



**Northeast Ohio
Regional Sewer District**

Thanks for joining!

WE WILL START MOMENTARILY.



**Northeast Ohio
Regional Sewer District**

Watershed Advisory Committee

CHAGRIN AND LAKE ERIE DIRECT TRIBUTARIES- MARCH 7, 2023



**Northeast Ohio
Regional Sewer District**



Agenda

- Welcome, Introduction & Updates
- Stormwater Inspection and Maintenance Update
- Watershed Technical Support Update
- Design & Construction Update
- Sages and Plan Review
- Code Updates
- Infrastructure Funding





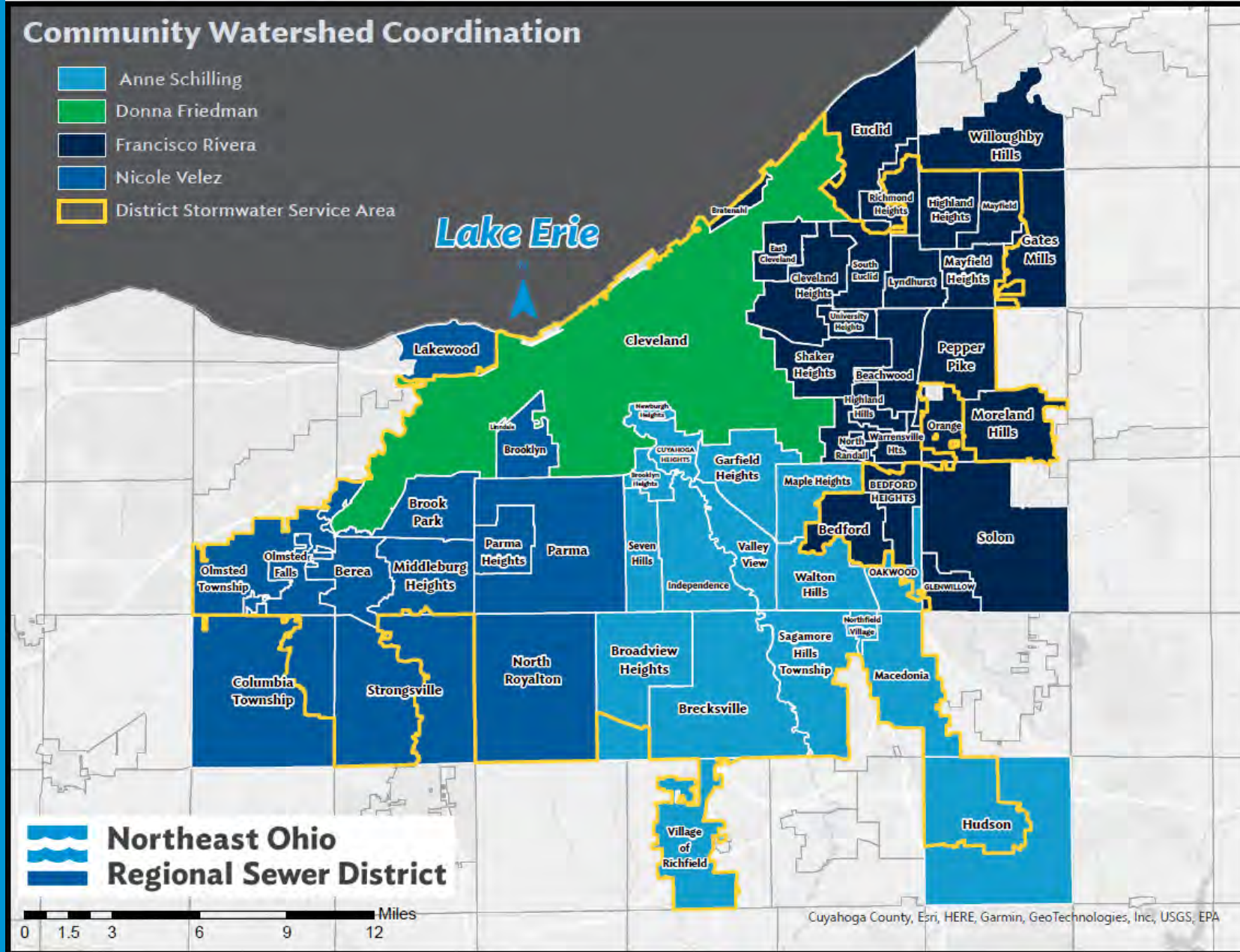
Program Highlights

Frank Greenland, Director of Watershed Programs

Matt Scharver, Deputy Director of Watershed Programs

Community Watershed Coordination

- Anne Schilling
- Donna Friedman
- Francisco Rivera
- Nicole Velez
- District Stormwater Service Area





Community Cost-Share Program

- CCS Funds Balance (2/28/2023)- \$37,810,420.18
- 96 projects w/ executed agreement- \$8,898,841.29
- 48 projects w/ agreements in progress- \$7,309,864.35
- **CCS Funds available to Member Communities - \$21,601,714.54**
- 29 approved allocation agreements- \$8,142,696.46



Community Cost-Share: 2016-2023 Reimbursement

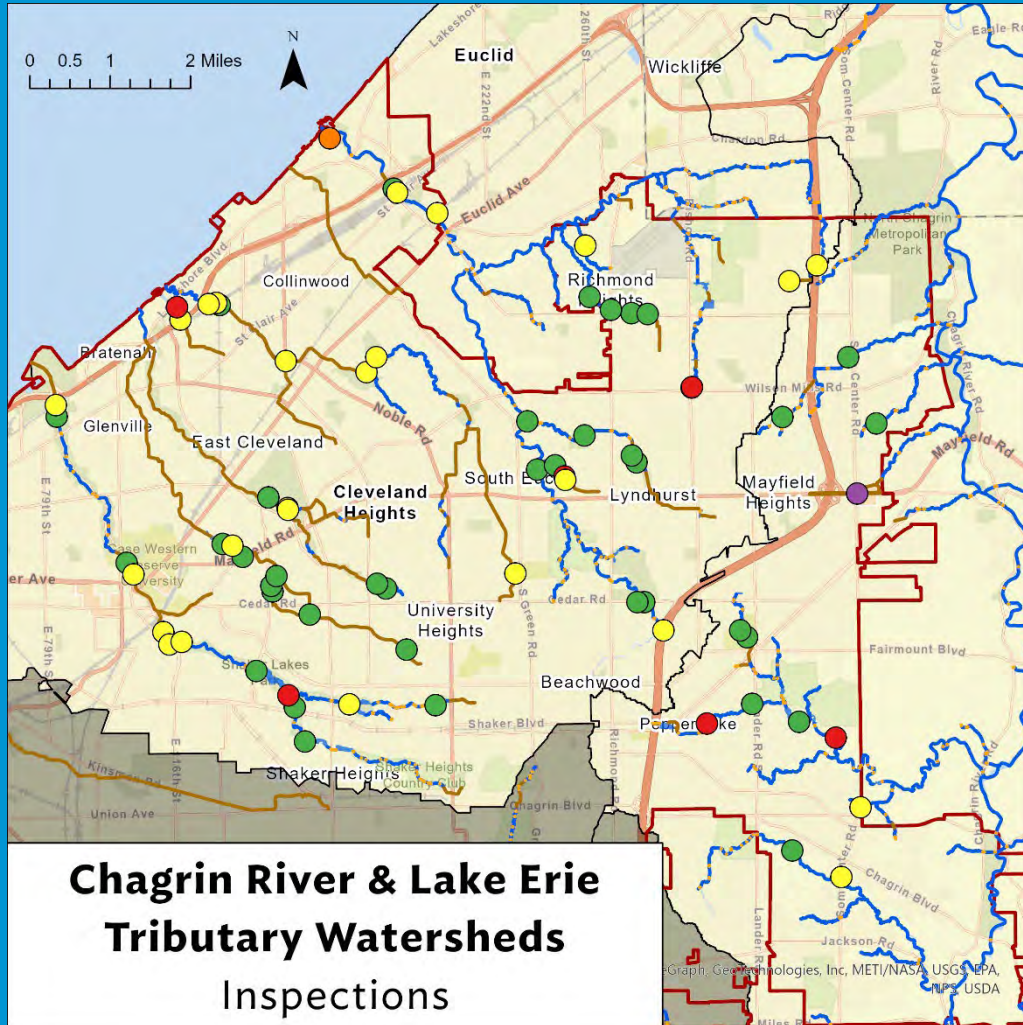
Year	CCS Funds Reimbursed
2016	\$ 35,166.00
2017	\$ 2,626,418.00
2018	\$ 4,218,308.00
2019	\$ 9,178,445.00
2020	\$ 6,720,943.00
2021	\$ 9,581,404.00
2022	\$ 6,806,797.89
2023 (2/28/2023)	\$ 575,596.22
Total Reimbursed	\$ 39,743,078.11



Inspection & Maintenance Update

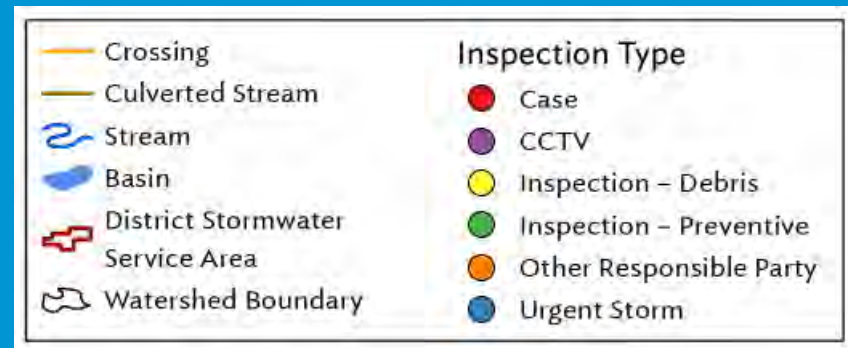
CHAGRIN AND LAKE ERIE DIRECT TRIBUTARIES

SWIM Inspections



10/22 - 2/23 Completed Inspections

Inspection Type	Inspection Count
Case	6
CCTV	1
Inspection - Debris	38
Inspection - Preventive	42
Other Responsible Party	1
Urgent Storm	1
Total	89



SWIM Maintenance



10/22 - 2/23 Maintenance Projects

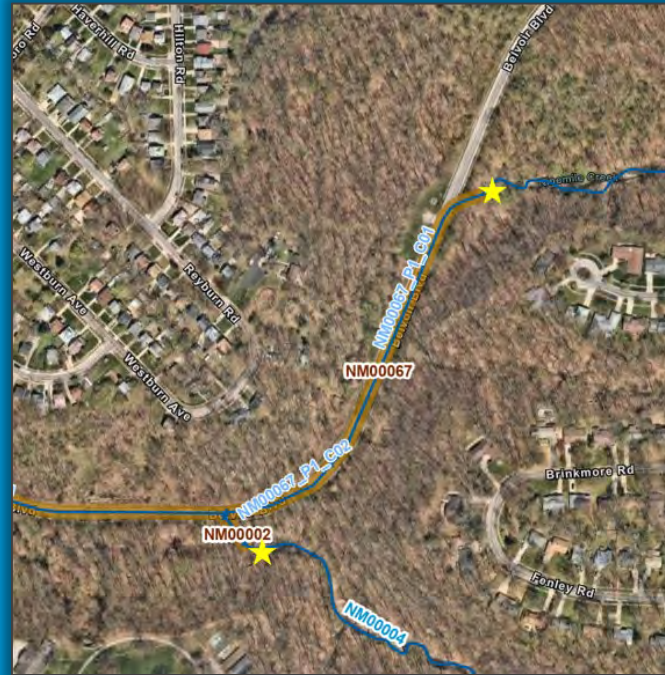
Project Type	Project Count
Debris/Sediment Removal	17
Vegetation Management	6
Total	23

Debris Removed	Sediment Removed
399 CY	150 CY



Nine-Mile Creek Debris Rack Installations

- Begin design of debris racks at the inlets of two culverted stream sections of Nine-Mile Creek near Belvoir Road in Cleveland and Cleveland Heights.
- Heavily wooded stream corridors upstream lead to debris within culverted stream.
- Debris removals are difficult due to confined space and traffic.



Doan Brook Streambank Stabilization at Shaker Heights Country Club

- Asset identified as top contributor of sediment to Green Lake during a SWIM 2021 Root Cause Failure Analysis
- Construction began January 2023





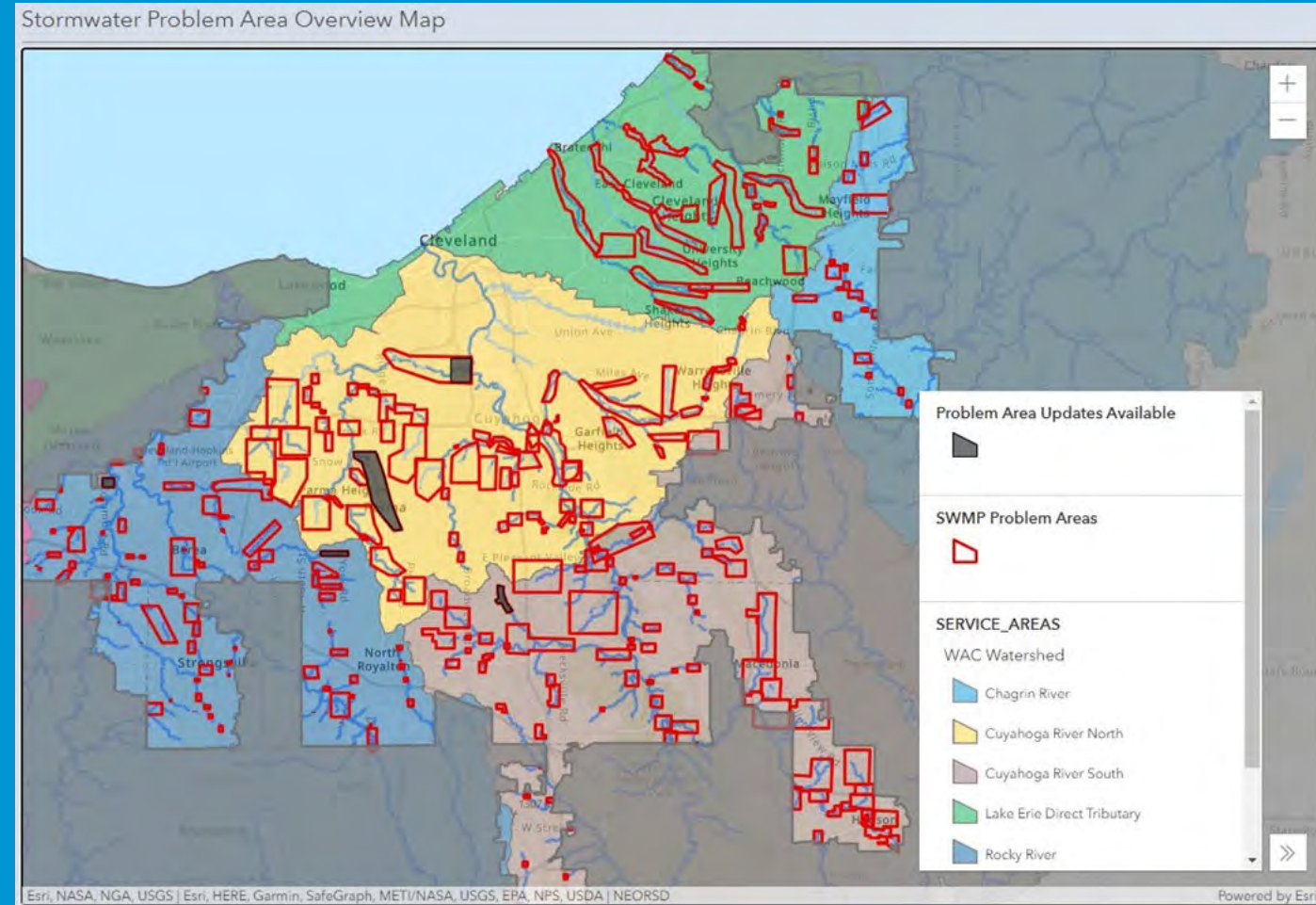
- Rock protection installed along both banks for 250 ft
- Final restoration in progress – native riparian mix
- Substantial Completion: April 30, 2023



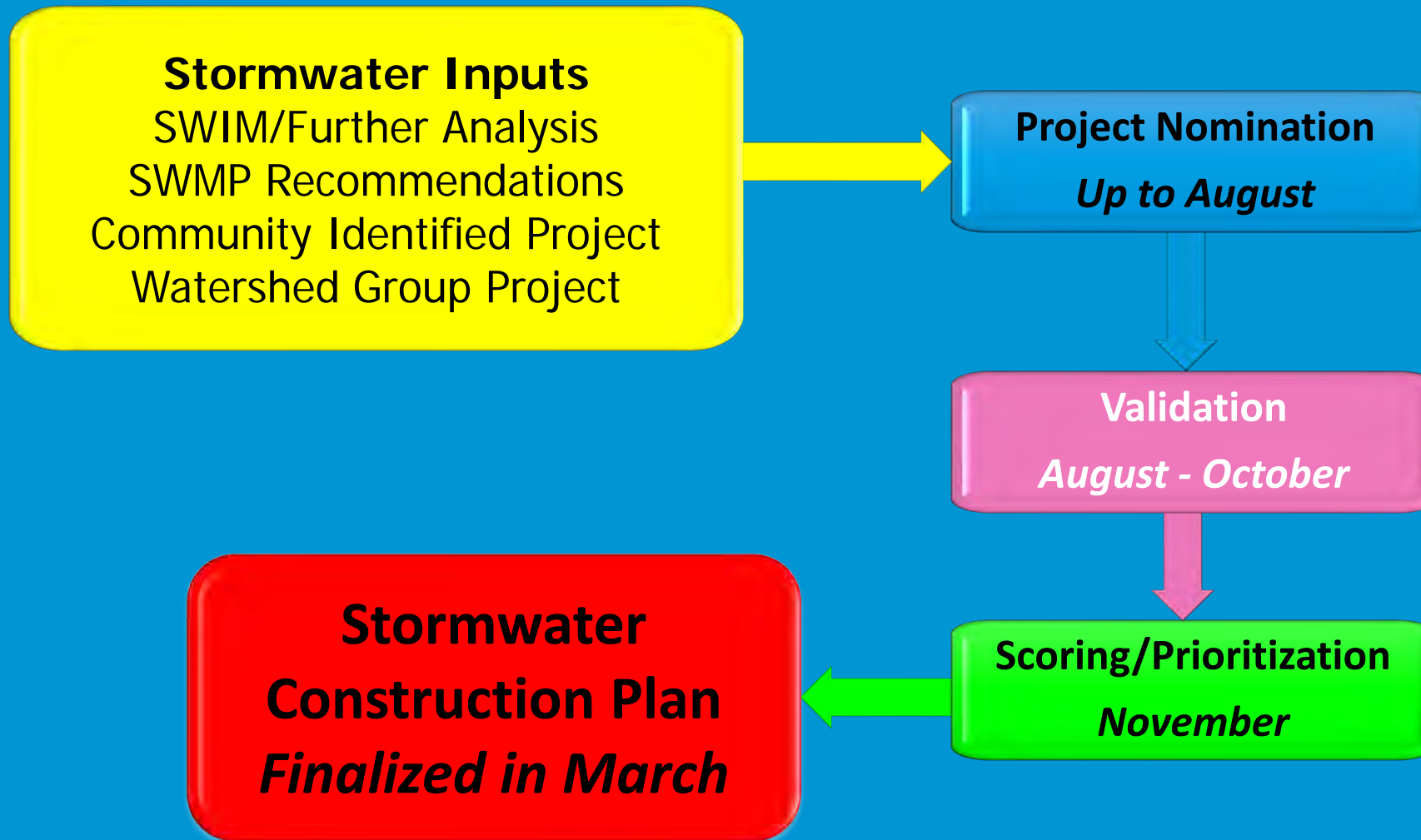
Watershed Technical Support

Chagrin River / Lake Erie Direct Tributaries Stormwater Master Plan

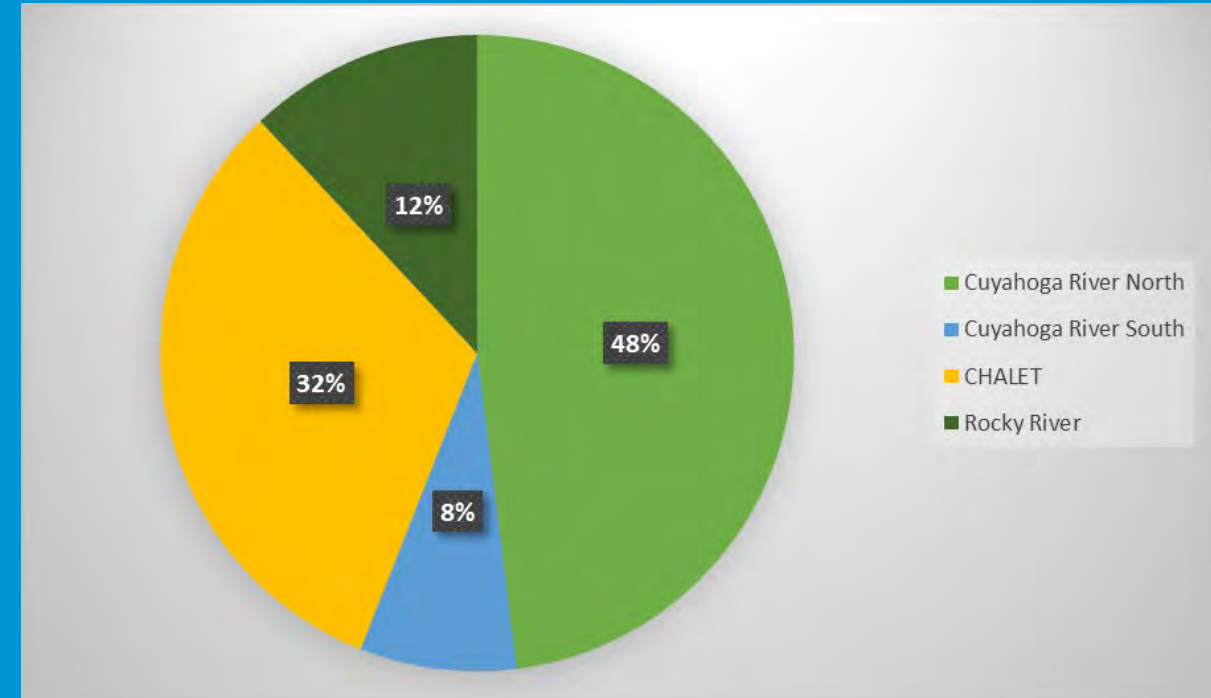
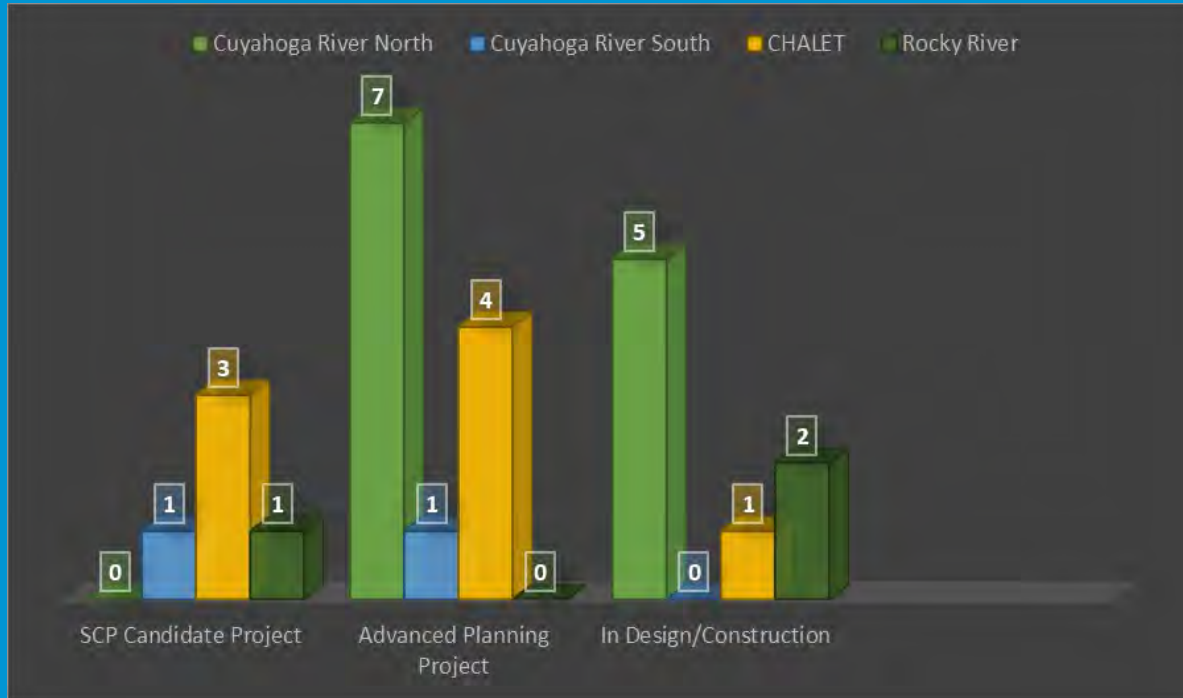
- CHALET Community Reports sent out to Community Members
- Problem areas have been nominated, scored and prioritized as part of the annual stormwater construction plan review.
- Contact your Watershed Team Leader if you have any questions.



Stormwater Project Nomination Process



2022 Top 25 Stormwater Project Nominations



2022 Top Nominated Projects Watershed Distribution

2022 Design Projects Carried Over in the 2023 Stormwater Construction Plan

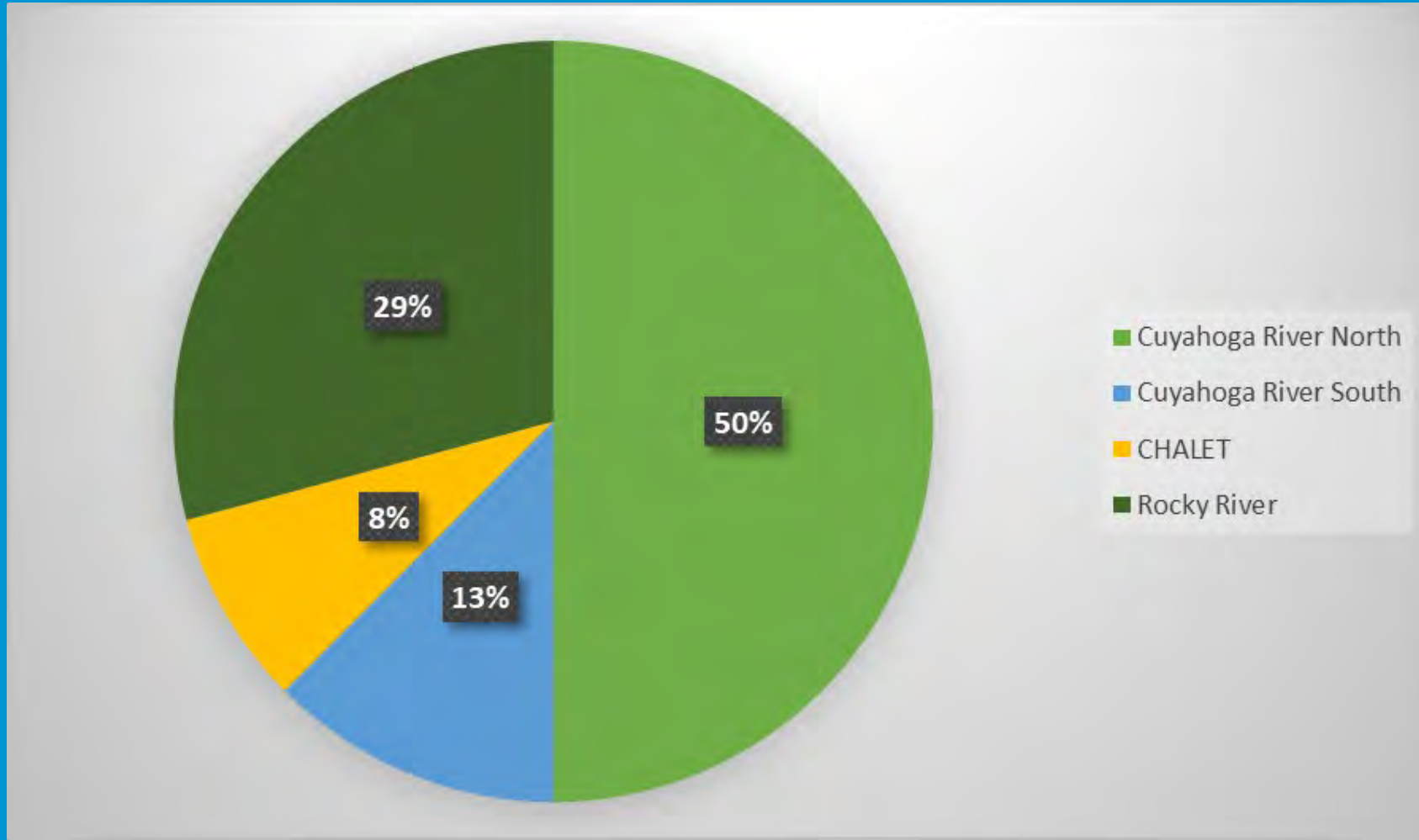
Nomination I.D.	Project #	Watershed	Community	Problem Area
N/A	1524	CRN	Brooklyn Hts.	WCBH09
2020-SW540	1575	CRS	Broadview Hts., North Royalton	CCPA09
2019-SW46	1584	RBR	Middleburg Heights	ACPA01
2019-SW73	1597	CRN	Parma	BCPA03
2020-SW346	1606	RBR	Brook Park, Middleburg Hts.	AC00126
2022-SW645	1629	LEDT	Cleveland Hts., Shaker Hts.	DBSH04
N/A	1630	CRN	Seven Hills	HCSV01
N/A	1634	CRN	Garfield Hts.	N/A
2019-SW96	1635	CRS	Brecksville	CSPA04
2021-SW625	1639	CRN	Parma Hts.	BCPH12
2019-SW99	1641	CRS	Brecksville	MSPA02
2019-SW90	1645	CRN	Parma	WCPA04
2022-SW648	1649	LEDT	East Cleveland	DEEC03
2020-SW516	1651	CRN	Warrensville Hts.	MCWH05
N/A	1657	CRN	Cleveland, Warrensville Hs.	MCWH07
2019-SW88	1658	RBR	Parma	BDPA06
N/A	1659	CRN	Cleveland, Garfield Hts.	N/A
2019-SW89	1661	RBR	Parma	BDPA07
2019-SW70	1663	CRN	North Royalton	BCNR02
2019-SW70	TBD	CRN	Sprague Road Bank Stabilization	BCNR02

2022 Design Project Nominations to Stormwater Construction Plan

Nomination I.D.	Watershed	Problem Area	Reason for Selection
2020-SW368	CRN	WBBP03 – Phase A: Kolleda Ditch	Failing infrastructure
2020-SW545	RBR	WBPA05	Secured critical mass of required property & distribution of projects across service area
2020-SW501	RBR	BDPA09 – Phase A: Applewood basin improvements	Failing infrastructure
2020-SW448	RBR	ACPA06 – Smith Rd Basin	Secured critical property & receipt of Federal Funding



Watershed Distribution of Current & Proposed Design Projects in the 2023 Stormwater Construction Plan



Chagrin River / Lake Erie Direct Tributaries Advanced Stormwater Planning

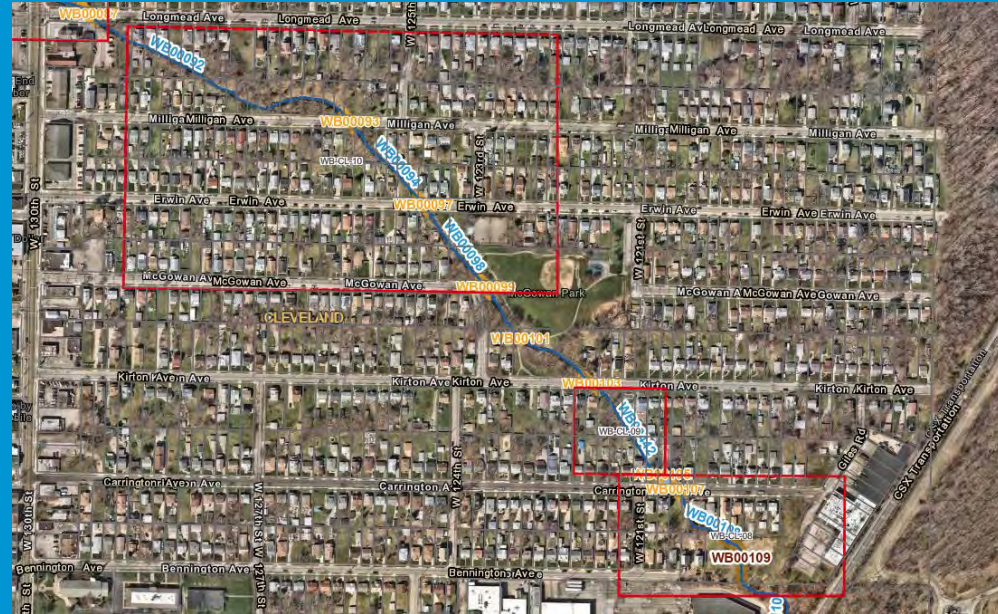
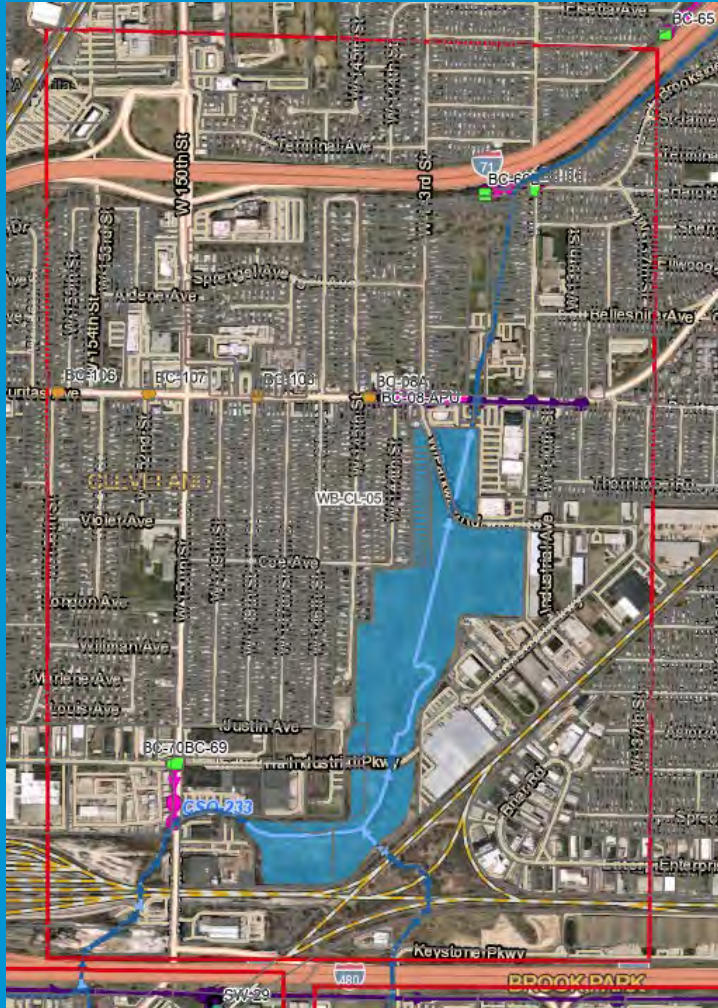
Goal to ready projects for full design

- Projects that require additional information to understand full RSS impacts
- Are cost prohibitive w/o phasing
- Breakdown of complex, preferred alternatives into manageable projects
- Acquisition/Easement procurement
- Coordination considerations with outside stakeholders



University Circle – Doan Brook Watershed

Advanced Stormwater Planning in 2023

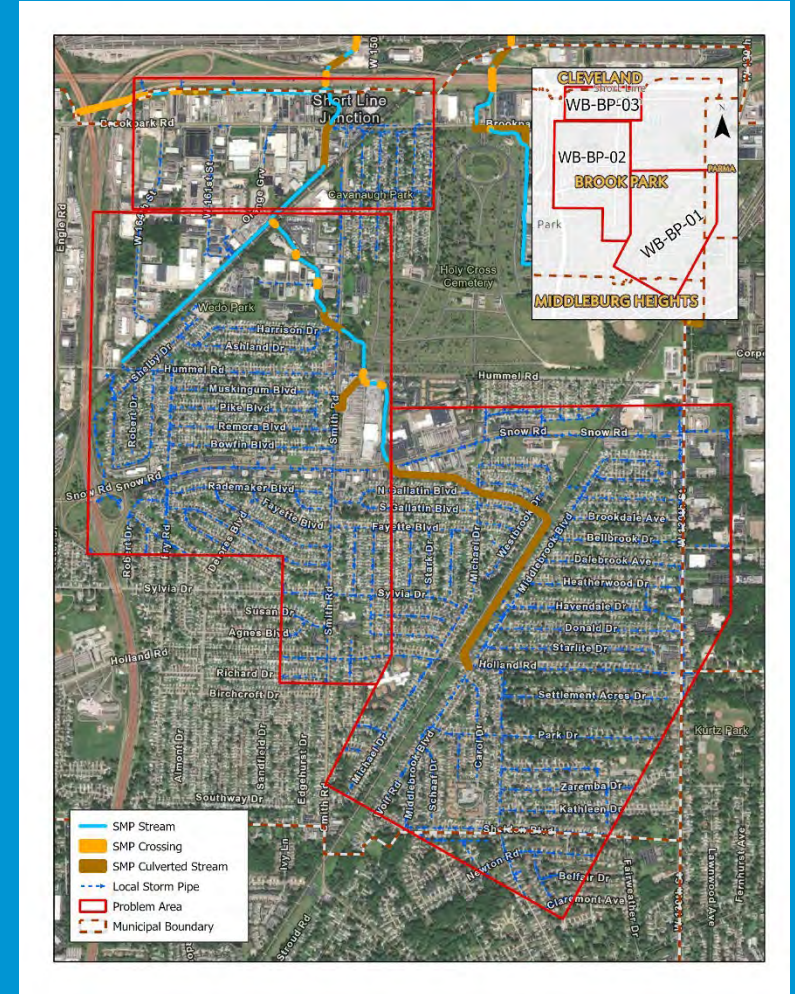


- Puritas Basin Alternatives Analysis (WB-CL-05): On-going, to be completed 3rd Qrt 2023
- Milligan/Erwin/Carrington Ave at W 130th (WB-CL-08 to 10): On-going, to be completed 3rd Qrt 2023

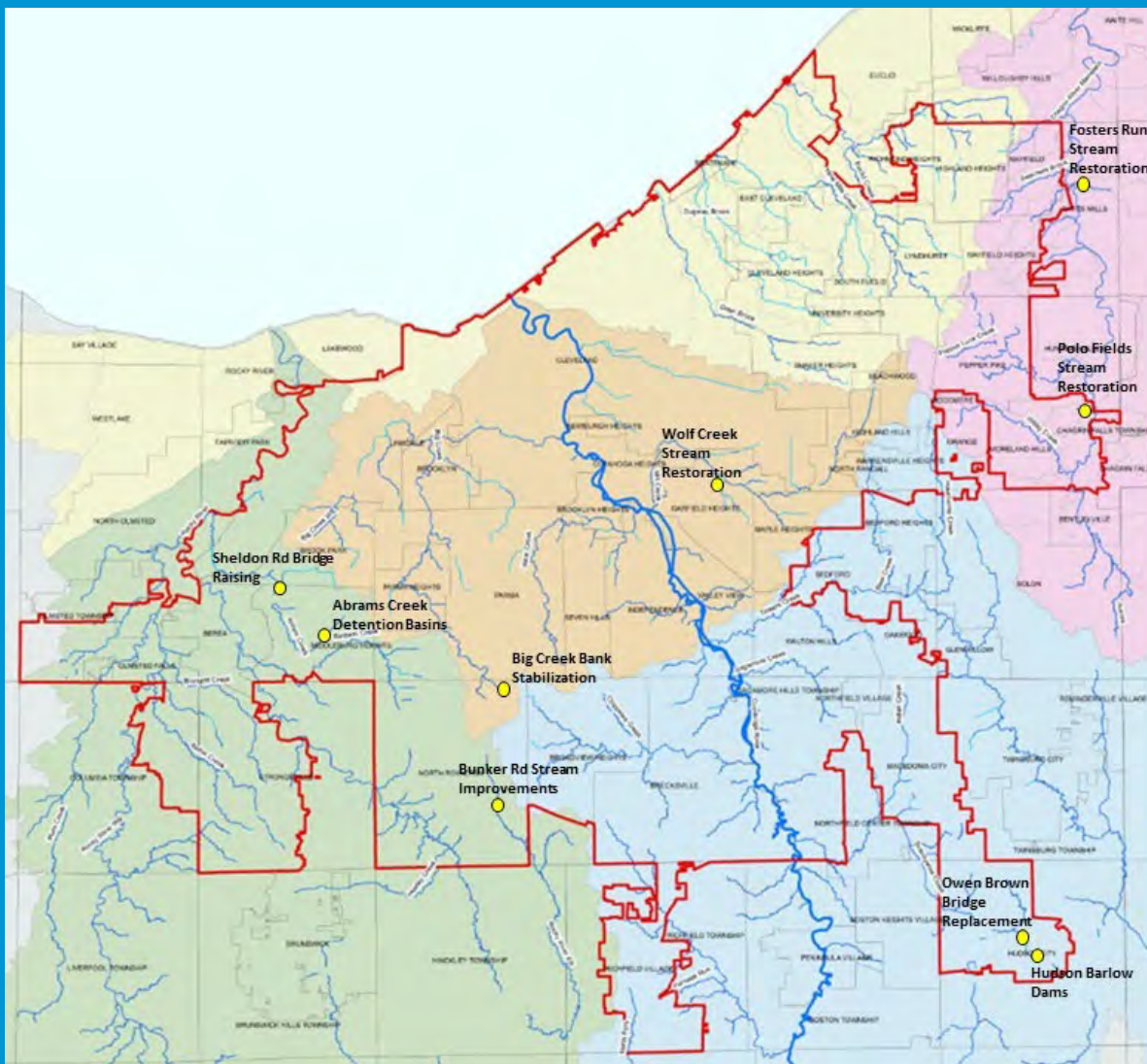
Advanced Stormwater Planning in 2023

1673: ASP of Big Creek West Branch for Problem Areas WB-BP-01 to 03 (New ASP Contract – Planning to advertise RFP end of March)

- Preferred alternatives from the SWMP no longer viable
- Need to better understand interactions between the RSS and local stormwater system
- Understand the benefits to RSS and LSS from new alternatives



Community Lead Projects



In Design Phase

<i>Project Title</i>	<i>Community</i>
Abram Creek Detention Basins 1 & 2	Middleburg Heights
Big Creek Bank Stabilization	North Royalton
Bunker Road Stream Improvements	North Royalton
Owen Brown Bridge Replacement	Hudson
Polo Fields Stream Restoration	Cleveland Metroparks
Sheldon Road Profile & Bridge Raising	Brook Park

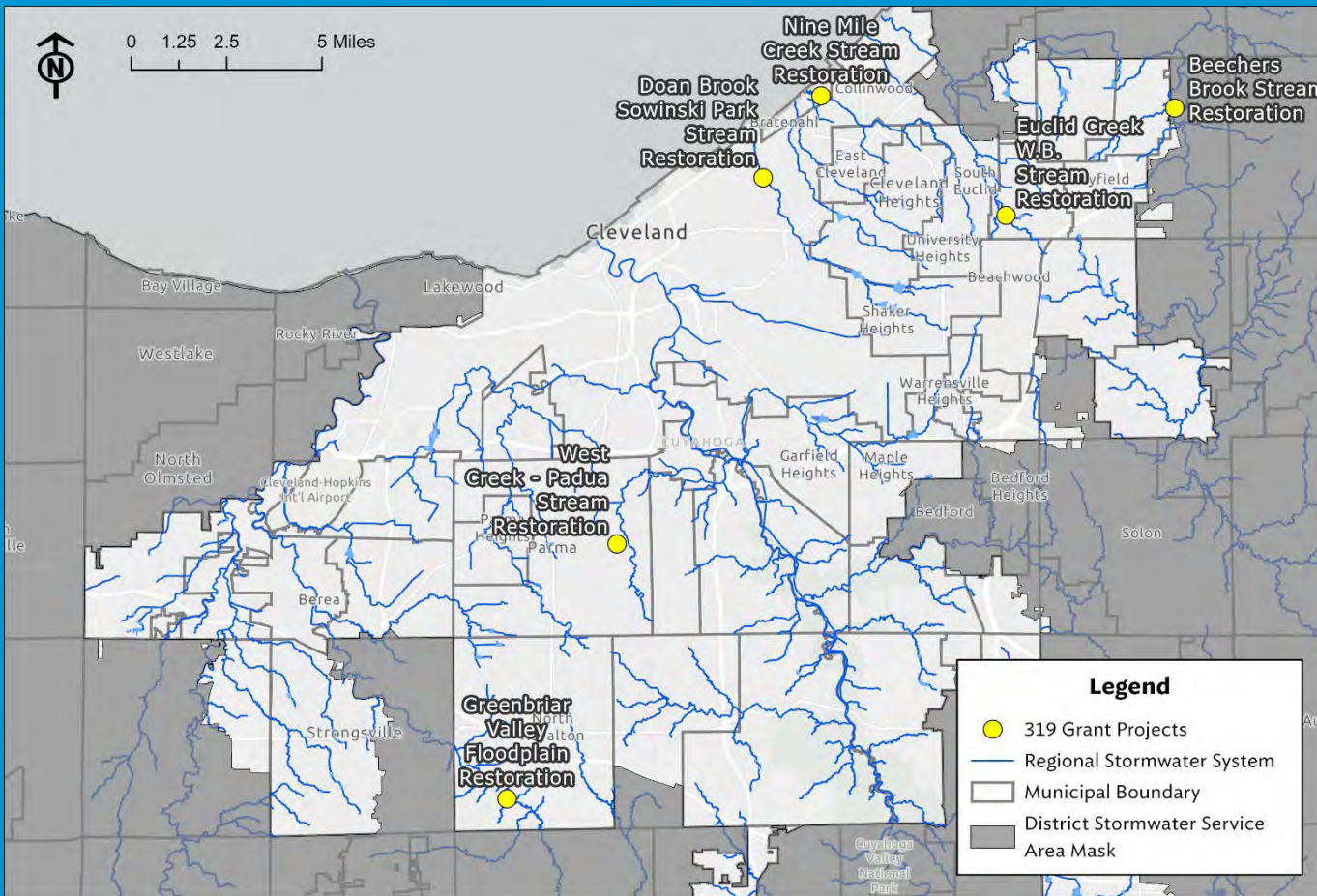
In Construction Phase

Abram Creek Detention Basin 3	Middleburg Heights
Barlow Dam Improvements	Hudson
Wolf Creek Stream Restoration	Cleveland Metroparks

Completed

Fosters Brook Stream Restoration	Cleveland Metroparks
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OEPA Section 319 Grant - Partner Lead Projects



In Design Phase		
<i>Project Title</i>	<i>Project Lead</i>	<i>Community</i>
Greenbriar Valley Floodplain Restoration	CUY Soil & Water Conservation District	North Royalton
West Creek – Padua Stream Restoration	West Creek Conservancy	Parma
In Construction Phase		
Nine Mile Creek Stream Restoration	Chagrin River Watershed Partners	Bratenhal
Doan Brook Sowinski Park Stream Restoration	Doan Brook Watershed Partnership	Cleveland
Euclid Creek West Branch Phase I Stream Restoration	CUY Soil & Water Conservation District	Lyndhurst
Completed		
Beechers Brook Stream Restoration	CLE Metroparks	Mayfield Village



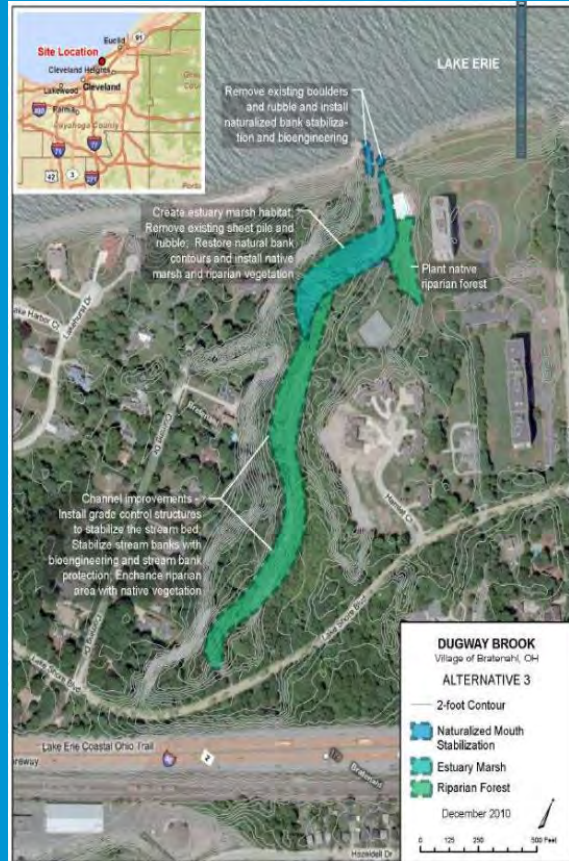
Doan Brook Subwatershed Watershed Partner Lead Project – Sowinski Park



Northeast
Ohio Regional
Sewer District

REGIONAL
STORMWATER
MANAGEMENT

Dugway Brook Subwatershed Estuary & Stream Restoration Study



Wetland Estuary Restoration



Daylighting Stream Segment

Questions ?



Lakeview Cemetery - Dugway Brook Subwatershed

Stormwater Design and Construction



Design and Construction Projects

Project Story Map

Over \$130M in Construction



Project Name	City	Subwatershed	Actual or Estimated Construction NTP
Debris Racks and Access Road Improvements	(various)	(various)	1-Jun-21
Baldwin Creek Stabilization near Abbey Road	North Royalton	Baldwin Creek	19-Jan-22
Chippewa Creek Stabilization Broadview Rd	Broadview Hts	Chippewa Creek	1-Feb-22
Blodgett Creek Stabilization near Brigadoon	Strongsville	Blodgett Creek	14-Mar-22
Big Creek Flood Reduction near Sprague Road	(various)	Big Creek	14-Mar-22
Brandywine Creek Barlow Dam Improvements	Hudson	Brandywine Creek	14-Apr-22
Brookside Culvert	Cleveland	Big Creek	10-May-22
Baldwin Stormes Drive	Parma	Baldwin Creek	10-Jun-22
Picha Basin	Brecksville	Cuy Trib	17-Jun-22
Pepper Luce Creek Stabilization Gates Mills Blvd	Pepper Pike	Pepper Luce Creek	27-Jun-22
Big Creek Upper Ridgewood Basin	Parma	Big Creek	1-Aug-22
Bear Creek Culvert Improvements	North Randall	Bear Creek	15-Sep-22
Stafford Basin	Maple Hts	Wood Creek	10-Oct-22
Chippewa Creek Stabilization Route 21	Brecksville	Chippewa Creek	12-Dec-22
Doan Stabilization in Shaker Hts Country Club	Shaker Heights	Doan Brook	19-Dec-22
Brookside in Independence CH00147	Independence	Cuy Trib	15-Mar-23
Big Creek near Old York Road in Parma Hts	Parma Hts	Big Creek	5-Apr-23
Pecan Drive Stabilization	Parma	Big Creek	19-Apr-23
West Creek Stabilization	Brooklyn Hts	West Creek	19-Apr-23
Chippewa Creek Flood Reduction Echo Ln	Broadview Hts	Chippewa Creek	17-May-23
Mill Creek Culverted Stream Rehab (ROCS1)	Garfield Hts	Mill Creek	19-Jul-23
Big Creek Near Ridge Road	Parma	Big Creek	19-Jul-23
Hemlock Seven Hills Phase 1	Seven Hills	Hemlock Creek	2-Aug-23
Cuyahoga River Vaughn Road Raising	Brecksville	Cuyahoga	3-Jan-24
West Creek Veterans Basin	Parma	West Creek	5-Jun-24
Baldwin Bonny Banks Basin	Parma	Baldwin Creek	15-Nov-23
Mill Creek Restoration near Cricket Ln	Warrensville Hts	Mill Creek	15-May-24
Cuyahoga Trib Riverview Road Reconstruction	Brecksville	Cuy Trib	5-Jun-24
Abrams Creek Flood Reduction Sheldon Rd	(various)	Abrams Creek	1-May-24
Renewal of Culverted Stream II (ROCS2)	(various)	various	30-Nov-24
Baldwin - York Pleasant Valley Dell Haven Basin	Parma	Baldwin Creek	30-Dec-24
Dugway Brook - Forest Hills Dam	East Cleveland	Dugway Brook	24-Apr-24
Big Creek Flood Reduction near Oakridge	North Royalton	Big Creek Creek	30-Jan-25
Hemlock Creek near Hemlock Road	Independence	Hemlock Creek	30-Jan-25
Mill Creek Restoration Kerruish Basin	Garfield Hts	Mill Creek	30-Jan-25
Doan Restoration at Horseshoe Lake Park	(various)	Doan Brook	16-Apr-25
Lower Shaker Lake Reconstruction	(various)	Doan Brook	13-Jan-26



Stormwater Design

1649 Dugway Brook Forest Hill Park Dam Removal – City of East Cleveland

Project Goals:

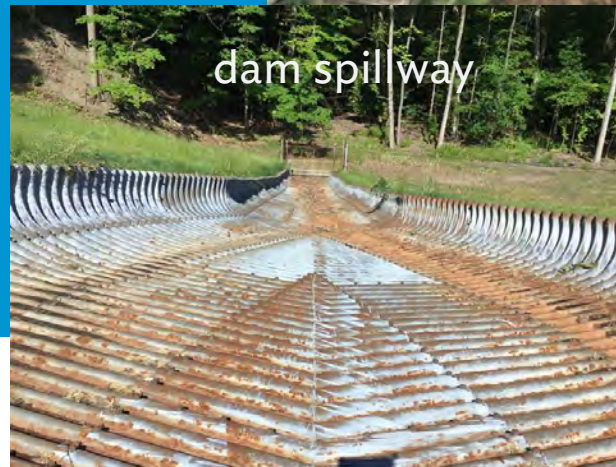
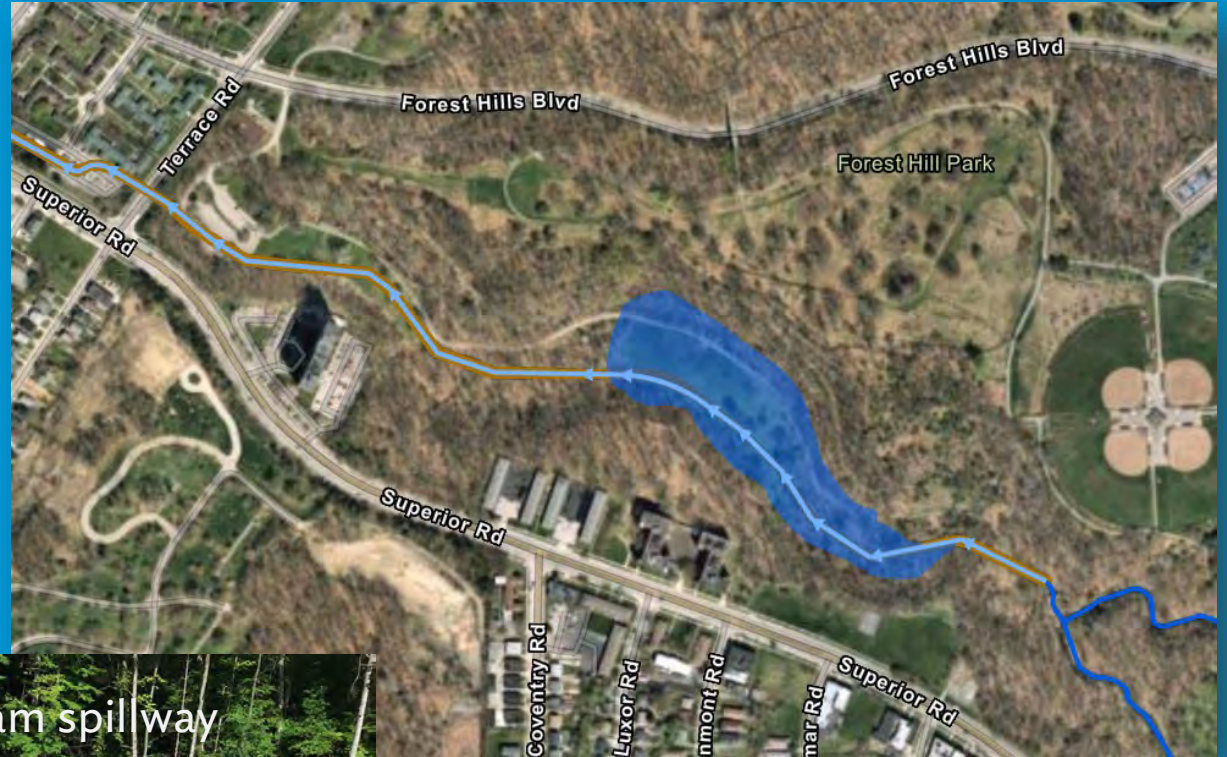
- Remove failing dam or declassify from ODNR regulations

Consultant: EMH&T (GES Contract)

Estimated Construction: \$0.8M

Facts to Note:

- Dam is owned by City of East Cleveland
- Intent is to remove structure from ODNR classification and remove its risk and consequences of failure
- Working with stakeholders to determine final design scope



1629 Doan Brook Restoration near Horseshoe Lake Park- Cities of Shaker Heights and Cleveland Heights

Project Goals:

- Remove failing dam
- Restore stream corridors
- Integrate stream restoration with landscape architecture

Consultant: AECOM-Stimson JV

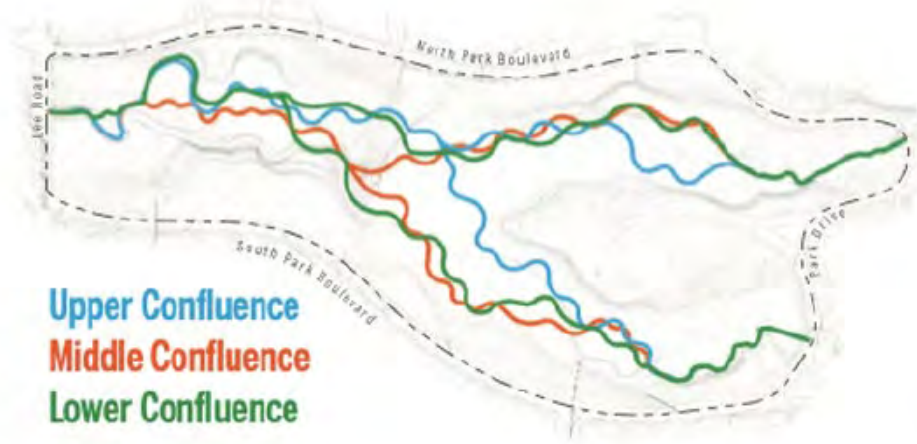
Facts to Note:

- Pre-Design Underway
- Final design to begin in mid-2023
- Public engagement process



August Outreach Event

STREAM HYDROLOGY | POSSIBLE ALIGNMENTS



A group of people are gathered around a table in a bright room with large windows. They are focused on a large map or project spread out on the table. A woman in a red vest and blue shirt is in the foreground, working on the map. A man in a brown sweater and glasses is also working. A ring light on a tripod is positioned in the background, illuminating the scene. The atmosphere is collaborative and professional.





Stormwater Construction

1558 Pepper Luce Creek Culvert Replacement & Rehabilitation at Gates Mills Boulevard City of Pepper Pike

Project Goals:

- Rehabilitate and replace failing culverts
- Enlarge a detention basin to reduce flood risks to Gates Mills Blvd

Contractor: Tucson, Inc

Construction Award: \$2,058,367

Construction NTP: June 27, 2022

Facts to Note:

- City of Pepper Pike is utilizing Community Cost Share for the rehabilitation of the upstream culvert





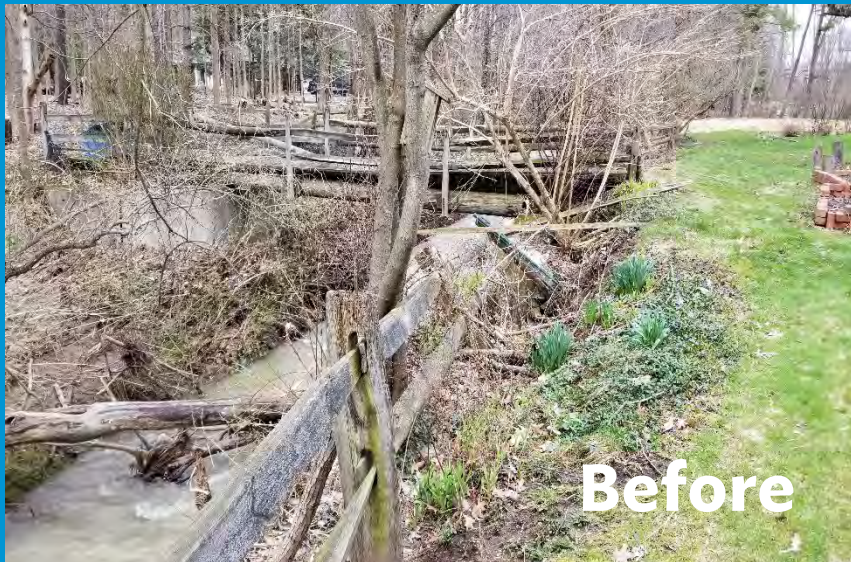
Completed Projects

1559 Pepper Luce Creek Stabilization Near Lander Road

Substantial Completion Anticipated
September 2021

Contract Amount: \$593,034.90

Lineal Feet of Stream Work: 575'



Plan Review with SagesGov

Types of Plan Reviews

- Title IV
- Title V
- Green Infrastructure Grant Program
- Direct Connection Requests
- Acceptance of Flow Request (PTI)
- Utility Verification Review
- Member Community Infrastructure Program

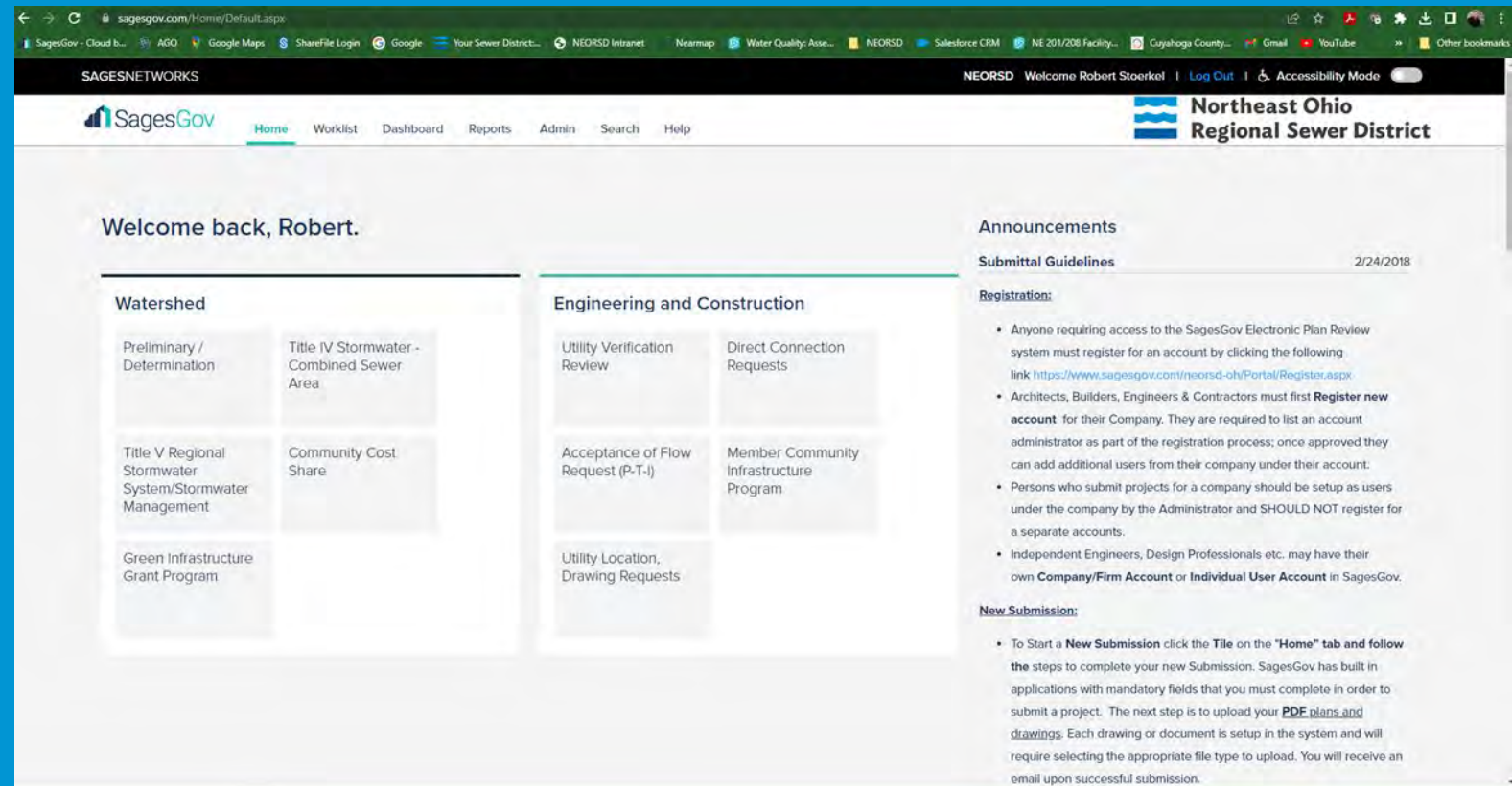
SagesGov

- To Access SagesGov, go to neorsd.org
- Business
- Plan Review
- SagesGov Logo
- Register (Individual Account Recommended)
- Verify Email



SagesGov Submittal

- Log In
- Home Screen
- Select Review
- Application
- Upload PDFs
- Submit



Review, Comments, Resubmittal

- SagesGov will send you an email when the Plan Reviewer is done
- Only Applicant is notified and has access
- Under Files, see marked-up drawings
- Resubmit when revised drawings are ready
- Type in a response for each comment, check Application, Upload revised drawings, hit submit

Conclusion of Review

- Title IV : No Objection Letter
- Title V in Parma, North Royalton, Olmsted Township (CCDPW) : No Objection Letter
- Direct Connection Requests: Connection Approval Letter
- Acceptance of Flow : Acceptance of Flow Letter
- GIG, Utility Verification, MCIP: Email from SagesGov

Contact for Help or Questions

- Robert Stoerkel CDPP Specialist
- StoerkelR@neorsd.org
- CDPP@neorsd.org
- 216-881-6600 x6802
- Instructions on web page

Title III & IV

Repeal and Replacement





Authority

Ohio Revised Code Section 6119.08

Title III Separate Sanitary Sewer Code

Title IV Combined Sewer Code





Title III – Updated

Document structure

Definitions

Creation of The Water Quality Technical Program



Title III – Updated

Creation of the Water Quality Technical Support Program (WQTSP)

- District to provide support to communities in addressing water quality issues regulated by others, such as OEPA and County Board of Health
- Voluntary program

Community Discharge Permit- Community Must:

- Control Excessive I/I
- Maintain and update local sewer data
- Implement BMPs
- Create a Community Compliance Plan outlining how compliance of the permit objectives will be achieved





Title IV – Updated

Document structure

Definitions

Connections to or Disconnections from the Combined Sewer System





Benefits of Title III & IV Updates

- **Consistency**

- Permits for all communities
 - 1 unified permit

- **Improved Utilization of District resources**

- LSSESs
- MCIP

- **Usability**

- **Simplicity**

- **Water quality improvement and infrastructure investment**



Jeff Jowett

Community Discharge Permit Program Manager

jowettj@neorsd.org

P:216-881-6600 ext.6881

C:216-630-1433



Infrastructure Funding Update



**Northeast Ohio
Regional Sewer District**

Ohio Water Pollution Control Loan Fund



**Northeast Ohio
Regional Sewer District**



Infrastructure Investment and Jobs Act: Ohio Water Pollution Control Loan Fund

- Approximately \$100 million/year to the Water Pollution Control Loan Fund (WPCLF)
 - 5 years of funding (4 remaining)
 - 49% through loans referred to as “principal forgiveness,” which don’t need to be paid back.
 - Principal forgiveness to be disbursed to disadvantaged communities



FY 2024 WPCLF Affordability Criteria

Criteria	2023 Value	2024 Value
Median Household Income	$\leq \$58,116$	$\leq \$61,938$
Unemployment Rate	$\geq 5.3\%$	$\geq 5.2\%$
Individuals with Poverty Rate below 200% of the Poverty Level	$\geq 30.4\%$	$\geq 29.8\%$
Percent Population Change	$\leq 50\%$ Increase	$\leq 50\%$ Increase



**Must meet 3 of the 4
to qualify as
disadvantaged**





Types of Projects (Human Health Category)

- Capacity improvements
- Septic System conversions
- Dry weather or wet weather overflows
- Basement back up elimination
- Illicit discharge elimination





Project Submittal Process

- For FY 2023, communities with the District's help had 3 projects selected for Principal Forgiveness.
- Currently looking at potential projects in the qualified communities.
- Interested communities can submit projects with the District's assistance for FY 2024. Applications due in August 2023.



Member Community Infrastructure Program Grant

FUNDING YEAR 2024



**Northeast Ohio
Regional Sewer District**



Member Community Infrastructure Program (MCIP)

- Annual competitive grant funding (up to \$15M for FY 2024)
- Address water quality and quantity issues associated with the Clean Water Act

Since 2017, the MCIP has invested **\$62.5 million** towards 90 **publicly owned sewer infrastructure improvement projects** which has leveraged an additional **\$82.5 million** in member community sewer infrastructure investments



Member Community Infrastructure Program Project Impacts

MCIP Year	Basement Flooding Remediation	Reduced Impact on SSO/CSO	Removal of WWTP	HSTS Removal	Linear Feet of New Collection System
2017	427	3		779	67,855
2018	39	2	1	402	18,130
2019	659	3	2	232	34,147
2020	149	2		182	20,276
2021	332	1			20,591
2022	576	14		73	37,117
2023	1,356	17			75,368
TOTAL	3,538	42	3	1,668	273,484





Member Community Infrastructure Program (MCIP)

What's New – Policy Changes in 2023

Direct Disbursement – beginning July 1, 2023, grantees can begin applying for direct disbursement of MCIP funds

What's Upcoming- Funding Year 2025

Title III – Code of Regulations of the Northeast Ohio Regional Sewer District
Separate Sanitary Sewer Code (update 12/2022)

*Beginning with the **2025 MCIP** funding round, anticipated **2025 RFP** release in March 2024, a community must be a participant in the Water Quality Technical Support Program to be eligible for grant funding.*





Member Community Infrastructure Program

2024 MCIP Implementation Schedule

- March 2 RFP Release
- April 17-28 Pre-Proposal Meetings
- May 15 MCIP Submissions Due
- June – July Proposal Reviews
- August Recommendations to Board of Trustees

2024 Request for Proposals are available on the MCIP webpage at NEORSD.org
Further program questions, contact Linda Mayer, mayerl@neorsd.org





2022 Clean Watersheds Needs Survey

- EPA report to Congress on Clean Water needs
 - Supports state and congressional budgeting efforts
 - Supports public information and other clean water initiatives
 - Typically conducted every 4 years
- EPA will send the survey out to large communities/service providers.
- Due date moved to April 28, 2023.





What should communities submit?

- Local wastewater and stormwater capital costs, (e.g. design & construction, vac trucks); do not include maintenance costs.

District submitted:

- Stormwater Master Plan needs, as well as District WWTPs and interceptor work, totaling \$3.3B.
- LSCFS documentation provided to OEDPA, totaling \$2.4B.





WTL Contact

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Watershed Team Leader

RiveraF@neorsd.org

(440) 670-3264

Donna Friedman
Manager of Community Watershed Coordination

Friedmand@neorsd.org

(216) 401-1332

Thank you!