

# *Watershed Advisory Committee Cuyahoga River South March 3, 2020*

NORTHEAST OHIO REGIONAL SEWER DISTRICT



REGIONAL  
STORMWATER  
MANAGEMENT  
PROGRAM

# Agenda

- Sewer District Updates
- Special Feature – CCS Reimbursements
- Stormwater Master Plan
- Stormwater Inspection and Maintenance
- Stormwater Design & Construction
- Looking Ahead

# Program Highlights

Matt Scharver, Deputy Director of Watershed  
Programs

# Community Cost-Share: 2020

- CCS Funds Balance (1/31/2020) \$ 26,692,552
- 53 projects w/ executed agreement \$ 7,273,159
- 24 projects w/ agreements in progress \$ 2,608,062
- CCS Funds available to Member Communities \$ 16,811,331
- 19 approved allocation agreements \$ 9,378,822

*42 of 55 Member Communities currently participating*

*54 of 55 Member Communities have participated*

# “Year-One” Funds

## Community Cost Share

Title V and the CCS Policy states that communities:

- Must apply for Year One funds by July 1 of Year Five,
  - Unapplied funds will be returned to the RSMP general fund.
- 
- Why?
    - Encourage communities to use their funds
    - Communities can only accumulate a maximum of 5 years of funds in their account

# “Year-One” Funds

## Community Cost Share

- This Year’s “Year One” - January 2013 through December 31, 2016.
  - Litigation temporarily paused the RSMP from September 26, 2013 to December 2, 2015.
- Communities that are at risk of losing funds have had conversations with their WTL. Only a few communities still falls in this category.

# “Year-One” Funds

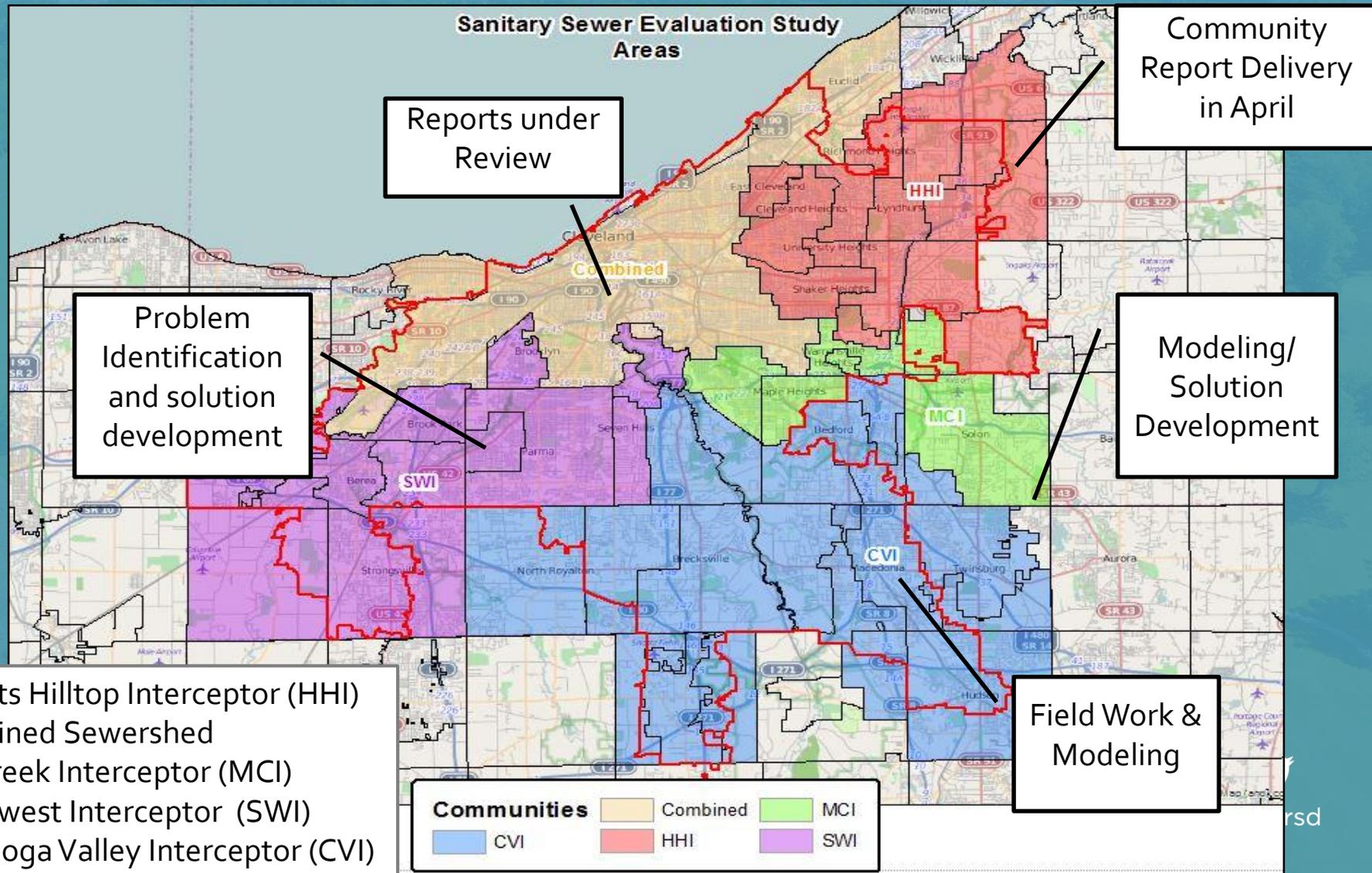
## Community Cost Share

- What does this mean going forward?

<b>“Year One” - funds to be applied for</b>	<b>Corresponding “Year Five” apply by date</b>
<i>January 1, 2013- December 31, 2016</i>	July 1, 2020
January 1, 2017- December 31, 2017	July 1, 2021
January 1, 2018- December 31, 2018	July 1, 2022
January 1, 2019- December 31, 2019	July 1, 2023

- District will give your community updates if you are at risk.

# Local Sewer System Evaluation Studies



Heights Hilltop Interceptor (HHI)  
Combined Sewershed  
Mill Creek Interceptor (MCI)  
Southwest Interceptor (SWI)  
Cuyahoga Valley Interceptor (CVI)

# Member Community Infrastructure Program

- Grant funding for local sanitary sewer rehabilitation targeted at reducing basement backups and human health issues
- LSSES early action project alternatives for the Southwest & Cuyahoga Valley Interceptor Area
- RFP will be released March 5 - due on May 11
- MCIP Workshop March 13 (8:30 – 11:30 am) at the Watershed Stewardship Center in Parma

# Cost-Saving Programs

- *Summer Sprinkling\**
    - *Average winter consumption*
  - *Crisis Assistance\**
    - *\$300 sewer credit*
    - *Experienced financial hardship within last 6 months*
- \* Does not apply in Summit County*

# Cost-saving Programs

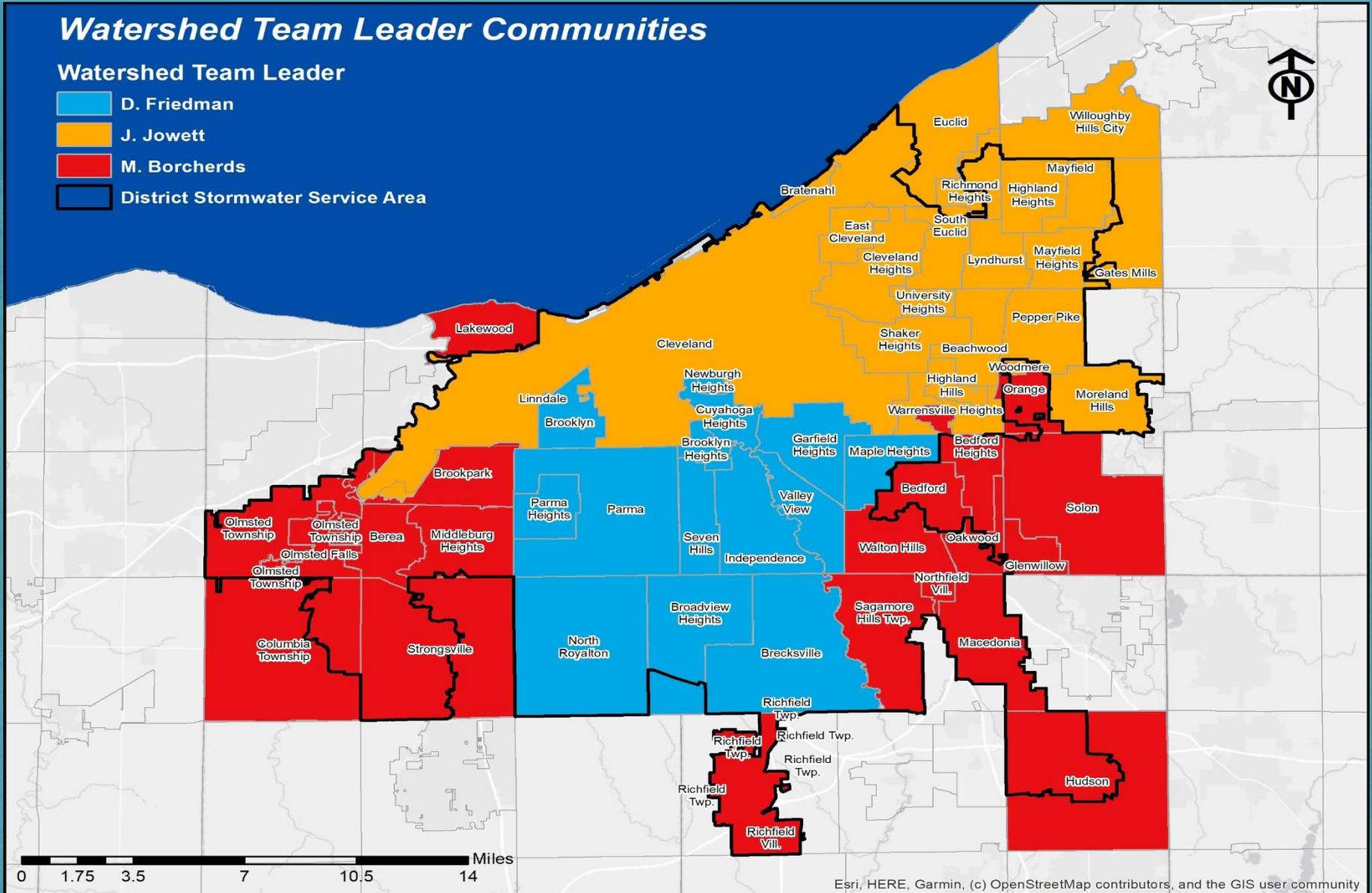
- *Homestead*
  - 65 and older *or* permanently disabled
  - Household income must not exceed \$33,500
- *Affordability*
  - Annual income is at or below 200% of the poverty level

*Customer Service (216) 881-8247*

# Watershed Team Leader Communities

## Watershed Team Leader

-  D. Friedman
-  J. Jowett
-  M. Borchers
-  District Stormwater Service Area



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

# Questions



@Tom Jones

# Special Feature

## Community Cost-Share - Reimbursement Requests

### TIPS

- ✓ Review the reimbursement request requirements prior to starting the project to ensure collection of the proper documents as the project progresses
- ✓ Reimbursement Requests can be submitted as the project progresses, it is not necessary to wait for project completion to submit
- ✓ Email the submission to the Grant Programs Administrator

Linda Mayer

MayerL@neorsd.org

# Special Feature

## Community Cost-Share - Reimbursement Requests

A complete  
Reimbursement Request  
submission will include:

- ✓ Reimbursement Request  
Cover Sheet



Community Cost-Share Program  
Reimbursement Request

### Community Cost-Share Program REIMBURSEMENT REQUEST - COVER SHEET

#### Project Information

Member Community: \_\_\_\_\_

Project Title: \_\_\_\_\_

Amount Requested: \_\_\_\_\_

P.O. #: \_\_\_\_\_

#### Authorized Signature

I certify that the costs outlined in this reimbursement request have been incurred in accordance with the approved project proposal as set forth in the Community Cost-Share agreement document(s). Furthermore, I affirm that the information contained herein is, to the best of my knowledge and belief, accurate and complete.

Name (print or type): \_\_\_\_\_

Title: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Rev 5/2016

# Special Feature

## Community Cost-Share - Reimbursement Requests

A complete Reimbursement Request submission will include:

- ✓ Reimbursement Request **Cover Sheet**
- ✓ Reimbursement Request **Deliverable Expense Worksheet w/supporting documentation**

*Community Cost-Share Program  
Reimbursement Request*



**Community Cost-Share Program  
REIMBURSEMENT REQUEST – DELIVERABLE EXPENSE WORKSHEET**

Member Community: \_\_\_\_\_

Project Title: \_\_\_\_\_

P.O. #: \_\_\_\_\_ Request Date: \_\_\_\_\_

**Instructions:**  
Record all expenses and attach relevant procurement documentation, such as an itemized bill, receipt, invoice, time card along with proof of payment, such as a credit card receipt, cancelled check, and/or other documentation to substantiate purchase and compensation as deemed acceptable by the NEORSO.

*Direct all Community Cost-Share reimbursement questions and reports to the Watershed Programs Department's, Watershed Funding Administrator, Linda Mayer, 440-253-2147, [mayerl@neorsd.org](mailto:mayerl@neorsd.org).*

PROJECT DELIVERABLE	Cost per Unit	Total Units	Total Cost	Details

Rev 5/2016

# Special Feature

## Community Cost-Share - Reimbursement Requests

A complete Reimbursement Request submission will include:

✓ Reimbursement Request

Cover Sheet

✓ Reimbursement Request

Deliverable Expense Worksheet  
w/supporting documentation

✓ Reimbursement Request

Progress Report



Community Cost-Share Program  
Progress Report

### Community Cost-Share Program PROGRESS REPORT

#### Instructions:

Provide a summary of the accomplishments with respect to objectives, degree of completion based on the Project application, and any problems encountered. Progress Reports must be submitted within 30 days of written request from the Watershed Team Leader and as an attachment to all Reimbursement Requests. Progress Reports submitted with the Reimbursement Request reflect the accomplishments between Reimbursement Requests.

#### Project Information

Member Community: \_\_\_\_\_

Project Title: \_\_\_\_\_

Is the project complete? \_\_\_\_\_ If yes, is this the final reimbursement request? \_\_\_\_\_

Add additional page(s) to respond to the following questions:

- 1) Summarize progress and/or accomplishments during this reporting period as related to your project implementation schedule. (500 word maximum)
- 2) Difficulties and delays encountered during this reporting period. (500 word maximum)
- 3) Describe progress towards Project tasks. (500 word maximum)

#### Authorized Signature

I certify that the information in this Progress Report is accurate and reflects current status of the Project. Furthermore, I affirm that the information contained herein is, to the best of my knowledge and belief, accurate and complete.

Name (print or type): \_\_\_\_\_

Title: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Signature: \_\_\_\_\_

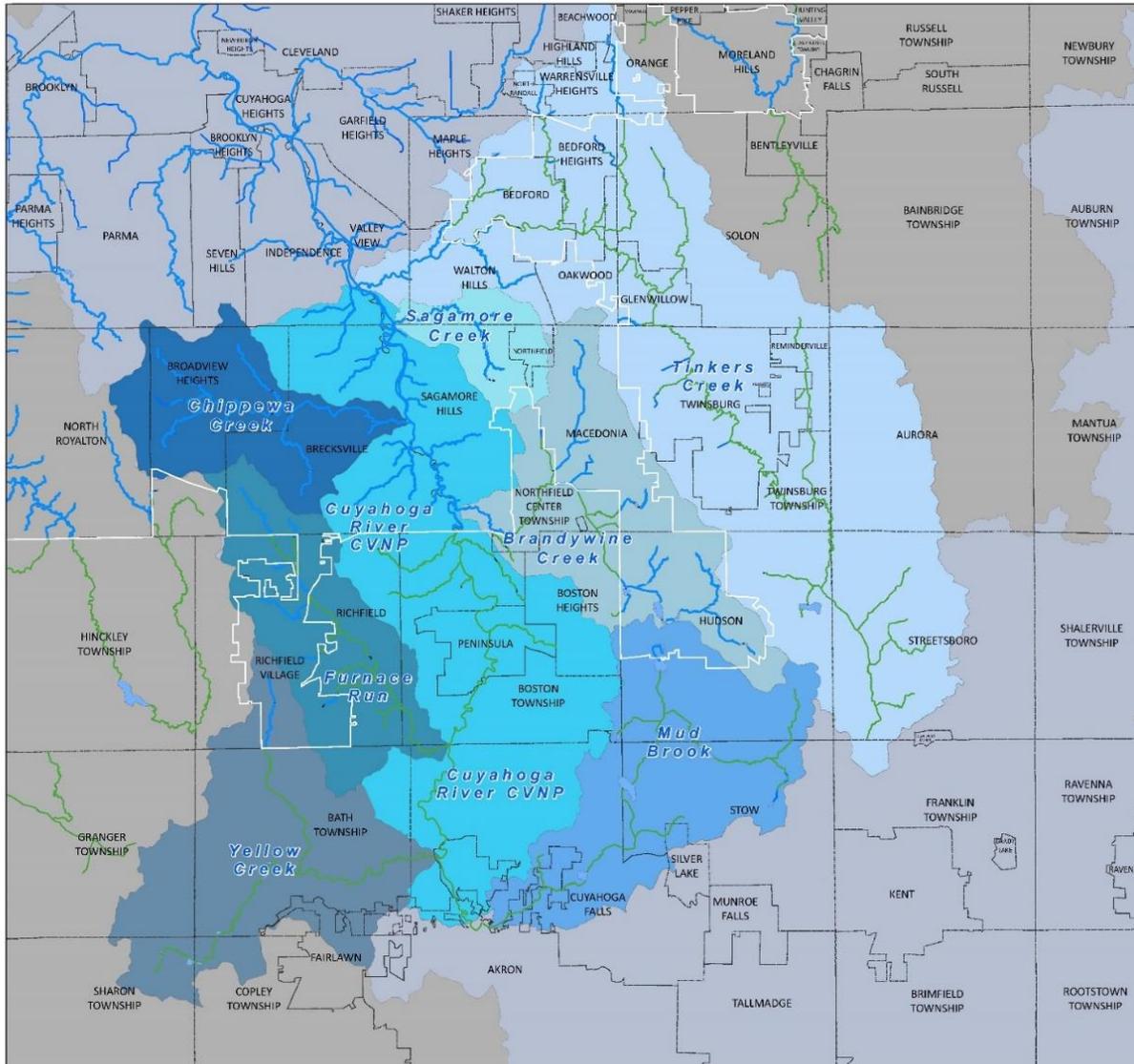
Date: \_\_\_\_\_

# Questions



Linda Mayer  
Grant Programs Administrator  
[MayerL@neorsd.org](mailto:MayerL@neorsd.org)  
216-253-2147

# Stormwater Master Plan



## Cuyahoga River - South

-  Regional Stormwater System in NEORS D Service Area
-  Regional Stormwater System not in NEORS D Service Area
-  Service Area
-  Community

 **Northeast Ohio  
Regional Sewer District**

Coordinate System : Ohio State Plane North  
Datum : NAD 1983 , NAVD 1988  
Projection : Lambert Conformal Conic  
Sources : NEORS D GIS

Map Created: October 2017

1:72,379



This information is for display purposes only. The Northeast Ohio Regional Sewer District (NEORS D) makes no warranties, expressed or implied, with respect to the accuracy of and the use of this map for any specific purpose. This map was created to serve as base information for use in Geographic Information Systems (GIS) for a variety of planning and analysis purposes. The NEORS D expressly disclaims any liability that may result from the use of this map. For more information, please contact NEORS D GIS Services, 3900 Euclid Avenue, Cleveland, Ohio 44115 (216) 883-6600 — [GIS@neorsd.org](mailto:GIS@neorsd.org)

# Implementing Master Planning Recommendations

## Baseline Recommendations

- Policy recommendations to community
  - Flood Damage Prevention Ordinance: Compensatory Storage/No-Net Loss
  - Riparian Setback Ordinance
  - Stormwater Management Ordinance - Reduce runoff volumes for redevelopment projects based on pre-redevelopment impervious area

**Reach out to WTL if Interested in Pursuing Updates**

# Implementing Master Planning Recommendations

## Baseline Recommendations

- Small bank/channel protection, monitor, or structural repairs:
  - Small Scale SWIM Project
  - SW Construction Plan Prioritization
  - Refer recommendation to owner to implement

# Implementing Master Planning Recommendations

## System Enhancement

### Recommendations (large RSS projects):

- SW Construction Plan prioritization – Problem Area preferred alternative were:
  - Prioritized and scheduled,
  - Identified for property acquisition,
  - Submitted for advanced planning, or
  - Deferred

# Implementing Master Planning Recommendations

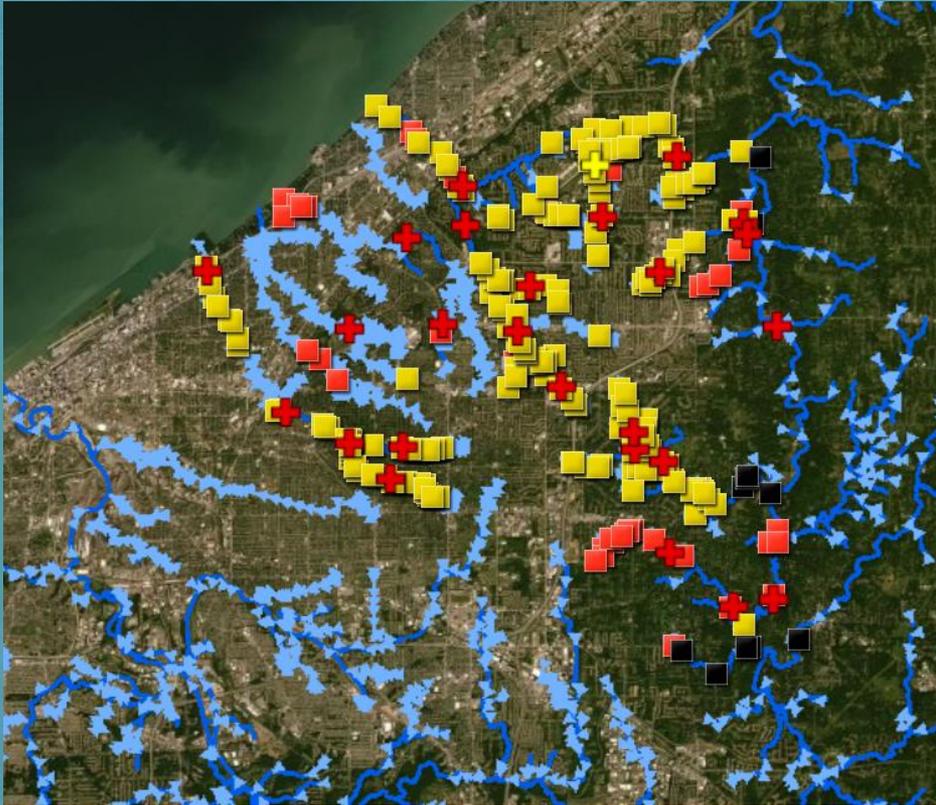
## Community Reports:

- Overview of SWMP study
- Planning level recommendations within each community for...
  - Baseline projects
  - System Enhancements

**Delivered to each Community**  
**- Option to request meeting to review -**

# Stormwater Master Plan

## Data Sharing with Community Members



- Culverted Stream CCTV/PACP Reports
- Spherical Imagery of Open Streams
- Inventory of RSS Crossings
- SWMM Models of Sub-watersheds
- SWMP Report



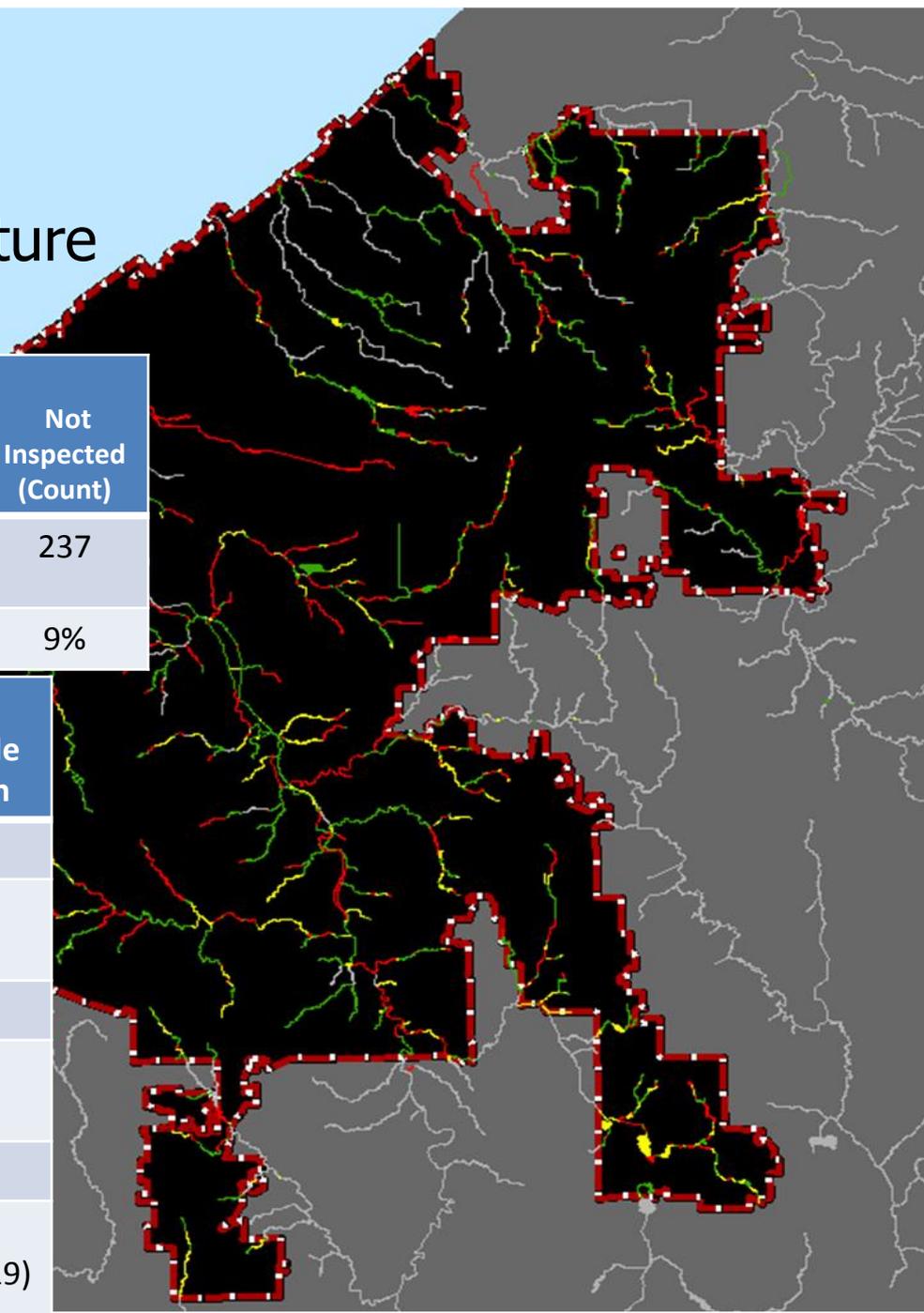
# Questions



# SWIM

March 2020

## SWSA State of the Infrastructure Structural Condition: B-



RSS	Total (Count)	Good Condition (Count)	Acceptable Condition (Count)	Not Acceptable Condition (Count)	Not Inspected (Count)
Total	2,811	1,689	426	459	237
Percent	100%	60%	15%	16%	9%

Asset Class Type	Overall Grade	Assets Inspected	Not Acceptable Condition
Crossings	B-	1,057	191
Culverted Streams	B-	156	26
Basins	B-	96	15
Major Structure	B-	15	4
Streams	B-	1,250	223
Total	B-	2,574 (91%)	459 363 (3/2019)

**Stormwater Service Area**  
**Structural Condition Score**

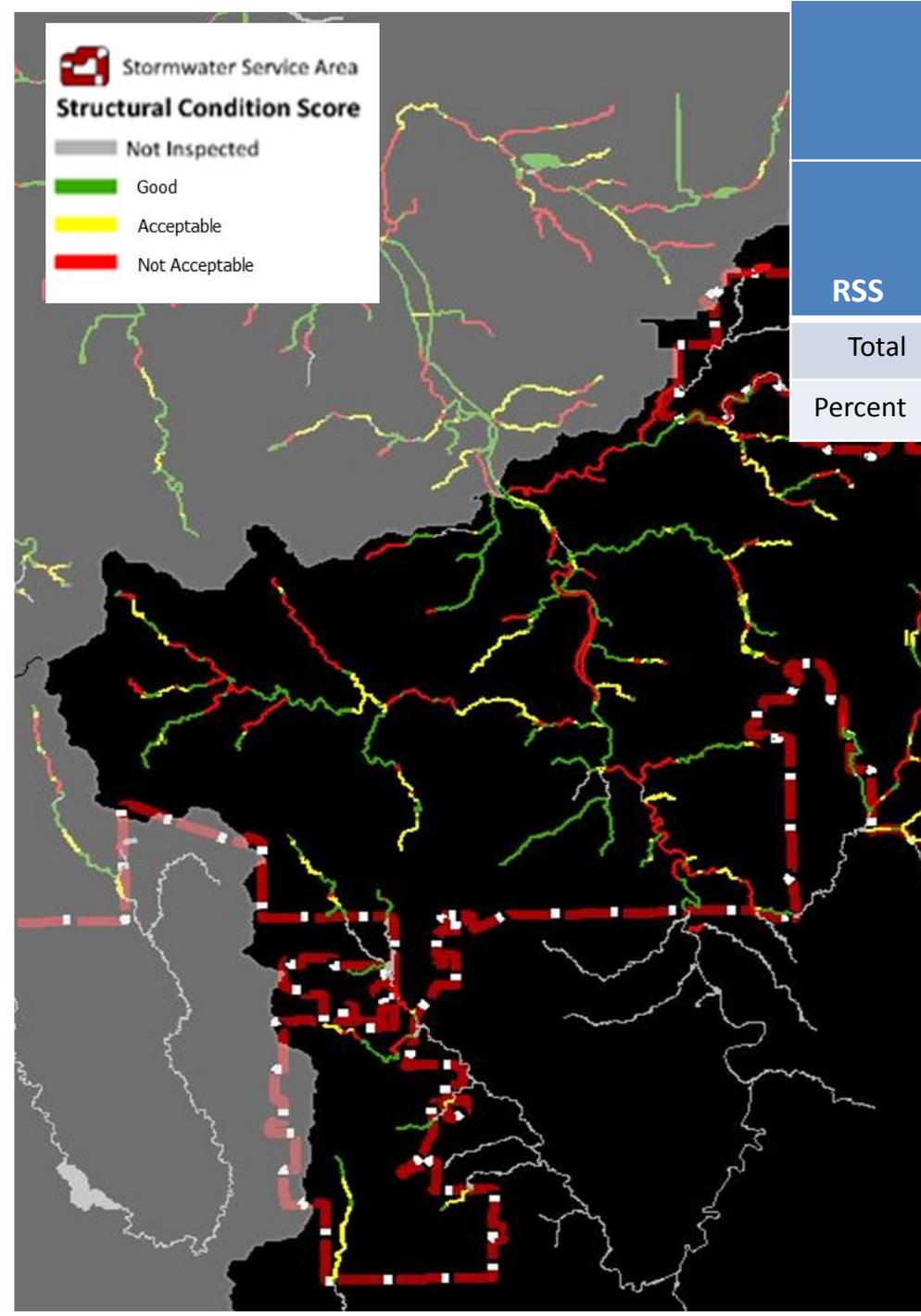
- Not Inspected
- Good
- Acceptable
- Not Acceptable

# State of the Infrastructure

## Structural Condition: B-

RSS	Total (Count)	Good Condition (Count)	Acceptable Condition (Count)	Not Acceptable Condition (Count)	Not Inspected (Count)
Total	685	403	120	143	19
Percent	100%	59%	17%	21%	3%

Asset Class Type	Overall Grade	Assets Inspected	Not Acceptable Condition
Crossings	B-	269	56
Culverted Streams	C+	24	7
Basins	B-	21	4
Major Structure	B-	21	2
Streams	B-	350	74
Total	B-	666	143 (105 3/2019)



# State of the Infrastructure: BTU and Crossing Indian Creek

Asset #: IC00068  
Macedonia: S Bedford Road  
BTU Structural BRE= 16  
Debris & Sediment BRE=15



# State of the Infrastructure: Crossing Walton Hills

Asset #: TS00105

Walton Hills: SR 8

Stream Structural BRE= 9

Sediment & Debris BRE= 12



# State of the Infrastructure: Crossing Brecksville

Asset #: CL00346

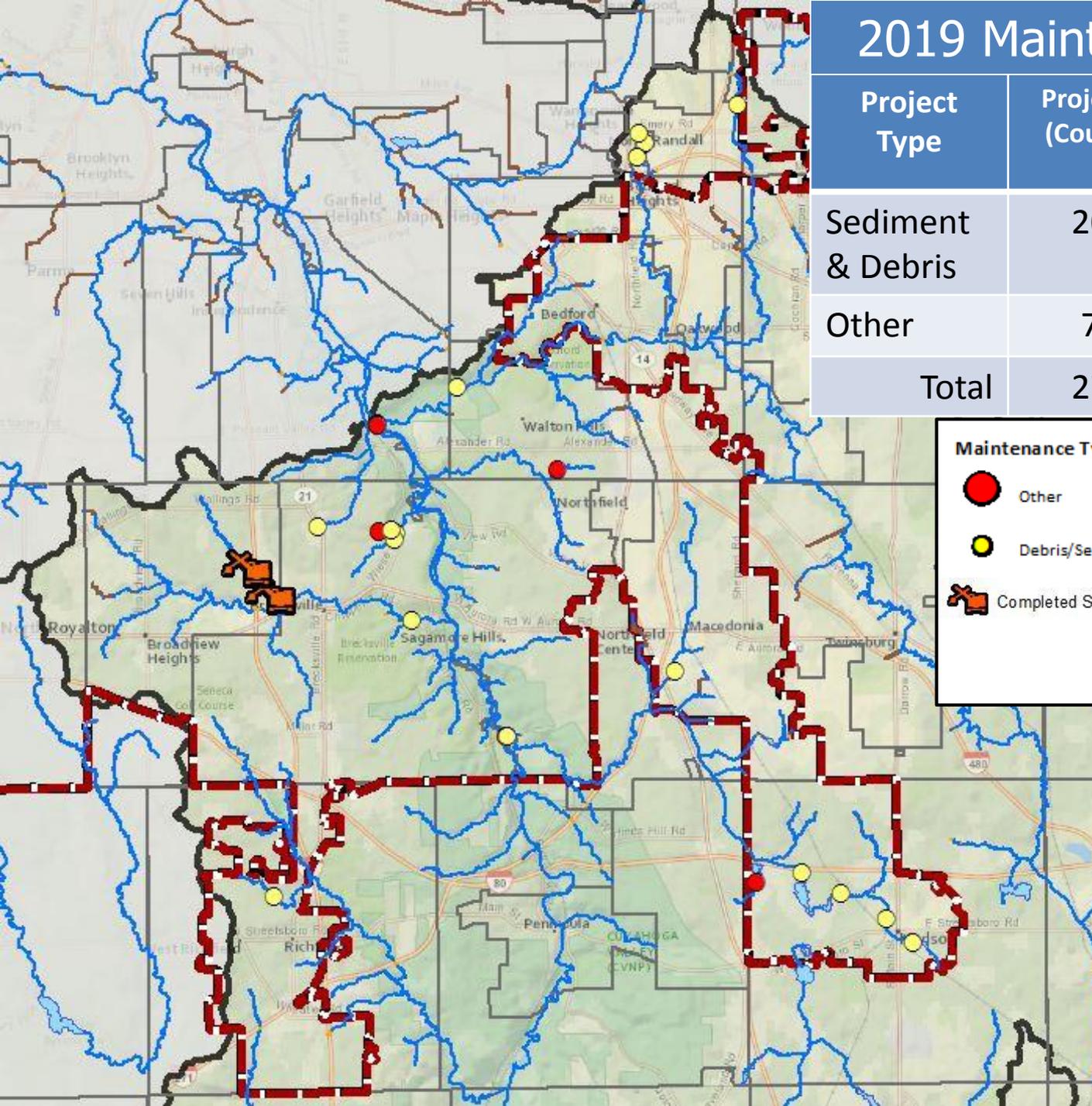
Brecksville: Riverview Road

Structural BRE= 24



# 2019 Maintenance Projects

Project Type	Projects (Count)	Debris Removed (CY)	Sediment Removed (CY)
Sediment & Debris	20	338	556
Other	7		
<b>Total</b>	<b>27</b>	<b>338</b>	<b>556</b>



**Maintenance Type**

- Other
- Debris/Sediment Removal
- Completed Small Scale Project
- Watershed Boundary
- Stream
- Major Structure
- Basin
- Crossing
- Culverted Stream
- Stormwater Service Area
- Community Boundary

# Small Scale Maintenance Project: Dredging Cuyahoga River Mainstem Southeast

Asset #: CE00017, CE00018, CE00019  
Sagamore Hills Twp: Ohio & Erie Canal, CVNP  
Sed & Debris BRE=15, 9, 9 (respectively)



# Small Scale Maintenance Project: Streambank Stabilization Chippewa Creek

Asset #: CC00082

Broadview Heights: Westminster Drive

Stream Structural Condition = 4

Project Cost: \$48,000



# Small Scale Maintenance Project: Streambank Stabilization Chippewa Creek

Asset #: CC00080

Broadview Heights: Harris Road

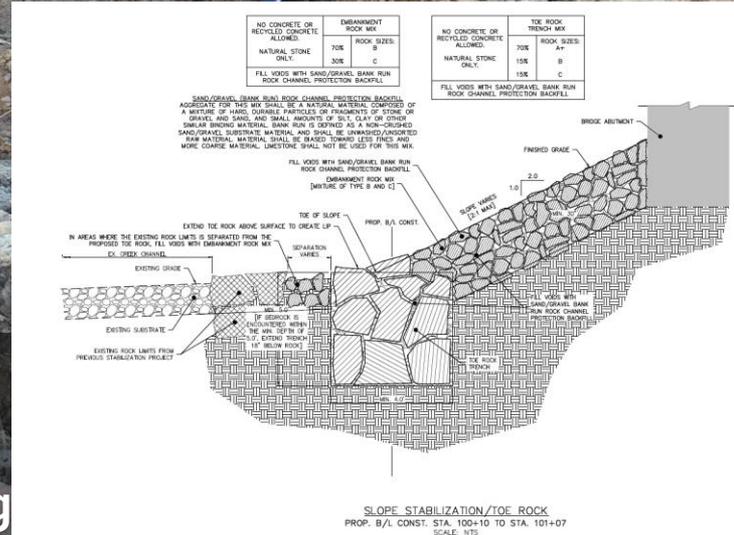
Stream Structural Condition = 4

Project Cost: \$32,600



# Small Scale Maintenance: Temporary Streambank Stabilization West Creek [Planned Small Scale Project]

Feb 2020



Asset #: WC00067  
Brooklyn Heights  
Temporary Stabilization Upstream and Under Bridge

# Monitoring Landcaster Bridge

Feb 2016



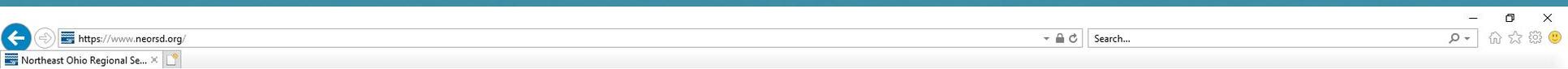
# Questions



# Stormwater Design and Construction Program



# Stormwater Storymap



NOTICE: Southerly Electrical Infrastructure I

Doing business with us ▸

Industrial Customers ▸

Engineering & Construction

Plan Review

Procurement

Register as a New Vendor /  
iSupplier Login

Bids and Proposals: Active,  
Closed, and Awarded

Business Opportunity Program:  
Get certified

Event Calendar

GovDeals Surplus Items

Capital Improvement Plan

Stormwater Construction  
Program

Opportunity Corridor on-site  
stormwater management  
strategy report

*qualify for a lower  
? We can help.*

**Programs**

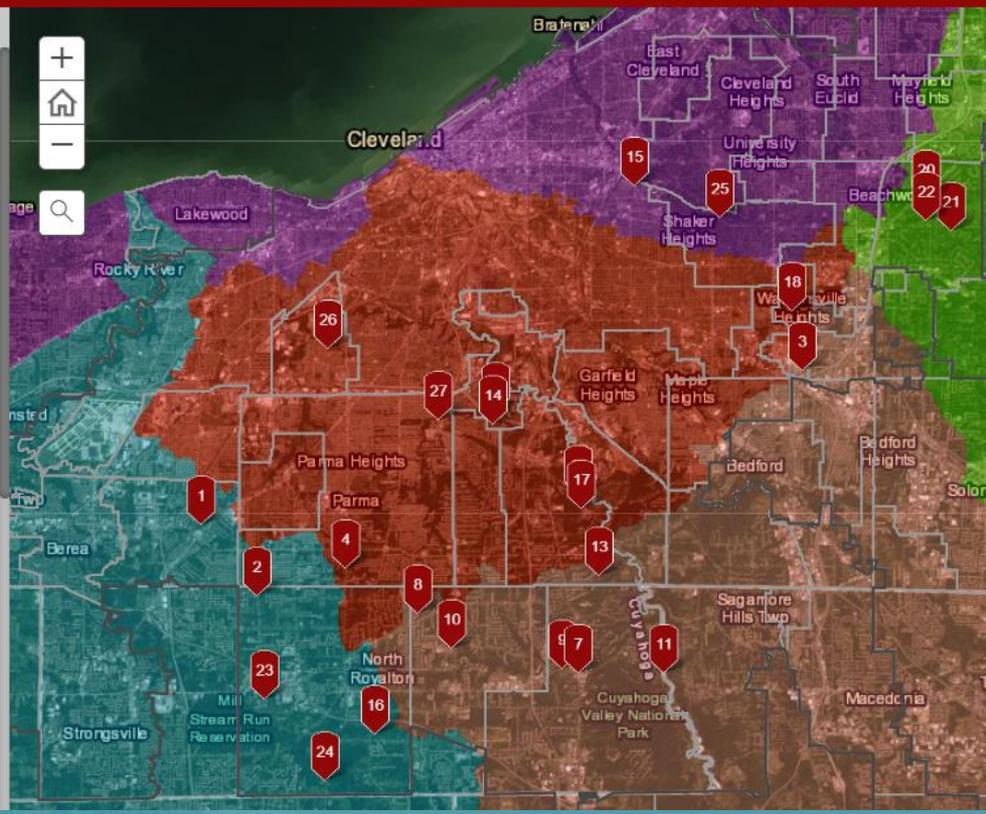
# NEORSD Stormwater Design & Construction Program

Navigate using the tabs below and by clicking the images to view more details on our completed, current design, and current construction stormwater projects. Zoom in to view satellite imagery and Regional Stormwater culverts, conduits, etc). Use the "Zoom To" drop down menu to locate your watershed.

- All Projects
- Design**
- Construction
- Complete



 <b>1</b> Abram Creek / Big Creek Parkway Detention...	 <b>2</b> Baldwin Creek Stabilization Near Abb...	 <b>3</b> Bear Creek Culvert Removal	 <b>4</b> Big Creek Stream Stabilization Upstream...
 <b>5</b> Brandywine Creek - Barlow Community...	 <b>6</b> Brandywine Creek - Owen Brown Bridge...	 <b>7</b> Chippewa Creek Bank Stabilization at Route 21	 <b>8</b> Chippewa Creek Flood Reduction Near Echo...
 <b>9</b> Chippewa Creek Stabilization at...	 <b>10</b> Chippewa Creek Stream Stabilization Near...	 <b>11</b> Cuyahoga River Bank Stabilization Brecksville	 <b>12</b> Cuyahoga River Bank Stabilization at Railway...



# Design



# Bear Creek Improvements – North Randall

## Goals:

- Daylight or replace failing culverts
- Reduce flood elevations

## Current Design Phase:

- 50% Design
- Est. Construction Cost: \$1M



Figure 6: BA00013 Deteriorated Timber Section



Figure 7: BA00013 Failing Timber at Outfall Section



# Brookside Culvert Rehabilitation – Cleveland



2017



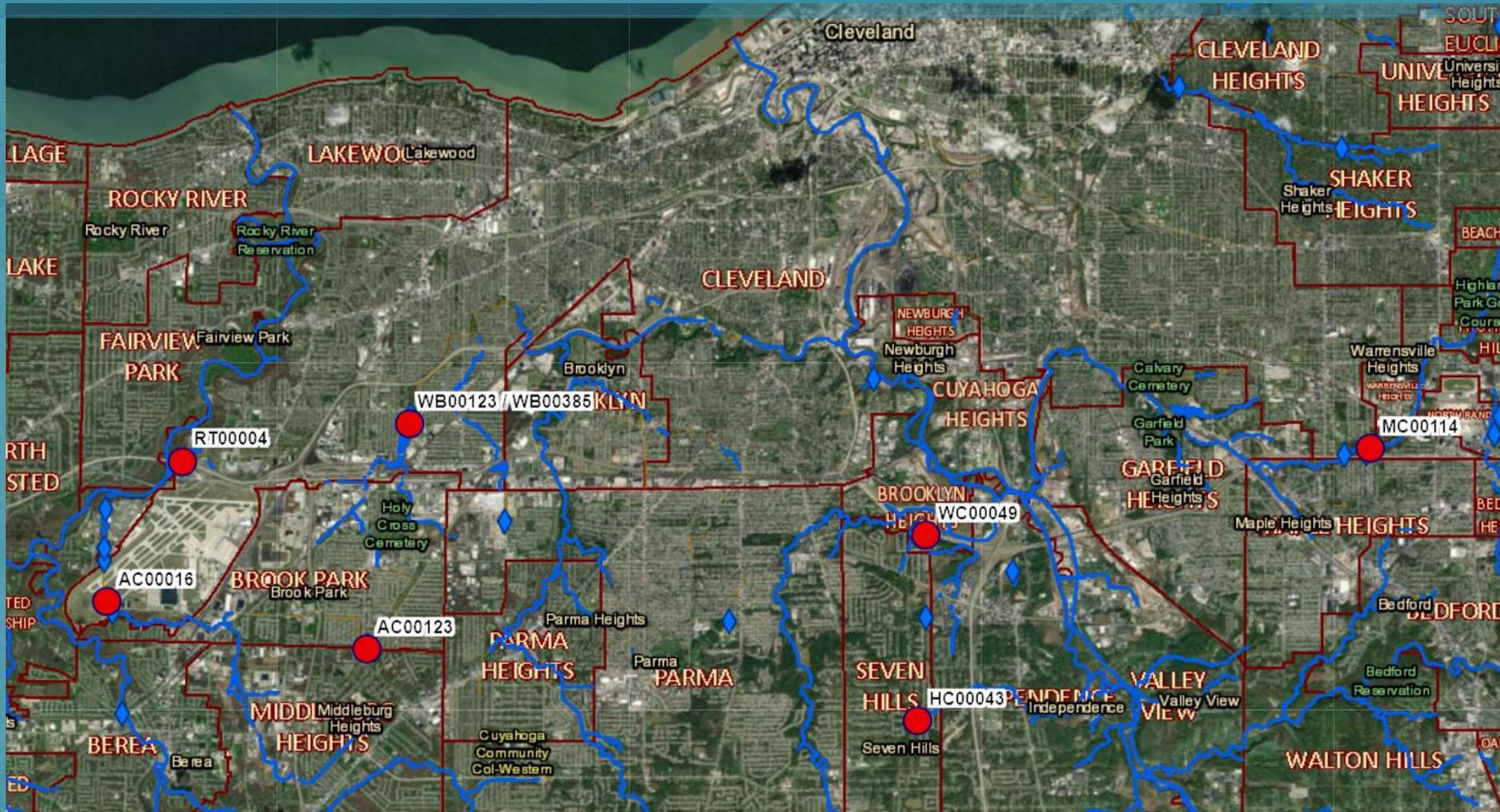
2018



2019



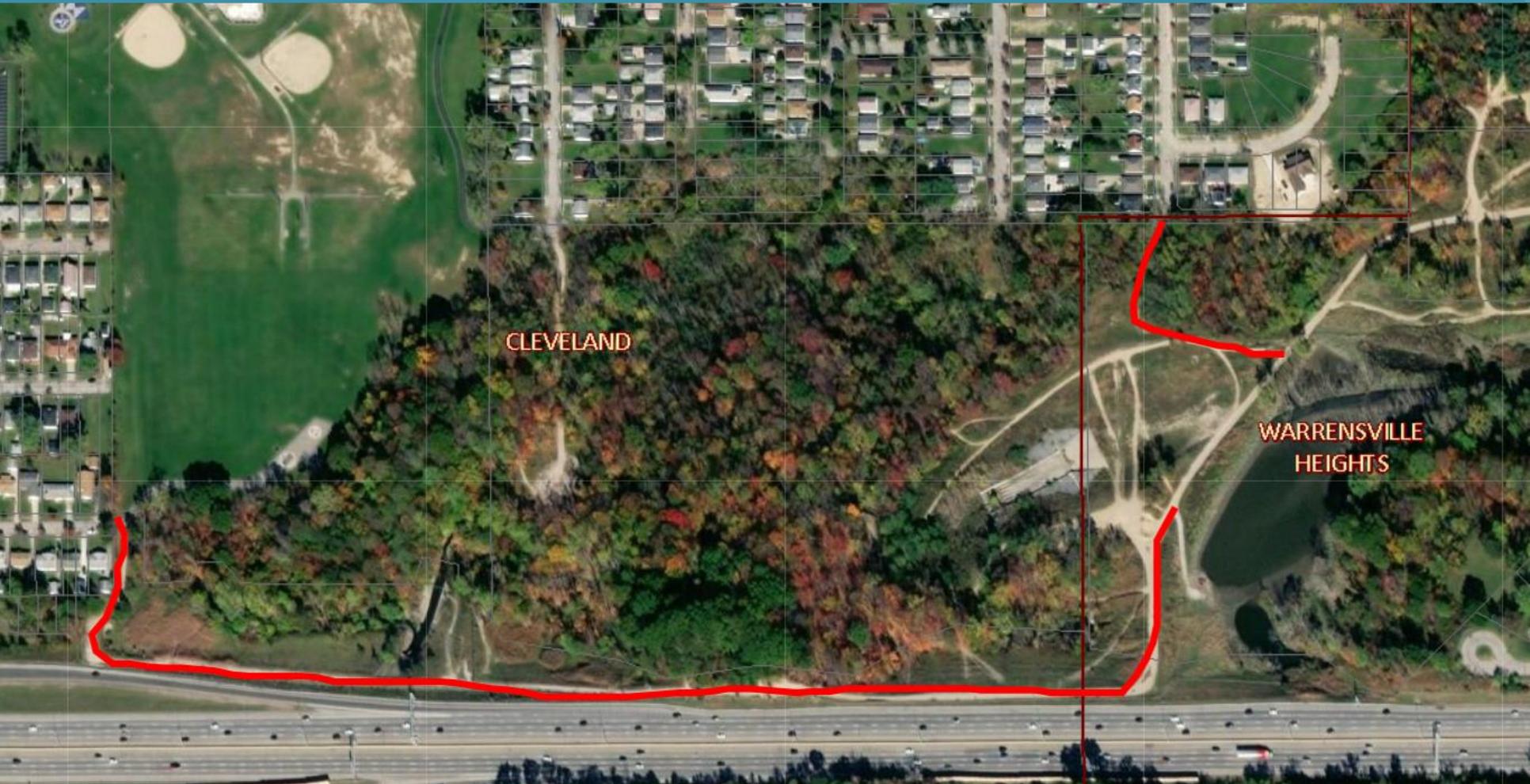
# Debris Racks and Access Roads in Various Locations



# AC00016 – Cleveland Hopkins Airport Culvert Debris Rack



# MC00114 - Kerruish Basin Access Drives



# HC00043 – Hemlock Creek Basin Debris Rack and Access Road

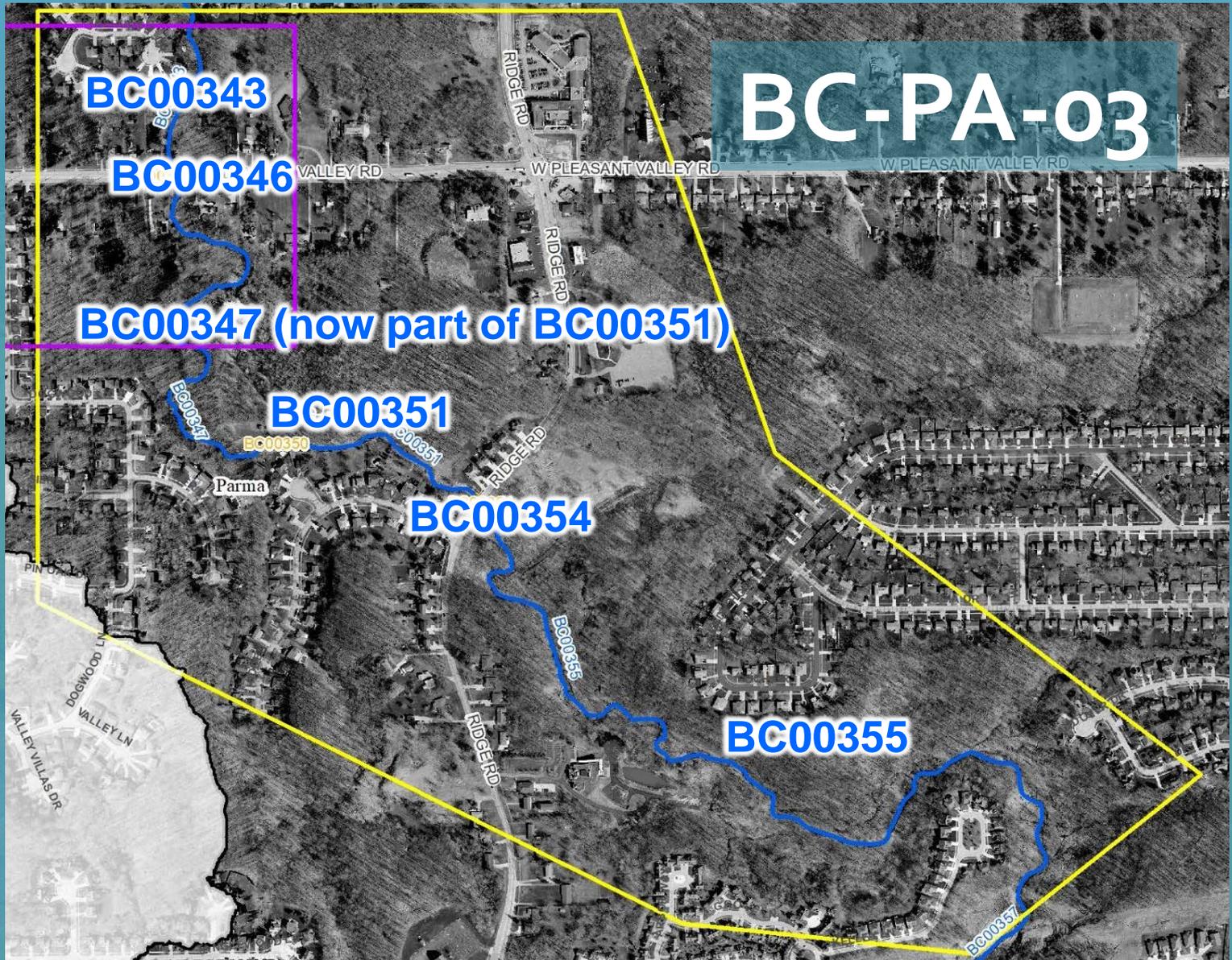


# WB00123 & WB00385 – Puritas Basin Access Roads

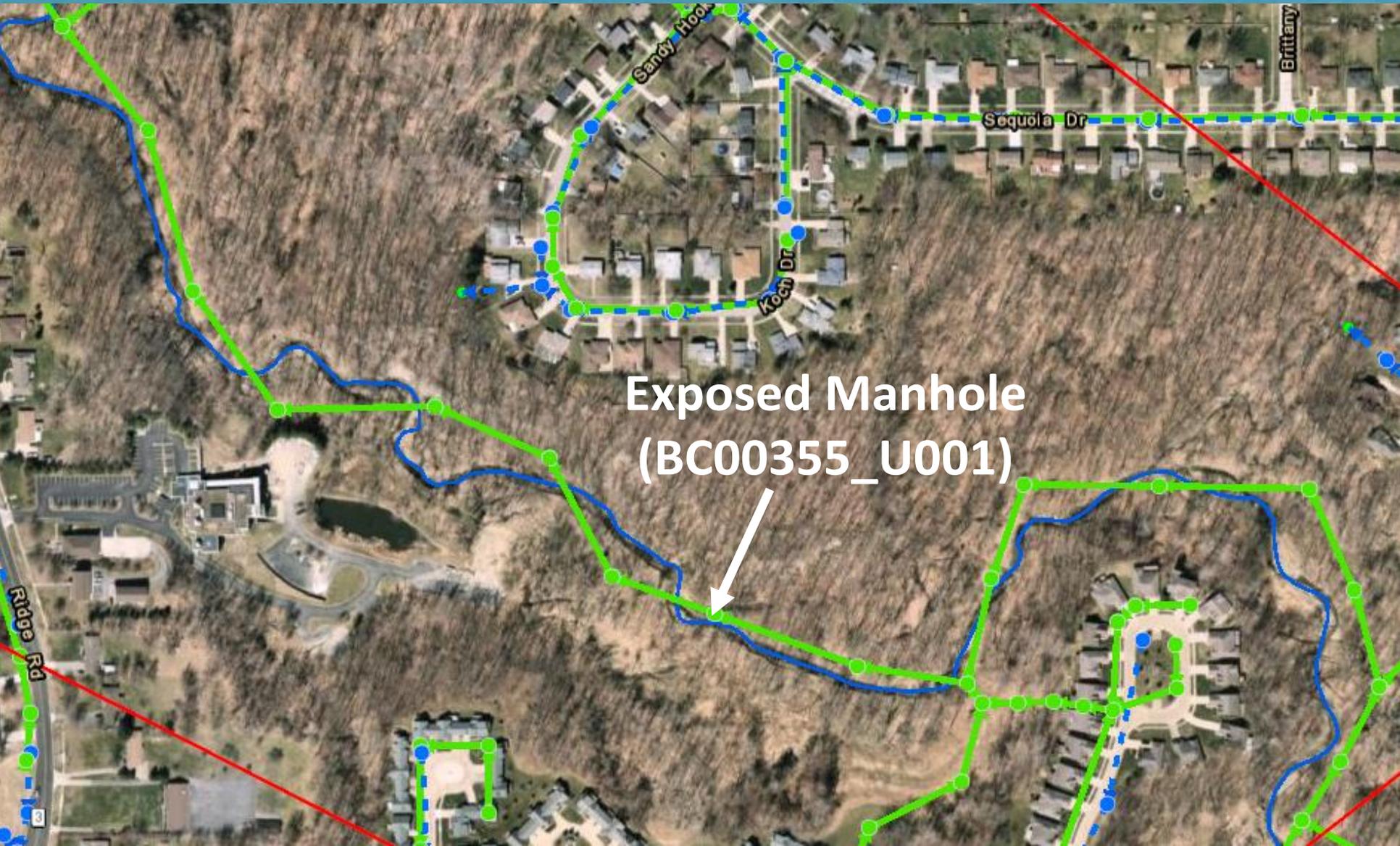




# Big Creek Stream Restoration Upstream and Downstream of Ridge Road



# BC00355



Exposed Manhole  
(BC00355\_U001)

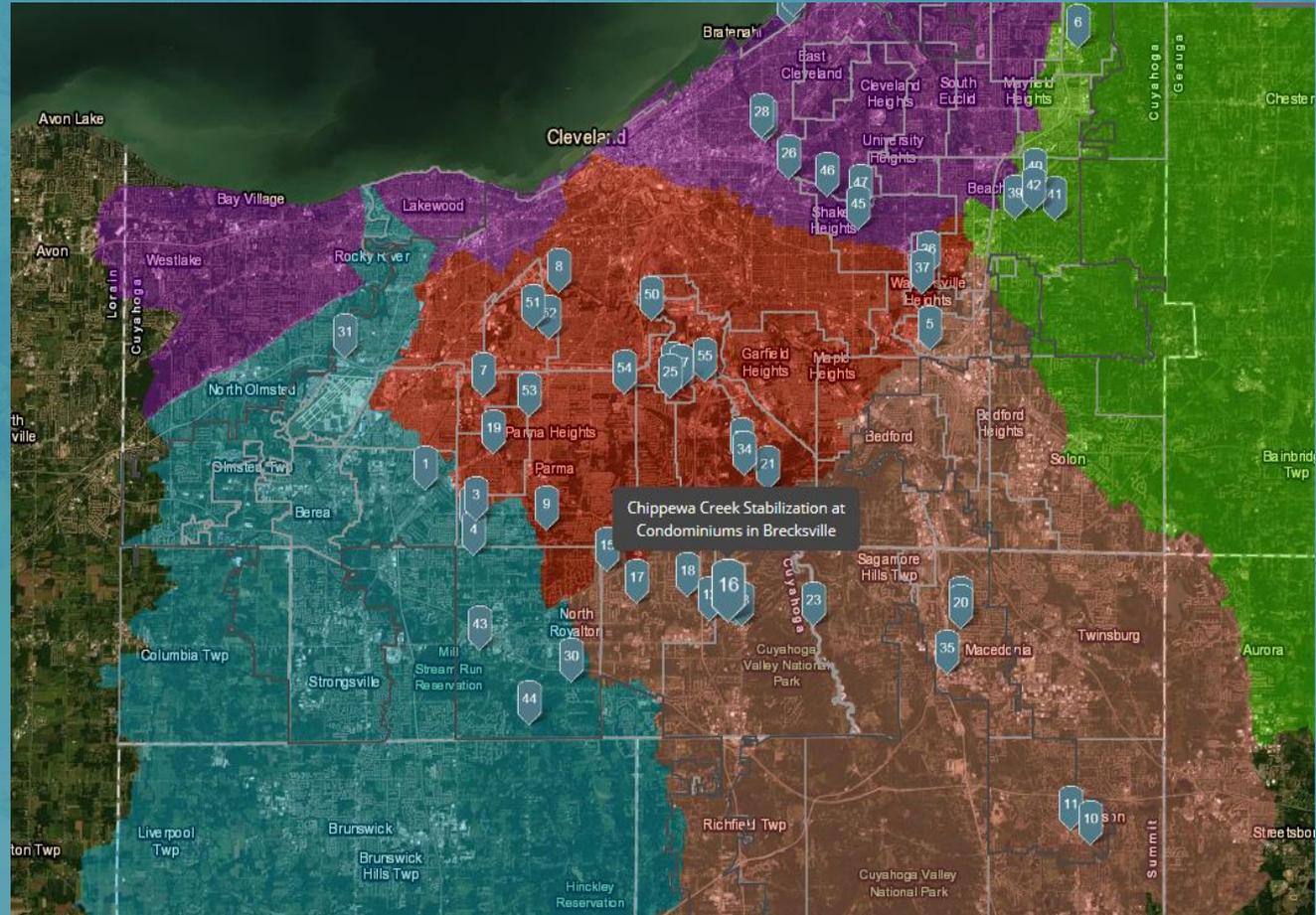


BC00351

# Upcoming Construction

Chippewa Creek is a tributary to the Cuyahoga River

Eroding right bank by Condominiums in Brecksville



# Chippewa Creek Stabilization at Condominiums in Brecksville

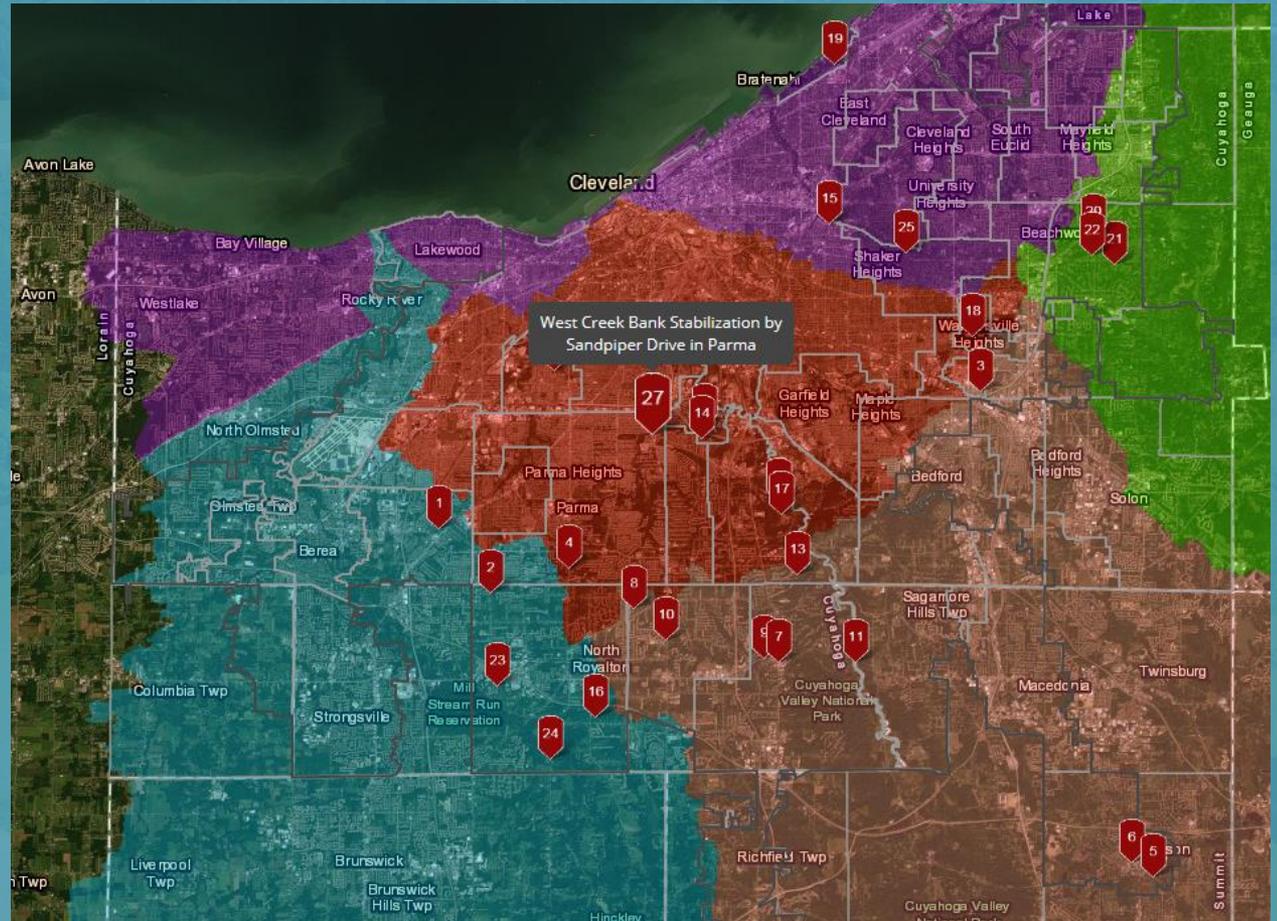


- *Eroding streambank within 12 ft of the condominiums*
- *Erosion within 6 ft of local sanitary sewer*
- *Stream infrastructure more cost effective than acquisition*
- *Approx. \$1.2M Construction Cost*
- *Excavate Floodplain on left bank*

# Upcoming Construction

West Creek is a tributary to the Cuyahoga River

Eroding banks by a nursing facility



# West Creek Stabilization by Sandpiper Drive



- *Stream infrastructure more cost effective than acquisition*
- *Large area of property impacted including large trees*
- *Approx. \$2.3M Construction Cost*

# Questions



# WTL Contact

**Meiring Borchers**  
216.881.6600 Ext. 6159  
Cell: 440.409.1766  
borcherdsm@neorsd.org



***Stormwater Program: Community Resources***  
<http://www.neorsd.org/communitystormwaterresources.php>