
From: Wyant, Dan (DEQ)
Sent: Monday, December 28, 2015 9:49 AM
To: Snyder, Rick (GOV); Scott, Allison (GOV); Agen, Jarrod (GOV); Baird, Richard (GOV); Muchmore, Dennis (GOV); Hollins, Harvey (GOV); Posthumus, Dick (GOV); Murray, David (GOV); Holland, Meegan (GOV); Lyon, Nick (DHHS)
Cc: Wyant, Dan (DEQ)
Subject: FW: Auditor General Letter – City of Flint Drinking Water
Attachments: Auditor General Letter - City of Flint Drinking Water.pdf

FYI – Please see the attached letter. The Auditor General findings are consistent with the DEQ's own internal review. The Auditor General delivered the letter to Senator Ananich late Wednesday, December 23, 2015.

Please call me if you have any questions.

Dan Wyant
Director

Attachment

From: MI_Office_of_the_Auditor_General [mailto:mi_auditor_general@audgen.michigan.gov]
Sent: Wednesday, December 23, 2015 3:18 PM
To: aleavitt@senate.michigan.gov; sstudley@senate.michigan.gov
Cc: Hirst, Laura (OAG); Ringler, Doug (OAG); Wyant, Dan (DEQ); Sygo, Jim (DEQ)
Subject: Auditor General Letter – City of Flint Drinking Water

Please see the attached letter, which addresses your questions about the City of Flint's drinking water.

We stand ready to answer any questions that you may have. Thank you.



December 23, 2015

The Honorable Jim Ananich
Senate Minority Leader
State Capitol, Room S-105
Lansing, Michigan

Dear Senator Ananich:

Enclosed are answers to the questions you posed in your October 20, 2015 letter to our office regarding the audit we are conducting of the Office of Drinking Water and Municipal Assistance (ODWMA), Department of Environmental Quality (DEQ), specific to lead contamination in the City of Flint's drinking water. Also enclosed are additional questions we developed that are relevant to these issues, along with five exhibits:

- A map showing Flint water samples by zip code.
- A map showing lead counts of 5 parts per billion or higher.
- Two charts showing the number of samples by time period and zip code.
- A time line of the Flint water review.

We appreciate the opportunity to assist you in answering questions regarding this topic. If you have further questions or a request for other services, please do not hesitate to contact our office.

Sincerely,

A handwritten signature in black ink that reads 'Doug Ringler'.

Doug Ringler
Auditor General

Enclosures



Questions and Answers

Q1: How does ODWMA ensure the data it receives is accurate?

A: With regard to the United States Environmental Protection Agency (EPA) Lead and Copper Rule (LCR) monitoring requirements, DEQ relies on the following key controls to ensure the accuracy of test results:

- State-owned laboratories test water samples.
- State-owned laboratories send test results directly to DEQ.
- The City of Flint Water Treatment Plant (Flint WTP) certifies whether sample sites are classified as tier 1^{*}.

The current Flint WTP LCR sampling process includes:

1. DEQ informs the Flint WTP of the required water lead and copper sample size.
2. The Flint WTP determines the pool of tier 1 sites for sampling.
3. The Flint WTP selects the sample.
4. The Flint WTP sends out sample kits and instructions to residents for collecting water samples.
5. Residents leave samples and signed sampling forms outside their front doors.
6. The Flint WTP employee picks up samples and forms from residents.
7. The Flint WTP employee reviews sample forms for completeness.
8. The Flint WTP employee sends samples to the State-owned laboratories.
9. State-owned laboratories test samples and provide results directly to DEQ.
10. DEQ receives water lead and copper sample results, which include the following information: date collected, date received, address where collected, type of residence (e.g., single family or apartment), and sample point (e.g., kitchen sink or bathroom sink).
11. DEQ tracks, and follows up if necessary, the number of samples collected by the Flint WTP to help ensure that the required minimum number of samples are collected by the monitoring period deadline.

* Single-family or multiple-family residence with lead service line, lead solder copper piping constructed after 1982, or lead plumbing.

12. The Flint WTP submits lead and copper report to DEQ that certifies whether sample sites meet tier 1 criteria.
13. DEQ prepares the LCR 90th percentile calculation report.

During our review, we noted two potential improvements for the Flint WTP sampling process (see Question 5 of the additional questions answered by the OAG regarding tier 1 sample validity):

- DEQ could verify that the sampling pool was limited to only tier 1 sample sites to ensure that the Flint WTP is in compliance with the LCR (Title 40, Part 141, section 86(a)(3) of the *Code of Federal Regulations* [CFR]).
- DEQ could independently verify the validity of sample site certifications.

Q2: What accountability measures are in place for ODWMA staff who fail to follow data verification protocols?

A: DEQ does not provide any direct oversight over the Flint WTP and, therefore, does not have any accountability measures over the Flint WTP's LCR data verification protocols. DEQ's data verification protocol for lead and copper water sampling is limited to verification that the WTP certifies samples submitted to the State-owned laboratories for analysis (see steps 7 and 12 in the Flint WTP LCR sampling process noted in Question 1 above). We did not identify any instances in which ODWMA staff failed to verify that submitted samples were certified by the Flint WTP.

Q3: What accountability measures are in place for ODWMA staff who lie or misrepresent information to the EPA?

A: As with all classified employees, ODWMA staff must adhere to the rules and regulations established by the Michigan Civil Service Commission. If any ODWMA staff were determined to misrepresent information to the EPA, they would be subject to Civil Service Rule 2-6, Discipline, which allows an appointing authority to discipline an employee for just cause up to and including dismissal. We are not aware of any DEQ-established measures that are in addition to the Civil Service Rules.

We gained access to the e-mail accounts of key DEQ management (DEQ Director, Deputy Director, ODWMA Chief, and other key ODWMA staff) extending back to January 1, 2013. We did so to identify the key decision points and conversations that occurred leading up to and through the situation in Flint. Our review was also intended to determine whether State, Flint, or other officials attempted to conceal key test results or other information.

We noted one e-mail exchange between DEQ and the EPA that appears to be a significant contributor to the concern that DEQ misrepresented information to the EPA. The EPA requested clarification on February 26, 2015 regarding the type of optimized corrosion control **treatment** the Flint WTP was using. DEQ responded on February 27, 2015 that the city had an optimized corrosion control **program** in place, but DEQ did not provide any program details. DEQ informed us that the Flint WTP corrosion control **program** included performing

lead and copper monitoring for two consecutive six-month periods to determine whether corrosion control **treatment** would be necessary in the future. However, it appears the EPA interpreted corrosion control **program** to mean that corrosion control **treatment** was being performed.

On April 23, 2015, the EPA again inquired as to what the Flint WTP was doing for corrosion control **treatment**. DEQ responded on April 24, 2015 that the Flint WTP was not practicing corrosion control **treatment**.

Based on our review of this and other e-mails, we have no specific reason to believe that DEQ willfully misrepresented the information to the EPA.

Q4: What policies do DEQ and ODWMA have in place to escalate major infractions up the chain of command?

A: We did not note any instances of major infractions (i.e., intentional disregard of policies, laws, regulations or specific directions) committed by DEQ staff during the course of our review. DEQ does not have a formal policy or procedure in place to escalate major infractions performed by ODWMA employees; however, our review of DEQ correspondence confirmed the escalation of key issues up the chain of command related to the Flint situation. DEQ stated that its informal policy is for staff to notify the proper level of management of infractions to determine necessary action.



Additional Questions Answered by the OAG

Application of the LCR

Q1: How did the Flint WTP become the primary water supplier for the City of Flint?

A: Upon notification of the City of Flint's plans to switch to the Karegnondi Water Authority (KWA) in April 2013, the Detroit Water and Sewerage Department (DWSD) submitted a letter to the City of Flint stating that it would terminate its agreement to provide water services on April 17, 2014.

According to DEQ management, the Flint WTP attempted to negotiate with the DWSD to maintain it as the City of Flint water supplier; however, after negotiations were unsuccessful, the City of Flint notified DEQ through a permit request of its intent to operate the Flint WTP full time using the Flint River. Although the Flint City Council voted in March 2013 in support of moving to the KWA pipeline, the vote was silent on the use of the Flint River as a temporary drinking water source.

DEQ informed us that in the 1990s, the City of Flint upgraded the Flint WTP to serve as a backup source of water for emergencies. In 2006, the Flint WTP began quarterly testing of the treated Flint River water at the Flint WTP to ensure water quality standards were met; however, the Flint WTP did not test the water's effect on the distribution system at consumer tap locations.

Q2. Did DEQ consult with the EPA prior to determining how to apply the LCR?

A: DEQ did not consult with the EPA on how to apply the LCR prior to implementing two consecutive six-month monitoring periods of the Flint WTP beginning July 1, 2014. Based on past experiences applying the LCR monitoring requirements, DEQ believed that it had appropriately applied the LCR requirements of a large water system.

Q3: When Flint switched to the Flint River water source, should corrosion control treatment have been maintained?

A: We believe that corrosion control treatment should have been maintained.

According to the LCR, a water system can achieve optimized corrosion control if it submits results of tap water monitoring for two consecutive six-month monitoring periods with acceptable lead levels. However, a water system that has optimized corrosion control, and which has treatment in place, should continue to operate and maintain optimal corrosion control treatment.

DEQ staff explained that they did not treat the switch to Flint River water as a new system, but as a new source. DEQ further stated that because the Flint River was a new water source and there was a change in chemicals needed to treat the new source, a corrosion control study was needed to determine the impact on the water distribution system. Therefore, it was DEQ's interpretation that two rounds of six-month monitoring were still needed to evaluate the water quality and determine optimal corrosion control treatment.

The Flint water system had optimal corrosion control treatment when the DWSD WTP was the water supplier. Based on our review of notes from a July 21, 2015 EPA and DEQ conference call on DEQ's implementation of the LCR regarding whether the Flint WTP should have continued to maintain corrosion control treatment, it appeared that the EPA did not agree with DEQ's interpretation of the LCR. Region 5 EPA staff explained that they would talk to the EPA headquarters about the interpretation of regulations and believes that systems that have been deemed optimized need to "maintain" corrosion control. The Region agreed to provide supporting regulatory citations for the language about maintaining corrosion control.

On November 3, 2015, the EPA issued a memorandum stating that the LCR had differing possible interpretations; however, the EPA concluded that it is important for large water systems to take the steps necessary to ensure that appropriate corrosion control treatment is maintained at all times, thus ensuring that public health is protected. Based on this clarification, it appears that corrosion control treatment should have been maintained.

Q4: Should DEQ have required the Flint WTP to start pursuing optimized corrosion control treatment after the first round of six-month sampling results were above the lead action level of 5 parts per billion (ppb)?

A: Yes. According to DEQ's application of the LCR, within six months after the end of the monitoring period in which the water sample results exceeded the acceptable lead level, DEQ should have required the Flint WTP to start pursuing optimized corrosion control treatment.

The LCR states that the lead action level is exceeded if the lead level, as determined by the 90th percentile calculation, is greater than 15 ppb. If the lead action level is exceeded, water systems are required to take additional actions including educating the public about lead in drinking water as well as commencing lead service line replacement if the water system has already installed corrosion control and/or source water treatment. However, for water systems that have not yet implemented corrosion control treatment, they can be deemed to have optimized corrosion control without installing treatment if they can demonstrate lead levels below 5 ppb for two consecutive six-month periods.

The first round of six-month sampling results was received in late March 2015. Because the results were 1 ppb over the lead action level of 5 ppb, DEQ would not be able to achieve two consecutive six-month periods below 5 ppb. Therefore, DEQ should have notified the Flint WTP to start pursuing optimized corrosion control treatment. However, DEQ waited until the second round of sampling was completed (June 30, 2015) to assess whether water sample results improved.

Water Samples

Q5: Did DEQ verify that only tier 1 sample sites were selected by the Flint WTP in the two rounds of six-month samples?

A: DEQ did not verify that only tier 1 sample sites were selected. DEQ relies on the Flint WTP's certification of sample sites and does not perform any independent verification of those certifications.

In a November 19, 2015 *Flint Journal* article, the Flint WTP indicated that it did not have the ability to ensure that all sites were tier 1. In fact, water samples came from the random distribution of 175 testing bottles without regard for whether the homes were at risk for high lead levels. DEQ issued a formal memorandum on November 9, 2015 requesting that the Flint WTP verify the classification of all prior sample items. The results are due back from the Flint WTP on December 30, 2015.

Q6: DEQ dropped two water sampling sites from its second six-month sample (January 1, 2015 through June 30, 2015). Was this appropriate?

A: Yes, it was appropriate for DEQ to drop these two water sampling sites. Federal regulation 40 *CFR* 141.86(a) states:

" . . . each water system shall complete a materials evaluation of its distribution system in order to identify a pool of targeted sampling sites that meets the requirements of this section . . . All sites from which first draw samples are collected shall be selected from this pool . . . Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants."

This regulation also requires that a water system's targeted sampling pool consist of only tier 1 sampling sites if an adequate number is available to meet monitoring requirements.

According to federal regulation 40 *CFR* 141.86(f), the State may invalidate a water sample if it determines that the sample was taken from a site that did not meet the site selection criteria. A sample invalidated per this regulation does not count toward determining lead or copper 90th percentile levels or toward meeting the minimum monitoring requirements.

DEQ dropped one water sample site from its 90th percentile calculations because the site was from a business that does not meet the tier 1 requirements of being a single-family or multiple-family residence. The second sample site was dropped because the home had a point-of-entry treatment device to filter contaminants. Based on the criteria specified above, it appears that DEQ's rationale for dropping the samples from these two sites appropriately met the requirements for invalidating samples per federal regulation 40 *CFR* 141.86.

Q7: Was flushing of the taps the night before drawing a sample an appropriate sample methodology?

A: Yes. The LCR requires that samples be a first draw of water after six hours of stagnation. The LCR does not indicate whether or not the water line should be flushed prior to collecting the sample. In the sample instructions, DEQ required preflushing to ensure that sampled faucets were not stagnant for an excessive period of time beyond the targeted six hours (e.g., rarely used faucets or when a homeowner has been gone for an extended period of time.)

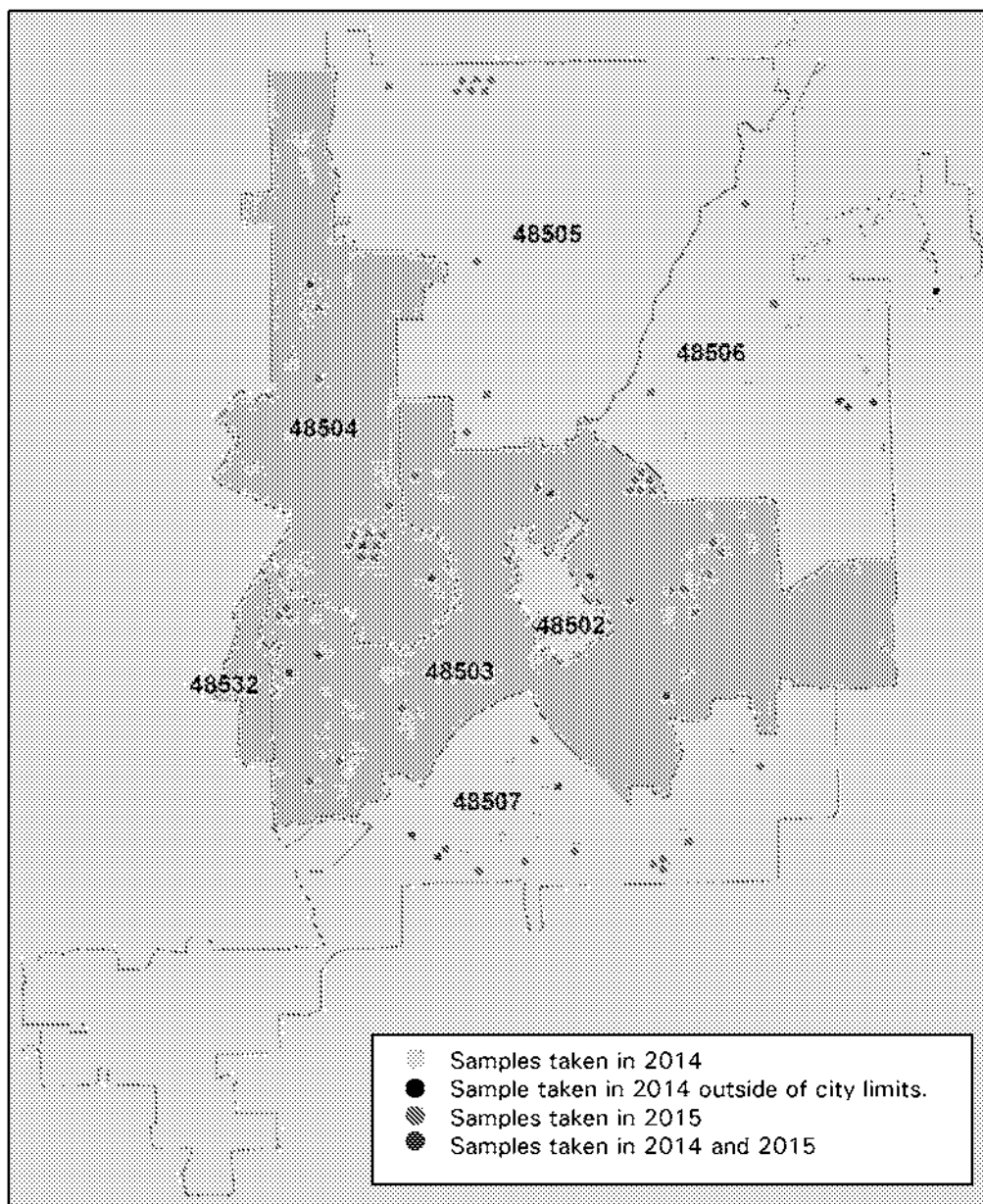
The LCR requires six hours of stagnation; however, it does not preclude DEQ from instructing residents to flush prior to stagnation.



Flint WTP 2014 and 2015 Sample Locations (Exhibit #1)

In calendar year 1992, the Flint WTP established a tier 1 sample site pool for LCR monitoring. With the change to the Flint River water, the Flint WTP needed to increase the pool of sample locations because of additional sampling requirements. The following exhibit documents the 2014 and 2015 sample locations for LCR monitoring. Based on the data obtained during our review, we could not determine how the locations were selected or whether they were properly classified as tier 1 sample sites.

As noted in Question 5 of the additional questions answered by the OAG, DEQ has requested the Flint WTP to verify the tier 1 classification of all prior sample items.

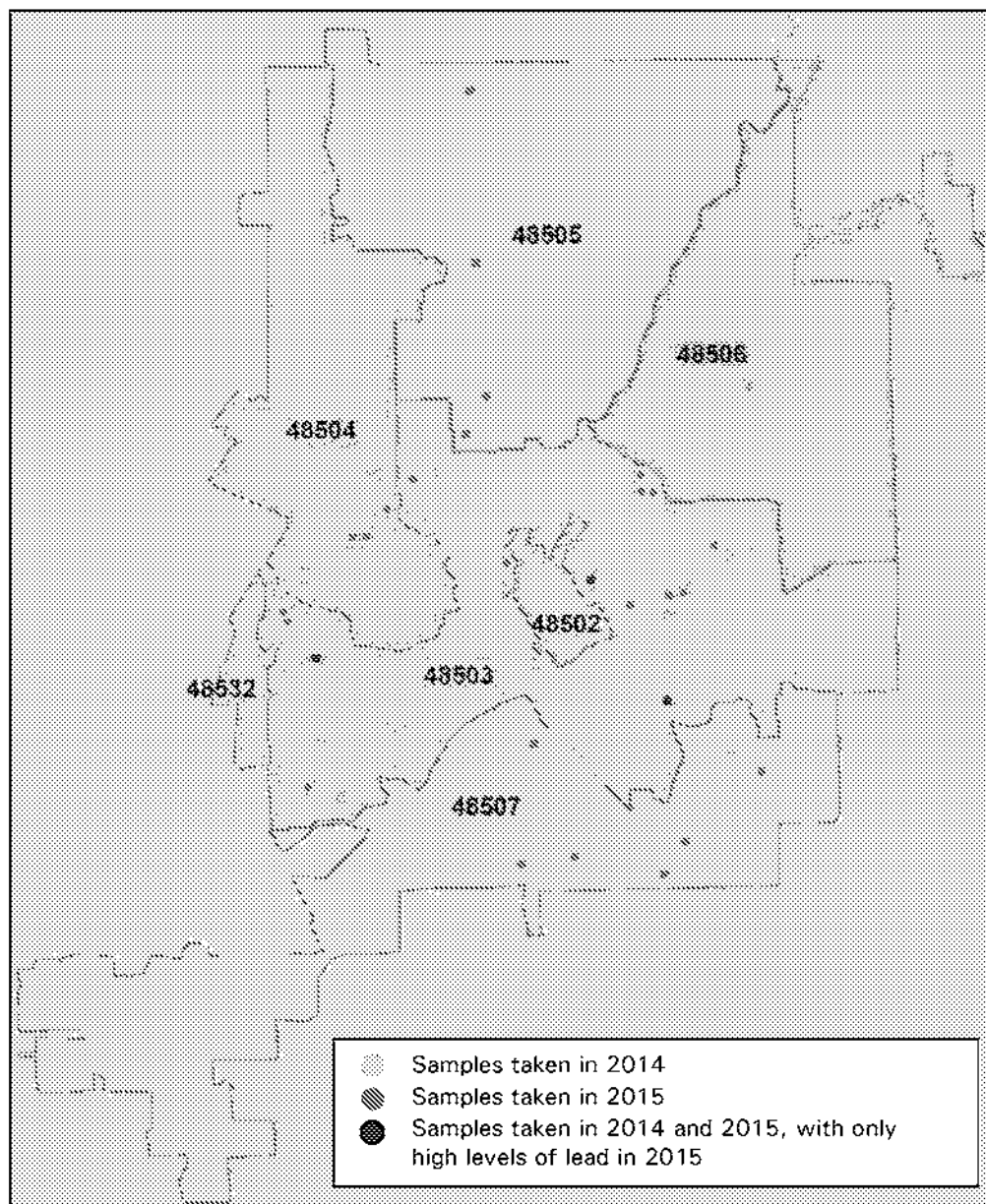


Source: The OAG prepared this map using data obtained from DEQ and ©OpenStreetMap contributors (opendatacommons.org). The sample locations are approximate.



**Flint WTP 2014 and 2015
Sample Locations With Lead Counts of
5 Parts Per Billion or Higher (Exhibit #2)**

This exhibit documents the 2014 and 2015 sample locations with lead counts of 5 ppb or higher. This information is used in aggregate by DEQ to determine if the city has optimized lead levels.

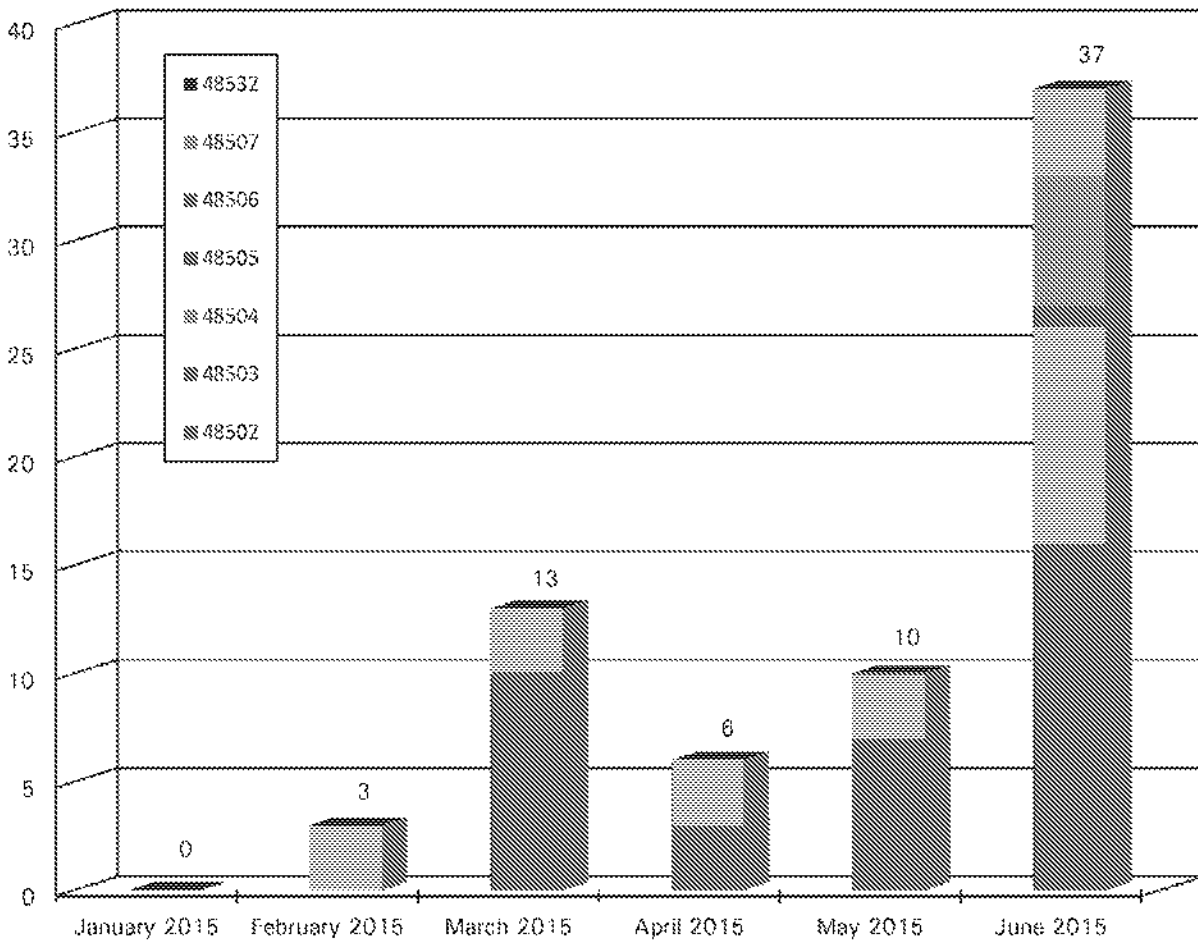


Source: The OAG prepared this map using data obtained from DEQ and ©OpenStreetMap contributors (opendatacommons.org). The sample locations are approximate.



Flint WTP 2015
Number of Samples by
Time Period and Zip Code (Exhibit #3)

This chart expands on Exhibit #1 to show a summary by zip code and time of selection within the sampling period. Based on the data obtained during our review, we could not determine if the lateness of selection within the monitoring period affected the appropriateness of the sample items.

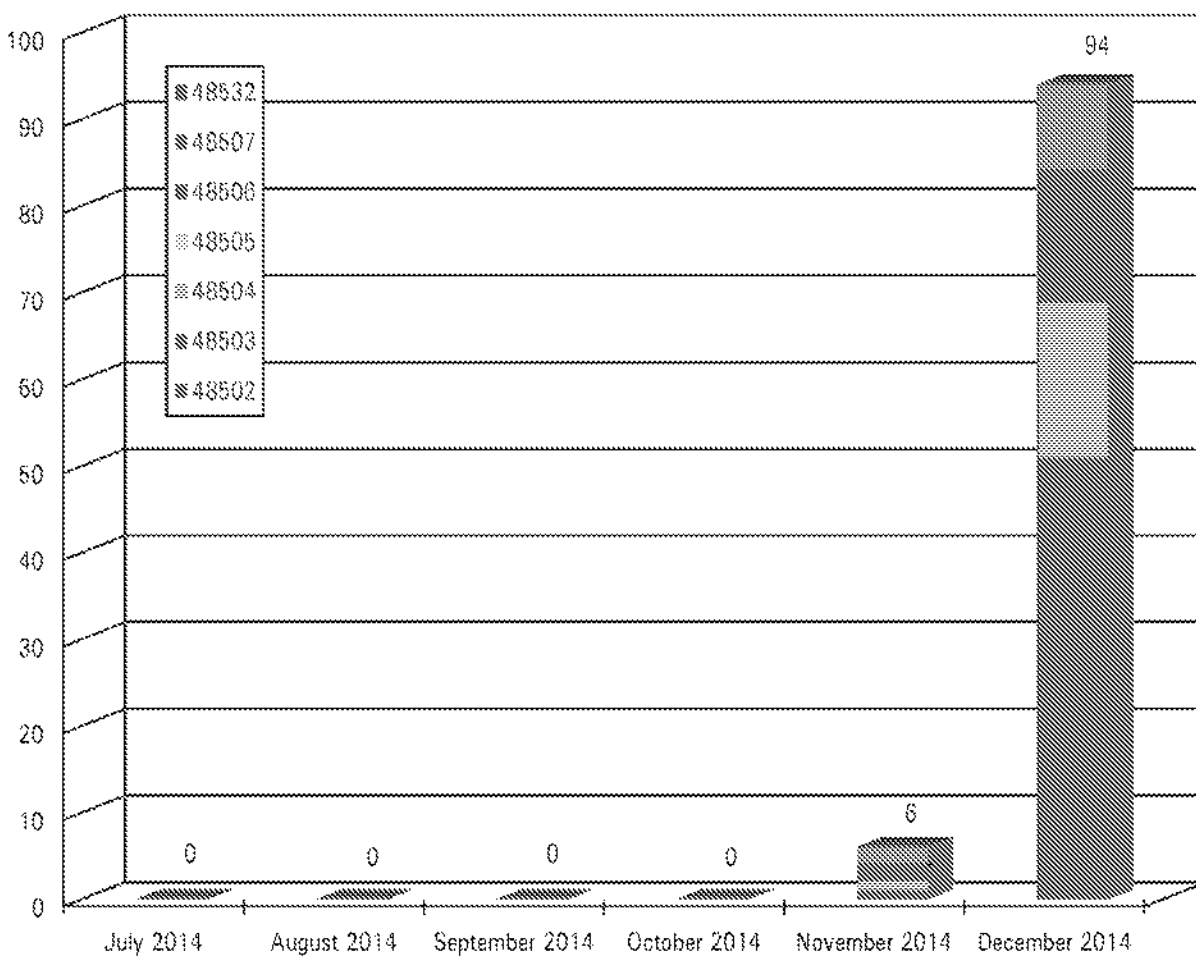


Source: The OAG prepared this chart using data obtained from DEQ.



Flint WTP 2014
Number of Samples by
Time Period and Zip Code (Exhibit #4)

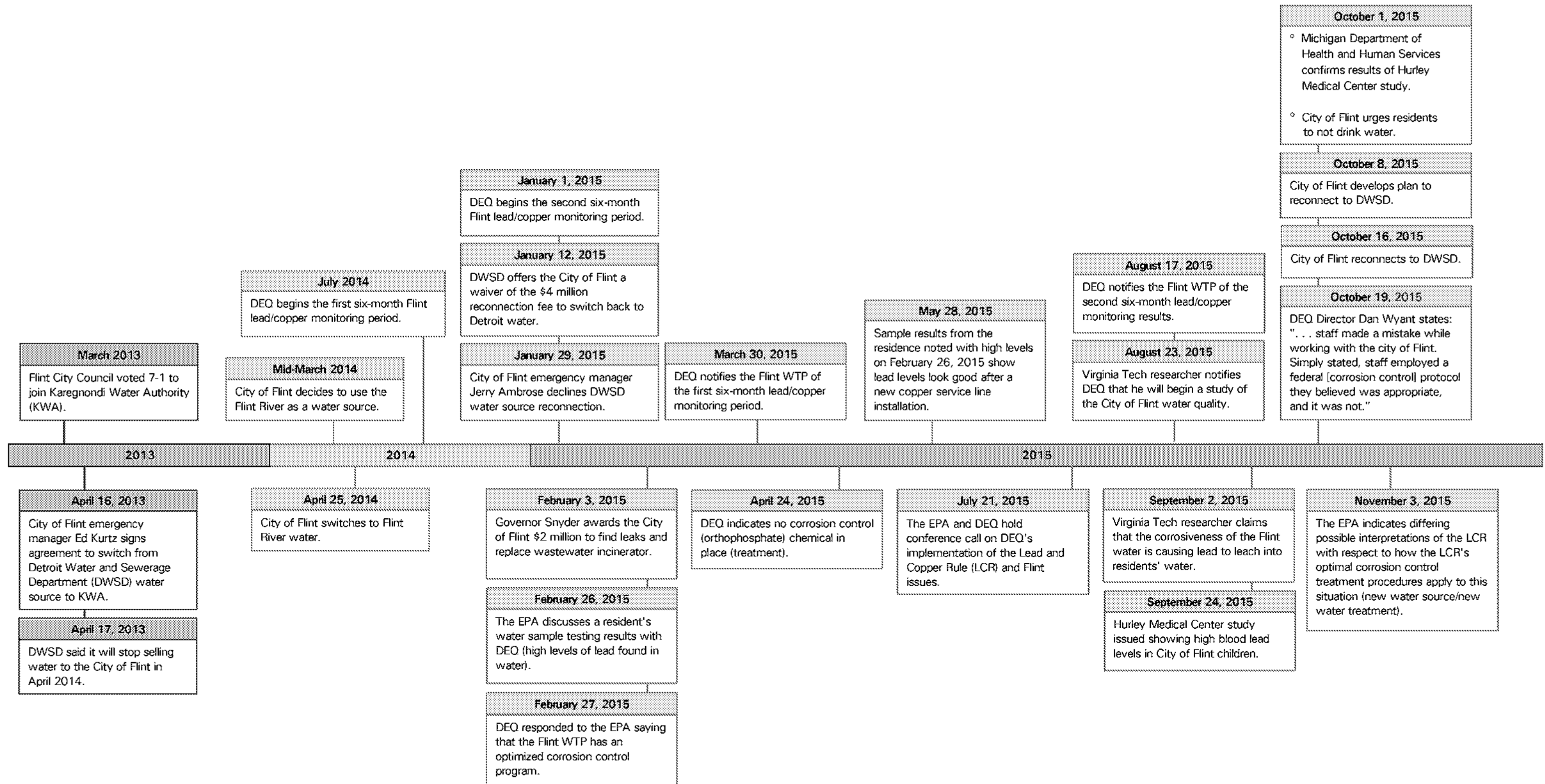
This chart expands on Exhibit #1 to show a summary by zip code and time of selection within the sampling period. Based on the data obtained during our review, we could not determine if the lateness of selection within the monitoring period affected the appropriateness of the sample items.



Source: The OAG prepared this chart using data obtained from DEQ.



Flint Water Review Time Line (Exhibit #5)



Source: The OAG prepared this time line using data (e-mails, meeting notes, and letters) obtained from DEQ, newspaper and press release articles, the Flintwaterstudy.org, and the Hurley Medical Center survey results.

From: Wyant, Dan (DEQ)
Sent: Monday, December 28, 2015 10:15 AM
To: Baird, Richard (GOV);Hollins, Harvey (GOV);Lyon, Nick (DHHS)
Cc: Krisztian, George (DEQ);Brownfield, Michael (GOV);Thelen, Mary Beth (DEQ);Wyant, Dan (DEQ)
Subject: Draft Document for Review - Not for Distribution - Taking Action on Flint Water - Response Due by Monday, January 4, 2016, COB
Attachments: TAKING ACTION ON FLINT WATER DRAFT 12-28-15.docx; Drinking Water Program Budget Request.pdf
Importance: High

Please edit, correct, and expand summaries as indicated in the attached document called Taking Action on Flint Water Draft 12-28-15. This document is intended to serve as a basis for the Governor to address the Flint drinking water issue in the State of the State and budget announcement.

I have also attached a pdf of a document called Drinking Water Program Budget Request for your information.

Please send your response back to me and also copy all by Monday, January 4, 2016, Close of Business.

Thank you.

Dan Wyant
Director
517-284-6700

Draft –Not for Distribution 12/28/15

TAKING ACTION ON FLINT WATER

- Flint deserves safe drinking water.
- The issues around Flint's drinking water represent the challenges of aging infrastructure.
- As Governor, I am committed to addressing the issue.
- Lead exposure is a serious issue.
- I appreciate those who have brought attention to this issue.
- We are committed to safe drinking water and to working in partnership with the city of Flint and the U.S. EPA.
- We must learn from what happened in Flint.
- **In October, I announced a ten point action plan to address lead exposure in Flint.**
- **Today, I am outlining additional actions to make sure the public health is protected in Flint and elsewhere in the State of Michigan.**
- **I am asking for changes in order to see that the Michigan Drinking Water Program becomes a national leader in public health protection.**

On October 2, 2015 the Flint Water Action Plan was announced. With the help of the Michigan Legislature and the Mott Foundation, we have taken significant action to address the issue. Actions include:

- **Switching back to the Great Lakes Water Authority/DWSD water supply (October 16, 2015)**
- Provided water filters to resident of Flint. (DHHS to provide update)
- Testing all Flint schools, preschools and day cares. Summary of results to date.(George to provide)
- Expanded health exposure testing of individual residences. Summary of results to date. (Nick to provide)
- Offer water testing at no cost to Flint residents to assure safe water. Summary of results to date. (George to provide)
- Expedite optimizing corrosion control in the Flint drinking water system. Summary of date completed. (George to summarize)
- Utilize the "Safe Drinking Water Technical Advisory Committee." To ensure the best technology, practices and science are being utilized; national experts have been assembled to provide technical advice.
- Accelerate water system improvement to address replacement of lead service lines. We are working with the city of Flint and our Congressional delegation on a lead service line replacement plan.
- Working to expedite the completion of the Karegnondi Water Authority.
- Expand a lead education program. (DHHS to provide update)

- Dr. Eden Wells was named as the Flint Drinking Water Public Health Advisor to ensure safe drinking water.

In addition to the announced Flint Action plan, I am calling for additional actions to be taken.

- Recently appointed Harvey Hollins to serve as my administration's point person to coordinate ongoing activities and partner with the city of Flint.
- Asking the DEQ to develop a statewide drinking water school testing program.
- Asking for changes in the Michigan Drinking Water Program in order for it to be recognized as a national leader in public health including:
 - New administrative leadership.
 - Creation of corrosion control expertise.
 - Expanded statewide testing.
 - Improved testing protocols.
- The creation of a health fund for children affected by lead exposure.
- Calling on the Legislature to work with my administration and stakeholders to develop a Strategic Water Fund to address Michigan's long term safe water and water quality infrastructure needs.
- I will look to implement additional recommendations of the Flint Water Advisory Task Force, and I appreciate their leadership on this issue.

**Department of Environmental Quality
Drinking Water Program Budget Request
December 21, 2015**

Appropriation	FTEs	Amount
One-Time (2016 Supplemental)		
City of Flint Emergency Water Services		\$ 3,900,000
Support half of the cost for Flint to stay on the Great Lakes Water Authority water system for six additional months (July 1, 2016 - December 31, 2016) until the Karegnondi Water Authority pipeline is completed		
Total One-Time Funding		\$ 3,900,000
Ongoing		
Drinking Water and Environmental Health Staff		
Corrosion Control Specialists	3	\$ 450,000
Sampling Staff	2	\$ 300,000
Lab Staff	3	\$ 450,000
Service Line Verification Staff	2	\$ 300,000
Total Staff	10	\$ 1,500,000
Local Health Department Contracts and Testing Fees		\$ 1,000,000
Lab Equipment		\$ 300,000
Travel		\$ 100,000
Other Supplies and Services		\$ 100,000
Total Ongoing Funding		\$ 3,000,000
Total Funding Request		\$ 6,900,000

Supplemental Boilerplate

Sec. xxxx. From the funds appropriated for the City of Flint Emergency Water Services, the department is authorized to pay \$3,900,000 of the water connection service costs to the Detroit Water and Sewerage Department or its successor. The payments shall only be made once a legally executable agreement has been reached between the parties. The funds are intended to support half of the connection costs for July 1, 2016 through December 31, 2016.

From: Holland, Meegan (GOV)
Sent: Monday, December 28, 2015 11:01 AM
To: Wyant, Dan (DEQ)
Subject: RE: Auditor General Letter – City of Flint Drinking Water

Will do. Thanks for the feedback. And safe travels today! :)

From: Wyant, Dan (DEQ)
Sent: Monday, December 28, 2015 10:59 AM
To: Holland, Meegan (GOV) <HollandM2@michigan.gov>
Cc: Wyant, Dan (DEQ) <WyantD@michigan.gov>
Subject: RE: Auditor General Letter – City of Flint Drinking Water
Importance: High

Good Morning Meegan,

This looks excellent with one word change – 5th paragraph , please change the word oversee to operate. (Change to: DEQ doesn't operate...)

Thank you.

Dan Wyant
Director

From: Holland, Meegan (GOV)
Sent: Monday, December 28, 2015 10:12 AM
To: Wyant, Dan (DEQ)
Subject: RE: Auditor General Letter – City of Flint Drinking Water

Dan –

Dave shared with me the draft of the report. We're eager for the OAG to release this. Meanwhile, I wrote a summary of the conclusions for the Governor's senior staff. Could you read this for accuracy? I'd very much appreciate your feedback.

We will likely give a version of this to reporters who ask about the auditor's letter.

Regards, Meegan

Here is a summary of answers from the Office of the Auditor General in response to questions mostly posed by Sen. Jim Ananich's office (the auditor added a few questions in the 11-page report). The questions came as the OAG conducts an audit of the Office of Drinking Water and Municipal Assistance's handling of the Flint water crisis.

Conclusions:

While the City Council voted in March 2013 to move to the KWA pipeline, it didn't designate the Flint River as an interim water source. But the DEQ had approved the river as a backup source for emergency purposes in 2006. The treated water met safety standards in quarterly tests by the Flint WTP, but Flint had never tested its effect on the distribution system.

In an email review of key DEQ managers to determine if there was an effort to conceal information, only one email exchange raised red flags. The EPA had asked DEQ in February 2015 if Flint had a corrosion control program; the DEQ responded the city had an optimized program in place. But in April the EPA asked again, and the DEQ said that the Flint Water Treatment Plant (WTP) was not doing corrosion control. DEQ later explained that the first answer was referring to its LCR program, in which it monitors a new water source (in this case, the Flint river) for lead/copper for two consecutive six-month periods to determine if corrosion treatment is necessary. The report says there's no reason to believe that DEQ willfully misrepresented information to the EPA. It also concludes that ODWMA employees appeared to have notified management properly about the unfolding Flint water situation.

DEQ did not consult with the EPA on how best to apply the Lead and Copper Rule (LCR) monitoring practices after the switch to Flint water, but from past experience, DEQ believed it was doing so correctly by doing two rounds of six-month monitoring on the new water source before determining optimal corrosion control. The EPA disagreed with DEQ's interpretation of the LCR, but later stated that the LCR was open to interpretation. It then clarified the rule; the upshot: corrosion controls already in place when Flint was on Detroit water should have been maintained after the switch.

DEQ should have notified the Flint WTP to start corrosion controls once the first round of six-month sampling results arrived in late March 2015 and showed the water exceeded acceptable lead levels.

DEQ doesn't oversee the Flint WTP so it doesn't have any accountability measures to ensure the WTP is collecting water samples from tier 1 homes, i.e., residences with lead service lines, soldering or plumbing. Instead, DEQ relies on Flint's certification of sample sites. The auditor suggests DEQ should consider an independent verification of the sampling pool or Flint's certifications. In November 2015, Flint admitted that it had no way to ensure the sites were all tier 1. Water samples came from 175 randomly distributed testing bottles. DEQ has asked Flint to verify its prior samples by this Wednesday (12/30).

There's been controversy that DEQ dropped two sampling sites with high lead levels from its second six-month review. It was appropriate for DEQ to do so because those sites did not meet federal criteria. It was also appropriate for DEQ to require flushing taps the night before sampling to ensure faucets didn't contain overly stagnant water.

Charts show that most water samples were taken in the sixth month of the six-month testing period. The report said it's tough to determine if the lateness of the sampling affects the accuracy.

The report ends with an excellent timeline. I have attached the report in case you want to review the timeline on page 11.

From: Wyant, Dan (DEQ)

Sent: Monday, December 28, 2015 9:49 AM

To: Snyder, Rick (GOV) <[REDACTED]@michigan.gov>; Scott, Allison (GOV) <scotta12@michigan.gov>; Agen, Jarrod (GOV) <AgenJ@michigan.gov>; Baird, Richard (GOV) <bairdr@michigan.gov>; Muchmore, Dennis (GOV) <muchmored@michigan.gov>; Hollins, Harvey (GOV) <hollinsh@michigan.gov>; Posthumus, Dick (GOV) <Posthumusd@michigan.gov>; Murray, David (GOV) <MurrayD1@michigan.gov>; Holland, Meegan (GOV) <HollandM2@michigan.gov>; Lyon, Nick (DHHS) <LyonN2@michigan.gov>

Cc: Wyant, Dan (DEQ) <WyantD@michigan.gov>

Subject: FW: Auditor General Letter – City of Flint Drinking Water

FYI – Please see the attached letter. The Auditor General findings are consistent with the DEQ's own internal review. The Auditor General delivered the letter to Senator Ananich late Wednesday, December 23, 2015.

Please call me if you have any questions.

Dan Wyant
Director

Attachment

From: MI_Office_of_the_Auditor_General [mailto:mi_auditor_general@audgen.michigan.gov]
Sent: Wednesday, December 23, 2015 3:18 PM
To: aleavitt@senate.michigan.gov; sstudley@senate.michigan.gov
Cc: Hirst, Laura (OAG); Ringler, Doug (OAG); Wyant, Dan (DEQ); Sygo, Jim (DEQ)
Subject: Auditor General Letter – City of Flint Drinking Water

Please see the attached letter, which addresses your questions about the City of Flint's drinking water.

We stand ready to answer any questions that you may have. Thank you.

Lawmakers Ananich, Neeley call for more answers, resources

LANSING, Mich. — Senate Democratic Leader Jim Ananich (D–Flint) and State Representative Sheldon Neeley (D–Flint) responded today to an independent review that confirmed that Michigan’s Department of Environmental Quality failed to ensure proper corrosion control was used to treat Flint River water and that the State was responsible for the decision to use the river as the City of Flint’s primary drinking water source.

The letter from the State Auditor General was the initial response to questions raised by Sen. Ananich in October. The Auditor General is working on a more thorough review and expects to have additional information in the coming months.

“The Auditor General has provided an important piece of this puzzle and I’m sure the extended report they are working on will reveal additional information,” Sen. Ananich said. “What’s clear is that corrosion control should have been used and there are serious failings in our system that must be addressed. Between the FOIA emails released recently and these findings, it’s obvious that legislative oversight is the best way to see how all of these pieces fit together. I expect holding hearings to be high on the agenda when the Legislature returns.”

In response to the question about whether corrosion control treatment should have been maintained when the switch for the water source was made to the Flint River, the Auditor General letter concludes, “We believe that corrosion control treatment should have been maintained.”

With regard to how the decision was made about using the Flint River as the primary drinking water source, the letter states, “Although the Flint City Council voted in March 2013 in support of moving to the KWA pipeline, the vote was silent on the use of Flint River water as a temporary drinking water source.”

This is contrary to recent claims that somehow this local vote was in favor of using the river.

“This is another example of how the state failed initially, and continues to fail by not treating this situation like the emergency it is,” Rep. Neeley said. “We need answers, we need action, and we need them sooner rather than later.”

Sen. Ananich and Rep. Neeley have been calling for legislative hearings and a more aggressive response since the Flint water crisis began. They also have been working with local and federal officials on securing additional resources to make safe water available to all residents, and to combat the health impacts of the lead that has been consumed.

[Editor's note: A copy of the Auditor General letter is available upon request.]

###

Angela Wittrock

Press Secretary

Senate Minority Leader Jim Ananich

...

Boji Tower, Second Floor | Lansing, MI 48909-7536

P: 517.373.1339

C: PPI

Please sign up for our e-news at: Senatedems.com/Ananich

Facebook: [jjmananich](https://www.facebook.com/jjmananich) | Twitter: [@jjmananich](https://twitter.com/jjmananich)

From: Hollins, Harvey (GOV)
Sent: Monday, December 28, 2015 3:52 PM
To: Baird, Richard (GOV);Wyant, Dan (DEQ);Lyon, Nick (DHHS);Holland, Meegan (GOV);Agen, Jarrod (GOV)
Cc: Krisztian, George (DEQ);Brownfield, Michael (GOV);Thelen, Mary Beth (DEQ);Khoury, Nick (TREASURY);Etue, Kriste (MSP);Whiston, Brian (MDE)
Subject: RE: Comments on SoS
Attachments: 20151228_SoS Draft DEQ.docx

Dan,
 Thanks for putting this draft together. I agree with Rich's edits, and the attached document has my recommendations. Also, I suggest we add the following departments to comment on this document as the issue in Flint now goes beyond water quality: Treasury, MSP and Dept. of Education. I've taken the liberty to solicit comments from the added directors through this reply.

Best,
 Harvey

-----Original Message-----

From: Baird, Richard (GOV)
 Sent: Monday, December 28, 2015 12:36 PM
 To: Wyant, Dan (DEQ) <WyantD@michigan.gov>; Lyon, Nick (DHHS) <LyonN2@michigan.gov>; Hollins, Harvey (GOV) <hollinsh@michigan.gov>; Holland, Meegan (GOV) <HollandM2@michigan.gov>; Agen, Jarrod (GOV) <AgenJ@michigan.gov>
 Cc: Krisztian, George (DEQ) <krisztiang@michigan.gov>; Brownfield, Michael (GOV) <BrownfieldM2@michigan.gov>; Thelen, Mary Beth (DEQ) <THELENM2@michigan.gov>
 Subject: Comments on SoS

Dan:

I added Jarrod and Meegan since we were engaged with Harvey and with Governor Thursday morning last week. I may be advocating a higher degree of "aggression" than others deem proper and I will defer to Jarrod after having had my say.

My key points on the attached (with suggested language and which have been highlighted) are:

- 1). Apologize. It happened on our watch and it shouldn't have happened, no matter what the law says.
- 2). Invite those who were the biggest burrs under the saddle to come work with us. In fact, we should be articulating how they have already been invited to our labs to collaborate on the findings and conclusions.
- 3). Start framing the infrastructure problem. We have huge problems throughout the state with aged piping and plumbing. Ignoring it will be at the peril of future generations. We should put a number out there on what it is going to take to fix it or conclude it is safe for generations to come.

Thanks for taking the lead.

Regards,

Rich

I have put Comments/Questions/Suggestions in []...

Draft –Not for Distribution 12/28/15

TAKING ACTION ON FLINT WATER

[I would start off with an apology..."Among the things our citizens have a right to expect from their government is clean, safe water. In Flint's case, government failed them on many levels. As the Chief Executive of the state, I apologize for these failures and am absolutely committed to making things right. I would ask that all of our leaders at the local, state and federal level, work with me to solve the immediate problems and put in place long term measures to monitor and address the consequences from exposure. I also want to thank Dr. Mona Attisha Hannah and Dr. Marc Edwards for their diligence in making sure I understood the severity of the problem before us.]

• Every municipality in Michigan deserves safe drinking water,

•

• As Governor, I am committed to addressing the issue.

• Lead exposure is a serious issue.

• I appreciate those who have brought attention to this issue.

• We are committed to safe drinking water and to working in partnership with the city of Flint, Genesee County, and the U.S. EPA.

• We must learn from what happened in Flint.

• In October, I announced a ten point action plan to address lead exposure in Flint.

• Today, I am outlining additional actions to make sure the public health is protected in Flint and elsewhere in the State of Michigan.

• I am asking for changes in order to see that the Michigan Drinking Water Program becomes a national leader in public health protection.

On October 2, 2015 the Flint Water Action Plan was announced. With the help of the Michigan Legislature and the Mott Foundation, we have taken significant action to address the issue. Actions include:

• Switching back to the Great Lakes Water Authority/DWSD water supply (October 16, 2015)

Deleted: Flint

Deleted: .

Comment [HH1]: The issue in Flint is the failure of Government to ensure safe drinking water. The aging infrastructure exacerbated that failure, and serves as the canary in the coal mine re the need for the legislature to address water and sewage infrastructure statewide.

Deleted: The issues around Flint's drinking water represent the challenges of aging infrastructure

Deleted: .

Comment [HH2]: It is important to note that this switch is temporary until KWA is online.

- Provided water filters to residents of Flint. (DHHS to provide update) [Distribution has been a problem—are we addressing it?]
 - Testing all Flint schools, preschools and day cares. Summary of results to date.(George to provide)
 - Expanded health exposure testing of individual residences. Summary of results to date. (Nick to provide)
 - Offer water testing at no cost to Flint residents to assure safe water. Summary of results to date. (George to provide)
 - Expedite optimizing corrosion control in the Flint drinking water system. Summary of date completed. (George to summarize)
 - Utilize the “Safe Drinking Water Technical Advisory Committee.” To ensure the best technology, practices and science are being utilized; national experts have been assembled to provide technical advice. [Will you include Dr. Mona? Larry Reynolds? Mark Edwards?]
 - Accelerate water system improvement to address replacement of lead service lines. We are working with the city of Flint and our Congressional delegation on a lead service line replacement plan.
 - Working to expedite the completion of the Karegnondi Water Authority. And to provide the expertise to upgrade the water treatment facility in Flint to ensure that the drinking water from KWA is at least the same quality as the water from GLWA/DWSD
 - Expand a lead education program.
(DHHS to provide update)
 - Dr. Eden Wells was named as the Flint Drinking Water Public Health Advisor to ensure safe drinking water.
- [Flint’s Head of Mott Children’s Hospital, Dr. Larry Reynolds was named to the Flint After Action Task Force].

In addition to the announced Flint Action plan, I am calling for additional actions to be taken.

- Recently appointed Harvey Hollins to serve as my administration’s point person to coordinate ongoing activities and partner with the city of Flint. [Harvey will be supported by senior members of my executive team to remove impediments and ensure efficient coordination at all levels.]

- Asking the DEQ to develop a statewide drinking water school testing program.
- Asking for changes in the Michigan Drinking Water Program in order for it to be recognized as a national leader in public health including:
 - o New administrative leadership.
 - o Creation of corrosion control expertise.
 - o Expanded statewide testing.
 - o Improved testing protocols.
- The creation of a health fund for children affected by lead exposure.
- Calling on the Legislature to work with my administration and stakeholders to develop a Strategic Water Fund to address Michigan's long term safe water and water quality infrastructure needs. [This can't get lost. Need more to educate people that our infrastructure is old, that the average city of 50,000 or more likely requires \$\$\$ in remediation. At some point the anti corrosive treatment is not likely to be sufficient.]
- I will look to implement additional recommendations of the Flint Water Advisory Task Force, and I appreciate their leadership on this issue. [I would say more here—the TF was bi-partisan, independent, and staffed by incredible talent. It has done an incredible job].
- Ensure transparency for the public regarding actions taken in Flint to resolve this crisis

Sent from my iPad

On Dec 28, 2015, at 10:14 AM, Wyant, Dan (DEQ) <WyantD@michigan.gov> wrote:

Please edit, correct, and expand summaries as indicated in the attached document called Taking Action on Flint Water Draft 12-28-15. This document is intended to serve as a basis for the Governor to address the Flint drinking water issue in the State of the State and budget announcement.

I have also attached a pdf of a document called Drinking Water Program Budget Request for your information.

Please send your response back to me and also copy all by Monday, January 4, 2016, Close of Business.

Thank you.

Dan Wyant
 Director
 517-284-6700
 <TAKING ACTION ON FLINT WATER DRAFT 12-28-15.docx>

<Drinking Water Program Budget Request.pdf>

From: Holland, Meegan (GOV)
Sent: Monday, December 28, 2015 4:29 PM
To: Lyon, Nick (DHHS);Wyant, Dan (DEQ)
Subject: Governor's statement

Hi Nick and Dan,

Senior staff in the Governor's office has been crafting a communications plan for the next couple weeks concerning the Flint water crisis, and I wanted to keep you in the loop.

We're putting out our summary to media about the OAG's letter, released today. Gov. Snyder has set up a meeting with Flint Mayor Karen Weaver for next week. And we're releasing this statement (which still may go through a few more tweaks). It may go out tomorrow, possibly Wednesday:

"I've been briefed on the recent meeting of the task force studying the Flint water situation and I've read the report from the Office of the Auditor General on the processes used by DEQ to monitor Flint water.

"The bi-partisan task force is working tirelessly to interview Flint, Genesee County, state and federal officials to complete its independent analysis. They are reviewing hundreds of documents at all levels of government and from the public health science community.

"I'd like to thank the task force for keeping me apprised of their continuing investigation. As they uncover more facts, it's clear to me we can do better. Their report may take another month or so, but if we need to make changes more swiftly, I plan to take immediate action.

"No matter what the testing requirements were, they were not enough to prevent this crisis.

"When it comes to matters of health and quality of life, we're committed to doing everything we can to protect the well-being of our citizens.

"I understand there can be disagreements within the scientific community. That is why I have told my directors at MDEQ and DHHS to invite every external scientist who has worked on the Flint water issue to the state laboratory facilities to work as partners with us. Together, we should be able to affirm that we're using the very best testing protocols to ensure Flint residents have safe drinking water and that we're doing proper monitoring and remediation of blood levels and other health impacts over the long term.

"These are only initial steps in our corrective actions. We fully expect to take more actions following the recommendations of our independent task force."

"I want the Flint community and all citizens of Michigan to know how very sorry I am that this has happened.

"But I know an apology isn't enough. We've already allocated \$10 million to test the water, distribute water filters, and help in other ways. On Thursday, I called Flint Mayor Karen Weaver, and we're going to sit down in the next week to discuss other ways the state can offer assistance.

"I want to assure residents there that we are working hard to resolve this crisis."

Please feel free to contact me if you have any questions.

- Meegan

-

Meegan Holland
Director of Communications for Gov. Rick Snyder
Office: 517-335-6397
Mobile: PPI
Twitter: @meholland

From: GOV Newsroom <govnewsroom@govsubscriptions.michigan.gov>
Sent: Tuesday, December 29, 2015 2:45 PM
To: Wyant, Dan (DEQ)
Subject: NEWS RELEASE: Gov. Rick Snyder takes action on initial findings from Flint Water Task Force



Right-click here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.
(COBIS Statement)

Contacts: [Dave Murray](#), [Anna Heaton](#) or [Laura Biehl](#)

FOR IMMEDIATE RELEASE

Tuesday, Dec. 29, 2015

517-335-6397

Gov. Rick Snyder takes action on initial findings from Flint Water Task Force

Changes to take place at DEQ, meeting planned with Mayor Karen Weaver

In response to initial findings from the Flint Water Task Force, Gov. Rick Snyder today issued the following statement:

“When I became aware that the city of Flint’s water showed elevated lead levels and that the state’s handling of the situation was being questioned, I requested funding to switch the source back to the Great Lakes Water Authority and appointed an independent task force to identify possible missteps and areas for improvement.

“The task force has done an exceptional job, reviewing stacks of documents and interviewing scores of Flint, Genesee County, state and federal officials. Although the task force’s final report is not yet completed, members have made me aware of some interim findings and corrective steps that I have decided to take immediately in order to restore trust in how the state keeps its citizens safe and informed.

“We’ll continue to work with the community members to make sure we hear and

respond to their concerns.

“In addition, MDEQ Director Dan Wyant has offered his resignation, and I’ve determined that it’s appropriate to accept it. I’m also making other personnel changes at MDEQ to address problems cited by the task force.

“But changes in leadership and staff are not enough. I understand there can be disagreements within the scientific community. That is why I have directed both the departments of Environmental Quality and Health and Human Services to invite every external scientist who has worked on this issue to be our partners in helping us improve Flint water. Let’s share research on water and blood lead level testing so we can arrive at accurate and mutually supported conclusions. Together, we should work to affirm that we’re using the very best testing protocols to ensure Flint residents have safe drinking water and that we’re taking steps to protect their health over the short and long term.

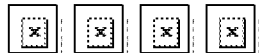
“I want the Flint community to know how very sorry I am that this has happened. And I want all Michigan citizens to know that we will learn from this experience, because Flint is not the only city that has an aging infrastructure.

“I know many Flint citizens are angry and want more than an apology. That’s why I’m taking the actions today to ensure a culture of openness and trust. We’ve already allocated \$10 million to test the water, distribute water filters, and help in other ways. Last week, I called Flint Mayor Karen Weaver, and we’re going to meet soon to discuss other ways the state can offer assistance.

“These are only initial steps - we fully expect to take more actions following the recommendations of our task force. When it comes to matters of health and quality of life, we’re committed to doing everything we can to protect the well-being of our citizens.”

#

STAY CONNECTED:



This email was sent to wyantd@michigan.gov on behalf of: The Executive Office of the Governor · 111 South Capitol Avenue · Lansing, MI 48909 · 517-335-7838

From: VanOtteren, Bruce (DNR)
Sent: Tuesday, December 29, 2015 5:37 PM
To: Wyant, Dan (DEQ)
Subject: Please reconsider if asked to stay on!

Hi Dan,

Of course the flint water crisis is one which should never have happened, and it did occur on your watch, but I can't imagine you had any part whatsoever in the decisions leading up to it, and I'm sure you felt assured that you had able staff to handle flint's water source changes. Sure there will be folks who will never be satisfied, but I really think it would be much better if you were to remain a part of the solution. But of course you've offered your resignation already and it's then up to the Governor who has already made a decision. . .but I can only hope that with enough support for you and your work that the Governor might reverse his decision. To that end I wrote the following on the Governor's website in the "Share Your Opinion" spot. I was limited to 1,000 characters and that was not enough to fully express my support for your work. Please if you get a chance, reconsider and lead on.

- - -

"Hi Governor Snyder, I work in the DEQ, and the last time I spoke directly with you was when you were first elected and you came around to talk with many of your new employees. I haven't needed to talk with you so much since then because I've been happy with your balanced approach to governing. This feeling has not changed, but I just read your press release about your taking action on the findings from the Flint Water Task Force. With all due respect, I strongly feel that accepting DEQ Director Dan Wyant's resignation is not a positive action for Michigan, and I hope you still have a choice here. In my 25 years working for the DEQ I have never worked with a more knowledgeable, capable, engaged and engaging leader than Director Wyant. I cannot imagine that any decisions made that contributed to this crisis were made by this Director, but rather they were certainly made within the division, because at the time they seemed like less important, lower-level decisions. The DEQ will be greatly harmed by a shakeup of this magnitude, and we do not need, especially now, a weakening of the agency which Director Wyant has so ably brought to cohesion. With the task force, your other initial actions, and with your continued vigorous work and leadership in fixing this crisis you are on the right track. Those asking for more action and who are demanding the heads of those at the top may well never be satisfied with your response to the crisis. Please do not compromise chances for success by releasing a Director who has always shown strong management, and found prompt, effective solutions. I trust I will not be the only person who feels strongly that you should ask Director Wyant to stay on. I hope an up-welling of support will give you reason to reconsider.

Thank you Governor Snyder for your time, and for your service to Michigan, I hope I get to shake your hand again sometime :) Keep up the good work!!! Happy 2016!!!

Bruce VanOtteren, PEAS Administrator, DNR/DEQ."

- - -

Thanks Dan,

No matter what happens, in my mind your legacy of inclusion, information-sharing, positive diplomacy, strong advocacy, and sound management within the perennial confines of state government will be one I hold as inalienable.

Thanks so much Dan,

Bruce

Bruce VanOtteren

Pollution Emergency Alerting System (PEAS) Administrator

Communications, Emergency Management & Homeland Security Section

Law Enforcement Division

DNR/DEQ

Tel.: (517) 284-6232,

Cell: PPI

FAX: (517) 241-8549

PEAS hotline: 800-292-4706

From: GOV Newsroom <govnewsroom@govsubscriptions.michigan.gov>
Sent: Tuesday, January 05, 2016 4:28 PM
To: Wyant, Dan (DEQ)
Subject: NEWS RELEASE: Gov. Snyder declares emergency for Genesee County



Right-click here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

COMB News Release

Contacts: [Dave Murray](#), [Laura Biehl](#), or [Anna Heaton](#)

FOR IMMEDIATE RELEASE

Tuesday, Jan. 5, 2016

517-335-6397

Editor's note: A copy of the official declaration is available at the link below.

Gov. Snyder declares emergency for Genesee County

State Emergency Operations Center activated to assist with relief efforts

LANSING, Mich. – Gov. Rick Snyder today declared a state of emergency for Genesee County due to the ongoing health and safety issues caused by lead in the city of Flint's drinking water.

By declaring a state of emergency, Snyder has made available all state resources in cooperation with local response and recovery operations. The declaration authorizes the Michigan State Police, Emergency Management and Homeland Security Division (MSP/EMHSD) to coordinate state efforts.

"The health and welfare of Flint residents is a top priority and we're committed to a coordinated approach with resources from state agencies to address all aspects of this situation," Snyder said. "Working in full partnership with the Flint Water Advisory Task Force, all levels of government and water quality experts, we will find both short-term and long-term solutions to ensure the health and safety of Flint residents."

In addition to the emergency declaration, Snyder activated the State Emergency Operations Center to coordinate state response and recovery activities. State agencies will report to the center to coordinate resources, assess the situation and begin

providing assets to assist with local relief operations.

“Our staff recognizes the urgency of this situation and is already working closely with local officials,” said Capt. Chris A. Kelenske, Deputy State Director of Emergency Management and Homeland Security and commander of the MSP/EMHSD. “We will continue to collaborate with state, city and county leaders to coordinate relief efforts, streamline communication and use all available resources to help residents.”

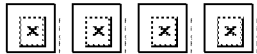
On Jan. 4, Genesee County declared a “local state of emergency,” which activated local emergency response and recovery plans. By requesting a governor’s declaration, the county has determined local resources are insufficient to address the situation and state assistance is required to protect public health, safety and property to lessen or avert the threat of a crisis.

The city of Flint has been under a local emergency declaration since Dec. 14, 2015.

The SEOC is the emergency operations center for the state of Michigan. Located in Lansing, the center is overseen by the MSP/EMHSD and coordinates response and recovery efforts by state agencies and local government. The SEOC is staffed by members of state agencies and other partners for decision making and information coordination during disasters or emergencies in the state of Michigan.

#

STAY CONNECTED:



This email was sent to wyand@nichigan.gov on behalf of, The Executive Office of the Governor · 111 South Capitol Avenue · Lansing, MI 48909 · 517-335-7858