solar. To that end the Legislature should appropriate \$150,000 for the Department of Energy, Great Lakes and the Environment to conduct a study to identify brownfields suitable to host solar installations with a focus on large open areas like sites of retired or retiring coal plants and closed landfills.
 - Suggested boilerplate: "The Michigan Agency for Energy, in coordination with the Department of Environmental Quality, shall conduct, or contract to conduct, a study to assess the potential for solar energy development on Michigan brownfields, in particular brownfield sites hosting closed or retiring coal plants and landfills. A final report on the study shall be transmitted to legislative committees with primacy over energy and brownfield remediation and development, and made available to the public, not later than June 1, 2020. At a minimum the study should do all the following: (A) overlay solar resource maps with brownfield sites, (B) estimate the solar energy potential and nameplate capacity available on brownfield sites, and (C) identify and prioritize the optimal brownfields for hosting solar energy development. The Agency should produce an estimate of the impact renewable energy development on brownfields would have on job creation, tax base, and economic growth."
- Dedicate the ~\$5 million Fiat/Bosch settlement funding to assist local governments and schools purchase electric buses. Unlike the VW settlement funding, this settlement went to the general fund and we would ask the legislature to put that general fund towards programs that reduce the harmful emissions that were the basis of the emissions cheating scandal in the first place.

Water

- Support the FY 2019 \$120 million drinking water supplemental. This supplemental would go towards:
 - Minimum of \$37,500,000.00 for implementation of the lead and copper rule, including but not limited to, lead service line replacement and support of local education efforts by the Water Supply Advisory Councils established in R 325.10410(7).
 - Minimum of \$30,000,000.00 to abate and cleanup emerging contaminants as well as invest in technologies to address contaminants in public water systems

- Minimum of \$40,000,000.00 to provide grant funding to eligible applicants applying for Drinking Water Revolving Loan Funds.
- Up to \$7,500,000.00 for grants to communities to enhance asset management plans and/or for the development of sustainable water rate plans, and/or for watershed plans.
- Up to \$5,000,000.00 to support research and innovation, including but not limited to optimizing corrosion control treatment, optimizing distribution systems, and enhancing data building capacity of water systems.
- The legislature should support full allocation of Renew Michigan funding for contaminated site clean-up program, waste management, and recycling. At the end of 2019 the legislature approved the allocation of \$69 million to fund the Renew Michigan Fund. We request that the full amount of that funding be appropriated to the specific programs outlined in the authorizing legislation.
- In addition to the Renew Michigan funding we would ask for a continuation of the approximately \$15 million GF that has been going to the DEQ for PFAS work to be included in the FY 20 budget. We continue to see the need for this additional GF to tackle widespread PFAS contamination. MEC does not believe that the \$45 million from the Renew Michigan fund for contaminated site clean-up is sufficient in and of itself to tackle both orphaned contaminated sites and new PFAS sites.
- The legislature should continue funding mapping of contaminated groundwater. In the supplemental approved at the end of 2018 the legislature allocated \$4.3 million to the DEQ to support work to map plumes of contaminated groundwater. We request that \$8.6 million be allocated to provide a full fiscal year of funding to continue this project.
 - Additionally, going forward the legislature should identify federal funding for groundwater mapping. There is some federal matching funds available through the USGS, but the state match would have to be appropriated to MSU since only accredited academic institutions are eligible: https://water.usgs.gov/wrri/FY_2019_RFP_104g.pdf

Department of Natural Resources

- Prioritize State Park funding to help address the backlog of capital projects. We have ~\$100 million in emergency repairs needed for state parks based on recent project logs. More money needs to be dedicated to continue to cut into this backlog to ensure our state parks are properly maintained.
- Identify needs at state hatcheries in order to put in water treatment and lead to net zero discharge of pollutants like phosphorus. The state should set an example on how aquaculture can be done with minimal impact on water quality. Currently the facilities, outside of Platte River have not been modernized to use the best treatment technologies available. We have boilerplate drafted.
 - Using existing funds, the Department shall produce a report on the amount of capital investment needed for improvements on energy efficiency and water treatment at all state fish hatcheries, with a focus on bringing the hatcheries in line with modern effluent and energy efficiency standards. This report shall be transmitted to the Appropriations and Natural Resources committees in both chambers of the legislature prior to October 1st, 2020.



MICHIGAN UNITED *Since 1937* CONSERVATION CLUBS

Uniting Citizens to Conserve, Protect and Enhance Michigan's Natural Resources and Outdoor Heritage

PO Box 30235 Lansing, MI 48909 | 800.777.6720 P | www.mucc.org

April 18, 2019

Dear House Appropriations Subcommittee on Natural Resources and Environmental Quality,

As you look towards the upcoming budget negotiations for the Michigan Fiscal Year 2019-2020, we expect that you will leverage the substantial investment that hunters, anglers, and trappers make by continuing to support and enhance key General Fund contributions to protecting and managing fisheries and wildlife and protecting and improving water quality contained in the budgets for the Department of Natural Resources and the soon-to-be Department of Environment, Great Lakes and Energy.

Specifically, MUCC's high priority General Fund/General Purpose funding requests for the Department of Natural Resource FY 2020 Budget are as follows:

- **\$2.3 million GF/GP for Chronic Wasting Disease surveillance and control**
 - Ongoing funding for wildlife disease lab support and funding for research into new methods of disease surveillance and control are critical to protecting our deer herd and ensuring continued hunter participation.
- **Retain or increase the \$5.1 million GF/GP for Invasive Species Prevention and Control**
 - This has been included in the last several Executive Budgets, which MUCC fully supports.
- **\$1.4 million for an inventory of hazardous pipeline crossings.**
 - While much attention has been paid to the potential risks of Line 5, there are hundreds of other places in Michigan where the same types of underground infrastructure interface with our natural waterbodies. Knowing more about the pipeline infrastructure and the habitat that surrounds it is important to determine potential risks.

MUCC's high-priority General Fund/General Purpose funding requests for the Department of Environment, Great Lakes, and Energy's FY 2019 Supplemental and FY 2020 Budget proposal are as follows:

The fiscal year 2019 supplemental includes one key investment:

- **\$120 million for a new Drinking Water Protection and Innovation Initiative** (general fund), which includes (among other things) funding for the response to PFAS and emerging contaminants.

The Governor's recommended fiscal year 2020 budget includes many key investments, but the one we want to call attention to is as follows:

- **\$69 million for Renewing Michigan's Environment** (restricted) to continue the program created in fiscal year 2019. Approximately \$45 million (65%) is dedicated to environmental cleanup and redevelopment; approximately \$9 million (13%) will be used for the waste

management program; and approximately \$15 million (22%) will be used for the recycling program.

While drinking water and environmental cleanup is, of course, important to human health and the public, MUCC wants to add our support for these efforts. The direct connection between PFAS and other environmental contaminants to fish and game consumption advisories is of great concern to Michigan's hunters and anglers. Ensuring our fish and wildlife populations are healthy and also having confidence in them as a source of high-quality protein is a key reason for many hunters and anglers to pursue their passions in the outdoors. We must do all we can to protect these resources.

Hunters, anglers and trappers in Michigan contribute more than \$80 million of their own money through license fees to fisheries and wildlife management, along with the enforcement of these regulations each year. Additionally, the economic impact of the related expenditures in hunting, fishing, and trapping amount to \$11.2 billion each year and sustain 171,000 jobs in this state. We hope that you will strongly consider our support for these General Fund items to continue to leverage this investment and protect our outdoor heritage and the considerable economic impact it generates for Michigan.

Sincerely,

Amy Trotter
Executive Director



SPORTSMEN'S IMPACT *on Michigan's Economy*

ECONOMIC CONTRIBUTION

\$11.2B

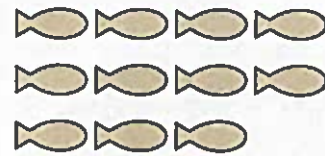


The amount generated by **MICHIGAN'S HUNTING AND FISHING** industry for the state economy each year

NUMBER OF PARTICIPANTS

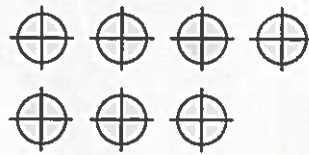
Anglers

1.1 MILLION



Hunters

700,000



JOB CREATION

The hunting and fishing industry supports more than **171,000** jobs in Michigan

HUNTING **135,579 JOBS**

FISHING

35,422 JOBS

SALARIES & GDP



The hunting and fishing industry contributes **\$3.3 BILLION** in salaries and wages to Michigan households



The hunting and fishing industry also has a **\$7.2 BILLION** value-add to Michigan's GDP

INDUSTRY

Michigan is No. 1 among Great Lakes states for jobs created from hunting and fishing purchases. In every region of Michigan, the number of jobs created and supported by hunting and fishing puts the industry in the **TOP 10 PERCENT OF JOB-CREATION** industries





TOTAL ECONOMIC IMPACT

of hunting and fishing spending by region

