ALCOSAN Board of Directors Green Committee Meeting

May 14, 2020

Green Committee Agenda

- Roll Call
- Informational Items
  - GROW Program Update
  - Controlling the Source
  - IDRC Update
- Action Items
  - GROW grant extensions
- Other Business
- Future Meeting Dates
- Adjournment

GROW Program Update

Modified Schedule

Task	Original Schedule	Modified Schedule
LOIs due	March 31	May 1
Invitation to Apply Issued	May 1	June 1
Applications Due	June 30	July 31
Green Committee Meeting	September 17	October 15-21*
Board Approval	September 24	October 22
Issue Notice of Award	October 1	November 1

* October Green Committee meeting was not anticipated in 2020 schedule

Cycle 5 Letters of Interest

Project Type	Count	Project Cost	Largest Single Project
DSIR	1	$ 329,500.00	$ 329,500.00
GSI	6	$ 3,421,123.40	$ 1,623,128.40
I/I	18	$ 7,286,861.47	$ 1,981,250.00
SS	9	$ 13,456,843.60	$ 4,361,929.10
SO	2	$ 1,354,425.00	$ 1,204,425.00
TOTAL	**36**	**$ 25,848,753.47**	

* Includes projects receiving “Bypass” letters

DSIR and GSI Projects

Municipality	Project Name	New Participant	Project Type	Reimbursement? (Y or N)	Estimated Project Cost for Grant Consideration ($)
North Versailles	Ice Plant Hill Runoff Control Project	No	DSIR	No	$329,500.00
PWSA	Wightman Park Phase II	No	GSI	No	$1,623,128.40
PWSA	Woodland Road GSI	No	GSI	No	$887,900.00
East Pittsburgh	East Pittsburgh Mall Green Infrastructure Project	Yes	GSI	No	$303,000.00
Homestead	Sarah Street Green Infrastructure and Flow Removal Project	No	GSI	No	$212,820.00
West View	Center Avenue Parking Area Improvements	Yes	GSI	No	$207,500.00
Rankin Borough	Rankin Recreation Site Green Infrastructure Project	No	GSI	no	$186,775.00

Municipality	Project Name	New Participant	Project Type	Reimbursement? (Y or N)	Estimated Project Cost for Grant Consideration ($)
Scott	2021 Source Flow Reduction and Sanitary Sewer Improvements	No	I/I	No	$1,981,250.00
Monroeville Municipal Authority	T-29A-10 Sanitary Sewer Rehabilitation Project	No	I/I	No	$1,123,320.00
Bridgeville	2020 Sanitary Sewer Flow Reduction Repairs Project	No	I/I	No	$740,000.00
Wilkinsburg	2021 NW Area Sewer Rehabilitation Project	No	I/I	No	$456,630.00
Mt. Lebanon	Scrubgrass Road Sewer Lining	No	I/I	No	$411,336.00
Ross	Lingay Drive Sewer Rehabilitation	No	I/I	No	$368,812.50
Avalon	2020 Regionalization and Source Flow Reduction Sewer Repairs	No	I/I	No	$340,000.00
O'Hara	2017-2020 Sanitary Sewer Lining Repairs Program	No	I/I	Yes	$289,894.00
Fox Chapel	2017-2019 Sanitary Sewer Lining Repairs Project	No	I/I	Yes	$267,093.00
Dormont	Meter #6 Area I&I Removal Project	No	I/I	No	$266,309.92
Shaler Township	Saxonburg Boulevard Sewer Rehab Phase II	No	I/I	No	$260,780.00
Bellevue Borough	O-18 Sewer Rehabilitation	No	I/I	No	$150,000.00
Brentwood Borough	Wanley Avenue Sewer Lining	No	I/I	No	$150,000.00
Penn Hills	MacFarlane Drive Sewer Rehabilitation	No	I/I	No	$150,000.00
Mt. Lebanon	Orchard Drive Sewer Lining and	No	I/I	No	$136,938.00
Neville	2016 Sanitary Sewer Improvements - Contract No. 16-S1	No	I/I	Yes	$124,930.00
Green Tree Borough	Parkedge/Sheldon Sewer Lining	No	I/I	Yes	$119,098.80
Blawnox Borough	Sanitary Sewer Repair - Phase VI	No	I/I	Yes	$100,469.25

SS and SO Projects

Municipality	Project Name	New Participant	Project Type	Reimbursement? (Y or N)	Estimated Project Cost for Grant Consideration ($)
Crafton	Woodlawn and Fountain Street Sewer Separation	No	SS	No	$4,361,929.10
Crafton	Crafton Boulevard Sewer Separation	No	SS	No	$3,814,072.00
Homestead	Hazel Way Sewer Separation Project	No	SS	No	$3,000,000.00
Carnegie	Cubbage Street Sewer Separation	No	SS	No	$643,323.00
Aspinwall Borough	Western Avenue Sewer Separation Project	No	SS	No	$519,200.00
Crafton	Perrine Street Sewer Separation	No	SS	No	$499,303.25
Crafton	Emerson Avenue Sewer Separation	No	SS	No	$319,016.25
Etna	Spring Street Separation	No	SS	No	$150,000.00
West Homestead	Doyle Avenue Sewer Repairs	No	SS	No	$150,000.00
Churchill Borough	Collins Road Pump Station Redirection	No	SO	No	$1,204,425.00
Penn Hills	Beulah Road Sewer Reroute	No	SO	No	$150,000.00

Controlling the Source

Informational Item

Controlling the Source Objective

Facilitate the identification and implementation of high performing source control projects empowering the Region to make investment decisions aligned with the commitment to an affordable, regional and adaptable CWP

Controlling the Source

- Complete: Internal comments provided
- Complete: Peer review outside of the region
- Complete: Regional peer review, Internal review/formatting
- Ongoing: Update CtS in response to comments
- 5/25 to 5/29: Internal ALCOSAN final review
- 6/1/20: Release CtS on ALCOSAN website

Peer Review Comments

Office of the Allegheny County Executive

PWSA

U Pittsburgh Collaboratory

RAND

ALCOSAN

NEORSD

Kansas City Water

3RWW

Act 167 Rep

Peer Review Comments

- Responses being developed for all comments
- 60-70% of the comments anticipated to generate change in CtS
- Most significant changes anticipated:
  - Publication of **Companion Summary** (previously planned)
  - Additional graphic(s) to better illustrate anticipated methodologies for use by customer municipalities and iterative process
  - Additional technical details where needed in the main report
- Other comments reinforce GSI/SC priorities for 2020/2021, including additional ORE analysis and impact of grey on GSI/SC
- No planned publication of formal responses to comments (potential feedback on key comments via email as courtesy to peer reviewers)
- Acknowledgements of peer reviewers in CtS and Companion Summary

How Source Controls Benefit ALCOSAN

- Understand where source controls could have an immediate impact on the characteristics of the regional collection system
- Source control projects have benefits other than overflow reduction
  - Extends useful life of wastewater assets
  - Protection of public health
  - Reduced wear and tear on ALCOSAN planned facilities
  - Continued investment in collection system / sustainable asset management
  - Municipal regulatory requirements
- Compliance with CD requirements

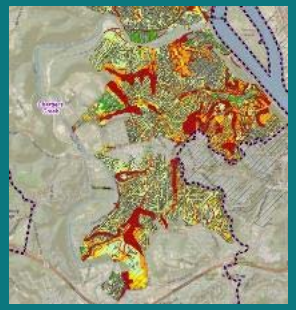
ORE Modeled Conditions

	Existing Conditions (present to 2027)	ICWP Plant Expansion and ORT (2027 to 2036)	ICWP ART and MRT (beyond 2036)	Selected Plan
GSI OREs for the CSS area	✓ Complete	✓ Planned	✓ Planned	✓ Draft
I/I Reduction OREs for the SSS area	✓ Complete	✓ Planned	✓ Planned	✓ Planned
DSIR OREs for discreet locations	✓ Complete	✗ Not planned at this time	✗ Not planned at this time	✗ Not planned at this time

CtS Methodolgy (Green Infrastructure)

Overflow Reduction Efficiencies → **Constraints** → **Opportunities & GSI-SC Strategies** → **Concept Plans and Costing Approach** → **Green Comparison w/ Grey Facilities**

Where
- Locations that can provide most OF Reduction



How (Feasibility)
- Soil, Slope, Environmental Features

Public Strategies
- Green Streets (Municipal / PennDOT)
- Green Parks
- Green Schools and Facilities
- GROW Eligible

Private Strategies
- Redevelopment: SW Ordinance
- Downspout Disconnection
- Coordination with GROW eligible advocate municipalities

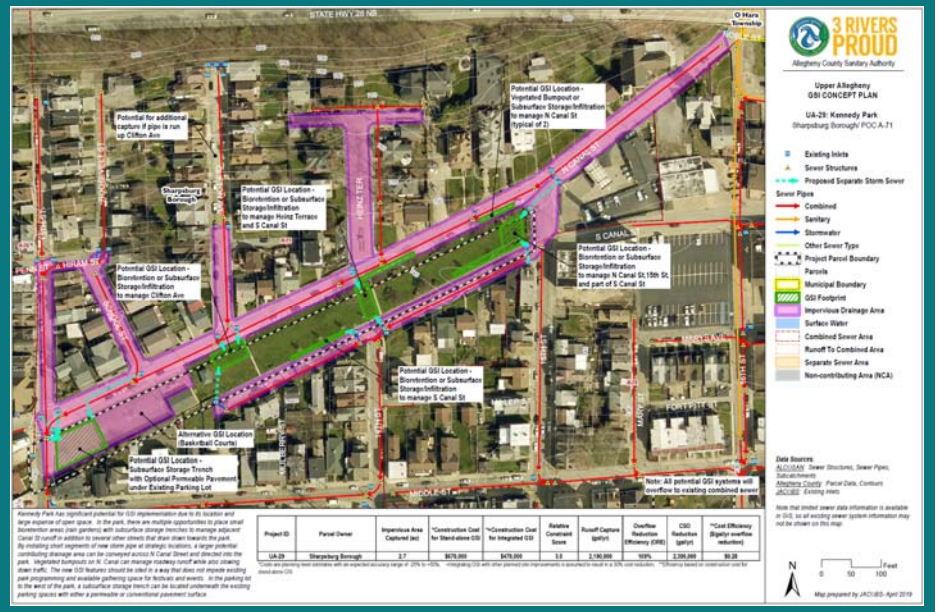
Who, What, When
- Public vs. Private
- Programmatic

Cost
- Integrated vs. Stand-Alone
- Factoring in OREs and Constraints

Where are the savings?
- Near Surface Grey Facilities
- Non-Tunnel OFs

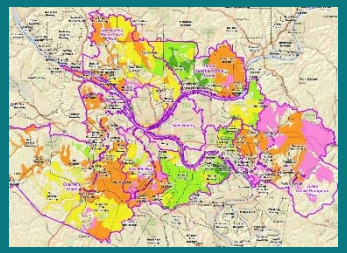
GSI Opportunities - Updates

- Sharpsburg advancing Kennedy Park
- Stakeholder outreach
  - Shared/discussed applicable concepts and additional graphics with Port Authority
  - Shared/discussed applicable concepts with Negley Run Task Force
  - Shared concepts with PWSA

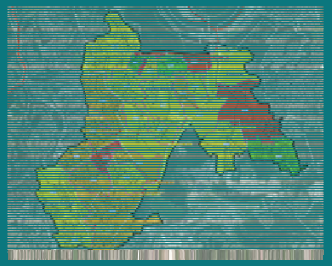


CtS Methodology (I/I Projects)

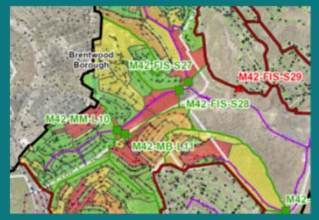
Overflow Reduction Efficiencies → **Flow Monitoring** → **Flow Isolation Study** → **Cost Analysis** → **Opportunities**



Where
- ORE for sanitary sewersheds inform where monitoring efforts should occur.



Where
- Flow monitoring narrows down wet areas in sewershed



Where
- Flow Isolation Study narrows down wet areas in sub-sheds

Sub-Basin	GPD Calc	GPD Reduced at 30%	Flow Target @ 4,200 GPD	GPD Over Threshold-Avg 4,200 GPD	Conservative Reduction GPD	Inch-Miles to Line	Target GPMD
M42-MB-L02	204,790	61,437	110,669	94,121	61,437	28.3	5,440
M42-FIS-S01	92,980	27,894	82,824	10,156	10,156	19.7	4,200
M42-MM-L10	206,839	62,082	203,499	3,440	3,440	48.5	4,200
M42-MM-L12	830,783	249,235	609,359	230,424	230,424	142.9	4,200
M42_MH 1346002	659,246	197,774	371,806	287,342	197,774	88.5	5,313
M42-FIS-S28	189,884	56,965	175,047	14,837	14,837	31.7	4,550
M42-FIS-S27	**427,613**	**128,284**	**400,977**	**26,636**	**26,636**	**95.5**	**4,200**
M42-MB-L14	214,313	70,295	236,739	0	0	0.0	4,157
M42-MB-L31	192,734	57,817	122,414	70,320	57,817	28.3	4,621
M42-FIS-S24	61,878	18,564	48,045	13,833	13,833	13.7	4,200

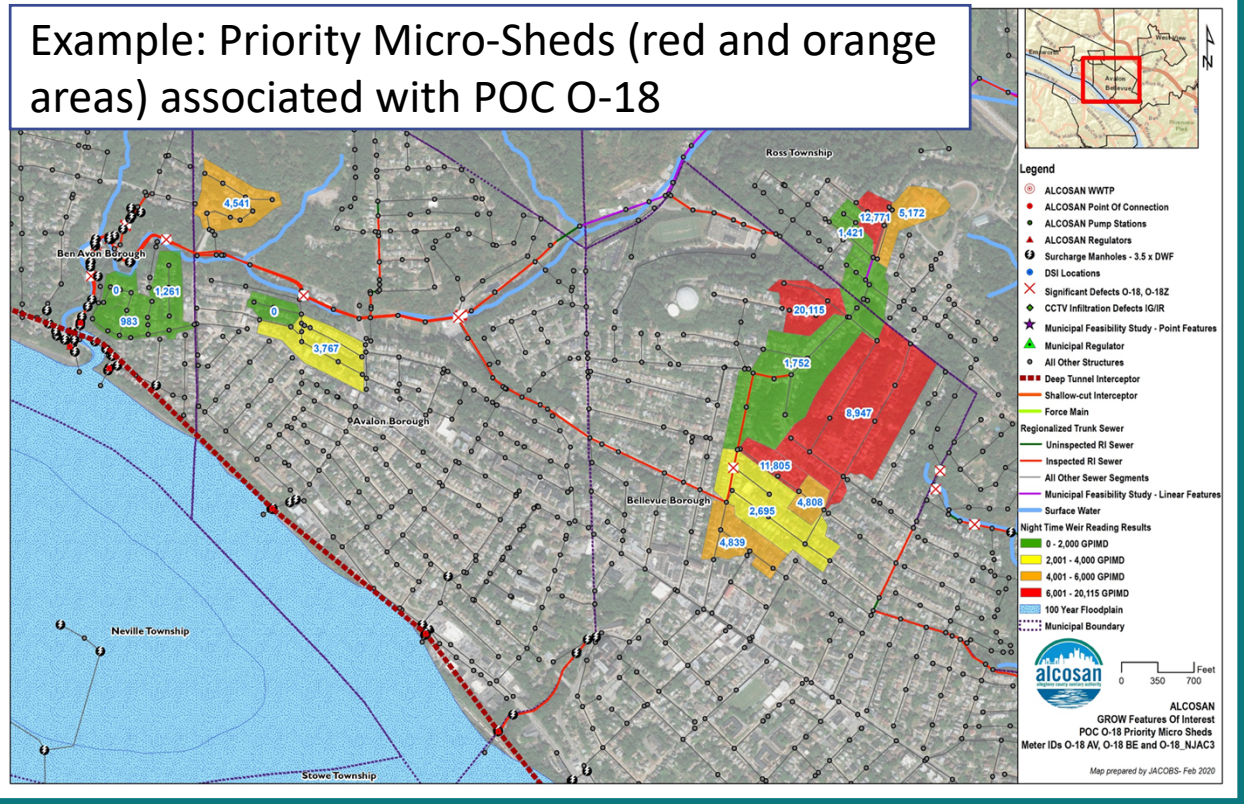
Cost
- Identifying areas with most cost effective projects

Who
- Coordination with customer municipalities

Identified I/I Reduction Opportunities

- Opportunities identified in M-42, M-47 and O-18
  - 3RWW convened meeting with Street's Run (M-42) municipalities
- Other sewersheds currently being analyzed

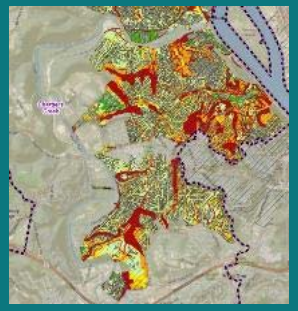
Example: Priority Micro-Sheds (red and orange areas) associated with POC O-18



CtS Methodology (DSIR Projects)

Site Investigation → Feasibility → Overflow Reduction Efficiencies → Cost and Funding Approach → Recommendations

Where
- Desktop analysis
- Locations with known inflows
- Heavy grit and sediment



How
- GSI Constraints
- Utility coordination
- Dry and Wet Weather Flow
- WQ characteristics

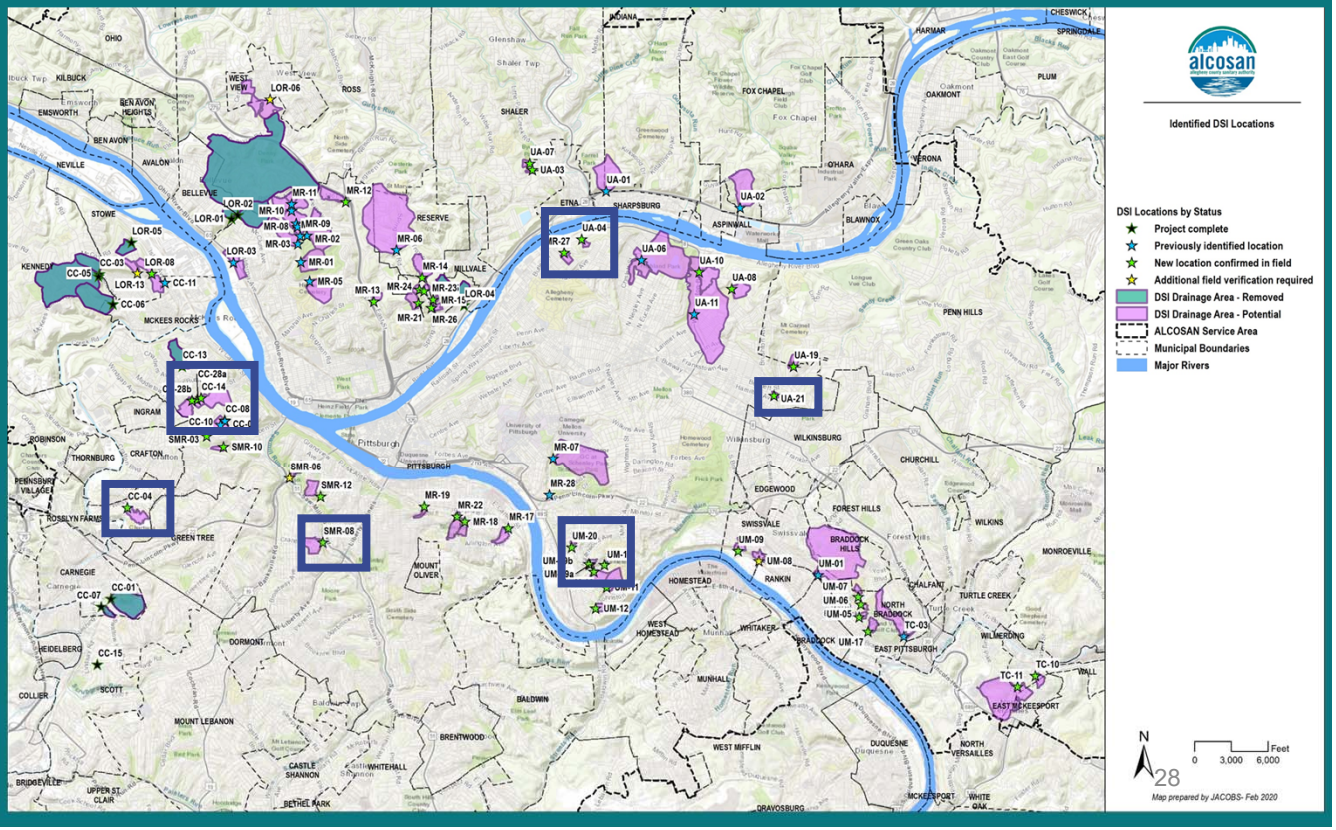
Impact
- Potential OF reduction
- Allow for SS
- Protect exisiting infrastructure

Cost
- ALCOSAN ACT
- Funding Partners

Approach
- Restore stream
- Connect to storm system
- GSI

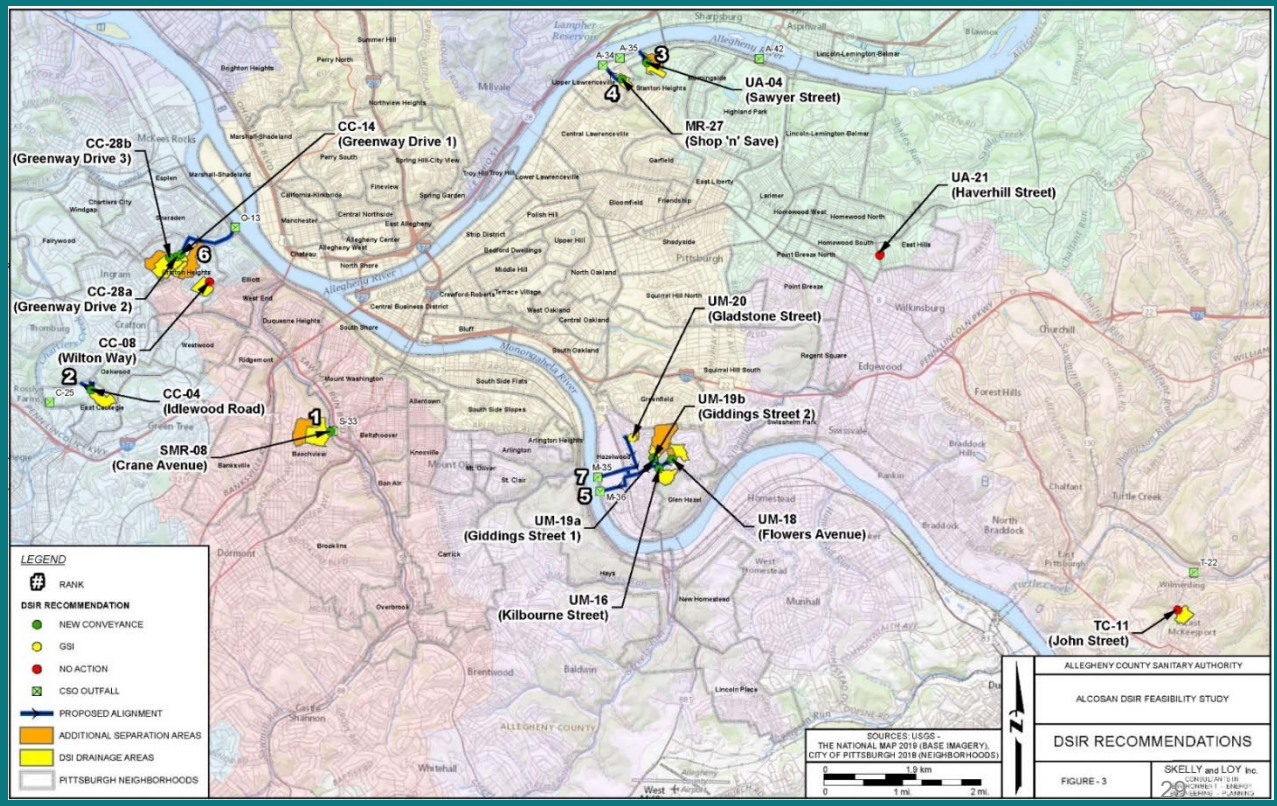
Identified DSIR Opportunities

- 33 previously identified DSI locations
- 44 new DSI locations identified
- Feasibility study for 15 of the locations just completed



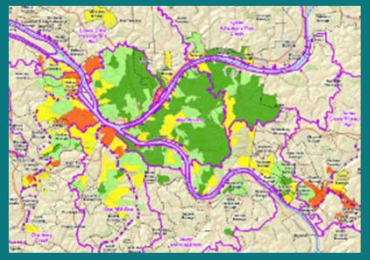
DSIR Feasibility Study Results

- Estimated cost $18 M results in 44 MG/yr inflow reduction ($0.41/gal)
- Etna Spring Street DSIR/SS granted LOI waiver for GROW Cycle 5

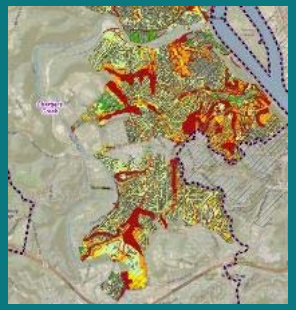


CtS Methodology (SS Projects)

Overflow Reduction Efficiencies → **Opportunities** → **Feasibility** → **Costing Approach** → **Concepts**



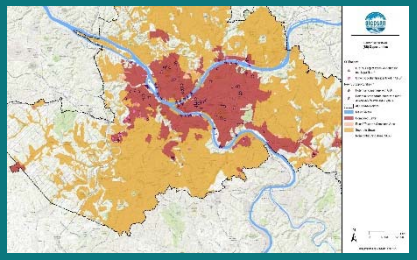
Where
- Locations that can provide most OF Reduction



Efficiencies
- Partially separated systems
- Phased programs

How
- Utility conflicts
- Proximity to receiving waterbody

Cost
- ALCOSAN ACT
- Local code
- Storm sizing



Concepts
- Currently under review

CtS Conclusions

- CtS is intended to guide investment decisions for an affordable, regional and adaptable CWP
- As of February 2020, CTS methodology development and implementation have resulted in:
  - Developing OREs for entire service area under Existing Conditions
  - Identifying 195 GSI opportunities and developing 58 concept plans for priority opportunities
  - Identifying 44 new potential DSI locations and conducting a feasibility study for 15
  - Defining a process to leverage regionalization program information to identify new I/I reduction opportunities
  - Identifying sewer separation opportunity areas that are starting to be investigated
- CtS is an evolving tool to be updated/improved in 2020-2025 timeframe

Status of IDRCs

Informational Item

Successes

- I-579 “CAP” IDRC approved by the City on 11/27/19 and recorded on 1/24/20
- City comfortable with filing IDRC for vacant lots and parks
  - City Law Department doing a final review of the IDRC language for lots and parks. Indicated they may request modifications to the language
  - PWSA has not recorded any IDRCs for projects in these categories

Right-of-Way Discussion 2/27/20

- City would not file an IDRC for right-of-way projects
- Stated they would not have approved an application for right-of-way projects
- Requested special accommodations in Program Guidelines and Grant Agreements for ROW projects (allow a License Agreement)
- GROW only exists with the 20-year O&M and financial liability requirements
- City and PWSA disagree on who would pay ALCOSAN back if a ROW project was removed in part or in entirety

Next Steps

- City Law Department doing a final review of the IDRC language for lots and parks
  - Indicated they may make modifications to the language
- Max drafted a revised IDRC for ROW projects based on the I-579 IDRC, and provided to City and PWSA on April 27
- PWSA Cycle 4 Agreements need resolution by June 8

GROW Grant Extensions

Informational Item

Approved Extensions Feb - April

GROW ID #	Municipality or Municipal Authority	Project Name	Original End Date	Previously Amended End Date	Amended End Date
2017_01-008	Aspinwall	Eastern Avenue Storm Sewer Separation	02/01/2020	-	03/31/2021
2017_01-043	Stowe Township	Fleming Ave GSI Project	5/1/2019	3/31/2020	12/31/2021
2018_01-007	Verona	A-45 Lining Project	3/31/2020		3/31/2021
2016_01-028	PWSA	Larimer Park Green Infrastructure Project	5/01/2020		9/30/21
2016_01-032	PWSA	Melwood Avenue Green Infrastructure Project	4/30/2020	-	12/31/20
2017_01-036	PWSA	Lawn and Ophelia Green Infrastructure Project	4/30/2020	-	12/31/21

May 2020 Extension Requests

GROW ID #	Municipality or Municipal Authority	Project Name	Original End Date	Previously Amended End Date	Amended End Date
2017_01-004	Wilkins Township	Linhart Area Phase IIA Sewer Separation	6/01/2020		12/31/2021
2017_01-020	Etna	Etna Green Streetscape Phases 2 and 3	6/30/2020		6/30/2021
2017_01-021	Indiana Township	Ottawa Hills I/I Removal	5/30/2019	6/30/2020	6/30/2021
2018_01-011	Monroeville Municipal Authority	Woodhaven Drive SSO Sanitary Sewer Rehabilitation Project	6/30/2020		6/30/2021
2018_01-013	Monroeville Municipal Authority	Simpson Run Sanitary Sewer Rehabilitation Project	6/30/2020		6/30/2021

June 2020 Extension Requests

GROW ID #	Municipality or Municipal Authority	Project Name	Original End Date	Previously Amended End Date	Amended End Date
2016_01-015[1]	Crafton	Crafton Park Rain Garden	1/1/2019	12/31/2019 6/30/2020	TBD
2016_01-029[2,3]	PWSA	Hayson Avenue Green Infrastructure	6/30/2018	12/31/2018 6/28/2019 6/30/2020	TBD
2016_01-033[4]	PWSA	McKinley Park Green Infrastructure	6/30/2019	6/30/2020	TBD
2016_01-038[4]	PWSA	Wightman Park Green Infrastructure	6/30/2020		TBD
2017_001-005[1]	Girty's Run JSA	Stanton Avenue Sanitary Sewer Lining	4/15/2019	9/30/2019 6/30/2020	TBD
2017_001-022	Wilkinsburg	South Avenue Area Sewer Rehabilitation	4/1/2019	6/30/2020	TBD
2017_001-025[1]	Munhall Sanitary Sewer Municipal Authority	Storm Sewer Redirection Project	6/30/2019	6/30/2020	TBD

Notes:
1. Waiting for the Final Report to be submitted. Project may be able to complete the close-out process instead of requesting an extension.
2. Project is requesting a fourth extension to the term of the Agreement.
3. PWSA project located in the right-of-way.
4. PWSA project located in a park.

Other Business

Future Meeting Dates

2020 Committee Meeting Dates

- Thursday, July 16th
- Thursday, September 17th
  - Request this meeting move to October based on revised GROW schedule
- Thursday, November 12th

Adjournment

alcosan
allegheny county sanitary authority

Questions / Comments?

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