







Bright ideas. Sustainable change



# Agenda

- 1. Welcome & Introductions
- 2. Historical Flooding
- 3. Purpose & Objectives
- 4. Flood Benches
- 5. Proposed Project Area
- 6. Potential Impacts on Flood Stages
- 7. Project Timeline
- 8. Questions & Answers

# Welcome & Introductions

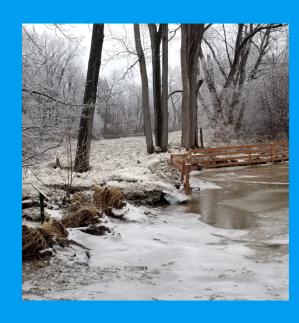
### **Project Sponsors**

- Buffalo Niagara Waterkeeper
- Town of West Seneca

### **Project Team**

- Ramboll Americas Engineering Solutions, Inc.
- Highland Planning

# Historical Flooding





The Buffalo Creek watershed was chosen as a study site for the NYS Resilient NY Initiative.

2018

Winter 2019 Significant ice-jam flooding caused the evacuation of the School Street Neighborhood.

Resilient NY Report identified Lexington Green neighborhood as a high flood risk.

2020

Winter 2022 A severe flooding event caused emergency evacuation of several neighborhoods.

Ramboll

# Historical Flooding

**Flood Plain** – Area of low-lying ground adjacent to a waterway which experiences flooding during periods of high flow



# Purpose & Objectives

### Purpose

Reduce long term flood risk for properties and neighborhoods along Buffalo Creek.

### Objectives

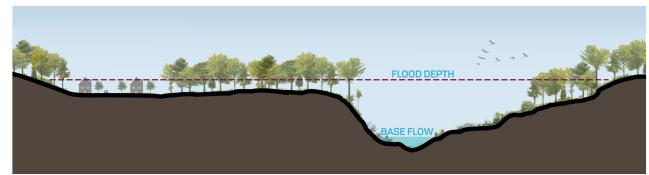
Construction of a flood bench along Buffalo Creek in targeted areas

Ramboll

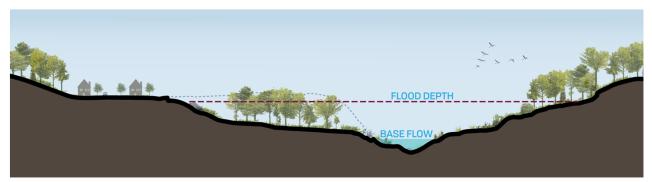
## Floodplain Benches – What is it?

A *floodplain bench* is an area, adjacent to a waterway that is purposely constructed to allow the water to expand resulting in lower flood stages.

#### Floodplain Bench



Before installing a floodplain bench



After installing a floodplain bench

Rambol

# Floodplain Benches - Benefits

- Environmentally friendly and adds aesthetics value
- Limited long-term maintenance for town and community
- Sustainable
- Continued access to the creek and land
- · No permanent barrier installed





## Proposed Area – Tasks Completed to Date

- Identified land parcels between the abandoned railroad bridge and Oxbow Wetland – land could store water during high flow events
- Identified property owners
- Evaluated land parcels
- Contacted property owners

# Proposed Project Area

#### Feasibility and Design of Floodplain Reconnection of Buffalo Creek

■ Primary Focus Area Boundar

Tax Parcel Boundaries

Buffalo Niagara Water Keeper in collaboration with Ramboll Americas Engineering Solutions, Inc. and Highland Planning

#### **Overview Map**

August 22, 202



## Potential Flood Bench Locations

#### Feasibility and Design of Floodplain Reconnection of Buffalo Creek

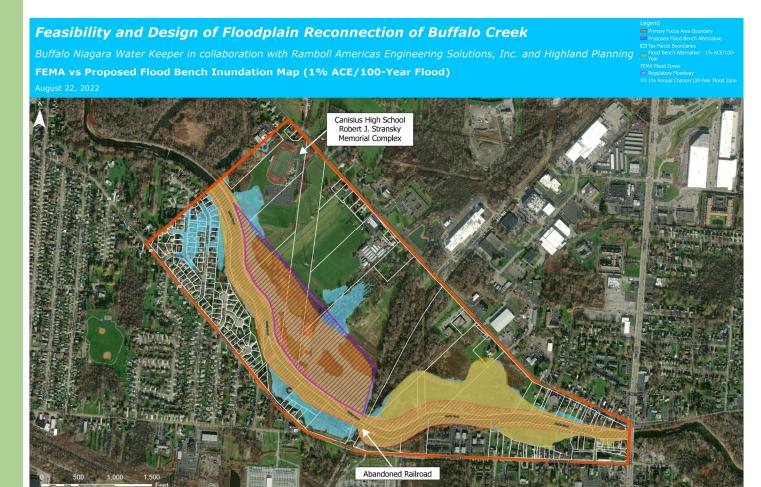
Buffalo Niagara Water Keeper in collaboration with Ramboll Americas Engineering Solutions, Inc. and Highland Planning

**Potential Flood Bench Locations Map** 

August 22, 202



# Potential Impact of Flood Storage



## **Project Timeline**



## Questions & Contact Information

Shaun B. Gannon, PE
Ramboll
(315) 396-4928
Shaun.Gannon@ramboll.com

Katherine Winkler
Buffalo Niagara Waterkeeper
(716) 310-5614
kwinkler@bnwaterkeeper.org

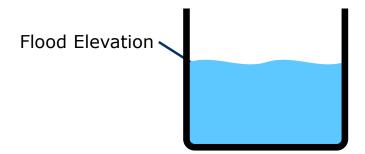
Gary Dickson
Town of West Seneca
(716) 558-3203
<a href="mailto:gdickson@twsny.org">gdickson@twsny.org</a>



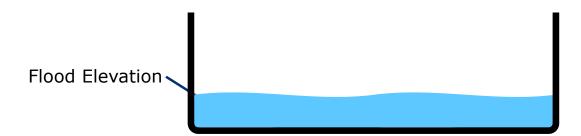
## Floodplain Benches – What is it?

A **floodplain bench** is an area, adjacent to a waterway that is purposely constructed to allow the water to expand resulting in lower flood stages.

#### **Buffalo Creek Currently**



#### Buffalo Creek w/ Floodplain Bench



Ramboll