

Stormwater Management Program

For Licking County & Others, a Small MS4

Ohio EPA Facility Permit Number: 4GQ10011*DG

Permit Period: Starting April 1, 2021

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Introduction

According to the Ohio EPA, storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events. Storm water often contains pollutants in quantities that could adversely affect water quality. Most storm water discharges are considered point sources and require coverage by a National Pollutant Discharge Elimination System (NPDES) permit. NPDES requires a permit for all facilities discharging pollutants from a point source to a water of the state. Pollutants are broadly defined as any type of industrial, municipal or agricultural wastewater. The primary method to control storm water discharges is through the use of best management practices (BMPs).

As defined by Ohio EPA, a Municipal Separate Storm Sewer System (MS4) is a conveyance or system of conveyances (including roads, catch basins, curbs, gutters, ditches, human-constructed channels, or storm drains) that are owned or operated by a public body, designed and used for collecting storm water. A MS4 is not a combined sewer and is not part of a Publicly Owned Treatment Works (POTW).

NPDES Phase II regulations address storm water runoff of MS4s serving populations less than 100,000, called small MS4s. More particularly, small MS4s located partially or fully within urbanized areas (UAs), as determined by the U.S. Bureau of the Census, and also on a case-by-case basis for those small MS4s located outside of UAs that Ohio EPA designates into the program. Automatically designated Small MS4s, those in UAs, were required to apply for permit coverage and develop and submit a SWMP by March 10, 2003. Since then, the 2010 US Census identified additional MS4s and additional UA acreage in existing MS4s.

In Licking County, there are multiple small MS4s. These small MS4s fall under the [Ohio EPA's Small MS4 Storm Water General Permit](#).

The Licking County & Others MS4 is a consortium of small MS4s who partner to better fulfill the requirements of NPDES. The partnership originated in 2003. Jobes Henderson (presently known as Verdantas) was contracted in 2003 to create a NPDES Phase II Stormwater Management Program (SWMP). Entities covered under the initial plan included Licking County, Village of Buckeye Lake, Village of Granville, Village of Hebron, Etna Township, Granville Township, Licking Township, Madison Township, Newton Township, Newark Township, and Union Township. The SWMP has been updated in 2004, 2010, 2015, and 2021. The initial county agency coordinating the MS4 was the Licking County Engineer's Office.

Since 2014, Licking County Soil & Water Conservation District coordinates MS4 permit compliance. Current partners include Licking County, Village of Buckeye Lake, Village of Granville, Village of Hebron, Etna Township, Granville Township, Harrison Township, Licking Township, Madison Township, Newton Township, and Union Township. These municipalities, with the exception of Etna Township, surround the Cities of Newark and Heath. Etna Township is adjacent to the Cities of Pataskala and Reynoldsburg. Each entity has a small Urbanized Area (UA) within their borders. The total MS4 is 22.40 square miles based on the 2010 U.S. census. The estimated total population in the MS4 is 17,000. Etna Township,

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the Village of Granville, and the Village of Hebron are the largest municipalities by population, but not every resident lives within the UA. A list of responsible staff is available in Appendix A.

Licking County has a Stormwater Consortium that meets regularly throughout the year to discuss stormwater Best Management Practices (BMPs). A minimum of one representative from each municipality under the Licking County & Others MS4 is required to attend and participate in at least three meetings a year. The consortium is chaired by the Licking County Soil & Water Conservation District. In addition to the municipalities listed above, the following agencies are members of the consortium: Licking County Engineer's Office, Licking County Planning Department, Licking County Health Department, Licking County Recycling, Licking County Highway Department, Licking County Commissioners Office, (retained) private consultants, and Southwest Licking Community Water and Sewer District. To clarify each partner's roles and responsibilities, the consortium crafted a document entitled *Expectations for Members of the Licking County MS4 Consortium*. The full document is available in Appendix B. Additionally, a Table of Organization is available in Appendix C.

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There are six minimum control measures (MCM) identified by the Ohio EPA. The following SWMP is organized in order of MCM as follows:

- MCM1: Public Outreach & Education
- MCM2: Public Involvement & Participation
- MCM3: Illicit Discharge Detection and Elimination (IDDE)
- MCM4: Construction Site Storm Water Runoff Control
- MCM5: Post Construction Storm Water Management in New Development and Redevelopment
- MCM6: Pollution Prevention/Good Housekeeping for Municipal Operations

MCM 1 – Public Outreach & Education

Licking County and others participate in many ongoing and replicable public outreach and education initiatives related to stormwater management.

Non-personal media: Print and digital literature includes *I Live in a Watershed* brochure, *What is Stormwater? Brochure*, *Rain Garden and Rain Barrel fact sheets*, *Licking County's MS4 Program: A Program to Manage Storm Water Runoff and Protect Our Streams from Pollution* informational flyer, ODOT's *Only Rain goes down the Drain* poster, and NACD's *Backyard Conservation: Lawns and the Environment*. These brochures are available in print or as web links through LCSWCD. LCSWCD also provides at least one stormwater article quarterly. A [Stormwater Management](#) webpage and Facebook pages (@DarrelTheRainBarrel, @ConservingSoilandWater, @RiverRoundUp, #LCRiverRoundUp) also add to the educational outreach. LCHD maintains an online [Illicit Discharge Detection and Elimination Program](#) description as well as information about their [Septic System Operation and Maintenance Program](#). As part of this program, LCHD identified areas with historically high septic system failure rates to focus on in 2016-2017, and includes areas in Granville Township, Licking Township, and Union Township, among others that are not part of the Licking County & Others Stormwater Consortium.

An informational mailing is direct mailed annually to all addresses (~4,000) in the FEMA floodplain and floodway fringe that outlines the MS4 program and MCMs. This mailing also reaches the development community as a specific audience. Utility bills are used as appropriate to send messages about stormwater to stakeholders. Promotion of the annual Licking County waterway cleanup (River Round Up) has been the primary communication piece for utility bills.

Storm drain inlets have been stenciled to show that they convey water to streams in parts of the MS4, especially in the Villages. Many of the townships do not have storm drains so stenciling is not an option.

Hands on efforts: Education also takes place in schools and during field trips for students through formal stormwater programming using Enviroscape and Groundwater models, and water quality testing both in classroom and at field sites. A list of programs offered by LCSWCD is available in Appendix D. Much of the program materials are available for teachers and community volunteers to check out. This addition has the potential to increase our educational reach substantially.

MCM1 public education and outreach efforts are available to the following public school districts:

- Granville EVSD
- Heath CSD
- Lakewood LSD
- Licking Valley LSD
- Newark CSD
- North Fork LSD
- Southwest Licking LSD

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Stormwater education for adults is incorporated into a Conservation Learning Series that includes multiple workshops offered throughout the year. These workshops include volunteer training to become a water quality monitor and collect credible data, DIY rain barrel building and rain garden workshops, tree planting and care, cover crop use for the home gardener, pond clinics, Backyard Conservation Day, professional development for formal and informal educators, and responsible herbicide and pesticide use. These opportunities are publicized on partner web calendars, newsletters, monthly event flyers, and through social media. Multiple themes are easily addressed during workshops.

Informal education also takes place at public events where displays are set up for attendees to view and ask questions. Some events appropriate to attend include: Hartford Fair, Granville 4th of July Celebration, Heath 4th of July Celebration, Turn Off Your Screen Week Kickoff at Infirmary Mound Park (Union Township), and National Pollinator Week event at Riverview Preserve (City of Newark). These events include informational literature and a hands-on experience.

Education and Outreach efforts address multiple pollutants but highlight nutrient, organic, toxic, and sediment, and as the four main categories of stormwater pollution. These four categories conveniently spell NOTS so it is an easy acronym to introduce to the general public. This acronym also establishes stormwater themes as follows:

1. Increase awareness and understanding of nutrient pollution and how to minimize it in stormwater.
2. Increase awareness and understanding of organic pollution and how to minimize it in stormwater.
3. Increase awareness and understanding of toxic pollution and how to minimize it in stormwater.
4. Increase awareness and understanding of sediment pollution and how to minimize it in stormwater.
5. For the development community, increase awareness of sediment and nutrient loss from construction and development operations.

Much of the Education and Outreach efforts are offered by LCSWCD. Licking County Recycling offers programs that encourage proper disposal of waste, thus reducing pollution entering our waterways. We often partner with other entities including the Licking Park District, Master Gardeners of Licking County, Licking County Library, the Works, and area colleges and universities on stormwater related programs and messaging.

Many of the education and outreach efforts are ongoing and have been developed and refined over the past several years. Ohio EPA requires that this storm water public education and outreach program reaches at least 50 percent of this MS4's population over the permit term; 50% of 17,000 = 8,500 people reached in a 5-year period. Based on the most recent annual report, the education and outreach program reached more than 100,000 people in a single year.

The following is the projected schedule for continued success in stormwater education and outreach:

MCM1		
Year	Entity	Activity
Ongoing	LCSWCD	Maintain a storm water webpage
Ongoing	LCSWCD	Maintain a social media presence where storm water issues and opportunities are shared
Ongoing	LCSWCD	Design and print storm water brochures, posters and other literature as needed
Ongoing	LCSWCD	Offer storm water education programs for youth and adults
Ongoing	LCSWCD	Offer storm water education equipment and supplies for check out by community leaders and educators
Ongoing	LCSWCD	Coordinate Stream Team, the citizen water quality monitoring program for the county
Ongoing	LCSWCD	Coordinate the Licking County River Round Up and associated events
Ongoing	ALL	Promote public education and outreach opportunities related to the SWMP
Ongoing	LC Health Dept.	Provide educational resources related to proper Home Septic Treatment Systems (HSTS) maintenance
Ongoing	LC Recycling	Promote storm water education and public participation through website, social media and other available means
Ongoing	Townships	Promote public education and outreach opportunities related to the SWMP
Ongoing	Villages	Maintain a website and/or social media to promote storm water education and event participation. (Links to LCSWCD resources are acceptable.)

MCM 2 – Public Involvement/Participation

Licking County and others participate in many ongoing and replicable opportunities for the public to participate in stormwater management. Hands-on, educational programs include rain barrel building workshops, volunteer water quality monitoring (Stream Team), annual waterway clean up (River Round Up), teacher workshops using nationally recognized curriculum (Project WET, Project WILD, Project Learning Tree), and general presentations about natural resource conservation. Participants increase their awareness and understanding of stormwater pollution and how to minimize various types of stormwater pollution. For educators specifically, our goal is to connect educators to the stormwater system so they could be better informed citizens themselves and share their new knowledge with their students. In schools, our goal is to reach youth from PK-12th grade through interactive, in class programming related to watersheds, stormwater, and how people can help or hinder stormwater impacts. We accomplish this goal by using the Enviroscape model, groundwater model and water quality testing equipment and supplies. Youth participate in this hands-on programing to learn about stormwater pollution and how to minimize that pollution.

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The River Round Up is our signature event and has expanded to promote the year-round intention of keeping our waterways clean. This initiative includes a major waterway cleanup day and events to promote waterway clean ups including a poster contest, local leader float, River Roundup Day proclamation presentations, Chipper Day, Cleanup and Shred It Day, Cleanup Week, Hazardous Waste Pick-up, Clean-up/Fix-up Week, Brush Pick-up/Chipping/Mulch program, event composting and recycling, and Tire Amnesty Program. River Round Up and associated events reach adults, youth, families, civic organizations, businesses, youth groups, schools and local leaders. The events listed above far exceed the minimum requirement of at least five events during the permit term.

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LCSWCD, Licking County Planning and Licking County Engineer's Office host the Technical Review Committee (TRC). They reach [out to](#) the construction and development community groups through regular meetings to discuss construction plans and how the plans consider stormwater management through sediment and erosion controls. These meetings increase awareness and understanding of the county stormwater program and how the development community can help or hinder stormwater impacts. Being able to discuss concerns and considerations on submitted plans with individuals, construction and development representatives and local government officials encourages plan modification to better address stormwater and encourage the use of green infrastructure.

These opportunities are advertised on partner web calendars/websites, social media, press releases, flyers, newspapers, radio, displays at events, newsletters, and at public meetings. Stormwater resources are also available on our Stormwater Management webpage including the Storm Water Management Plan and annual reports.

Many of the public involvement/participation efforts are ongoing and have been developed and refined over the past several years. Ohio EPA requires that this storm water public involvement/participation program includes, *at a minimum, five public involvement activities over the permit term*. Based on the

most recent annual report, the public involvement/participation program offered over 500 events and presentations in a single year.

The following is the projected schedule for continued success in public involvement/participation:

MCM2		
Year	Entity	Activity
Ongoing	LCSWCD	Offer storm water education programs for youth
Ongoing	LCSWCD	Coordinate the citizen water quality monitoring program for the county
Ongoing	LCSWCD	Coordinate the Licking County River Round Up and associated events
Ongoing	ALL	Participate in the Licking County River Round Up and associated events
Ongoing	ALL	Participate in Stormwater Consortium meetings
Ongoing	Townships and Villages	Host at least one clean up event in the permit cycle (i.e. Tire Amnesty, Village Clean Up Day)
Ongoing	LCSWCD	Offer adult stormwater educational workshops (rain barrel, rain garden, pond clinics)
Ongoing	LCSWCD	Host at least 1 tree planting event per permit cycle
Ongoing	LCSWCD	Conduct at least 1 attitude survey per cycle to engage public opinions on SCMs

MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

The Licking County Highway Department and the municipalities are connected to sanitary sewer services. The townships within Licking County are mostly on home septic treatment systems (HSTS). The storm sewer system is mapped and continually updated throughout the UA. The maps locate storm drains, outfalls, and ditches. A separate municipal facility map also exists. These maps are maintained by Licking County with the exception of the Village of Granville and Village of Hebron who maintain their own maps respectively. These maps will be expanded to include retention and detention areas in this permit cycle.

The known outfalls in the UA will be dry-weather screened during the permit term. LCSWCD takes the lead on this task with the help of the Villages. Annual outfall investigation is required if previous surveillance demonstrates a high likelihood of illicit discharges. LCSWCD completes basic water quality testing on dry-weather flows and partners with the Newark City Water and Wastewater Department Lab for additional testing.

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Licking County has an Illicit Discharge Report Form available online at www.lickingswcd.com. A copy of the Report Form is available in Appendix F. The report form is used by Licking County & Others leadership and the general public. Reports of sewage are investigated by the Licking County Health Department. Non-HSTS illicit discharge is investigated by LCSWCD and reported to the responsible entity for the specific pollutant (i.e. OEPA).

The Licking County Health Department (LCHD) maintains an Illicit Discharge and Elimination Plan. LCHD protects our streams, rivers and lakes from pollution resulting from the discharge of inadequately treated sewage, wash water or other wastes. The illicit discharge elimination program identifies collector tiles and storm drains that carry pollutants to the streams. These tiles are monitored to make sure no sewage or other pollution is discharging. If a problem is found, a sanitarian will try to follow the tile to the source of the pollution and have corrective action taken. The Illicit Discharge and Elimination Plan focuses extensively on illicit discharge associated with home septic treatment systems (HSTS), specifically failing septic systems. The full plan is available in Appendix E.

The Southwest Licking Community Sewer and Water District shall maintain a list of illicit discharges from their sanitary sewer system and notify SWCD when they are discovered and resolved.

LCHD is currently locating all HSTS within Licking County through a long-term 20+ year plan to permit all HSTS, have them inspected, maintained or repaired/replaced. The process of identifying, mapping, and inspecting HSTS is very long term and on-going, but will eventually identify all HSTS within Licking County. HSTS in the UA have been located and mapped in the previous permit cycle. As LCHD works with its new permitting process to locate and permit all HSTS in Licking County, new HSTS in the UA may be identified. When these discoveries happen, they will be added to the HSTS list and mapped. All known HSTS in the Village of Granville and Village of Hebron have been located, inspected and mapped in GIS, though discovery of previously unknown HSTS happens occasionally. It is the responsibility of the LCHD to work with property owners to remedy problems with HSTS.

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Ordinances and regulations related to IDDE are enacted and being utilized as follows:

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- Village of Buckeye Lake - [Village of Buckeye Lake Ordinances 2013-06 and 2013-07](#)
- Village of Granville - http://www.granville.oh.us/storage/charter_code_and_policies/H-PlanningZoning.pdf
- Village of Hebron - www.hebronvillage.com/stormwater.html
- Licking County Soil Erosion and Stormwater Regulations (covers Townships) - <http://www.lcounty.com/civicax/filebank/blobdload.aspx?BlobID=105602>

The following table summarizes illicit discharge detection and elimination action steps planned over the permit cycle.

MCM3		
Year	Entity	Activity
Ongoing	LCSWCD	Review and update storm water system maps annually
Year 5	LCSWCD	Map retention and detention ponds in MS4
Ongoing	LCSWCD	Oversee dry weather screening of 100% of MS4 outfalls during permit cycle
Ongoing	LCSWCD	Dry weather screen suspect MS4 outfalls annually
Ongoing	LCSWCD	Coordinate Illicit Discharge Reporting response and remediation efforts
Ongoing	LCSWCD	Inspect non-HSTS illicit discharge reports
Ongoing	LCHD	Inspect HSTS/sewage illicit discharge reports
Ongoing	ALL	Use Illicit Discharge Report Form to report illicit discharge
Ongoing	Granville/Hebron Villages	Dry weather screen MS4 outfalls in your municipality
Ongoing	SWLCSWD	Track any illicit discharge reports from SWLCSWD

MCM 4 – Construction Site Runoff Control

Performance Standards: Your construction site storm water control program shall include pre-construction storm water pollution prevention plan review of all projects from construction activities that result in a land disturbance of greater than or equal to one acre. To ensure compliance, these applicable sites shall be initially inspected. The frequency of follow-up inspections shall be at a minimum on a monthly basis unless you document your procedures for prioritizing inspections such as location to a waterway, amount of disturbed area, compliance of site, etc.

In accordance with Section 307.79 of the Ohio Revised Code, the Licking County Board of Commissioners adopted the Licking County Soil Erosion and Stormwater Regulations for Licking County, Ohio. The Board of Commissioners has delegated the administration of these regulations to the Licking County Planning Commission (Section 103: Administration, Licking County Soil Erosion and Stormwater Regulations).

The Licking County Planning Commission has a Memorandum of Understanding (July 1, 1998) with the Licking County Soil and Water Conservation District to participate in the Licking County Technical Review Committee (TRC) and assist with the review of the development plans to ensure compliance with the Licking County Soil Erosion and Stormwater Regulations. Additionally, the MOU provides for the LCSWCD staff to conduct site visits and inspections of construction projects to ensure compliance with the regulations and approved development plans.

The Licking County Board of Commissioners has agreements with DLZ, Inc. for Engineering Services for both Plan Reviews and Inspection Services. These are currently two separate agreements. The engineering services agreement provides for plan reviews to ensure compliance with the Licking County Soil Erosion and Stormwater Regulations, the Licking County Subdivision Regulations, and the Licking County Subdivision Improvement Regulations. The inspection services agreement provides for inspections of construction projects to ensure compliance with the approved plans and the regulations herein specified.

Plan reviews are conducted by the Licking County Technical Review Committee, which consists of the following agencies and applicants: Licking County Planning Commission, Licking County Engineer's Office, DLZ Ohio, Inc. (agent of the County), Licking County Soil & Water Conservation District, water and wastewater entity with jurisdiction, Township (Zoning Inspector, Road Superintendent, and/or Trustee), fire district with jurisdiction, Ohio Department of Transportation (if accessing or adjacent to a state, federal or interstate highway), developer, developer's engineer, developer's other agents. The Licking County Technical Review Committee meets at least monthly during regularly scheduled meetings to review applications to ensure compliance with applicable regulations. This includes the Licking County Soil Erosion and Stormwater Regulations.

All development in the MS4 is required to present a stand-alone, long-term operations and maintenance plan (O&M) with final construction plans. New development and redevelopment must have their O&M approved by LCSWCD before final plat. An O&M checklist is available on the LCSWCD website (www.LickingSWCD.com). The O&M checklist is included in Appendix G.

The TRC also conducts a final site walkthrough inspection once all construction is completed to review the development and ensure compliance with the approved construction plans and applicable regulations.

The TRC group in and of itself has no enforcement authority; that falls back on the specified agencies and the regulations that they administer. The TRC is strictly a reviewing body to provide a “one-stop” review of development proposals to ensure that the plans and other required documents comply with all applicable regulations. Appendix G shows the Development Process in a flow chart format.

In regards to the Soil Erosion and Stormwater Regulations, Licking County Soil & Water Conservation District, Licking County Engineer’s Office and DLZ, Inc. conduct inspections within Townships on behalf of Licking County to ensure that the soil erosion measures as identified on the approved construction plans are in place and maintained, and that the stormwater infrastructure is being constructed in accordance with the approved plans. If there is a violation, a violation letter is presented to the developer. The Licking County Planning Commission enforces any violations of the regulations and works with the Board of Commissioners and the Licking County Prosecutor’s Office to implement enforcement measures if needed.

Upon completion of construction, the developer provides an as-built plan to show the actual constructed improvements. The Licking County Engineer’s Office reviews this on behalf of the County to ensure that the constructed improvements comply with the approved plans and/or are in compliance with the applicable regulations. Before moving to final plat, an O&M Plan agreed upon by the developer and LCSWCD must be completed and approved.

The developer submits a signed original O&M Agreement to Licking County Prosecutor’s Office. The following must be printed on the mailed O&M Agreement: *ATTN: DEVELOPMENT NAME – Long-term Operations and Maintenance Agreement for Stormwater Infrastructure – For Review by Prosecutor’s Office*. The Prosecutor’s assignee will review the Agreement for approval and sign *as to form*. The Prosecutor’s assignee forwards the O&M Agreement to the Licking County Commissioners for signature. LCSWCD will draft a resolution request with LCSWCD’s recommendation for the Commissioners to approve the O&M Agreement as presented. Once signed by the Commissioners, the O&M Agreement will be recorded in conjunction with final plat by the Licking County Planning Department.

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The previous information covers the townships in the MS4. The municipalities are responsible for establishing ordinances, reviewing site plans, and conducting site inspections. In the Village of Hebron, all site plans are reviewed with an engineer. The engineer’s comments are forwarded to the Developer and resolved before the plans are approved. Hebron also distributes and explains: Village of Hebron Stormwater Construction Site Brochure, EPA Phase II fact sheet 2.6, EPA BMP concrete washout EPA833-F-11-006 and EPA poster *Maintain your BMP* to each Developer. The Villages use direct conversations with project managers and violation letters to address issues.

Ordinances and regulations related to Construction Site Runoff Control are enacted and being utilized as follows:

- Village of Buckeye Lake - [Village of Buckeye Lake Ordinances 2013-06 and 2013-07](#)
 - Note 2013-07 adopts a comprehensive SWMP for the Village of Buckeye Lake
- Village of Granville - Chapter 1197, Chapter 1198, Chapter 1199 of the Village of Granville Codified Ordinance
- Village of Hebron – Chapter 1187 Part Eleven – Planning and Zoning Code
- Licking County Soil Erosion and Stormwater Regulations (covers Townships) - <http://www.lcounty.com/civicax/filebank/blobdload.aspx?BlobID=105602>

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The following table summarizes construction site runoff control action steps planned over the permit cycle.

MCM4		
Year	Entity	Activity
Monthly	LCSWCD	Participate on Technical Review Committee as the storm water and erosion control expert – review construction plans, and operation and maintenance agreements in the MS4 Urbanized Area (UA)
Monthly	LCPC/LCEO/DLZ/Trustees/ Zoning Inspectors/Fire District/Water-Sewer District	Participate on Technical Review Committee to review construction plans for compliance with subdivision regulations and sediment and erosion control regulations
Monthly	LCPC	Facilitate Technical Review Committee
Ongoing	LCSWCD/LCEO Ditch Petition/DLZ/LCEO	Inspect active construction sites for erosion and sediment controls, as well as stormwater management monthly
Ongoing	LCSWCD	Update stormwater system map to reflect new development
Ongoing	LCEO/DLZ	Review stormwater calculations and report prior to construction
Ongoing	LCSWCD/LCPC/LC Recorder	Institute required Operations and Maintenance Agreement for developments within MS4 and recording O&M with final plat
Ongoing	LCSWCD	Map stormwater system to include detention and retention ponds

MCM 5 – Post-Construction Activities

In late 2014, MS4 Program Management was transferred from the Licking County Engineer's Office to the Licking County Soil & Water Conservation District (LCSWCD).

All post-construction sites within the UA are required to be inspected once every permit cycle. LCSWCD is responsible for inspecting storm water infrastructure in townships and villages in partnership with their MS4 representative or their designee. Post construction runoff control is covered in the Village of Granville and the Village of Hebron by the adoption of MORPC design standards for site development. MORPC has specific and rigid requirements for stormwater control, detention, and storm sewer design in general. Since 2004, the villages have demanded all new designs meet these requirements.

LCSWCD coordinates these inspections in townships. LCSWCD maintains an Urban Technician position to conduct stormwater inspections as a qualified and certified staff member. When an operation and maintenance (O&M) agreement is recorded with the final plat, the O&M plan is referred to. O&M agreements were not required until 2016. Final construction plans are also referred to prior to and during post construction annual inspections. Inspection data is maintained in stormwater software. If violations and concerns are discovered, property owner is informed via letter with an explanation of concern and expected actions for correction with a timetable. If no action is taken by owner, Licking County Planning activates the violation process to resolve the issue. All post construction sites will be inspected at least once during the permit cycle. All new post construction sites will be inspected within one year after final plat.

The following table summarizes post construction action steps planned over the permit cycle.

MCM 5		
Year	Entity	Activity
Annually	LCSWCD	Conduct final-walk through post-construction inspections and issue inspection reports for construction completed within permit cycle
As needed	LCPC	Activate violation process
By Year 5	LCSWCD	Conduct 1-yr post-construction inspections and issue inspection reports for construction completed prior to permit cycle

MCM 6 – Good Housekeeping and Pollution Prevention

Licking County Soil & Water Conservation District (LCSWCD) coordinates annual Good Housekeeping training. Licking County Highway Department employees participate, as well as MS4 representatives and road crews for partner municipalities. LCSWCD maintains attendance logs for these trainings.

The following municipalities have a municipal facility within the UA: Licking County Highway Garage, Village of Buckeye Lake, Village of Hebron, Madison Township, , Newton Township, and Union Township. A map showing the location of all municipal facilities of the co-permittees is available in Appendix I. Each municipal facility within the UA is required to have a Stormwater Pollution Prevention Plan (SWPPP). Additionally, an annual walk-through of the municipal site is required to ensure SWPPP compliance along with quarterly rainfall inspections. An annual review of the SWPPP and appropriate updates is also required by each municipality. LCSWCD is available to assist municipalities with their SWPPP and annual review efforts.

MCM 6		
Year	Entity	Activity
Annually	Township/Village Representative	SWPPP review and municipal site walk through
As needed	LCSWCD	Assist with SWPPP review and municipal site walk through
Annually	Township/Village Representatives	Participate in annual good housekeeping training
Annually	Hwy. Dept.	Participate in annual good housekeeping training
Annually	LCSWCD	Facilitate annual good housekeeping training
By Year 5	Madison Twp.	Install covered salt storage or eliminate uncovered/tarped salt storage

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 ■Maintaining storm drains and having O&M plans to explain how they should be running on municipal facilities

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Appendix A: List of Responsible Staff

County Government Contacts				
Last Name	First Name	Email	Title	Agency
Adzic	Bev	badzic@lcounty.com	Clerk	LC Commissioner's Office
Black	Rick	rblack@lcounty.com	County Commissioner	LC Commissioner's Office
Bubb	Tim	tbubb@lcounty.com	County Commissioner	LC Commissioner's Office
Flowers	Duane	dflowers@lcounty.com	County Commissioner	LC Commissioner's Office
Knerr	Jared	jknerr@lcounty.com	County Engineer	LC Engineer's Office
Hughes	Mason	mhughes@lcounty.com	Assistant Engineer	LC Engineer's Office
Morris	Scott	smorris@lickingcohealth.org	Environmental Health Dept.	LC Health Dept.
Cannon	Steve	scannon@lcounty.com	Clerk	LC Highway Dept.
Dobbins	Loren	ldobbins@lcounty.com	Highway Superintendent	LC Highway Dept.
Mercer	Brad	bmercerc@lcounty.com	Planning Manager	LC Planning & Development
Harkness	Chris	charkness@lcounty.com	Director	LC Planning & Development
Krava	Andrea	akrava@lcounty.com	Director	LC Recycling
Jarvis	Joe	joejarvis@lickingswcd.com	Urban District Technician	LC SWCD
Hawthorne	Kristy	kristyhawthorne@lickingswcd.com	District Program Administrator	LC SWCD
Wisniewski	Madison	madisonwisniewski@lickingswcd.com	Urban District Technician	LC SWCD
Gilcher	CJ	cgilcher@swlcws.com	General Manager	SWLCWSD

Village Contacts

*indicates primary contact

Village of Buckeye Lake				
Last Name	First Name	Email	Title	Phone Number
Peterson	Jeryne	mayor@buckeyelakevillage.com	Mayor	740-928-7100
Bucy	Randy		Streets Superintendent	
*Miller	Toby	blwater@roadrunner.com, tmiller@buckeyelakevillage.com	Water Department	
Eby	Kevin	keby@lcounty.com	Water/Wastewater	740 928-0349
Zwissler	Kitty	KZwissler@buckeyelakevillage.com	Council President	

Village of Granville				
Last Name	First Name	Email	Title	Phone Number
*Walker Yost	Debi	dwalkeryost@granville.oh.us	Village Planner	740-587-5243
Koehler	Herb	hkoehler@granville.oh.us	Village Manager	740-587-0700
*Smedley	Steven	ssmedley@granville.oh.us	Assistant Village Planner	740-587-3997
Robinette	Matt	mrobinette@granville.oh.us	Utility Director	740-587-2304
Willey	Darren	dwilley@granville.oh.us	Service Director	740-587-1880

Village of Hebron				
Last Name	First Name	Email	Title	Phone Number
*Nicomemus	Linda	linda.nicomemus@hebronvillage.org	Stormwater Coordinator	740-928-0076
Trujillo	John	john.trujillo@hebronvillage.org	Administrator	740-928-3204

Township Contacts

Etna Township				
Last Name	First Name	Email	Title	Phone Number
Varian	Julie	jvarian@etnatownship.com	Fiscal Officer	740-927-3235
Smith	Mark	roads@etnatownship.com	Roads Dept	740-927-8866
Johnson	Jeff	jjohnson@etnatownship.com	Trustee	740-927-0585
Evans	Mark	Mark@evansforetna.com	Trustee	614-831-1300
*Singleton	John	etnatwpzoning@etnatownship.com	Zoning	740-927-7717
Brown	Laura	etnatownship@etnatownship.com	Board of Trustees	740-927-7717
McKee	Rozland	trusteemckee@runbox.com	Trustee	

Granville Township				
Last Name	First Name	Email	Title	Phone Number
*Bird	Bryn	brynbird@granvilletownship.org	Trustee	740-404-1475
Van Ness	Dan	danvanness@granvilletownship.org	Trustee	
Bennett	Kevin	kevinbennett@granvilletownship.org	Trustee	740-587-0321
Binckley	Travis	zoning@granvilletownship.org	Zoning Inspector	740-587-0229

Harrison Township				
Last Name	First Name	Email	Title	Phone Number
Elder	Carolyn	celder@harrisantownship.net	Fiscal Officer	740-927-3545
Patterson	Ben	roads@harrisantownship.net	Road Superintendent	740-927-8280
Smith	Eric	trusteesmith@outlook.com	Trustee	740-973-6606
Foor	Ray	ray.foor@aol.com	Trustee	740-927-3036
*Hans	Valerie	zoning@harrisantownship.net	Zoning Inspector	740-973-3199
VanBuren	Mark	mvanburen@harrisantownship.net	Trustee	740-404-8656

Licking Township				
Last Name	First Name	Email	Title	Phone Number
Lynch	Andrea	alynchlickingtwp@yahoo.com	Fiscal Officer/Zoning Clerk	740-323-2400
*Mills	Rob		Road Crew	40-404-4475
Miller	Dave	davemiller43056@yahoo.com	Trustee	740-404-4720
Cormican	John	johncormican@yahoo.com	Trustee	740-877-4606
Howell	Doug	dhowell1948@yahoo.com	Zoning Inspector	740-973-5042
Holman	John	johnholman48@yahoo.com	Trustee	740-404-4721

Madison Township				
Last Name	First Name	Email	Title	Phone Number
McFarland	Jennifer	madisontwplc@gmail.com	Fiscal Officer	740-763-3611
Whisner	Roy	madisonzoning@windstream.net	Zoning Inspector	740-618-3820
*Houston	Rick	rhoustonmadisontwp@gmail.com	Trustee	740-404-5599
Chesterson	Patrick	pchestersonmadisontwp@gmail.com	Trustee	740-404-2325
Smith	Jason	-	Roads Superintendent	740-763-2629
Barr	Doug	dbarr@madisontwplc.net	Trustee	740-403-6039

Newton Township				
Last Name	First Name	Email	Title	Phone Number
Preston	Alicia	aliciapreston@windstream.net	Fiscal Officer	740-745-5034
Guinsler	Robert	-	Roads	740-745-2274
Posey	Jeffery	-	Trustee	740-366-6956
Hindel	Jeffery	jeffhindel@gmail.com	Trustee	740-366-1129
Trager	Steve	-	Zoning	740-745-2275
*Ellis	Scott	ellisfarms@windstream.net	Trustee	740-745-3491

Union Township				
Last Name	First Name	Email	Title	Phone Number
Greene	Paula	paula@uniontownship-licking.com	Administrator	740-404-8200
Slater	Jessica	fiscalofficer@uniontownship-licking.com	Fiscal Officer	740-928-0439
*Cable	Dave	dave@uniontownship-licking.com	Roads Superintendent	740-928-2376
Sharps	Jeffrey	jeff@uniontownship-licking.com	Trustee	
Start	Roger	roger@uniontownship-licking.com	Trustee	
Slater	John	john@uniontownship-licking.com	Trustee	740-404-5341

End of Appendix A: List of Responsible Staff

Appendix B: Expectations for Members of the Licking County MS4 Consortium

Section A: Licking County Government Responsibilities

County Commissioners' responsibilities

- Maintain Licking County & Others Municipal Separate Storm Sewer System (MS4) Permit
- Maintain MOU with LCSWCD to manage MS4 program
- Provide funds to LCSWCD to manage MS4 program
- Fund 25% of the cost of the program
- Designate Licking County government departments to fulfill requirements of the MS4 permit as detailed below in Section A: Licking County Government Responsibilities

Licking County Soil & Water Conservation District (LCSWCD) responsibilities

- Organize quarterly storm water consortium meetings
- Administer the Storm Water Management Program (SWMP) for the Licking County & Other MS4 permit
- Maintain a storm water webpage
- Maintain a social media presence where storm water issues and opportunities are shared
- Design and print storm water brochures, posters, and other literature as needed
- Offer storm water education programs for youth and adults
- Offer storm water education equipment and supplies for check out by community leaders and educators
- Coordinate the citizen water quality monitoring program for the county
- Coordinate the Licking County River Round Up and associated events
- Review and/or update storm water system maps annually
- Dry weather screen all MS4 outfalls for all unincorporated areas within urbanized area over the permit cycle
- Coordinate Illicit Discharge Reporting response and remediation efforts
- Participate in Technical Review Committee as the storm water and erosion control expert – review construction plans and operation and maintenance agreements in the MS4 Urbanized Area (UA)
- Inspect active construction sites that require Construction General Permit coverage for erosion and sediment controls monthly
- Ensure completion of post-construction inspections based on requirements for MS4 permit
- Offer Good Housekeeping training or refresher annually for partners
- Assist partners with writing Storm Water Pollution Prevention Plans (SWPPP) as needed
- Review partner SWPPP as requested
- Issue annual fee invoices and collect fees on behalf of county commissioners
- Gather data from MS4 consortium and other partner agencies for annual report

- Prepare and submit annual report to Ohio Environmental Protection Agency (OEPA) by April 1 of each year on behalf of the Licking County MS4 consortium

Licking Planning Department responsibilities

- Maintain an employee as the MS4 consortium representative
- Attend at least 3 storm water consortium meetings annually
- Review the SWMP annually and suggest updates, changes, and supplemental information
- Promote public education and outreach opportunities related to the SWMP
- Maintain and revise Licking County Subdivision Regulations and the Licking County Soil Erosion & Stormwater Regulations that align with the SWMP and MS4 directives as necessary
- Participate in the Licking County River Round Up
- Provide data to LCSWCD for inclusion in annual report by March 1 with a reminder during first quarterly consortium meeting
- Document and execute escalation procedures for violations

Licking County Engineer's Office/Highway Department responsibilities

- Maintain an employee as the MS4 consortium representative
- Attend at least 3 storm water consortium meetings annually
- Review the SWMP annually and suggest updates, changes, and supplemental information
- Participate in the Licking County River Round Up
- Have a SWPPP in place for municipal facilities within the UA. Review and/or update SWPPP annually
- Minimize use of salt, pesticides, herbicides and other chemical that contribute to storm water pollution
- Ensure that the MS4 representative and municipal facility employees participate in annual Good Housekeeping training and inspection
- Perform quarterly facility rainfall inspections
- Provide data to LCSWCD for inclusion in annual report by March 1 with a reminder during first quarterly consortium meeting

Licking County Health Department responsibilities

- Maintain an employee as the MS4 consortium representative
- Attend at least 3 storm water consortium meetings annually
- Review the SWMP annually and suggest updates, changes, and supplemental information
- Promote storm water education and public participation through website, social media and press releases
- Provide educational resources related to proper Home Septic Treatment Systems (HSTS) maintenance
- Participate in the Licking County River Round Up
- Respond to Illicit Discharge reports in cases related to faulty septic systems/HSTS

- Provide data to LCSWCD for inclusion in annual report by March 1 with a reminder during first quarterly consortium meeting
- Map and report HSTS locations to LCSWCD

Licking County Recycling responsibilities

- Maintain an employee as the MS4 consortium representative
- Attend at least 3 storm water consortium meetings annually
- Review the SWMP annually and suggest updates, changes, and supplemental information
- Provide educational resources related to proper disposal of waste/pollutants to reduce storm water contamination
- Promote storm water education and public participation through website, social media and other available means
- Participate in the Licking County River Round Up
- Provide data to LCSWCD for inclusion in annual report by March 1 with a reminder during first quarterly consortium meeting

Southwest Licking Community Water and Sewer District responsibilities

- Optional participation in the Licking County & Others permit
- Promote storm water education opportunities
- Present storm water education programs
- Collaborate on storm water related initiatives
- Provide data to LCSWCD for inclusion in annual report

Commented [WM20]: Was under "optional," now required

Appendix B: Expectations for Members of the Licking County MS4 Consortium

Section B: Township Responsibilities

- Maintain a person to be the MS4 consortium representative, preferably a Trustee or a Township employee
- Have a representative attend at least 3 storm water consortium meetings annually
- Promote public education and outreach opportunities related to the SWMP
- Promote and participate in the Licking County River Round Up
- Review the SWMP annually and suggest updates, changes, and supplemental information
- Ensure that the MS4 representative and employees that work in municipal facilities participate in annual Good Housekeeping training and inspection
- Perform quarterly facility rainfall inspections
- Have a Storm Water Pollution Prevention Plan (SWPPP) in place for municipal facilities within the Urbanized Area (UA) and review and/or update annually
- Minimize use of salt, pesticides, herbicides and other chemicals that contribute to storm water pollution
- Pay annual fee within one month of invoice receipt
- Provide data to LCSWCD for inclusion in annual report by March 1 with a reminder during first quarterly consortium meeting
- Provide LCSWCD with a copy of storm water management policies adopted for use in maintaining a SWMP
- Provide LCSWCD with a copy of any correspondence and applications submitted to the OEPA as part of the NPDES Phase II storm water program

_____. Township hereby engages Licking County Commissioners and their designees to provide services describes herein under "Section A: Licking County Government Responsibilities."

_____. Township hereby agrees to provide Licking County Commissioners and their designees with services described herein under "Section B: Township responsibilities."

Trustee signature

Date

Trustee printed name and title

Appendix B: Expectations for Members of the Licking County MS4 Consortium

Section C: Village Responsibilities

- Establish a specific person to be the MS4 consortium representative – preferably an elected official or a Village employee
- Attend quarterly storm water consortium meetings
- Review the SWMP annually and suggest updates, changes, and supplemental information
- Maintain a website and/or social media to promote storm water education and event participation. (Links to LCSWCD resources is acceptable)
- Promote and participate in the Licking County River Round Up
- Have a Storm Water Pollution Prevention Plan (SWPPP) in place for municipal facilities within the Urbanized Area (UA)
- Conduct dry-weather screening annually for all outfalls within jurisdiction
- Minimize use of salt, pesticides, herbicides and other chemical that contribute to storm water pollution
- Ensure that the MS4 representative and municipal facility employees participate in annual Good Housekeeping training
- Pay annual fee within one month of invoice receipt
- Provide data to LCSWCD for inclusion in annual report by March 1 with a reminder during first quarterly consortium meeting
- Provide LCSWCD with a copy of storm water management policies adopted for use in maintaining a SWMP
- Provide LCSWCD with a copy of any correspondence and applications submitted to the OEPA as part of the NPDES Phase II storm water program
- Provide LCSWCD with a copy of VILLAGE maps related to storm water systems and outfalls

The Village of _____ hereby engages Licking County Commissioners and their designees to provide services describes herein under "Section A: Licking County Government Responsibilities."

The Village of _____ hereby agrees to provide Licking County Commissioners and their designees with services described herein under "Section C: Village responsibilities."

Mayor signature

Date

Mayor printed name and title

Appendix B: Expectations for Members of the Licking County MS4 Consortium

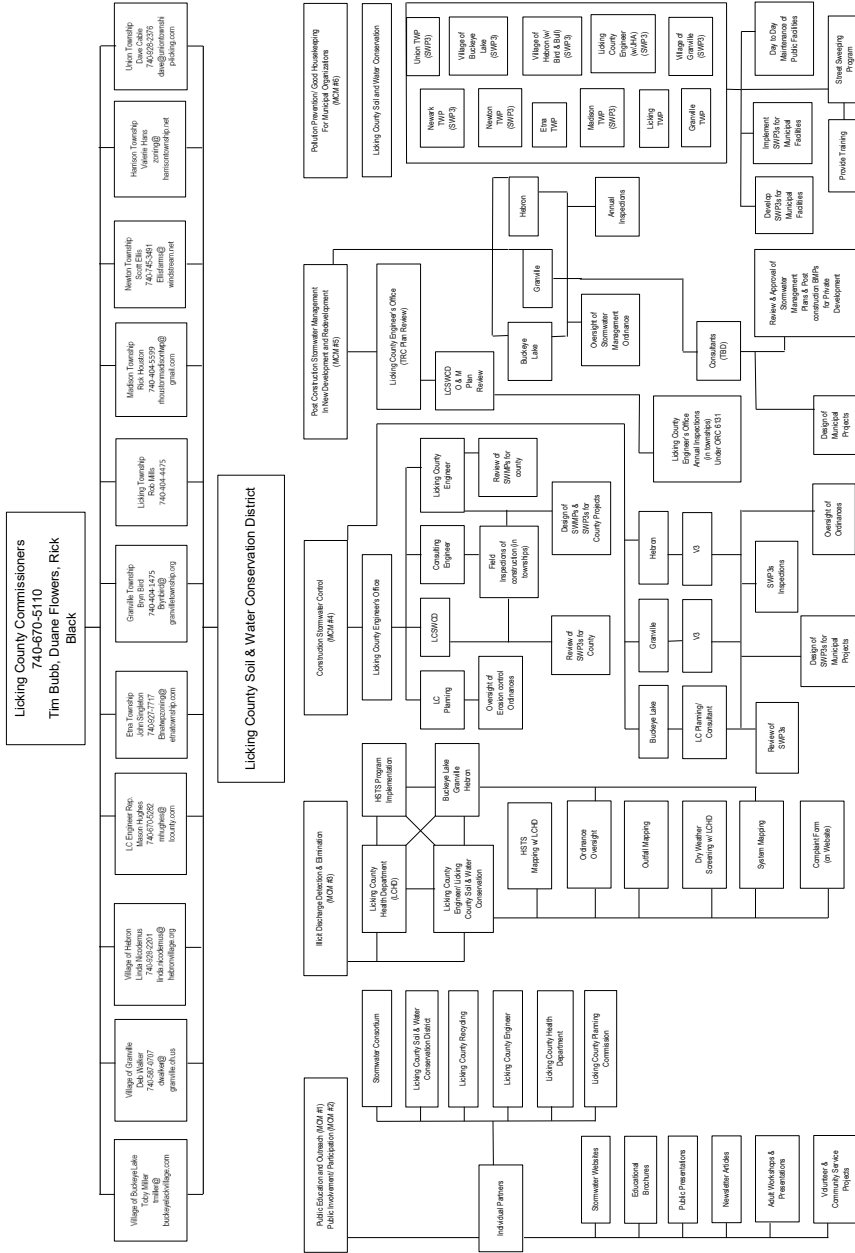
Section D: Optional Partnerships That Could Enhance MS4 Compliance

Licking Park District responsibilities

- Optional participation in the Licking County & Others permit
- Promote storm water education opportunities
- Present storm water education programs
- Collaborate on storm water related initiatives
- Provide data to LCSWCD for inclusion in annual report

End of Appendix B: Expectations for Members of the Licking County MS4 Consortium

Licking County and Others Small MS4



Appendix D: List of Programs Offered by LCSWCD

Education Programs Offered by Licking County Soil & Water Conservation District

Water-based Programs: Licking County has a lot of surface water and groundwater. People depend on this water for drinking, watering plants and animals, bathing, cleaning, etc. Observe how water moves above ground and underground. Evaluate and test the health of our waterways. *Choose from the programs below. Mix and match programs to fit your needs and time limitations.*

- **Enviroscape (20 minutes – 1 hour):** Using a hands-on watershed model, students learn about sources of non-point and point source pollution, as well as explore water pollution prevention through visual interaction. With a real-world career focus, the Enviroscape helps students make connections between what we do on Earth and the impact on the environment. Vocabulary words: watershed, non-point source, point source, pollution, runoff, stormwater, best management practices, sediment, nutrient, organic, toxic
- **Groundwater Model (20 minutes – 45 minutes):** Simulate groundwater movement using a table-top model. Demonstration includes pumps to recirculate the water, wells, springs, artesian wells, a lake, an unconfined and a confined aquifer, a malfunctioning septic systems and leaking underground storage tank. Dye injection is used to simulate groundwater or contaminant flow. (Electricity is required to operate model).
- **Water Quality Testing (30 minutes – 1 hour inside or 1 hour - 2 hours at a stream/river site):** Modeled after Licking Soil & Water's Stream Team program, students learn about various types of water pollution and their sources, as well as career paths related to water quality. Participants perform habitat assessments and biological, chemical, and/or physical water quality tests on surface water. This credible data is recorded and analyzed along with other data collected throughout the county.

Soil-based Programs: The soil under our feet plays a major role in where plants grow and animals live. Participate in soil tests and use scientific equipment to discover characteristics of Ohio soils. Compare soil from various places such as stream banks and grassy fields. Consider how soil is made and how we use the soil, rocks and minerals under our feet. Meet some soil builders and let them teach you how you can build soil in your community. *Choose from the programs below. Mix and match programs to fit your needs and time limitations.*

- **Soil Soup (20 minutes):** This activity is great for introducing soil vocabulary words while making *Soil Soup*. With the help of props, students consider the ingredients needed to make soil. *Vocabulary words:* sand, silt, clay, percolation, horizon, humus, organic matter, invertebrate, organism, ecosystem, reclamation, restoration, habitat, decomposer
- **Soil Testing (30-60 minutes):** Students answer comparative questions by performing soil investigation tests. Students read and follow soil test directions, collect soil samples from various habitats, and use scientific equipment.
- **Decomposer Tag (20 minutes):** Description: Students play a freeze tag game where “Death” tries to tag and freeze the “Nutrients” in plants and animals. The “Decomposers” unfreeze the “Nutrients” trapped in dead bodies, allowing them to return to the cycle of life. Variation 2: To demonstrate that life would stop without “Decomposers” recycling dead things, you can allow “Death” to tag and freeze the “Decomposers” along with the plants and animals. The game (and life on Earth) ends when everyone is frozen except “Death.”
- **Vermicompost and Worm Investigation (20 minutes):** Identify worms as decomposers in a working vermicompost system. Investigate worms in small working groups. Each group gets a worm, investigation equipment, and worksheet to record observations. As a group, conclude with a guided discussion on what ecosystem services worms provide as decomposers.
- **Mineral Puzzle (20 Minutes):** Use rock samples to guide conversation about how are rocks and mineral different, where are they found, and how do we use them. Warm up with a rock sample matching activity. Next build rocks from minerals using a puzzle. Finally students create a work of art by combining their minerals to make a granite sculpture.
- **It Come from Soil Relay (20 minutes):** In teams, students determine if certain everyday items come from the soil beneath our feet or not. As a group, investigate where things ended up and why. The students can make great arguments for why they put things here or there. Ultimately, the group should discover that many everyday items come from soil.

End of Appendix D: Stormwater Education Programs offered by LCSWCD

LICKING COUNTY HEALTH DEPARTMENT ILLCIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Commented [WM21]: Inquire about program and verify duties per organizations

Introduction

The Licking County Health Department (LCHD) has implemented an Illicit Discharge Detection and Elimination Program (IDDEP) in order to protect public health in the Licking County General Health District. The goal of the program is to eliminate discharges that contain sewage and other contaminants. Doing so will increase the water quality of the waterways in Licking County, and prevent illnesses associated with illegally discharging pollutants.

Illicit Discharge Definition

For the purposes of this document and LCHD's IDDEP an illicit discharge constitutes any discharge to a waterway that is comprised of improperly treated sewage or the characteristics of improperly treated sewage. A waterway can include a stream, river, swale, roadside ditch and other areas capable of receiving a discharging tile.

Illicit Discharge Identification

LCHD has identified a total of 391 potential illicit discharge locations that are inspected on an annual basis. These locations were identified using historical data from public health nuisance complaints related to illegally discharging sewage. LCHD will continue to add locations to the program as additional complaints are received and are found in a condition that warrant being monitored on an annual basis. LCHD will also work with the entities conducting MS4 illicit discharge surveillance in Licking County to investigate and conduct necessary enforcement activities related to discharge locations found with illegally discharging sewage.

Illicit Discharge Location Nomenclature

All potential illicit discharge locations identified as part of this program will be named in a uniform manner. The locations will be identified by the political subdivision code in which they are located followed by a discharge identification number for the political subdivision. For example, a discharge location found in Granville Township will be named 08-001. A list of political subdivisions is included as an appendix to this document.

Illicit Discharge Data Collection

Each potential illicit discharge location identified as part of this program will be documented in LCHD's electronic software. LCHD will utilize an application developed by Fulcrum to input the locations of all potential illicit discharge locations included in this program, as well as the inspection data collected at each location. The inspection data will be entered into the software by the LCHD staff member conducting the inspections of the discharge locations. The data will be entered into the system in the field using a handheld device. This will eliminate the need to duplicate efforts by handwriting the information, and then entering the data at a later time. LCHD staff members working in the program will also enter any new inspection locations in the software in the field using a handheld device. The staff member will enter the required information in the software, which will include a picture of the discharge point. The data collected as part of this program will be used by LCHD to identify areas with an increased probability of an illicit discharge causing a public health

nuisance. These areas will be targeted by LCHD staff in order to reduce the public health risk associated with illegally discharging sewage and wastewater.

Illicit Discharge Mapping

All illicit discharge locations identified as part of this program will be mapped using GIS software. This will allow LCHD to easily identify the locations, and provide a visual depiction of areas of concern to stakeholders and elected officials. LCHD staff will collect accurate GPS coordinates for each illicit discharge location identified as part of this program. This information will be added to the department's database and used to develop maps for the county and each political subdivision in which discharge locations have been identified.

Illicit Discharge Location Inspections

All illicit discharge locations contained in the LCHD program will be inspected on an annual basis. The locations will be inspected by sanitarians, EH technicians, and/or interns. Data from each inspection will be recorded using LCHD's form, and all relevant data will be documented on the form.

Dry Weather Screening

All inspections will be conducted through a process known as Dry Weather Screening (DWS). DWS requires discharge locations only be inspected when .01" or less of rain has been recorded within the previous 72 hours. This helps to minimize water related to storm runoff from diluting illicit discharges and potentially masking a public health concern.

Inspection Elements

LCHD's inspection of discharge locations will include the documentation of a variety of parameters. These parameters will provide data related to the quality of the water found at discharge locations, and whether or not further investigation is necessary. The following parameters will be documented at each discharge location:

1. Inspection Date
2. Outfall ID
3. Inspector's Name
4. GPS Coordinates
5. Indication of Last Rainfall Date
6. Type of Pipe at the Discharge Location
7. Discharge Pipe Condition
8. Size of Pipe at the Discharge Location
9. Identification of Flow at Discharge Location
10. Amount of Flow at Discharge Location (1/4 pipe, 1/2 pipe, 3/4 pipe, full pipe)
11. Color of Flow
12. Odor of Flow
13. Temperature of Flow
14. Water Sample Results (If Applicable)
15. Photo of Outfall

Water Sampling

Discharge locations that are discharging at the time of inspection will be sampled in the field for dissolved oxygen, pH, and ammonia. The data collected from these parameters will provide LCHD

with an insight of the potential source of the illicit discharge. Any discharge that is blatantly obvious to be characterized as sewage will not be sampled. The table below provides an indication of the benefit of testing for the parameters at the discharge locations.

Table 1

Parameter	Use of Testing Data
Dissolved Oxygen	Low DO can be an indication of household sewage
pH	Extreme pH levels (high and low) can be an indication of an industrial discharge
Ammonia	High levels can be an indication of sanitary wastewater

Enforcement Action

As illicit discharge locations are identified, LCHD staff will conduct a more in depth investigation in order to determine the source of the discharge. This will include a variety of efforts. If the presence of household sewage is suspected, LCHD will begin investigating upstream from the discharge location in order to identify the pollution source. Once the source is identified, LCHD will implement its standard operating procedures for abating public health nuisances. If an industrial discharge is suspected, LCHD will contact the Ohio EPA in order to provide them with the necessary information in order to initiate an investigation. If the presence of sanitary wastewater is suspected, LCHD will contact the nearest purveyor of sanitary sewer service in order to provide them with the necessary information in order to initiate an investigation.

Public Education

In 2012, LCHD implemented the Sewage and Wastewater Elimination Education Program (SWEEP) in order to increase the awareness level of the importance of regular septic system maintenance. LCHD plans to continue this initiative in order to reduce the number of household sewage treatment system failures due to a lack of regular maintenance. This will consist of the distribution of press releases regarding this information and through LCHD's social media outlets. In addition, LCHD will hold a minimum of one (1) homeowner educational workshop each year. The workshop will be designed to provide basic septic system maintenance information and to allow homeowners to ask questions about their specific system.

In addition, LCHD has made its database of approved septic and well permits available on its website. This allows homeowners, realtors, and contractors to easily access this information and better understand the type of system that exists on a specific property. The database can be viewed at www.lickingcohealth.org

Document Review

Revision	Date of Revision	Section Revised	LCHD Staff Completing Review
1	5/1/13	Document Developed	Chad Brown
2	5/3/13	Water Sampling	Chad Brown
3	5/10/13	Illicit Discharge Data Collection	Chad Brown
4	5/13/13	Document Approved	Joe Ebel

Commented [WM22]: Meet with LCHD to discuss

End of Appendix E: Licking County Health Department's Illicit Discharge and Elimination Plan

ILLICIT DISCHARGE REPORT FORM

Report Environmental Emergencies to Ohio EPA: (800) 282-9378

Name: _____ **Date:** _____

Email: _____ **Phone:** _____

What type of incident do you wish to report? (Check all that apply)

- ☐ Dumping Down a Storm Drain
- ☐ Suspicious Discharge from a Pipe into Surface Waters of the State*
- ☐ Unusual Color of Water of Surface Waters of the State*
- ☐ Strange Smells in Surface Waters of the State*
- ☐ Suspicious Suds or other Substances Floating on Water
- ☐ Death of Aquatic Organisms

**Surface Waters of the State include catch basins, pipes, ditches, flood control facilities, post-construction water quality BMPs, streams, lakes, reservoirs, ponds, marshes, wetlands, or other waterways which are situated wholly or partially within the boundaries of the state.*

Where did the incident take place?

Address (If Applicable): _____

Name of Street: _____

Name of Closest Cross Street: _____

Name of Body of Water Impacted: _____

Please provide a brief description of the area affected that might help us locate the site:

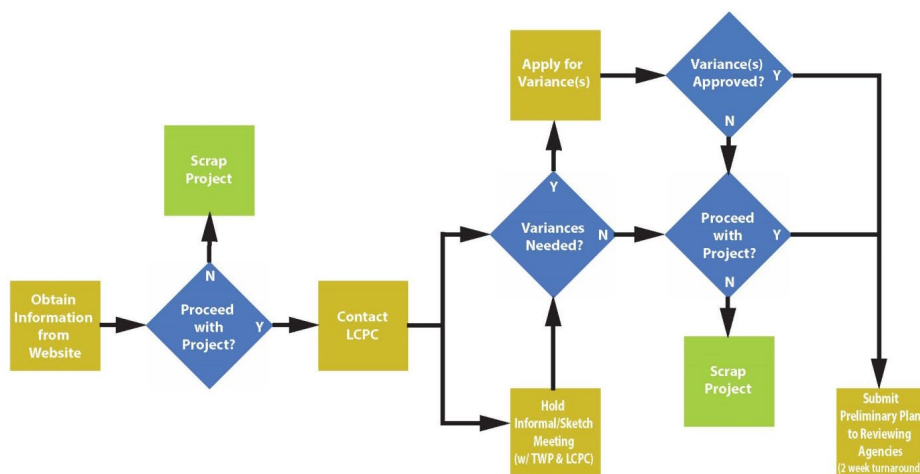
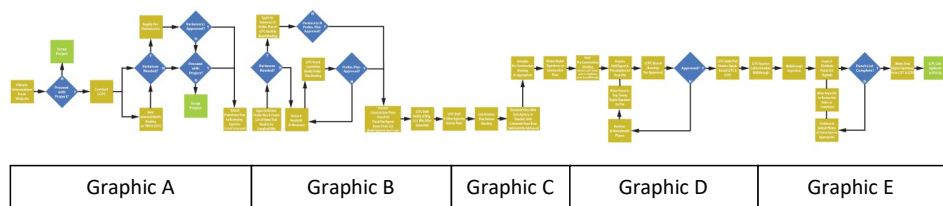
Date of the incident: _____ **Time of the incident:** _____

Please send this form along with any additional information and photographs to:

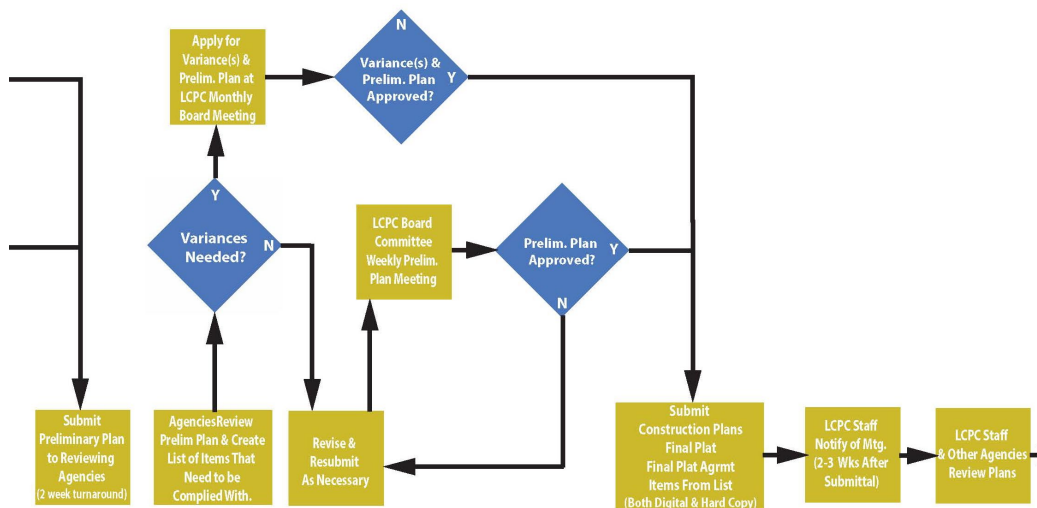
Licking County Soil & Water Conservation District
771 East Main St., Suite 100
Newark, OH 43055
information@lickingswcd.com
740-670-5330

End of Appendix F: Illicit Discharge Report Form

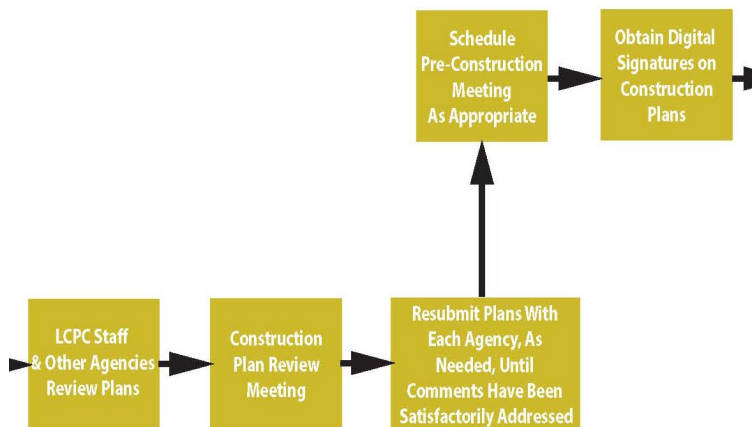
Appendix G: Development Process Flow Chart



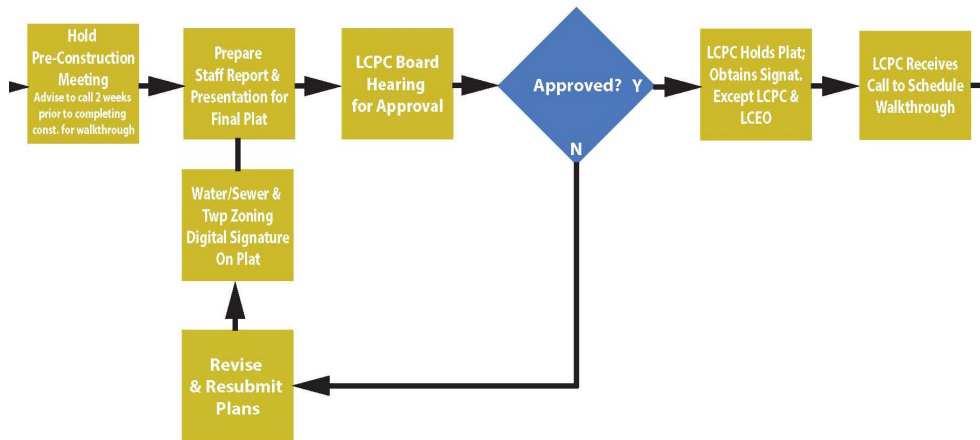
Graphic A



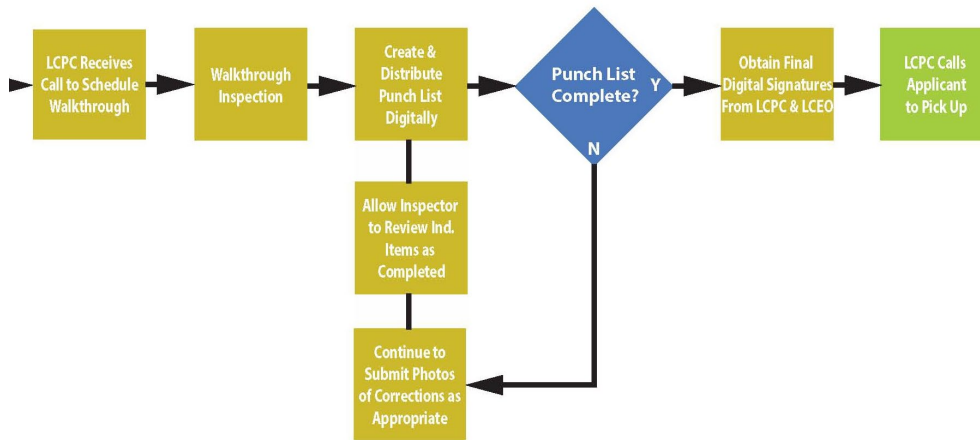
Graphic B



Graphic C



Graphic D



Graphic E

End of Appendix G: Development Process Flow Chart

Long-term Stormwater System Operation and Maintenance Plan Checklist

Licking County Soil and Water Conservation District

1. Cover Page that includes:

- ☐ Title: "Long-term Stormwater System Operation and Maintenance Plan"
- ☐ Development name
- ☐ Location of development
 - o Address
 - o Inset map showing where the development is located in reference to the township, the county, or the nearest city/village.
- ☐ Post-construction Operator of Stormwater System (Typically this is the developer, unless responsibilities are transferred to a Homeowners Association or the system is put into the Licking County Petition Drainage Program.)
 - o Name
 - o Address
 - o Email
 - o Phone Number

2. Table of Contents

3. Stormwater System Overview, including a list and individual descriptions of each Post Construction BMP onsite, describing the purpose, general use, and technical information, i.e. inverts, pool and top of bank elevations, outlet info, etc.

4. Maintenance and Inspection Procedures, Inspection Schedule, and Maintenance/Inspection Log for BMPs.

5. Blank Stormwater BMP Maintenance Inspection Checklist/Report Form

6. Detail drawings of all BMP structures, including outlet structures, basins, water quality ponds.

7. Post Construction Map with topography (11"x17"), showing post-construction layout of site, identifying the stormwater system and its components. A scaled down version from the construction plan set is acceptable.

8. Copies of the SWPPP pages from the construction plan (11"x17").

9. Copies of Stormwater Management pages from construction plan (11"x17"), if they are not one in the same as the SWPPP pages.

10. Map showing any related easements to the stormwater system.

11. IF LOCATED IN MS4 URBANIZED AREA - Long-term Operations and Maintenance Agreement – legal document stating the operators responsibility to maintain the stormwater system.

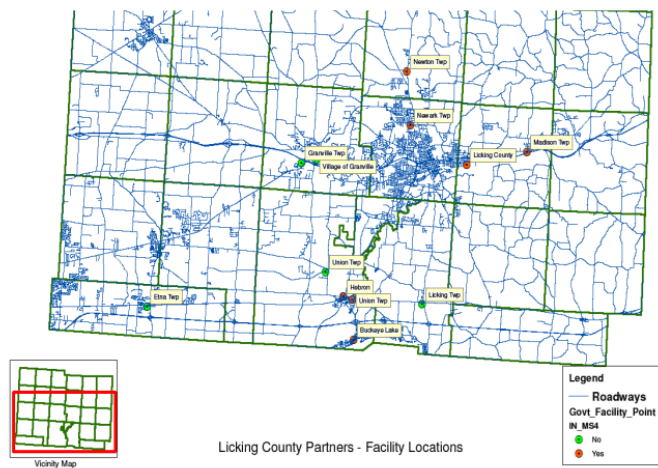
Please compile the above into an 8.5" x 11" packet and send to Licking County Soil and Water Conservation District:

Mail or deliver to:

Licking County Soil and Water Conservation District
ATTN: Urban Technician
771 East Main Street, Suite 100
Newark, OH 43055
740-670-5330

End of Appendix H: Long-term Stormwater System Operations and Maintenance Plan Checklist

Appendix I: Municipal Facilities



End of Appendix I: Municipal Facilities

END OF DOCUMENT