

Surface Water Management District Update

August 7, 2023 Update to Bath Township

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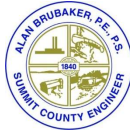
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Surface Water Management District Update 8/7/2023 SWMD Expansion

- All 9 townships are in SWMD, in response to OEPA's ruling that townships were unable to enforce the stormwater permit IDDE.
- The City of Reminderville and Village of Lakemore opted in.
- The MS4 communities' responsibilities are outlined by Ohio EPA in these Six Minimum Control Measures (MCMs):
 1. MCM 1 – Public Education & Outreach - SWCD
 2. MCM 2 – Public Participation & Involvement - SWCD
 3. MCM 3 – Illicit Discharge Detection & Elimination – SCE & SCHD, with assistance from SWCD
 4. MCM 4 – Construction Site Runoff - SWCD
 5. MCM 5 – Post-Construction Runoff Control - SWCD
 6. MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations – each community, checked by SWCD



Surface Water Management District Update 8/7/2023

SWMD Expansion

- Summit County Council and Executive have determined to “kick off” the expanded SWMD by utilizing \$18 Million ARPA funds for MS4 Mapping, watershed studies and priority construction projects.
- ARPA Projects in Bath will include Wye Road Drainage Phase 2, Idle Brook Bankfull Wetlands and Bonnebrook Pond (or other).
- ARPA Projects elsewhere include the following:
 - Northfield Ctr Twp – Marwyck/Dorwick neighborhood
 - Copley Twp – Copley Meadows & Copley Ditch and Black Pond Outlet county ditch improvements
 - Springfield & Lakemore - Springfield Lake Outfall improvement & Springfield Lake Watershed Study for stormwater quality BMPs
 - Coventry Twp – Penguin area ditch improvements
 - Twinsburg Twp – Darrow/Marwell area
 - Cuyahoga River watersheds study
 - Tuscarawas River Watersheds study



Surface Water Management District Update 8/7/2023

SWMD ARPA Projects

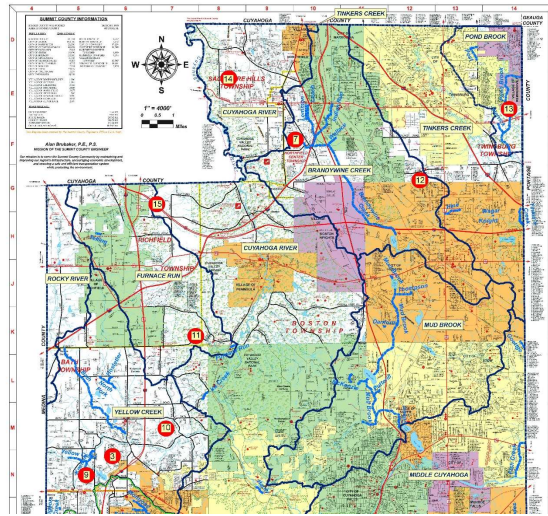
Major considerations for project selection:

- Previously identified areas of concern.
- Severity of the flooding, erosion and/or water quality.
- The number of properties benefiting from the improvement.
- Existing County petitioned ditches that can be improved to provide better drainage and water quality.
- Areas where land is available for stormwater management and water quality basins.



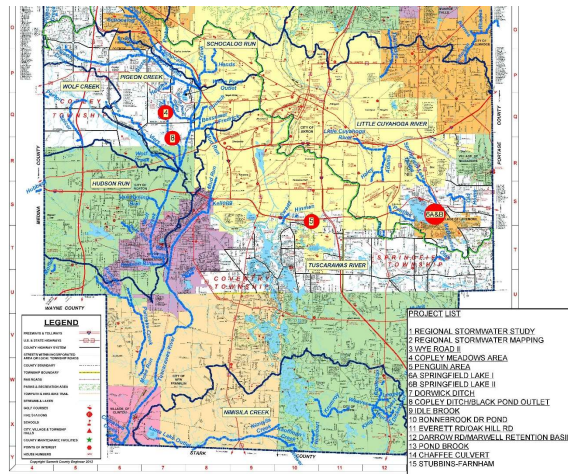
Surface Water Management District Update 8/7/2023

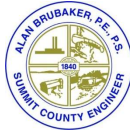
North Projects



Surface Water Management District Update 8/7/2023

South Projects





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SWMD Expansion

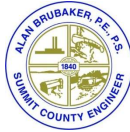
- Bath SWMD will remain as a Special District until June 2024.
- SWMD bills have been on property tax bills since Jan. 2023.
- The SWMD-Bath revenue and funding will be available exclusively for projects that benefit Bath. Currently available for projects is approximately \$600,000. With anticipated revenue of \$300,000 for 2 more years, SWMD-Bath will have approximately \$1,200,000 available for projects.
- Starting January 2025, the new countywide SWMD fees will be collected and the Bath Special District fees will cease.



Surface Water Management District Update 8/7/2023

SWMD Fee Revision

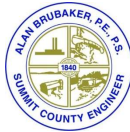
- New SWMD fee was developed with input from stakeholders, including all member communities and the Ohio Farm Bureau.
- The rates were set up so the average home in the SWMD area will pay approximately \$50 annually.
- SWMD bills will be on property tax bills (as Bath's have been).
- SWMD Fees will be calculated based upon parcel area and a 0.5 millage on permanent improvements, with maximum fees for each portion with consideration of classification.
- For a single-family home, the maximum fee will be \$100/yr.
- The fee structure is defined in Chapter 942.05



Surface Water Management District Update 8/7/2023
Status of Bath Projects

Three Bath Projects are On-Going:

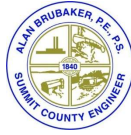
- Yellow Creek Watershed Study – started Autumn 2018, report submitted 2019, refinement and assistance continue.
- Wye Road Flood Mitigation Drainage Improvement – draft study 2019-20, final study done 2020-21, final design 2022-23.
Phase 1 plans done and being prepared for bidding.
Phase 2 plans approximately 30% complete.
- Idle Brook Bankfull Wetlands – identified in YCWS, criteria engineering completed and pursuing additional funding.



Surface Water Management District Update 8/7/2023
Status of Bath Projects

Yellow Creek Watershed Study As-Authorized Tasks
Continue:

- Targeted Preliminary Watercourse Modeling
- Conceptual Opportunity Graphics and Documentation
- Priority Project Re-evaluation
- Stakeholder Engagement
- Programmatic/Crediting Assistance



Surface Water Management District Update 8/7/2023
Status of Bath Projects

Wye Road Flood Mitigation Location Map



Surface Water Management District Update 8/7/2023
Status of Wye Road Drainage Improvement Project

- Wye Road Drainage Improvement Project – will reduce flooding and erosion with sedimentary pollution along this tributary to Yellow Creek.
- The project will be located primarily in the Sanctuary of Bath subdivision and will enlarge the existing detention basin, mitigate flooding on 2 lots and reduce in-stream erosion.
- The project has been split into 2 phases to maximize funding possibilities and for permitting from OEPA and Army Corps of Engineers.



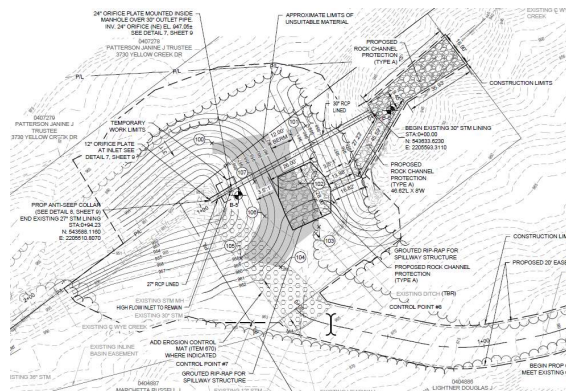
Surface Water Management District Update 8/7/2023
 Status of Wye Road Drainage Improvement Project

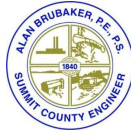
- Phase 1 Plans are complete.
- Phase 1 construction cost estimate is \$682,137. Funding will be 80% EMA BRIC grant and 20% SWMD-Bath.
- Phase 1 construction schedule is Fall 2023 - Spring 2024.
- Phase 2 Plans are 30% complete.
- Phase 2 construction cost estimate is apx. \$500,000. Funding will be 100% SWMD ARPA.
- Phase 2 construction schedule is Spring - Fall 2024.



Surface Water Management District Update 8/7/2023
 Wye Road Drainage Improvement Project

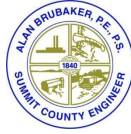
Phase 1 - Proposed SWM Basin Expansion – 50% More Volume





Surface Water Management District Update 8/7/2023 Idle Brook Bankfull Wetlands Project

Location Map

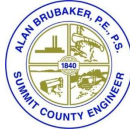
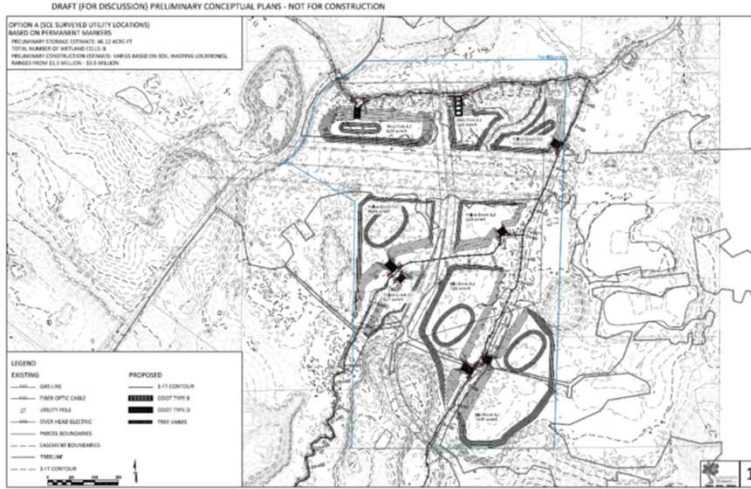


State of the Yellow Creek Watershed 2023 Idle Brook Bankfull Wetlands Project

- Will re-establish the stream's connection to the adjacent floodplains, remove invasive species, and reconstruct the wetlands with native plants.
- This improved area will provide enhanced habitat for flora and fauna and will store stormwater. Yellow Creek velocities & erosion will be reduced as will flooding.
- Project construction cost is estimated at \$1.5M - \$3.0M (depending on soils), Funded by SWMD ARPA. We'll apply for a Clean Ohio Greenspace grant this month.
- Project Site is on 4 parcels owned by Summit County.
- The project consists of 7 or 8 unique wetland cells which might be expanded onto Ohio Edison ROW.
- Construction by Design-Build firm in 2024.

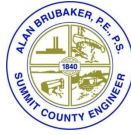


Surface Water Management District Update 8/7/2023 Idle Brook Bankfull Wetlands Project

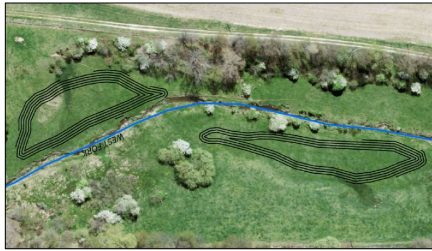
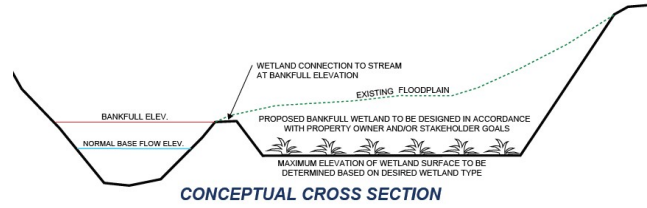


Surface Water Management District Update 8/7/2023 Idle Brook Bankfull Wetlands Project

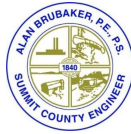




Surface Water Management District Update 8/7/2023 Idle Brook Bankfull Wetlands Project



- Add new storage specifically designed to offload erosive flows
- Created in undevelopable floodplain areas
- Could be optimized to reduce the erosive power of the 1-year discharge, particularly during summer storms



Surface Water Management District Update 8/7/2023 Idle Brook Bankfull Wetlands Project

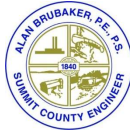
The creek are incised, cut off from the natural floodplain.
The project will restore this connection.



Actual Existing Condition



Proposed Condition



Surface Water Management District Update 8/7/2023
I-77 Issues That May Impact Yellow Creek

I-77 Third Lane – we have received and reviewed the plans from ODOT. They will comply with OEPA’s construction and post-construction stormwater management rules.

- ODOT will include 20 Vegetated Filter Strips in Bath segment.
- **ODOT will add an overflow pipe under Yellow Creek Rd to YC**
- We are reviewing the plans and looking for opportunities to establish stormwater quality / flood mitigation facilities downstream from the I-77 discharge points.

I-77 Southbound Rest Area – ODOT is considering allowing SCE/SWMD to construct a stormwater BMP on their site. Details will be worked out this fall/winter for 2024 build.



Surface Water Management District Update 8/7/2023
SWMD Grading Permit Summary & Updates

- Streams, waterways, wetlands and ditches shall remain open and free-flowing, shall not be altered without a permit, and shall not be polluted.
- Filling and grading operations and construction of ponds, bridges, culverts, and storm sewers must meet standards, and are subject to plan review and permit requirements.
- Existing bridges, culverts, and storm sewers must be properly sized and kept free-flowing so that the waterway is not impeded, or they may be ordered removed.
- Enforcement, appeal, and penalty provisions are in place.
- ***An Application fee of \$50 and Permit Fee of \$250 will cover the cost of review and inspection.***
- ***A Permit Bond is required for work involving pond, wetland or waterway, a drainage system, or over 150 Cu. Yd. of earthwork.***
- ***New homesites will be reviewed and inspected.***

SWMD grading permit projects may also require approval from other agencies:

- Riparian Corridor work requires a Township Zoning Permit.
- Over one acre disturbance requires approval from the SWCD, and smaller projects must include compliant erosion control measures.
- FEMA Floodway work requires approval from the Summit County Floodplain Administrator/Chief Building Official.

(The full code is found in Chapter 942 Appendix A and on the SWMD webpage)



Surface Water Management District Update 8/7/2023 Map of Yellow Creek Watershed

- The Yellow Creek Watershed measures 31 square miles and extends beyond Bath Twp. to 8 other communities.
- Bath also is part of 4 other watersheds: Rocky River, Furnace Run, Sand Run, and Schocalog Run.
- The SWMD is fortunate to be able to support the efforts of Stephanie Deibel as Yellow Creek Watershed Coordinator.

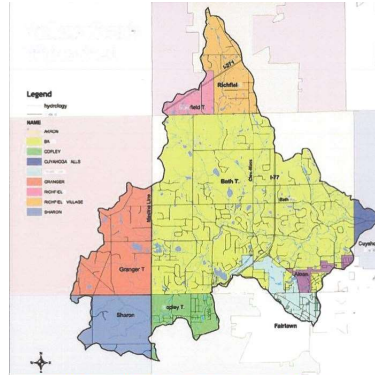


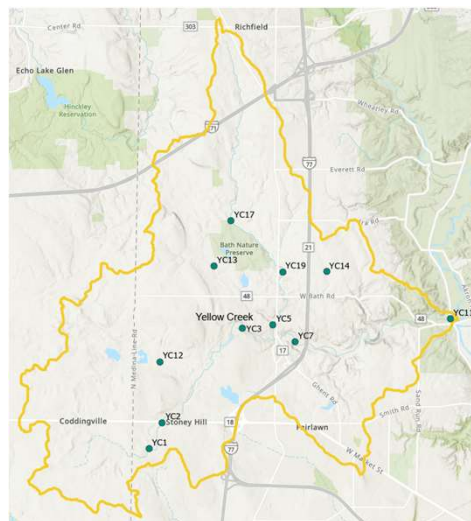
Table 1: Municipalities within the Yellow Creek HUC-12

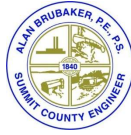
Municipality	Area (acres)	Coverage (%)
Bath Township	11800	60
Copley Township	960	4
Richfield Township	540	3
Village of Richfield	1420	7
Cuyahoga Falls	230	1
City of Akron	210	1
Fallstown	810	4
Granger Township	2510	12.5
Sharon Township	1500	7.5

Note: Areas and percentages are approximate.

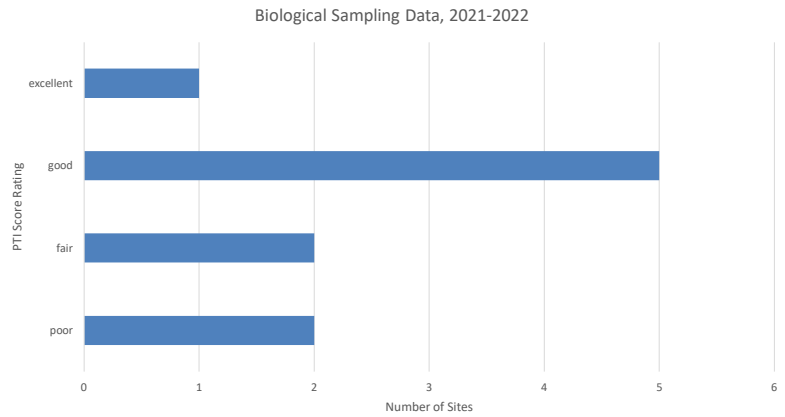


Surface Water Management District Update 8/7/2023 Sampling in Yellow Creek Watershed





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Surface Water Management District Update 8/7/2023

