NW of Zeeland Drain Board of Determination November 30, 2021

Ottawa County Water Resources Commissioner

Joe Bush – Water Resources Commissioner





Presentation Overview

- Why Are We Here?
- Drain Overview
- Drain History
- Drainage Issues
- What Happens Next?



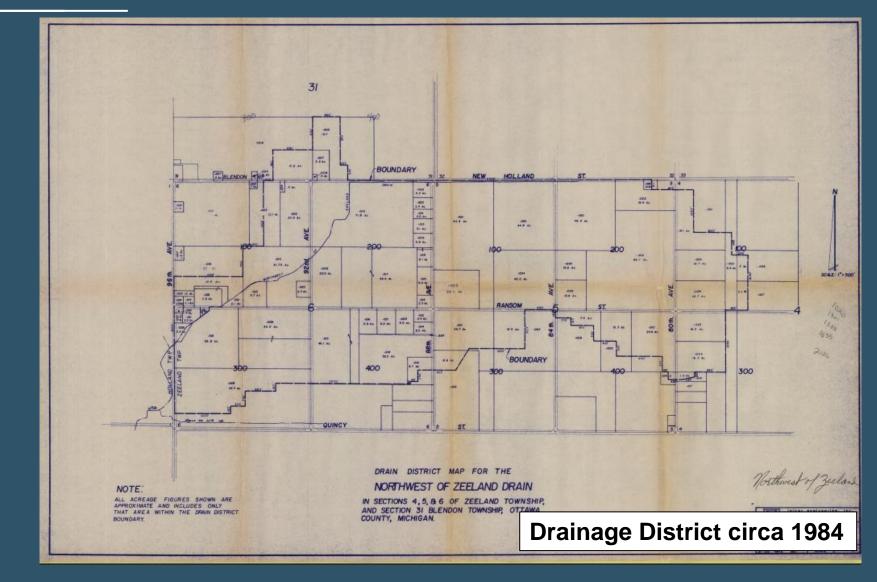
Why Are We Here?

- Ottawa County Water Resources Commissioner (OCWRC)
 received a petition from Zeeland Township requesting that the
 NW of Zeeland Drain be extended and improved as provided in
 Chapter 8 of the Michigan Drain Code, Public Act 40 of 1956, as
 amended, to alleviate drainage issues in the Drainage District.
- Michigan Drain Code mandates that as part of the petition process, the Drain (Water Resources) Commissioner must schedule and hold a Board of Determination (BOD).
- BOD will hear all testimony and determine if a project is necessary based on public health, welfare or convenience.

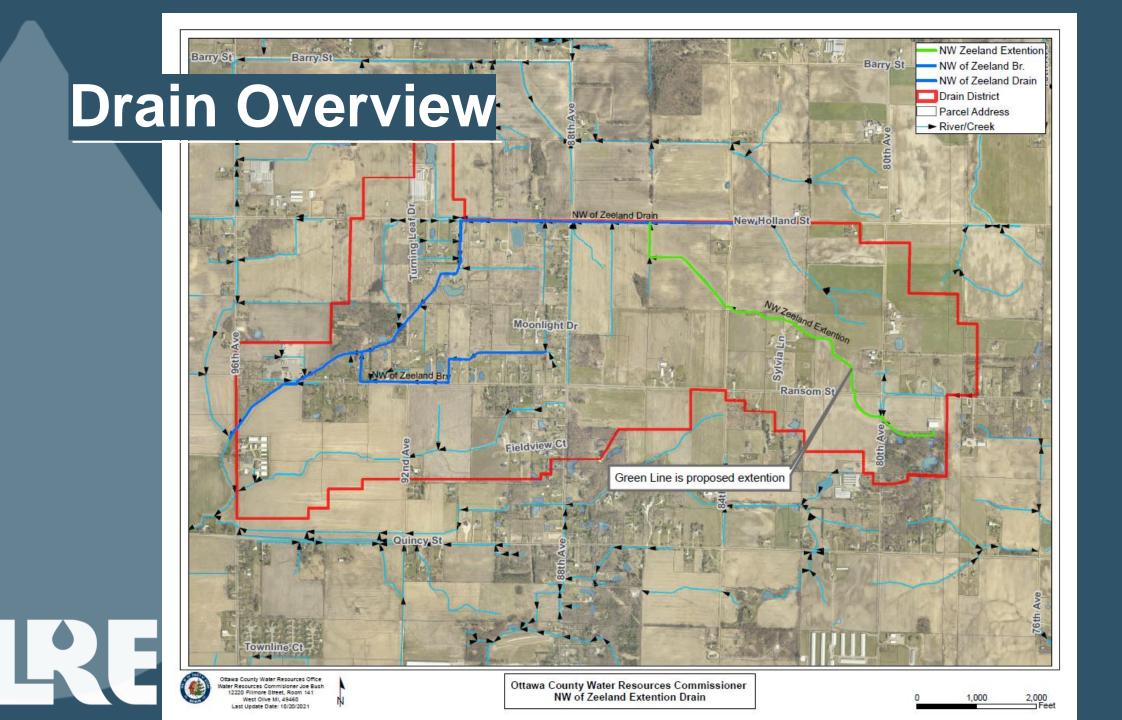


Drain Overview

- Established in 1909
- Length of Established Drain 10,900 ft in 1909
- Added 3,500 ft +/branch in 2005
- Frequently petitioned, maintained, and emergency debris cleanouts.



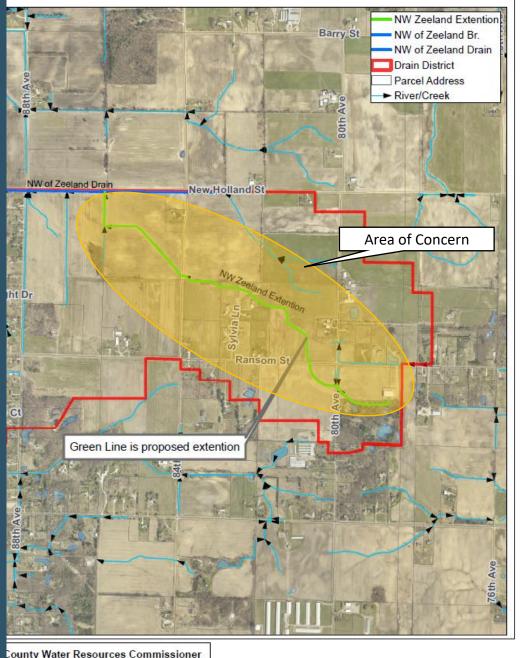




Drain Overview

- Area of Concern is along a (private) tributary water course that is neither part of the Established Drain nor under the jurisdiction of the Ottawa County Water Resources Commissioner.
- If the petition is found necessary, a branch / extension of the NW of Zeeland Drain could be established along the water course allowing maintenance or improvements to occur.





ounty Water Resources Commissioner NW of Zeeland Extention Drain

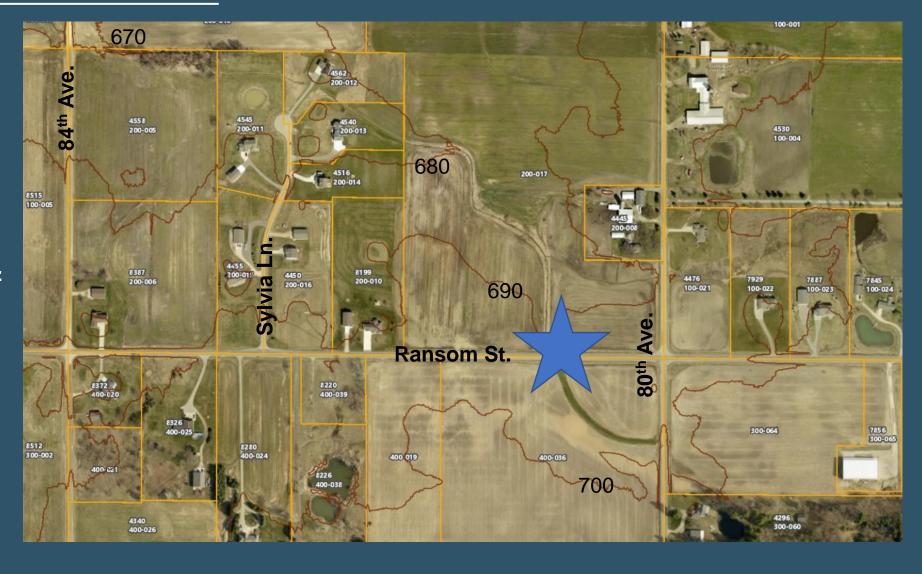
Drain History

- Established 1909 as a County Drain, previously established drain in Zeeland Township Records.
- Petitioned in 1916 cleaned drain
- Petitioned in 1930 cleaned drain
- Petitioned in 1944 cleaned drain, extension for sufficient outlet
- 2001 Ransom Street Crossing Replaced
- Petitioned in 2005 create branch drain along Ransom Street
- 2011 96th Avenue Crossing Replaced
- 2015 Maintenance remove brush
- 2017 Maintenance remove brush
- 2018 Maintenance emergency removal of corn silage



Drainage Issues

 Area of Concern: Property Owners north of Ransom Street want to block off the natural flow of drainage through the county road culvert.





Drainage Issues

- Public Health, Convenience or Welfare Issues:
 - Land Use Conversion
 - Increased Sediment and Nutrient Loading
 - Undersized Culverts
 - Obstructions in Drain



Land Use Conversion





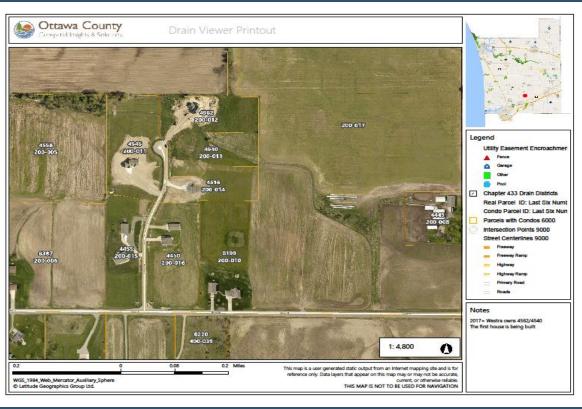


1997 Aerial.

2021 Aerial.

Land Use Conversion



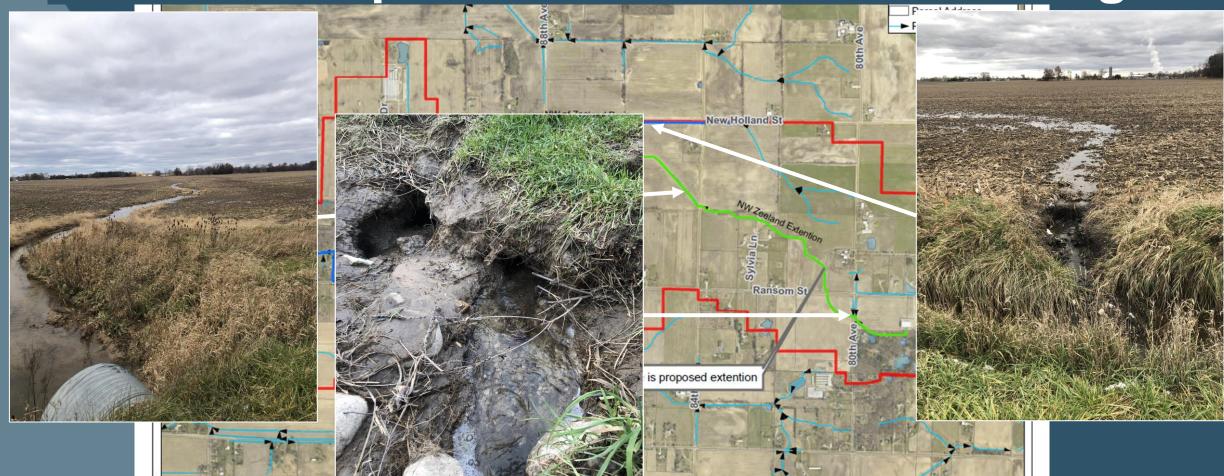


Pre-Development

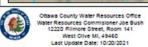
Post Development



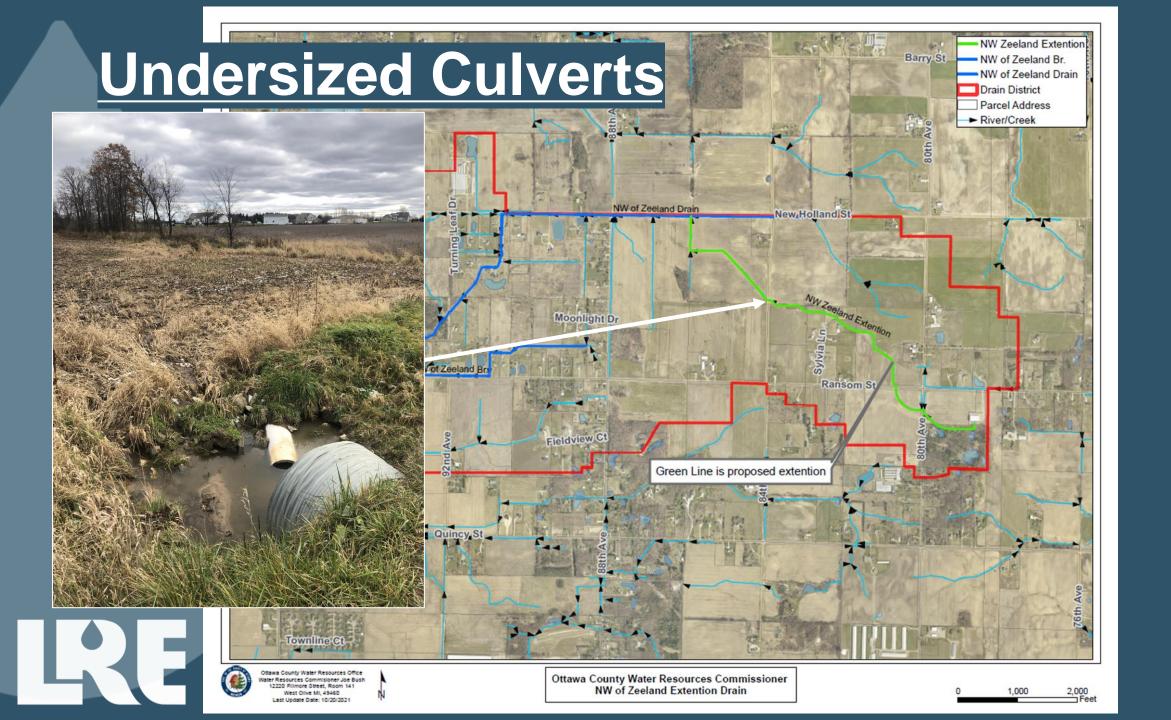
Sediment Deposition and Nutrient Loading

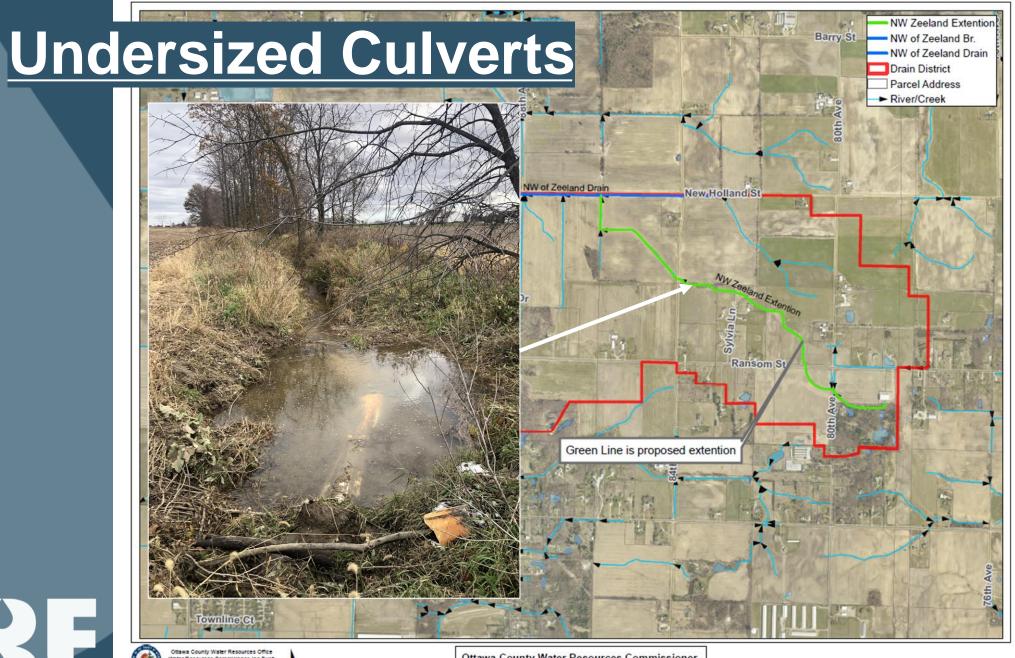




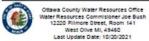




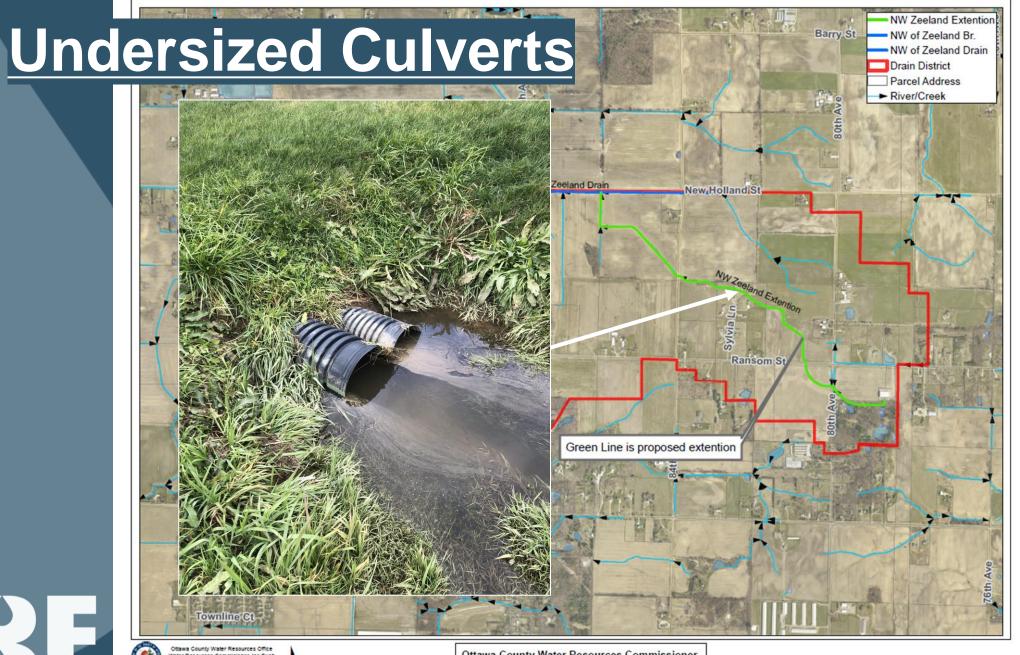




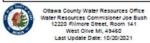




Ottawa County Water Resources Commissioner NW of Zeeland Extention Drain







What Happens Next?

BOD to decide if petition is necessary:

- If the BOD finds that the petition is not necessary, the project ceases immediately, and no petition can be heard for the same project until 12 months have passed.
- If the BOD finds that the petition is necessary based on health, welfare or convenience, the Drain Commissioner proceeds with a project (the scope of which will be defined later).
 Each project is unique, however, in accordance with the Drain Code, the following tasks must be completed:
 - 1. Complete Engineering Design
 - 2. Obtain Easements (if necessary)
 - 3. Apply for Permits (if necessary)
 - 4. Bid Project
 - 5. Hold "Day of Review"
 - 6. Construct Project



The End

THANK YOU

