

Long Term CSO Control Plan Project

The Next Step in Wet Weather Planning

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Key Take-Aways

01

Background

02

This Project

03

The Contract

04

Questions

05



Agenda



Key Take-Aways



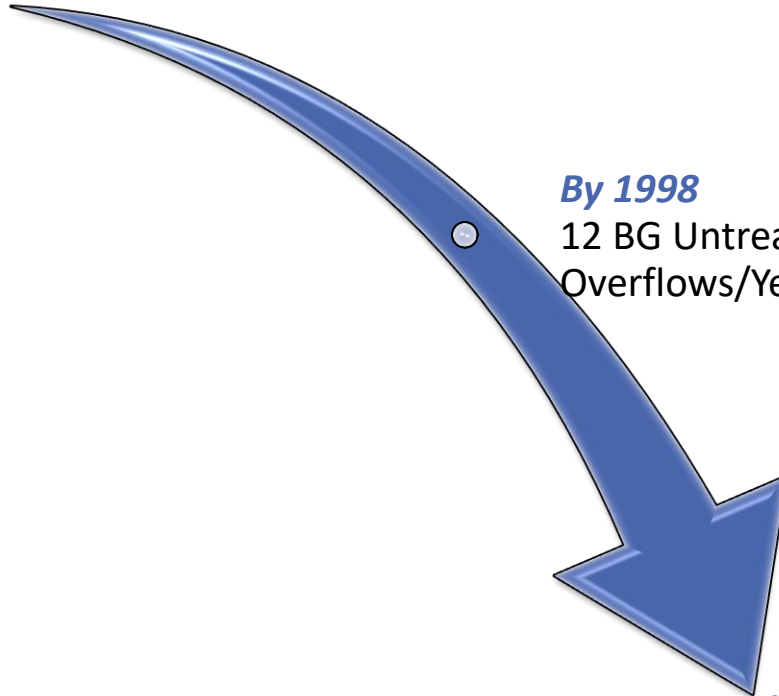
Background

This has been a long road...

Where We've Been

Before Wet Weather Control

Approx. 21 BG Untreated
Overflows/Year



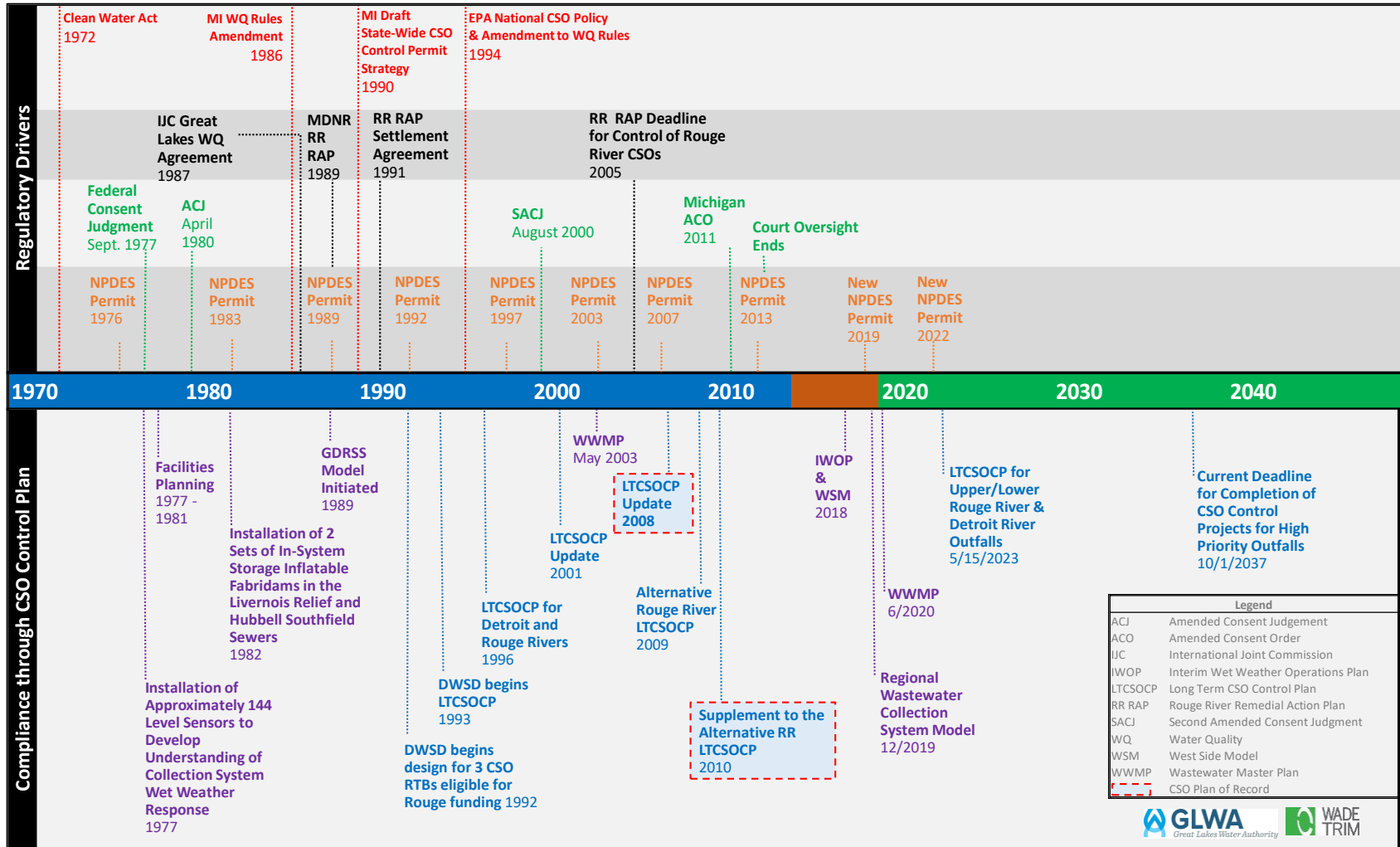
By 1998

12 BG Untreated
Overflows/Year

Today

1 to 2 BG Untreated
Overflows/Year

Detailed Regulatory History



This Project

The Next Chapter

Comparison to Master Plan

Wastewater Master Plan

- GLWA Initiated
- Regional
- More than Wet Weather
- Planning Level Concepts
- Phased with No Specific Dates
- Provided A Framework That Is
 - Integrated
 - Adaptable
 - Flexible

Long Term CSO Control Plan

- NPDES Permit Required
- Specific to GLWA & DWSD
- Specific to Wet Weather
- Preliminary Engineering
- More Specificity Required
- Leverage Framework
 - Effective
 - Affordable

This Project and Plan Must Be

1. *Affordable* – Reasonably Able to Be Implemented
2. *Effective* – Improve Water Quality
3. *Efficient* – Optimize What We Have First
4. *Sustainable* – Recognize Needs for Asset Renewals

Project Approach Will Provide



Further Refined Optimizations



Greatest Reduction in Untreated Overflow per Dollar Expended



Road Map for Future CSO Control

What Technologies
Which Outfalls
When to Implement



Use of Artificial Intelligence to Run Optimization Iterations



Basis of Design/Preliminary Engineering for Selected Projects

The Contract

*How and When
We Will Get It Done*

Solicitation

- Qualifications Based Selection
- Team Members from GLWA and DWSD on the Evaluation Team
- Two Proposals Received
- Recommending Award to LimnoTech

How It Will Be Accomplished

11 Tasks

- Project Management
- Regulatory and Stakeholder Coordination
- Background Data Review and Analytics
- Hydraulic Modeling Analysis & Reporting
- System Optimization Analysis
- Receiving Water Modeling, Analysis and Reporting
- Existing and Baseline Conditions Analysis
- Alternatives Development and Evaluation
- Financial Capability Analysis
- Recommended Plan
- As Needed Modeling, Capacity Evaluations, Contract Negotiations and Meetings

Performance Incentive

- Approach to Incentivize Flow Reduction Results in Scope
- Details to Be Developed In Future
- Any Incentive Will Require Board Approval
- Negotiations Ongoing

How Long Will It Take

- Proposed Contract Duration 4.5 Years
 - Nov 2020 - Award Contract
 - Sept 2022 – 60% Complete
 - Jan 2023 – 90% Complete
 - May 2023 – Long Term Control Plan Due
 - Negotiations, Data Collection and Analytics
- May 2025 - Proposed Contract End Date

Key Take-Aways



Questions?





GLWA

Great Lakes Water Authority