



HAZARD MITIGATION BOTS?!



STORMWATER MANAGEMENT COMMISSION

Land on the Run:

Mitigation & Ravine Slope Stabilization in Bull Creek

Sharon Østerby, CFM

Water Resource Professional

Lake County Stormwater Management Commission

IAFSM Annual Conference Presentation

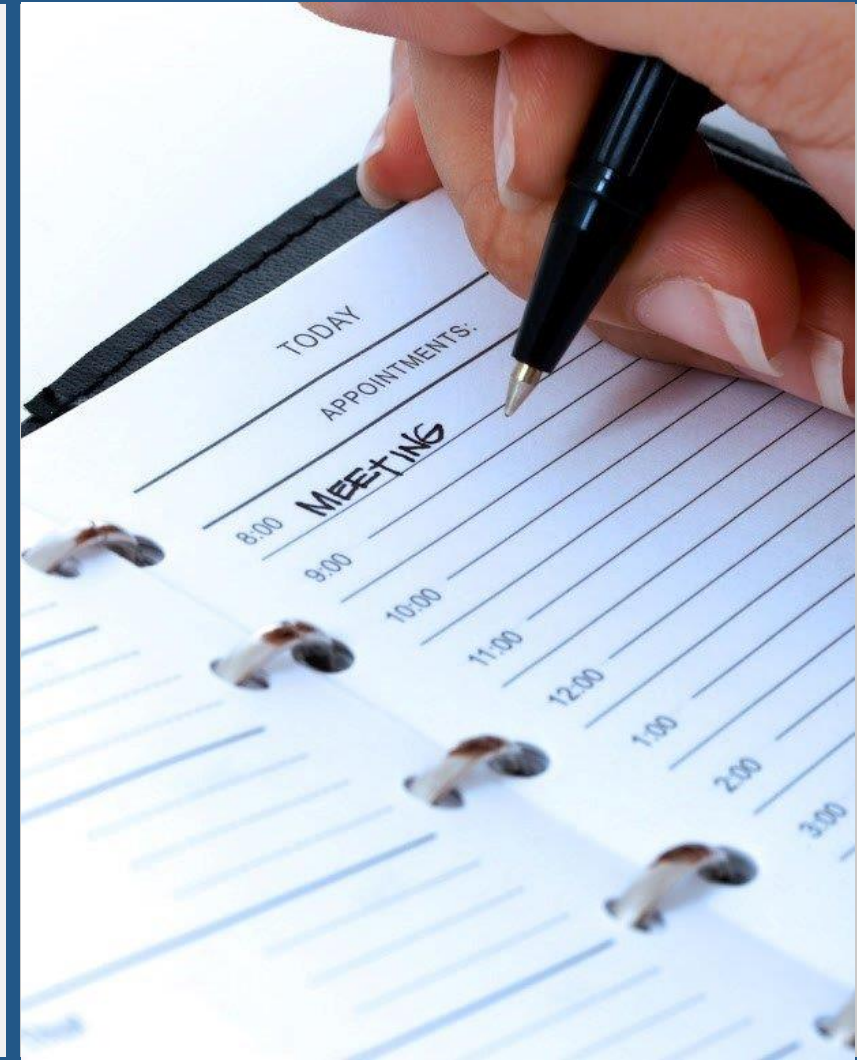
March 15, 2023





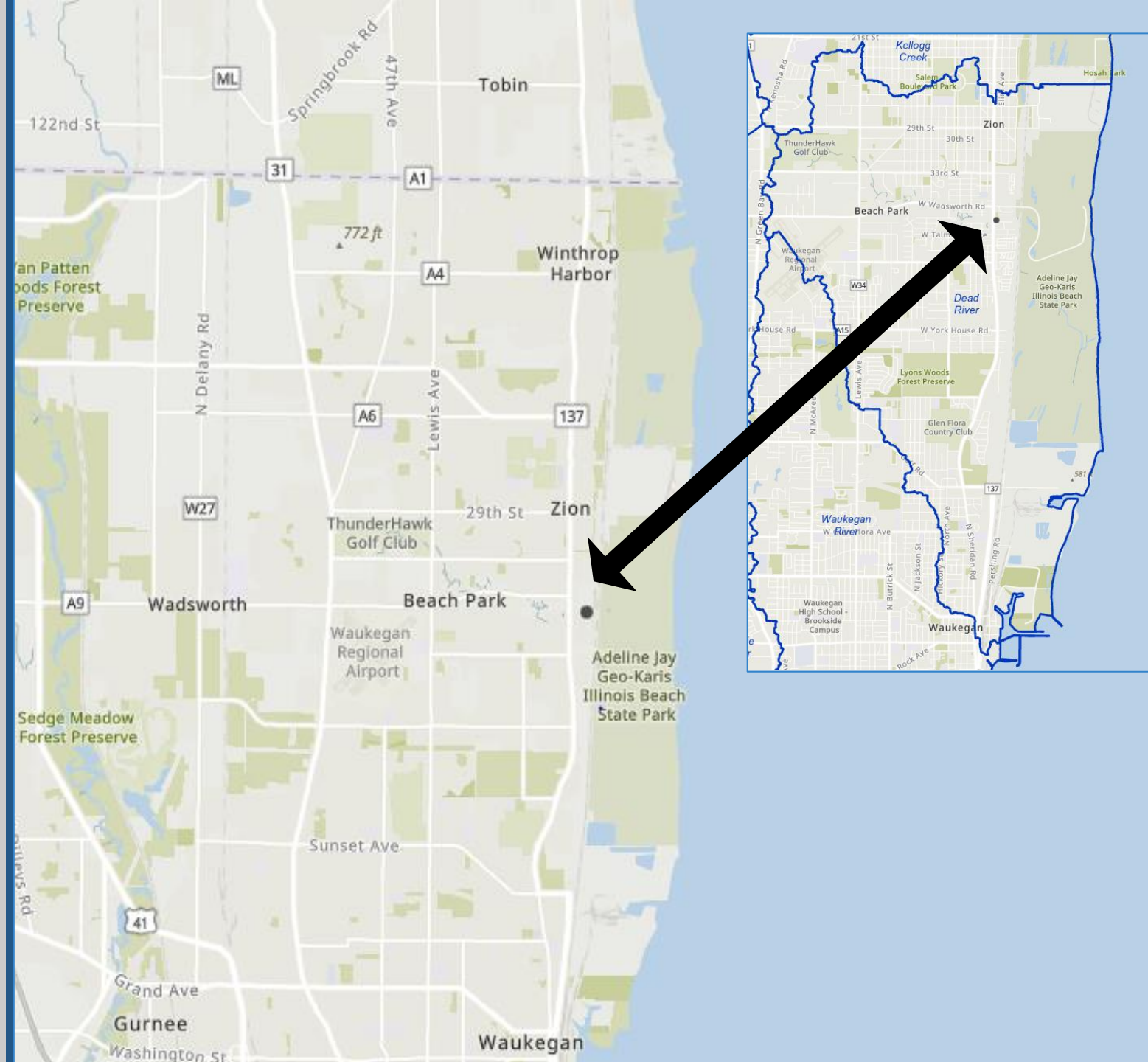
Agenda

- Introduction & Background
- Problem
- Solution
- Execution
- Results



PROJECT LOCATION

- Bull Creek is located in the Dead River Subwatershed of Lake Michigan Watershed.
- Drains to the S. Unit of the IL Beach State Park through a severely eroded bluff/ravine system in Beach Park.



NOVEMBER 29,
2016



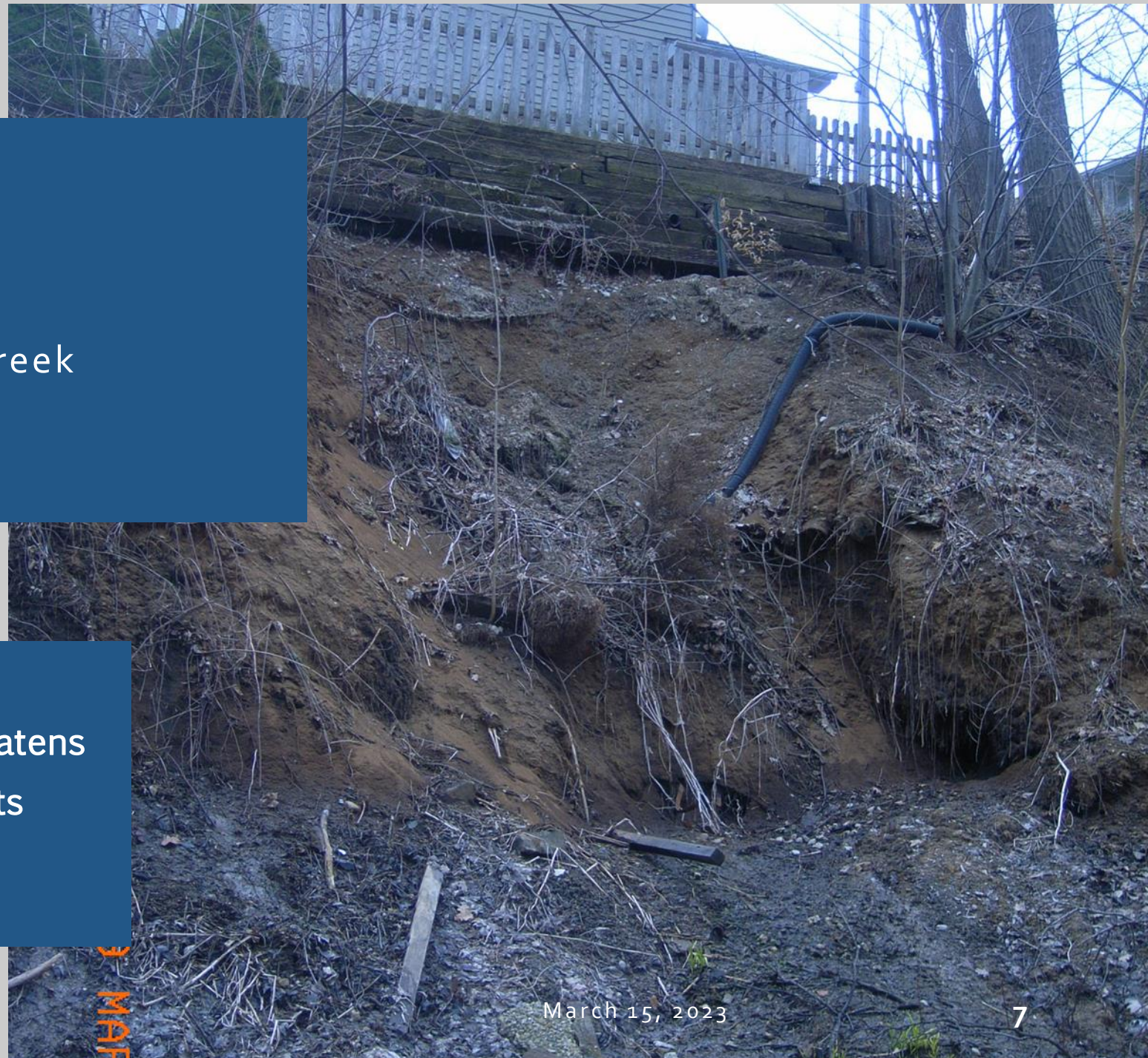
FEBRUARY 15,
2017

Lake County SMC
Stabilization and Restoration Work in Bull Creek

PROBLEM:

Severe Erosion in the Bull Creek
Bluff/Ravine System

A catastrophic slope failure threatens
the health and safety of residents
living Marguerite Lane.



March 15, 2023

MARCH 31, 2017 FLOOD



PROBLEM:

Ravine intersects groundwater table

Lateral flow of water is visible after heavy precipitation events and further erodes the slope.



MARCH 22, 2017

APRIL 5, 2018





JANUARY 15, 2020

JANUARY 15, 2020



JANUARY 15, 2020



JUNE 4, 2021



JUNE 11, 2021



JUNE 18, 2021





JUNE 18, 2021

JUNE 25, 2021





JULY 7, 2021



STORMWATER MANAGEMENT COMMISSION

Challenges Overcome!

Community Participation

Homeowner Anxiety-Red Tagged

IDOT Culvert Conflicts

Weather conditions during construction



JUNE 11, 2021

Project Team

Lake County SMC Team!

Village of Beach Park

IDOT

IEMA/FEMA 2017 PDM Fundi

Christopher B. Burke Engineering-Slope Stabilization Design & Engineering Plans

V3 Companies –Slope Stabilization Construction



Thank you

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