

*Watershed Advisory Committee
Lake Erie Direct Tributaries
& Chagrin River
March 12, 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

Frank Greenland, Director of Watershed Programs

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.
 - Expiring funds will be discussed based on the year they were earned, so next year they will be referred to as “2017” funds, rather than Year One funds.
- Communities that are at risk of losing funds have had conversations with their WTL. Only a few communities still fall in this category.

“Year-One” Funds

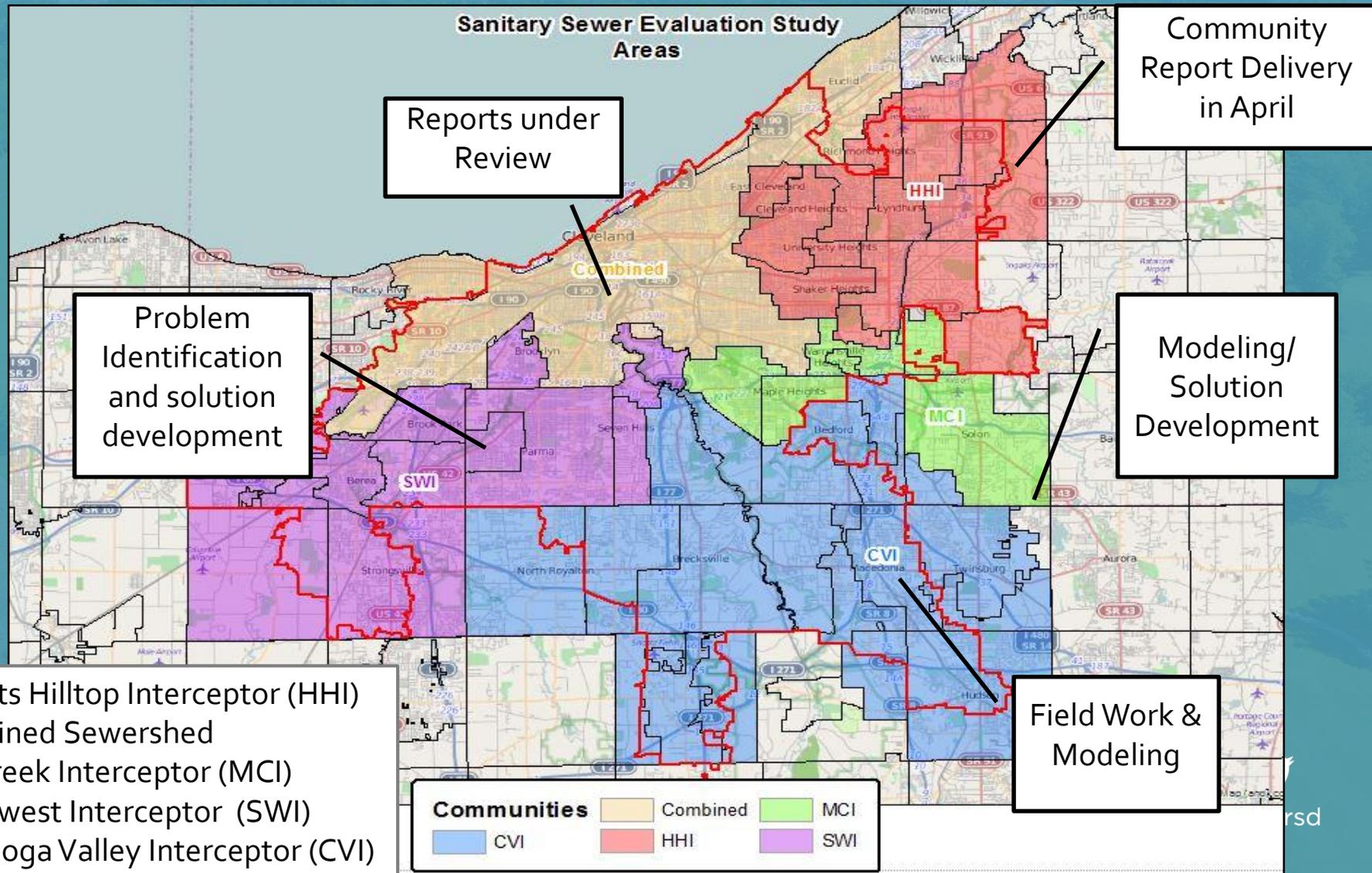
Community Cost Share

- What does this mean going forward?

Expiring funds to be applied for, collected during the following dates	Corresponding “Year Five,” apply by date
<i>January 1, 2013- December 31, 2016</i>	July 1, 2020
<i>January 1, 2017- December 31, 2017</i>	July 1, 2021
<i>January 1, 2018- December 31, 2018</i>	July 1, 2022
<i>January 1, 2019- December 31, 2019</i>	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*

Cost-saving Programs

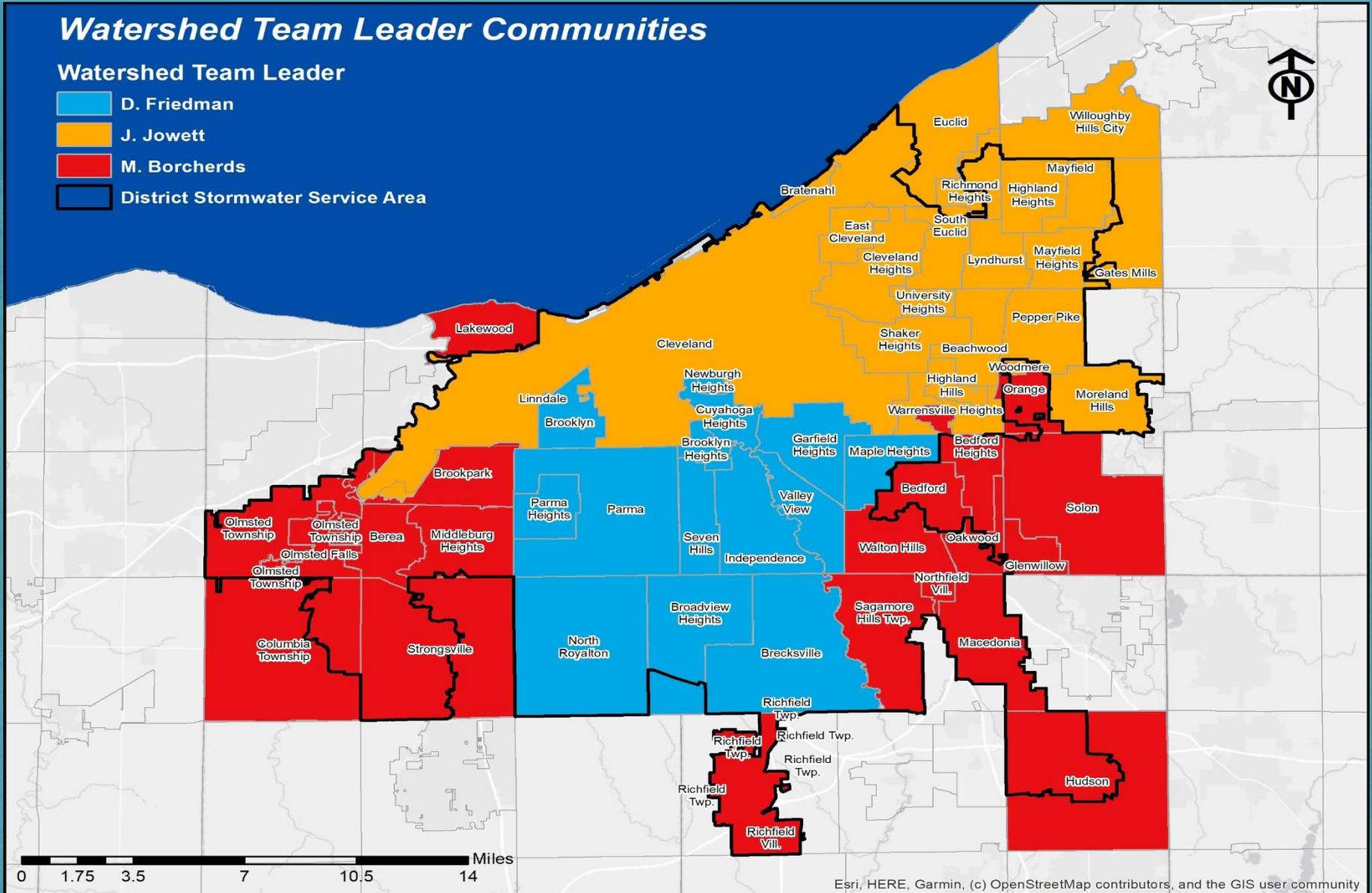
- *Homestead*
 - 65 and older *or* permanently disabled
 - Household income must not exceed \$33,500
- *Affordability*
 - Annual income is at or below 200% of the poverty level

Customer Service (216) 881-8247

Watershed Team Leader Communities

Watershed Team Leader

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



0 1.75 3.5 7 10.5 14 Miles

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 NEORS.

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.

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: _____

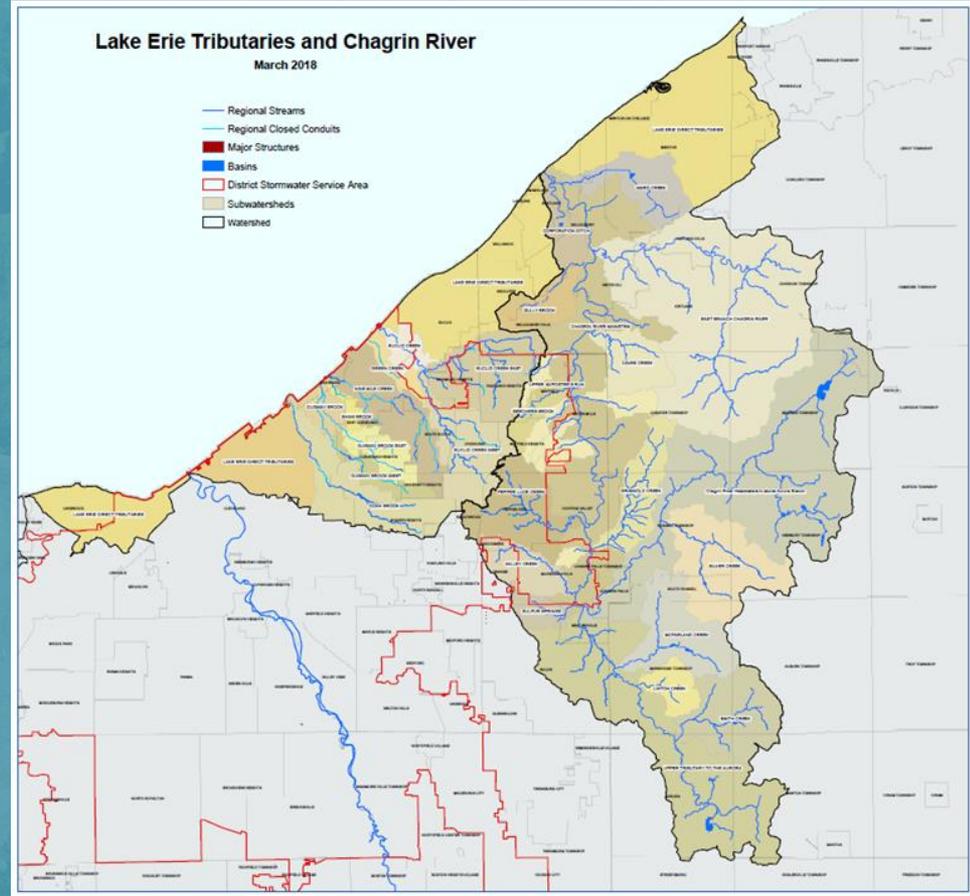
Date: _____

Questions



Linda Mayer
Grant Programs Administrator
MayerL@neorsd.org
216-253-2147

Stormwater Master Plan



Stormwater Master Planning (status through 1/31/2020)

Cuyahoga River South

Completion Date: June 2019



100 % Complete

Cuyahoga River North

Completion Date: March 2020



95% Complete

Rocky River

Completion Date: August 2020



84% Complete

Chagrin River / Lake Erie Tribs

Completion Date: May 2021



47% Complete

Stormwater Master Plan

Field Work Project Status



Task Item Status – 79% Complete

CCTV Inspection



Basin Inspection



16 basins inspected

Geomorphic Inspection



62.7 miles inspected (approximate)

Survey

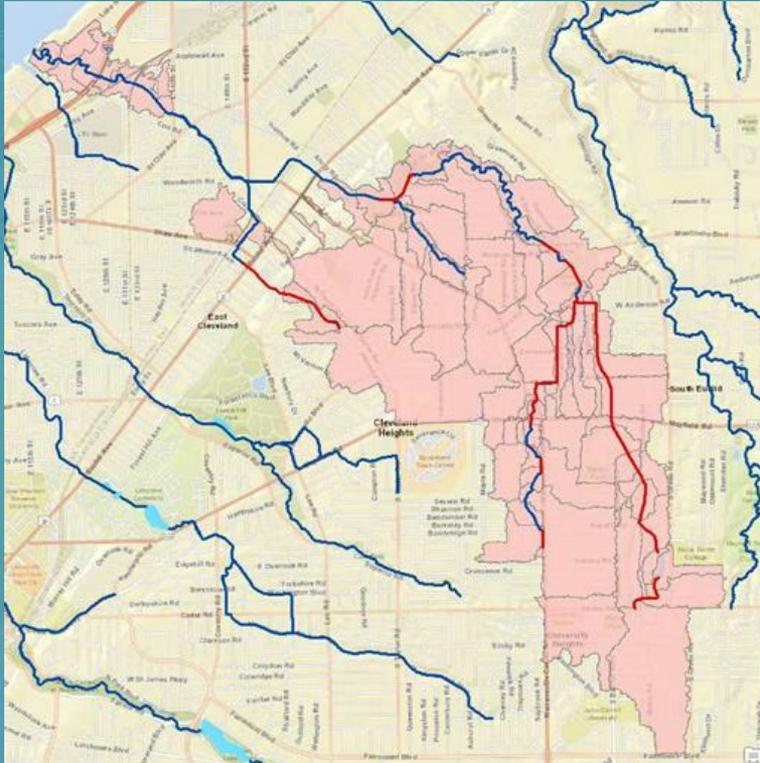


Crossing Inventory

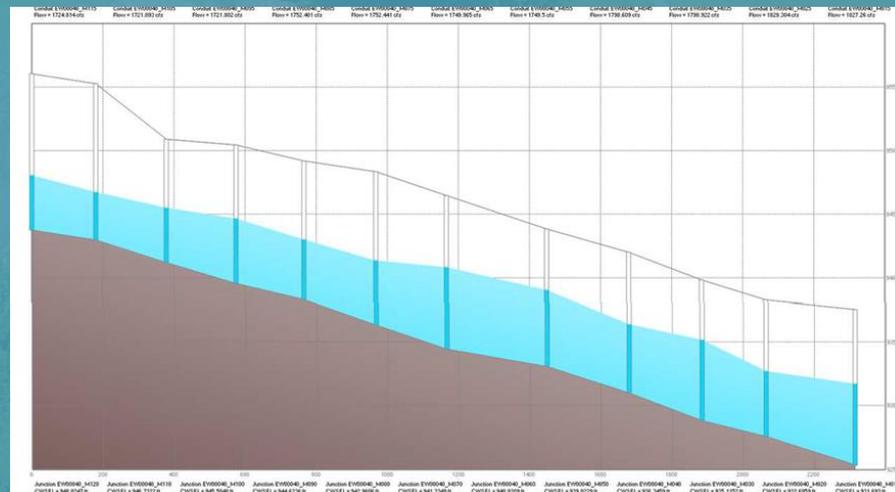


Stormwater Master Plan

Model Development Status



- Completed Models Doan Brook
 - Doan Brook
 - Beechers Brook
- Models Currently Under Construction
 - Euclid Creek (East, West, Mainstem)
 - Pepper Luce Creek
 - Nine-Mile Creek
 - Dugway (East & West Branch)



Stormwater Master Plan

Problem Area I.D. / Alternative Evaluation

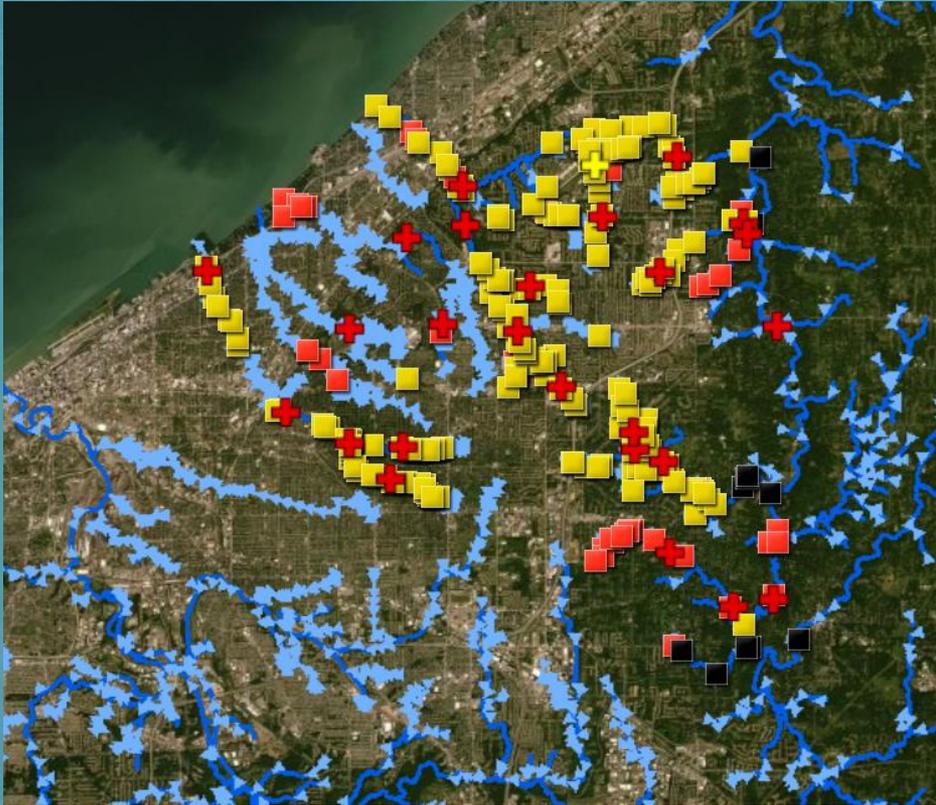


Start comparing structural problem areas with flooding problem areas:

- Doan Brook
- Beecher's Brook

Stormwater Master Plan

Data Sharing with Community Members



- Culverted Stream CCTV/PACP Reports
- Spherical Imagery of Open Streams
- Basin Bathymetric Data
- Inventory of RSS Crossings
- SWMM Models of Sub-watersheds



Stormwater Master Plan

Community Communication

- Continued Coordination with Member Communities
- Meet with communities
 - Problem Area Review
- SWMP Recommendations and Community Report - 2021

Your Watershed Team Leader serves as the point of contact between the communities and the District

Questions



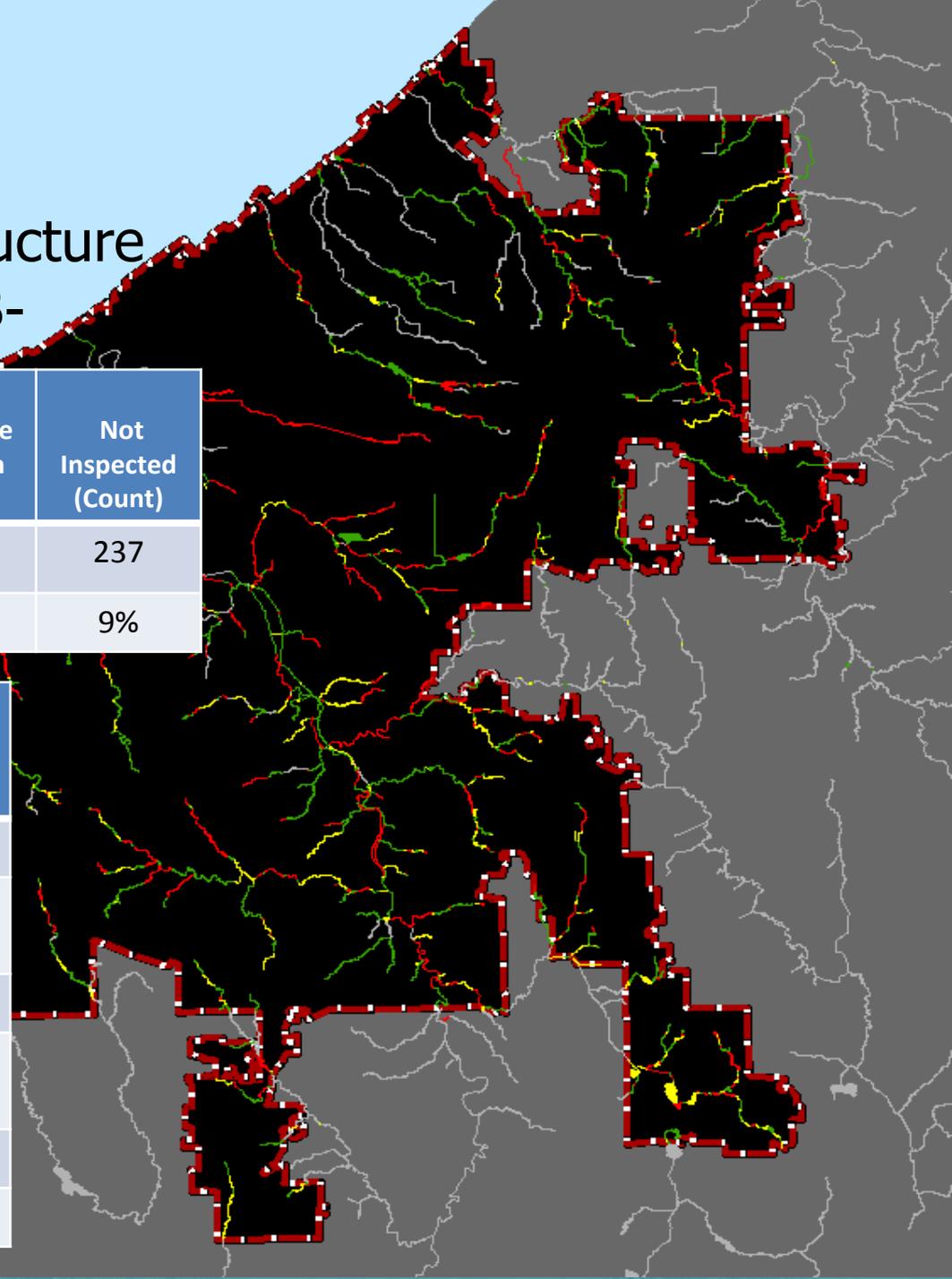
SWIM

March 2020

SWSA State of the Infrastructure Structural Condition: B-

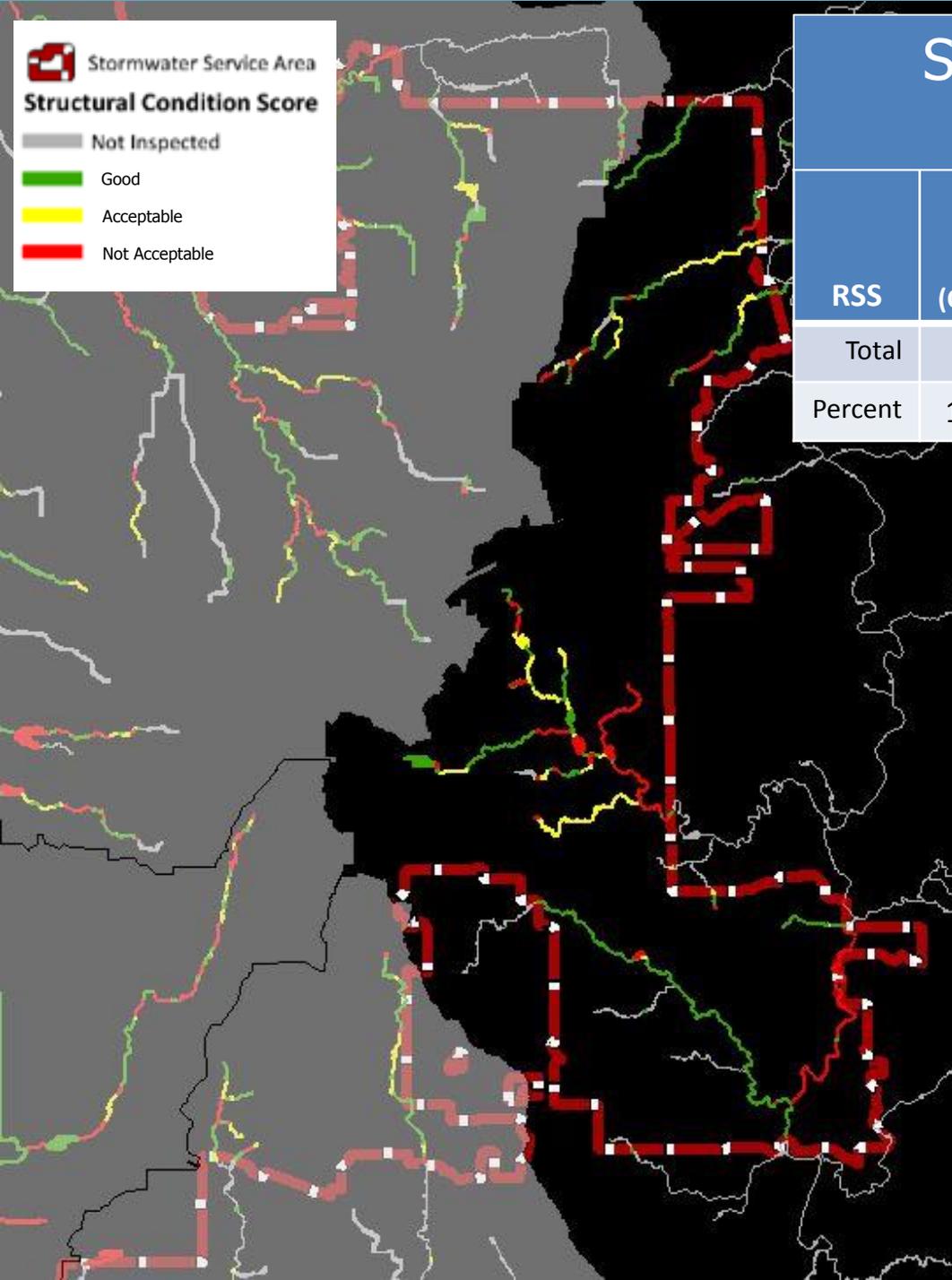
RSS	Total (Count)	Good Condition (Count)	Acceptable Condition (Count)	Not Acceptable Condition (Count)	Not Inspected (Count)
Total	2,811	1,689	426	459	237
Percent	100%	60%	15%	16%	9%

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	459



 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	190	104	31	29	10
Percent	100%	63%	16%	16%	5%

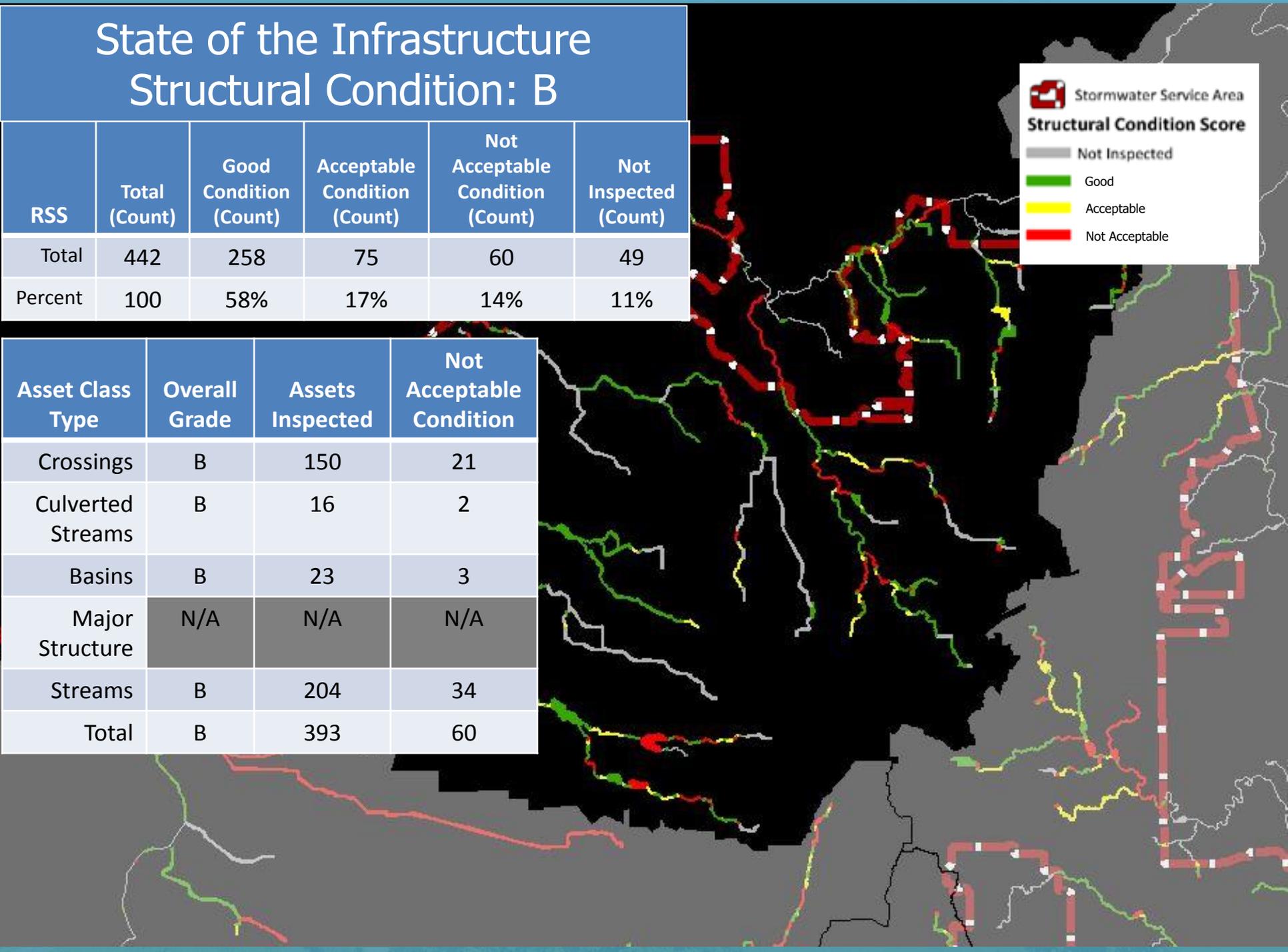
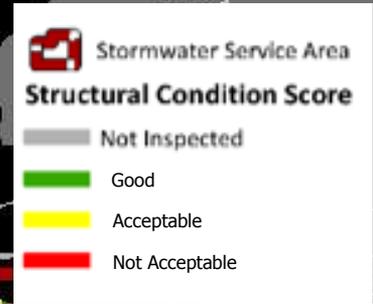
Asset Class Type	Overall Grade	Assets Inspected	Not Acceptable Condition
Crossings	B	79	11
Culverted Streams	B+	4	0
Basins	B-	8	2
Major Structure	N/A	N/A	N/A
Streams	B-	89	16
Total	B-	180	29

State of the Infrastructure

Structural Condition: B

RSS	Total (Count)	Good Condition (Count)	Acceptable Condition (Count)	Not Acceptable Condition (Count)	Not Inspected (Count)
Total	442	258	75	60	49
Percent	100	58%	17%	14%	11%

Asset Class Type	Overall Grade	Assets Inspected	Not Acceptable Condition
Crossings	B	150	21
Culverted Streams	B	16	2
Basins	B	23	3
Major Structure	N/A	N/A	N/A
Streams	B	204	34
Total	B	393	60



State of the Infrastructure: Culverted Stream Nine Mile Creek



State of the Infrastructure: Stream & BTU Euclid Creek East Branch



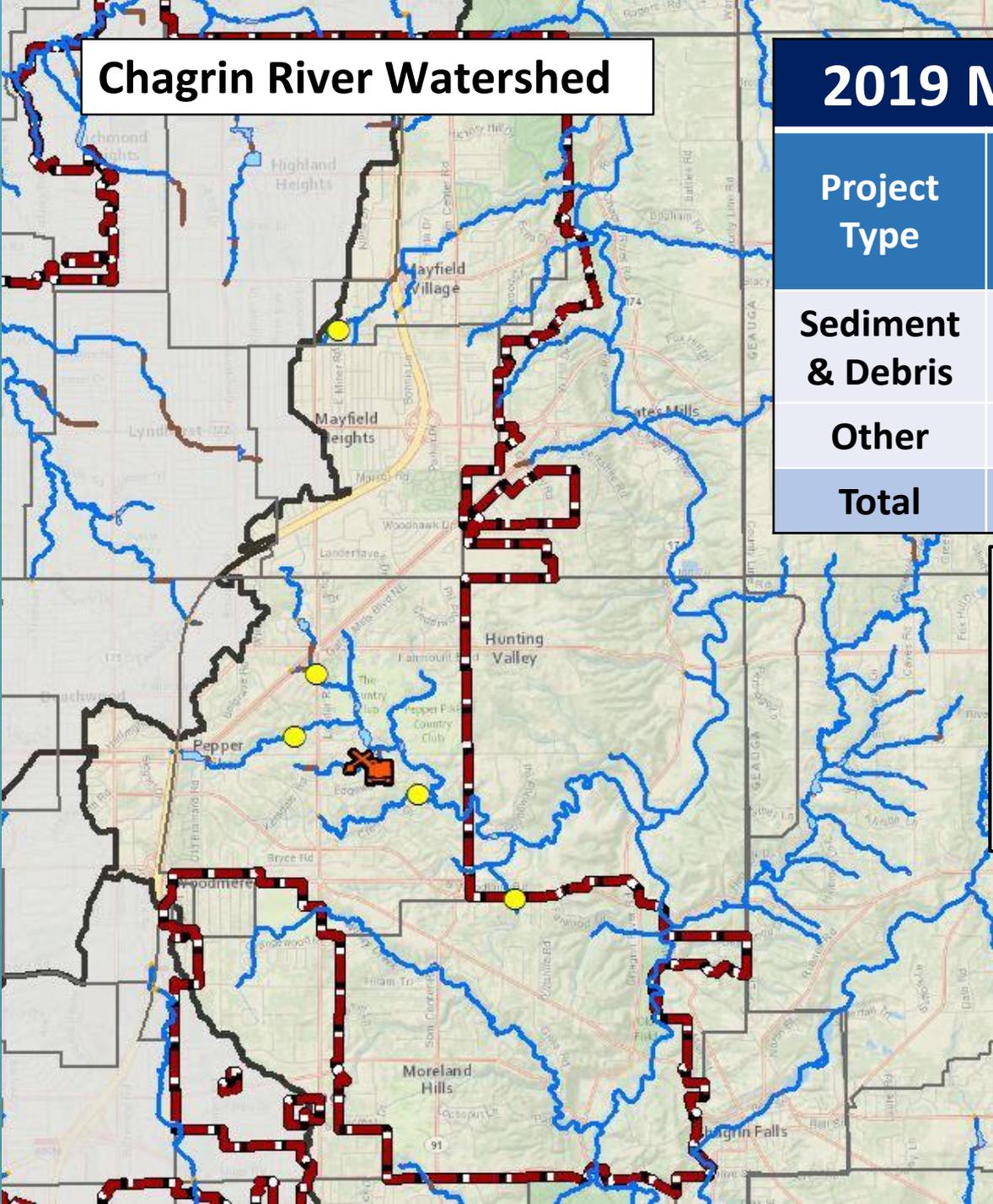
Chagrin River Watershed

2019 Maintenance Projects

Project Type	Projects (Count)	Debris Removed (CY)	Sediment Removed (CY)
Sediment & Debris	5	39	0
Other	1		
Total	6	39	0

Maintenance Type

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



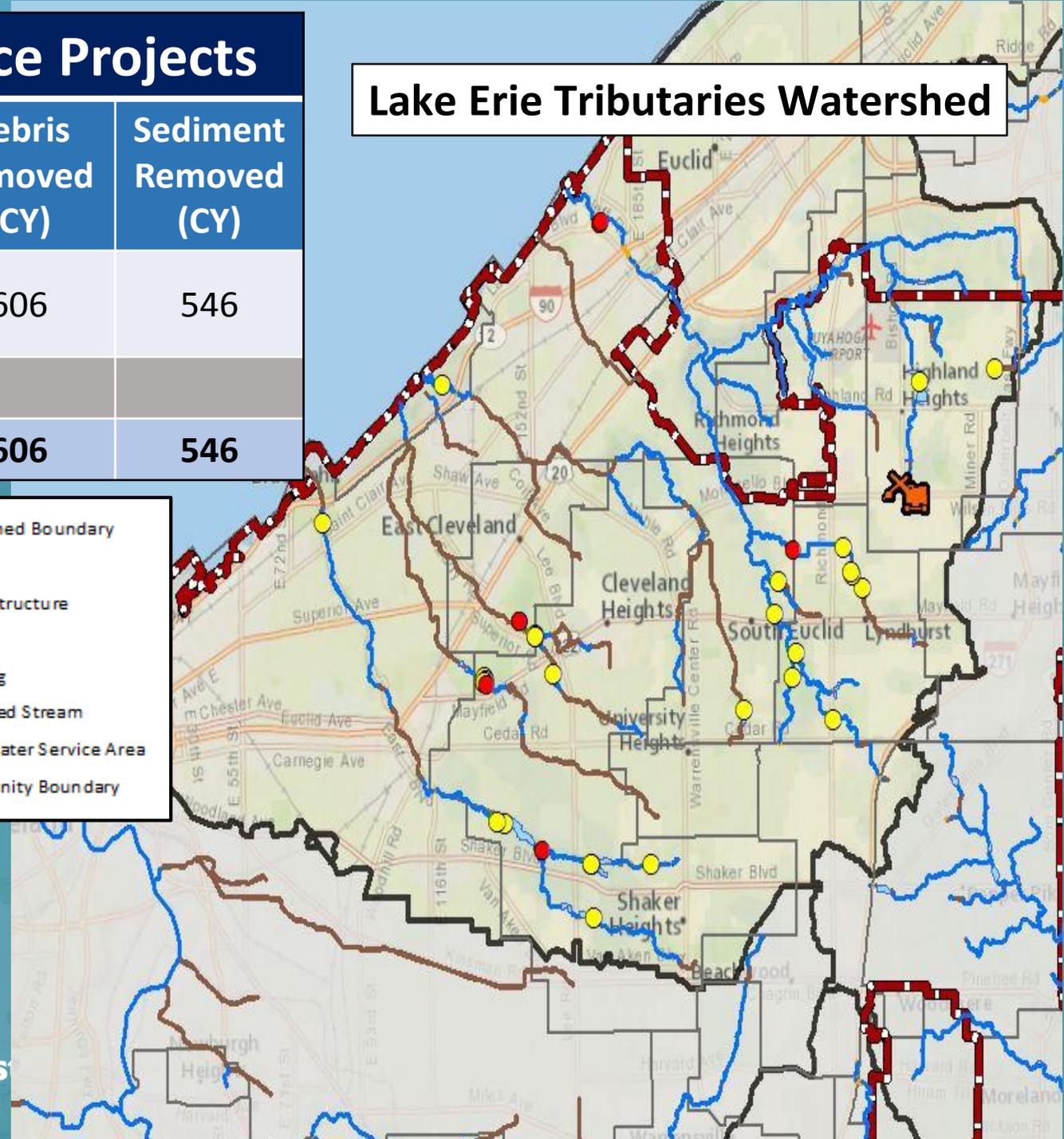
2019 Maintenance Projects

Lake Erie Tributaries Watershed

Project Type	Projects (Count)	Debris Removed (CY)	Sediment Removed (CY)
Sediment & Debris	30	606	546
Other	16		
Total	46	606	546

Maintenance Type

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



Maintenance: Green Lake Shaker Heights

Asset #: DBoo101
Shaker Heights
Green Lake Dredging- 480 CY
sediment removed from forebay.



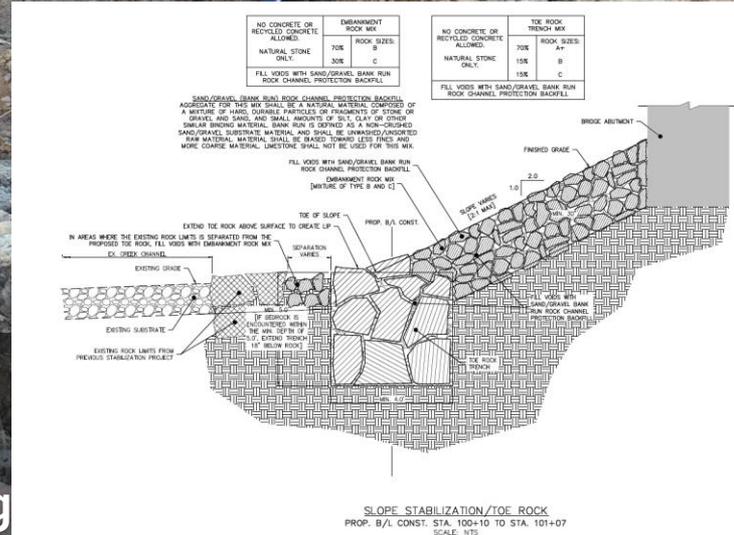
Small-Scale Maintenance: Euclid Creek East Branch Highland Heights

Asset #: EE00350
Highland Heights
Stabilize left bank at culvert outlet
adjacent to parking lot.



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



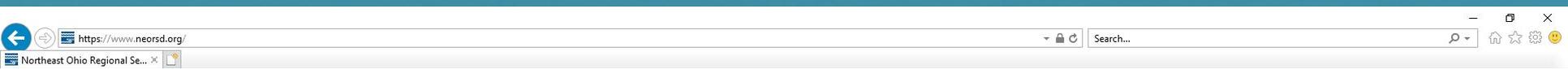
Questions



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

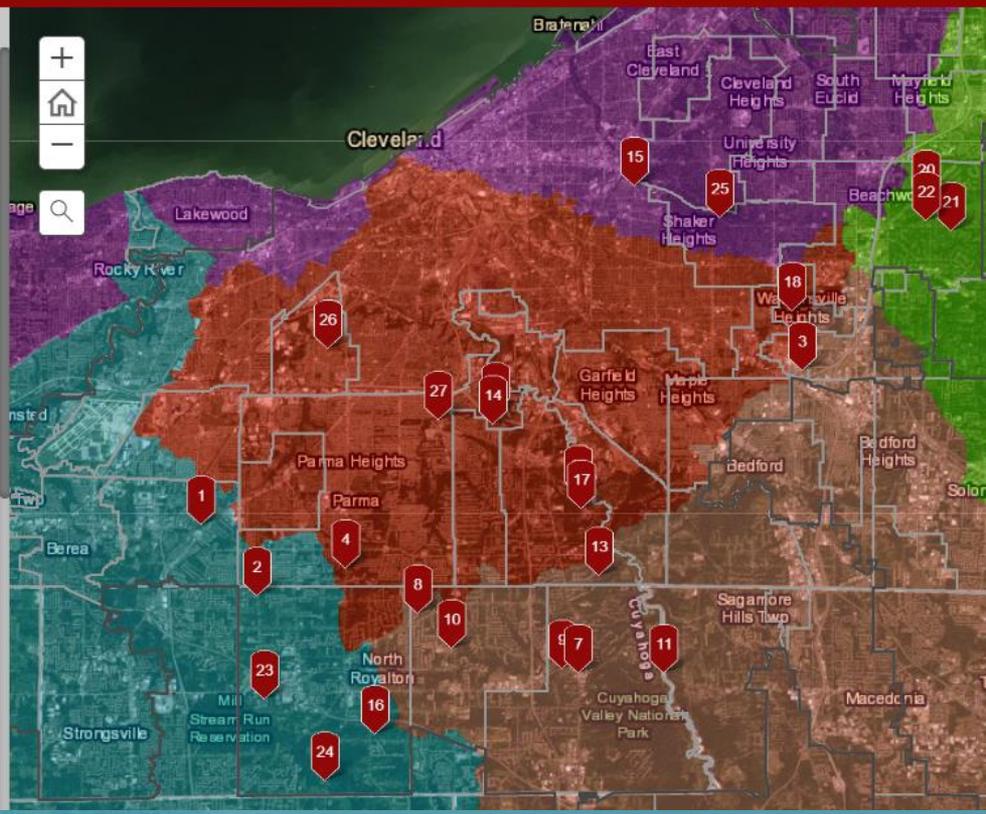
NEORSD Stormwater Design & Construction Program

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



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

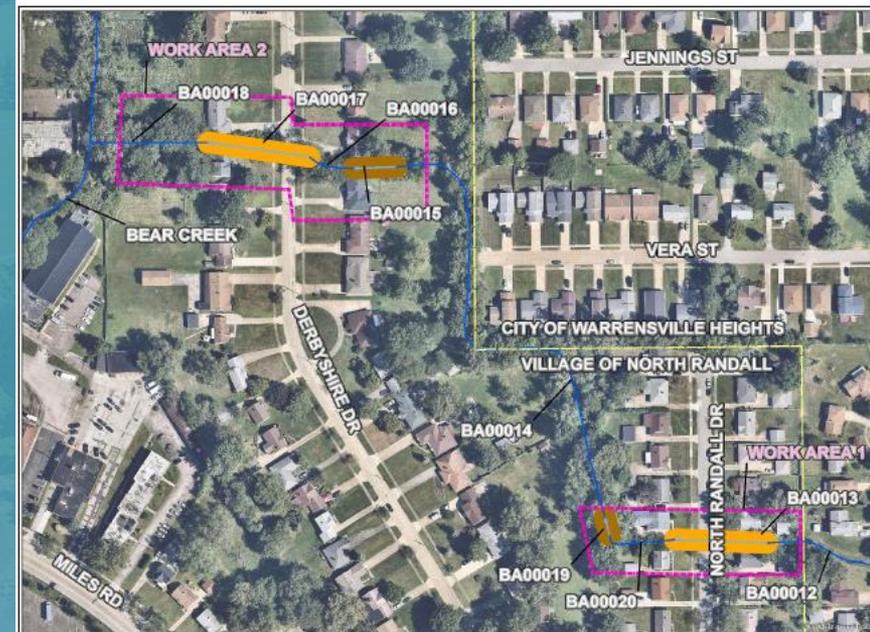


Figure 6: BA00013 Deteriorated Timber Section



Figure 7: BA00013 Failing Timber at Outfall Section



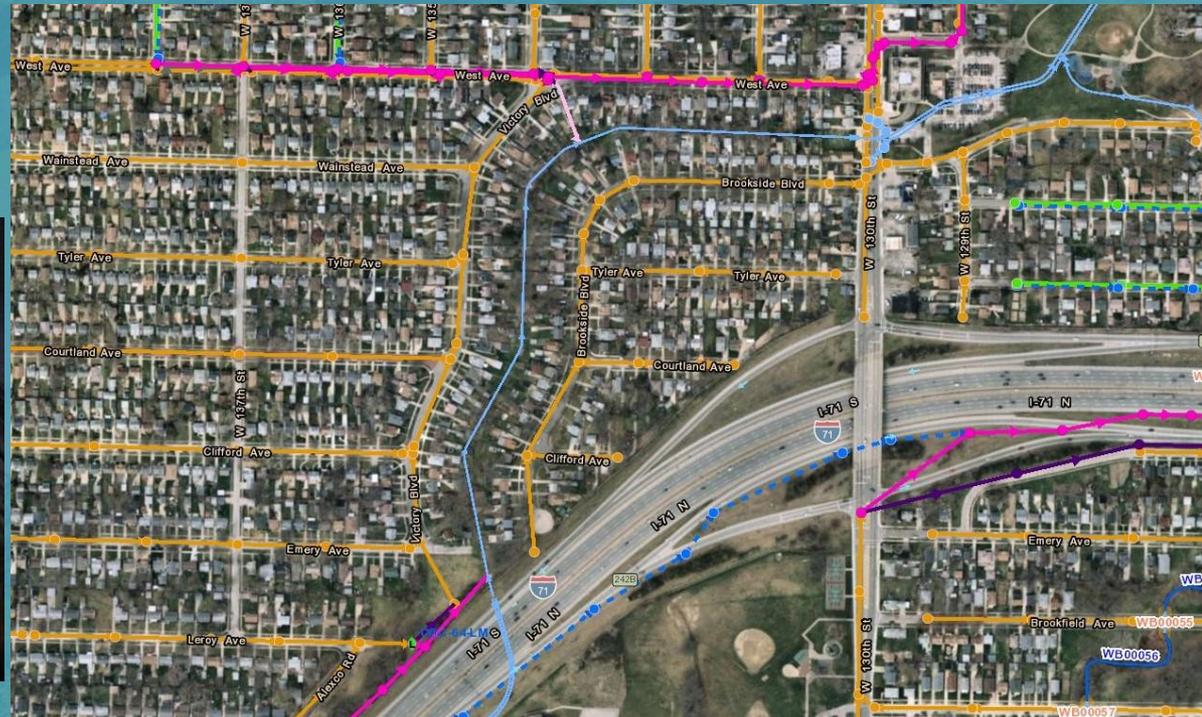
Brookside Culvert Rehabilitation – Cleveland

Goals:

- Rehab culvert to maintain conveyance without increasing water surface elevations up- or downstream

Current Design Phase:

- Design Procurement
- Est. Construction Cost: \$10M



Brookside Culvert Rehabilitation – Cleveland



2017

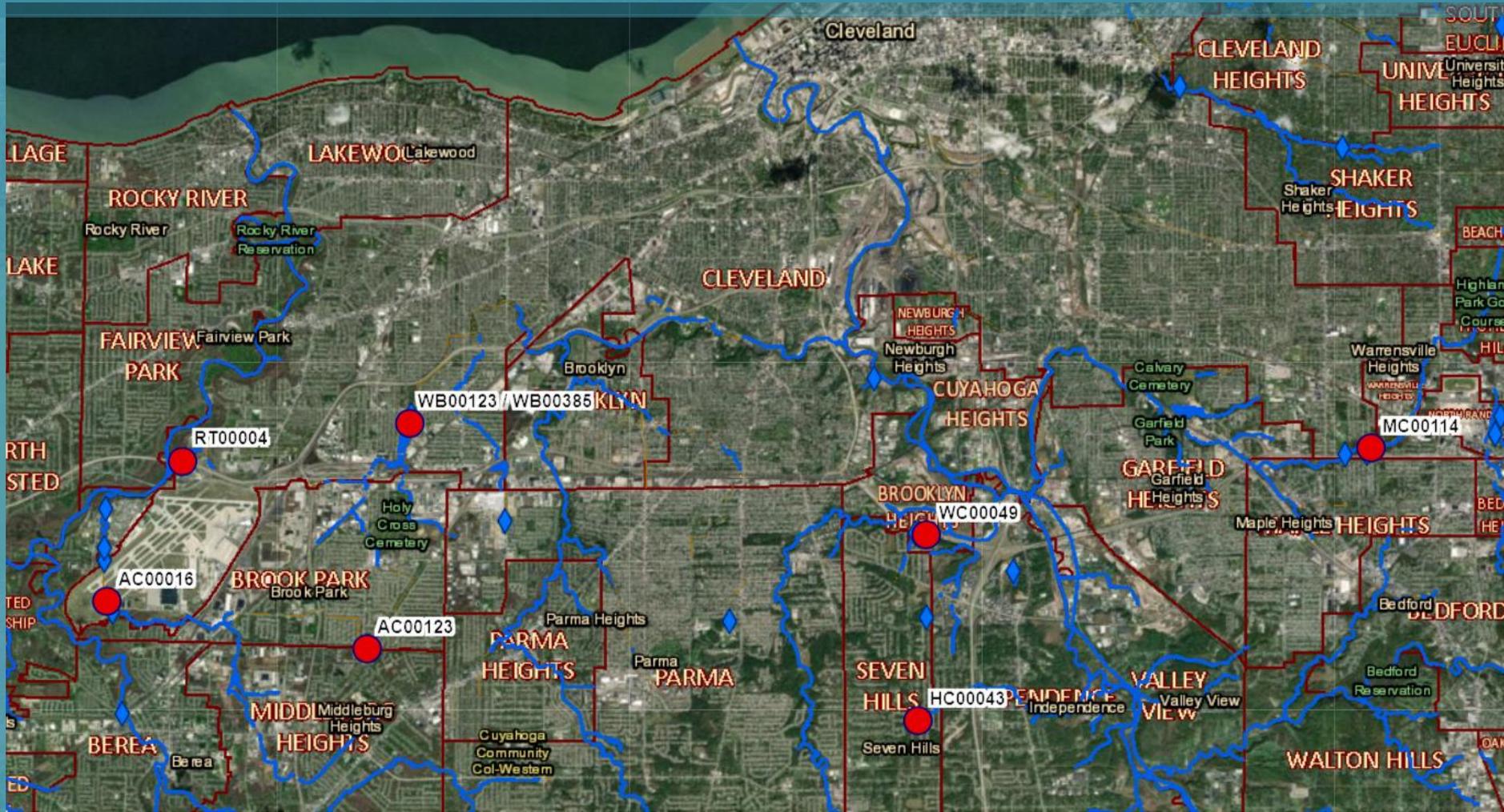


2018



2019

1539 Debris Racks and Access Roads in Various Locations



AC00016 – Cleveland Hopkins Airport Culvert Debris Rack



HC00043 – Hemlock Creek Basin Debris Rack and Access Road



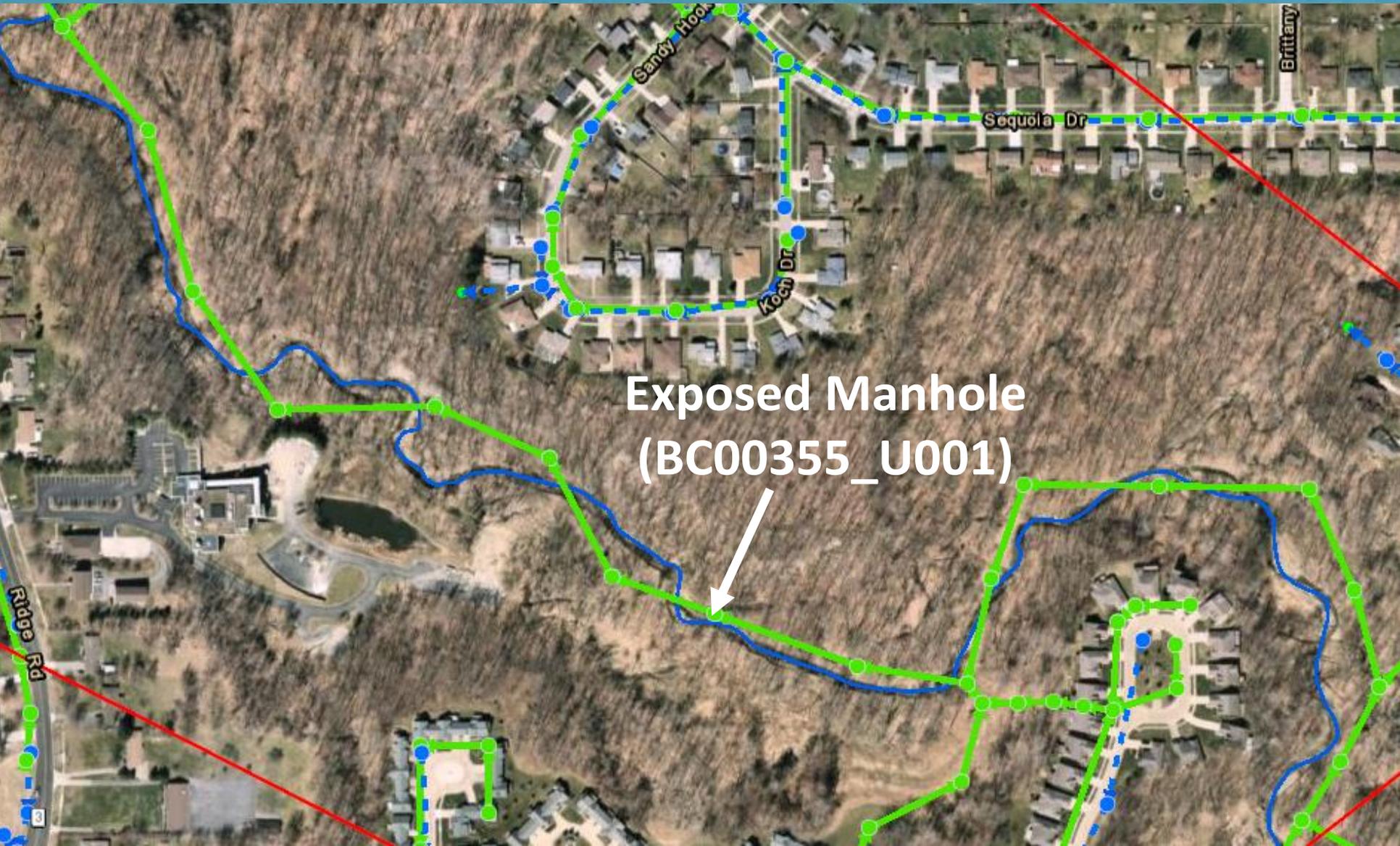
WB00123 & WB00385 – Puritas Basin Access Roads





1597 Big Creek Stream Restoration Upstream and Downstream of Ridge Road

BC00355



Exposed Manhole
(BC00355_U001)



BC00351



Questions

Chippewa Creek Stabilization at Condominiums in Brecksville

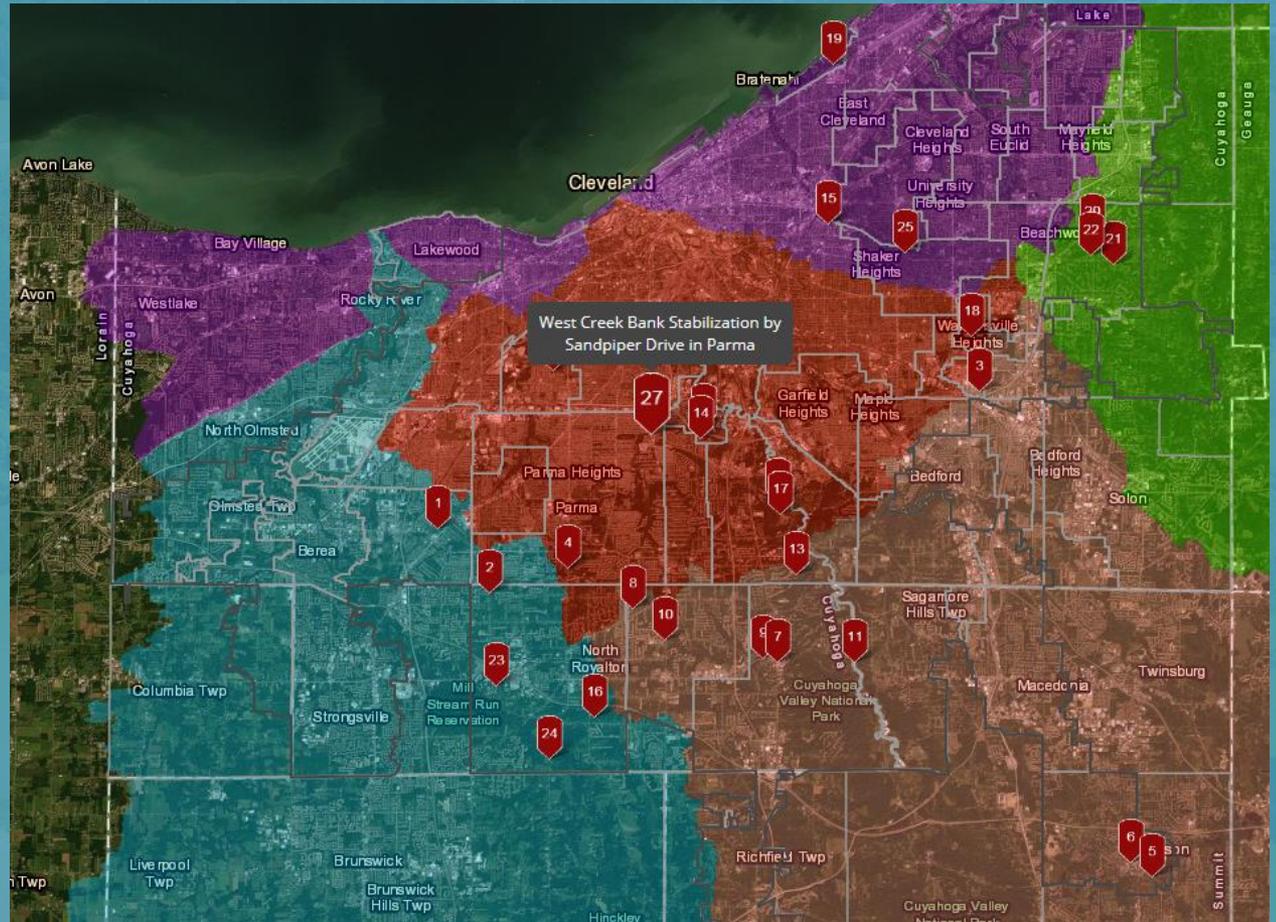


- *Eroding streambank within 12 ft of the condominiums*
- *Erosion within 6 ft of local sanitary sewer*
- *Exposed storm sewer pipe and headwalls*
- *Approx. \$1.2M Construction Cost*

1569_Upcoming Construction

West Creek is a tributary to the Cuyahoga River

Eroding banks by a nursing facility



West Creek Stabilization by Sandpiper Drive



- *Eroding streambank has damaged parking lot at skilled nursing facility in Parma*
- *Large area of property impacted including large trees*
- *Approx. \$2.3M Construction Cost*

Questions



WTL Contact

Jeff Jowett

216.881.6600 Ext. 6881

Cell: 216.630.1433

jowettj@neorsd.org



Stormwater Program: Community Resources

<http://www.neorsd.org/communitystormwaterresources.php>