

Mt. Zion Annual Facility Inspection Report

March 2018 - March 2019



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*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

EXHIBIT A

EROSION & SEDIMENT CONTROL TIPS FOR INDIVIDUAL LOT CONSTRUCTION

www.maconcleanwater.org



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-to-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"

COMMONLY USED EROSION CONTROLS TEMPORARY AND PERMANENT SEEDING

The following chart is intended to provide general information on establishing temporary vegetative cover and permanent lawns.

Temporary Seeding Chart
Early spring to October 15

Permanent Seeding Chart
Early spring to May 15, August 1 to September 10
Dormant Seeding – November 15 through Freeze

Species	Rate/1000 sq ft.	Species	Rate/1000 sq. ft.
Cereal (annual ryegrass)	2 lbs (90 lbs/acre)	Kentucky Blue Grass Blend Min. 3 varieties	2-3 lbs
Oats	2 lbs. (90 lbs./acre)	Kentucky Blue Grass Perennial Ryegrass mix 2:1	3-4 lbs
Wheat	2 lbs. (90 lbs/acre)	Kentucky Bluegrass Fine Fescue mix 2.5:1 Shade	3-5 lbs
Perennial Ryegrass	0.6 lbs (25 lbs/acre)	Tall Fescue Blend High Traffic Areas or Hot Dry sites	5-6 lbs.

Mulching – Used to provide temporary erosion Protection.

Shape and grade as required while removing all rocks, clods and debris. Spread mulch uniformly at a rate of 90 lbs. per 1000 square feet of bare ground. No more than 25% of the ground should be visible.

Anchor mulch immediately using one of the following:

- Staple degradable plastic, polyester or paper netting over mulch with a 4-6 inch overlap at edges installed according to manufacturer's recommendations.
- Crimp or pinch mulch into soil 2-4 inches by using either a mulch anchoring tool or a farm disk operating on the contour of the slope OR by cleating with bulldozer tracks operating up and down the slopes (to prevent tracks from forming gullies).
- Apply synthetic tackifier, binder or soil stabilizer According to manufacturer's recommendations.

Maintain adequate coverage by checking after rain events And reapplying when needed. Continue inspections and maintenance until permanent vegetation is established. Temporary seeding is only effective for one year.

Stabilized Construction Entrance

1. Install as soon as possible after grading.
2. Use filter fabric as layer between dirt and aggregate stone.
3. Drive must be at least as wide as the ingress and egress (or 14 ft. minimum) and extend from the foundation to the Street (30 ft. minimum).
4. Replace as needed to maintain 6 inch depth.

Figure 5—How to Install a Gravel Entrance

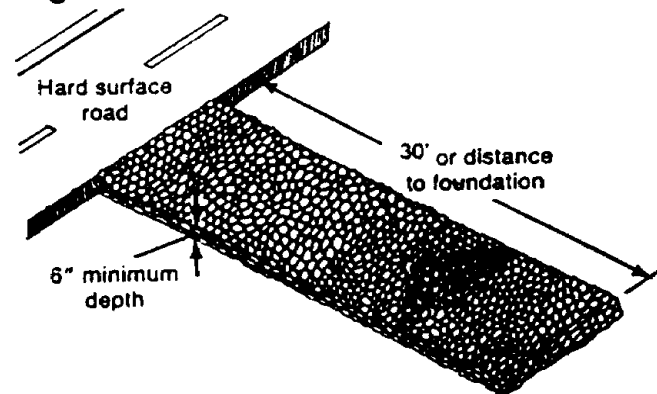


EXHIBIT B

EROSION CONTROL FOR HOMEBUILDERS

Macon County Soil and Water Conservation District

Controlling Erosion is Easy...AND THE LAW...It's Important Because...

Eroding construction sites are a leading cause of water quality problems in Illinois. For every acre under construction, about a dump truck and a half of soil washes into nearby lakes and streams.

Problems caused by this sediment include:

Increased Flooding – Sediment build-up lowers the flow capacity of channels causing more frequent flooding in areas that rarely or never flooded before.

Financial Burden to Taxpayers – Sediment that finds it way into streets, storm sewers, and ditches result in additional maintenance costs for local, state and federal governments.

Water Quality Impairment – Sediment laden runoff transfers nutrients and other pollutants to downstream lakes and rivers degrading aquatic habitats and increasing costs for water treatment.



Erosion control is important even for home sites less than an acre. The materials (straw, silt fence, stakes, gravel, plastic tubes, and grass seed) are easy to find and relatively inexpensive. Putting these materials to use is a straightforward process. Only a few controls are needed on most home sites.

Simple...but Effective Controls Include....

Preserving existing trees and grass where possible;

Cleanup sediment carried off-site by vehicles or storms;

Silt Fence to trap sediment on the down slope sides of the lot and soil piles;

Downspout Extenders to prevent erosion from roof runoff; and

Soil Piles located away from any roads or waterways;

Reseed or Sod the site as soon as possible.

Gravel Drive used by all vehicles to limit tracking of mud onto streets;

Macon County Soil and Water Conservation District,
3342 N Pres. Howard Brown Blvd, Decatur, IL 62521
Phone: 217-877-5670 x3

SILT FENCES

Put up before any other work is done. Install on down slope enough to allow water to pond behind the fence. Excavate a 6 inch wide by 6 inch deep trench along the contour of the slope. An additional 6 inches of fabric should extend along the bottom of the trench in the upslope direction. Inspect and repair once a week and after every one-half (1/2) inch rain. Remove sediment if deposits reach one-third the fence height. Maintain until lawn is established and then remove.

SOIL PILES

Locate away from any down slope street, driveway, stream, lake, wetland, ditch or drainage way. Place a silt fence around all stockpiles and, if necessary, polymers and/or temporary seeding such as annual rye or winter wheat.

STABILIZED CONSTRUCTION ENTRANCE

Install a single access "gravel drive" using 2-3 inch aggregate. Lay stone 6 inches deep, at least as wide as the ingress and egress (14 ft. minimum, and extend from the foundation to the street (30 ft. minimum). Use to prevent tracking mud onto the road by all vehicles. Maintain throughout construction.

SEDIMENT CLEANUP

At the end of each work day, sweep or scrape up soil tracked onto the road. By the end of the next work day after a storm, clean up the soil washed off-site.

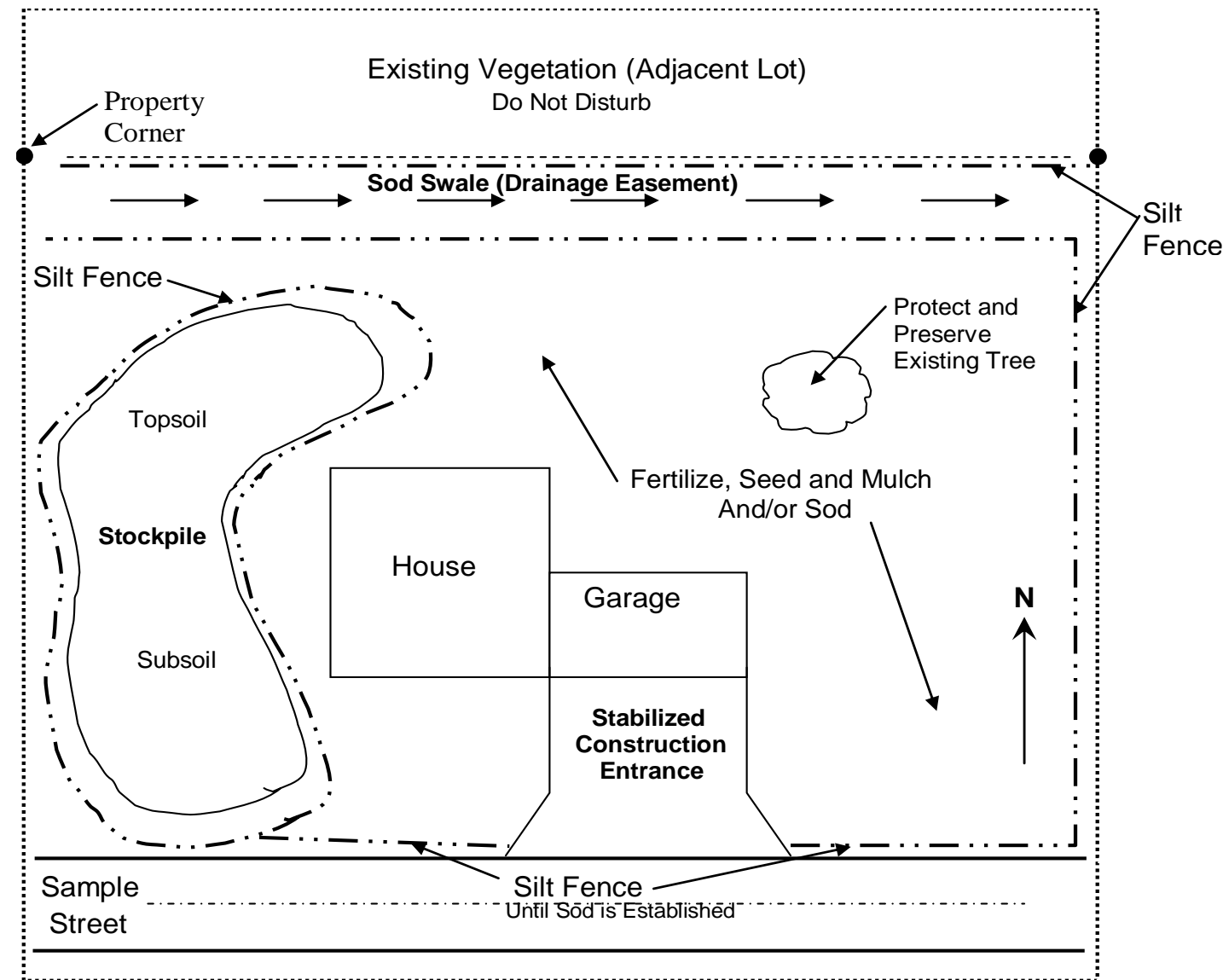
DOWNSPOUT EXTENDERS

Not required, but highly recommended. Install as soon as gutters and downspouts are complete to prevent erosion from roof runoff. Use plastic drainage pipe to route water to a grassed or paved area. Maintain until lawn is established.

STORM SEWER INLET PROTECTION

Protect on-site storm sewer inlets with the appropriate measures. Inspect, repair and remove sediment deposits weekly and after every 1/2 inch storm event.

SAMPLE EROSION CONTROL PLAN FOR A HOMESITE



WARNING – Extra measures may be needed if your site:

- Site is within 300 feet of a stream or wetland
- Site is within 1000 feet of a lake
- Site receives runoff from 10,000 sq. ft or more of adjacent land
- Site has steep slopes (slopes of 12% or more)
- Site has a waterway or ditch.
- Site has more than one acre of disturbed ground.

This fact sheet includes the diagrams and step-by-step instructions for common best management practices that can be used by builders on most home sites. Additional controls may be needed for sites that are on steep slopes, are adjacent to lakes, streams, rivers and wetlands, receive a lot of runoff from adjacent land or are larger than one acre.

If you need help developing an erosion control plan, assistance is available from your local Soil and Water Conservation District office at:

Macon County SWCD 217-877-5670 x 3

PRESERVE EXISTING VEGETATION

Wherever possible, preserve existing trees, shrubs, and other vegetation. To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation. Place plastic mesh or snow fence barriers around trees to protect the area below their branches.

SEEDING AND MULCHING

Spread 4-6 inches of topsoil. Fertilize and lime, if needed, according to soil test or apply 25 lbs. per 1000 square feet of 12-12-12 fertilizer. Seed an appropriate mix for the site (see table on the back page). Rake lightly to cover seed with 1/4 inch of soil – roll lightly. Mulch with straw (90 lbs. per 1000 sq. ft.).

Anchor mulch by punching into the soil, watering, or by using netting or other measures on steep slopes. Water gently every day or two to keep soil moist. Less watering is needed once grass is 2 inches tall. Add maintenance fertilizer annually in split applications as needed for seeding.

SODDING

Spread 4 to 6 inches of topsoil. Fertilize and lime if needed according to soil test (or apply 10 lb. /1000 sq. ft. of 10-10-10- fertilizer). Lightly water the soil. Lay sod. Tamp or roll lightly. On slopes, lay sod starting at the bottom and work toward the top, laying in a brickwork pattern. Peg each piece down in several places. Initial watering should wet soil 4 inches deep below sod (or until water stands 1 inch deep in a straight-sided container). Then water lightly every day or two to keep soil moist but not saturated for 2 weeks. Generally, the best times to sod or seed are early spring (April 1-May 15) or fall (Aug. 1-Sept. 15). Add maintenance fertilizer annually in split application as needed for sod.

If construction is completed after September 15, final seeding should be delayed. Sod may be laid until November 15. Temporary seed (such as rye or winter wheat) may be planted until October 15. Mulch or matting may be applied after October 15, if weather permits. Silt fences must be maintained until final seeding or sodding is completed in spring. (by June 1)

Meeting Today's Regulatory Challenges

Macon and Champaign County's Annual Stormwater Workshop
for Contractors, Engineers, Public Works, and Elected Officials

February 21st, 2019

National Sequestration Education Center

3357 N. President Howard Brown Blvd, Decatur, IL 62521

AGENDA

- 7:30-8:00 am **Breakfast & Welcome**
- 8:00-8:30 am **Updates to the ILR10 Construction Permit**
Holly Hirschert, Illinois Environmental Protection Agency
- 8:30-8:45 am **Municipality Responses to ILR10 Permit Changes & Revisions to Local Ordinances**
Mary Cave, Villages of Mt. Zion and Forsyth
Paul Caswell, City of Decatur
- 8:45-9:30 am **Basic Construction Site BMPs**
Ted Pickens, Emerald Site Services
- 9:30-9:45 am **Break**
- 9:45-10:45 am **Inspections: What Does an Inspector Look For?**
Megan Andrews, Kendall County SWCD, CPESC
- 10:45-11:45 am **Lessons Learned from the City of Rockford**
Brad Holcomb, City of Rockford Stormwater Program Manager

Brought to you by the MS4 Work Group of Macon and Champaign County, including:

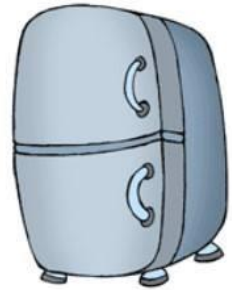


Sparkle & Shine Day!



**Saturday, March 23,
2019**

9 am — 12 pm



A drop site will be provided for Mt. Zion Village and Township residents to discard large items at **Fletcher Park**.

Please NO chemicals, paint, tires, household garbage, fencing, wire, televisions, electronics or yard waste.

For items not accepted visit www.maongreen.com for a list of available disposal options.

A shredding event sponsored by the Township and Mt. Zion District Library will be held at the Mt. Zion District Library parking lot from 10 am - noon on March 23rd.

For more information on this event visit our website at www.mtzion.com or call 864-5424.



Fletcher Park: 323 Fletcher Park Blvd.

MTZ District Library: 115 W. Main Street



Mt. Zion Township Garage
360 N. Main Street
Mt. Zion, IL 62549

EXHIBIT D

Illinois RiverWatch Network SITE IDENTIFICATION FORM

1. WATERBODY NAME: Finley Creek

Use the name of the waterbody (stream/river) as it appears on a USGS 7 ½ minute topographic map, or some other reliable map. If the name of the waterbody is unknown, write "UNKNOWN," or ask someone who lives near the site if they know the name.

2. WATERSHED NAME: Sangamon River

List the watershed in which your stream site lies. Use the names of the 10 watershed recognized by the RiverWatch Program (see list and map below).

3. COUNTY: Macon

Write the name of the county in which the stream site lies.

4. NEAREST TOWN/CITY: Village of Mt. Zion

Write the name of the town/city in which the stream site lies.

5. LOCATION DESCRIPTION: _____

Provide a brief statement on the direction and distance of the site from a stationary landmark that can be identified on a road map or topographic map. A stationary landmark can be defined as a town, church, school, bridge, road or road crossing. For example, a location description for a stream site would be written as: ½ MILE SOUTH OF THE INTERSECTION OF CR 1200 E AND CR 800 N.

6. LATITUDE: 39.7689

LONGITUDE: -88.8860

Latitude and longitude coordinates are to be written as decimal degrees to 4 decimal places. For example: 20.0075°

How did you acquire the longitude/latitude coordinates? (Circle one) GPS Topo Map ArcView Unknown

7. TOPOGRAPHIC MAP NAME: _____

Write the name of the USGS 7 ½ minute topographic map that was used to determine the legal description of the site. The name of the map can be found in the upper and lower right hand corners of the map.

8. RANGE: 3E **TOWNSHIP:** 15N **SECTION:** 9 **QUARTER SECTION:** NW

Write the range, township, section and quarter section values in the banks above.

9. COMPLETED BY: Corey Rickard

Print full name.

WATERSHED NAMES USED BY RIVERWATCH:

1. Rock River
2. Fox and DesPlaines Rivers
3. Kankakee, Mackinaw, and Vermilion Rivers
4. Spoon River
5. Sangamon River
6. LaMoine River
7. Kaskaskia River
8. Embarras and Vermilion Rivers
9. Little Wabash River
10. Big Muddy, Saline, and Cache Rivers



Illinois RiverWatch Network

SITE EVALUATION FORM

Waterbody: Finley Creek Evaluation Date: April, 2018

Completed By: _____

1. Owner / Manager Property Access Permission.

YES NO

An X in the YES space indicates that a PROPERTY ACCESS PERMISSION form has been signed and completed for this site. The signed permission form must accompany the registration materials prepared for this site.

Landowner's Name: _____ Phone Number: _____

2. Protected Areas. Please check one.

The site is located in an Illinois Natural Preserve / Illinois Land and Water Reserve.

NAME OF PRESERVE / RESERVE: _____

NOTE: If the potential site is located within an Illinois Nature Preserve or an Illinois Land and Water Reserve, a permit MUST be requested from the Illinois Preserve Commission. A permit may take up to, or more than, 30 days to receive. Permit application does not guarantee permission to monitor.

The site is NOT located within an Illinois Nature Preserve nor an Illinois Land and Water Reserve.

3. Directions to Site.

Provide directions to the stream site. Be specific in your directions. You may include travel routes and any obvious landmarks. Indicate where and how far one would walk or drive from an obvious reference point. For example: Travel south on St. Hwy. 105 to Old Farm Road. Turn left. The stream is located underneath the third bridge crossing. You will see a foot bridge downstream. The beginning of the 200 ft site is marked by a large rock located 100 ft downstream from the foot bridge. Use the rock as you zero point and measure 200 ft downstream.

Travel South from the intersection of US Rt. 36 and Baltimore Ave. for 3.3 miles. Then head East on Main St.
for 0.30 mile and turn right onto Carrington Ave. Travel South 0.40 miles and walk East for 500 ft.

4. Suitability of Site.

Evaluate the site according to the physical criteria listed below.

PHYSICAL SUITABILITY

Location If the site is located at a bridge crossing, the site must be located a minimum of 100 ft upstream or downstream from the bridge.

Depth The site must be wadeable; knee deep or less across most of the entire site at time of monitoring.

Stream flow An estimate of the stream flow must not exceed 9 ft²/sec at the time of monitoring. If the product of the depth (feet) and velocity (feet/second) exceeds nine, the stream flow is generally considered unsafe for monitoring.

SAFETY

Safe access The site must be safely accessed for monitoring activities and be located in an area free of dangerous waste, debris and other threats to personal safety. Parking availability must allow ample space for the safe loading and unloading of monitoring equipment. Bank stability and slope must be sufficient to allow safe, easy access to the stream from at least two points along the study reach.

Parking Location of parking and the number of cars that may be parked in this area: _____

EXHIBIT H
Illinois RiverWatch Network
SITE IDENTIFICATION FORM

1. **WATERBODY NAME:** Finley Creek

Use the name of the waterbody (stream/river) as it appears on a USGS 7 ½ minute topographic map, or some other reliable map. If the name of the waterbody is unknown, write "UNKNOWN," or ask someone who lives near the site if they know the name.

2. **WATERSHED NAME:** Sangamon River

List the watershed in which your stream site lies. Use the names of the 10 watershed recognized by the RiverWatch Program (see list and map below).

3. **COUNTY:** Macon

Write the name of the county in which the stream site lies.

4. **NEAREST TOWN/CITY:** Village of Mt. Zion

Write the name of the town/city in which the stream site lies.

5. **LOCATION DESCRIPTION:** _____

Provide a brief statement on the direction and distance of the site from a stationary landmark that can be identified on a road map or topographic map. A stationary landmark can be defined as a town, church, school, bridge, road or road crossing. For example, a location description for a stream site would be written as: ½ MILE SOUTH OF THE INTERSECTION OF CR 1200 E AND CR 800 N.

6. **LATITUDE:** 39.7931

LONGITUDE: -88.8856

Latitude and longitude coordinates are to be written as decimal degrees to 4 decimal places. For example: 20.0075°

How did you acquire the longitude/latitude coordinates? (Circle one) GPS Topo Map **ArcView** Unknown

7. **TOPOGRAPHIC MAP NAME:** _____

Write the name of the USGS 7 ½ minute topographic map that was used to determine the legal description of the site. The name of the map can be found in the upper and lower right hand corners of the map.

8. **RANGE:** 3E **TOWNSHIP:** 16N **SECTION:** 32 **QUARTER SECTION:** SW

Write the range, township, section and quarter section values in the banks above.

9. **COMPLETED BY:** Corey Rickard

Print full name.

WATERSHED NAMES USED BY RIVERWATCH:

1. Rock River
2. Fox and DesPlaines Rivers
3. Kankakee, Mackinaw, and Vermilion Rivers
4. Spoon River
- 5. Sangamon River**
6. LaMoine River
7. Kaskaskia River
8. Embarras and Vermilion Rivers
9. Little Wabash River
10. Big Muddy, Saline, and Cache Rivers



Illinois RiverWatch Network

SITE EVALUATION FORM

Waterbody: Finley Creek Evaluation Date: April, 2018

Completed By: _____

1. Owner / Manager Property Access Permission.

YES NO

An X in the YES space indicates that a PROPERTY ACCESS PERMISSION form has been signed and completed for this site. The signed permission form must accompany the registration materials prepared for this site.

Landowner's Name: _____ Phone Number: _____

2. Protected Areas. Please check one.

The site is located in an Illinois Natural Preserve / Illinois Land and Water Reserve.

NAME OF PRESERVE / RESERVE: _____

NOTE: If the potential site is located within an Illinois Nature Preserve or an Illinois Land and Water Reserve, a permit MUST be requested from the Illinois Preserve Commission. A permit may take up to, or more than, 30 days to receive. Permit application does not guarantee permission to monitor.

The site is NOT located within an Illinois Nature Preserve nor an Illinois Land and Water Reserve.

3. Directions to Site.

Provide directions to the stream site. Be specific in your directions. You may include travel routes and any obvious landmarks. Indicate where and how far one would walk or drive from an obvious reference point. For example: Travel south on St. Hwy. 105 to Old Farm Road. Turn left. The stream is located underneath the third bridge crossing. You will see a foot bridge downstream. The beginning of the 200 ft site is marked by a large rock located 100 ft downstream from the foot bridge. Use the rock as you zero point and measure 200 ft downstream.

Travel South from the intersection of US Rt. 36 and Baltimore Ave. for 2.2 miles. Then head East on Bakeridge
Place for 0.20 miles and walk 630 feet North.

4. Suitability of Site.

Evaluate the site according to the physical criteria listed below.

PHYSICAL SUITABILITY

Location If the site is located at a bridge crossing, the site must be located a minimum of 100 ft upstream or downstream from the bridge.

Depth The site must be wadeable; knee deep or less across most of the entire site at time of monitoring.

Stream flow An estimate of the stream flow must not exceed 9 ft²/sec at the time of monitoring. If the product of the depth (feet) and velocity (feet/second) exceeds nine, the stream flow is generally considered unsafe for monitoring.

SAFETY

Safe access The site must be safely accessed for monitoring activities and be located in an area free of dangerous waste, debris and other threats to personal safety. Parking availability must allow ample space for the safe loading and unloading of monitoring equipment. Bank stability and slope must be sufficient to allow safe, easy access to the stream from at least two points along the study reach.

Parking Location of parking and the number of cars that may be parked in this area: _____



Outfall Monitoring Sheet

Site ID #: R0510301
 Stream: Finley Creek
 Date: 4/24/2019

Name(s) of Inspector(s): Corey Rickard & Ron Tapscott
 Start Time: 1 : 27 pm End Time: 1 : 53 pm

Present Weather <input type="checkbox"/> Clear/Sunny <input checked="" type="checkbox"/> Overcast <input type="checkbox"/> Showers (Intermittent) <input type="checkbox"/> Rainy (Steady) <input type="checkbox"/> Stormy (Heavy)	Worst Weather in past 48 hours <input type="checkbox"/> Clear/Sunny <input type="checkbox"/> Overcast <input checked="" type="checkbox"/> Showers (Intermittent) <input type="checkbox"/> Rain (Steady) <input type="checkbox"/> Storm (Heavy)	Temperature Air <u>55</u> °F °C Water <u>52</u> °F °C
Water Appearance <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Milky <input type="checkbox"/> Foamy <input type="checkbox"/> Dark Brown <input type="checkbox"/> Oily Sheen <input type="checkbox"/> Reddish <input type="checkbox"/> Green <input type="checkbox"/> Other _____	Water Odor <input checked="" type="checkbox"/> None <input type="checkbox"/> Sewage <input type="checkbox"/> Chlorine <input type="checkbox"/> Fishy <input type="checkbox"/> Rotten Eggs <input type="checkbox"/> Petroleum <input type="checkbox"/> Other _____	Turbidity <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slight <input type="checkbox"/> Medium <input type="checkbox"/> 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. NOT
 0% 1-5% 6-25% 26-50% 51-75% 76-100% **VISIBLE**

Are there Submerged Aquatic Plants? Yes No

If yes, what types? _____
 List the types of **riparian (stream side) vegetation** present at the site. Trees, Grasses, Honeysuckle,
Shrubs

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%

<input type="checkbox"/> Bedrock	<input type="checkbox"/> Cobble (2.5 in – 10 in)	<u>C</u> Sand (<0.1 in)
<input type="checkbox"/> Boulder (> 10 in)	<input type="checkbox"/> Gravel (0.1 in – 2.5 in)	<u>E</u> Silt
<input type="checkbox"/> Hard Pan Clay	<input type="checkbox"/> Other _____	

Stream Discharge Estimate

Stream Width: $\frac{26}{A}$ 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. $\frac{3}{\quad}$ ft
2. $\frac{2}{\quad}$ ft
3. $\frac{2}{\quad}$ ft

Average Depth = $\frac{2.33}{B}$ feet

Velocity Calculations:

12 ft ÷ 14.93 seconds = 0.80 ft/sec

12 ft ÷ 14.66 seconds = 0.82 ft/sec

12 ft ÷ 13.20 seconds = 0.91 ft/sec

Average Velocity = $\frac{0.84}{C}$ ft/sec

Discharge (width x depth x velocity) $\frac{26}{A} \text{ ft} \times \frac{2.33}{B} \text{ ft} \times \frac{0.84}{C} \text{ ft/sec} = \frac{50.89}{\quad} \text{ ft}^3/\text{sec}$

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.

D	Forest (W1)		Logging (W2)		Golf Course (W3)
	Grassland and Ungrazed Field (W4)		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? _____ Evidence of a beaver near location _____

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.)



Outfall Monitoring Sheet

Site ID #: R0510301
Stream: Finley Creek
Date: 4/24/2019

Name(s) of Inspector(s): Corey Rickard & Ron Tapscott

Start Time: 2 : 05 pm End Time: 2 : 40 pm

Present Weather

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

Worst Weather in past 48 hours

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

Temperature

Air 55 °F °C
Water 53 °F °C

Water Appearance

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

Water Odor

- X None
- Sewage
- Chlorine
- Fishy
- Rotten Eggs
- Petroleum
- Other _____

Turbidity

- X Clear
- X Slight
- Medium
- Heavy

Canopy Cover

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

Algal Growth

- 0% X 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. NOT

- 0% 1-5% X 6-25% 26-50% 51-75% 76-100% **VISIBLE**

Are there Submerged Aquatic Plants? Yes (No)

If yes, what types? _____

List the types of riparian (stream side) vegetation present at the site. Trees, Grasses, ground covers

Blue Bell flowers

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%

- | | | |
|--|---|---|
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Cobble (2.5 in – 10 in) | <input checked="" type="checkbox"/> <u>C</u> Sand (<0.1 in) |
| <input type="checkbox"/> Boulder (> 10 in) | <input type="checkbox"/> Gravel (0.1 in – 2.5 in) | <input type="checkbox"/> <u>E</u> Silt |
| <input checked="" type="checkbox"/> <u>C</u> Hard Pan Clay | <input type="checkbox"/> Other _____ | |

Stream Discharge Estimate

Stream Width: $\frac{26 \text{ feet}}{A}$

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. $\frac{2}{\text{ft}}$
2. $\frac{2.2}{\text{ft}}$
3. $\frac{2.8}{\text{ft}}$

Average Depth = $\frac{2.3 \text{ feet}}{B}$

Velocity Calculations:

$12 \text{ ft} \div 10.33 \text{ seconds} = 1.16 \text{ ft/sec}$

$12 \text{ ft} \div 11.06 \text{ seconds} = 1.08 \text{ ft/sec}$

$12 \text{ ft} \div 9.22 \text{ seconds} = 1.30 \text{ ft/sec}$

Average Velocity = $\frac{1.18 \text{ ft/sec}}{C}$

Discharge (width x depth x velocity) $\frac{26 \text{ ft}}{A} \times \frac{2.3 \text{ ft}}{B} \times \frac{1.18 \text{ ft/sec}}{C} = \frac{70.56 \text{ ft}^3/\text{sec}}$

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.

D	Forest (W1)		Logging (W2)		Golf Course (W3)
	Grassland and Ungrazed Field (W4)		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? _____ Evidence of a beaver near location _____

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.)



Macon County Soil & Water Conservation District
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Yearly Report for MS4's **April 1, 2018 – March 31, 2019**

The Macon County Soil and Water Conservation District employs Natalie Misner-Watershed Specialist and CPESC-IT and Manny Wei- Private Engineer, Watershed Technician to provide technical assistance to the MS4 Working Group and to conduct MS4 inspections. A record of applications and inspection reports are maintained at the Macon County SWCD office. The following summarizes the inspections.

City of Decatur: 13 permits (8 commercial, 5 residential) were taken out. Multiple sites are still open as March 31, 2019.

Village of Forsyth: 8 permits were issued for residential buildings, several sites still open.

Village of Mt. Zion: 8 permits (5 residential, 3 commercial) were taken out. Multiple sites are still open.

Each site is inspected at least once with larger commercial sites being inspected multiple times throughout construction.

Education efforts: On February 21, 2019 the MS4 group hosted a Contractors breakfast with Champaign County at the NSEC building in Decatur. Keynote speakers included, Brad Holcomb, Holly Hirschert and Ted Pickens. Topics included IEPA Updates to ILR10 Construction Permit, Municipality Responses to ILR10 Permit Changes and Revisions to Local Ordinances, Basic Construction Site BMPs, What do Inspectors Look for During inspections and Lessons from the City of Rockford. With 51 in attendance.

The Macon County MS4 working group also maintains a website, www.maconcleanwater.com. From April 1, 2018 to March 31, 2019 the site had a total of 15,794 total views.

The SWCD staff present educational programs on urban erosion and water quality throughout the year. The effects of urban erosion were demonstrated at the Festival of Spring and Sangamon Watershed Celebration, over 500 adults and children were in attendance in Decatur. Each year the Macon County SWCD participates in Macon County Agucation, sponsored by Farm Bureau and held at Richland College, multiple conservation topics are discussed, over 600 students from Macon County participate each year.