



Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

Acrobat Reader 8.0 or above installed to use the form

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2021 To March, 2022

Permit No. ILR40 0181

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: City of Decatur Mailing Address 1: #1 Gary K. Anderson Plaza

Mailing Address 2: County: Macon

City: Decatur State: IL Zip: 62523 Telephone: 217-424-2747

Contact Person: Paul Caswell Email Address: pcaswell@decaturil.gov

(Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

City of Decatur

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- | | |
|---|--|
| 1. Public Education and Outreach <input type="checkbox"/> | 4. Construction Site Runoff Control <input type="checkbox"/> |
| 2. Public Participation/Involvement <input type="checkbox"/> | 5. Post-Construction Runoff Control <input type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination <input type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping <input type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))



Owner Signature:

Paul Caswell

Printed Name:

5/31/2022

Date:

City Engineer

Title:

EMAIL COMPLETED FORM TO:

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
ANNUAL FACILITY INSPECTION REPORT
June 1, 2022**

**NPDES PHASE II PERMIT FOR STORM WATER DISCHARGES
FROM
MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

**City of Decatur, Illinois
NPDES Permit No. 400181**

REPORTING PERIOD:

April 1, 2021 to March 31, 2022

MS4 OPERATOR INFORMATION:

City of Decatur
#1 Gary K. Anderson Plaza
Decatur, Illinois 62523
(217)424-2747

GOVERNMENTAL ENTITY IN WHICH MS4 IS LOCATED:

Decatur, Illinois

INTRODUCTION:

The 1987 amendments to the Clean Water Act required the United States Environmental Protection Agency (USEPA) to address stormwater runoff in two phases. Phase I of the National Pollution Discharge Elimination System (NPDES) Stormwater Program became effective in 1990. Phase I of the NPDES Stormwater Program applies to large and medium Municipal Separate Storm Sewer System (MS4) communities and eleven industrial categories including construction sites disturbing 5 or more acres of land. Phase II of the NPDES Stormwater Program became effective March 10, 2003 and applies to small MS4's and construction sites disturbing between 1 and 5 acres of land. Phase II also expands the industrial "no exposure" exemption from Phase I. The Illinois Environmental Protection Agency (IEPA) oversees implementing both phases of the NPDES Stormwater Program.

Since the City of Decatur is a small MS4, the report and appendices include the City's compliance with Phase II of the NPDES Stormwater Program. By submitting a Notice of Intent (NOI) in September 2013, the City outlined a plan of implementation for six minimum control

measures with a goal of improving the stormwater quality. The plan was updated with the new NOI that was submitted in February of 2021.

The six minimum control measures are:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-construction Runoff Control
6. Pollution Prevention and Good Housekeeping

The City of Decatur has developed a plan that coordinates with the needs of the City to address the six control measures outlined above. The Best Management Practices (BMPs) outlined in this report were chosen to comply with the NPDES Stormwater Program Phase II. The City has set measurable goals and milestones for each of the BMPs included.

The City has worked together with surrounding communities to create a website, maconcleanwater.com, to help educate the public about the Macon County Municipal Separate Storm Sewer System. This website touches base with two of the six control measure: Public Education and Outreach and Public Participation and Involvement.

The City of Decatur staff selected seven large and important stormwater outfalls throughout the City. Together, these outfalls take large portions of stormwater from residential, commercial, and industrial areas that ultimately flow into waters of the US. The outfall monitoring forms were completed for the seven outfalls and pictures were taken and stored. The forms and maps of the outfalls are in Exhibit 2 of this report.

ITEM A: Changes to Best Management Practices

There were no changes made to the Best Management Practices for the reporting period.

ITEM B: Status of Compliance with Permit Conditions

The City proposed nineteen (19) BMPs during the April 1, 2021 to March 31, 2022 time frame. The City was able to implement all of these BMPs. The City has been able to build upon past good practices, while implementing and maintaining the current BMPs.

For more information on the regarding the implementation of the BMPs for the reporting period, please refer to Item C.

ITEM C: Results of Information Collected During the Reporting Period

The various best management practices listed on the permit are provided herein with brief commentary as to their status in achieving the goal of reducing the discharge of pollutants from the MS4. Supporting information is attached as available. All entries are itemized by BMP as listed in the City's most recent Notice of Intent which was filed March of 2021. Exhibit 2 provides the outfall inspection data

BMP No. A.1 Public Education and Outreach

Brief Description of BMP: Create and distribute brochures related to current and relevant storm water pollution prevention topics.

Measurable Goal(s), including frequencies: Brochures will be available in the Engineering office and Building Services office. In addition, brochures will be given to homeowners, contractors, engineers, and other applicable groups that will benefit from the information the brochure provides.

Milestones: Distribute Homeowner Erosion Control Brochure.

Homeowner Erosion Control brochures are available in the Engineering office and the Building Services office. Brochures are also available at MCSW, Mt Zion, Macon County, and Forsyth. Exhibit 1 provides a copy of the brochures available.

The City also distributes brochures if a sanitary sewer overflow occurs due to a grease blockage in the sewer line, a copy of the City of Decatur brochure, "Cut Through the Fog," will be sent to all properties that may have contributed to the grease issue.

BMP No. A.4 Community Event

Brief Description of BMP: Provide community events for training and education

Measurable Goal(s), including frequencies: Hold a minimum of 1 yearly.

Milestones: Participate in one community event per year.

In 2021 Champaign County hosted the joint MS4 training on October 20, 2021 with a free virtual training named, Illinois Green Infrastructure & Erosion Control Conference 2021. The workshop was published on both Macon and Champaign County MS4 websites along with a mailer sent to our contractor, engineering, municipality contact list. Conference presenters included; Stormwater Solution Engineering, Urbana Park District, Prosperity Gardens, University of Illinois Extension, and Green Spot Alliance. There was approx. 82 attendees via virtual. A copy of the flier is attached in Exhibit 1.

On June 22, 2021, The Macon County Farm Bureau partnered with several local stakeholders located in the Lake Decatur watershed to host a Nutrient Stewardship Field Day, focused on sharing information about recent nutrient Stewardship efforts and other watershed planning updates. There was approx. 48 attendees at this event. A copy of the fly is attached in Exhibit 1

Farm Progress show was held in Decatur on August 31, 2021 through September 2, 2021. The Macon County Water and Soil Water Conservation District had a booth at this event and had estimated 800 visitors to the booth.

BMP No. A.6 Other Public Education

Brief Description of BMP: Continue to update and increase visits to maconcleanwater.com.

Measurable Goal(s), including frequencies: Maintain and Update Website

Milestones: Maintain and Update Website

The Macon County MS4 website – www.maconcleanwater.com has been in place since July of 2012. The local area utilities the website for land develop permits and links to each individual community's information. The website provides easy access to the links and information, which will encourage people to visit more frequently. This year we were not able to report the number of views due to the technical difficulties with the host.

BMP No. B.3 Stakeholder Meeting

Brief Description of BMP: Participate in a working group with Macon County, the Village of Mt. Zion, the Village of Forsyth, and the Macon County Soil & Water Conservation District.

Measurable Goal(s), including frequencies: Meet 4 to 8 times a year with the Macon County MS4 Working Group.

Milestones: Meetings have scheduled dates and agendas are provided for each. The Macon County MS4 Working Group meets the second Tuesday of every alternating month. Below are the dates for the MS4 meetings within the reporting period.

| |
|--------------------|
| May 19, 2021 |
| July 21, 2021 |
| September 15, 2021 |
| November 17, 2021 |
| January 19, 2022 |
| March 16, 2022 |

BMP No. B.4 Public Hearing

Brief Description of BMP: Provide public hearings when modifications are made to the city's storm water ordinance.

Measurable Goal(s), including frequencies: Present any necessary changes to the City's storm water ordinance to the City Council for public discussion as required by law.

Milestones: When changes occur in the storm water ordinance, there will be a City Council meeting to have public discussion of these changes.

The City of Decatur did not have any changes with the ordinance in 2021 reporting period with the latest being in 2020.

BMP No. C.1 Sewer Map Preparation

Brief Description of BMP: Continue to refine the storm sewer infrastructure on the City's GIS map.

Measurable Goal(s), including frequencies: Update storm sewer map as necessary.

Milestones: Update as discovered.

Updates continued to be made and outfalls placed on map as found. The City has had a robust GIS map since 2009 with prior to that having ACAD maps

BMP No. C.7 Visual Dry Weather Screening

Brief Description of BMP: Inspect separate storm sewer discharges for illegal connections

Measurable Goal(s), including frequencies: Screen if complaint is received with a goal to inspection 10% of outfalls greater than 30". Eliminate all illicit discharges discovered.

Milestones: Screen if complaint is received with a goal of 10% on outfall greater than 30".

No illegal connections were found and staff shortages provided difficulties to meet the 10% goal. It is anticipated to meet the goal for 2022

BMP No. D.1 Regulatory Control Program

Brief Description of BMP: Require Land Disturbance Permit all site plans disturbing more than one acre of land and as detailed in the storm water ordinance.

Measurable Goal(s), including frequencies: Receive, review, process and approve all permits.

Milestones: Receive, review, process and approve all permits.

The City completed and issued all permits that met the criteria of the stormwater ordinance.

BMP No. D.2 Erosion and Sediment Control BMPs

Brief Description of BMP: Require Storm Water Pollution Preventions Plans (SWPPP) detailing sediment and erosion control on all site plans disturbing more than one acre of land.

Measurable Goal(s), including frequencies: Require the use of sediment and erosion control Best Management Practices (BMPs) to promote erosion and sediment control on construction sites.

Milestones: Require SWPPPs on all site plans disturbing one acre or more. Review and verify the use of appropriate sediment and erosion control BMPs.

All site plans disturbing one acre or more are required to have a SWPPP. The City's site plan review procedures include review and verification on the use of appropriate sediment and erosion control BMPs.

BMP No. D.4 Site Plan Review Procedures

Brief Description of BMP: Review and approve all site plans in compliance with the stormwater ordinance and development review procedures.

Measurable Goal(s), including frequencies: Review all site plans, LDP, and SWPPPs.

Milestones: Review all site plans, LDP, and SWPPPs.

The City's reviewed and approved all site plans.

BMP No. D.5 Public Information of Handling Procedures

Brief Description of BMP: Provide public services for complaint relating to construction, site erosion and sediment control.

Measurable Goal(s), including frequencies: Track and log all complaints.

Milestones: Track and log all complaints.

The City followed up on all complaints in request for construction, site erosion or sediment control. The City is working on implementing a better tracking system for complaints.

BMP No. D.6 Site Inspection/Enforcement Procedures.

Brief Description of BMP: The City preforms construction site inspections to verify and enforce storm water ordinance compliance.

Measurable Goal(s), including frequencies: For each construction site, inspections will need to occur during the construction process to ensure they are following the storm water code. Anything out of the ordinary will be recorded and followed up.

Milestones: Each construction site will require inspections to verify and enforce storm water code compliance.

Sites are inspected at least once during construction and post stabilization to verify that they are achieving compliance. Larger sites will be visited more. The City has 19 active Land Disturbance Permits, see Exhibit 3.

BMP No. E.2 Regulatory Control Program

Brief Description of BMP: Enforce the City's Storm Water Ordinance.

Measurable Goal(s), including frequencies: Enforce the City's Storm Water Ordinance. Update and modify as necessary.

Milestones: Provide and continue internal policies to enforce the City's Storm Water Ordinance.

The City continued to implement procedures in accordance with City regulations.

BMP No. E.5 Site Inspection During Construction

Brief Description of BMP: Provide construction site inspections for storm water code compliance.

Measurable Goal(s), including frequencies: Perform construction site inspections for storm water code compliance.

Milestones: Inspect all construction sites at least once during construction. The City performs inspections for all sites requiring a Land Disturbance Permit.

The City inspected all construction sites for storm water code compliance. The City has 19 active Land Disturbance Permits, see Exhibit 3.

BMP No. E.6 Post-Construction Inspections

Brief Description of BMP: Provide post-construction site inspections to assure compliance with the City's storm water regulations and the approved site plan.

Measurable Goal(s), including frequencies: Complete post-construction site inspections prior to releasing site bonds to assure that sites are constructed in accordance with the approved site plan and City regulations.

Milestones: Complete post-construction site inspections prior to releasing the site bond.

The City performed post-construction site inspections for all construction sites disturbing one acre or more.

BMP No. F.1 Employee Training Program

Brief Description of BMP: Provide training and direction to employees on the efficient application of salt on roadways for winter snow / ice removal operations.

Measurable Goal(s), including frequencies: Provide yearly training and direction to employees on salt application rates for winter snow / ice removal operations.

Milestones: Provide salt application training prior to winter snow / ice removal operations and direction as to application amounts during operations.

Training procedures have been prepared and provided on salt application during winter operations. Training was held prior to the snow season in 2021 on November 5th.

BMP No. F.2 Inspection and Maintenance Program

Brief Description of BMP: Sweep City Streets in order to reduce potential pollutants.

Measurable Goal(s), including frequencies: Sweep each City street with curb and gutter twice each year.

Milestones: Sweep each curb and gutter street twice each year.

Street sweeping is occurring on each curb and gutter street at least twice each year. 3,823 miles were swept in 2021

BMP No. F.3 Municipal Operations Storm Water Control

Brief Description of BMP: Control the application of salt placed on City streets.

Measurable Goal(s), including frequencies: Using metering devices on the spreaders, monitor the amount of salt placed on City streets during ice and snow removal operations. Provide yearly training of City maintenance staff on salt application and control procedures.

Milestones: Control and monitor the amount of salt placed on City streets during ice and snow removal operations. Provide training on salt application and control.

Salt application is monitored during ice and snow removal operations using the Force America 5100 Spreader Control and 5100ex Spreader Control systems. The control systems are both monitored by CompassCom and they also monitor when the plow is up or down. Training was provided to crews regarding salt application.

BMP No. F.6 Pollution Prevention and Good Housekeeping

Brief Description of BMP: Clean catch basins within the separate storm water collection system in order to reduce potential pollutants.

Measurable Goal(s), including frequencies: Clean at least 500 catch basins per year. These numbers are recorded for each basin cleaned.

Milestones: Continue to clean catch basins every year.

For the reporting year, 662 catch basins were pumped.

Monitoring

Brief Description of BMP: Perform stream surveys and outfall monitoring for seven major outfalls throughout the City of Decatur.

City of Decatur staff selected seven large and important stormwater outfalls throughout the City of Decatur. Together, these outfalls take stormwater from large portions of the City. Runoff from residential, commercial, and industrial areas flow through these outfalls. An outfall monitoring form was made, following a River Watch habitat survey sheet. Over the past year, each of these outfalls were inspected. Pictures were taken, and outfall monitoring sheets were completed. Each of these outfall monitoring forms, as well as a map showing the locations of these outfalls in the City, are included in Exhibit 2.

ITEM D: Activities Planned for the next Reporting Period

The City plans to continue to refine the BMP Controls

ITEM E: NOTICE THAT ANOTHER GOVERNMENT ENTITY IS BEING USED TO SATISFY SOME OF OUR PERMIT OBLIGATIONS

The Macon County Soil and Water Conservation District assist with the education services for the City of Decatur.

ITEM F: CONSTRUCTION PROJECTS PAID FOR BY THE CITY OF DECATUR (That would have required an NPDES Construction Permit)

City of Decatur Firehouse 7
Country Club Rd Reconstruction

ITEM G: ILLICIT DISCHARGES IDENTIFIED / REMOVED

The City received complaint of a carpet cleaning company discharging waste in park, the City inspected the location to not find any sign of debris and also followed up with the company to discuss the proper disposal of waste.

Exhibit 1

MS4 Brochures & Education Events

Illinois Green Infrastructure & Erosion Control Conference 2021

Wednesday, October 20, 2021, 9:00 am to 3:00 pm (CST)
a free virtual conference, hosted by:



Conference Presenters

Stormwater Solutions Engineering, LLC

Urbana Park District * Prosperity Gardens

University of Illinois Extension * Green Sports Alliance

Champaign County Stormwater Partnership

City of Champaign * City of Urbana * Champaign County

Champaign County Soil and Water Conservation

University of Illinois at Urbana-Champaign * Village of Savoy

www.ccstormwater.org

The Champaign County Stormwater Partnership (CCSP) extends a warm welcome to all in attendance at today's virtual conference. Today's conference is designed to engage the audience on how we can all work collectively to achieve the goals of the Clean Water Act. This event will demonstrate existing technologies, techniques, and social programs that:

- have a positive impact on stormwater and help stop severe erosion.
- demonstrate site regeneration.
- bring food security to our community.
- educate homeowners and businesses on developing pollinator-friendly, easy-to-maintain gardens.
- introduce sustainability to the sports world.

Conference Agenda

- 9:00 **Welcome Statements**
- 9:05 **Adrienne Cizek**, PhD, P.E. Senior Project Engineer, Stormwater Solutions Engineering
- 10:00 **Andy Rousseau**, Project Manager, Urbana Park District (UPD)
Kara Dudek, Park Planner, Urbana Park District (UPD)
Erin Pande, Wetland Scientist, Engineering Resource Associates
- 11:00 **Nicole Musumeci**, Director, Prosperity Gardens
- 12:00 **Lunch Break**
- 1:00 **Kelly Allsup**, Extension Educator, Horticulture, University of Illinois Extension
- 2:00 **Garrett Wong**, Member Services Manager, Green Sport Alliance
- 2:55 **Closing Remarks**

Our esteemed presenters:



Adrienne Cizek, PhD, P.E.

Adrienne earned her PhD studying Regenerative Stormwater Conveyance (RSC) at North Carolina State University, working along-side the NC state extension, state and local water quality regulators, and engineering design firms. She has been part of the Stormwater Solutions Engineering (Milwaukee, WI) team for the past seven years, working on Green Infrastructure and site design, community engagement, floodplain modeling, stormwater management plans, permitting, and grant applications.

Regenerative Stormwater Conveyance (RSC), A New Tool for the Stormwater Toolbox uses a series of pools and riffles connected by an

underlying media layer designed to convey, manage, and treat stormwater runoff in one footprint. RSCs provide ravine stabilization, reduction in land use, water quality improvement, and streambank stabilization. This presentation will introduce RSC and its many applications through up-to-date research and case studies so that the audience can add RSC to their stormwater toolbox.



Andy Rousseau

Andy is the Project Manager for the Urbana Park District. He is a graduate of Eastern Illinois University and the University of Illinois-Springfield, with a Master's in Public Administration (MPA). He has worked for UPD in a variety of roles since 2009, and served as the Project Manager for the last 4 years. Andy currently oversees capital improvements and manages contracts for a wide-variety of projects. His projects have included the Crystal Lake Park Rehabilitation Project, a wetland restoration at Perkins Road Park Site, and a habitat enhancement project on the Saline Branch, as part of a joint venture with the Illinois Department of Natural Resources and U.S. Fish and Wildlife Service.



Kara Dudek, AICP, GIP

Kara is Park Planner for the Urbana Park District. A graduate of the Department of Urban and Regional Planning at the University of Illinois, she is a member of the American Planning Association's American Institute of Certified Planners (AICP), as well as a trained Green Infrastructure Practitioner (GIP) through the National Green Infrastructure Certification Program. Kara is also a Climate for Health Ambassador through EcoAmerica. She supports the creation of safe, innovative, resilient, and inclusive parks as an essential tool to address some of the most pressing issues of our day: human and environmental health, climate change, and social equity. Her work ranges from district-wide strategic and climate plans, to park-specific planning; she writes and administers grants, performs GIS work, and collaborates with community members on new UPD projects and initiatives.



Erin Pande, PWS, CFM

Erin is a professional wetland scientist and certified floodplain manager. She graduated from Augustana College in Rock Island, IL with a degree in biology and minors in environmental studies and geology. She has worked for Engineering Resource Associates 17 years. Prior to her work at ERA, she was a



wetland specialist at DuPage County. She has performed natural area assessments and designed and implemented streambank and shoreline stabilization, natural area restoration, and water quality best management practice projects. She has authored the wetland, buffer, riparian, best management practice and volume control sections of the Cook County Watershed Management Ordinance and the Kane County Stormwater Management Ordinance. Erin is also a past president of the Lake Branch of the American Public Works Association (APWA) Chicago Metro Chapter and remains active on numerous committees for the Branch.

Green over Grey Infrastructure: Crystal Lake Rehabilitation Project

The Urbana Park District (UPD) and Engineering Resource Associates (ERA) discuss the Crystal Lake Revitalization project from planning and community input through design and implementation. History of Crystal Lake and common issues plaguing urban lakes will be briefly discussed, while green stormwater practices will be the focus. Learn why the Urbana Park District embraced green infrastructure for solving water quality, erosion, flooding, and habitat degradation concerns at Crystal Lake. Hint—the benefits are abundant!



Nicole Musumeci

Nicole is the Director of Prosperity Gardens in Champaign, IL. She is a University of Illinois ACES graduate with a degree in Agriculture and Environmental Communications. She has served as an

AmeriCorps VISTA volunteer in Champaign and worked for two years in community-based programs in Zambia, Africa as a member of the US Peace Corps.

Prosperity Gardens (Food Security & Environmental Justice)

is an urban farm workforce development program in the Champaign/Urbana community which helps combat food insecurity and takes on food and environmental justice issues. This is achieved in various ways through community partnerships. Conference participants will learn more about Prosperity Gardens workforce development program, which hires and trains vulnerable individuals and supports their transition from homeless to homed, from unemployed to employed. Learn about the urban farm location and how its presence has enriched the area, and the partnership between Prosperity Gardens and the Mobile Market, which strives to serve those located in local food deserts.



Kelly Allsup

Kelly is a Horticulture Educator for University of Illinois Extension serving Livingston, McLean, and Woodford Counties. She meets the educational needs of her community, including local chapters

of Master Gardener and Master Naturalist volunteers, through expertise in home horticulture and entomology. Her passion for ecologically friendly gardening and all things plants makes her a dynamic speaker on topics that range from beneficial insects, to growing vegetables and fruits, to urban trees. A graduate of University of Illinois, she is fervent about connecting the latest horticulture research to the communities she serves so that they may grow more food and conserve the environment.

"Know" Maintenance Gardening (Low Maintenance / Stormwater Control)

is a new perennial garden theory, originally developed by author Roy Diblik, that allows perennial gardens to be more sustainable. Kelly shares a fresh perspective on perennial gardening by outlining specifics from Diblik on bed preparation, plant selection, garden design, watering, and weed maintenance that allow homeowners, businesses, and municipalities to have an easier gardening and landscape management experience.



Garrett Wong

A sustainability change-maker and sports aficionado, Garrett joined the Green Sports Alliance as the Member Services Manager, working directly with the organization's professional sports teams

and collegiate universities. After graduating from Arizona State University's School of Sustainability, he led the Sustainability Committee for the 2017 Final Four in achieving the Council of Responsible Sport's Evergreen Certification. Garrett sat on the School of Sustainability Alumni Board and provided opportunities for Sustainability alumni to further their network and professional development. He was the Emerging Professionals Chair for the U.S. Green Building Council Arizona Community, focused on continued education and networking for green building industry professionals. Between training for his next marathon and improving his amateur photography skills, Garrett is beyond ecstatic to continue working alongside the GSA members to bolster their sustainability programs and push their brands to new heights.

Green Sports Alliance: Solutions from Sports - Catalysts for Sustainable Change.

GSA is an environmentally-focused trade organization that convenes stakeholders from around the sporting world, as they promote healthy, sustainable communities where we live, work, and play.

Champaign County Stormwater Partnership

The Champaign County Stormwater Partnership is a collaboration of local government entities in Champaign County, Illinois, consisting of Champaign County, City of Champaign, City of Urbana, University of Illinois at Urbana-Champaign, the Village of Savoy, and the Champaign County Soil & Water Conservation District. We share common resources and efforts to develop a regional consistency in fulfilling Municipal Separate Storm Sewer System (MS4) permit requirements. This collaboration helps to minimize costs, while maximizing improvements in the quality of stormwater that runs off of the land and into rivers, lakes, and streams.

Thank you for joining us virtually today. Look for our next stormwater forum education conference in 2022, which will be hosted by the Macon County MS4 Group.

Thanks to the CCSP partners for planning this conference, and to all of our speakers who helped make it a success, despite all the hurdles involved.

A special thanks goes to Amanda Christenson and the U of I Extension Team for all their help setting up the Zoom Conference, and making this virtual conference a reality! And, as great as this was, we hope our next CCSP biennial conference will return to in-person at the iHotel in 2023. See you then!



Champaign County Stormwater Partnership Members

Champaign County

John Hall, Director of Planning and Zoning

Champaign County Soil and Water Conservation District

Erin Gundy, Resource Conservationist

Renee Weitekamp, Administrative Coordinator

City of Champaign

Alex Nagy, Assistant City Engineer for Environment

Leslie Heath, Engineering Technician II

City of Urbana

Tim Cowan, P.E., Public Works Director & City Engineer

Beth Reinke, Stormwater Engineering Technician

University of Illinois at Urbana-Champaign

David Wilcoxon, Associate Director, Environmental Compliance

Betsy Liggett, Coordinator, Special Programs, Environmental Compliance

Colleen Ruhter, P.E., Coordinator, Special Programs, Environmental Compliance

Village of Savoy

Roland White, P.E., Public Works Director

Brian Marcotte, Operations Superintendent



**COVID-19
PRECAUTIONS
WILL BE
TAKEN**

JOIN US

2021 Nutrient Stewardship Field Day

TUESDAY
JUNE 22

5:30 P.M. – 7:30 P.M.
REGISTRATION AT 5:00 P.M.

RAIN OR SHINE

Macon County Farm Bureau (CFB) is partnering with several local stakeholders located in the Lake Decatur watershed to host a Nutrient Stewardship Field Day, focused on sharing information about recent nutrient stewardship efforts and other watershed planning updates.

PRESENTERS:

Mike Stacey, President, Macon CFB
– *Welcome*

Lauren Lurkins, Director of
Environmental Policy, Illinois
Farm Bureau (IFB) – *IFB Nutrient
Stewardship Efforts*

Keith Alexander, Water Production
Manager, City of Decatur – *Why We're
Here and Where We're Going*

Angela Daily, Watershed Specialist,
Macon County Soil and Water
Conservation District (SWCD) –
*History of Macon SWCD's Work in
the Watershed*

Jeff Boeckler, Principal Water
Resource Specialist, Northwater
Consulting – *Watershed Management
Program*

Stephen Anderson, Farmer, Shelby
County and **Dr. Rabin Bhattarai**,
Associate Professor, U of I College
of Agricultural, Consumer &
Environmental Sciences – *Drainage
Water Management (DWM)
in Shelby County*

Mike DeCamp, CEO, **Chris Aulbach**,
Lead Agronomist, CoverCress Inc.
(CoverCress) – *Introduction to New
Winter Oilseed Crop for Corn/Soybean
Rotation*

LOCATION:

6705 Angle Crossing Rd.,
Oakley, IL 62501

Limited parking on-site.

RSVP:

By Monday, June 14th to the
Macon County Farm Bureau
at (217) 877-2436

DETAILS:

Decatur Brew Works will serve beer
on-site.

Meal at 5:30, catered by Richland
Community College

**Masks and social distancing will
be required for all attendees.**

Hand washing stations will
be provided.

Brought to you by your local community partners:





Macon County Soil & Water Conservation District

3342 N. President Howard Brown Blvd.
Decatur, IL 62521-6207
217-877-5670 Ext 3

www.maconcountyswcd.net

Educational Events put on by/attended by the Macon County SWCD for 2021/2022

| Date | Name of Event | Program Presented | People in Attendance |
|------------------------------|---|--|----------------------|
| 1/27/21 | Pipeline Safety | Pipeline Safety | 16 |
| February 1-28, 2021 | Contractors Workshop | Pipeline safety, JULIE, green infrastructure, IDOT hauling regulation updates | 36 |
| April 2021 | Agucation | Conservation Jeopardy (virtual event sent to all 5 th grade classrooms in Macon County) | 600 students |
| 5/13/2021 | Lady Landowners | Farm Family Resource | 27 |
| 6/22/2021 | Nutrient Stewardship Field Day | Watershed update, Cover Crops, nutrient reduction | 48 |
| 7/8/2021 | Lady Landowners | Women in Ag | 31 |
| 8/31-9/2, 2021 | Farm Progress Show | Lake Decatur Watershed Through the Years | 800 |
| 8/26/21 | Pond Demo | Pond maintenance, stocking, problems, invasives | 54 |
| 9/9/21 | Lady Landowners | Lincoln Heritage Lincoln Ag | 28 |
| 10/20/21 | Illinois Green Infrastructure & Erosion | Stormwater solutions, Green over Grey, Low maintenance gardening, Catalysts for Sustainable Change | 187 |
| 11/11/21 | Lady Landowners | Ag in the Classroom, ag ed for youth | 26 |
| 1/13/22 | Lady Landowners | Women in Ag | 26 |
| 1/24/22 | Pipeline Training | Pipeline Training | 21 |
| 3/10/22 | Lady Landowners | Farm Inputs | 22 |
| 3/16/22 | Spring Fish Day | Spring Fish Day | 18 |
| Total Reached in FY21 | | | 1,940 |

Gentry Davidson
Watershed Specialist
Macon County SWCD

The Macon County Soil and Water Conservation District is an Equal Employment Opportunity Employer. The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital/family status. (Not all prohibited basis apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audio tape, etc.) should contact USDA's TARGET Center at (202)7202600 (voice and TDD). To file a complaint, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington D.C., 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity employer.



Spring/Fall 2021 EVENTS SCHEDULE

Unwanted TV's and select consumer video devices, gaming systems and home office electronic items may be dropped off for recycling by appointment only on:

Saturday, April 24, 2021

Saturday, May 22, 2021

Saturday, June 26, 2021

Saturday, July 24, 2021

Saturday, August 28, 2021

Saturday, September 25, 2021

Saturday, October 16, 2021 *Rain Day If Needed*

Up to seven TVs/ monitors will be accepted at the cost of \$10 each .



Household-generated paint, stain and varnish will be accepted by appointment only on:

Saturday, April 10, 2021

Saturday, May 8, 2021

Saturday, June 12, 2021

Saturday, July 10, 2021

Saturday, August 14, 2021

Saturday, September 11, 2021

Saturday, October 2, 2021 *Rain Day If Needed*



This is free event for those who register for an appointment.

Please note: Accepted products must be in labeled, original containers.

Empty cans/ dried paint should be disposed in household trash. *We do not accept spray paint.*

Macon County Environmental Management's Spring events will be held at the Recycling Center at 1750 N. 21st St., Decatur

To register for a collection event or for more information:

Visit www.MaconGreen.com, or call 217/425-4505

"MaconCoEnvMgt" on





Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Collector's Electronic Products Collection & Transportation Report

Total Weight Collected & Transported from
January 1, 2021 through December 31, 2021

Report Due: March 1, 2022

Collector Name _____

CED Weight by Site/Event

List the total weight of all residential CEDs collected and transported from program collection sites and one-day events. Each site or event needs to report separately. (Should additional sites or events be needed, click on the button provided to add more fields.)

☒ Site ☐ Event If event, date of event: _____
Street address of location 1750 N 21st Street
City Decatur County Macon Zip 62526

| | | |
|---|---------------|------|
| Computers and Small-Scale Servers** | _____ | lbs. |
| Monitors* | <u>9,286</u> | lbs. |
| Televisions* | <u>64,883</u> | lbs. |
| Printers/Fax Machines/Scanners | <u>815</u> | lbs. |
| DVD Players/DVD Recorders/VCRs | <u>872</u> | lbs. |
| Video Game Consoles | _____ | lbs. |
| Digital Converter Boxes/Cable Receivers/Satellite Receivers | <u>1,435</u> | lbs. |
| Keyboards/Mice/Portable Digital Music Players | <u>1,550</u> | lbs. |
| Total Pounds Collected | <u>78,841</u> | lbs. |
| Total Pounds Collected and Transported | <u>78,841</u> | lbs. |
| Total Pounds <u>Not</u> Transported (remaining on-site) | <u>0</u> | lbs. |

*Pounds of Monitors and Televisions must be separated.

**Includes laptop, notebook, netbook, tablet, desktop.

Add Site Event

Remove Site Event

Why do we care about erosion from construction sites?

Sediment is the number one pollutant that flows from construction sites. It degrades water quality and can harm our water supply.

Macon County, the City of Decatur, the Village of Forsyth, and the Village of Mt. Zion are working together to do their part in protecting and improving water quality.

This brochure is designed to be a quick reference to some commonly used Best Management Practices to prevent erosion.

Failure to install BMP's could bring about costly fines, stop work orders, and expensive clean ups.



Who Should I Contact?



City of Decatur
217-424-2724



Macon County
217-425-6583



Village of Forsyth
217-433-9597



Village of Mt. Zion
217-864-4811

For Inspections:

In Macon County: 217-425-6583
Decatur, Forsyth, & Mt. Zion:
Macon County Soil and Water
Conservation District
217-877-5670 Ext. 3

EROSION & SEDIMENT CONTROL TIPS FOR INDIVIDUAL LOT CONSTRUCTION

www.maconcleanwater.com



A collaborative effort of the
Macon County MS4 Communities

Best Management Practices for Individual Lot Construction

Correctly installed and maintained BMP's can help ensure that sediment generated from construction activity remains on-site. The following BMP's are commonly used for individual lot construction:

Construction Entrance

- Use to prevent tracking soil onto road
- Use 2"-3" stone, 6" deep
- Install during clearing phase and maintain throughout construction
- Install geotextile fabric under entrance



Rock Outlet Protection

- Use to dissipate energy from concentrated flows
- Helps prevent eroded channels downstream
- Use oversized stone appropriate for design velocities
- Install geotextile fabric under riprap



Sediment Barriers

- Use to trap sediment and intercept runoff
- Install prior to clearing phase
- Ensure silt fence is installed correctly by entrenching a portion of it in the ground and place stakes on the downhill side
- Maintain until vegetation is established; keep it upright and remove collected sediment
- Do not use on steep slopes or concentrated flow areas



Sediment Cleanup

- At the end of each work day sweep or scrape soil tracked onto roads
- After storm events inspect for off-site sediment movement and repair damage to barriers
- Remove sediment that penetrated barriers and remove build-up

Inlet Protection

- Protect all stormwater inlets- they are a direct conveyance to streams and rivers
- Install prior to clearing phase
- Filter fabric and temporary seeding are standard for inlet protection



Stockpile Placement and Protection

- Build stockpiles away from critical areas such as streams, drainage ways, and stormwater inlets
- Use temporary seed, such as rye or winter wheat, to stabilize pile until removed or re-graded



Re-vegetation/ Surface Protection

- Try to preserve existing trees, shrubs, and other vegetation when possible
- Use to stabilize exposed surfaces from erosion
- Use seed or sod to cover exposed soils after final grade is completed
- Seed critical areas such as drainage swales, right-of-way areas, areas near curb inlets, buffer areas along streams and wetlands
- Mulching can be used when temporary seeding is not practical and can be done in any weather situation



"All the water that will ever be is right now"

Bioswales

Bioswales are storm water runoff conveyance systems that provide an alternative to storm sewers. They can absorb low flows or carry runoff from heavy rains to storm sewer inlets or directly to surface waters. Bioswales improve water quality by infiltrating the first flush of storm water runoff and filtering the large storm flows they convey. The majority of annual precipitation comes from frequent, small rain events. Much of the value of bioswales comes from infiltrating and filtering nearly all of this water.



Who should I contact if I want to know more about these practices?

City of Decatur
217-424-2724

Macon County
217-425-6583

Village of Forsyth
217-433-9597

Village of Mt. Zion
217-864-4811

Green Infrastructure



*Prepared by: Macon County
Municipal Separate Storm
Sewer System (MS4)
Communities*

What is Green Infrastructure?

Green Infrastructure is a network for solving urban and climatic challenges by building with nature. The main components are stormwater management, climate adaptation, less stress heat, better air quality, and clean water and healthy soils. It also serves to provide an ecological framework for social, economical, and environmental health of the surroundings.

Rain Gardens

Rain Gardens are landscaped areas built in a depression that are designed to capture and filter stormwater runoff from a roof or other impervious surface. The plants and soil of the rain garden provide an easy, natural way of reducing the amount of stormwater runoff from individual residential properties.

Pervious Pavement

Pervious pavement may include paving blocks, grid pavers, or pervious concrete installed according to manufacturer's specifications. Pervious pavement can be used for driveways and patios with a stone reservoir underneath. The reservoir temporarily stores surface runoff before infiltrating it into the soil below the stone reservoir. Runoff is infiltrated directly into the soil and improves water quality.



Green Roofs

A green roof is a roof that is partially or completely covered with vegetation and waterproofing membrane. A green roof's purpose is to absorb rainwater, provide insulation, create habitat for wildlife, and help lower urban air temperatures.



Mission Statement for Municipal Separate Storm Sewer System

Our Municipal Separate Storm Sewer System (MS4) purpose is to protect, maintain, and enhance the environment of the jurisdictions and the public health, safety, and welfare of the citizens by controlling discharges of pollutants to the storm water system, by maintaining and improving the quality of the receiving waters into which the storm water outfalls flow, including without limitation lakes, rivers, streams, ponds, wetlands, and groundwater, and to enable compliance with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations for storm water discharges.



Web Sites for More Information:

www.maconcleanwater.com

Contact:

City of Decatur 424-2747

Macon County 424-1466

Village of Forsyth 877-9445

Village of Mt. Zion 864-4811



**WHEN IT
RAINS.....
IT DRAINS
BE THE SOLUTION TO
STORMWATER POLLUTION**

Basics of Water Pollution

Point Source Water Pollution

This is pollution that flows from pipes or comes from specific points such as an industrial site. This type of pollution is regulated by State laws.

Non-Point Source Water Pollution

This type of pollution results from land runoff, precipitation, atmospheric deposition, drainage and seepage. This pollutant is caused by rainfall and snowmelt moving over the ground. This activity collects pollutants and chemicals which are deposited into various creeks, lakes and water sources. This type of pollutant is not closely regulated but can be prevented by education.

**Be The Solution to
Storm Water
Pollution**

How Can You Make A Difference?

Household Chemicals

Problem: Many people do not know where to dispose of chemicals from the home.

Solution: Take all household chemicals to collection sites on specified days. Please see Macon County Environmental Agency website for additional information and the specific collection dates.
www.macongreen.com

Yard and Garden

Problem: Many homeowners over fertilize their yard because they enjoy the look of a green yard.

Solution: Do not over fertilize your yard. Always follow the manufacturer's recommendations.

Do not apply when rain is in the forecast. Not only is it a waste of time and money, but the chemicals easily wash away in the runoff after a storm.

Do choose natural fertilizers such as compost or grass clippings.

Pet Waste

Problem: Many people allow their pet's waste to wash down the storm drain.

Solution: Pick up pet's waste when going for walks.

Auto Maintenance

Problem: Many people are not careful when performing routine maintenance on their vehicles.

Solution: Do not dump motor oil or fluids down a storm drain.

Do not clean up fluid spills with water. Other alternatives for clean up is kitty litter, sawdust, or wood chips to soak up the spill.

Do take your vehicle to the car wash so the soap and dirt is properly disposed of.

Do properly dispose of all motor oil and fluids properly. Many oil change shops will take used oil at no charge.



Exhibit 2

Outfall Monitoring Sheets



Outfall Monitoring Sheet

Site ID #: Lake ridge st / Lakeview
Stream: _____
Date: _____

Name(s) of Inspector(s): Tatu

Start Time: 12:00 am PM

End Time: 12:30 : _____ am PM

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 40 °F °C
Water _____ °F °C

Water Appearance

- ☒ Clear
☐ Milky
☐ Foamy
☐ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☐ Clear
☒ Slight
☐ Medium
☐ Heavy

Canopy Cover

☐ 0% ☐ 1-5% ☒ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☐ 0% ☒ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes No

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. _____

grass / brush, trees

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

A

Bedrock

C

Cobble (2.5 in – 10 in)

B

Sand (<0.1 in)

D

Boulder (> 10 in)

A

Gravel (0.1 in – 2.5 in)

A

Silt

A

Hard Pan Clay

Other _____

Stream Discharge Estimate

Stream Width: 10 feet
A

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. 1.5 ft
2. 1.6 ft
3. 1.3 ft

Average Depth = _____ feet
B

Velocity Calculations:

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

Average Velocity = 0.3 ft/sec
C

Discharge (width x depth x velocity) _____ ft x _____ ft x _____ ft/sec = _____ ft³/sec
A B C

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

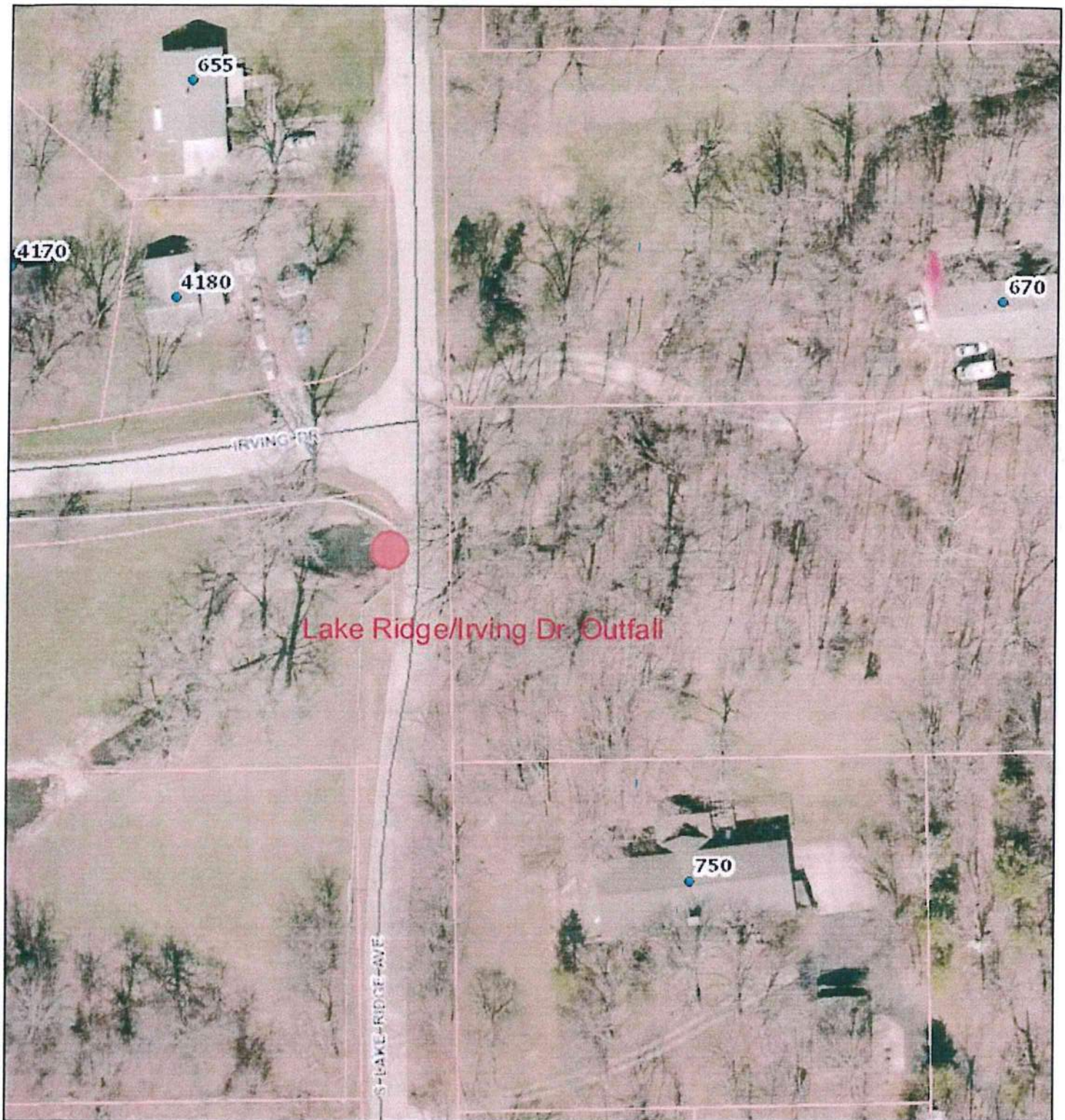
| | | | | | |
|---|-------------------------------------|--|--|---|----------------------------|
| | Forest (W1) | | Logging (W2) | X | Golf Course (W3) |
| D | Grassland and Ungrazed Field (W4) | | Commercial (W6) | | Scattered Residential (W7) |
| | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | | Sewage Treatment (W10) |
| | Park (W11) | | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| X | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | | Industrial (W16) |
| X | Other (W17) <u>Airport</u> | | | | |

Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) YES NO
If yes, approximately how far upstream? _____
2. **Wastewater treatment discharge upstream?** YES NO
If yes, approximately how far upstream? _____
3. **Any pipes emptying directly into or near your study site?** YES NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? YES NO
If yes, what percentage of your site has been channelized? _____ %

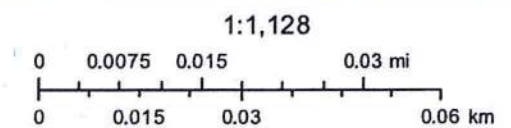
Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

Engineering GIS



3/16/2018, 8:52:18 AM

- Addresses
- ▬ Decatur City Limits
- Roads (small scale)**
 - <all other values>
 - Interstate Highway
 - State Route or U.S. Highway
- ▬ Arterial
- Residential
- County Highway
- Railroad Tracks
- ▬ Macon Co. Tax Parcels





Outfall Monitoring Sheet

Site ID #: Lincoln park / 48
Stream: _____
Date: _____

Name(s) of Inspector(s): Tatum

Start Time: 9:00 am pm

End Time: 9:10 am pm

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 30 °F °C
Water _____ °F °C

Water Appearance

- ☒ Clear
☐ Milky
☐ Foamy
☐ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☒ Clear
☐ Slight
☐ Medium
☐ Heavy

Canopy Cover

☐ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☒ 51-75% ☐ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes No

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. _____

Trees

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

A Bedrock

F Boulder (> 10 in)

O Hard Pan Clay

A Cobble (2.5 in – 10 in)

A Gravel (0.1 in – 2.5 in)

C Other _____

A Sand (<0.1 in)

A Silt

Stream Discharge Estimate

Stream Width: _____ feet
A

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. _____ ft
2. _____ ft
3. _____ ft

Average Depth = _____ feet
B

Velocity Calculations:

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

Average Velocity = _____ ft/sec
C

604 out of pipe

Discharge (width x depth x velocity) _____ ft x _____ ft x _____ ft/sec = _____ ft³/sec
A B C

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

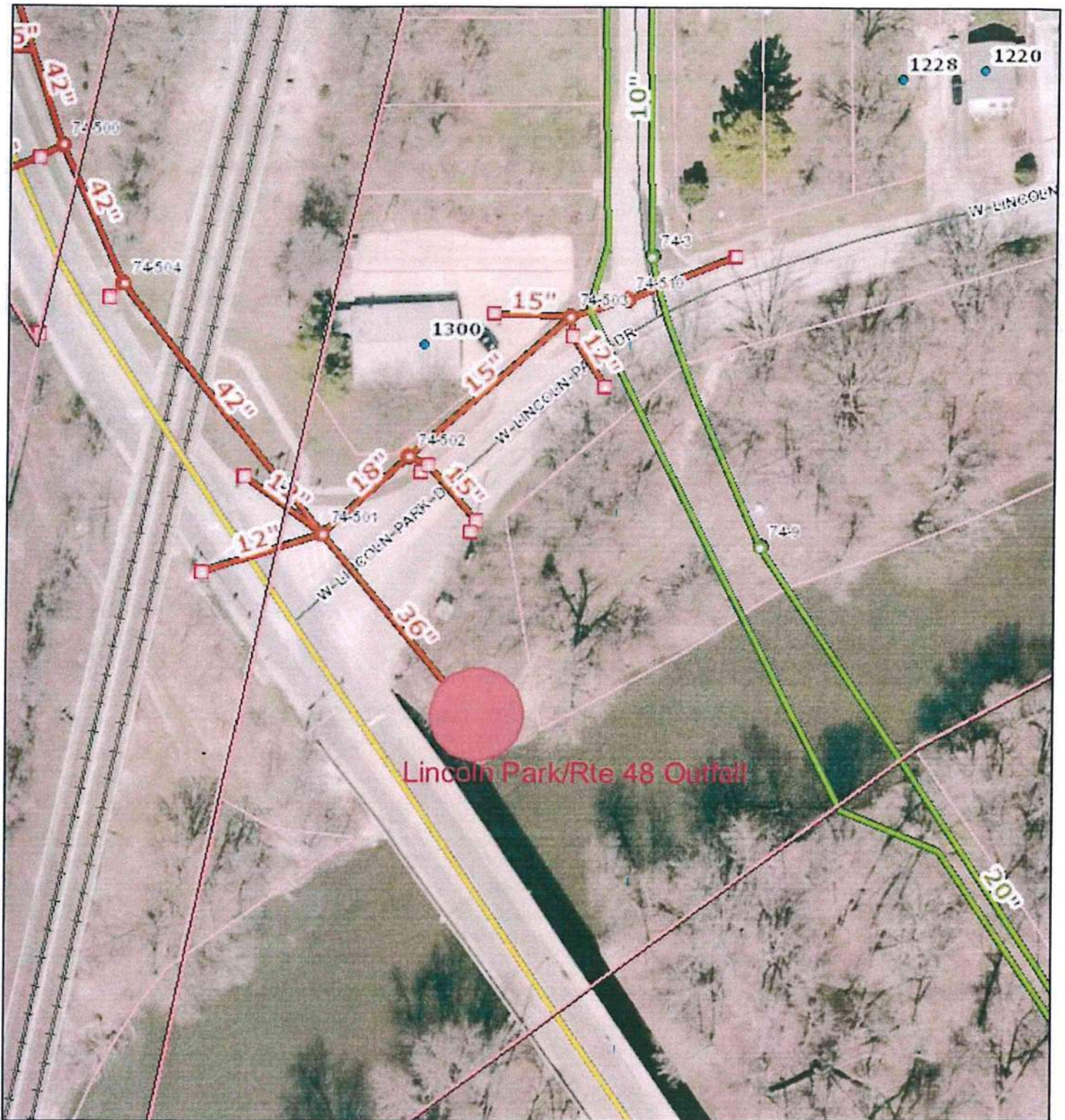
| | | | | | |
|---|-------------------------------------|---|--|---|----------------------------|
| | Forest (W1) | | Logging (W2) | | Golf Course (W3) |
| | Grassland and Ungrazed Field (W4) | | Commercial (W6) | X | Scattered Residential (W7) |
| D | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | | Sewage Treatment (W10) |
| | Park (W11) | X | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | | Industrial (W16) |
| | Other (W17) _____ | | | | |

Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) ☒ YES ☐ NO
If yes, approximately how far upstream? *Lake Okauch*
2. **Wastewater treatment discharge upstream?** ☒ YES ☐ NO
If yes, approximately how far upstream? *CSO facility*
3. **Any pipes emptying directly into or near your study site?** ☒ YES ☐ NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? YES ☒ NO
If yes, what percentage of your site has been channelized? _____ %

Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

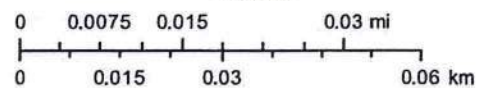
Engineering GIS



3/16/2018, 8:26:35 AM

1:1,128

- | | | |
|-----------------------|----------------------------|-------------------------------|
| ● Addresses | Mains | — State Route or U.S. Highway |
| □ Decatur City Limits | — Combined | — Arterial |
| — Catch Basins | — Sanitary | — Residential |
| + Cleanouts | — Stormwater | — County Highway |
| Manholes | Roads (small scale) | — Railroad Tracks |
| ⊕ Sanitary | — <all other values> | — Macon Co. Tax Parcels |
| ⊕ Stormwater | — Interstate Highway | |





Outfall Monitoring Sheet

Site ID #: Lions Park
Stream: _____
Date: _____

Name(s) of Inspector(s): Tatum

Start Time: 9:15: am pm

End Time: 9:46: am pm

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 30 °F °C
Water _____ °F °C

Water Appearance

- ☐ Clear
☐ Milky
☐ Foamy
☒ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☐ Clear
☒ Slight
☐ Medium
☐ Heavy

Canopy Cover

☐ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☒ 51-75% ☐ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☐ 0% ☒ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes No

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. _____

Trees + Brush

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

A Bedrock

A Boulder (> 10 in)

A Hard Pan Clay

A Cobble (2.5 in – 10 in)

A Gravel (0.1 in – 2.5 in)

F Other man made channel

A Sand (<0.1 in)

A Silt

Stream Discharge Estimate

Stream Width: _____ feet
A

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. _____ ft
2. _____ ft
3. _____ ft

Average Depth = $\frac{5}{B}$ feet

Velocity Calculations:

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

Average Velocity = $\frac{0}{C}$ ft/sec

Discharge (width x depth x velocity) _____ ft x _____ ft x _____ ft/sec = $\frac{0}{C}$ ft³/sec
A B C

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

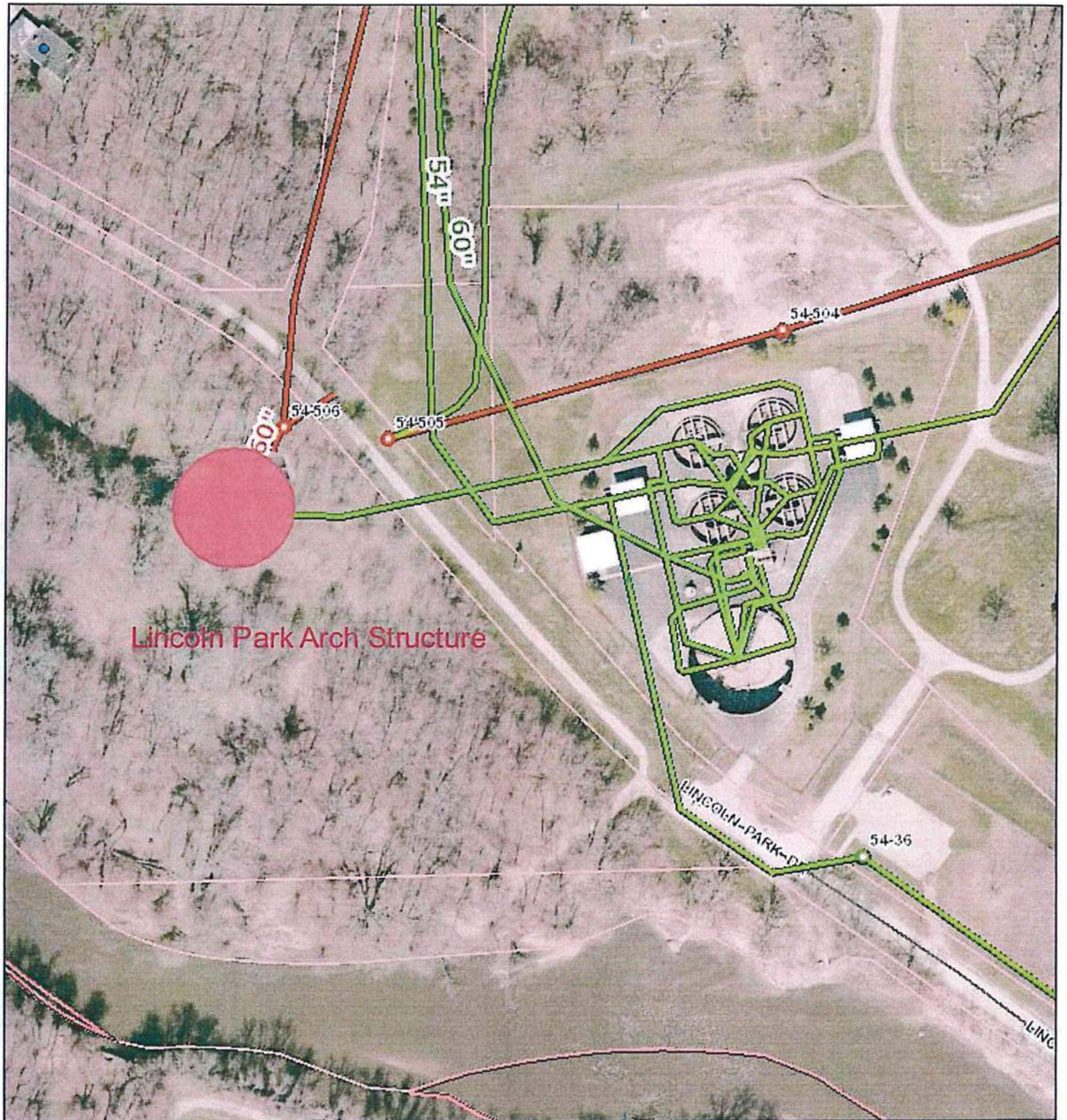
| | | | | | |
|---|--|--|--|---|----------------------------|
| | Forest (W1) | | Logging (W2) | | Golf Course (W3) |
| | Grassland and Ungrazed Field (W4) | | Commercial (W6) | X | Scattered Residential (W7) |
| A | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | X | Sewage Treatment (W10) |
| X | Park (W11) | | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | | Industrial (W16) |
| X | Other (W17) <i>run off from Cemetery</i> | | | | |

Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) YES ☒ NO
If yes, approximately how far upstream? _____
2. **Wastewater treatment discharge upstream?** ☒ YES NO
If yes, approximately how far upstream? *100 yards*
3. **Any pipes emptying directly into or near your study site?** ☒ YES NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? ☒ YES NO
If yes, what percentage of your site has been channelized? *100* %

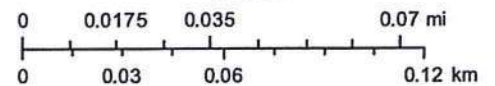
Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

Engineering GIS



3/16/2018, 8:32:06 AM

1:2,257





Outfall Monitoring Sheet

Site ID #: Lowest + 31st
Stream: _____
Date: _____

Name(s) of Inspector(s): Tatum

Start Time: 10:04 am pm

End Time: 10:20 am pm

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 32 °F °C
Water _____ °F °C

Water Appearance

- ☒ Clear
☐ Milky
☐ Foamy
☒ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☒ Clear
☐ Slight
☐ Medium
☐ Heavy

Canopy Cover

☐ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☒ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes ☐ No ☒

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. _____

Brush + Trees

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

A Bedrock
D Boulder (> 10 in)
A Hard Pan Clay

C Cobble (2.5 in – 10 in)
C Gravel (0.1 in – 2.5 in)
____ Other _____

C Sand (<0.1 in)
A Silt

Stream Discharge Estimate

Stream Width: $\frac{1}{A}$ feet

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. ft
2. ft
3. ft

Average Depth = $\frac{1}{B}$ feet

Velocity Calculations:

10 ft ÷ seconds = ft/sec

10 ft ÷ seconds = ft/sec

10 ft ÷ seconds = ft/sec

Average Velocity = $\frac{2}{C}$ ft/sec

Discharge (width x depth x velocity) $\frac{1}{A}$ ft x $\frac{1}{B}$ ft x $\frac{2}{C}$ ft/sec = 1.02 ft³/sec

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

| | | | | | |
|---|-------------------------------------|--|--|---|----------------------------|
| | Forest (W1) | | Logging (W2) | | Golf Course (W3) |
| X | Grassland and Ungrazed Field (W4) | | Commercial (W6) | X | Scattered Residential (W7) |
| D | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | | Sewage Treatment (W10) |
| | Park (W11) | | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | X | Industrial (W16) |
| D | Other (W17) <u>RAIL YARD</u> | | | | |

Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) YES NO
If yes, approximately how far upstream? _____
2. **Wastewater treatment discharge upstream?** YES NO
If yes, approximately how far upstream? _____
3. **Any pipes emptying directly into or near your study site?** YES NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? YES NO
If yes, what percentage of your site has been channelized? 100 %

Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

Logs + Brush built up on outfall of structure

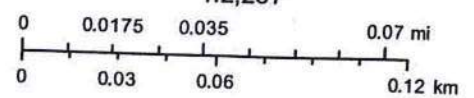
Engineering GIS



3/15/2018, 3:39:35 PM

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- | | | |
|-----------------------|----------------------------|-------------------------------|
| ● Addresses | Mains | — State Route or U.S. Highway |
| □ Decatur City Limits | — Combined | — Arterial |
| — Catch Basins | — Sanitary | — Residential |
| + Cleanouts | — Stormwater | — County Highway |
| Manholes | Roads (small scale) | — Railroad Tracks |
| + Sanitary | — <all other values> | — Macon Co. Tax Parcels |
| + Stormwater | — Interstate Highway | |





Outfall Monitoring Sheet

Site ID #: Marmatta Valley Wier
Stream: _____
Date: _____

Name(s) of Inspector(s): _____

Start Time: 11:30 : _____ am pm

End Time: 11:50 : _____ am pm

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 35 °F °C
Water _____ °F °C

Water Appearance

- ☒ Clear
☐ Milky
☐ Foamy
☐ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☐ Clear
☐ Slight
☒ Medium
☐ Heavy

Canopy Cover

☐ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☒ 51-75% ☐ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☐ 0% ☒ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes No

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. _____

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

A Bedrock

A Boulder (> 10 in)

A Hard Pan Clay

C Cobble (2.5 in – 10 in)

C Gravel (0.1 in – 2.5 in)

____ Other _____

C Sand (<0.1 in)

B Silt

Stream Discharge Estimate

Stream Width: 60" pipe feet
A

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. _____ ft
2. _____ ft
3. _____ ft

Average Depth = 2.00 feet
B

Velocity Calculations:

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

Average Velocity = 0 ft/sec
C

Discharge (width x depth x velocity) _____ ft x _____ ft x _____ ft/sec = 0 ft³/sec
A B C

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

| | | | | | |
|---|-------------------------------------|---|--|--|----------------------------|
| | Forest (W1) | | Logging (W2) | | Golf Course (W3) |
| X | Grassland and Ungrazed Field (W4) | X | Commercial (W6) | | Scattered Residential (W7) |
| X | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | | Sewage Treatment (W10) |
| | Park (W11) | | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | | Industrial (W16) |
| | Other (W17) _____ | | | | |

Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) YES NO
If yes, approximately how far upstream? _____
2. **Wastewater treatment discharge upstream?** YES NO
If yes, approximately how far upstream? _____
3. **Any pipes emptying directly into or near your study site?** YES NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? YES NO
If yes, what percentage of your site has been channelized? _____ %

Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

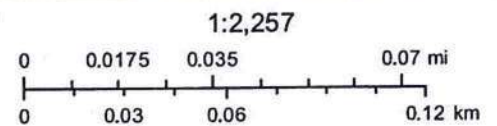
Creek is High due to rain run off
No flow from pipe

Engineering GIS



3/16/2018, 8:34:56 AM

- Addresses
- ▭ Decatur City Limits
- Roads (small scale)**
 - <all other values>
 - Interstate Highway
 - State Route or U.S. Highway
- Arterial
- Residential
- County Highway
- Railroad Tracks
- ▭ Macon Co. Tax Parcels





Outfall Monitoring Sheet

Site ID #: monroe st Creek
Stream: _____
Date: _____

Name(s) of Inspector(s): Tatum

Start Time: 11:00: am pm

End Time: 11:25: am pm

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 35 °F °C
Water _____ °F °C

Water Appearance

- ☒ Clear
☐ Milky
☐ Foamy
☐ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☐ Clear
☒ Slight
☐ Medium
☐ Heavy

Canopy Cover

☐ 0% ☒ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☐ 0% ☐ 1-5% ☒ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes No

If yes, what types?

List the types of riparian (stream side) vegetation present at the site. _____

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

_____ Bedrock

_____ Boulder (> 10 in)

_____ Hard Pan Clay

_____ Cobble (2.5 in – 10 in)

_____ Gravel (0.1 in – 2.5 in)

_____ Other _____

_____ Sand (<0.1 in)

D Silt

Stream Discharge Estimate

Stream Width: $\frac{16}{A}$ feet

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. _____ ft
2. _____ ft
3. _____ ft

Average Depth = $\frac{3}{B}$ feet

Velocity Calculations:

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

Average Velocity = $\frac{16}{C}$ ft/sec

Discharge (width x depth x velocity) $\frac{16}{A}$ ft x $\frac{3}{B}$ ft x $\frac{16}{C}$ ft/sec = 7.68 ft³/sec

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

| | | | | | |
|---|-------------------------------------|---|--|--|----------------------------|
| | Forest (W1) | | Logging (W2) | | Golf Course (W3) |
| X | Grassland and Ungrazed Field (W4) | D | Commercial (W6) | | Scattered Residential (W7) |
| D | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | | Sewage Treatment (W10) |
| | Park (W11) | | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | | Industrial (W16) |
| | Other (W17) _____ | | | | |

Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) YES ☒ NO
If yes, approximately how far upstream? _____
2. **Wastewater treatment discharge upstream?** YES ☒ NO
If yes, approximately how far upstream? _____
3. **Any pipes emptying directly into or near your study site?** YES ☒ NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? ☒ YES ☐ NO
If yes, what percentage of your site has been channelized? 450 %

Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

Sediment Build up on North side
Erosion throughout

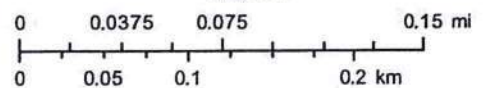
Engineering GIS



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- | | |
|---|---|
|  Decatur City Limits |  Arterial |
| Roads (small scale) |  Residential |
|  <all other values> |  County Highway |
|  Interstate Highway |  Railroad Tracks |
|  State Route or U.S. Highway | |





Outfall Monitoring Sheet

Site ID #: N.E. Drainage Ditch
Stream: _____
Date: _____

Name(s) of Inspector(s): _____

Start Time: 10:30 am pm

End Time: 10:45 am pm

Present Weather

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rainy (Steady)
☐ Stormy (Heavy)

Worst Weather in past 48 hours

- ☒ Clear/Sunny
☐ Overcast
☐ Showers (Intermittent)
☐ Rain (Steady)
☐ Storm (Heavy)

Temperature

Air 32 °F °C
Water _____ °F °C

Water Appearance

- ☒ Clear
☐ Milky
☐ Foamy
☐ Dark Brown
☐ Oily Sheen
☐ Reddish
☐ Green
☐ Other _____

Water Odor

- ☒ None
☐ Sewage
☐ Chlorine
☐ Fishy
☐ Rotten Eggs
☐ Petroleum
☐ Other _____

Turbidity

- ☒ Clear
☐ Slight
☐ Medium
☐ Heavy

Canopy Cover

☐ 0% ☒ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Algal Growth

☒ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage: Estimate the percentage of the stream bed that is covered by silt.

☐ 0% ☐ 1-5% ☐ 6-25% ☒ 26-50% ☐ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants?

Yes ☐ No ☒

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. Spring and Grass

Bottom Substrate: Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0% B = 1-5% C = 6-25% D = 26-50% E = 51-75% F = 76-100%

A Bedrock
B Boulder (> 10 in)
B Hard Pan Clay

B Cobble (2.5 in – 10 in)
B Gravel (0.1 in – 2.5 in)
____ Other _____

D Sand (<0.1 in)
A Silt

Stream Discharge Estimate

Stream Width: 4 feet
A

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.

If only one measurement is taken, use the single value as the average.

Depth Measurements:

1. 1.5 ft
2. 1.5 ft
3. 1.5 ft

Average Depth = 1.5 feet
B

Velocity Calculations:

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

10 ft ÷ _____ seconds = _____ ft/sec

Average Velocity = .32 ft/sec
C

Discharge (width x depth x velocity) 4 ft x 1.5 ft x .32 ft/sec = 1.92 ft³/sec
A B C

Land Uses

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

| | | | | | |
|---|-------------------------------------|---|--|---|----------------------------|
| | Forest (W1) | | Logging (W2) | | Golf Course (W3) |
| X | Grassland and Ungrazed Field (W4) | D | Commercial (W6) | X | Scattered Residential (W7) |
| | High-Density Residential/Urban (W8) | | Cropland (W9) Type? (W9T) _____ | | Sewage Treatment (W10) |
| | Park (W11) | | Mining (W12) Type? (W12T) _____ | | Sanitary Landfill (W13) |
| | Livestock Pasture (W14) | | Construction (W15) Type? (W15T) _____ | X | Industrial (W16) |
| | Other (W17) _____ | | | | |

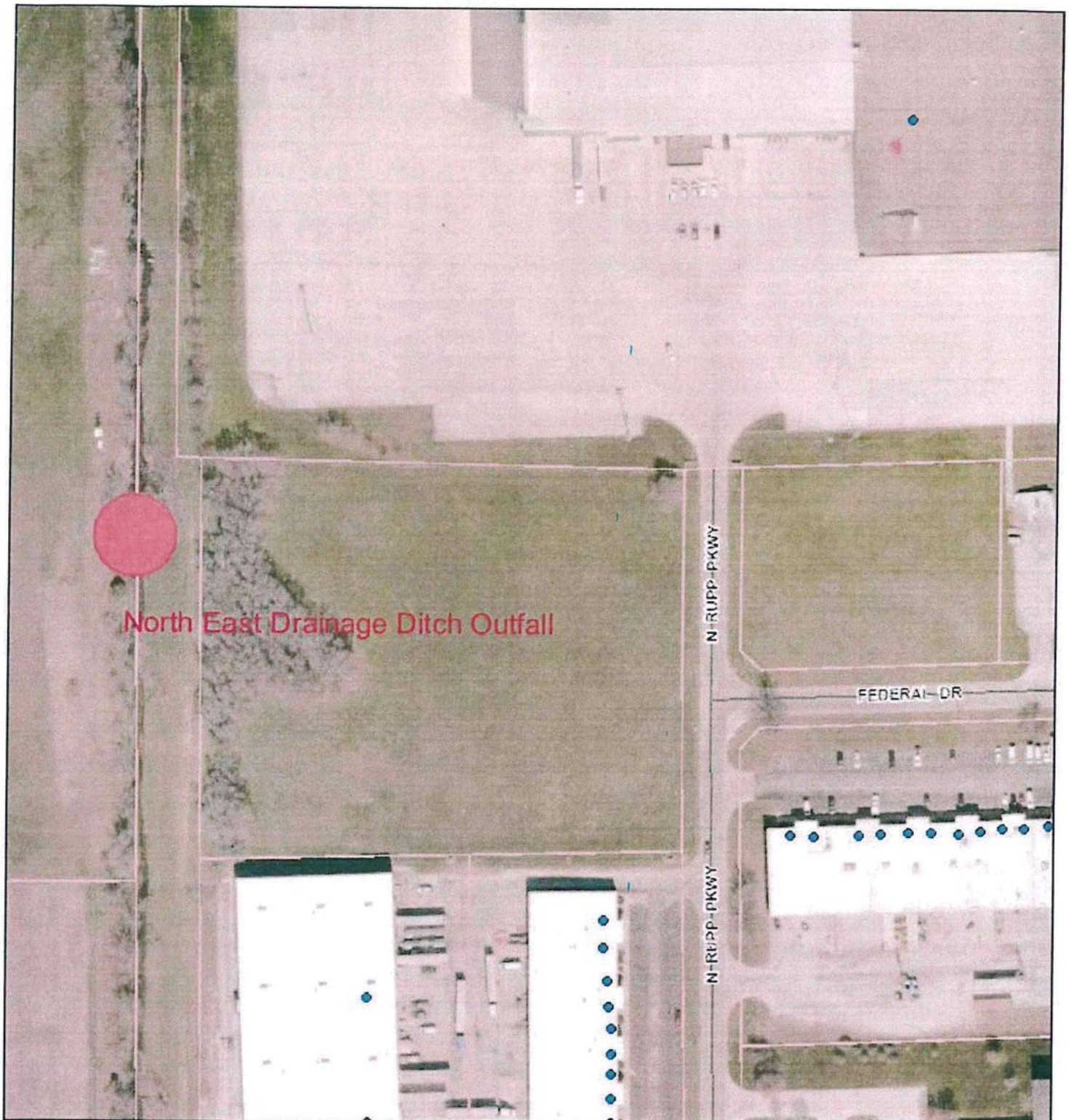
Please circle YES or NO and provide the necessary information to answer the following questions:

1. **Upstream dam?** (including beaver dams) YES NO
If yes, approximately how far upstream? _____
2. **Wastewater treatment discharge upstream?** YES NO
If yes, approximately how far upstream? _____
3. **Any pipes emptying directly into or near your study site?** YES NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? YES NO
If yes, what percentage of your site has been channelized? 100 %

Habitat Survey Notes (Include sediment odors, appearance and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention. Attach separate sheet if needed.)

Downed trees leading to dam
and after not affecting flow
Beaver Dam

Engineering GIS



3/15/2018, 3:53:20 PM

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- | | |
|-------------------------------|-------------------------|
| ● Addresses | — Arterial |
| — Decatur City Limits | — Residential |
| Roads (small scale) | — County Highway |
| — <all other values> | — Railroad Tracks |
| — Interstate Highway | — Macon Co. Tax Parcels |
| — State Route or U.S. Highway | |

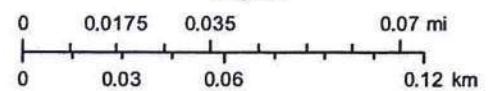


Exhibit 3

Land Disturbance Permits

| Exhibit 3 | | | | |
|--------------------------|----------|--------------------------------------|------------------------------------|-----------|
| Land Disturbance Permits | | | | |
| 31-May-22 | | | | |
| Permit No. | Active | Project | Address | Site Plan |
| | Y | IDOC Auditorium and Training | 980 W Grove Rd & 1099 W Rotary Way | Y |
| | Complete | MDI Building Expansion | 3425 N 22nd St | Y |
| | Y | VA Building & ICAT Building | 3104 & 3120 S. Business Rt 51 | N |
| | Y | IDOC Dorm Facility | 930 W Grove Rd | Y |
| 19-30 | Y | Mueller Brass Foundry | 2675 N Jasper St | Y |
| 20-11 | Y | DPS Ben Franklin Elem Addition | 2400 N Summit Ave | N |
| 21-8 | Y | Decatur Distribution Center | 3755 N Brush College Rd | Y |
| 21-6 | Y | Cardinal Warehouse | 4250 N Commercial Crossing | Y |
| 20-10 | Complete | DPS EJ Muffley Addition | 88 S Country Club Rd | N |
| 20-16 | Complete | Mueller Parking Lot Relocation | 802 W Eldorado | Y |
| 22-4 | Y | ADM Protein Solutions Center | 1001 N Brush College Rd | Y |
| 21-4 | N | Woodford Homes Supportive Living | 1370 E Carrie Lane | Y |
| 21-3 | Y | Stevens Creek Bike Path - Ph 2B | Cresthaven park to Timer Lane | Y |
| 21-9 | Y | CAT Building Expansion | 3000 N 27th | Y |
| 21-7 | Y | Airport - Snow Removal/Fire Building | 910 S Airport Rd | Y |
| 21-5 | Y | VA Soccer Field, Pavilion & Storage | 3096 & 3100 S Business Rt 51 | Y |
| 22-1 | Y | ADM - WWTP Digester Expansion | 4666 E Faries Parkway | Y |
| 22-3 | N | Brooks Meadow Park - 3rd Add | 2405 Angle Ct | Y |
| 21-12 | Y | Shurco Trailer Storage | 3993 E Mueller Ave | Y |
| 22-2 | Y | St. Teresa Athletic Field | 2710 N Water St | Y |
| 22-6 | Y | Rent 1 RNR | 1207/1217 E Pershing Rd | Y |
| 22-5 | Y | SPC4 & TVP Bldgs | 4666 E Faries Parkway | Y |
| 22-7 | N | ABC Supply Expansion | 4155 N Commercial Crossing | Y |
| | Complete | Montessori Academy | 4735 Cantrell St | Y |
| 19-10 | Complete | Fire Training Facility | 920 W. Grove Rd | N |
| 20-4 | Complete | Farm Safety Training | 910 W Grove Rd | N |
| | Complete | Bolek Building Addition | 1087 W. Rotary Way | Y |
| | Complete | Caseys 1996 | 1525 W Mound Rd | N |
| | Complete | CAT Prime Product Tent | 3000 N 27th St | N |
| | Complete | Cresthaven Park Parking Expansion | 660 Arthur Ct | N |
| | Complete | Dairy Queen Drive Thru | 610 E Snyder | Y |
| | Complete | DMH Yard Maint Bldg | 2692 N Church St | Y |
| | Complete | Subway | 975 W Eldorado St | N |
| | Complete | YMCA Outhouse | 220 W McKinley Ave | N |
| | Complete | SJ Smith Company | 3890 L&A Industrial Dr | Y |
| 20-6 | Complete | Private Residence | 2381 Rolling Creek Dr | Y |
| 20-1 | Complete | Private Residence | 2357 Glenn Ave | Y |
| 18-6 | Complete | Center for Theatre & Dance | 190 N Arrival Circle | Y |
| 18-17 | Complete | Crossing Healthcare | King & Warren | Y |
| 19-03 | Complete | B&W Asphalt | 3914 & 3906 E. Hospitality Lane | Y |
| 19-16 | Complete | Central Baptist Church | 1275 W. Mt. Gilead Rd | |
| 19-21 | Complete | Comm. Care 2nd Addition - Baby Talk | 320 E. Central Ave | |

| | | | | |
|-------|----------|--|------------------------|--|
| 19-28 | Complete | Carmala Inc. | 500 Southland Dr | |
| 19-29 | Complete | Zoo Pavillion | 71 S. Country Club Rd | |
| 19-31 | Complete | Club Car Wash | 275 E Pershing Rd | |
| 19-33 | Complete | Private Residence | 2214 Rolling Creek Dr. | |
| 19-34 | Complete | DPD Pavillion #1 Parking Lot | 2475 Pavillion Dr | |
| 19-35 | Complete | KRB Addition | 5285 E Maryland St | |
| 19-37 | Complete | Private Residence | 2242 Rolling Creek Dr | |
| 19-38 | Complete | Private Residence | 2232 Rolling Creek Dr | |
| 19-42 | Complete | Private Residence | 2430 Rolling Creek Ct | |
| 19-43 | Complete | Private Residence | 2294 Rolling Creek Dr | |
| 20-5 | Complete | Private Residence | 385 E Mueller Ct | |
| 20-15 | Complete | Johns Hill Park Site | Johns Hill Park | |
| 20-12 | Complete | Illinois State Police Forensic Science Lab | 1081 W Rotary Way | |