



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Gelman Town Hall

Remediation and Redevelopment Division

Jackson District

Dan Hamel, Project Manager

Dr. Chris Svoboda, District Geologist

Dr. Andrea Munoz-Hernandez, District Supervisor

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1,4-Dioxane

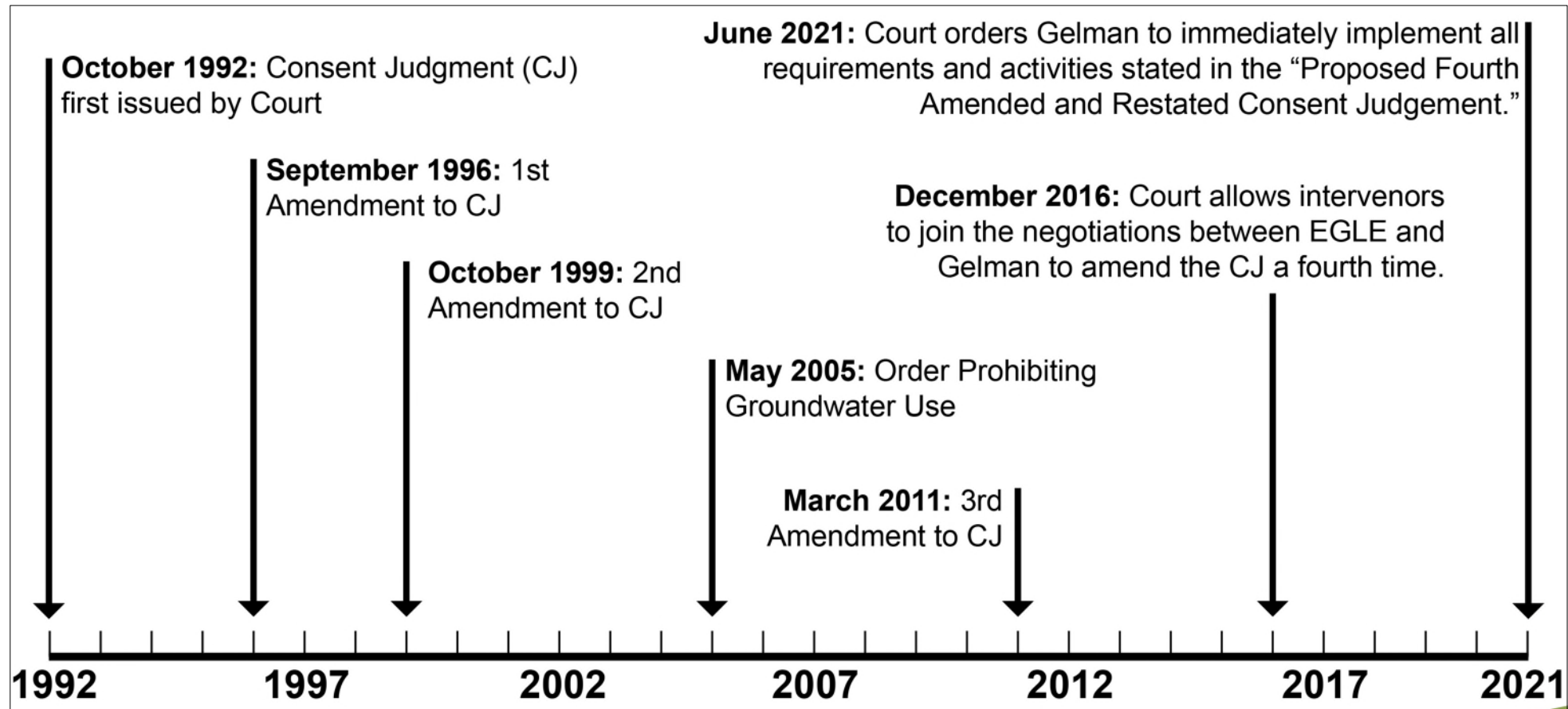
- Water-soluble solvent
- Does not break down readily in groundwater
- Can be found in paint strippers, glues, pesticides, and many other household products such as detergents, shampoos, etc.
- Drinking Water Criterion for 1,4-dioxane is 7.2 micrograms per liter ($\mu\text{g/L}$). ($1 \mu\text{g/L} = 1$ part per billion (ppb))

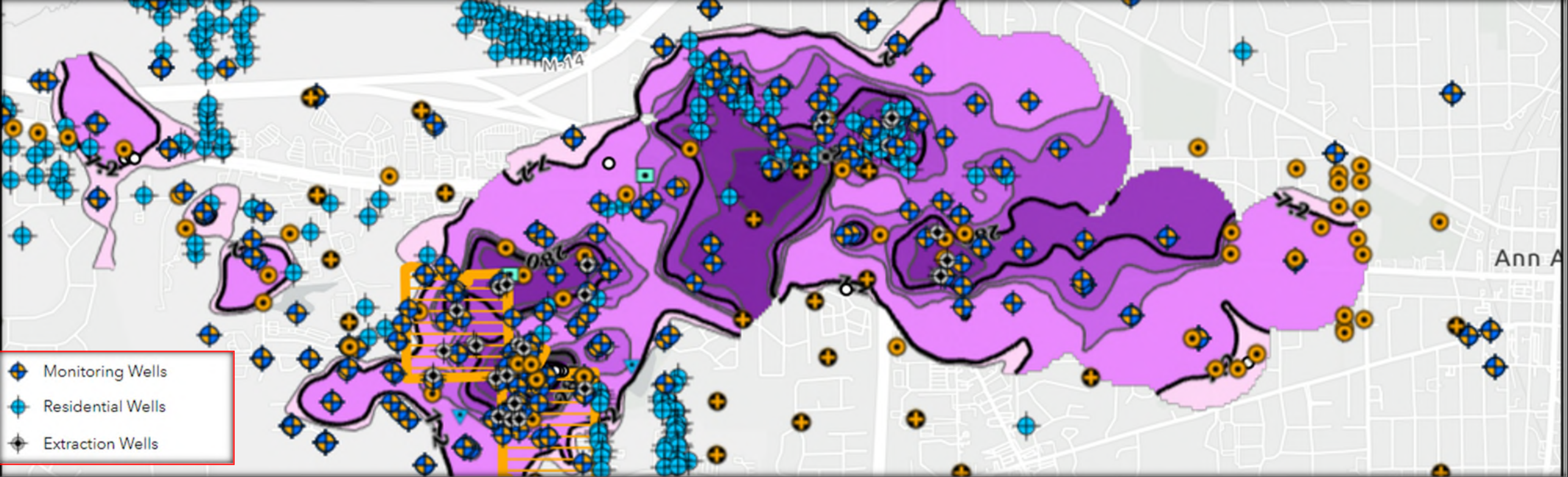
Continued...1,4-Dioxane

- Contaminant of concern at the Gelman Sciences site
- Used in Gelman's manufacturing process from 1966 to 1986
- In 1985, 1,4-dioxane was discovered in residential drinking water wells in the area of their facility
- EGLE and the Washtenaw County Health Department have been tracking the plume for over 20 years

Consent Judgment & Legal Actions

The Consent Judgment is the legal agreement, issued by the Washtenaw County Circuit Court, between EGLE and Gelman that dictates the monitoring and treatment of the contamination.





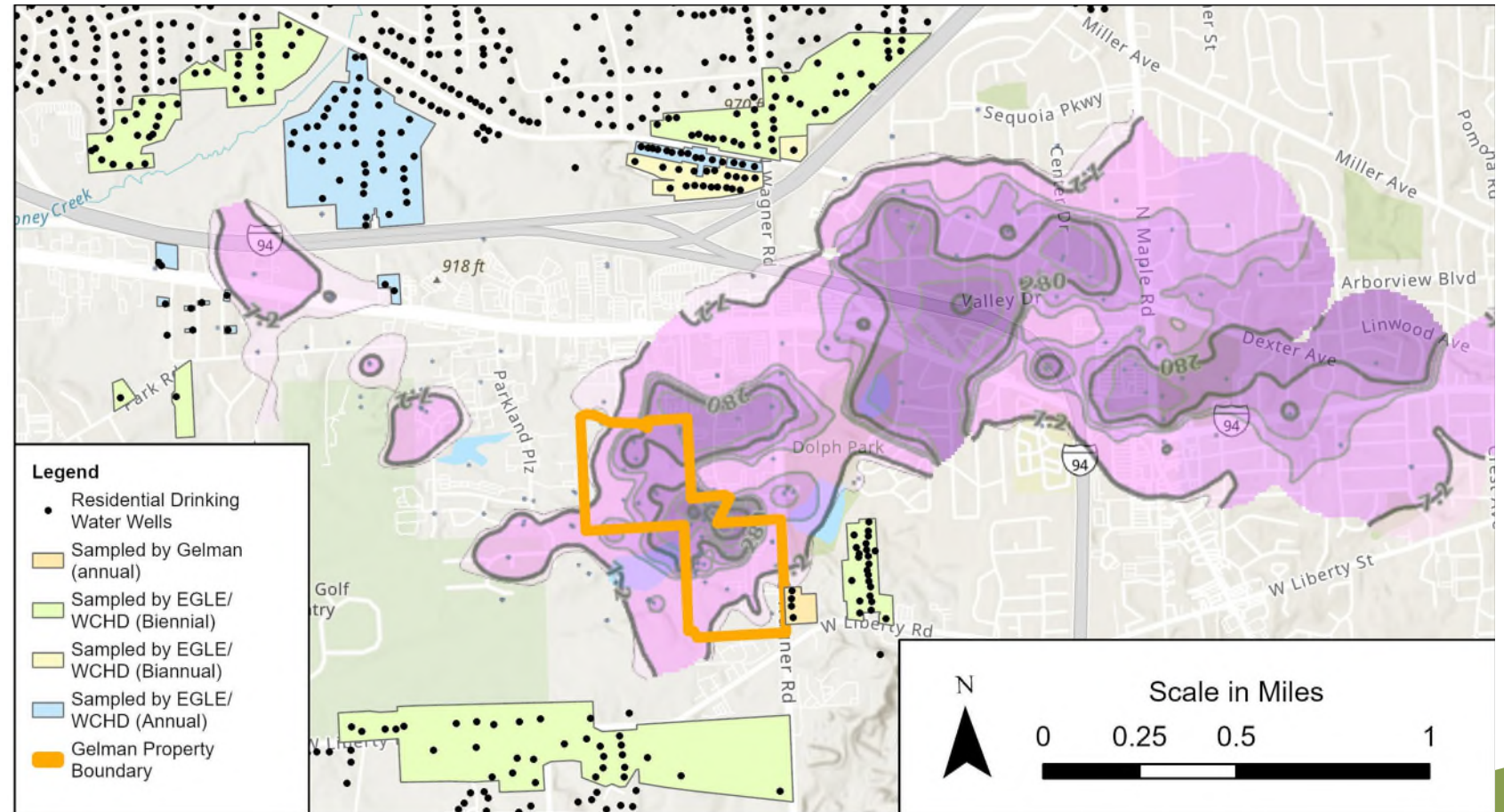
- Monitoring wells are used to determine the nature and extent of contamination
- Gelman has been treating contaminated groundwater since 1997 using extraction wells

EGLE Residential Drinking Water Well Sampling

EGLE and the WCHD are planning to collect samples from 187 residential wells in 2022.

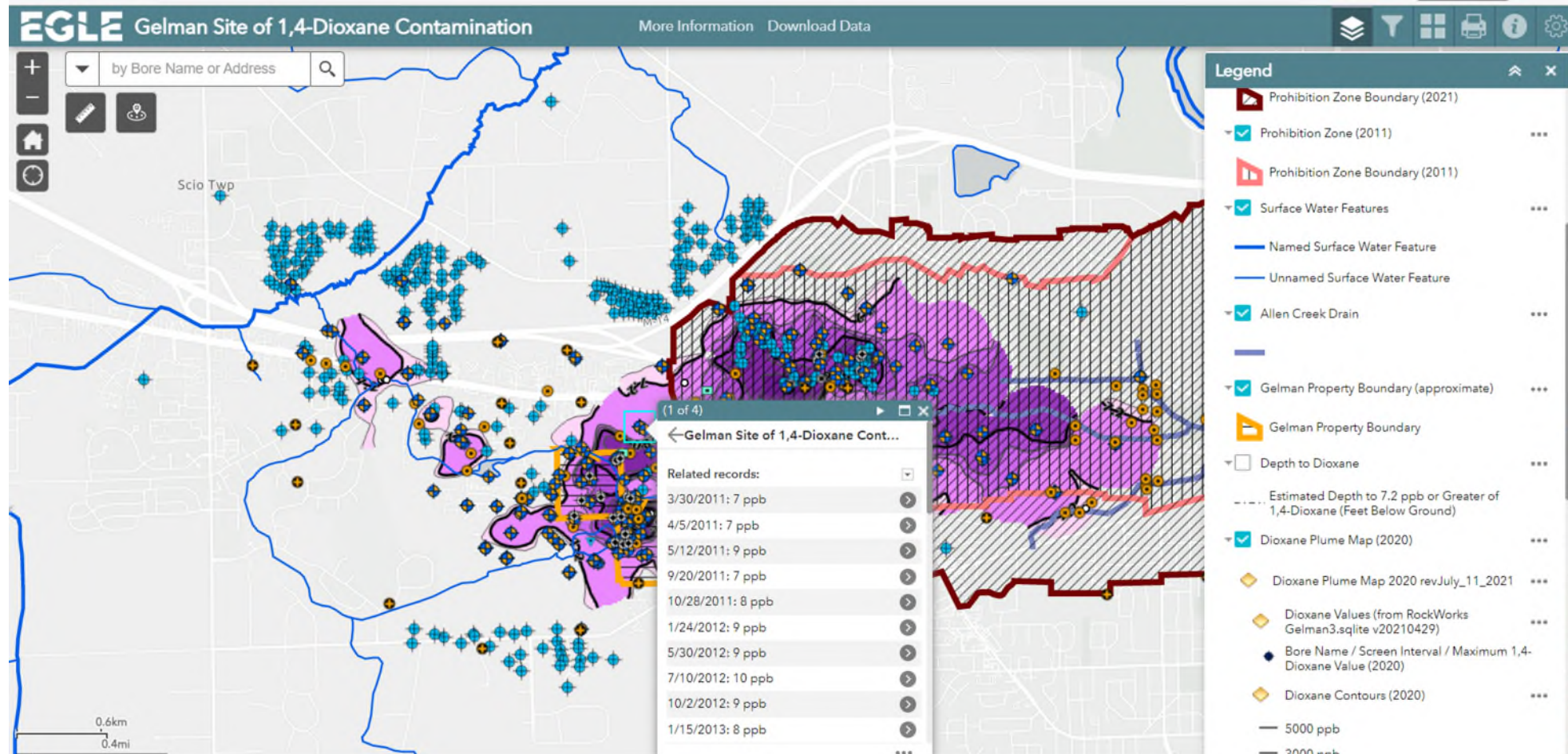
The EGLE Laboratory minimum detection limit for 1,4-dioxane is currently 1 ppb (Method 8260 SIM).

Michigan Drinking Water Criterion is 7.2 ppb.



EGLE Gelman Web App

Based on geologic modeling conducted by EGLE & contractors



<https://arcg.is/1080De0>

Summary

- Currently implementing the June 2021 Response Activity Order, which requires Gelman to conduct all activities stated in the Proposed 4th Amended and Restated Consent Judgment.
 - 4 to 5 additional extraction wells will be installed.
 - 39 additional monitoring wells will be installed.
 - On-site remediation activities for groundwater and soils will be conducted.
 - Groundwater will continue to be monitored to ensure that it does not exceed 7.2 ppb in residential water wells.
- EGLE and WCHD will continue to sample residential wells annually.

Important Websites

- EGLE Information Page : [EGLE - Gelman Sciences, Inc. Site of Contamination Information Page \(michigan.gov\)](#)
- GIS Web Map : [Gelman Site of 1,4-Dioxane Contamination \(arcgis.com\)](#)
- Fact Sheet : [Gelman Sciences, Inc - 1,4 Dioxane in Ann Arbor October 27, 2016 Town Hall Meeting Questions and Answers \(michigan.gov\)](#)

Michigan Department of
Environment, Great Lakes, and Energy

800-662-9278

Michigan.gov/EGLE



Contact Information:

Dan Hamel, Project Manager

Email: HamelD@michigan.gov

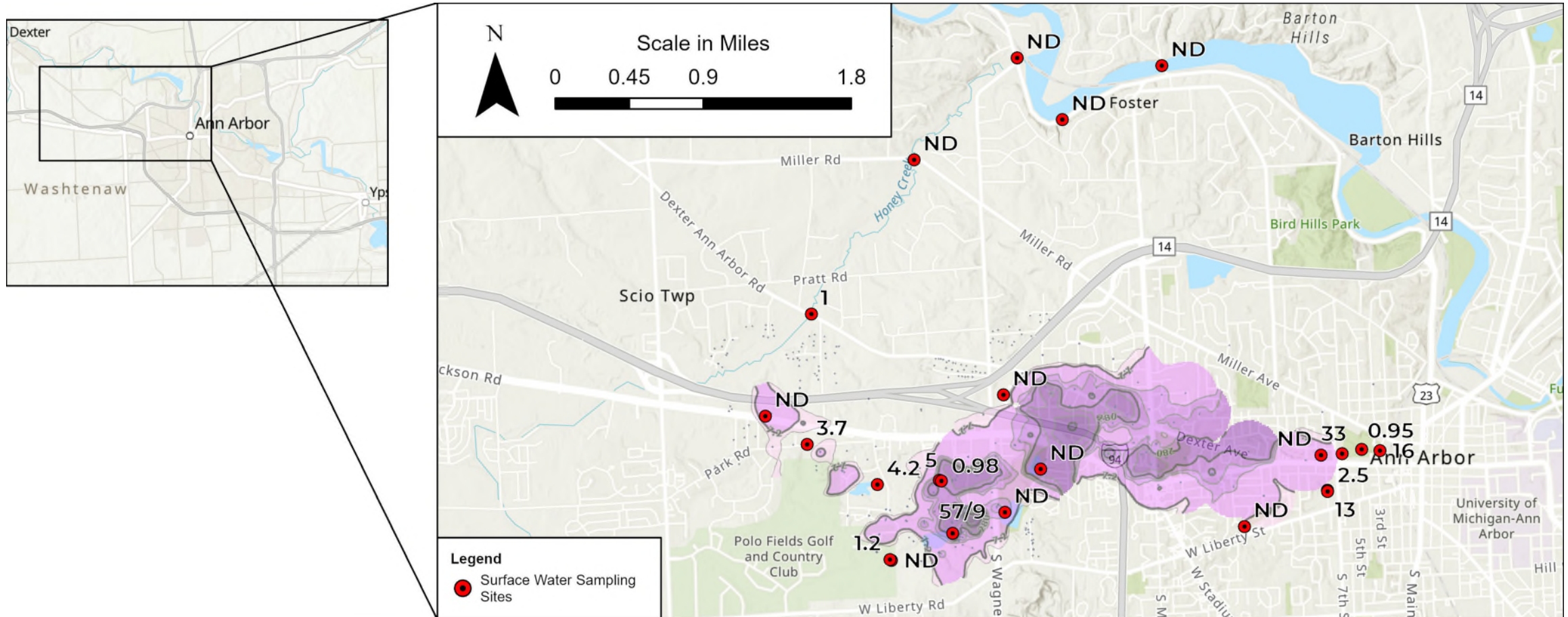
Dr. Chris Svoboda, District Geologist

Email: SvobodaC@michigan.gov

Dr. Andrea Munoz-Hernandez, District Supervisor

Email: munozhernandeza@michigan.gov

EGLE Surface Water Sampling – 2021



Concentrations reported in ppb (ppb = $\mu\text{g/L}$); ND = not detected