



Assessment Hearing
May 17, 2023

Crooked and Eagle Lakes - Lake Level Control Project

Texas Township Hall

Prein&Newhof

Introductions

- Nick Loeks PE, Texas Township Supervisor
- Jason Wiersma, Drain Commissioner
- Thomas C. Wheat, PE & Thomas Smith, PE, Prein&Newhof Engineers
- Stacy Hissong & Kyle O'Meara, Fahey Schultz Burzych Rhodes, Attorneys for Drain Commissioner



Overview

- Background on Why Lake Levels Established
- Discuss Proposed Project
- Outline Project Costs / Assessments
- Answer Questions



The Problem

- By May 2018, widespread flooding around Crooked and Eagle Lakes
- Basements flooded, eight homes demolished, and unusable lakes
- Crooked and Eagle Lakes had no infrastructure to manage lake levels

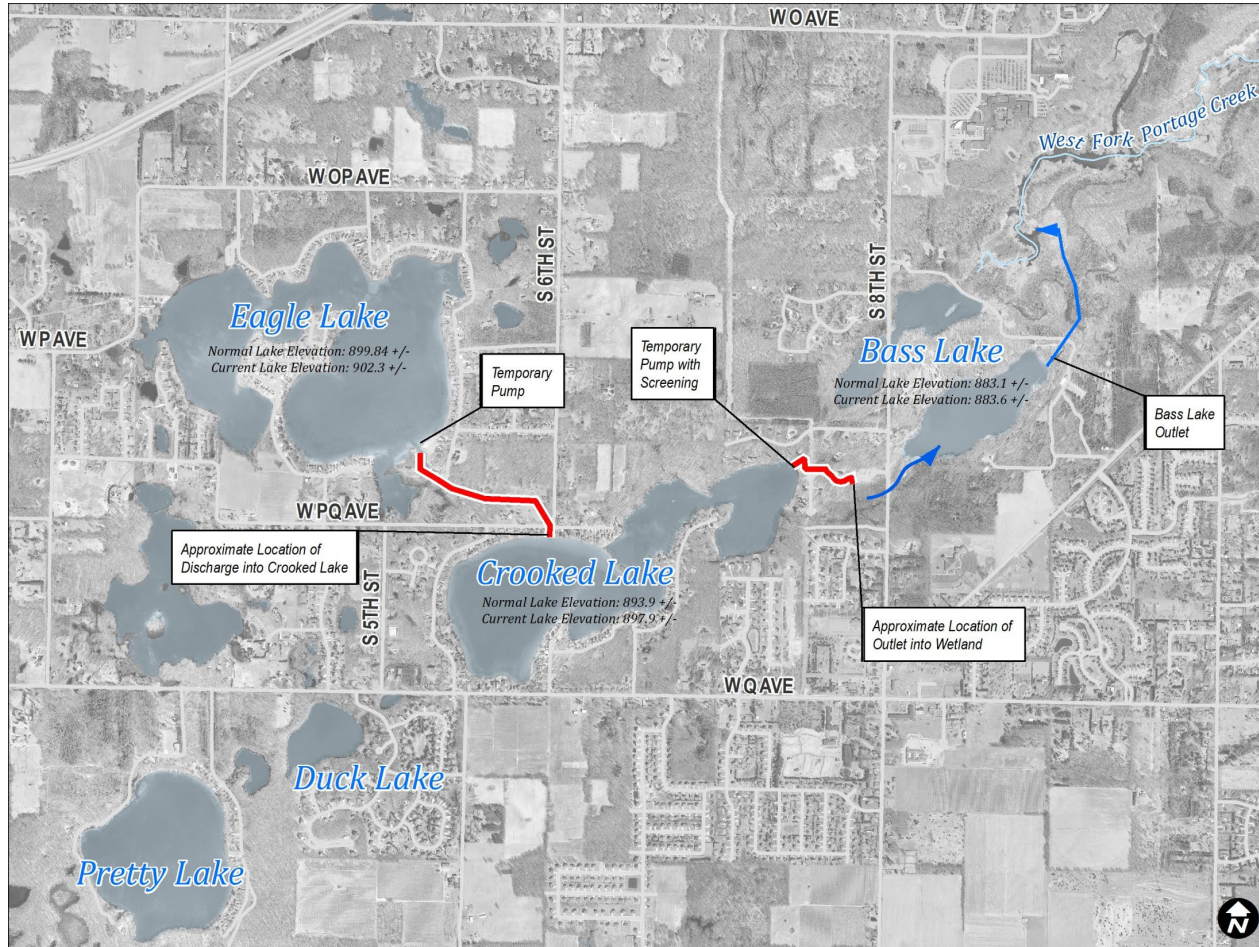


The Short-Term Solution

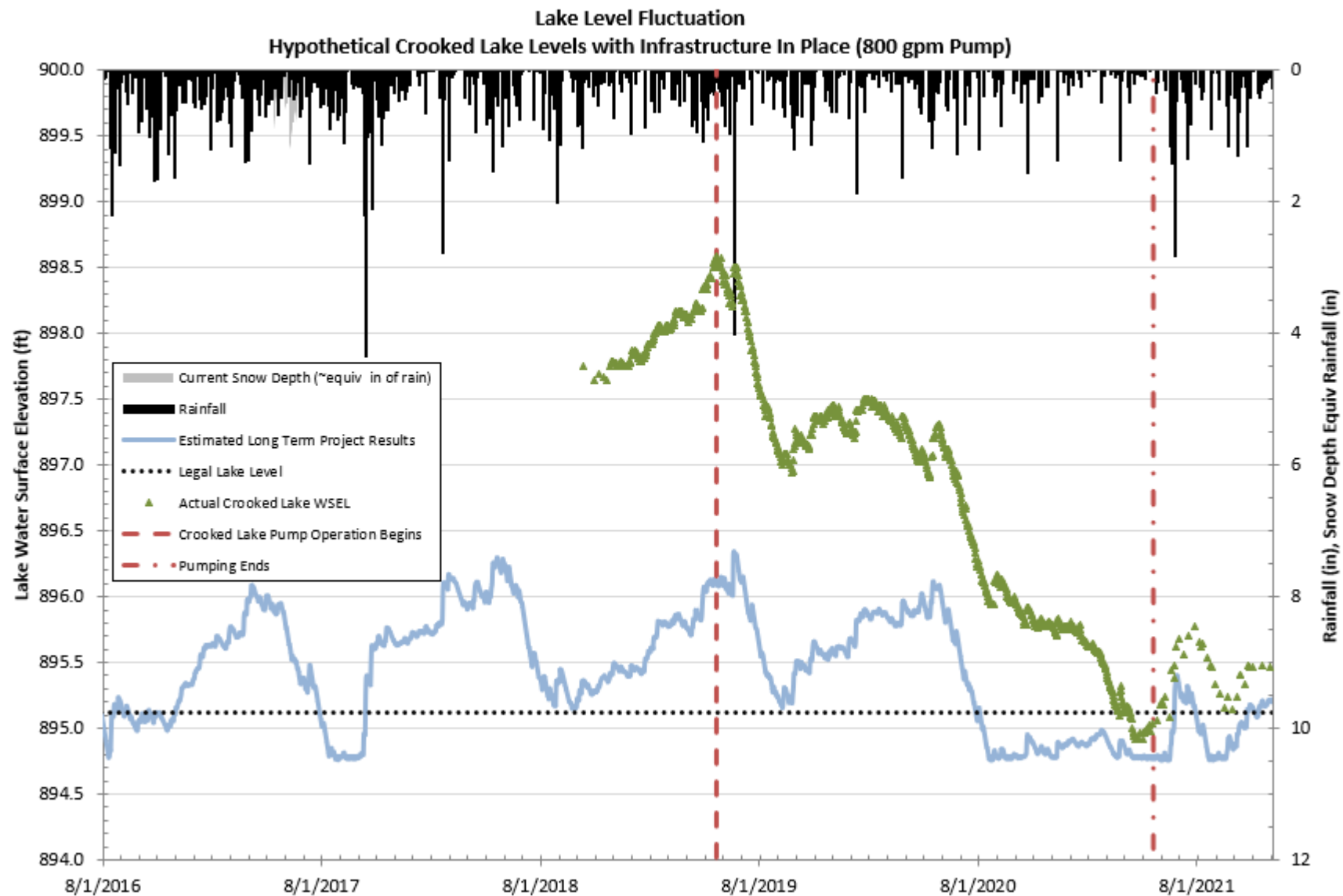
- To alleviate flooding, short-term pumping project
- Pumped excess water from Eagle Lake to Crooked Lake to Bass Lake (eventually to Kalamazoo River)
- Only received temporary Department of Environment, Great Lakes, and Energy (“EGLE”) permit
- Temporary pumping started May 2019 and ended June 1, 2021



The Short-Term Solution

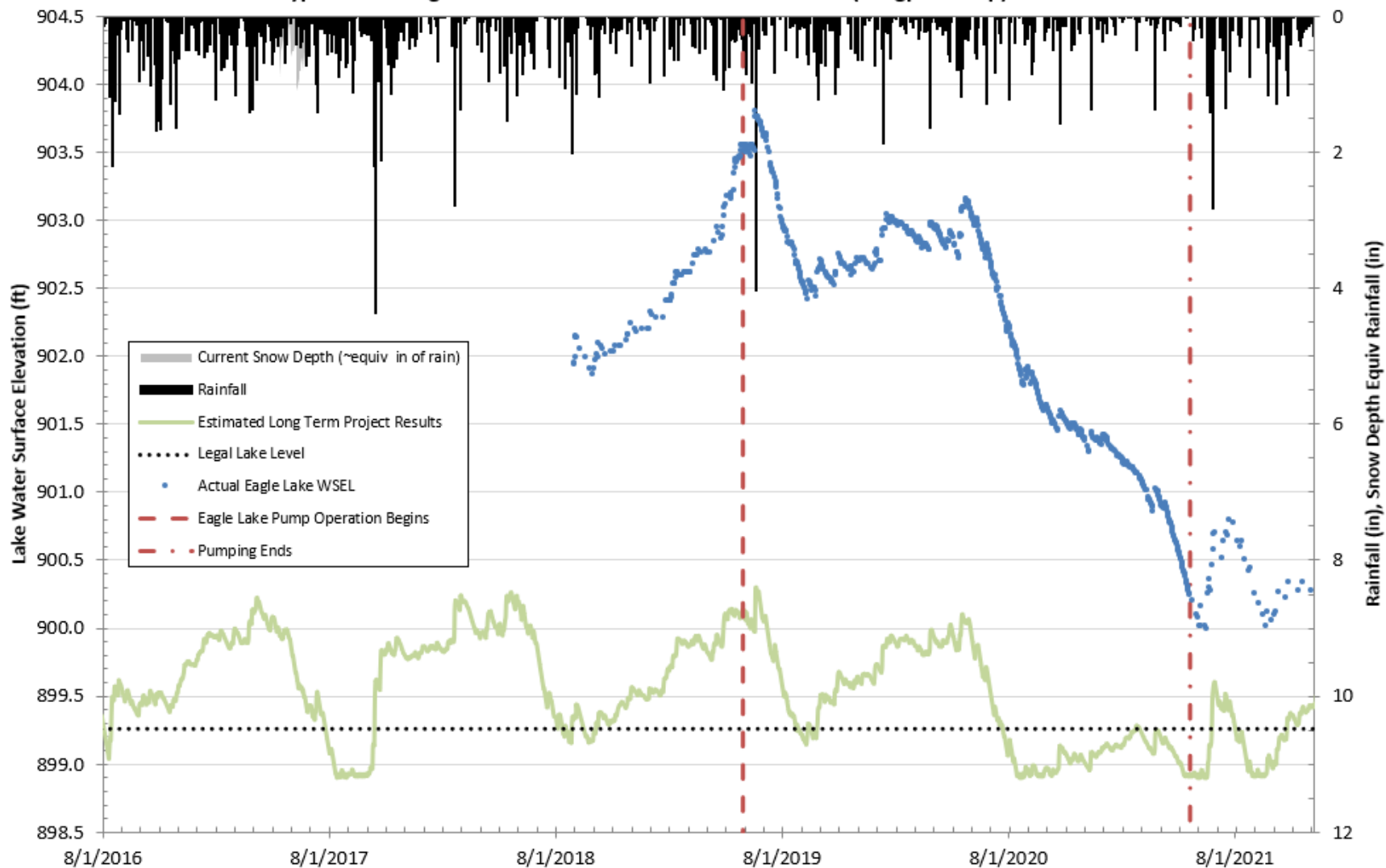


CHARTER TOWNSHIP OF TEXAS
LAKE LEVEL CONTROL PROJECT



CHARTER TOWNSHIP OF TEXAS
LAKE LEVEL CONTROL PROJECT

Lake Level Fluctuation
Hypothetical Eagle Lake Levels with Infrastructure In Place (500gpm Pump)



Need for a Long-Term Solution

- Pumping stopped in June 2021
- Need to design a permanent project to manage lake levels and prevent future flooding
- State Law (Part 307 of Michigan's Natural Resources and Environmental Protect Act) allows counties to establish legal lake levels

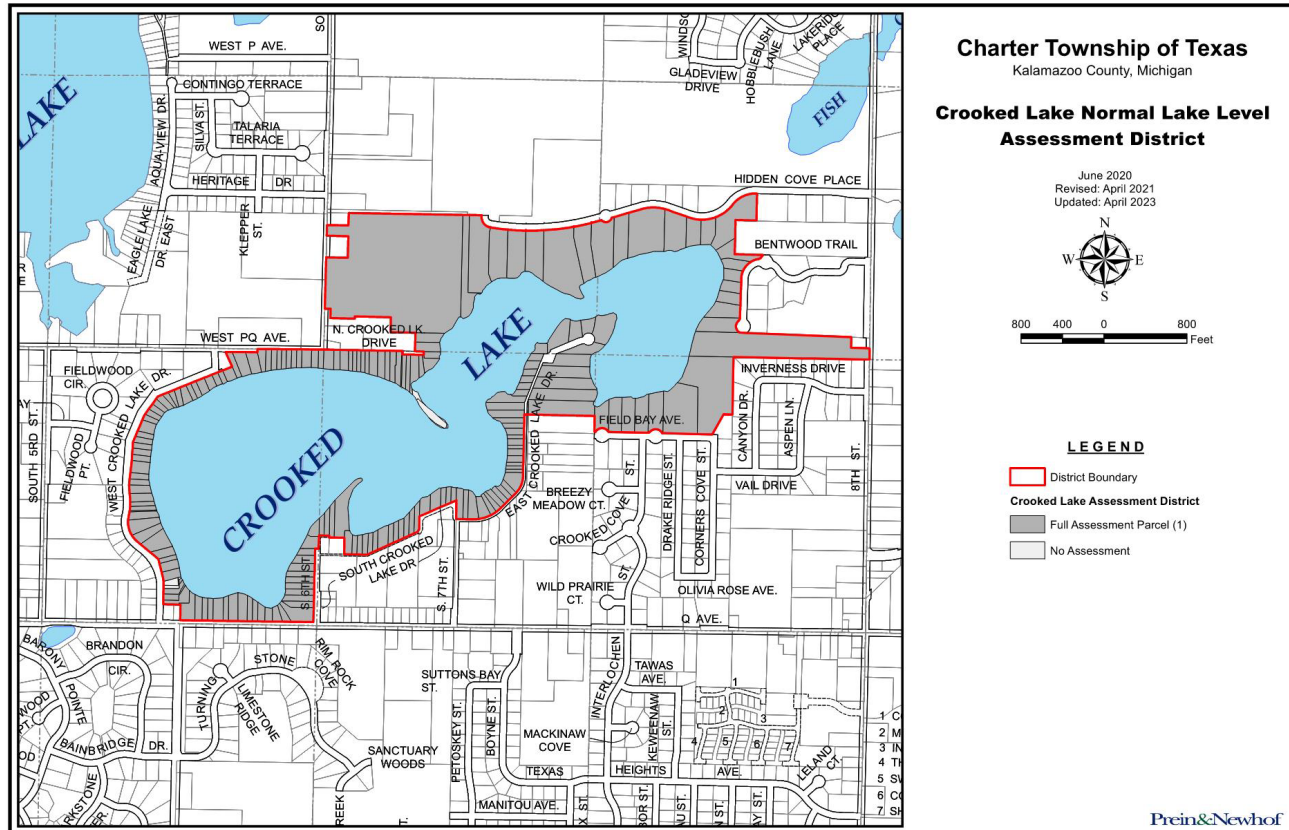


Establishing Lake Levels – Court Order

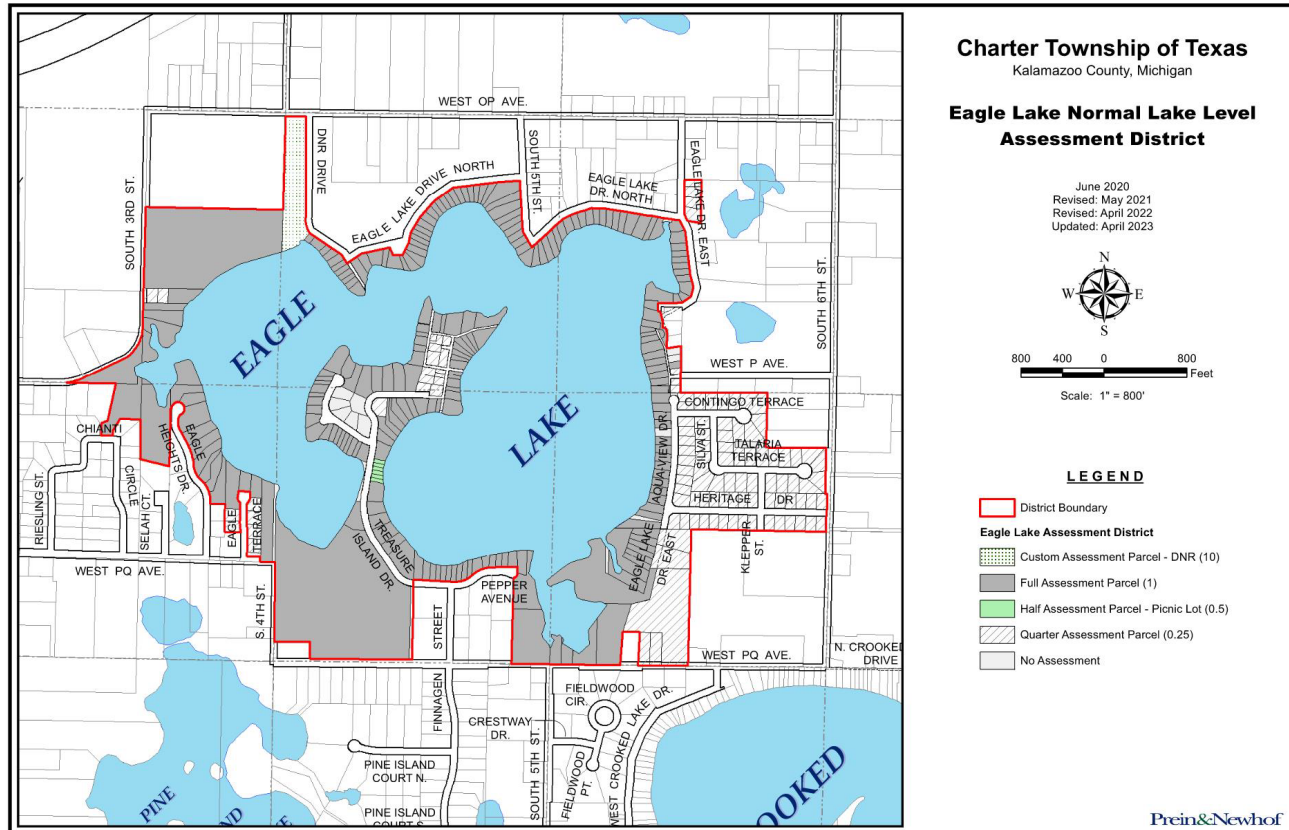
- Texas Township worked cooperatively with Kalamazoo County and Drain Commissioner to establish lake levels
 - Required extensive lake level study
- May 28, 2021 Circuit Court Order set lake levels on Crooked and Eagle Lakes
 - Crooked Lake 895.12 feet NAVD88
 - Eagle Lake 899.26 feet NAVD88
- Also set special assessment district boundaries (properties that can be assessed) consisting of properties on both lakes



Assessment District (Court Ordered)



Assessment District (Court Ordered)

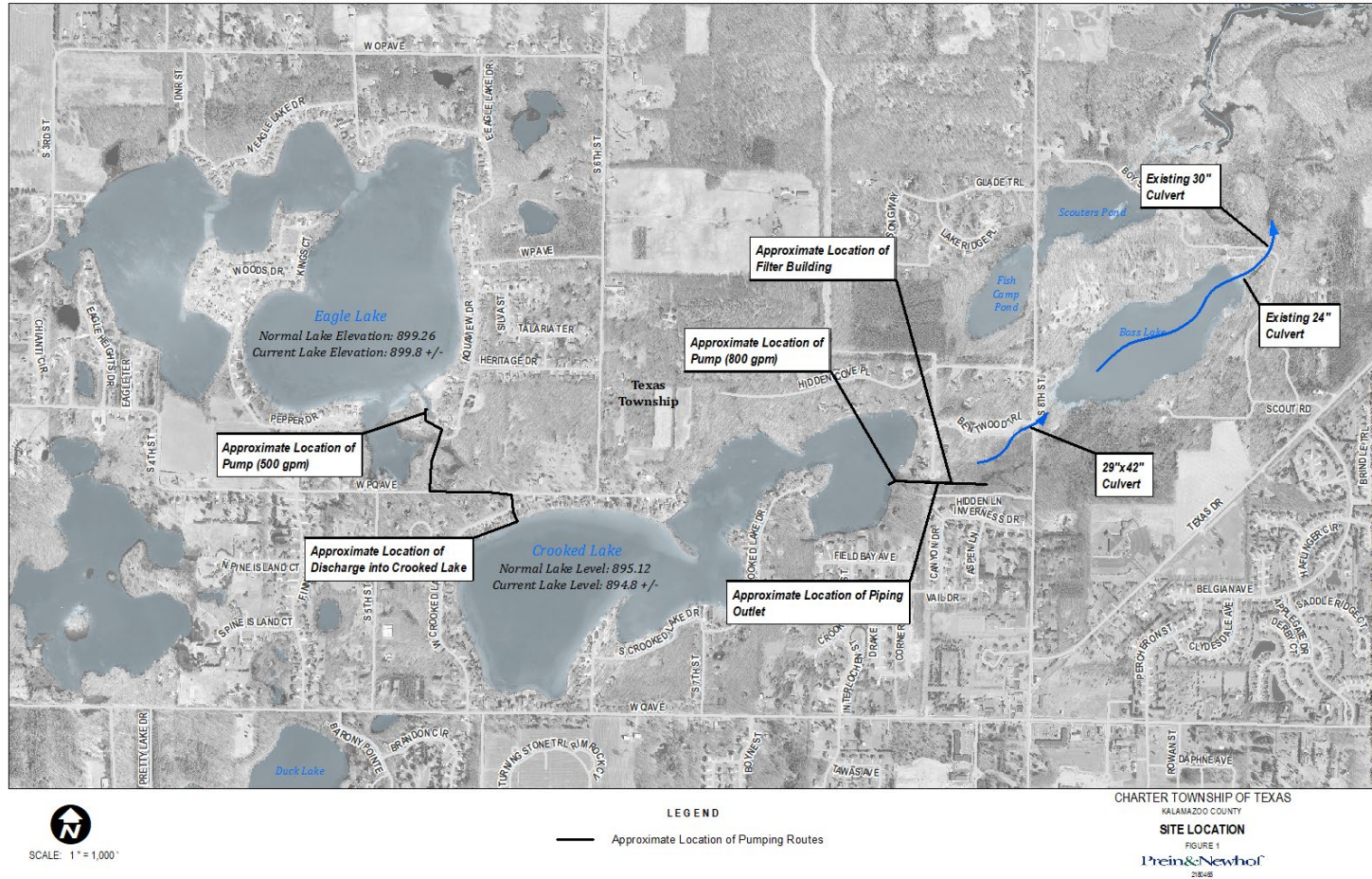


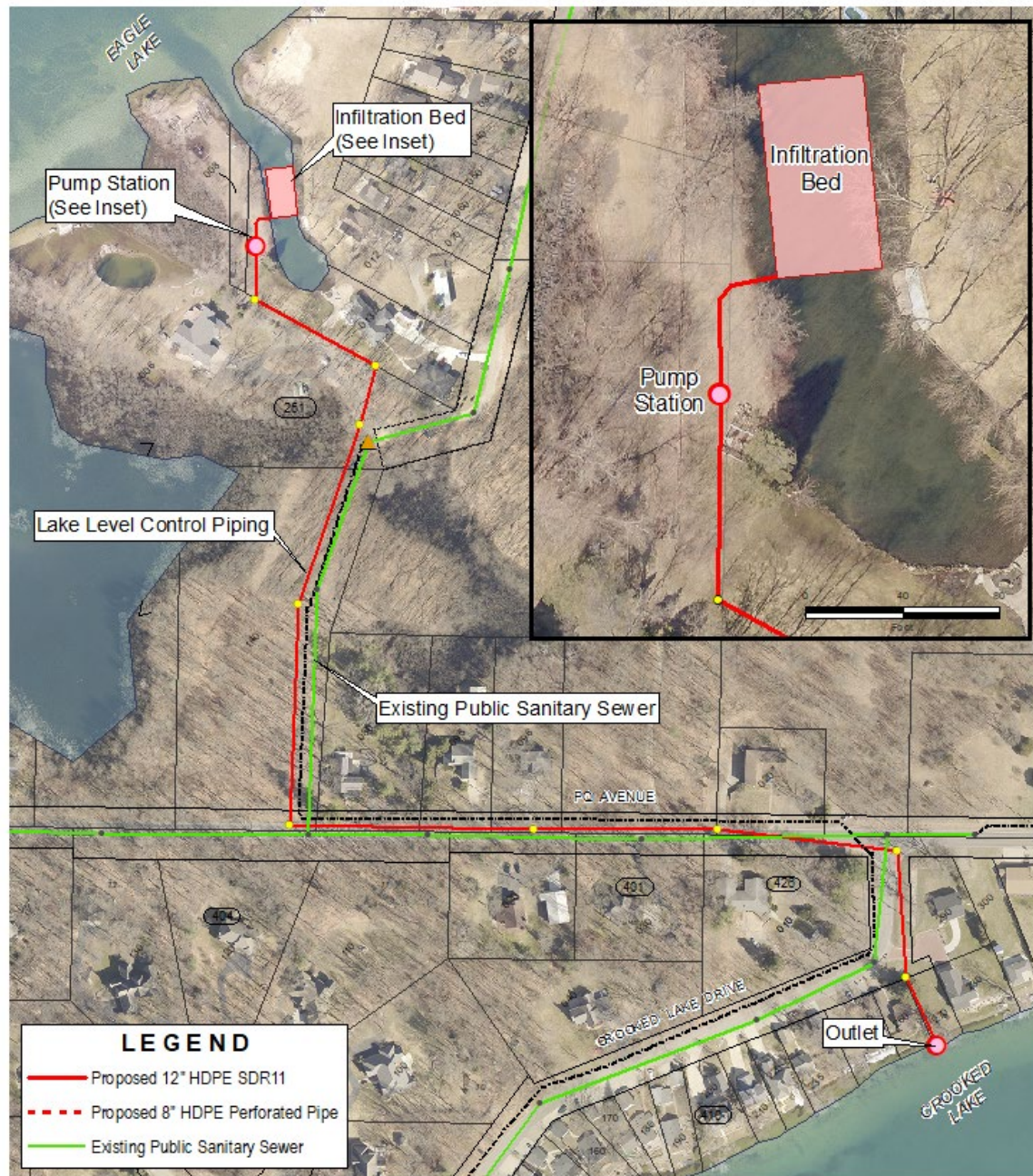
Building the Long-Term Solution

- After establishment of legal lake levels, engineers could proceed with designing a project
- Required significant efforts for EGLE permitting
 - Invasive species control (filters)
 - Will require environmental monitoring
- Lake Level District will own project when constructed, Drain Commissioner will maintain lake levels



The Long-Term Solution







Project Costs

5/2/2023

**Computation of Cost
Crooked Lake/Eagle Lake
County of Kalamazoo, State of Michigan**

Contract for Construction	
Construction	4,464,778
Engineering	
Preliminary and Construction Engineering	694,425
Establishing the District	30,000
Other Project Costs (i.e. spare parts, operations and monitoring)	611,151
Legal	
Attorney Fees	58,844
Costs of Issuance	
Bond Counsel, Muni. Advisor, Bond Sale	95,300
Easement & Property Acquisition	
Land Purchase: Easements	115,151
Capitalized Interest (1 year @ 3.50%)	185,500
Gross Sum of Expenses	<u>6,255,149</u>
Contingency	724,326
Total Project Cost	<u>6,979,475</u>
Less FEMA Grant	<u>1,679,475</u>
Amount to Bonded	5,300,000



Project Costs - Notes

- First bidding 3-1-23 no bids received, second bidding 4-12-23 one bid received. Difficult bidding environment.
- Initial construction bid of \$4,914,248 reduced to \$4,418,738
- Cost sharing
 - Township (10%) - \$530,000
 - County (12%) - \$636,000
 - FEMA Grant - \$1,679,475
- Required Contingency - \$724,326



Assessment Calculations

5/2/2023

Computation of Assessment
Crooked Lake/Eagle Lake
County of Kalamazoo, State of Michigan

Amount to Bonded	5,300,000
County Contribution 12%	(636,000)
Texas Township Contribution 10%	(530,000)
Amount to be spread to property owners	4,134,000

	Equivalent Benefits
Eagle Lake Fully Benefited Properties (1 ea)	229
Eagle Lake Partially Benefited Properties (0.5 ea)	3
Eagle Lake Partially Benefited Properties (0.25 ea)	27.25
DNR Public Access	10
Crooked Lake Fully Benefited Properties (1 ea)	196
Total Benefits	465.25
Total Cost Per Benefit	8,885.55

Note: This project generally uses the same assessment methodology and assesses the same properties as other lake improvement projects.



Prepayment Deadline & Construction Schedule



Residents may prepay their entire assessment to avoid interest costs. Please prepay by June 23rd.



The proposed schedule is to begin construction in September 2023, with a completion by July 1, 2024





Questions?
Tel: 269-290-1363