



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



DAN EICHINGER
DIRECTOR

March 13, 2023

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT
Charter Township of Bedford, Calhoun County
River Road Water Main Extension
Drinking Water State Revolving Fund (DWSRF) Project No. 7670-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a water supply project plan submitted by the applicant mentioned above.

HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Part 54, Safe Drinking Water Assistance, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.5401 to 324.5418 of the Michigan Compiled Laws Annotated, requires EGLE to evaluate all environmental implications of a proposed water supply project. EGLE has done this by incorporating a detailed analysis of the environmental impact of the proposed alternatives in its review and approval process. A project plan was prepared by the applicant and reviewed by the State. EGLE has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project plan or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

HOW DO I GET MORE INFORMATION?

A map depicting the location of the proposed project is attached. This information is also available on our website at Michigan.gov/DWSRF under "Related Links." The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing one of the contact people listed below.

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at EGLE, Constitution Hall, P.O. Box 30457, Lansing, Michigan 48909-7957. We will not take any action on this project plan for 30 calendar days from the date of this notice in order to receive and consider any comments.

WHAT HAPPENS NEXT?

In the absence of substantive comments during this period, our preliminary decision will become final. The applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by EGLE should be brought to our attention. If you have any questions, please contact Mr. David J. Worthington, the senior project manager, at 517-554-1835, by email at Worthingtond@michigan.gov, or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,

Dan Beauchamp

Dan Beauchamp, Section Manager
Water Infrastructure Funding and Financing Section
Finance Division
517-388-3380

Attachment

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
Drinking Water State Revolving Fund (DWSRF)
Environmental Assessment
Charter Township of Bedford, Calhoun County
March 2023

PROJECT IDENTIFICATION

Applicant: Charter Township of Bedford, Calhoun County

Address: 115 South Uldriks Drive
Battle Creek, Michigan 49037

Authorized Representative: Ms. Joni Jones, Township Supervisor

Project Number: 7670-01

PROJECT OVERVIEW

The Charter Township of Bedford (Bedford) is seeking a DWSRF loan administered by the Department of Environment, Great Lakes, and Energy (EGLE) in Fiscal Year (FY) 2023 to finance a water main (WM) extension project along River Road (River) to provide residents and businesses (estimated 41 new connections) safe and reliable drinking water due to groundwater contamination affecting and potentially affecting private residential and commercial water wells. The total project cost is estimated to be \$5,100,000. Construction is scheduled to begin in the fall of 2023. It is expected that no debt repayment for system users will be required, as Bedford is eligible for a 100 percent principal loan forgiveness made available by the Bipartisan Infrastructure Law (BIL) for eligible DWSRF projects with the primary purpose to address perfluoroalkyl and polyfluoroalkyl (PFAS) substances in drinking water. Construction will be permitted, and the facilities operated and maintained, under an ownership agreement with the city of Battle Creek (Battle Creek). See Figure 1 for a map of the study area and the location of the proposed water main extension.

PROJECT SETTING AND POPULATION

Bedford is in the northeast corner of Calhoun County (Calhoun). The proposed water main service area is in Sections 32, 33, and 34 of the township and Section 3 of Battle Creek, located between the Battle Creek Air National Guard Base (ANGB) and the Kalamazoo River. Land use within the study area primarily includes residential with some existing commercial and industrial use.

According to the United States Census Bureau, Bedford's population was 9,357 in 2010 and 9,198 in 2020. There is no significant seasonal variation.

There are no existing facilities (WM or service lines) in the proposed service area. Battle Creek is available to provide a connection for water treatment and supply at the west end. Battle Creek currently treats and supplies water to parts of Bedford, Emmett, and Pennfield Townships, and the city of Springfield (Springfield). Battle Creek has a water tank north of the Kalamazoo River on Kellogg Street.

PROPOSED PROJECT

Project Need/Justification

For Bedford, the issue is not the age or condition of the existing distribution system, PFAS contamination in the groundwater beyond safe levels and affecting individual private wells. Contaminated wells are from 8,000 to 11,000 feet horizontally, and 100 feet lower in elevation, than the Battle Creek ANGB and the Battle Creek Executive Airport that are believed to be the point sources of the PFAS contamination. See Figure 2 for a map of well sampling results and locations.

PROJECT ALTERNATIVES

No-action Alternative

Due to concerns to human health from consuming PFAS-contaminated water, a no-action alternative was not considered.

Regional Alternative

There are four feasible regional alternatives to consider, and each involves a connection to Battle Creek's water supply (in one instance, by connecting to Springfield's distribution system). These are described more fully below as principal alternatives. The route of the WM along River is the same for each alternative. A geotechnical investigation will be performed to determine if there is any contamination at the location and elevation of the proposed water main. In each alternative, existing private wells would be filled, capped, and abandoned per EGLE requirements.

Evaluation of Principal Alternatives

Option 1 – North Alternative

The North Alternative continues from River to Stringham Road (Stringham) via 2,100 linear feet (LF) of WM to a crossing beneath the Kalamazoo River and connection to a 12-inch diameter WM on Jackson Street (Jackson). Crossing the river would require an EGLE Joint Permit Application and is proposed to be constructed by using the directional drill boring method. The crossing at Jackson would be constructed using the horizontal auger bore method. All other areas of the route would be installed utilizing the standard open cut method.

Option 2 – South Alternative

The South Alternative extends from River south 2,000 LF cross-country to Harmonia Road for connection to an 8-inch diameter WM. This is the lowest cost alternative but has the following disadvantages: it would traverse through environmentally sensitive areas, it would require an auger bore under a railroad crossing (requiring a time-consuming permit process), and it would create a long dead-end WM on River that would not serve any customers beyond those on River. This alternative was rejected as a principal alternative.

Option 3—East Alternative

The East Alternative extends the WM 3,400 LF along River to Ritchie Street, onward to M-37 (Bedford Road), and then connects to an existing WM on Lafayette Street in Springfield. An agreement with Springfield would be required for implementation. A Michigan Department of

Transportation right-of-way permit would be required for the M-37 bore and might necessitate a traffic detour on M-37. This is the most expensive option of the four alternatives.

Option 4—West Alternative

The West Alternative extends cross country 3,200 LF southward on private property (requiring easements) and then west along Harmonia Road (Harmonia) to Evergreen Road. This route also requires a railroad crossing permit for the auger under the track. One advantage of this route is the ability to serve an additional 16 customers on Ellis Road and Harmonia, where PFAS has been detected in wells. One disadvantage is that it would create a long dead-end WM on River and it would not serve customers on Stringham. This alternative was rejected as a principal alternative. However, it may be a viable route for future expansion.

Each Principal Alternative, Option 1-4 is depicted on Figure 1.

Selected Alternative

The North Alternative was the selected for several reasons. It is the lowest cost compared to the East Alternative, and it provides unlimited expansion capability. Environmentally, the North Alternative does require a crossing of the Kalamazoo River, which the East Alternative does not, but the impacts of this to the resource can be minimized via directional drilling underneath the river bottom. See Table 1 for a comparison of the North and East Alternatives.

Table 1. North vs. East Alternative Comparison.

Alternative	Capital Cost	Present Worth	Potential New Users	Expandability
North	\$5,100,000	\$6,333,050	41	Unlimited
East	\$5,900,000	\$6,349,699	45	Limited

The Battle Creek water department has the equipment and operators necessary to maintain the expanded system. Bedford has an existing long-term intermunicipal agreement with Battle Creek. Compliance with Act 399 will be met under permit to the city. WM size will be 8-inch diameter, the minimum required by Ten States Standards. For 41 residential equivalent units (REUs), the design peak hour flow is 1,435 gallons per hour and the average day usage per REU is projected at 241 gallons per day. The North Alternative connects the low-pressure distribution system south of the Kalamazoo River with the high-pressure district north of the river and improves the flow into and out of the elevated storage tank on Kellogg Street.

Bedford is a small community unable to incur debt sufficient to finance the project without substantial principal forgiveness being offered by EGLE through qualification for federal BIL funds targeted for applicants with environmental health issues associated with emerging contaminants. A 100 percent forgiveness DWSRF loan up to \$5,100,000 has been set aside for loan closure on August 28, 2023. Any project cost increase beyond that amount cannot be guaranteed for DWSRF financing or principal forgiveness.

As of FY 2023, user costs are estimated to be \$30 per month per REU. These costs can be offset somewhat by customers no longer needing to purchase potable water for consumption and not having private wells to operate and maintain.

Construction would likely begin no sooner than September 2023 and should be completed by Fall of 2024 or early 2025.

ENVIRONMENTAL EVALUATION

Cultural Resources

Bedford's engineering consultant CEI has hired Arbre Croche Cultural Resources LLC to perform a Section 106 application review for this project, and it has been submitted to the State Historical Preservation Office. Tribal Historical Preservation Officers with potential cultural resources in the area have also been contacted, and no concerns have been expressed to date. No archaeological, historical, cultural, or tribal impacts are anticipated for either alternative. An archaeological survey will be performed prior to any construction to confirm this conclusion.

Natural Environment

Aside from winter month weather in Michigan, no adverse climate impacts are anticipated for either alternative. Air quality will be short term affected by dust generated from construction operations and exhaust from construction equipment and vehicles. No significant wetlands impact is anticipated for either alternative. The North alternative will have a temporary impact to wetlands depending on which construction method is used – directional drilling is intended for use which creates minimal impact. A floodplain permit may be needed, but no change to the floodplain cross-section is anticipated. The Kalamazoo River is a warm water fishery, but not designated as a Natural/Wild Scenic River. No known endangered or threatened plant or animal species have habitats or environmentally sensitive habitats expected to be affected. If necessary, any tree removals will be scheduled to occur outside of roosting times for the Indiana and Northern long-eared bats.

Drinking water quality to residents affected by PFAS contamination in private wells will be improved through municipal service provided by the Battle Creek Water Plant. Battle Creek favors the North Alternative as it will help move water through a portion of their existing system that is stationary for longer time periods than desired. Commercial operations in the area can also be improved by eliminating the contamination. No new surface or groundwater withdrawals are proposed.

OTHER IMPACTS

Two underground storage tanks are believed present near the west tie-in point. Soil testing will be conducted to determine if contaminants are present in the proposed construction zone. Temporary traffic movement impacts could occur for residential and commercial users along the water main route, but there will no long term negative socio-economic impacts. River, Stringham, and Jackson will be directly impacted by construction, primarily front lawns of residential and commercial properties and drive approaches. Significant growth from the new water supply extension is not anticipated; most parcels along the route are already developed.

MITIGATION MEASURES

The proposed Kalamazoo River crossing will be mitigated through the EGLE's Water Resources Division Joint Permit Application process to ensure no harmful effects occur from construction. If the riverbed is sandstone and it is decided that open cut must be used to cross the river in lieu

of drilling the pipe, then proper dewatering methods, sheet piling, and turbidity curtains would be employed as necessary.

If contaminants are found in soil tests, chemical resistant gaskets will be designed and installed on the ductile iron WM pipe, and workers and the environment protected under proper handling and disposal guidelines outlined in the construction contract specifications. Dust and sedimentation control mitigation will be included in contract documents. Green areas will be re-seeded.

Wells contaminated with PFAS will be properly capped and abandoned. PFAS will no longer leach into septic systems or groundwater from those sources. If necessary, any tree removals will be scheduled outside of bat roosting seasons. Approximately 15 trees may need to be removed during construction.

PUBLIC PARTICIPATION

Numerous meetings have been held with affected property owners, Battle Creek, and the Calhoun Environmental Health Department. On June 27, 2022, a formal public hearing was held at the Bedford Township Hall to receive public input on the plan, and a transcript recorded. This hearing was advertised in the *Battle Creek Shopper News* on May 19, 2022. A description of the drinking water quality needs and problems was discussed at the hearing, along with the recommended alternative, cost impact including project financing and user cost, and anticipated social and environmental impacts. On June 30, 2022, the Bedford Charter Township Board of Trustees approved a resolution adopting the final project plan.

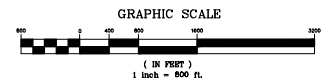
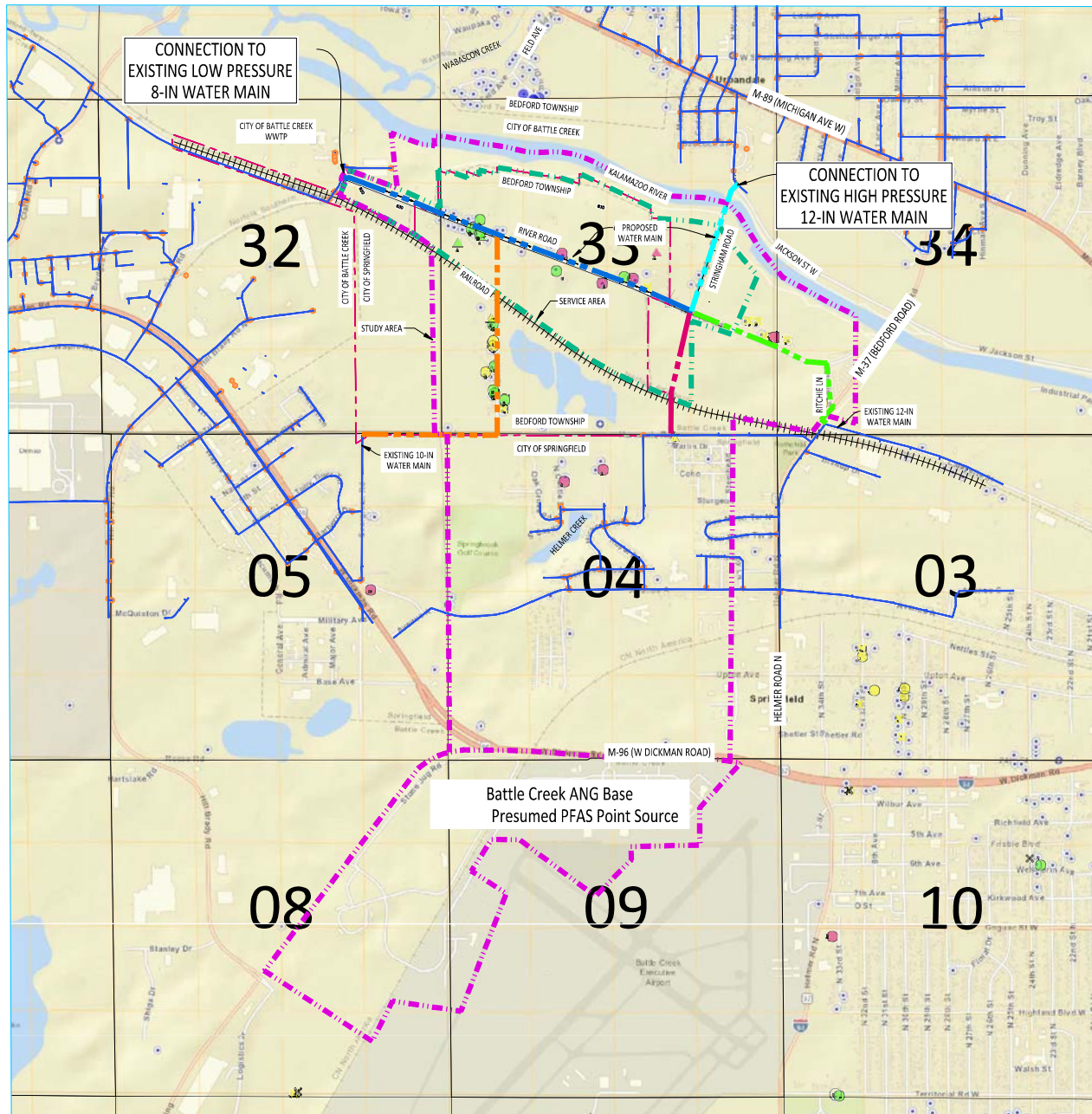
REASONS FOR CONCLUDING NO SIGNIFICANT IMPACTS

Negative construction impacts are short term and will be outweighed by the public health benefits of providing safe water to residents and businesses experiencing, or under threat of, elevated PFAS contamination in their private wells.

Questions regarding this Environmental Assessment should be directed to:

Mr. David J. Worthington, Senior Project Manager
Water Infrastructure Funding and Financing Section
Finance Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30457
Lansing, Michigan 48909-4957
Telephone: 517-554-1835
E-Mail: Worthingtond@michigan.gov

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- 2020 Resampling Status
- Exceedence
 - Exceedence First-time Sample
 - Exceedence
 - Detection
 - Detection First-time Sample
 - Detection No Filter Provides
 - Not Detected
 - Not Detected First-time Sample

- EXISTING WATER WELLS
- EXISTING WATER MAINS
- SERVICE AREA
- STUDY AREA
- NORTH ALTERNATIVE
- SOUTH ALTERNATIVE
- EAST ALTERNATIVE
- WEST ALTERNATIVE

CEI
Civil Engineers Inc.
14250 Beede Ln Rd
Suite 150
Battle Creek, MI
48704-7202
www.cei-bc.com
269-962-0127

JOB NO: 211104
DATE: 5/19/22
DRAWN BY: KEH
REVIEWED BY: RAR

OWNER
BEDFORD TOWNSHIP
115 S LIVINGSTON ROAD
BATTLE CREEK, MI 49307

RIVER ROAD WATER CONCEPT
STUDY AREA

Know What's
Below, Call
MISS DIG 811

REVISIONS

Date	Comment

SHEET
Appendix A

Figure 1

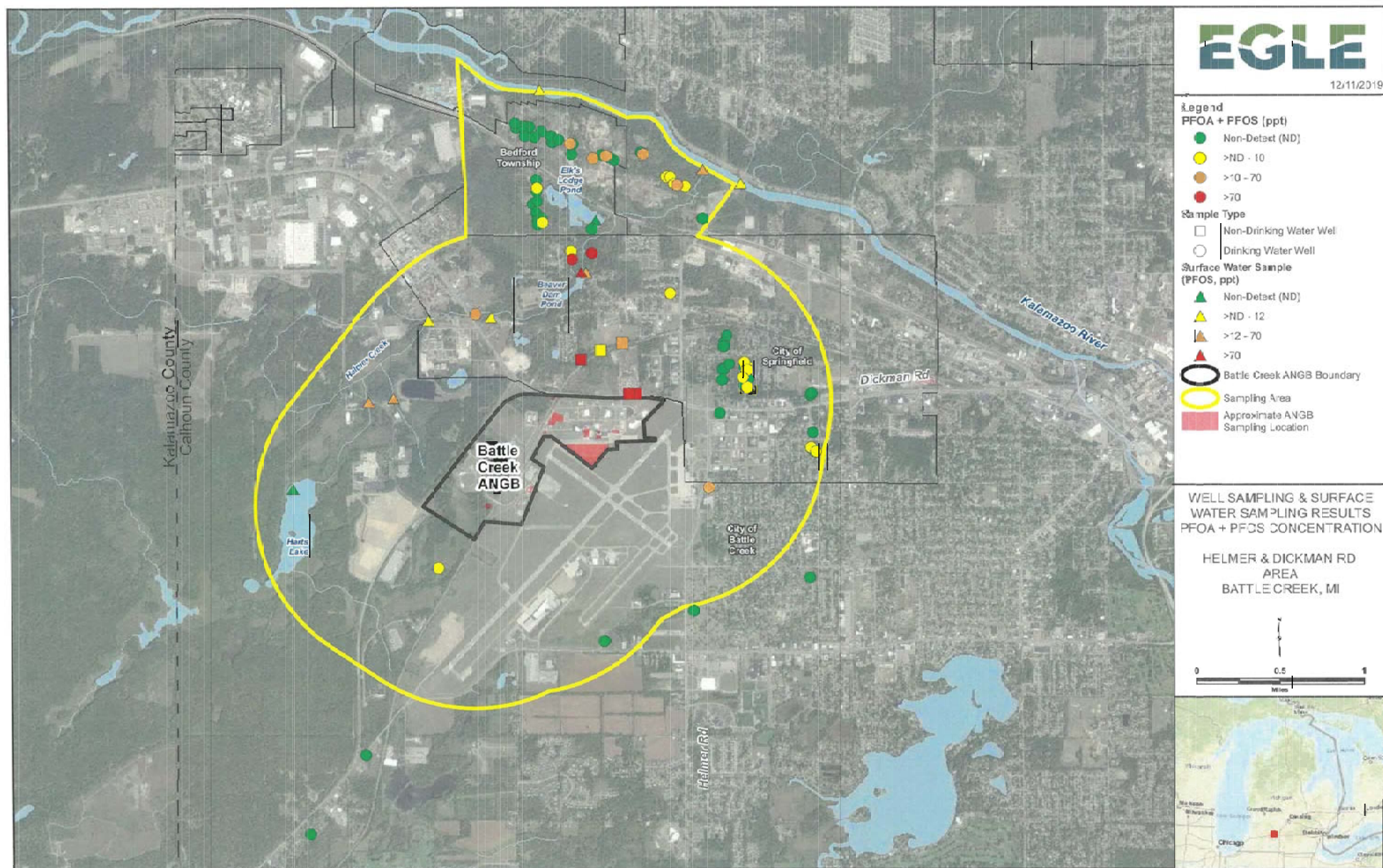


Figure 2