Robinson ENGINEERING

Municipal Expertise. Community Commitment.

Dana Ludwig, PE, CFM, CPESC
Direct Line: (815) 412-2702
Email: dludwig@reltd.com

May 31, 2019

Project 18-R0959

Illinois Environmental Protection Agency
Water Pollution Control
Compliance Assurance Section #19
P.O. Box 19276
Springfield, IL 62794-9276

RE: Village of Channahon
NPDES Permit MS4 Annual Report
Reporting Cycle 2018-2019
Permit No. ILR40 - 0623

Dear Sir/Madam:

Enclosed please find the following items in regard to the NPDES Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4) for the Village of Channahon:

- MS4 Annual Facility Inspection Report for 2018-2019.
- Various Attachments supporting Minimum Control Measures

The Village did not fund any construction projects over one acre during the reporting cycle.

This year, the Village has worked with other entities to satisfy permit obligations. Support documentation from Lower DesPlaines Watershed Group (LDWG) and Lower DuPage River Watershed Coalition (LDRWC) are also enclosed with this letter.

This documentation has also been emailed to epa.ms4annualinsp@illinois.gov. If you have any questions, please call me at (815) 412-2702.

Very truly yours,

ROBINSON ENGINEERING, LTD.

Dana E. Ludwig

Dana E. Ludwig, PE, CFM, CPESC
Senior Project Manager

Encl.

xc: Don Kinzler, Engineering Project Manager – Village of Channahon
Jay Patel – IEPA-Des Plaines office

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
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, 2018 To March, 2019

Permit No. ILR40 0623

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

Name: Village of Channahon Mailing Address 1: 24555 S. Navajo Dr.

Mailing Address 2: County: Will

City: Channahon State: IL Zip: 60410 Telephone: 815-467-6644

Contact Person: Donald R. Kinzler, PE, CFM Email Address: dkinzler@channahon.org
(Person responsible for Annual Report)

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

Will County

Grundy County

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 ☐
2. Public Participation/Involvement ☐
3. Illicit Discharge Detection & Elimination ☐
4. Construction Site Runoff Control ☐
5. Post-Construction Runoff Control ☐
6. Pollution Prevention/Good Housekeeping ☐

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: Date: 05-30-19

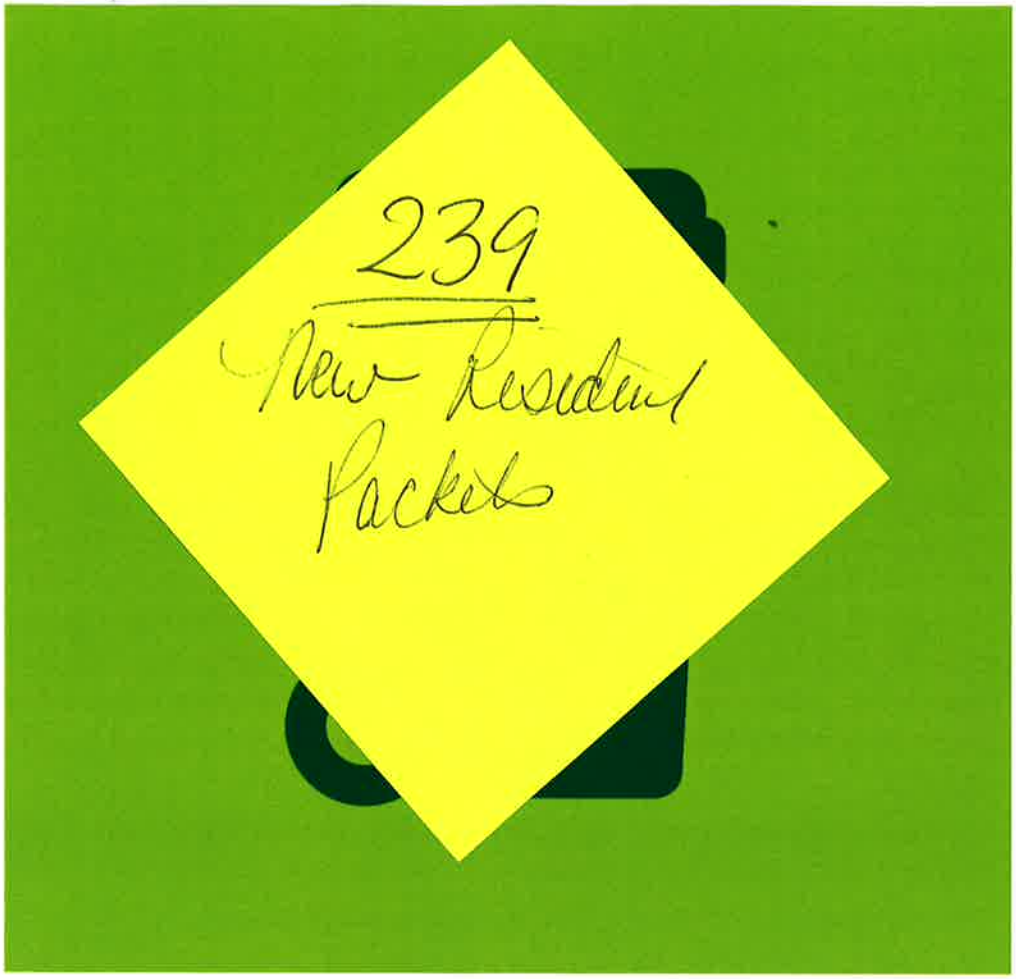
Donald R. Kinzler, PE, CFM — Printed Name:

Engineering Project Manager — Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

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

A-1, B-6



The Village of Channahon

Refuse, Recycling, & Yard Waste Program

WASTE MANAGEMENT

THINK GREEN.®

A-1, B-6

The Village of Channahon

Refuse, Recycling, & Yard Waste Program

WM
WASTE MANAGEMENT

THINK GREEN.®

Dear Channahon Resident:

The Village of Channahon provides residents a comprehensive program designed to encourage recycling, reduce materials headed to the landfill, and ensure that all waste is disposed of in an environmentally responsible manner. Waste Management looks forward to helping Channahon be as clean – and green – as possible in the years ahead. We take this opportunity to provide you updated information regarding your waste, recycling and yard waste services.

For further information, questions or concerns, regarding service, please visit our local website at home.wm.com/Channahon or contact the Village of Channahon at (815) 467-6644.

Visit our local website
home.wm.com/Channahon

Collection Times

Per the Village ordinance #1689, all items placed at the curb for collection, including yard waste, must be out by no earlier than 6 p.m. the day before collection and at least by 6 a.m. on the day of collection. Carts should be placed with the handle facing away from the roadway and about three feet apart. After collection, all carts should be removed no later than the evening of your collection day.

Please note: If you are a member of an active homeowners association (HOA), your covenants may address additional hours/locations for refuse services.

Refuse

The Village utilizes a modified-volume based refuse collection program. Residents can choose from three cart sizes; 35-gallon, 64-gallon, or 96-gallon that best fits your weekly refuse needs.

- Residents must contact Village Hall at (815) 467-6644 to establish service.
- Each resident can choose 35-gallon, 64-gallon or 96-gallon carts as the primary refuse container.
- Additional refuse materials may be placed in bags next to the cart. A pre-paid sticker must be attached to each bag left outside the cart.
- Bulk items such as a chair, couch or furniture will be collected with the weekly pickup.

  You are allowed one bulk item per week. Stickers are not required for these items.
- Carpeting and padding must be cut and rolled into 4-foot lengths. Each roll must not weigh more than 50 lbs. and be securely tied. Improperly prepared carpeting will not be accepted. A maximum of four rolls of carpeting and padding will be accepted as a bulk item.
- Please help Channahon stay clean and green by keeping free liquids to a minimum in your refuse and recycling carts and receptacles. Residents are encouraged to properly contain all materials to prevent leakage.
- White goods such as refrigerators, washers, dryers, dishwashers and water heaters require a separate pickup for a $45.00 charge. Arrangements for white good collection can be made by calling Waste Management at (800) 964-8988.

WM
WASTE MANAGEMENT

Recycling

- Each home is provided with a wheeled refuse cart as the primary recycling container.
- Recycling collection will occur every week.
- Please see the adjacent panel to learn about the Recycle Often. Recycle Right.® program and acceptable materials. It's important that only acceptable materials be recycled so the whole load doesn't go to waste. If you have questions or want to learn more, visit www.RecycleOftenRecycleRight.com.

Sticker Locations

Stickers for extra refuse and yard waste may be purchased at the following locations:

Village of Channahon: 24555 S. Navajo Dr. (815) 467-6644
CIBC Bank: 23840 Eames St. (815) 467-5321
Casey's General Store: 25258 W. Eames St. (815) 467-9847

Stickers may also be purchased by calling Waste Management Customer Service at (800) 796-9696 and prepaying by credit or debit card.

Yard Waste

Yard waste such as grass clippings, leaves, tree branches and brush is collected weekly on your scheduled pickup day the last week of March through November 30. The Village also utilizes a modified-volume based program for yard waste materials.

- All yard waste must be placed in brown paper bags which can be purchased at local retail stores. A pre-paid sticker must be attached to each bag of yard waste in order to be collected.
- Brush and branches must be cut into 4-foot lengths, bundled with string or twine. Brush and branch bundles do not require a sticker.
- Each bundle must not exceed 50 lbs.
- Whole trees, tree stumps and/or improperly prepared bundles will not be collected.
- Leaves will be collected from October 1 through November 30 at no charge.
- Leaves must be placed in brown bags.
- Two additional leaf collections will take place on Saturday in the fall. Please check with the Village for the dates and set-out requirements.

Yard waste subscription services are available for residents with greater yard waste needs. Residents can call Waste Management to rent a 96-gallon yard waste cart for an annual fee of $181.24 in lieu of purchasing brown bags and stickers. To subscribe for the yard waste cart, please call Waste Management directly at (800) 964-8988.

Residents utilizing this service can place all of their yard waste in the provided 96-gallon cart and include up to 5 additional brown bags without stickers. Stickers are required for any additional bags over the 5-bag limit. This service will also be billed directly to residents from Waste Management and is billed annually with a required one-year commitment.

RECYCLE OFTEN. RECYCLE RIGHT.

WM WASTE MANAGEMENT

Great things happen when Channahon residents use **Recycle Often. Recycle Right.®** By recycling everyday items like those shown below, tons of raw materials, time, energy and money are saved. Plus the recycled materials become new products - if you recycle an aluminum can today, it could be back on the shelf as a new one in 60 days - and the cycle continues.

- Place only the acceptable recyclables shown below together in your recycling cart - no sorting needed.
- Containers that held food should be rinsed free of food debris and liquid.
- Do not put recyclables in plastic bags - empty recyclables directly into your cart.

Acceptable materials for curbside recycling include:

Always recycle:

Plastic Bottles & Containers

Food & Beverage Cans

Paper

Flattened Cardboard & Paperboard

Food & Beverage Cartons

Glass Bottles & Containers

Do NOT include in your mixed recycling cart:

NO Food Waste
(Compost instead!)

NO Plastic Bags & Film
(Find a recycling site at plasticfilmrecycling.org)

NO Foam Cups & Containers
(Check Earth911.org for options.)

NO Plastic Bags Or Bagged Recycling

NO Needles
(Keep medical waste out of recycling. Place in safe disposal containers like Waste Management's MedWaste Tracker℠ box.)

To Learn More Visit:
RecycleOftenRecycleRight.com

#Recycling101

Electronic Waste Ban

Effective January 1, 2012, the State of Illinois has banned electronics from landfill disposal, including televisions, monitors, printers, computers, etc.

Other Restricted Items

Waste Management will not collect the following items:

- Construction/demolition materials
- Automotive parts, antifreeze
- Hazardous wastes (oil-based paint, oil, flammables, hot ash, etc.)
- Dirt, stone, concrete, rock
- Medical Wastes Needles
- Swimming pools
- Tires
- Pesticides/Insecticides
- Antifreeze

The Will County Land Use Department holds several recycling events for hazardous wastes, electronics and tires throughout the year. You can visit the website at www.willcountygreen.com for more information or call (815) 727-8834. Residents can also visit the Illinois EPA website at www.epa.illinois.gov for other recycling options.

Observed Holidays

Waste Management only observes the following holidays. When your pickup falls on or after one of these holidays, your pickup will be delayed by one day that week.

NEW YEAR'S DAY	MEMORIAL DAY	FOURTH OF JULY
LABOR DAY	THANKSGIVING DAY	CHRISTMAS DAY

Waste Management will pick up Christmas trees on the two consecutive regular pickup weeks after Christmas.

Visit our local website
home.wm.com/Channahon

WASTE MANAGEMENT

prairierivers network

Rain Gardens for Illinois

WHAT IS A RAIN GARDEN?

Do you have a wet basement, water that pools on your property, or a winter skating rink that results from downspout water rushing down your driveway? With a little effort, you can put that water to work and create a very attractive landscape feature! A rain garden is a vegetated depression specially designed to capture and use rain and snowmelt, collectively known as storm water.

Rain gardens receive storm water runoff from upstream drainage areas such as roofs, driveways, and lawns. Water that pools in rain gardens nourishes the plants and filters into the soil. Rain gardens imitate natural filtering systems such as wetlands.

You don't have to be an engineer to make a rain garden, and the numerous economic and environmental benefits will last for years!

RAIN GARDEN BENEFITS

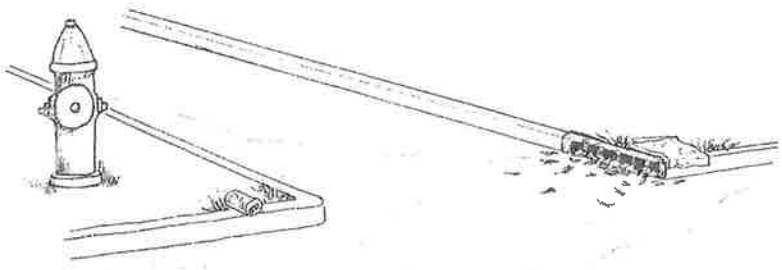
Rain gardens provide a number of benefits:

- offer a unique, beautiful landscape feature
- provide habitat for plants and wildlife such as hummingbirds and butterflies
- reduce flooding and water damage
- absorb more water than traditional lawns
- recharge ground water
- remove pollutants from storm water

WHY WORRY ABOUT STORM WATER?

Precipitation that is unable to filter into the ground moves into basements and streets, sometimes causing flood damage. As storm water flows downhill across lawns and impermeable surfaces, it picks up debris, soil, and chemical contaminants. This polluted water runs into storm drains and empties into rivers and lakes, often without treatment.

The influx of storm water into Illinois waterways not only makes our water resources less clean, but also causes the destabilization of banks and increases downstream flooding. Waterways need to be protected from the negative impacts of storm water because they are a source of drinking water, recreation, and wildlife habitat.



BASIC STEPS FOR CREATING A RAIN GARDEN

1. Choose a location
2. Determine rain garden size
3. Call JULIE (dial 811)
4. Dig the depression
5. Install inflow and outflow conveyances
6. Mulch the rain garden
7. Plant the rain garden
8. Water and weed regularly

Please refer to the text in this brochure for more details on each step.

SELECTING A LOCATION FOR THE RAIN GARDEN

Rain gardens are a great way to reduce storm water runoff and beautify the landscape in residential, commercial, and industrial settings. The first step of installing a rain garden is deciding where to put it! Suitable locations include courtyards, lawns, and next to buildings, roads, driveways, or sidewalks. Avoid spots that are unlikely to receive storm water runoff from surrounding areas.

The most efficient way to determine the location of your rain garden is to observe your property during and after a rainfall. Note both where the water comes from and the area it travels to and pools. An ideal place for a rain garden is an existing low spot where water collects but also drains over time. Or, create your own depression close to an existing downspout. You can also be neighborly and intercept water that flows off your property.

A few more factors to consider when deciding on the location of your rain garden include:

- place rain garden at least 10 feet from building foundations
- avoid underground utility lines, septic fields, and tree roots
- the water table should be greater than 2 feet deep
- a location with partial or full sunlight will dry out faster and allow the use of native prairie plants

SOIL TESTING

If you need help determining the properties of your soil, you can submit a sample for particle size analysis at a soil testing laboratory. The University of Illinois Extension maintains a list of laboratories located in Illinois and neighboring states.

When you have a location in mind, dig a small hole approximately 6 inches deep and determine the soil type and water permeability. Sandy soils are gritty, whereas clay soils are sticky when wet. Fill the hole with water and observe how long it takes to drain. The soil is suitably permeable if the water disappears in 24 hours. Sandy, permeable soils are ideal because rain gardens should drain within a few days. When clay soil is present or permeability is low, you can:

- relocate the rain garden to more permeable soil
- amend the soil with sand and organic matter
- create a water garden

DIGGING THE RAIN GARDEN

Before digging the rain garden, determine the surface area, depth, and shape that are appropriate for your site and drainage conditions. A shape that works well is a bean-shape, with the long side facing upslope in order to catch as much storm water runoff as possible. Your rain garden should be approximately 10-30% of the drainage areas providing runoff. The depth of the rain garden should generally be 3-12 inches. If clay soils are present, the rate of water percolation into the ground will be low and therefore the rain garden should be relatively shallow and large in area. If the soil has good permeability (≥1 inch/hour), the rain garden can be on the deeper and smaller side of the suggested ranges.

It is best to dig your rain garden in the spring or early summer. The sides should be gently sloped, so that the rain garden resembles a saucer instead of a bowl. Use soil you have excavated to level out the bottom. The excess soil can also be used to create a berm on the downslope side of the rain garden. When working on the berm, you can install a rock-lined overflow spillway or a drain pipe so that you have more control of the rate of water loss. This extra step is only recommended if you are concerned about the rain garden overflowing or the soil is high in clay. Direct storm water to the rain garden with a downspout extension or shallow channel. Water can also come from sump pump outlets. Add decorative rock to soften the impact of incoming water.

PLANTING THE RAIN GARDEN

- Use native species because they are adapted to local conditions, benefit wildlife, have deep root systems, and are often perennial
- Avoid species that are aggressive or exotic
- Choose plants with different bloom times so the rain garden remains colorful during the growing season

- Remove existing vegetation to reduce plant competition (non-toxic techniques include sod cutters and layers of black plastic or newspaper)
- Place species according to moisture tolerance, light requirements, and plant height (ex. wettest spot in rain garden should have the more moisture-tolerant species)
- Consider clumping species for visual effect
- Add 2-4 inches of mulch to help remove pollutants, maintain moisture, and prevent erosion and weeds

NATIVE PLANTS

River Oats

Gray Sedge

New England Aster

Swamp Milkweed

Golden Alexander

Virginia Bluebells

Great Blue Lobelia

Cardinal Flower

PLANTS FOR SUN AND SHADE

SUNNY GARDEN

Common Name	Height	Color	Bloom Time
Blue Flag Iris	2-3'	Blue	May-Jun
Golden Alexander	1-2'	Yellow	May-Jun
Great Blue Lobelia	2-4'	Blue	Aug-Sep
Joe-Pye Weed	3-6'	Pink	Jul-Sep
Mountain Mint	2-4'	White	Jul-Sep
New England Aster	1-5'	Purple	Aug-Oct
Palm Sedge	1-3'	Green	Apr-Jun
River Oats	2-3'	Green	Jul-Oct
Swamp Milkweed	2-4'	Pink	Jul-Aug

SHADY GARDEN

Common Name	Height	Color	Bloom Time
American Bellflower	2-6'	Violet	Jun-Oct
Bottlebrush Grass	2-5'	Green	Jun-Aug
Cardinal Flower	2-4'	Red	Jul-Sep
Cinnamon Fern	2-4'	Green	No flower
Dutchman's Breeches	1'	White	Apr-May
Gray Sedge	1-3'	Green	May-Sep
Jack-In-The-Pulpit	1-2'	Green	Apr-Jul
Orange Jewelweed	2-5'	Orange	Jun-Sep
Virginia Bluebells	1-3'	Blue	Apr-May

For more plant ideas, visit:

Illinois Wildflowers - **www.illinoiswildflowers.info**

Blue Thumb Plant Selector - **www.bluethumb.org/plants**

MAINTAINING THE RAIN GARDEN

The care needed to maintain a functioning rain garden does not differ greatly from a regular flower garden. Fertilizers are not needed, but compost can be blended into the soil to increase nutrients. Consider fencing the rain garden initially to keep your plants safe from hungry herbivores!

During the first year, the rain garden will need regular watering (~1 inch/week) and weeding. Over time, the plants will grow larger and develop deep root systems. Simultaneously, the need for weeding and watering will decrease.

Each spring, remove the dead material from the previous growing season. Also replenish the mulch and make sure the inflow and outflow conveyances are clear of debris.

MOSQUITOES

Mosquitoes will not breed successfully in well-drained rain gardens. It takes 10-14 days for a mosquito to fully develop from egg to adult. Rain gardens should filter water completely within a few days.

OTHER RESOURCES

More details about rain gardens are available from:

Prairie Rivers Network
www.prairierivers.org/raingardens

Wisconsin Department of Natural Resources
dnr.wi.gov/runoff/rg

This rain garden brochure is a product of Prairie Rivers Network. To learn more, call us to schedule a rain garden presentation. If you build a rain garden, please send your stories and pictures to info@prairierivers.org.

prairieriversnetwork

1902 Fox Drive, Suite G
Champaign, IL 61820
217-344-2371
www.prairierivers.org

Illustrations by Karie Neukomm and photographs by Michael Jeffords and John Hilty.

On cable 24/7

A-6, B-6

2018 Water Quality Reports are available.

These reports are based on samples
taken from the period of
January 1, 2017 to December 31, 2017.
They are available online at www.Channahon.org

A-6, B-6

2/18/19
cable

Channahon Park District Rain Barrel Purchase Program

Top 10 Benefits of Rain Barrels

Did you know rain barrels have community as well as household benefits? Beyond contributing to your beautiful flowers and plants, here are the top 10 benefits of using a rain barrel as part of your eco-friendly gardening:

1. Rainwater is better for your plants and soil. Rainwater is highly oxygenated, free of the salts, inorganic ions, and fluoride compounds contained in tap water that accumulate in the soil over time and potentially harm plant roots. Use of rainwater in your garden dilutes this impact, making plants more drought-tolerant, healthy, and strong.

2. You'll have your own water source in times of drought or watering restrictions. If you collect rainwater, you'll be able to keep watering and nourishing your garden with your rain barrel reserves.
3. You'll help to reduce runoff pollution. When it rains, runoff picks up soil, fertilizer, oil, pesticides and other contaminants and pushes them into other areas of the landscape. These pollutants can increase algae growth in lakes, alter the habitat for fish, and even make lakes and oceans dangerous for recreational activities. Your water collecting stops some of this damaging flow.
4. You'll contribute to erosion prevention efforts. Rain runoff is also a particular issue in places where land erosion is a concern. Your rain catch will be especially helpful in these cases.

5. You'll cut down on the amount of water that must undergo expensive and energy-intensive sewage treatments. Capturing rainwater and putting it straight to use in your garden eliminates the need for this processing cycle.
6. You'll have a fresh, green way to wash your cars and pets. Rainwater doesn't have the salt and other chemicals found in tap water.
7. Rainwater is the eco-friendly option to keep composts moist. Adding tap water to your compost doesn't fit this sustainability practice; you'll want to use rainwater instead.
8. You'll help control moisture levels around the foundations of your home. Collecting rainwater before it hits ground levels will help to prevent flooding, damp, and mold.

9. You can reduce your water bill. Garden and lawn watering accounts for 40 percent of residential water use during the summer, according to the U.S. Environmental Protection Agency. Thanks to a rain barrel's water catch, the typical gardener can save 1,300 gallons of water during the growing season.
10. You'll be an inspiring example of environmental stewardship. And we thank you for it!
Visit the Park District website for more information and ordering instruction.
https://www.channahonpark.org/green-initiatives/

3/1 – 5/1 on cable

A-6, B-6

Channahon Park District Spring Clean Up On the I&M Canal Trail - April 18-20

Celebrate Earth Day by participating in the I&M Canal Trail spring clean up! We are looking for groups to spend one day to help keep your I&M Canal Trail beautiful. Groups will be assigned a section of the I&M Canal. Garbage bags and gloves will be provided. Planned in cooperation with Illinois Department of Natural Resources.

For more info & to sign up visit:
https://www.channahonpark.org/special-events/

247

Did you know……

Nearly 70% of the pollution in our streams and lakes comes from storm water. Properly designed rain gardens can remove up to 99% of common pollutants in rainfall runoff. Information is available at Village Hall.

Yard waste such as leaves, branches and twigs makes up over 25% of our waste stream.

10 THINGS YOU CAN DO TO PREVENT STORM WATER RUNOFF POLLUTION

- Use fertilizers sparingly & sweep up driveways, sidewalks & gutters
- Never dump anything down storm drains or in streams
- Vegetate bare spots in your yard
- Compost your yard waste
- Use least toxic pesticides follow labels & learn how to prevent pest problems
- Direct downspouts away from paved surfaces; consider starting a rain garden
- Take your car to the car wash instead of using your driveway
- Check your car for leaks and recycle your motor oil
- Pick up after your pet
- Have your septic tank pumped & system inspected regularly

EPA UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Channahon Township
25461 S. Fryer Street

The COMPACTOR is open to Channahon Township residents only.

HOURS OF OPERATION

Saturdays 8:00am - 2:00pm (year round)

Wednesdays 3:00 – 7:00pm (April thru October)

****As of Feb 13th, 2016 Electronics will no longer be accepted at this facility.**

Cable
Dec1 - April 14

A-6, B-6

WASTE MANAGEMENT

Yard Waste will resume on April 3, 2018

Jan 1 - 5/1

A-6, B-6

WASTE MANAGEMENT

Yard Waste will resume on April 1, 2019.

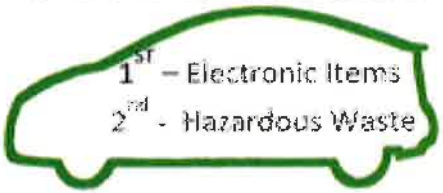
4/1 – 4/22

A-6, B-6

RESIDENTIAL ELECTRONICS & HAZARDOUS WASTE DROP-OFF EVENT

By Appointment Only

VEHICLE UNLOADING ORDER



Saturday, April 21st, 2018 – 8am to 3pm
Joliet

For location information: Make Appointment at

www.willcountygreen.com

Event Sponsored By:
Will County Land Use Department
Resource Recovery & Energy Division

815-727-8834
willcountygreen.com
You will power to rethink, reuse, reduce and recycle.

4/1 - 6/10

A-6, B-6

willcountygreen.com
The will power to rethink, renew, reduce and recycle.

Will County
2018 Spring Events

	Event	Location(s)	Dates	Times
	Electronics and Household Hazardous Waste Collection Event (2 TV limit) RESIDENTIAL ONLY *Appointment Required*	**Joliet** For location information visit www.WillCountyGreen.com	**One Day April 21, 2018**	8 a.m. to 3 p.m. Saturday
		Mokena For location information visit www.WillCountyGreen.com	**One Day June 23, 2018**	
	**Earth Day Photo Contest**	Chance to win a refurbished IPad. See website for details.	Last Day April 22	Enter anytime
	Medication Take-Back (DEA Spring Collection)	***Multiple Police Departments*** http://tinyurl.com/zehej65 Input your zip code for location	One Day April 28, 2018	10 a.m. to 2 p.m. Saturday
	Textile Collection Sheets, towels, clothes, hats, gloves, all pairs of shoes, including gym shoes(Tie or band together)	Will County Office Building 302 N Chicago Street Joliet, IL 60432 ***WJOL's Scott Slocum on Friday, 5:30-9:00am***	**One Week April 30 -May 4 2018**	8:30 a.m. to 4:30 p.m. Mon-Friday
	Bike to School and Bike to Work Week	National Bike to Work Week May is national Bike Month Try biking for errands or work	**One Week May 14-18**	varies
	Bluestem Earth Fair Displays and Activities about the environment *Learn How to Compost & Recycle More-Recycle Better Demonstrations*	University of St. Francis **Joliet**, IL 60435 ww.bluestemearthfestival.com/	**One Day May 19, 2018**	10 a.m. to 3 p.m. Saturday
	Book Reuse & Recycling All types of books – hardcover, soft cover, magazine collections	Joliet Park District's Pilcher Park - Nature Center 2501 Highland Park Drive **Joliet**, IL 60432	**3 Days June 1-3 2018**	9 am – 4 pm Friday Saturday Sunday

A-6, B-6

2/18/19
cable

Channahon Park District Spring Clean Up On the I&M Canal Trail - April 18-20

Celebrate Earth Day by participating in the I&M Canal Trail spring clean up! We are looking for groups to spend one day to help keep your I&M Canal Trail beautiful. Groups will be assigned a section of the I&M Canal. Garbage bags and gloves will be provided. Planned in cooperation with Illinois Department of Natural Resources.

For more info & to sign up visit:
https://www.channahonpark.org/special-events/

A-6, B-6

LOWER DES PLAINES WATERSHED GROUP

Join our annual family-friendly

BioBlitz

WHAT

ACTIVITIES INCLUDE

- In-stream exploring
- Native plant coloring activities
- Identification stations
- Wetland animal artifacts

Nets and other supplies will be provided

WHEN

JOIN US SATURDAY

SEPTEMBER 8TH, 9:00-11:00AM

WHERE

RUNYON FOREST PRESERVE
202 MORGAN ST
LOCKPORT, IL

In cooperation with:
Will County Forest Preserve District

OR

ROUND BARN FARM
12415 US-52
MANHATTAN, IL

In cooperation with:
Manhattan Park District

?

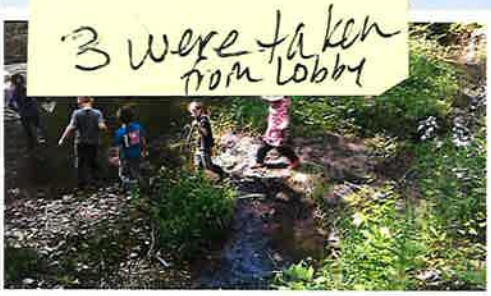
Questions? Contact Monica Rockstroh: 630-428-4500 ext. 123
mrockstroh@theconservationfoundation.org

Come get your toes wet while exploring your local waterways!

(wear old shoes or boots you can enter the water with)

on cable
25
3 were taken from Lobby

We can do more together.
Visit lowerdesplaineswatershed.org for more information



Used Paint Disposal Alternatives

•Keep Painting! What better place to put that last pint or so of paint but right up there on the wall where it blends in perfectly with all the other paint you just put up there.

•Paint Something Else! Use an old piece of cardboard, some scrap lumber, or the inside of your garage. Just about anywhere would probably work to use up that last bit of paint. Again, let the can dry and recycle or dispose of it.

•Use an Absorbent like Kitty Litter! Kitty litter, sawdust, shredded paper or just about anything else that will absorb moisture and let the paint dry out should work here. You may be able to empty the can, dry it out, and recycle it.

•Give it to Someone! Look around and you may find somebody who needs to paint a small area.

•Store it for Later! For "touch-ups“ , cover the opening with plastic wrap, and make sure the lid fits securely so the paint doesn't leak. Then turn the paint can upside down! This creates a tight seal, and keeps the paint fresh to use again.

Posts	Facebook (People Reached)	Website Hits
I&M Canal Clean Up	3,126	-
Yard Waste Spring Clean Up	3,135	155
Electronic Recycling Event	2,132	190
Yard Waste Begins Post	1,412	308
Electronic Recycling Event	1,131	101
I&M Canal Spring Clean Up Event	2,741	389
Tree Pickup Dates	1,282	319
Electronic Recycling Event	625	103
Fall Leaf Collection Dates	546	263
Fall Leaf Collection Post	1,320	368
Watershed group BioBlitz	571	391
DuPage River Study Public Review Post	788	465
Water Quality Reports	767	526
Rain Barrel Program	1,390	826
January - Discover Channahon Newsletter	1,275	419
February - Discover Channahon Newsletter	2,057	401
March - Discover Channahon Newsletter	825	386
April - Discover Channahon Newsletter	702	104

Lower DuPage River
Watershed Coalition

AGENCY MEMBERSHIP PROFILE

B-1

1. Agency Name: Village of Channahon

Address: 24555 S. Navajo Drive
City, Zip: Channahon, IL 60410
Telephone Number: 815-467-6644
Chief Executive Officer Name:

County: Will
Website: www.channahon.org
Fax Number: 815-467-8398
Title:

2. If your Agency operates a wastewater treatment facility that discharges to the DuPage River Watershed, please provide the following information for each facility:

NPDES Permit Number:
Facility Discharges to:
Design Average Flow:

NPDES Permit Number:
Facility Discharges to:
Design Average Flow:

NPDES Permit Number:
Facility Discharges to:
Design Average Flow:

NPDES Permit Number:
Facility Discharges to:
Design Average Flow:

3. Are there any combined sewer service areas within your Agency?
_X_ No __ Yes (If yes, the LDRWC may request additional information)

4. DESIGNATED REPRESENTATIVE:
Name: Don Kinzler
Title: Engineering Project Manager
Direct Line:
Email Address: dkinzler@channahon.org

ALTERNATE REPRESENTATIVE:
Name: Ed Dolezal
Title: Director of Public Works
Direct Line:
Email Address: Edolezal@channahon.org

The Designated Representative is authorized to vote at Workgroup meetings on the agency's behalf and the Alternate Representative is authorized to vote in the absence of the Designated Representative.

Signature _____ Title _____ Date 03-28-19

Please direct questions to Jennifer Hammer, Watershed Coordinator, at 630-747-8106. Please complete this Agency Membership Profile and return it along with a check made payable to the Lower DuPage River Watershed Coalition.

Lower DuPage River Watershed Coalition
10S404 Knoch Knolls Rd.
Naperville, Illinois 6056

Or Email to jhammer@theconservationfoundation.org

Lower DuPage River Watershed Coalition

ANNUAL MEMBERSHIP MEETING AGENDA
JANUARY 17, 2019
10AM

Location: Plainfield Public Works Facility – 14400 Coil Plus Drive, Plainfield

1. **Approve:** Minutes from November 15, 2018 meeting

2. **Executive Board Elections:**
   2019 Slate of Officers
   President – Doug Kissel, Village of Plainfield
   Vice President – Nick Gornick, City of Joliet
   Treasurer/Secretary – Amy Ries, City of Naperville
   2019 Slate of Members-at-Large
   Andrew Hawkins, Forest Preserve District of Will County
   Deanna Doohaluk, The Conservation Foundation
   Randy Jessen, Will County Stormwater Committee

3. **2019-2022 Budget Approval:** See attached draft budget for approval.

4. **Education & Outreach:**
   a. Winter Outreach Campaign
   b. Salt Smart for Communities Presentation
   c. Winter BMP Survey

5. **Update Nutrient Implementation Plan**: The Nutrient Science Advisory Committee (NSAC) has released their draft report to Illinois EPA. See attached report

6. **Monitoring Program Update:**
   a. Integrated Prioritization System Model
   b. Winter Conductivity Monitoring

7. **Updates:**
   a. Membership Update –
   b. Treasurer's Report –

8. **Calendar**
   a. February 27th – DRSCW membership meeting 9AM at Village of Lombard
   b. March 21st – Lower DuPage Watershed Coalition Member Meeting
   c. October 15th – Will County Parking Lots & Sidewalks Winter Deicing Workshop
   d. October 16th – Will County Public Roads Winter Deicing Workshop

Lower DuPage River Watershed Coalition

MEMBERSHIP MEETING MINUTES
NOVEMBER 15, 2018
10AM

Location: Plainfield Public Works Facility – 14400 Coil Plus Drive, Plainfield

1. **Approve: Minutes from September 20, 2018 meeting** *Motion to approve minutes by Deanna Doohaluk, seconded by Joe Slevnik. Motion carried.*

2. **Special Conditions Update:** *Deanna provided a short overview of the POTW Meeting that DRSCW hosted on November 8th. In preparation for permit renewals in 2020, DRSCW wanted to make sure that members were still on board with maintaining the Special Conditions Language as it is for the next round of permits. These discussions are pertinent for the LDWRC as this language is also being incorporated to current permit renewals for Lower DuPage POTWs. All members are in favor of maintaining this language and the funding that goes with it.*

3. **Education & Outreach:**
    a. Winter Outreach Campaign Materials *Monica Rockstroh reviewed Winter Outreach Campaign materials and received input from members on re-ordering cups and magnets and developing a bumper sticker. We also discussed creating SaltSmart.org website to house the campaign so it could more easily be shared between the Lower DuPage and Lower DesPlaines watershed groups as well as possibly expanding the program into the DRSCW watersheds.*
    b. Salt Smart for Communities Presentation *Jennifer Hammer developed a presentation that could be used by members to share information with other staff and elected officials to help promote the use of smart salting practices in member communities. Jennifer asked for input to improve the presentation and will post it to the DuPageRivers.org website.*
    c. Winter Deicing Workshops Recap *Lower DuPage and Lower DesPlaines jointly hosted two Winter Deicing Workshops in October. The Public Roads workshop was held on October 23 and had 90 participants – our largest number of participants yet. The Parking Lots and Sidewalks workshop was held October 16th with 19 participants. While we had a good group of people at the second workshop, we are exploring ways to greatly increase attendance for this workshop.*
    d. Winter BMP Survey *Monica Rockstroh provided information on how to respond to the Winter BMP Survey as we have made some changes to the on-line format to allow respondents to save the survey and come back to it. Monica will be following up with communities as this information is a part of required information for annual reporting and compliance with NPDES permits.*

4. **Update Nutrient Implementation Plan:** *Deanna Doohaluk reported the Nutrient Science Advisory Committee (NSAC) is supposed to provide their draft report to Illinois EPA on December 10th, 2018. It will be available for public comment shortly after Illinois EPA receives it.*

5. **Monitoring Program Update:**
    a. Bioassessment Recap *Jennifer Hammer provided a recap of monitoring activities over the summer. All 41 stations were sampled for fish, macroinvertebrates, habitat and water chemistry. A subset of six sites were sampled for sediment.*
    b. Winter Conductivity Monitoring – *Jennifer Hammer will work with three communities to use DO probe housing to deploy conductivity probes for the winter as a proxy for*

instream chloride levels. Additional grab samples will be collected and analyzed to compare to the new conductivity probes.

6. **Updates:**
    a. Membership Update – *nearly all of dues have been collected for FY2018, the remaining members have payments in process.*
    b. Treasurer's Report –

7. **Calendar**
    a. December 12th – DRSCW membership meeting 9AM at Village of Lombard
    b. January 17th – Lower DuPage Watershed Coalition Annual Meeting

Lower DuPage River Watershed Coalition
FY2019-2022

Lower DuPage River
Watershed Coalition

Proposed 2019-2022 Agency Members	Acres within Watershed	Acreage Contribution $0.71/acre	Design Average Flow (MGD)	WWTP Contribution $1723.16/mgd	Total Contribution
Bolingbrook	13739	$ 9,727	2.8	$ 4,844	$ 14,570.87
Channahon	3741	$ 2,648			$ 2,648.25
Crest Hill	3336	$ 2,362	1.3	$ 2,249	$ 4,610.98
Joliet	16035	$ 11,352	3.2	$ 5,536	$ 16,888.52
Minooka	2486	$ 1,760	2.2	$ 3,806	$ 5,565.99
Naperville	9647	$ 6,830	26.25	$ 45,415	$ 52,244.85
Plainfield	13303	$ 9,418	7.5	$ 12,976	$ 22,393.68
Romeoville	6236	$ 4,415			$ 4,414.73
Shorewood	5093	$ 3,606			$ 3,605.66
Will County Stormwater Comm.	32078	$ 22,710			$ 22,709.79
Totals	105694	$ 74,827	43.25	$ 74,827	$ 149,653.32

2016-2019 Dues Agency Members	Acres within Watershed	Acreage Contribution $0.68/acre	Design Average Flow (MGD)	WWTP Contribution $1664.47/mgd	Total Contribution
Bolingbrook	13739	$ 9,358	2.8	$ 4,661	$ 14,018.14
Channahon	3741	$ 2,548			$ 2,547.79
Crest Hill	3336	$ 2,272	1.3	$ 2,164	$ 4,436.07
Joliet	16035	$ 10,922	3.2	$ 5,326	$ 16,247.88
Minooka	2486	$ 1,693	2.2	$ 3,662	$ 5,354.86
Naperville	9647	$ 6,571	26.25	$ 43,692	$ 50,263.05
Plainfield	13303	$ 9,061	7.5	$ 12,484	$ 21,544.21
Romeoville	6236	$ 4,247			$ 4,247.26
Shorewood	5093	$ 3,469			$ 3,468.89
Will County Stormwater Comm.	32078	$ 21,848			$ 21,848.33
Totals	105694	$ 71,988	43.25	$ 71,988	$ 143,976.48

From Park District

Don Kinzler

From: Daryl Cole
Sent: Monday, April 22, 2019 10:46 AM
To: Don Kinzler
Cc: Mike Leonard
Subject: RE: NPDES MS4 Permit Annual Report Data

Don,

For the **March 1, 2018 to February 28, 2019** reporting period.

- 75 people attended the Recycle Day program
- 260 people participated in the I&M Canal
- The Park District did not have a Spring Clean Your Parks Day.
- One (1) rain barrel was sold.
- Here's a list of items that have been on the electronic sign (I'm not 100% if they're all considered environmental):
    - Spring Clean up on the I&M Canal
    - Plant our Community Garden
    - America Recycles Day
    - Prairie Wetland Opening
    - Adopt A Bed
    - America Recycles Day
    - Rain Barrels
    - Garden Palooza

  Average days they are displayed is 10 days.

- There were no other programs during this time period.as involved with like a river clean up, stormwater/environmental awareness, etc.?

Daryl Cole

Channahon Park District
24856 W Eames
Channahon, Illinois 60410
Main Line: 815-467-7275
www.ChannahonPark.org

C-1

Village of Channahon

Outfall Location Map

Legend

- Final Outfalls

1:12,000

MAY 2018

1:100,000

Village of Channahon Outfall Inspections

NPDES MS4 Outfalls

Outfall Location	ID#
Des Plaines River (8)	1-5, 59, 70, 71
DuPage River (8)	50-52, 60-63, 80
Illinois & Michigan Canal (31)	10-12, 20-21, 30-36, 53-58, 64-66, 81-87, 90-92
Other (3)	22, 39, 40

Annual Inspections starting 2018

All Des Plaines and DuPage River Outfalls (8)

1/3 of I&M Outfalls + Others (11+)

Total annual inspections = 19+

Consider the following location groupings for the 1/3 inspections:

Year 1: 10-12, 20-21, 53-58 (11)

Year 2: 30-36, 39, 40, 90-92 (12)

Year 3: 22, 81-87, 64-66 (11)

Public Works Department Work Order

Work Order No.	**7081**
Date	6/20/2018
Requested by	Kinzler, D
Assigned to	Vaickus, B
Assigned to	
To Be Completed By	
Division	Streets
JULIE #	
Request	Check storm sewers draining into pond behind 26500 McKinley Woods Road for illicit discharge.
Work Performed	Went to location, 6 storm sewers noted in curb line which drain into pond. One 6" pipe that drains a wetland area on the north side of Old Kerry. Found 5 of the 6 were covered in grass clippings. Cleaned all 5, pulled gates off, water was clear in man holes and not flowing, small amount of grid at botton of 6 of the manholes. Inspected the FES at 2 locations on the east side of pond, both had a little grid in them but were working correctly. One has a tree growing from it. It should be removed for better drainage. Inspect 2 others that drained pond with "bee hive" covers on them with the last one having a 4 inch restrictor for draining pond at the NE corner. Resident came out and pointed out the "stuff" floating in the SE corner. I did look at it. Told him I was no expert but it looked like floating alge. He said it looked like the color of copper sulfate crystals which he used last year to control alge. I was able to stir it and it disbursed in the water. Conditions at the time: we had rain the night before tempetures were in the 70's and the wind was coming from the NW. Checked other ponds in the area, with and without areation. Some had alge, others did not.
Date complete	6/20/2018
Completed by	Vaickus, B
Completed by	

B & W

C-7

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: Interstate Chemical	Outfall ID: 59	
Date: 12/19/2018	Time (Military): 0939	
Temperature: 41°F	Inspector(s): Gordon	
Previous 48 Hours Precipitation:	Photo's Taken (Y/N)	If yes, Photo Numbers:

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
Storm Sewer (Closed Pipe)	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Clay / draintile ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: ____	☐ Single ☐ Double ☐ Triple ☐ Other:____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
Open drainage (swale/ditch)	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other:	☐ Trapezoid ☐ Parabolic ☐ Other:		Depth: Top Width: Bottom Width:	

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe algea/growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	
Do physical indictors suggest an illicit discharge is present (Y/N):			

Flow Present?	☒ Yes	☐ No	**If No, Skip to Section 7 and Close Illicit Discharge Investigation**
Flow Description	☒ Trickle	☐ Moderate	☐ Substantial

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Sulfide ☐ Petroleum/gas ☐ Laundry ☐ Other:	☐ 1–Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color (color chart)	☐	☒ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange/Red ☐ Multi-Color ☐ Other:	☐ 1–Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1–Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage ☐ Grease ☐ Petroleum (oil sheen) ☐ Suds and Foam ☐ Other:	☐ 1 Few/slight; origin not obvious	☐ 2 – Some; indications of origin	☐ 3 - Some; origin clear
Do physical indictors (flowing) suggest an illicit discharge is present (Y/N): N					

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature	70°F	NA	NA	Thermometer
pH	7.2	6 – 9		5-in-1 Test Strip
Ammonia	0	<3 mg/L April – Oct < 8 mg/L Nov - March		Test Strip
Free Chlorine	0	NA	NA	5-in-1 Test Strip
Total Chlorine	0	< 0.05 mg/L		5-in-1 Test Strip
Phenols	0	< 0.1mg/L		Test Kit
Detergents as Surfactants	0	> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper	0	<0.025 mg/L		Test Strip
Alkalinity	240	NA	NA	5-in-1 Test Strip
Hardness	25	NA	NA	5-in-1 Test Strip
Sample Location	Northwest Corner of Pond @ outfall			

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab?	☐ Yes	☒ No
2. If yes, collected from:	☐ Flow	☐ Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Flouride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

C-7

B & W

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: Ravine Woods		Outfall ID: 50	
Date: 12/17/2018		Time (Military): 0958	
Temperature: 38°F		Inspector(s): Gordon	
Previous 48 Hours Precipitation: 0		Photo's Taken (Y/N)	If yes, Photo Numbers:

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
Storm Sewer (Closed Pipe)	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Clay / draintile ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: ____	☐ Single ☐ Double ☐ Triple ☐ Other:____	Diameter/Dimensions: 12"	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
Open drainage (swale/ditch)	☐ Concrete ☒ Earthen ☐ rip-rap ☐ Other:	☐ Trapezoid ☒ Parabolic ☐ Other:		Depth: Top Width: Bottom Width:	

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe algea/growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Do physical indictors suggest an illicit discharge is present (Y/N)

Flow Present?	☒ Yes	☐ No	**If No, Skip to Section 7 and Close Illicit Discharge Investigation**
Flow Description	☒ Trickle	☐ Moderate	☐ Substantial

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Sulfide ☐ Petroleum/gas ☐ Laundry ☐ Other:	☐ 1–Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color (color chart)	☐	☒ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange/Red ☐ Multi-Color ☐ Other:	☐ 1–Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage ☐ Grease ☐ Petroleum (oil sheen) ☐ Suds and Foam ☐ Other:	☐ 1–Few/slight; origin not obvious	☐ 2 – Some; indications of origin	☐ 3 - Some; origin clear
Do physical indictors (flowing) suggest an illicit discharge is present (Y/N):					

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature	68°F	NA	NA	Thermometer
pH	7.2	6 – 9		5-in-1 Test Strip
Ammonia	.25	<3 mg/L April – Oct <8 mg/L Nov - March		Test Strip
Free Chlorine	0	NA	NA	5-in-1 Test Strip
Total Chlorine	0	< 0.05 mg/L		5-in-1 Test Strip
Phenols	.04	< 0.1mg/L		Test Kit
Detergents as Surfactants	0	> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper	0	<0.025 mg/L		Test Strip
Alkalinity	120	NA	NA	5-in-1 Test Strip
Hardness	25	NA	NA	5-in-1 Test Strip
Sample Location				

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab?	☒ Yes	☐ No
2. If yes, collected from:	☐ Flow	☐ Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Flouride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

C-7

B & W

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: Big Basin	Outfall ID: 70		
Date: 12/17/18	Time (Military): 1412		
Temperature: 43°F	Inspector(s): Gordon		
Previous 48 Hours Precipitation: 0	Photo's Taken (Y/N)	If yes, Photo Numbers:	

Land Use in Drainage Area (Check all that apply):

- ☒ Open Space
- ☐ Industrial
- ☐ Institutional
- ☒ Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
Storm Sewer (Closed Pipe)	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Clay / draintile ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: ____	☐ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 8"	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
Open drainage (swale/ditch)	☐ Concrete ☒ Earthen ☐ rip-rap ☐ Other:	☐ Trapezoid ☒ Parabolic ☐ Other:		Depth: 8" Top Width: 48" Bottom Width: 24"	

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe algea/growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	
Do physical indictors suggest an illicit discharge is present (Y/N)			

Flow Present?	☒ Yes	☐ No	**If No, Skip to Section 7 and Close Illicit Discharge Investigation**
Flow Description	☒ Trickle	☐ Moderate	☐ Substantial

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Sulfide ☐ Petroleum/gas ☐ Laundry ☐ Other:	☐ 1–Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color (color chart)	☐	☒ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange/Red ☐ Multi-Color ☐ Other:	☐ 1–Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1–Slight cloudiness	☐ 2 Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage ☐ Grease ☐ Petroleum (oil sheen) ☐ Suds and Foam ☐ Other:	☐ 1 Few/slight; origin not obvious	☐ 2 – Some; indications of origin	☐ 3 - Some; origin clear
Do physical indictors (flowing) suggest an illicit discharge is present (Y/N):					

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature	41°F	NA	NA	Thermometer
pH	7.8	6 – 9		5-in-1 Test Strip
Ammonia	.25	<3 mg/L April – Oct < 8 mg/L Nov - March		Test Strip
Free Chlorine	0	NA	NA	5-in-1 Test Strip
Total Chlorine	0	< 0.05 mg/L		5-in-1 Test Strip
Phenols	0	< 0.1mg/L		Test Kit
Detergents as Surfactants	0	> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper	0	<0.025 mg/L		Test Strip
Alkalinity	240	NA	NA	5-in-1 Test Strip
Hardness	25	NA	NA	5-in-1 Test Strip
Sample Location	Stream			

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab?	☐ Yes	☐ No
2. If yes, collected from:	☐ Flow	☐ Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Flouride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

VILLAGE OF
CHANNAHON
24555 S. NAVAJO DRIVE • CHANNAHON, ILLINOIS 60410
(815) 467-6644 • FAX (815) 467-9774 • www.channahon.org

May 24, 2018

Matthew Schumacher, P.E.
CAGE Civil Engineering
3110 Woodcreek Dr.
Downers Grove, IL 60515

RE: Lot 4 – Channahon Corporate Center, Site Development Permit Review 1

Dear Mr. Schumacher:

The Village of Channahon has received and reviewed the following:

- *Mass Grading Improvements for Lot 4 – Channahon Corporate Center* prepared by CAGE Engineering, dated 05-08-18
- *Site Development Permit Application (SDP)* received 05-09-18
- *SWPPP* prepared by CAGE Engineering, dated 05-07-18

Based upon my review of submitted materials, I offer the following comments:

1. The actual property owner should be listed under the OWNER as either the applicant, or as a co-applicant. Or, documented permission from the current property owner to perform all permit work must be provided.

   Documented permission must also be provided for offsite work adjacent to the NW corner of the site, and also onto IDI property. Or such work must be removed from mass grading plans.
2. All engineering submittals must be signed and stamped by an Illinois Professional Engineer.
3. Provide a drainage protection certification on the cover sheet.
4. Provide benchmark locations on this sheet. Benchmarks and engineering elevations must be tied into the NAVD 88 datum. Provide a statement that:

   ALL BENCHMARK AND FINAL ENGINEERING ELEVATIONS ARE ON NAVD 88 DATUM.
5. Provide original and revision dates for engineering plan submittals.
6. On all sheets, show and label all existing easements located on the property.
7. For properties with existing vegetation in areas proposed for development, a tree survey shall be submitted prior to issuance of any final plat or final site plan approval. The tree survey must indicate the location, size, and species (both scientific, and common) of all surveyed deciduous trees (those measuring 20 feet in height or having a caliper size of five inches measured six inches above the ground), and evergreen trees measuring five feet or more in vertical height. The tree survey must be completed by a certified arborist or landscape architect, and shown as such on the submitted survey.

Although removal of trees is allowed for this site, they must be replaced as follows:

- *Deciduous trees.*
  - In the event a deciduous tree designated for preservation is destroyed or removed, such trees shall be replaced with new trees for every one inch in caliper of removed tree. (*Example:* A ten-inch caliper Sycamore is designated for preservation and destroyed. Four deciduous trees from the village recommended tree list shall be provided at two and one-half inch caliper.)
  - In the event of a fraction of an inch, if the fraction is less than one-half inch it may be disregarded. If the fraction is one-half inch or greater, it shall be counted as one inch.
- *Evergreen trees.*
  - In the event an evergreen tree designated for preservation is destroyed or removed, such tree shall be replaced with new trees at a rate of one vertical foot for each one vertical foot of removed tree.
- Trees normally required by this chapter may not be counted towards the required caliper inches to mitigate preservation trees.
- Village staff shall approve the type of replacement tree to be planted as selected from the approved Overstory Tree List (Exhibit A to this chapter). The following minimum sizes are required for replacement trees:
  - *Deciduous trees.* All replacement trees for deciduous trees shall have a minimum caliper of two an one half inches in diameter, as measured at diameter breast height (DBH) above the ground. Any combination of tree sizes equaling two and one half inches in diameter or larger, may be used tree replacement; i.e., one 24-inch tree equals two six- inch and four three-inch tree replacements or eight three-inch replacements.
  - *Evergreen trees.* All replacement trees for evergreen trees shall be a minimum height of six vertical feet in height or greater may be used as tree replacements.
- Village staff may vary the number of replacement trees required depending on the desirability of the existing trees.
- For those areas of significant vegetation (50% or greater contiguous lot coverage by existing vegetation and/or identified by the village staff), lots shall be reviewed on an individual basis. Emphasis will be placed on maintaining contiguous plantings, and keeping disruption confined to the perimeter as much as possible.
- All required replacement trees shall be planted on the site from which the trees were removed. Relief from any portion or the entire on-site tree replacement requirement may be granted by the Code Official. Relief shall be based upon practical physical difficulties and/or undue hardships related to conditions of the site.
  - Where specific unique site conditions render complete replacement impractical, cash-in-lieu of replacement trees may be accepted by the village. The contribution in lieu of planting replacement trees shall be $100 for each caliper inch of deciduous tree or $50 for each vertical foot of evergreen tree and shall be paid to the village prior to the issuance of any building permits.
- Removal of any ash trees may require special requirements due to the Emerald Ash Borer. Before any ash trees are moved out of the area, the person or persons removing the tree must contact the village.

NOTE: Although the tree survey must be completed prior to issuance of the SDP, decisions on mitigation of removed trees per the ordinance can be included with the full final Landscape Plan for this site.

8. Existing Conditions Plan
    - Provide north and south sheets in a 40 scale to better compare existing and proposed perimeter drainage patterns.
    - Provide typical data for existing storm sewer; rim and invert elevations, material type, length and slope of pipe, etc. This includes the two storm sewer crossings just north of the NW corner of the site, driveway culverts, and any other storm sewer.
    - This sheet must be in a typical engineering scale. The scale provided is illegible and does not match typical scales.
    - Show the location of existing well and septic improvements on the site. Include the septic tank and field tiles.
9. Overall Site Mass Grading Plan.
    - Turn off, remove or grey scale all building, pavement, roadway, utility structures, and other proposed improvements and descriptions which are not part of permit work. Only proposed mass grading contours and elevations should be a typical dark line type.
    - The scale shown as 1" = 20 ft is incorrect. When measuring the south property line, shown on Existing Conditions as 188.5 ft, it measures approximately 47.5 ft.
    - Provide an excavation stockpile location with erosion & sediment controls.
    - All storm water must be conveyed to the detention basin with this work. Identify overland flood routes (OFRs) for the site by providing OFR arrows where flow crosses from one drainage area to the next until entering the basin; provide high and low point spot grades along the perimeter of the site to demonstrate that storm water is prevented from migrating to adjacent properties.
    - It appears the drainage area to the Frontage Rd ditch has been increased with the work on this sheet. Existing Conditions indicate runoff flows east from roughly the top of the ditch, then north before continuing east. Proposed grading appears to increase the tributary area to the ditch. Please quantify and comment on the extent of this change.
    - Please provide a separate Overall Site Mass Grading Plan exhibit on a larger sheet and in 40 scale with additional existing contour elevation callouts to help review of contour transitions around the site.
10. Detailed Site Mass Grading Plan - North.
    - Please provide additional offsite existing elevation callouts along the Frontage Rd and north and east of the site to help review of contour transitions around the site.
    - All existing contours must tie into proposed contours around the perimeter of the site, and vice versa. Contours shall not tee into other contours at any location and shall not end in space. There are multiple locations with these discrepancies.
    - There are several examples of elevations changing by 1 foot when following the contour. At minimum this is occurring as they transition from existing to proposed contours along the west side of the site, i.e. 588 to 587, etc. Please check that all contours on this sheet are correct through any transitions.
    - Some onsite major contours (every 5 ft) switch from bold to thin. Please correct.
    - A construction entrance is proposed at the NW corner of the site. Show applicable grading changes to the ditch and provide an RCP culvert sized for a 30 yr storm event.
    - Frontage Rd relocation is not permitted with the SDP. Remove proposed grading and flow arrows from the ROW.

- Show existing valve vaults and fire hydrants with existing and proposed rim and grade ring elevations on this sheet; also call out adjustment or reconstruction methods for each where applicable. Note that no more than two adjusting rings totaling 6" are allowed per utility structure. If an adjustment to an existing structure exceeds this limit, it must be called out as a reconstruction with barrel sections.
- Provide callouts every 50 ft showing proposed + or - elevation changes over the existing watermain located in an easement along the Frontage Rd.

11. Detailed Site Mass Grading Plan - South.
    - Please provide additional offsite existing elevation callouts along the Frontage Rd and south and east of the site to help review of contour transitions around the site.
    - All existing contours must tie into proposed contours around the perimeter of the site, and vice versa. Contours shall not tee into other contours at any location and shall not end in space. There are multiple locations with these discrepancies.
    - There are several examples of elevations changing by 1 foot when following the contour. At minimum this is occurring as they transition to the detention basin, i.e. 582 to 583, etc. Please check that all contours on this sheet are correct through any transitions.
    - Address the removal of the existing storm sewer crossing to the east property.
    - Show existing valve vaults and fire hydrants with existing and proposed rim and grade ring elevations on this sheet; also call out adjustment or reconstruction methods for each where applicable. Note that no more than two adjusting rings totaling 6" are allowed per utility structure. If an adjustment to an existing structure exceeds this limit, it must be called out as a reconstruction with barrel sections.
    - Provide callouts every 50 ft showing proposed + or - elevation changes over the existing watermain located in an easement along the Frontage Rd.
12. This property included a residential home with outbuildings. The home site area will be excluded from the SDP until the following items are addressed:
    - The home has since been removed, but other outbuildings remain. Apply for a Demolition Permit through the Village for buildings removal.
    - Existing well and septic improvements must be abandoned through Will County with documentation provided to the Village.
    - Note: The Village does not have record of the home demolition which may have occurred prior to annexation. However, the County may have permitted this work and still have record of it.
13. Soil Erosion & Sediment Control Plan.
    - Some landscape areas are shown to receive erosion control blanket, but others are excluded; and restoration methods are not provided. Identify the method of restoration of landscape areas including the detention basin and explain why some proposed landscape areas are not shown to be restored.
    - Remove reference to inlet baskets. Storm sewer improvements are not proposed with this work.
    - The Limits of Disturbance extend beyond property boundaries to the east, north and west of the Frontage Rd ROW. Revise this boundary to encompass only proposed/authorized work areas.
    - Provide contact information for the NPDES Permit Inspector Certification. This sheet must also be signed on final approved engineering plans.

14. Soil Erosion & Sediment Control Details. Remove the Inlet Filter Basket Detail and Temporary Concrete Washout Detail which are not applicable to this work.
15. SWPPP
    - Provide the Emergency 24-Hour Contact information.
    - The Construction Site Estimates note a 70% impervious area after construction; this indicates the detention basin is being counted as pervious. If so, this is not accurate as the basin becomes essentially impervious when any level of water is reached. Please comment on the proposed construction method which supports the basin being considered pervious, or include the detention basin water surface area as impervious for the purpose of the SWPPP. This subject can then be discussed in detail with complete site development engineering and storm water management submittals and review.
    - The receiving waters for this site is the DesPlaines River.
    - Update SWPPP and appendices as applicable based on all review comments with the exception that SE&SC Plan and Details exhibits for the SWPPP can continue to include storm sewer measures.
    - For the NOI, provide copies of the Historic Preservation and Endangered Species review letters specific to this property.
    - A copy of the executed IEPA ILR10 Permit must be provided prior to start of work. The document provided in the SWPPP was issued July 30, 2013 and modified April 30, 2014 (both dates' years before this development began), does not have a permit number, and does not identify this property as part of the permit.
    - The project is titled as "Lot 3 – Channahon Corporate Center" throughout this document, but is referred to as 'Lot 4' on engineering plans and other documents. Please make applicable corrections or clarifications.

Please call me at 815-467-6644 with any questions you may have.

Sincerely,

Donald Kinzler, P.E., CFM
Engineering Project Manager

Cc (via email): Ed Dolezal, Director of Public Works
Mike Petrick, Director of Development
David Christel, Arco Murry
Brad Hovanec, CAGE Civil

Citizen Inquiry

Inquiry No.	1228	**Received by**	Vaickus, B
Date	10/22/2018		
Name	MacNichol, Mike		
Address	25002 Fryer St		
Phone	(815) 467-4290	**Alt Phone**	
Subdivision		**Unit**	
Request/Concern	Please take a look at drainage issue.		
Action Taken	Create work order to clean around french drain and add either stone or cold patch at edge of road.		
Date Complete	10/25/2018		
By	Kratochvil, C		
By			
Work Order No.			

Citizen Inquiry

Inquiry No.	1215	**Received by**	Vaickus, B
Date	8/10/2018		
Name	Zasada, Timothy		
Address	25421 Mallard Dr		
Phone		**Alt Phone**	
Subdivision		**Unit**	
Request/Concern	Please inspect storm drain in fenced in back yard. There is a lot of erosion.		
Action Taken	Settling - 1 wheelbarrow of black dirt should resolve sinking. Done		
Date Complete	8/14/2018		
By	Browning, G		
By			
Work Order No.			

Citizen Inquiry

Inquiry No.	1209	**Received by**	Vaickus, B
Date	7/11/2018		
Name	,		
Address	0 Steve Rittof Dr		
Phone		**Alt Phone**	
Subdivision	Springbrook Estates	**Unit**	
Request/Concern	Springbrook Resident called regarding sewer grates being covered with debris and when it rains the water pools in those areas. She wanted to know if the grates can be cleaned.		
Action Taken	Cleaned		
Date Complete	8/8/2018		
By	Baranoski, J		
By			
Work Order No.			

Citizen Inquiry

Inquiry No.	1206	**Received by**	Reiter, S
Date	7/2/2018		
Name	Hohenwater, George		
Address	24213 Navajo Dr		
Phone	(815) 467-7619	**Alt Phone**	
Subdivision		**Unit**	
Request/Concern	Storm sewer is sinking and buckling, please inspect storm sewer and inform resident of plan of action.		
Action Taken	Entered work order and requested Julie.		
Date Complete	7/12/2018		
By	Browning, G		
By			
Work Order No.	7102		

JACOB & HEFNER ASSOCIATES
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

NPDES Site Observation Report for ILR10

General Information			
Project Name	**Roadway Improvements for I-55 & Bluff Road**		**Approximate Acreage: 10.2 ac**
Operator	**Village of Channahon**		**JHA Project No.: E209m**
Project Location	**Bluff Road and Frontage Roads at I-55 Interchange**		
Date of Site Visit	**3/29/18**	**NPDES Permit No. ILR10 ILR10W592**	
Observer's Name(s) & Title(s)	**Ben Alonzo – Project Geologist**		
Construction phase at time of visit	☐ **Pre-Construction** ☐ **Land Development** ☐ **Vertical Construction** ☒ **Roadway Construction** ☐ **Post Construction** ☐ **Other:**		
Type of Site Visit: ☐ **Routine** ☒ **Post-Storm Event** ☐ **Other:**			
Weather Information			
Overcast, 43º F, Wind N 10 mph	Last measured precipitation event ≥ 0.5": **0.74" from 03/25/18 to 03/28/18 at Romeoville airport**		
Site Observations – Describe Location and Recommend Corrective Measures on Back Page			

No.	BMP/ Activity	Implemented & Maintained		
1	Are discharge points and receiving waters free of sediment deposits and other pollutants?	☒ Yes	☐ Action Item	☐ N/A
2	Have BMPs specified in the SWPPP been installed and maintained?	☒ Yes	☐ Action Item	☐ N/A
3	Has the SWPPP been updated to reflect the current conditions on site?	☒ Yes	☐ Action Item	☐ N/A
4	Are outlets protected/stabilized?	☐ Yes	☐ Action Item	☒ N/A
5	Have stormwater management systems been constructed, stabilized, and verified to be functioning appropriately?	☐ Yes	☐ Action Item	☒ N/A
6	Are Special Management Areas (e.g., creeks, wetlands, buffers, etc.) adequately protected?	☐ Yes	☐ Action Item	☒ N/A
7	Are storm drain inlets adequately protected?	☐ Yes	☐ Action Item	☒ N/A
8	Have all idle, disturbed areas been stabilized within 14 days of cessation of construction activities in that area (or more restrictive time period per local ordinance requirements)?	☒ Yes	☐ Action Item	☐ N/A
9	Are erodible stockpiles (e.g., topsoil) properly located and adequately protected?	☒ Yes	☐ Action Item	☐ N/A
10	Are washout facilities (e.g., concrete washouts, etc.) available and maintained?	☒ Yes	☐ Action Item	☐ N/A
11	Is waste, including building materials and construction debris, collected and placed in approved receptacles?	☒ Yes	☐ Action Item	☐ N/A
12	Are non-stormwater discharges (e.g., dewatering) properly controlled?	☒ Yes	☐ Action Item	☐ N/A
13	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other potential pollutants?	☐ Yes	☐ Action Item	☒ N/A
14	Are portable toilets, material storage areas, and materials that are potential stormwater contaminants managed appropriately?	☒ Yes	☐ Action Item	☐ N/A
15	Are stabilized entrances installed and are adjacent roads clear of sediment?	☐ Yes	☐ Action Item	☒ N/A
16	Other, based on site conditions:	☐ Yes	☐ Action Item	☒ N/A

No.	Location and Recommended Corrective Measure	Completed/Initial*

*Following completion of corrective measure, check and initial

General Notes and Comments:

No imminent erosion items were noted during the time of the inspection. JHA did not observe any site work taking place during the inspection. Silt fence is in place and in good condition throughout the site. Check dams and sedimentation logs are being implemented in several areas to reinforce silt fence and help prevent potential off-site sedimentation at discharge points. JHA will continue to perform SWPPP inspections and recommend action be taken if necessary.

Certification Statement: (To address NPDES Permit NO. ILR10 requirements)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print Name & Title: Matthew J. Kramer, P.E.

Signature:  Date: 04/03/18

Figure 1: Sedimentation log, rock check dam and silt fence utilized to protect off-site drainage between I-55 and the I-55 northbound exit ramp, facing east.

Figure 2: Sedimentation log, rock check dam and silt fence utilized to protect off-site drainage between the I-55 northbound exit ramp and Frontage Road, facing southeast.

Figure 3: Silt fence in place between the southbound I-55 exit ramp and Frontage Road, facing north.

Figure 4: Silt fence and sedimentation log in good condition along east side of I-55, west of the northbound entrance ramp.

Figure 5: Silt fence in place and in good condition along the west side of I-55, facing east.

Figure 6: Portable toilet in place and adequately stabilized with a sand bag to prevent it from tipping over.

STATE OF ILLINOIS } COMPLAINANT VILLAGE OF CHANNAHON A Municipal Corporation.
COUNTY OF WILL

☐ POLICE DEPT. ☐ ZONING ENFORCEMENT
☒ BUILDING DEPT. ☐ OTHER

TO THE DEFENDANT HEREINAFTER NAMED:

You are hereby notified that the Village of Channahon has issued you this notice of ordinance violation. If you fail to pay the required fee this notice will be converted to an Ordinance Violation.

COMPLAINT

The Complainant named above by its Authorized Officer, on oath states that:

MONTH	DATE	YEAR	D O B
12	3	18	/ /

AT HOUR AM PM

Dr. Lic. #

Conte Paving NAME defendant herein, did violate Section

3820 Squires mill Rd ADDRESS 9310 S of the local ordinance

Joliet CITY IL STATE 60431 ZIP

Lot 29 MACURA (LOCATION OF OFFENSE) in said Municipality

by (describe act) Dumping of Gravel on Road Creating Hazard

MAKE/YEAR	LICENSE NUMBER	STATE	MONTH/YEAR	MUNICIPALITY AND YEAR

and further states that he has probable cause to believe that defendant is in violation of said ordinance.

for the above named Municipality by: OFFICER [signature] its Agent

this 3 day of December ☐ ACTION REQUIRED:

Penalty for this violation, on or BEFORE Due Date $ 250 00

Penalty for this violation, After due date $ 350 00

ACT 09818

DUE DATE WAS

MONTH	DATE	YEAR
12	14	18

YOUR FINAL NOTICE DATE WAS

MONTH	DATE	YEAR
12	24	18

THIS IS AN ADMINISTRATIVE COMPLIANCE TICKET
If The Penalty is Paid Promptly

1. You Will Not Have To Appear In Court.
2. No Points Will Be Charged Against Your License.
3. The Fee Is Less Than A Normal Citation.
4. You Will Not Have To Pay Normal Court Costs.

If not paid within 30 days an ordinance complaint will be issued subjecting you to trial in circuit court including payment of a fine and court costs.

VIOLATOR'S COPY

CONTE PAVING COMPANY, INC.
PO BOX 1327
PLAINFIELD, IL 60544
815-439-0660

12-83

17447

70-160/719
10116

DATE 12-12-18

PAY TO THE ORDER OF Village of Channahon $ 250 00

Two hundred fifty and 00/100 DOLLARS

First Midwest Bank

CHECK AMOUNT

Photo Safe Deposit?

COUNTY OF WILL } COMPLAINANT

☐ POLICE DEPT. ☐ ZONING ENFORCEMENT
☒ BUILDING DEPT. ☐ OTHER

ACT 09824

DUE DATE WAS		
MONTH	DATE	YEAR
3	4	19

YOUR FINAL NOTICE DATE WAS		
MONTH	DATE	YEAR
3	14	19

TO THE DEFENDANT HEREINAFTER NAMED:

You are hereby notified that the Village of Channahon has issued you this notice of ordinance violation. If you fail to pay the required fee this notice will be converted to an Ordinance Violation.

COMPLAINT

The Complainant named above by its Authorized Officer, on oath states that:

MONTH	DATE	YEAR	DOB
2	19	19	/ /

on ____ AT ____ HOUR ☐ AM ☐ PM

Dr. Lic. #

William Vessel (NAME) defendant herein, did violate Section

25146 Tryon St. (ADDRESS) 1954 of the local ordinance

Channahon (CITY) IL (STATE) 60410 (ZIP)

at Timber Ridge Drive (LOCATION OF OFFENSE) in said Municipality

by (describe act) mud on Road.

MAKE/YEAR	LICENSE NUMBER	STATE	MONTH/YEAR	MUNICIPALITY AND YLAR

and further states that he has probable cause to believe the defendant is in violation of said ordinance.

for the aboved named Municipality by: OFFICER ____ its Agent

on this 19 day of Feb 2019 ☐ ACTION REQU RED

Penalty for this violation, on or BEFORE Due Date $ 150.00

Penalty for this violation, After due date $ 250.00

THIS IS AN ADMINISTRATIVE COMPLIANCE TICKET
If The Penalty is Paid Promptly

1. You Will Not Have To Appear In Court.
2. No Points Will Be Charged Against Your License.
3. The Fee Is Less Than A Normal Citation.
4. You Will Not Have To Pay Normal Court Costs.

If not paid within 30 days an ordinance complaint will be issued subjecting you to trial in circuit court including payment of a fine and court costs.

VIOLATOR'S COPY

1945

BLACKJACK BUILDERS AND REMODELERS,LLC
25146 S Tryon St
ChannAHON,IL 60410
815-467-1521

2-2566/0710

DATE 3-26-19

PAY TO THE ORDER OF Village of Channahon $ 150.00

One hundred fifty and 00/100 DOLLARS

BMO HARRIS BANK

FOR ____

⑈071025661⑈ 48128405541" 1945

RECEIVED
MAR 26 2019
BY: SMutz

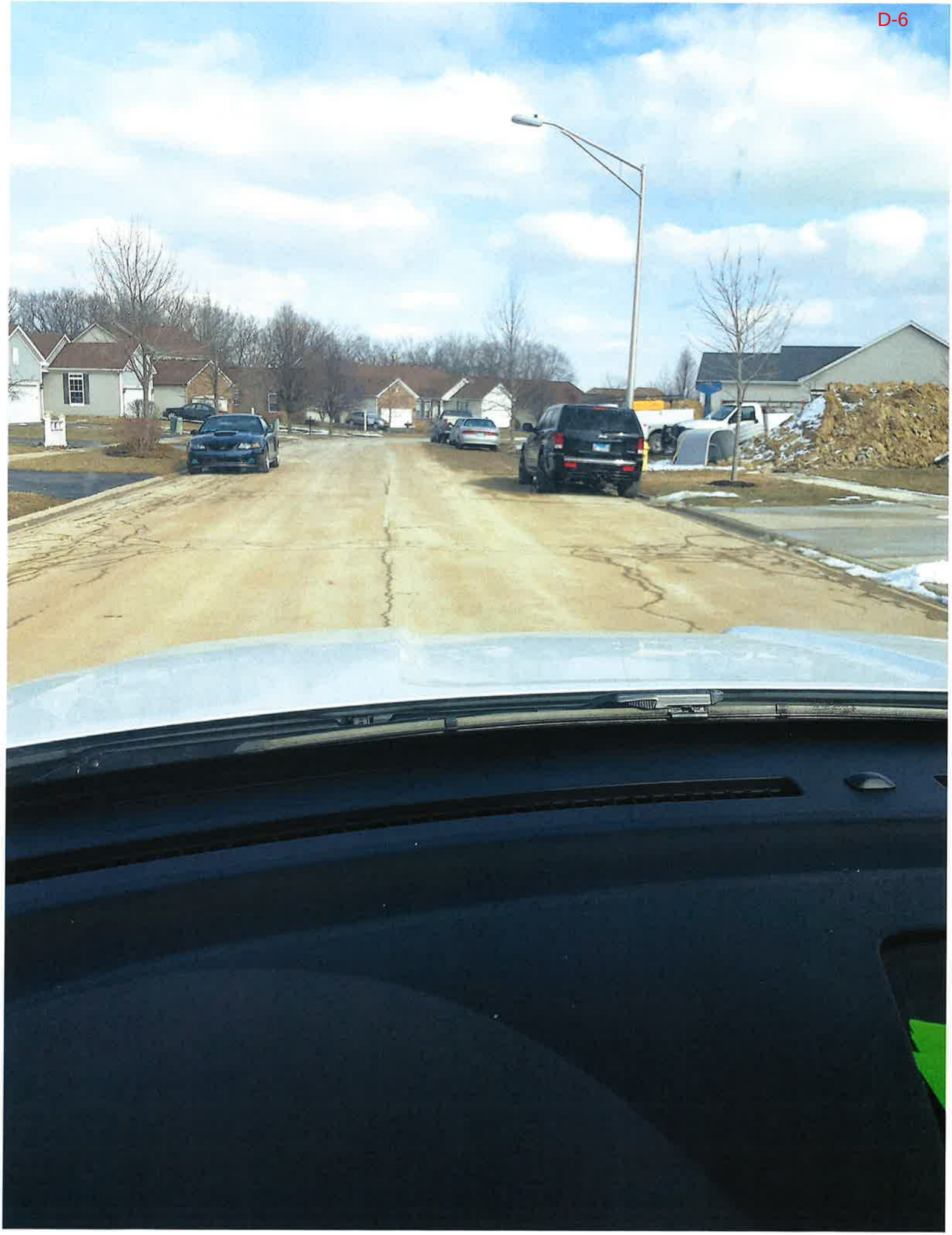
CHANNAHON

Received From: BLACKJACK BUILDERS
Date: 03/26/2019 Time: 1:23:29 PM
Receipt: 122403
Cashier: SMUTZ

ITEM REFERENCE	AMOUNT
COMPL COMPLIANCE TICKETS COMPLIANCE TICKETS	$150.00
TOTAL	$150.00
CHECKS 1945	$150.00
Total Tendered:	$150.00
Change:	$0.00

* CAME IN THE DROP BOX. 3/26
* PER GABE AMOUNT IS CORRECT.

D-6


D-6

Public Works Department Work Order

Work Order No.	7108
Date	7/16/2018
Requested by	Kratochvil, C
Assigned to	Vaickus, B
Assigned to	
To Be Completed By	
Division	Streets
JULIE #	
Request	Replace failing manhole structure in front of 25143 Tryon.
Work Performed	Installed new dry well.
Date complete	8/29/2018
Completed by	Helms, J
Completed by	Kratochvil, C

Public Works Department Work Order

Work Order No.	**7102**
Date	7/12/2018
Requested by	Vaickus, B
Assigned to	Kratochvil, C
Assigned to	
To Be Completed By	
Division	Streets
JULIE #	
Request	Repair storm sewer at 24213 Navajo Dr.
Work Performed	Rebuilt storm sewer & curb replacement. Pull barricades Monday 8/6/18.
Date complete	8/1/2018
Completed by	Browning, G
Completed by	

Public Works Department Work Order

Work Order No.	7057
Date	5/25/2018
Requested by	Vaickus, B
Assigned to	Kratochvil, C
Assigned to	
To Be Completed By	
Division	Streets
JULIE #	
Request	Clean out two culverts at the southwest corner Meadowlark and Green Heron
Work Performed	Both culvert pipes have been jetted & vacuumed by Brieser.
Date complete	6/1/2018
Completed by	Kratochvil, C
Completed by	

Public Works Department Work Order

Work Order No.	**7009**
Date	4/6/2018
Requested by	Vaickus, B
Assigned to	Kratochvil, C
Assigned to	
To Be Completed By	
Division	Streets
JULIE #	
Request	Clean out all catch basins and inlets and jet all west to east culvert and storm drain pipes on Blackberry Lane from Bridge Street to the Public Works Shop
Work Performed	Hired Brieser construction with there vactor/jetter and cleaned everything listed above by vacuuming out catch basins and inlets and Jetting all pipes down Blackberry Lane and sucked the outfalls at the end that lead to the canals
Date complete	3/29/2018
Completed by	Kratochvil, C
Completed by	Browning, G

Public Works Department Work Order

Work Order No.	**6998**
Date	3/16/2018
Requested by	Vaickus, B
Assigned to	Kratochvil, C
Assigned to	
To Be Completed By	
Division	Streets
JULIE #	
Request	Inspect storm sewers on attached map in the area of 26545 Old Kerry (makred in red) to make sure they are working correctly. If not take action to correct.
Work Performed	Done. Silt baskets still in. All good.
Date complete	3/26/2018
Completed by	Browning, G
Completed by	Helms, J

VILLAGE OF
CHANNAHON
24555 S. NAVAJO DRIVE • CHANNAHON, ILLINOIS 60410
(815) 467-6644 • FAX (815) 467-9774 • www.channahon.org

May 4, 2018

Mr. Thomas E. Carroll, PE
Geotech, Inc.
1207 Cedarwood Drive
Crest Hill, IL 60403

RE: Town Center Unit 3 and St. Elizabeth Residences - Record Drawing Review 1

Dear Mr. Carroll:

The Village of Channahon has received the following document:

- *Record Drawings* prepared by Geotech, Inc., dated REV 2-15-18

Upon review of the above referenced document, we offer the following comments and recommendations:

Record Drawings

1. **General**
   - 1.1 Show asbuilt survey spot grades within outlots and overland flood routes.
2. **Cover Sheet – Sheet 1**
   - 2.1 Add the following to the Engineer's statement:

     UNLESS OTHERWISE NOTED ON THESE PLANS, ALL IMPROVEMENTS HAVE BEEN INSTALLED IN CONFORMANCE TO VILLAGE OF CHANNAHON APPROVED ENGINEERING PLANS AND SPECIFICATIONS FOR THIS SITE/SUBDIVISION.
3. **Traffic Control and Lighting Plan – Sheet 4**
   - 3.1 Show asbuilt location of streetlights, wiring and controllers on this sheet.
4. **Grading As-Built Plan – Sheet 5**
   - 4.1 For roadways and parking areas the Village requires cross section elevations consisting of:
     - At all High and Low points, provide surveyed cross section elevations including the center line, flow line of curb & gutter (or edge of pavement if no gutter exists), top-of-curb, and top-of-sidewalk nearest ROW line;
     - For a continuous grade extending more than 200 feet (i.e., up or down hill), provide cross section elevations at ≤100 foot intervals and/or all design grade changes;
     - In all cases, spacing between roadway cross section data shall not exceed 200 feet;
     - Provide cross section elevations for all connecting roads at roadway intersections;
     - Strike through proposed data and provide asbuilt data adjacent to it; both data should be easily distinguishable.

     At locations, numerous spot grades are provided which are not required while design grades or required asbuilt elevations are not shown. Other high or low points are missing all or some asbuilt and design

elevations. Asbuilt data points located at design points should have design data struck out as described with asbuilt elevation adjacent. Both must be legible.

Provide as built cross section data as required and all design data. Please generally limit roadway elevations to those required plus nearby utility elements. Where asbuilt data is provided for design data, strike out as described above. Turn off sanitary cleanouts and streetlights. Although provided on this sheet in design plans, consider turning off predevelopment spot grades.

4.2 Provide record elevations at the north end stub of St. Ann Way.

4.3 Provide asbuilt cross sections at high and low points along all overland flow routes and at proposed Sections A-A and B-B.

4.4 Please provide a separate sheet (5a?) showing detention outlots D/F and G at a larger scale. For outlot D/F, extend data to adjacent b/c (N, S, E) and the west boundary of outlot D. For Outlot G, provide asbuilt data extending to adjacent b/c.

Provide asbuilt cross sections for the OFR from St. Elizabeth Dr. and into the basin including the b/c, parkway, depressed sidewalk, between the walls, and the highpoint if not in one of these areas.

Update the weir detail with record measurements and elevations.

4.5 The record rim elevation given on this sheet for Inlet IN-18 does not agree with the information given on Sheet 7.

4.6 Provide all OFR arrows as shown on approved engineering.

4.7 Provide asbuilt grades for the bike path starting at the OFR crossing and continuing to Outlot I.

5. Grading and Utility Layout Outlot I – Sheet 6

5.1 Provide record as measured pipe lengths for the utilities. Calculate the record pipe slopes based on these measured lengths.

5.2 Provide record information for the Overflow Weir, include record measurements and elevations in the Overflow Weir Detail. Provide spot grades across the weir.

5.3 Provide asbuilt data for MH-35, CB-2 and the 24" RCP between CB-2 and DW-1.

5.4 Provide asbuilt grades for the bike path.

5.5 Provide asbuilt grading to 25 ft beyond Outlot I on the north, west and south sides.

5.6 Provide asbuilt grading southeast of Outlot I and 50 ft around MH-36.

5.7 Provide asbuilt grading 30 ft wide cross sections every 25 ft over the proposed berm from Outlot I to 20 ft passed CB-2.

6. Utility As-Built Plan – Sheet 7

6.1 Provide record as measured pipe lengths for the utilities. Calculate the record pipe slopes based on these measured lengths.

6.2 Utility Conflict Table: Provide as built crossing data for all crossings involving watermain. Watermain can be assumed to be at design elevations.

6.3 The invert of IN-17 is 2.98' high. Please verify this is correct.

6.4 Provide asbuilt data for CB-40, the storm sewer between CB-20 and DW-19 and the storm sewer stubs from CB-21 and CB-25. It can be assumed the stub ends were built to design.

7. St. Elizabeth Street As-Built Profile – Sheet 8

7.1 Provide record pipe lengths and slopes for the sanitary sewer in the profile view.

8. Sanitary Sewer As-Built Profiles – Sheet 10

8.1 Provide record pipe lengths and slopes for the sanitary sewer in the profile view.

9. Details 2 – Sheet 15

9.1 Provide detailed record information for the restrictor structure, MH-38. Include the elevation of the top of the weir wall, measured sizes of the restrictors, invert elevations of the restrictors.

With your next Record Drawing review submittal, please provide a written response to these comments (including VOC comments), 3 full size and 2-11x17 size site plans, and 3 copies of all materials submitted for review.

Please call me at 815-467-6644 with any questions you may have.

Sincerely,

Donald Kinzler, P.E., CFM
Engineering Project Manager

Cc (via email): Ed Dolezal, Director of Public Works
Mike Petrick, Director of Development
Steve Kuczkowski, Chief Building Official

NOTES

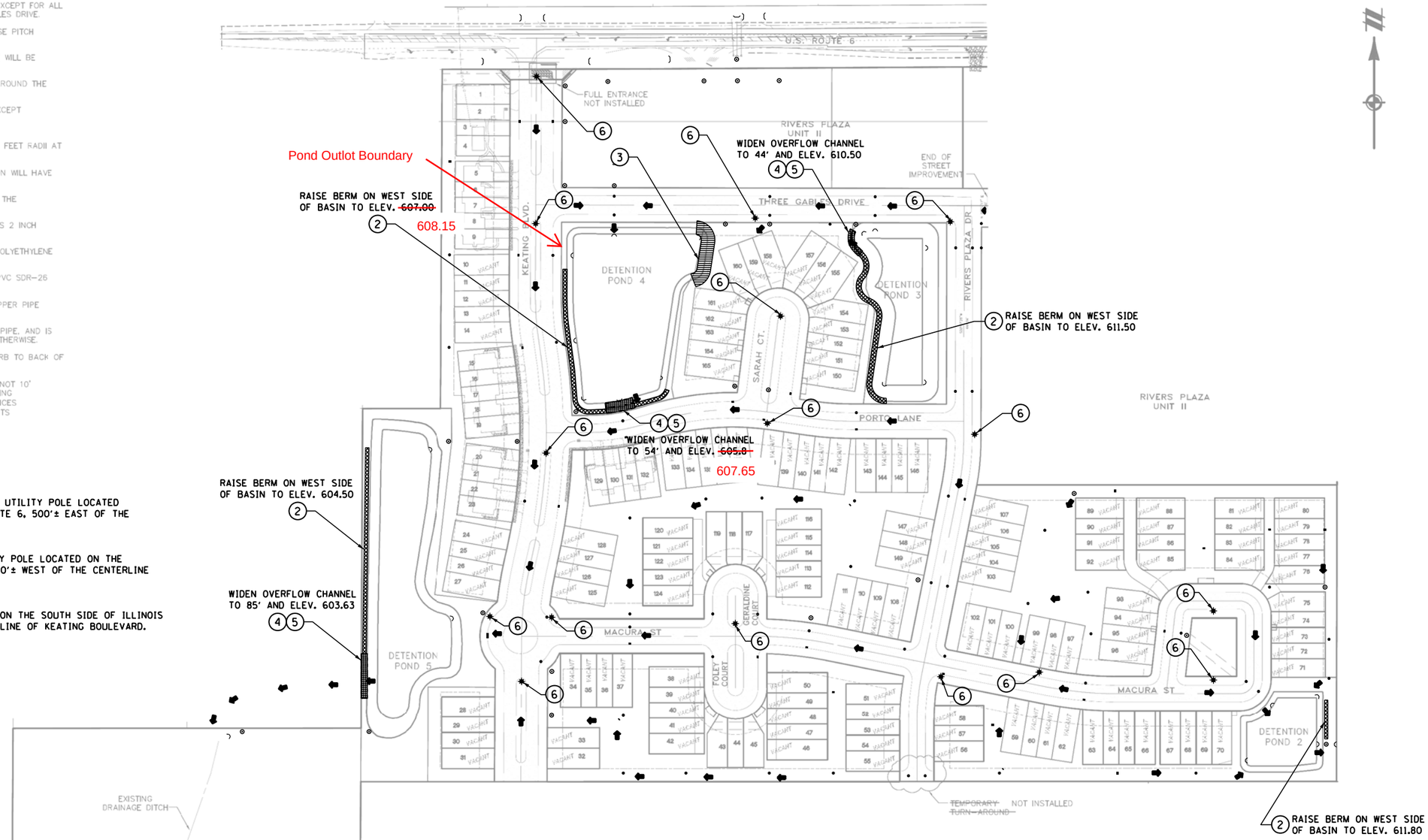
1. ALL CURB AND GUTTER IS SPECIFIED AS M3.12 EXCEPT FOR ALL MEDIANS AND EXCEPT ALL CURB ON THREE GABLES DRIVE.
2. ALL MEDIANS SHALL BE B6.12 CURB AND REVERSE PITCH GUTTER.
3. ALL CURB AND GUTTER ON THREE GABLES DRIVE WILL BE B-6.12.
4. B6.12 CURB AND GUTTER SHALL BE INSTALLED AROUND THE ISLAND ON THE EAST END OF MACURA STREET.
5. ALL STREET RADII ARE SPECIFIED AS 25 FEET EXCEPT MEDIANS AND U.S. ROUTE 6/ KEATING BOULEVARD INTERSECTION.
6. MEDIANS ON KEATING BOULEVARD WILL HAVE 9.5 FEET RADII AT ENDS.
7. U.S. ROUTE 6/ KEATING BOULEVARD INTERSECTION WILL HAVE 50 FOOT RADIUS CURB RETURNS.
8. ALL SPOT ELEVATIONS ON THE CURB SHOWN ON THE GRADING PLAN ARE TOP OF CURB.
9. ALL SUMP LEADS OUT OF BUILDING ARE SIZED AS 2 INCH POLYETHYLENE PIPE.
10. ALL TRUNK SUMP LINES ARE SIZED AS 6 INCH POLYETHYLENE PIPE.
11. ALL SANITARY SERVICES ARE SIZED AS 6 INCH PVC SDR-26 HAVING A MINIMUM OF 1.0% SLOPE.
12. ALL WATER SERVICES ARE SIZED AS 1" INCH COPPER PIPE TERMINATING WITH BUFFALO BOX.
13. ALL WATER MAIN IS SPECIFIED AS DUCTILE IRON PIPE, AND IS SIZED AS 8 INCH DIAMETER UNLESS SPECIFIED OTHERWISE.
14. ALL STREET DIMENSIONS ARE FROM BACK OF CURB TO BACK OF CURB.
15. ANY WATER AND SANITARY SERVICES THAT ARE NOT 10' APART WILL BE SHELVED IN THE SAME TRENCH, HAVING MINIMUM OF 18" VERTICAL SEPARATION. WATER SERVICES SHALL MEET THE MINIMUM 5' COVER REQUIREMENTS

PROJECT BENCHMARKS

BM-1 RAILROAD SPIKE IN SOUTH FACE OF UTILITY POLE LOCATED ON THE NORTH SIDE OF ILLINOIS ROUTE 6, 500'± EAST OF THE CENTERLINE OF KEATING BOULEVARD.
ELEVATION = 616.47 (NAVD88 DATUM)

BM-2 SPINDLE IN SOUTH FACE OF UTILITY POLE LOCATED ON THE NORTH SIDE OF ILLINOIS ROUTE 6, 150'± WEST OF THE CENTERLINE OF KEATING BOULEVARD.
ELEVATION = 619.77 (NAVD88 DATUM)

BM-3 ARROW ON FIRE HYDRANT LOCATED ON THE SOUTH SIDE OF ILLINOIS ROUTE 6, 170'± WEST OF THE CENTERLINE OF KEATING BOULEVARD.
ELEVATION = 618.00 (NAVD88 DATUM)

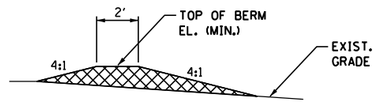


GRADING AND DRAINAGE IMPROVEMENTS

(2) RAISE BERM AT BASIN EDGE (SPECIAL)
(3) GRADING AND SHAPING BASIN EDGE (SPECIAL)
(4) GRADING AND SHAPING BASIN SPILLWAY (SPECIAL)
(5) EROSION CONTROL BLANKET (SPECIAL)
(6) BACKFILL STREET LIGHT FOUNDATION (SPECIAL)
⬅ = OVERLAND FLOW ROUTE

GRADING AND DRAINAGE IMPROVEMENTS NOTES

1. GRADING AND SHAPING BASIN SPILLWAY SHALL INCLUDE GRADING OF SPILLWAY TO THE ELEVATION SHOWN ON ORIGINAL DEVELOPMENT DRAWINGS 4360-4, -5, AND -6.



RAISE BERM DETAIL
(NO SCALE)

Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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Design Firm #184-004315

SECTION 23
TOWN 34 NORTH, RANGE 8 EAST
VILLAGE OF CHANNAHON
GRUNDY COUNTY, ILLINOIS

CLIENT: KEATING DEVELOPMENT GROUP
KEATING POINTE
GRADING AND DRAINAGE IMPROVEMENTS
OVERALL DEVELOPMENT PLAN
RECORD DRAWING SET

DATE: MAY 2005

09/17/10 RECORD DRAWING REVISIONS PER VILLAGE COMMENTS (1RDR)
07/19/10 RECORD DRAWING REVISIONS PER VILLAGE COMMENTS (1RDR)
12/22/09 RECORD DRAWING
02/07/07 PER VILLAGE REVIEW
11/04/05 PER SAN. SEWER (cp)
11/01/05 PER VILLAGE REVIEW (cp)
10/21/05 PER VILLAGE REVIEW
10/5/05 PER VILLAGE REVIEW
7/29/05 PER IDOT (cp/mh)
7/18/05 PER VILLAGE REV.
REVISIONS

ATWELL
SCALE 0 50 100
1" = 100 FEET
DR. AP | CH. DMV
P.M. T. ROBERTS
BOOK:
CAD FILE: 09000241RD-02-OD
JOB: 09000241.10
FILE CODE: 4360-4
SHEET NO. 2 -A

Illinois Association for Floodplain and Stormwater Management

Certificate of Training

DONALD KINZLER
has satisfactorily completed training during the

2018 IAFSM Annual Conference

Conducted by
The Illinois Association for Floodplain and Stormwater Management

Location: Tinley Park, Illinois
Date: March 14th and 15th, 2018

PDH Credits: 11.5
CEC Credits: 10

Diane Bouckaert, PE, CFM, CPESC
Chair, Education Outreach Committee

IAFSM
Illinois Association for Floodplain and Stormwater Management

Date of Training: 4/12/2018
Date of Expiration: 12/31/2018

STATE OF ILLINOIS

Certificate Number: ML 4355

DEPARTMENT OF AGRICULTURE

Special Application of Solid Mosquito Larvicides

This is to certify that the person whose name appears on this certificate has complied with Section 210 of the rules [8 IAC 250.210] adopted for implementation of the Illinois Pesticide Act [415 ILCS 60] and is therefore certified to apply the following mosquito larvicides:

Product Name	***USEPA Registration Number***
Natular XRT	8329-84
Altosid Briquets	2724-375
Altosid XR	2724-421
Altosid Pellets WSP	2724-448
VectoLex WSP	73049-20
Fourstar Briquets	83362-3
Fourstar BTI Briquets	83362-2
Fourstar BTI WPS	85685-4
Fourstar WPS	85685-3
VectoMax WSP	73049-429

Therefore, said person is granted certification as specified herein until the date of expiration unless and until otherwise suspended, revoked or modified as provided in the act cited.

STEVE KUCZKOUSKI
24555 NAVAJO DR.
CHANNAHON, IL 60410

Douglas C. Owens

Douglas C. Owens, Chief
Bureau of Environmental Programs

Belinda S. Warner

Belinda Warner, Manager
Certification, Licensing and Registration

F-1

ILLINOIS ASSOCIATION OF WATER POLLUTION CONTROL OPERATORS
P.O. BOX 59 RANTOUL, ILLINOIS 61866

CELL 815-303-3745 • EMAIL exec@iawpco.org

Missey Moorman Schumacher
Village President
Village of Channahon
24555 South Navajo Drive
Channahon, IL 60410

Dear Ms. Schumacher:

We are pleased to announce that the Village of Channahon wastewater facility has been nominated for an award for "Best Operated Wastewater Treatment Works" to be presented by the Illinois Association of Water Pollution Control Operators (IAWPCO) during their annual conference on February 11 - 13, 2019. This award is presented in each of five categories, with the categories being separated according to facility size and treatment process type. Your facility has been nominated in the Group 3 category. It was nominated for the award by the Illinois Environmental Protection Agency's (IEPA) Division of Water Pollution Control, Field Operations Section.

The purpose of the annual awards is to emphasize the relationship between adequate wastewater treatment and clean receiving waters and to give public recognition and encouragement to communities, their officials and the operating personnel who have operated their wastewater facilities in an especially effective manner.

You should consider this quite an honor, as your facility was one of only seven (7) nominated from all Group 3 facilities considered statewide. The nominees for the Group 3 "Best Operated Wastewater Treatment Works" are:

City of Oregon WWTP
Village of Channahon WWTP
Village of Banner WWTP
Village of Findlay WWTP
City of Carrollton WWTP
Caseyville Township-West STP
Lawrence County Correctional Facility

Inspection teams made up of IAWPCO representatives will choose the winner. A member of an inspection team either has or will be contacting you in the near future to make arrangements for visiting your facility.

ILLINOIS ASSOCIATION OF WATER POLLUTION CONTROL OPERATORS
P.O. BOX 59 RANTOUL, ILLINOIS 61866

CELL 815-303-3745 • EMAIL exec@iawpco.org

Registration materials for the IWPC conference will be mailed in early December. Should you fail to receive the registration materials, please contact:

David L. Miller
Illinois Association of Water Pollution Control Operators
Post Office Box 59
Rantoul, Illinois 61866
Telephone: 815/303-3745

Congratulations on your nomination.

Sincerely,

David L Miller

David L. Miller
Executive Director
Illinois Association of Water Pollution Control Operators

Cc: Ed Dolezal, Director of Public Works
Bruce Vaickus, Utilities & Streets Supt.

VILLAGE OF
CHANNAHON
24555 S. NAVAJO DRIVE • CHANNAHON, ILLINOIS 60410
(815) 467-6644 • FAX (815) 467-9774 • www.channahon.org

July 25, 2018

Al Gonzalez, Jr.
Illinois EPA
9511 Harrison St, 3rd Floor
Des Plaines, IL 60016-1563

RE: Village of Channahon MS4 Findings-NPDES Permit ILR400623

Dear Mr. Gonzalez,

This letter is in response to your June 29, 2018 email. This email provided comments associated with your inspection of the Village's MS4 program on June 28, 2018. Following are the Village's responses corresponding to your numbered comments:

1. Please provide the Village of Channahon Environmental Justice Area (EJA) determination/results. If an EJA does exist, please provide a timeline to implement appropriate public involvement and participation.

1. In summary,
    a. The percentage of minority races is lower in Channahon than the percentages of minority races in the State of Illinois in each classification provided by the U.S. Census Bureau in their 2017 estimates. Therefore, Channahon does not appear to qualify as an EJA or Potential EJA by this classification.
    b. Income & Poverty characteristics also indicate that the EJA and Potential EJA are not applicable to the Village of Channahon, due to higher levels of income in Channahon than the State of Illinois, and a lower level of persons in poverty in Channahon than the State of Illinois.
    c. By the provided definition of an Environmental Justice Area, The Village of Channahon does not meet the criteria to be considered as such. Excerpt data provided on the attachments. Source of data may be found at: https://www.census.gov/quickfacts/fact/table/il,channahonvillageillinois/RHI125217

2. Number of non-HOA basins maintained by the Village of Channahon.

2. None.

3. Submission date of last MS4 Annual Inspection Report (and period coverage).

3. The Village of Channahon Annual Report was submitted May 30, 2018 for the reporting period of March, 2017 to March, 2018. A copy of this report was provided to you via email on May 31, 2018.

4. The number and location of the monitoring sites where the visual assessment is made as per part V. Monitoring, Recordkeeping and Reporting, page 12 in the MS4 permit.

4. The Village is a member of the Lower DuPage River Watershed Coalition (LDRWC). The LDRWC conducts bioassessment steam monitoring on behalf of all member communities which complies with their respective ILR40 permits. See attached pages from our MS4 Program which detail LDRWC actions specific to the MS4 permit section noted above. There are 5 monitoring sites within or near Village of Channahon municipal boundaries. The Village also has 50 stormwater discharge outfalls that Village Staff seeks to inspect annually.

5. The name of the contractors that undergo annual pollution prevention training (plus topics and records) that perform maintenance and provide services to the village equivalent to Public Works Dept. duties, per item 6, page 10 of said MS4 permit.

5. None of the contractors used to perform these duties undergo the required training. The Village will seek to require such training as part of future contracted work.

6. The number of Village of Channahon employees who undergo similar annual pollution prevention training as described in item 3 5.(This number was supposed to be 5 per email from A. Gonzalez)

6. Snow removal and deicing techniques are reviewed each year at the beginning of the season. We have twelve employees who go through this each year. The village in the process of converting its equipment so as to handle liquid deicing agents in the future. (Attached is last year's Snow Policy). We also provide annual training for dropping of pellets for our mosquito abatement program. Larvicide training was done on April 12, at the Will County Health Department in Joliet.

7. If Green Infrastructure Maintenance (GIM) is required, who undergoes annual GIM training?

7. The only GIM items maintained by the Village are isolated drywells along certain streets. Please refer to our response to No. 5.

8. Copy Of latest Village meeting minutes/Agenda topics that address storm water management or MS4 program related items.

8. The Village has not specifically addressed this at a board meeting. The MS4 program will be discussed at a public meeting during the current permitting cycle.

9. The amount of salt stored w/I the dome at the public works garage.

9. 2000 tons can be contained in the dome. It is currently about half full.

10. Does the Village have a pesticides permit and number of DOA lic. pesticide applicators.

10. The village does not have a permit, but we have two staff who are "Commercial Not for Hire certified" applicators. Their licenses, attached, expire in December 2018.

11. Is there an oil water separator for the public Works garage and maintenance schedule for same.

11. Yes. It is cleaned out annually; more if needed.

12. Storm sewer manholes behind the Public Works Garage appeared semi clogged with dirt and mud- time line for cleanup of said sewers.

12. The area has been cleaned and new rip-rap installed; see attached pictures. Whenever we have heavy downpours, such as just days before the inspection, we get runoff from the farm field and wooded area to the west. We clean this up whenever such events occur. .

13. The fuel capacity, type of fuel, and if fuel tanks are double walled at the Public Works garage fueling station.

13. The two fuel tanks, one diesel, and one gasoline, each are 1000 gallon capacity. Both tanks are doubled walled. We have gauges on the outside of the tank to let us know if the inside tank should ever start to leak.

Thank you for the training and insight you were able to provide during the inspection meeting. Please call me at 815-467-6644 with any questions you may have.

Sincerely,

Donald Kinzler, P.E., CFM
Engineering Project Manager

Cc (via email): Ed Dolezal, Director of Public Works
Bruce Vaikus, Building and Streets Superintendent
Dana Ludwig, Robinson Engineering

Lower DuPage River Watershed Coalition ILR40 Activities
March 2018 – February 2019

PART I. COVERAGE UNDER GENRAL PERMITS ILR40

Not applicable to the work of the LDRWC.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the LDRWC.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the LDRWC.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the LDRWC.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

LDRWC outreach activities for 2018-2019 included:

- The LDRWC website was maintained during the reporting period and periodically updated with presentations and material (www.dupagerivers.org).
- A searchable database with information on local aquatic biodiversity (IBIs), habitat (QHEI), and sediment and water column chemistry was maintained and periodically updated.
- A Seasonal Outreach Campaign was implemented throughout year. Media tool kits were revised and distributed to member communities for each season with text for websites, newsletters, blogs and social media posts. Campaign specific materials were also developed – see examples at end of report. For the winter season www.SaltSmart.org website was developed as a clearinghouse of winter BMPs for residents, public agencies and private deicing companies. This website has provided a wider reach beyond the Lower DuPage River watershed and has organically grown into a regional Salt Smart Collaborative.
  Copies of the media toolkits can be made available upon request. Starting in spring of 2019, the toolkits will be fully available on-line with the most up-to-date materials.
  - Spring – Using native plants
  - Summer – Stormwater Pond Maintenance
  - Fall – Proper leaf collection/disposal
  - Winter – SaltSmart – Winter Snow & Ice Management BMPs

- Hosted a table representing LDRWC at the Bluestem Earth Festival in Joliet on May 19, 2018

- Public information available on the website includes:
  - Chloride Fact Sheets aimed at mayors and managers, public works staff, commercial operators, and homeowners.
  - Seasonal Outreach Campaign materials
  - A brochure on coal tar sealants as a source of Polycyclic Aromatic Hydrocarbons (PAHs) aimed at homeowners (produced by the University of New Hampshire Stormwater Center).
  - Detailed reports on the biolocal and chemical conditions Lower DuPage River Watershed.

2. Public Involvement and Participation **–** no activities

3. Illicit Discharge Detection and Elimination – no activities

4. Construction Site Storm Water Runoff Control - no activities

5. Post-Construction Stormwater Management in New Development and Redevelopment - no activities

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Chloride Reduction Workshops
Two chloride reduction workshops were held during the reporting period ending March 2018.

The **public roads deicing workshop** held at Village of New Lenox Public Works Facility on October 23, 2018 with the following agenda:

Registration and Breakfast
Welcome/ Housekeeping
Sean Vandenberg, Village of New Lenox
Visualizing the Movements of Chloride in the Shallow Aquifers
Daniel Abrams, Illinois State Water Survey
Environmental Impacts/Watershed Activities/ Residential Outreach/Lower DuPage & Lower Des Plaines Watersheds
Jennifer Hammer, The Conservation Foundation
Tour of New Lenox Public Works Facility – Good Housekeeping
Sean Vandenberg, Village of New Lenox
Break
Meeting MS4 Requirements & Record Keeping
John Kawka, Morris Engineering, Inc.
Break
Community Round Table: Levels of Service & Evaluation
Chris Drey, Village of Shorewood
Bruce Viakus, Village of Channahon
Ken Enda, Village of Bolingbrook

Attendance – 89 registered, 6 presenters/staff, 3 sponsors/exhibitors = 98 total. All participants received a certificate of attendance.

The **parking lots and sidewalks deicing workshop** was held at New Lenox Public Works Facility on October 16, 2018 with the following agenda:

- Ambient conditions and regulatory update: Jennifer Hammer, The Conservation Foundation/LDRWC
- Information on developing efficient and cost-effective snow fighting operations, appropriate product selection, equipment selection, application rates, equipment calibration, ambient conditions monitoring. Presenters: Connie Fortin, Fortin Consulting and Chis Walsh, (former Public Works Director with City of Beloit, WI)
- Test on workshop materials.

Attendance - 24 registrations, 4 presenters/staff, 2 exhibitors/staff = 30 total. All participants received a training certificate.

Qualifying State, Country or Local Program

Not applicable to the work of the LDRWC.

C. Sharing Responsibility

This report outlines the activities conducted by the LDRWC on behalf of its' members related to the implementation of the ILR40 permit. It is the responsibility of the individual ILR40 permit holders to utilize this information to fulfill the reporting requirements outlined in Part V.C. of the permit.

D. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the LDRWC.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The ILR40 permit states that permit holders "must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts". The LDRWC monitoring program meets the following monitoring objectives and requirements outlined in the permit:

- Measuring pollutants over time (Part V. A. 2. b. ii)
- Sediment monitoring (Part V. A. 2. b. iii)
- Assessing physical and habitat characteristics such as stream bank erosion caused by storm water discharges ((Part V. A. 2. b. vi)
- Collaborative watershed-scape monitoring (Part V. A. 2. b. x)
- Ambient monitoring of total suspended solids, total nitrogen, total phosphorus, fecal coliform, chlorides, and oil and grease (Part V. A. 2. c.)

The LDRWC water quality monitoring program is made up of two components: 1) Bioassessment and 2) DO monitoring.

BIOASSESSMENT

Overview and Sampling Plan

A biological and water quality survey, or "biosurvey", is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. The LDRWC bioassessment is the latter. The LDRWC bioassessment program began in 2012 with sampling 26 stations in the Lower DuPage River watershed. In 2015 an additional 15 stations were added for a total of 41 stations monitored. Forty-one stations were sampled in the summer of 2018. The bioassessment program functions under a quality assurance plan agreed on with the Illinois Environmental Protection Agency.

The LDRWC bioassessment program utilizes standardized biological, chemical, and physical monitoring and assessment techniques employed to meet three major objectives:

1) determine the extent to which biological assemblages are impaired (using IEPA guidelines);
2) determine the categorical stressors and sources that are associated with those impairments; and,
3) add to the broader databases for the DuPage River watershed to track and understand changes through time in response to abatement actions or other influences.

The data collects as part of the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. The assessments are directly comparable to previously conducted bioassessments such that trends in status can be examined and causes and sources of impairment can be confirmed, amended, or removed. A final report containing a summary of major findings and recommendations for future monitoring, follow-up investigations, and any immediate actions that are needed to resolve readily diagnosed impairments is prepared following each bioassessment. The bioassessment reports are posted on the LDRWC at http://www.dupagerivers.org/bioassessment-monitoring/ . It is not the role of the bioassessments to identify specific remedial actions on a site specific or watershed basis. However, the baseline data provided by the bioassessments contributes to the Integrated Priority System that was developed by the DuPage River Salt Creek Workgroup to help determine and prioritize remedial projects and is now being updated to incorporate Lower DuPage River watershed data. The IPS model update will be completed in mid-2019.

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exude an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or "pour point" of the watershed (Level 1 site), then continues by deriving each subsequent "panel" at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in in seven drainage area levels in each of the three watersheds, starting at the largest (150 sq. mi) and continuing through successive panels of 75, 38, 19, 9, 5 and 2 sq. mi. Targeted sites are then added to fill gaps left by the geometric design and assure complete spatial coverage in order to capture all significant pollution gradients including reaches that are impacted by wastewater treatment plants (WWTPs), major stormwater sources, combined sewer overflows (CSOs) and dams. The number of sampling sites by method/protocol and watershed are listed in Table 1 and illustrated in Figure 1.

Representativeness – Reference Sites

Data is collected from selected regional reference sites in northeastern Illinois preferably to include existing Illinois EPA and Illinois DNR reference sites, potentially being supplemented with other sites that meet the Illinois EPA criteria for reference conditions. One purpose of this data will be to index the biological methods used in this study that are different from Illinois EPA and/or DNR to the reference condition and biological index calibration as defined by Illinois EPA. In addition, the current Illinois EPA reference network does not yet include smaller headwater streams, hence reference data is needed to accomplish an assessment of that data. Presently thirteen (13) reference sites have been established.

Figure 1 Lower DuPage River Watershed bioassessment monitoring sites for 2015 and 2018

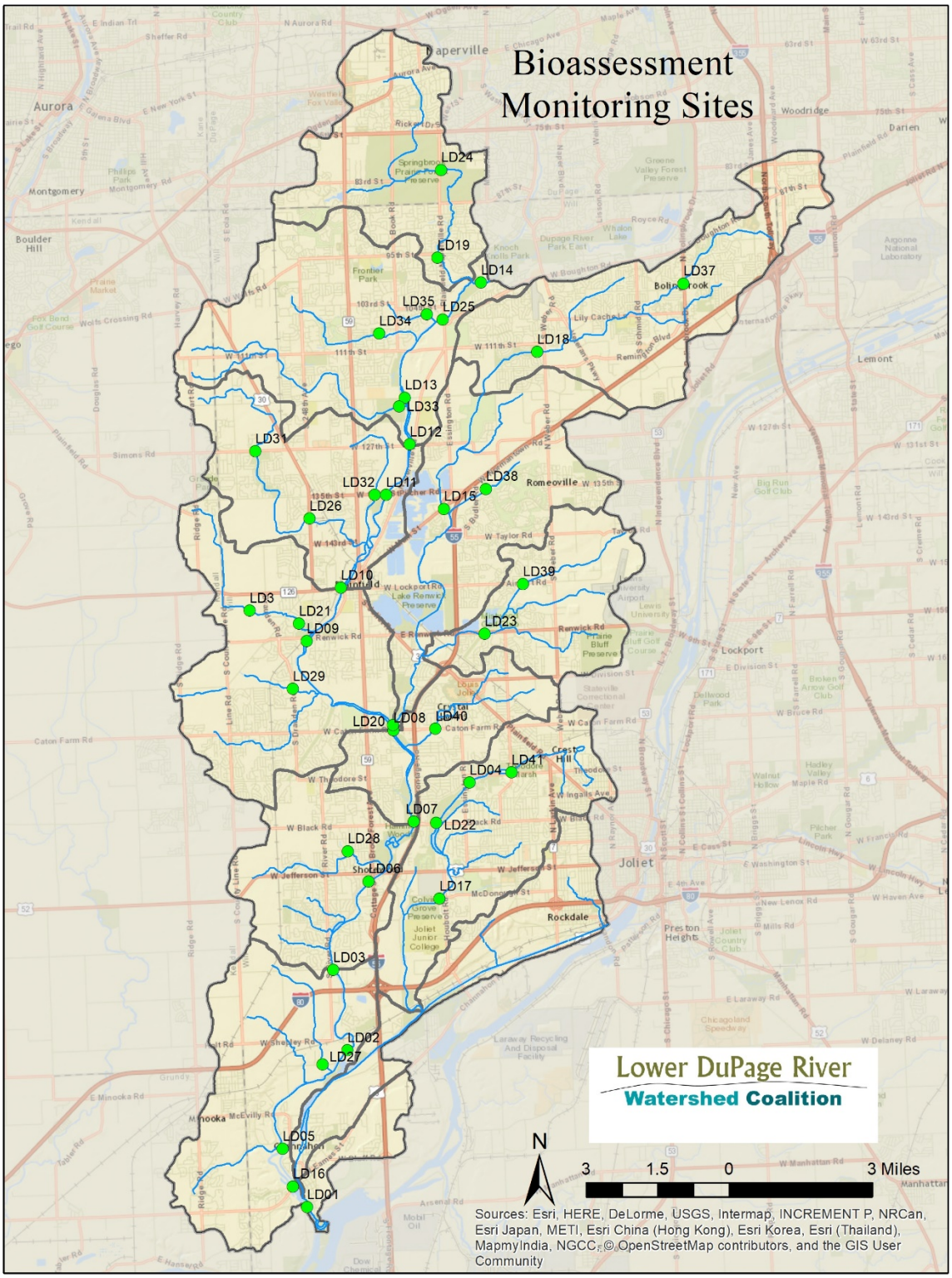


Table 1. Number of sampling sites in the LDRWC project area.

Method/Protocol	Lower DuPage River (2012)	Lower DuPage River (2015)
Biological sampling	26	41
Fish	26	41
Macroinvertebrates	26	41
QHEI	26	41
Water Column Chemical/Physical Sampling		
Nutrients*	26	41
Water Quality Metals	26	41
Water Quality Organics	8	0
Sediment Sampling	7	7

*Also included indicators or organic enrichment and ionic strength, total suspended solids (TSS), DO, pH and temperature

The bioassessment sampling includes four (4) sampling methods/protocols: biological sampling, Qualitative Habitat Evaluation Index (QHEI), water column chemical/physical parameter sampling and sediment chemistry. The biological sampling includes two assemblages: fish and macroinvertebrates.

FISH

Methodology

Methods for the collection of fish at wadeable sites was performed using a tow-barge or longline pulsed D.C. electrofishing apparatus (MBI 2006b). A Wisconsin DNR battery powered backpack electrofishing unit was used as an alternative to the long line in the smallest streams (Ohio EPA 1989). A three-person crew carried out the sampling protocol for each type of wading equipment sampling in an upstream direction. Sampling effort was indexed to lineal distance and ranged from 150-200 meters in length. Non-wadeable sites were sampled with a raft-mounted pulsed D.C. electrofishing device in a downstream direction (MBI 2007). Sampling effort was indexed to lineal distance over 0.5 km. Sampling was conducted during a June 15-October 15 seasonal index period.

Samples from each site were processed by enumerating and recording weights by species and by life stage (y-o-y, juvenile, and adult). All captured fish were immediately placed in a live well, bucket, or live net for processing. Water was replaced and/or aerated regularly to maintain adequate D.O. levels in the water and to minimize mortality. Fish not retained for voucher or other purposes were released back into the water after they had been identified to species, examined for external anomalies, and weighed either individually or in batches. While the majority of captured fish were identified to species in the field, any uncertainty about the field identification required their preservation for later laboratory identification. Identification was made to the species level at a minimum and to the sub-specific level if necessary. Vouchers were deposited and verified at The Ohio State University Museum of Biodiversity (OSUMB) in Columbus, OH.

Results

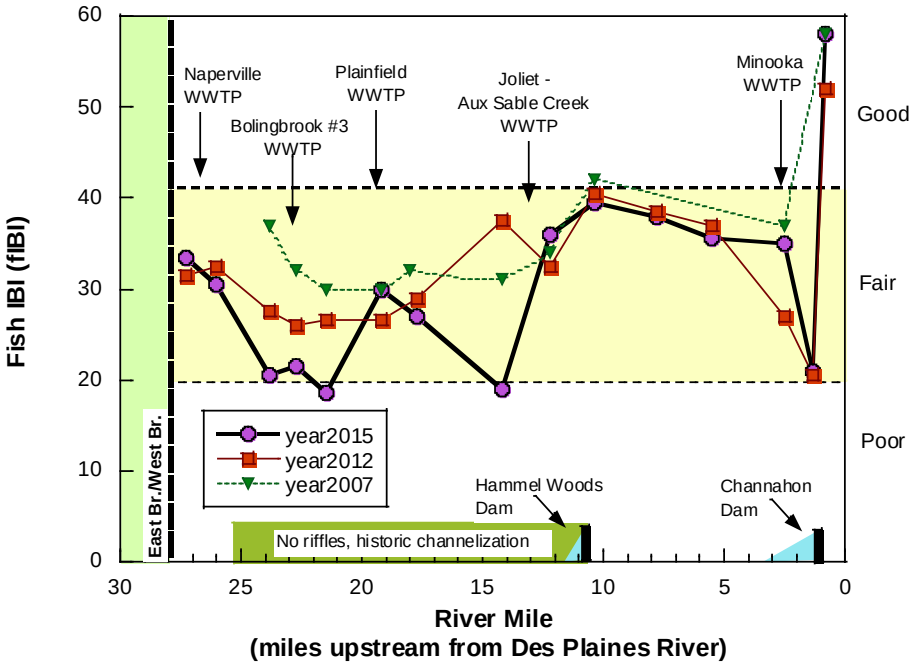
The fish sampling results presented in this report summarize the findings for the mainstem reaches of the DuPage River. Information on the tributaries and detailed analysis of all results can be found at http://www.dupagerivers.org/bioassessment-monitoring/ Results from the 2018 bioassessment will be available in late 2019.

The fish and macroinvertebrate results are presented as Index of Biotic Integrity (IBI) scores. IBI is an evaluation of a waterbodies biological community in a manner that allows the identification, classification and ranking of water pollution and other stressors. IBIs allow the statistical association of various anthropogenic influences on a water body with the observed biological activity in said water body and in turn the evaluation of management interventions in a process of adaptive management. Chemical testing of water samples produce only a snapshot of chemical concentrations while an IBI allows an evaluation of the net impact of chemical, physical and flow variables on a biological community structure. Dr. James Karr formulated the IBI concept in 1981.

DuPage River

As in previous studies, fish assemblages in the lower DuPage River watershed ranged from poor to good in 2015 (Figure 2). The only site with consistently good quality assemblages during all surveys is found in the Channahon Dam tail waters, a short reach wedged in between the dam and the Des Plains River.

Figure 2. Fish IBI scores in the Mainstem DuPage River, 2012, 2015 and 2007 in relation to municipal POTW dischargers. Bars along the x-axis depict mainstem dams or weirs (only black bars impede fish passage). The shaded area demarcates the "fair" narrative range.



MACROINVERTEBRATES

Methodology

The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded tray. Taxonomic resolution is performed to the lowest practicable resolution for the common macroinvertebrate assemblage groups such as mayflies, stoneflies, caddisflies, midges, and crustaceans, which goes beyond the genus level requirement of IEPA (2005). However, calculation of the macroinvertebrate IBI followed IEPA methods in using genera as the lowest level of taxonomy for mIBI calculation and scoring.

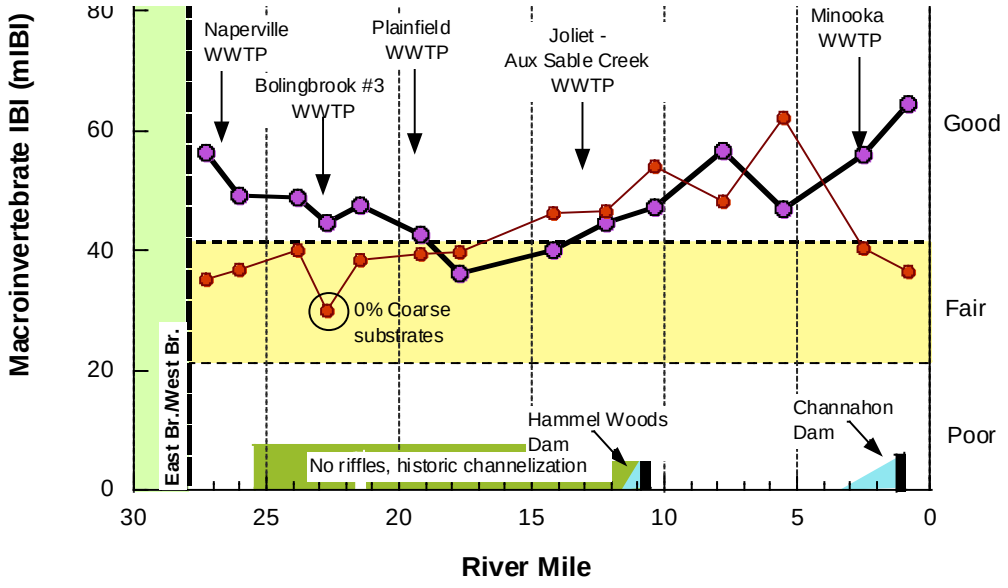
Results

The macroinvertebrate sampling results presented in this report summarize the findings for the mainstem reaches of the DuPage River. Information on the tributaries and detailed analysis of all results can be found at http://www.dupagerivers.org/bioassessment-monitoring/ Results from the 2018 bioassessment will be available in late 2019.

DuPage River

Macroinvertebrate assemblage performance in the lower DuPage River watershed ranged from poor to good in 2015. Mainstem communities improved at almost all stations compared to 2012.

***Figure 3**. Macroinvertebrate Index of Biotic Integrity (mIBI) scores for the Lower DuPage River in 2012 and 2015 in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). The shaded region demarcates the "fair" narrative range.*



HABITAT

Methodology

Physical habitat was evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995; Ohio EPA 2006b) and as modified by MBI for specific attributes. Attributes of habitat are scored based on the overall importance of each to the maintenance of viable, diverse, and functional aquatic faunas. The type(s) and quality of substrates, amount and quality of instream cover, channel morphology, extent and quality of riparian vegetation, pool, run, and riffle development and quality, and gradient used to determine the QHEI score which generally ranges from 20 to less than 100. QHEI scores and physical habitat attribute were recorded in conjunction with fish collections.

Results

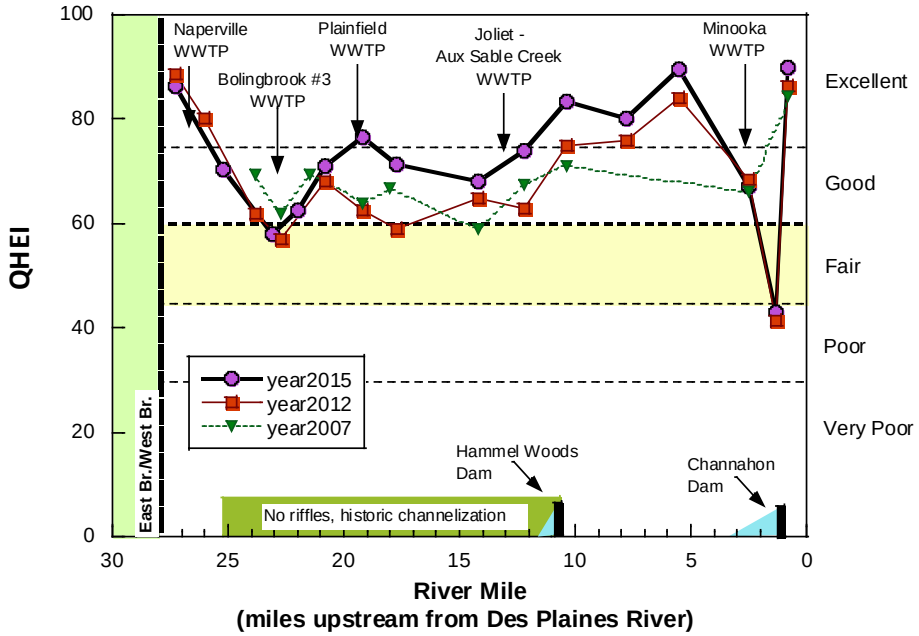
The QHEI data presented in this report summarize the findings for the mainstem reaches of the East Branch DuPage River, the West Branch DuPage River and Salt Creek. Information on the tributaries and detailed analysis of all results can be found at http://www.dupagerivers.org/bioassessment-monitoring/ Results from the 2018 bioassessment will be available in late 2019.

The physical habitat of a stream is a primary determinant of biological quality. Streams in the glaciated Midwest, left in their natural state, typically possess riffle-pool-run sequences, high sinuosity, and well-developed channels with deep pools, heterogeneous substrates and cover in the form of woody debris, glacial tills, and aquatic macrophytes. The QHEI categorically scores the basic components of stream habitat into ranks according to the degree to which those components are found in a natural state, or conversely, in an altered or modified state.

DuPage River

As in previous surveys, 2015 DuPage River habitat quality varied by location but was more than adequate to support warm water communities throughout most of its 27.8-mile length (see figure 4). Extreme upper mainstem habitats remained clearly exceptional, but continued to decline to the lower good range in the sluggish, historically channelized reach between the Naperville WWTP and the Hammel Woods low-head dam (~ RMs 25-10.6).

Figure 4. *Qualitative Habitat Evaluation Index (QHEI) scores and narrative ranges in the Lower DuPage River in 2017, 2012 and 2015 in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). QHEI scores less than 45 are often typical of highly modified channels or dam pools.*



Sediment Chemistry

Detailed analysis and results for sediment chemistry is located at http://www.dupagerivers.org/bioassessment-monitoring/ Results from the 2018 bioassessment will be available in late 2019.

Water Chemistry

Methodology

Water column and sediment samples are collected as part of the LDRWC bioassessment programs. The total number of sites sampled is detailed in Table 1. Total number of collected samples by watershed typical for a full assessment are given in Table 2. The number of samples collected at each site is largely a function of the sites drainage area with the frequency of sampling increasing as drainage size increases (Table 3). Organics sampling is a single sample done at a subset of sites. Sediment sampling is done at a subset of 66 sites using the same procedures as IEPA.

The parameters sampled for are included in Table 4 and can be grouped into demand parameters, nutrients, demand, metals and organics. Locations of organic and sediment sites are shown on

Figure 1. All sampling occurs between June and October of the sample year. The Standard Operating Procedure for water quality sampling can be found at http://www.dupagerivers.org/bioassessment-monitoring/ Results from the 2018 bioassessment will be available in late 2019.

Table 2. Total number of samples typical for a full assessment

Watershed	Approximate # Sites	Demand Samples	Nutrients Samples	Metals Samples
Lower DuPage	41	239	239	138

Table 3. Approximate distribution of sample numbers by drainage area across the monitoring area.

Drainage Area and site numbers	>100 sq mi (n=12)	>75 sq mi (n=25)	>38 sq mi (n=11)	>19 sq mi (n=11)	>8 sq mi (n=15)	>5 sq mi (n=24)	>2 sq mi (n= 46)
Mean # Samples demand /nutrients	12	9	6	6	4	4	2
Mean # Samples metals	6	6	4	4	2	2	0

Table 4. Water Quality and sediment Parameters sampled as part of the LDRWC Bioassessment Program.

Water Quality Parameters	Sediment Parameters
Demand Parameters	**Sediment Metals**
5 Day BOD	Arsenic
Chloride	Barium
Conductivity	Cadmium
Dissolved Oxygen	Chromium
pH	Copper
Temperature	Iron
Total Dissolved Solids	Lead
Total Suspended Solids	Manganese
	Nickel
Nutrients	Potassium
Ammonia	Silver
Nitrogen/Nitrate	Zinc
Nitrogen – Total Kjeldahl	
Phosphorus, Total	
	Sediment Organics
Metals	Organochlorine Pesticides
Cadmium	PCBS
Calcium	Percent Moisture
Copper	Semivolatile Organics
Iron	Volatile Organic Compounds
Lead	
Magnesium	
Zinc	

Results

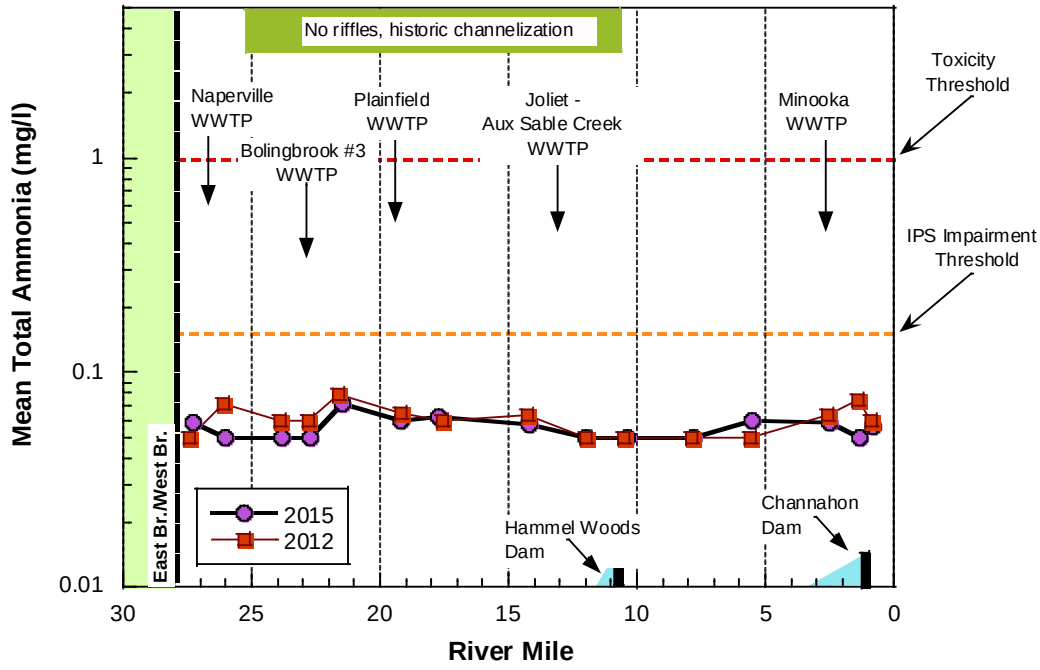
The discussion presented below focuses on the constituents listed in the MS4 permit: total suspended solids, total nitrogen, total phosphorus, and chlorides. Total nitrogen is presented as ammonia, nitrate, and total kjeldahl nitrogen (TKN). Fecal coliform and oil and grease sampling will be added to all future bioassessment sampling ensuring that both parameters will be sampled during the effective period of the ILR40 permit. Results from the 2018 bioassessment will be available in late 2019.

Detailed analysis and results for the other water quality constituents is located at http://www.dupagerivers.org/bioassessment-monitoring/

Lower DuPage River - Chemical Water Quality

As noted in the 2012 Lower DuPage report, summer base flows in the DuPage River are largely a product of the effluent dominated flows of the East and West Branches. As such, water quality is highly influenced by the concentrations and composition of chemical constituents in those effluents as well as runoff from the urban and developed land cover in those watersheds. In 2015, Lower DuPage River water quality samples were collected at higher flows than in 2012, and the quality of treated effluent, with respect to regulated parameters (i.e., cBOD5, TSS, NH3-N), remained generally good. Effluents did not result directly in exceedances of water quality standards and rarely exceeded threshold levels considered protective of biological assemblages for these parameters. Mainstem nutrient levels at late summer flows are largely related to wastewater discharges, but were at lower concentrations (particularly for nitrates) in 2015 than in 2012 due largely to higher river flows. See figures 5 – 8. Results from the 2018 bioassessment will be available in late 2019.

Figure 5. *Mean concentrations of ammonia nitrogen (top panel) and total Kjeldahl nitrogen (bottom panel) in the Lower DuPage River in 2012 and 2015. The approximate locations of municipal WWTP discharges and dams are noted. For ammonia, the upper dashed line represents a threshold concentration (1.0 mg/l) beyond which toxicity is likely while the lower dashed line (0.15 mg/l) is correlated with impaired biota in the IPS study. For TKN, the dashed line represents the IPS aquatic life target level (1.0 mg/l).*



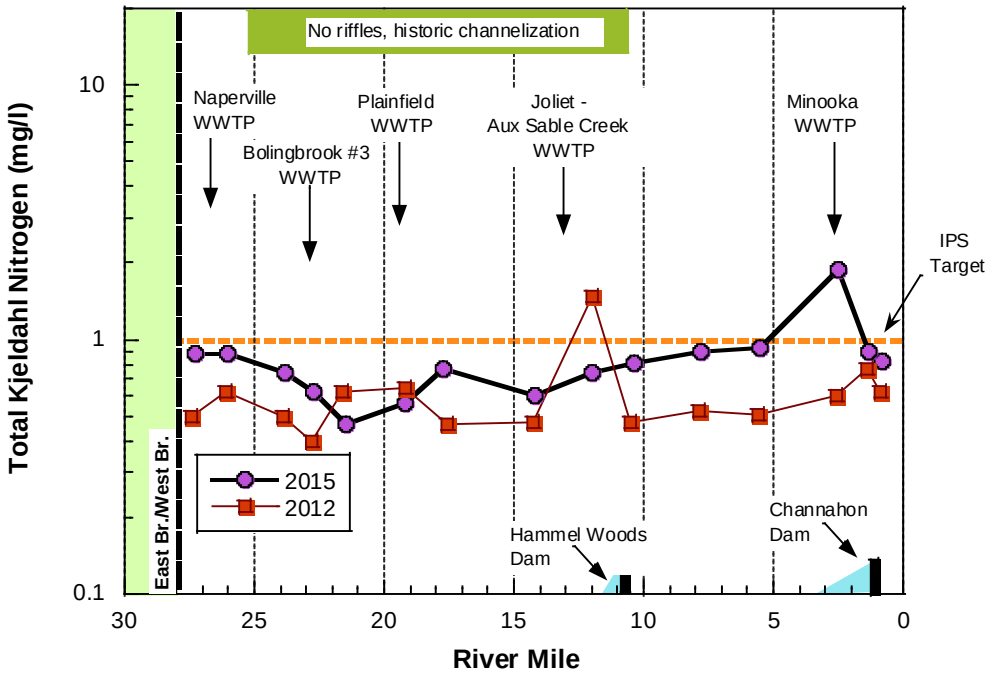


***Figure 6**. Mean concentrations of total phosphorus (top) and total nitrate (bottom) in the Lower DuPage River in 2012 and 2015. The approximate locations of municipal WWTP discharges and dams are noted. For phosphorus, dashed lines represent target concentrations for USEPA Ecoregion 54 (0.072 mg/l), the Illinois EPA non-standard based criteria (0.61 mg/l) and the suggested protective effluent limit (1.0 mg/l). For nitrate, dashed lines represent target concentrations for USEPA Ecoregion 54 (1.798 mg/l), the Illinois EPA non-standard benchmark criterion (7.8 mg/l) and the Illinois water quality criterion (10 mg/l).*

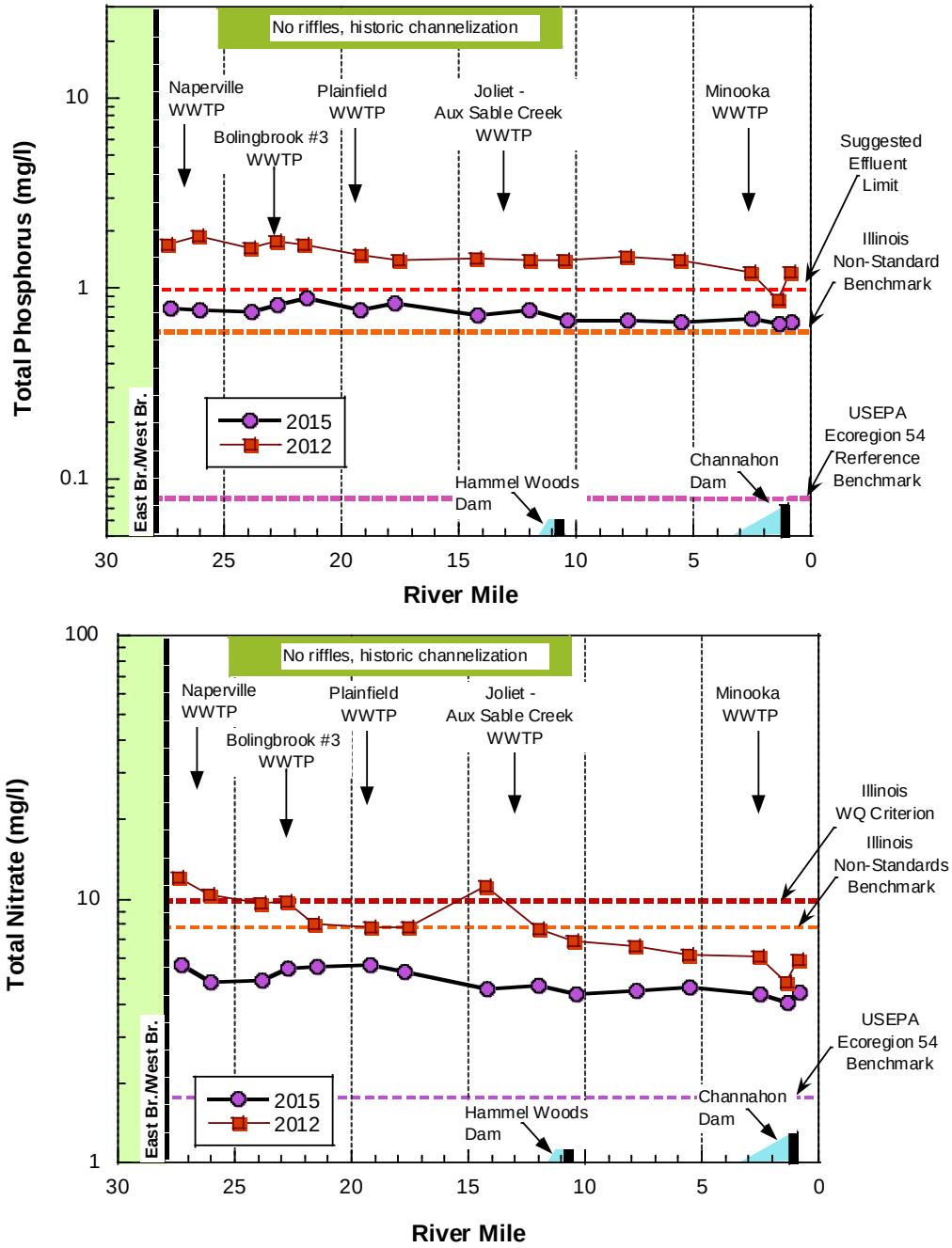


Figure 7. *Mean concentration of 5-day biological oxygen demand (BOD_5; top panel) and total suspended solids (TSS; bottom panel) in the Lower DuPage River in 2012 and 2015. The approximate locations of municipal WWTP discharges and dams are noted. The dashed line in the BOD_5 plot (3mg/l) represents a eutrophication threshold for southern Minnesota streams (Heiskary, et al. 2015). The red dashed line in the TSS plot represents the upper limit of concentrations typical of unpolluted waters in the Midwest and the orange dashed line represents the IPS target.*

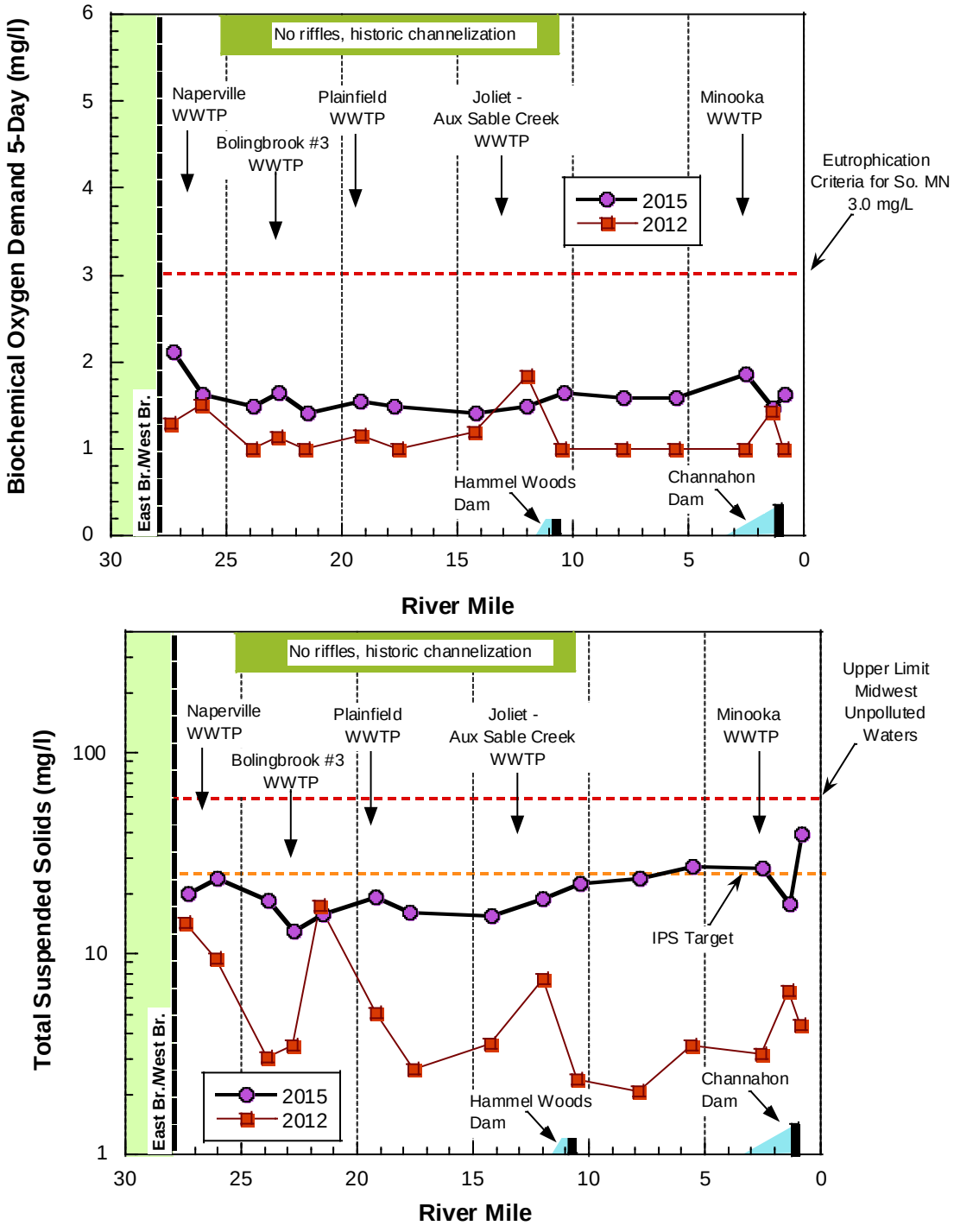
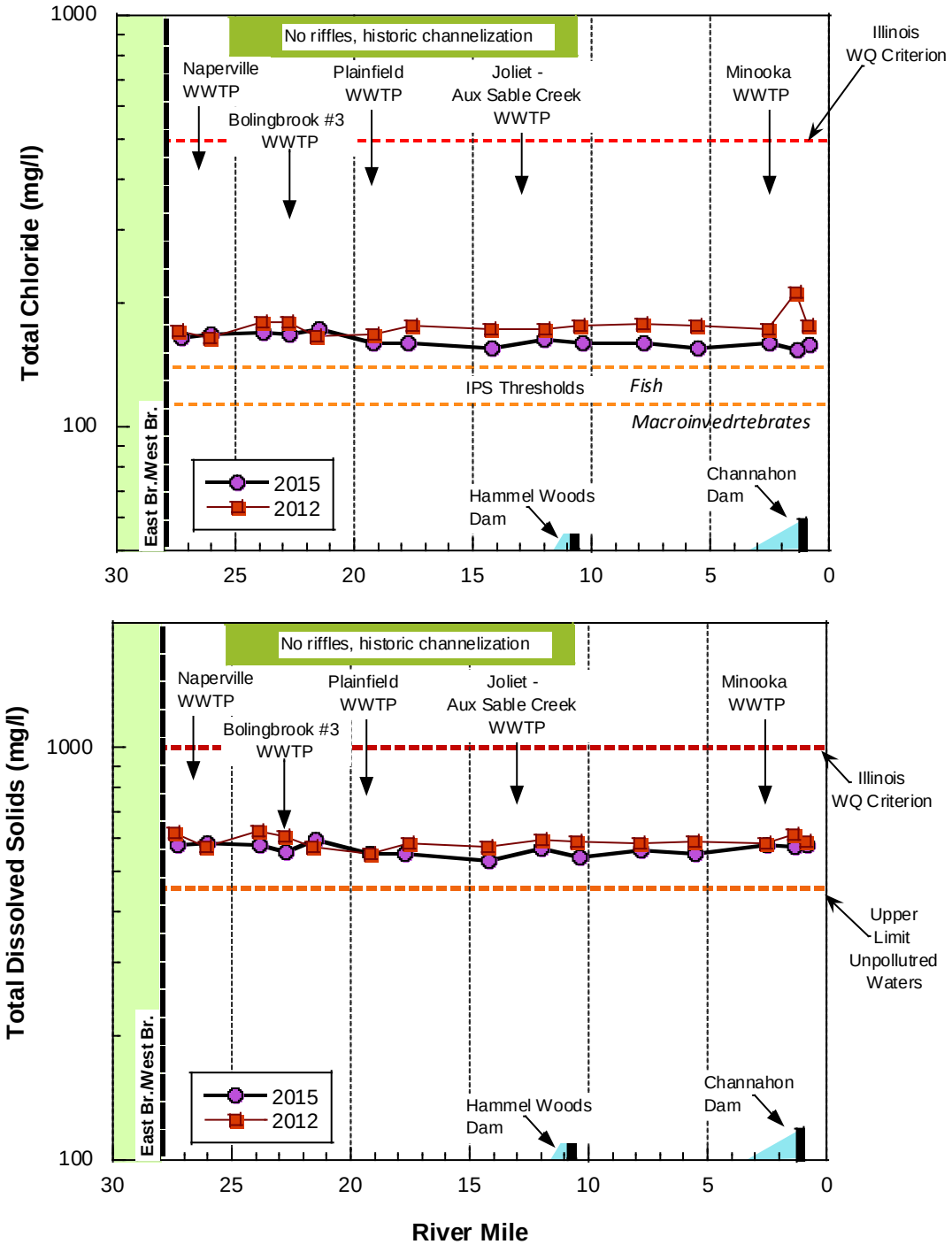


Figure 8. *Mean concentrations of total chloride (top panel) and total dissolved solids (bottom panel) in the Lower DuPage River in 2012 and 2015. The approximate locations of municipal WWTP discharges and dams are noted. For chloride, the upper, red dashed line represents the existing Illinois water quality criterion (500 mg/l); the lower orange dashed lines show IPS quantile regression thresholds for the fIBI (141 mg/l) and mIBI (112 mg/l). For TDS, orange dashed lines represent the 75th percentile TDS level for small rivers in Ohio and the red dashed line is the existing Illinois water quality criterion (1000 mg/l).*



Spring Campaign Infographics

Healthy Yards. Healthy Communities.

The actions we take to maintain our yards can have direct consequences for the health of our community and our rivers. This spring, join the thousands of homeowners who have incorporated native plants into their landscapes to create beautiful outdoor spaces, invite birds and butterflies to their yards, reduce their use of water, fertilizers and pesticides and protect our rivers. Creating a beautiful outdoor landscape with native plants can be easy with a little know-how.

Pagoda Dogwood
Type: Shrub
Sunlight: 4+ hours

Northern Dropseed
Type: Grass
Sunlight: 4+ hours

Bee Balm
Type: Flower
Sunlight: 4+ hours

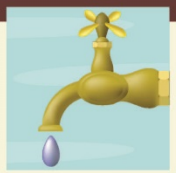
Wild Geranium
Type: Flower
Sunlight: < 4 hours

Pennsylvania Sedge
Type: Short grass-like groundcover
Sunlight: < 4 hours

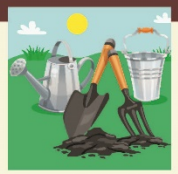
Oak-leaved Hydrangea
Type: Shrub
Sunlight: < 4 hours

Native plants are deep-rooted, helping direct rainwater into the soil. This makes them effective at managing stormwater that falls on your property.

Go local.
Visit your local native plant nursery for the best selection of native plants.



Save water.
Once established, native plants do not need to be watered every day like most ornamental plants. Check the soil before you decide to water.



Get established.
Like any other plant, perennial native plants need care. To ensure new native plants thrive, continue to weed and trim your garden.

Cut the fertilizer.
Native plants thrive in our area and don't need fertilizer or pesticides.

Incorporating native plants into our landscapes helps make our rivers and our yards healthy.

Lower DuPage River Watershed Coalition

To learn more about using native plants in your landscaping, visit The Conservation Foundation's *Conservation@Home* webpage.

Summer Campaign 2-Page Stormwater Pond Checklist for Homeowners Associations

Lower DuPage River
Watershed Coalition

Inspection Checklist

Stormwater Pond Inspection

Use this checklist for your monthly inspections. Make sure to inspect vegetation conditions, shoreline erosion and the inlet/outlet structures. Take note of any improvements that need to be made.

Pond Location
(cross street, description, etc.) _____

1. VEGETATION

Shoreline vegetation	In-pond vegetation	"Safe zone" width (ft)	Notes
☐ Turf grass ☐ Invasive plants ☐ Seawall ☐ Native plants ☐ Rip-rap	☐ Turf grass (bottom) ☐ Native/wetland plants ☐ Submerged plants ☐ Floating plants ☐ Invasives ☐ N/A	**Plant height**	

2. SHORELINE **3. INLET/OUTLET STRUCTURES**

Erosion	Notes	Obstruction	Notes
☐ None ☐ Slight ☐ High ☐ Minimal ☐ Moderate		☐ Trash/debris ☐ Sediment ☐ None	

4. Overall water quality benefits: ☐ Poor ☐ Fair ☐ Good

Repair opportunities/future maintenance:

Lower DuPage River
Watershed Coalition

Maintenance Checklist

HOA Stormwater Pond Maintenance

Track the work you get done on your stormwater pond with this checklist. This checklist is good for one full year. For additional copies, download this file at [link].

YEAR: _____

	TASK	FREQUENCY	DATE(S)	NOTES
1.	Inspect your stormwater pond monthly. Note areas with shoreline erosion and remove any trash, debris or sediment blocking inlet pipes or outlet structures.	Monthly and after storms that fill up your pond(s)		
2.	Schedule a professional engineer to inspect your pond.	Annually		
3.	Install native plants along the banks and in the pond	Annually		
4.	Enforce a 20' natural "safe zone" around the edge of the pond, where no pesticide or fertilizer use is allowed	Annually		
5.	If vegetation around your stormwater pond is over 4' tall, hire professional services to remove and treat for invasive species	As-needed		
6.	Update residents on maintenance and repair of the detention pond(s)	Annually		

Fall Campaign bill inserts for both curb or back pick-up

Loose Leaves Green Algae

As fall rolls around, many of us will be raking leaves to keep our yards and community looking good. Unfortunately, when these leaves are left in the streets they can become a big problem for our rivers.

Leaves that find their way into our rivers contribute to excessive algae growth, which pollutes our river, makes it smell and look bad, and keeps us from enjoying it when spring rolls around. Loose leaves can also clog our storm drains and contribute to local flooding.

Curb it and we'll snag it

[Town] is reminding all residents to rake their leaves to the curb as part of our leaf pickup program. This program is designed to make it easy for you to dispose of unwanted leaves.

To participate in [town]'s leaf collection program, remember to keep your leaves out of the street. **Leaves raked to the curb will be picked up by [town or waste hauler] [weekly/monthly/on specified dates].**

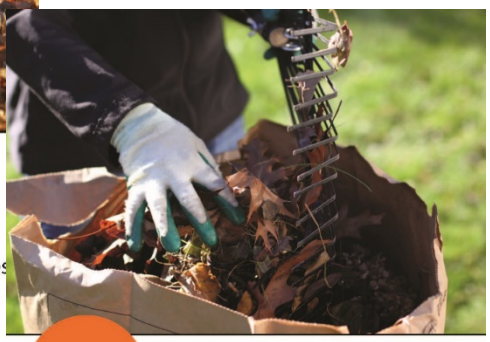
Together, we can keep our community looking good and our rivers healthy.

[City LOGO]

Lower DuPage River Watershed Coalition

[Town] is a part of the Lower DuPage River Watershed Coalition, a collection of communities and local stakeholders working together to improve the health of the DuPage River.

[Town or Coalition info--website]



Bag it and we'll snag it

[Town] is reminding all residents to bag their leaves as part of our leaf pickup program, instead of raking them to the curb or the street. This program is designed to make it easy for you to dispose of unwanted leaves.

Purchase kraft paper bags at a local retailer and put your leaves into the bags and place them at the curb to be picked up. Bagged leaves will be picked up by [town or waste hauler] [weekly/monthly/on specified dates].

Together, we can keep our community looking good and our rivers healthy.

[City LOGO]

Lower DuPage River Watershed Coalition

[Town] is a part of the Lower DuPage River Watershed Coalition, a collection of communities and local stakeholders working together to improve the health of the DuPage River.

[Town or Coalition info--website]

Winter Campaign bill inserts, hand out, cup design and truck magnet

SALT SMART. SAVE MORE.

SALT SMART SAVE MORE

Midwest winters can be tough on our roads and commuters. Road salt is used to keep our roads safe, but the cost of using too much salt goes beyond the pavement.

Excess road salt damages vehicles and infrastructure, harms our pets and plants and degrades our rivers and wetlands. [Town] is using best winter practices to keep you safe while using less salt.

SALT SMART AT HOME

There is such a thing as too much salt!

Using the right amount of salt could make a big difference for our local waterways—and our pocketbooks. Using the right amount of salt keeps you safe, saves money and protects our river. Join [town] and reduce the amount of salt used on your driveways and sidewalks.

OUR COMMITMENT:
We will strive to use the best technology and practices within our means to keep roads and sidewalks safe all winter long. Smart salt use will ensure [Town] uses tax dollars responsibly and keeps our precious water resources healthy for generations to come.

SALT SMART. SAVE MORE.

Here are five tips for salting smart this winter:

1. **Shovel first.** Clear all snow from driveway and sidewalks before it turns to ice. Salt should only be used after the snow is removed and only in areas needed for safety.

2. **Size up.** More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for a 20-ft driveway or about 10 sidewalk squares.

3. **Spread.** Distribute salt evenly, not in clumps.

4. **Sweep.** If you see leftover salt on the ground after the ice melts, then you've used too much! Sweep up leftover salt to keep it out of our rivers and streams.

5. **Switch.** Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to sand for traction or choose a different deicer formulated for colder temperatures.

15 degrees

[City LOGO]

Keeping roads safe, spending responsibly and preserving the health of the DuPage River this winter.

Lower DuPage River
Watershed Coalition

[Town] is a part of the Lower DuPage River Watershed Coalition, a collection of communities and local stakeholders working together to improve the health of the DuPage River.

[Town or Coalition info--website]

[City LOGO]

Keeping roads safe, spending responsibly and preserving the health of the DuPage River this winter.

Lower DuPage River
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[Town or Coalition info--website]

SALT SMART. SAVE MORE.

SALT SMART SAVE MORE

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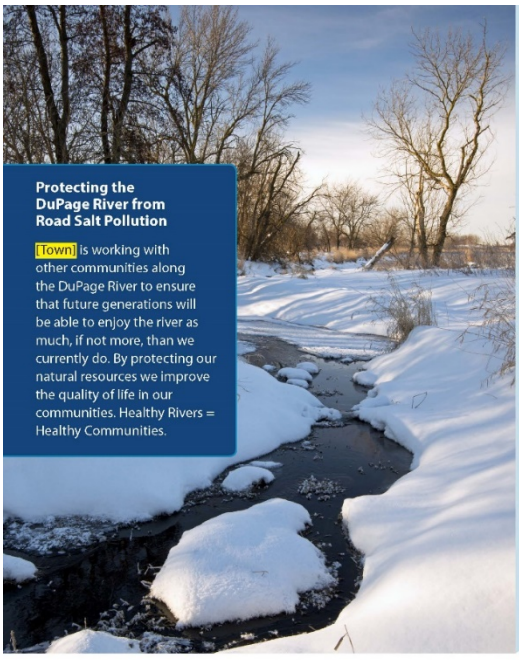


Protecting the DuPage River from Road Salt Pollution

[Town] is working with other communities along the DuPage River to ensure that future generations will be able to enjoy the river as much, if not more, than we currently do. By protecting our natural resources we improve the quality of life in our communities. Healthy Rivers = Healthy Communities.

SALT SMART SAVE MORE

OUR COMMITMENT:
We will strive to use the best technology and practices within our means to keep roads and sidewalks safe all winter long. Smart salt use will ensure [Town] uses tax dollars responsibly and keeps our precious water resources healthy for generations to come.

SALT SMART AT HOME to protect the DuPage River

Using the right amount of salt could make a big difference for our local waterways—and our pocketbooks. Using the right amount of salt keeps you safe, saves money and protects our river. Join [town] and reduce the amount of salt used on your driveways and sidewalks.

There is such a thing as too much salt!

SALT SMART. SAVE MORE. Here are five tips for salting smart this winter:

1. **Shovel first.** Clear all snow from driveway and sidewalks before it turns to ice. Salt should only be used after the snow is removed and only in areas needed for safety.

2. **Size up.** More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for a 20-ft driveway or about 10 sidewalk squares.

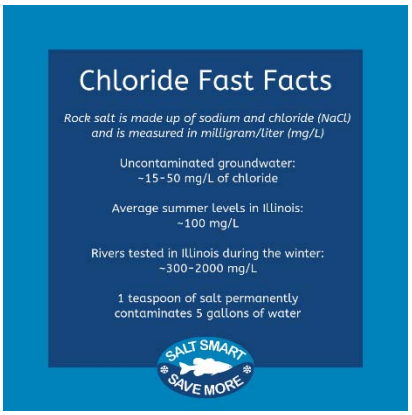
3. **Spread.** Distribute salt evenly, not in clumps.

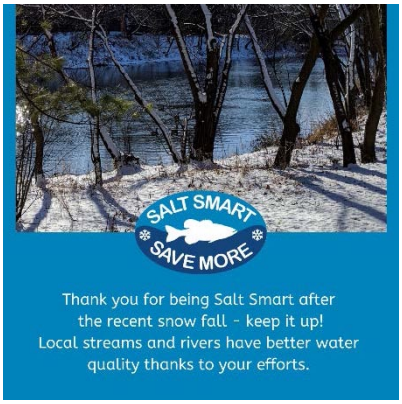
4. **Sweep.** If you see leftover salt on the ground after the ice melts, then you've used too much! Sweep up leftover salt to keep it out of our rivers and streams.

5. **Switch.** Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to sand for traction or choose a different deicer formulated for colder temperatures.

Salt Smart materials for members.

Salt Smart Social Media Posts





Lower DesPlaines Watershed Group ILR40 Activities
March 2018 – February 2019

PART I. COVERAGE UNDER GENRAL PERMITS ILR40

Not applicable to the work of the LDWG.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the LDWG.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the LDWG.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the LDWG.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

LDWG outreach activities for the year ending 2018 included:

- The LDWG website was maintained during the reporting period and periodically updated (http://www.lowerdesplaineswatershed.org).
- A Seasonal Outreach Campaign was implemented throughout year. Media tool kits were revised and distributed to member communities for each season with text for websites, newsletters, blogs and social media posts. Campaign specific materials were also developed – see examples at end of report. For the winter season www.SaltSmart.org website was developed as a clearinghouse of winter BMPs for residents, public agencies and private deicing companies. This website has provided a wider reach beyond the Lower DuPage River watershed and has organically grown into a regional Salt Smart Collaborative.
  Copies of the media toolkits can be made available upon request. Starting in spring of 2019, the toolkits will be fully available on-line with the most up-to-date materials.
  - Spring – Using native plants
  - Summer – Stormwater Pond Maintenance
  - Fall – Proper leaf collection/disposal
  - Winter – SaltSmart – Winter Snow & Ice Management BMPs

- Hosted a table representing LDWG at the Bluestem Earth Festival in Joliet on May 19, 2018

2. Public Involvement and Participation **–** The Lower Des Plaines Watershed Group hosted two Bio-Blitz sites on September 8, 2018. One site was located on Jackson Creek at the Round Barn Farm in Manhattan and the second sited was located on Fiddyment Creek at the Runyon Forest Preserve. Activities were provided for families with opportunities to get in the stream and look for macroinvertebrates and then sort and identify what was found. We had approximately 10 participants at each event.

3. Illicit Discharge Detection and Elimination – no activities

4. Construction Site Storm Water Runoff Control - no activities

5. Post-Construction Stormwater Management in New Development and Redevelopment - no activities

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Chloride Reduction Workshops
Two chloride reduction workshops were held during the reporting period ending March 2018.

The **public roads deicing workshop** held at Village of New Lenox Public Works Facility on October 23, 2018 with the following agenda:

Registration and Breakfast
Welcome/ Housekeeping
Sean Vandenberg, Village of New Lenox
Visualizing the Movements of Chloride in the Shallow Aquifers
Daniel Abrams, Illinois State Water Survey
Environmental Impacts/Watershed Activities/ Residential Outreach/Lower DuPage & Lower Des Plaines Watersheds
Jennifer Hammer, The Conservation Foundation
Tour of New Lenox Public Works Facility – Good Housekeeping
Sean Vandenberg, Village of New Lenox
Break
Meeting MS4 Requirements & Record Keeping
John Kawka, Morris Engineering, Inc.
Break
Community Round Table: Levels of Service & Evaluation
Chris Drey, Village of Shorewood
Bruce Viakus, Village of Channahon
Ken Enda, Village of Bolingbrook

Attendance – 89 registered, 6 presenters/staff, 3 sponsors/exhibitors = 98 total. All participants received a certificate of attendance.

The **parking lots and sidewalks deicing workshop** was held at New Lenox Public Works Facility on October 16, 2018 with the following agenda:

- Ambient conditions and regulatory update: Jennifer Hammer, The Conservation Foundation/LDRWC
- Information on developing efficient and cost-effective snow fighting operations, appropriate product selection, equipment selection, application rates, equipment calibration, ambient conditions monitoring. Presenters: Connie Fortin, Fortin Consulting and Chis Walsh, (former Public Works Director with City of Beloit, WI)
- Test on workshop materials.

Attendance - 24 registrations, 4 presenters/staff, 2 exhibitors/staff = 30 total. All participants received a training certificate.

Qualifying State, Country or Local Program

Not applicable to the work of the LDWG.

C. Sharing Responsibility

This report outlines the activities conducted by the LDWG on behalf of its' members related to the implementation of the ILR40 permit. It is the responsibility of the individual ILR40 permit holders to utilize this information to fulfill the reporting requirements outlined in Part V.C. of the permit.

D. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the LDRWC.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The first round of bioassessment monitoring was completed in 2018 at half of the identified sites on the mainstem Des Plaines River. Results and reporting will be combined with 2019 monitoring at the remaining main stem sites. Bioassessment Report will be available in 2020. Details of the bioassessment program are below.

The ILR40 permit states that permit holders "must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts". The LDWG will begin a monitoring program starting in the summer of 2018 that will meet the following monitoring objectives and requirements outlined in the permit:

- Measuring pollutants over time
- Sediment monitoring
- Assessing physical and habitat characteristics such as stream bank erosion caused by storm water discharges
- Collaborative watershed-scape monitoring
- Ambient monitoring of total suspended solids, total nitrogen, total phosphorus, fecal coliform, and chlorides

BIOASSESSMENT

A biological and water quality survey, or "biosurvey", is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. The LDWG bioassessment is the latter. The LDWG bioassessment program began in 2018 with sampling 29 stations in the lower portion of the mainstem Lower DesPlaines River. See table below for complete sampling schedule. The Bioassessment will include fish, macroinvertebrate, QHEI – Habitat and water chemistry at all sites and sediment sampling at a subset of sites. Results and reporting will be combined with data collection that will happen in 2019 and be available in 2020.

Watershed	Year Sampled	# of Stations
Lower mainstem Lower DesPlaines	2018	29
Upper mainstem Lower DesPlaines + northern tributaries	2019	33
Hickory Creek subwatershed	2020	50
Remaining Tributaries	2021	56

The LDWG bioassessment program utilizes standardized biological, chemical, and physical monitoring and assessment techniques employed to meet three major objectives:

1) determine the extent to which biological assemblages are impaired (using IEPA guidelines);
2) determine the categorical stressors and sources that are associated with those impairments; and,
3) add to the broader databases for the Des Plaines River watershed to track and understand changes through time in response to abatement actions or other influences.

The data collects as part of the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. The assessments are directly comparable to previously conducted bioassessments such that trends in status can be examined and causes and sources of impairment can be confirmed, amended, or removed. A final report containing a summary of major findings and recommendations for future monitoring, follow-up investigations, and any immediate actions that are needed to resolve readily diagnosed impairments is prepared following each bioassessment. The bioassessment reports will be posted on the LDWG website. It is not the role of the bioassessments to identify specific remedial actions on a site specific or watershed basis.

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exude an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or "pour point" of the watershed (Level 1 site), then continues by deriving each subsequent "panel" at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in in seven drainage area levels in each of the three watersheds, starting at the largest (150 sq. mi) and continuing through successive panels of 75, 38, 19, 9, 5 and 2 sq. mi. Targeted sites are then added to fill gaps left by the geometric design and assure complete spatial coverage in order to capture all significant pollution gradients including reaches that are impacted by wastewater treatment plants (WWTPs), major stormwater sources, combined sewer overflows (CSOs) and dams. The number of sampling sites by method/protocol and watershed are listed in Table 1 and illustrated in Figure 1.

<u>Representativeness – Reference Sites</u>

Data is collected from selected regional reference sites in northeastern Illinois preferably to include existing Illinois EPA and Illinois DNR reference sites, potentially being supplemented with other sites that meet the Illinois EPA criteria for reference conditions. One purpose of this data will be to index the biological methods used in this study that are different from Illinois EPA and/or DNR to the reference condition and biological index calibration as defined by Illinois EPA. In addition, the current Illinois EPA reference network does not yet include smaller headwater streams, hence reference data is needed to accomplish an assessment of that data. Presently thirteen (13) reference sites have been established.

The bioassessment sampling includes four (4) sampling methods/protocols: biological sampling, Qualitative Habitat Evaluation Index (QHEI), water column chemical/physical parameter sampling and sediment chemistry. The biological sampling includes two assemblages: fish and macroinvertebrates.

FISH

Methodology

Methods for the collection of fish at wadeable sites was performed using a tow-barge or longline pulsed D.C. electrofishing apparatus (MBI 2006b). A Wisconsin DNR battery powered backpack electrofishing unit was used as an alternative to the long line in the smallest streams (Ohio EPA 1989). A three-person crew carried out the sampling protocol for each type of wading equipment sampling in an upstream direction. Sampling effort was indexed to lineal distance and ranged from 150-200 meters in length. Non-wadeable sites were sampled with a raft-mounted pulsed D.C. electrofishing device in a downstream direction (MBI 2007). Sampling effort was indexed to lineal distance over 0.5 km. Sampling was conducted during a June 15-October 15 seasonal index period.

Samples from each site were processed by enumerating and recording weights by species and by life stage (y-o-y, juvenile, and adult). All captured fish were immediately placed in a live well, bucket, or live net for processing. Water was replaced and/or aerated regularly to maintain adequate D.O. levels in the water and to minimize mortality. Fish not retained for voucher or other purposes were released back into the water after they had been identified to species, examined for external anomalies, and weighed either individually or in batches. While the majority of captured fish were identified to species in the field, any uncertainty about the field identification required their preservation for later laboratory identification. Identification was made to the species level at a minimum and to the sub-specific level if necessary. Vouchers were deposited and verified at The Ohio State University Museum of Biodiversity (OSUMB) in Columbus, OH.

MACROINVERTEBRATES

Methodology

The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded tray. Taxonomic resolution is performed to the lowest practicable resolution for the common macroinvertebrate assemblage groups such as mayflies, stoneflies, caddisflies, midges, and crustaceans, which goes beyond the genus level requirement of IEPA (2005). However, calculation of the macroinvertebrate IBI followed IEPA methods in using genera as the lowest level of taxonomy for mIBI calculation and scoring.

HABITAT

Methodology

Physical habitat was evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995; Ohio EPA 2006b) and as modified by MBI for specific attributes. Attributes of habitat are scored based on the overall importance of each to the maintenance of viable, diverse, and functional aquatic faunas. The type(s) and quality of substrates, amount and quality of instream cover, channel morphology, extent and quality of riparian vegetation, pool, run, and riffle development and quality, and gradient used to determine the QHEI score which generally ranges from 20 to less than 100. QHEI scores and physical habitat attribute were recorded in conjunction with fish collections.

Water Chemistry

Methodology

Water column and sediment samples are collected as part of the LDWG bioassessment programs. The number of samples collected at each site is largely a function of the sites drainage area with the frequency of sampling increasing as drainage size increases. Sediment sampling is done at a subset of 168 sites using the same procedures as IEPA.

The parameters sampled for are included in Table 1 and can be grouped into demand parameters, nutrients, demand, metals and organics. Locations of organic and sediment sites are shown on Figure 1. All sampling occurs between June and October of the sample year.

Table 1. Water Quality and sediment Parameters sampled as part of the LDWG Bioassessment Program.

Water Quality Parameters	Sediment Parameters
Demand Parameters	**Sediment Metals**
5 Day BOD	Arsenic
Chloride	Barium
Conductivity	Cadmium
Dissolved Oxygen	Chromium
pH	Copper
Temperature	Iron
Total Dissolved Solids	Lead
Total Suspended Solids	Manganese
	Nickel
Nutrients	Potassium
Ammonia	Silver
Nitrogen/Nitrate	Zinc
Nitrogen – Total Kjeldahl	
Phosphorus, Total	
	Sediment Organics
Metals	Organochlorine Pesticides
Cadmium	PCBS
Calcium	Percent Moisture
Copper	Semivolatile Organics
Iron	Volatile Organic Compounds
Lead	
Magnesium	
Zinc	

Spring Campaign Infographics

Healthy Yards. Healthy Communities.

The actions we take to maintain our yards can have direct consequences for the health of our community and our rivers. This spring, join the thousands of homeowners who have incorporated native plants into their landscapes to create beautiful outdoor spaces, invite birds and butterflies to their yards, reduce their use of water, fertilizers and pesticides and protect our rivers. Creating a beautiful outdoor landscape with native plants can be easy with a little know-how.

Pagoda Dogwood
Type: Shrub
Sunlight: 4+ hours

Northern Dropseed
Type: Grass
Sunlight: 4+ hours

Bee Balm
Type: Flower
Sunlight: 4+ hours

Wild Geranium
Type: Flower
Sunlight: < 4 hours

Pennsylvania Sedge
Type: Short grass-like groundcover
Sunlight: < 4 hours

Oak-leaved Hydrangea
Type: Shrub
Sunlight: < 4 hours

Native plants are deep-rooted, helping direct rainwater into the soil. This makes them effective at managing stormwater that falls on your property.

Go local.
Visit your local native plant nursery for the best selection of native plants.

Save water.
Once established, native plants do not need to be watered every day like most ornamental plants. Check the soil before you decide to water.

Get established.
Like any other plant, perennial native plants need care. To ensure new native plants thrive, continue to weed and trim your garden.

Cut the fertilizer.
Native plants thrive in our area and don't need fertilizer or pesticides.

Incorporating native plants into our landscapes helps make our rivers and our yards healthy.

To learn more about using native plants in your landscaping, visit www.theconservationfoundation.org.

Lower DuPage River Watershed Coalition

Summer Campaign 2-Page Stormwater Pond Checklist for Homeowners Associations

Inspection Checklist

Stormwater Pond Inspection

Use this checklist for your monthly inspections. Make sure to inspect vegetation conditions, shoreline erosion and the inlet/outlet structures. Take note of any improvements that need to be made.

Pond Location
(cross street, description, etc.) _____

1. VEGETATION

Shoreline vegetation	In-pond vegetation	"Safe zone" width (ft)	Notes
☐ Turf grass ☐ Invasive plants ☐ Seawall ☐ Native plants ☐ Rip-rap	☐ Turf grass (bottom) ☐ Native/wetland plants ☐ Submerged plants ☐ Floating plants ☐ Invasives ☐ N/A	**Plant height**	

2. SHORELINE **3. INLET/OUTLET STRUCTURES**

Erosion	Notes	Obstruction	Notes
☐ None ☐ Slight ☐ High ☐ Minimal ☐ Moderate		☐ Trash/debris ☐ Sediment ☐ None	

4. Overall water quality benefits: ☐ Poor ☐ Fair ☐ Good

Repair opportunities/future maintenance:

Maintenance Checklist

HOA Stormwater Pond Maintenance

Track the work you get done on your stormwater pond with this checklist. This checklist is good for one full year. For additional copies, download this file at [link].

YEAR: _____

	TASK	FREQUENCY	DATE(S)	NOTES
1.	Inspect your stormwater pond monthly. Note areas with shoreline erosion and remove any trash, debris or sediment blocking inlet pipes or outlet structures.	Monthly and after storms that fill up your pond(s)		
2.	Schedule a professional engineer to inspect your pond.	Annually		
3.	Install native plants along the banks and in the pond	Annually		
4.	Enforce a 20' natural "safe zone" around the edge of the pond, where no pesticide or fertilizer use is allowed	Annually		
5.	If vegetation around your stormwater pond is over 4' tall, hire professional services to remove and treat for invasive species	As-needed		
6.	Update residents on maintenance and repair of the detention pond(s)	Annually		

Fall Campaign bill inserts for both curb or back pick-up

Loose Leaves Green Algae

As fall rolls around, many of us will be raking leaves to keep our yards and community looking good. Unfortunately, when these leaves are left in the streets they can become a big problem for our rivers.

Leaves that find their way into our rivers contribute to excessive algae growth, which pollutes our river, makes it smell and look bad, and keeps us from enjoying it when spring rolls around. Loose leaves can also clog our storm drains and contribute to local flooding.

Curb it and we'll snag it

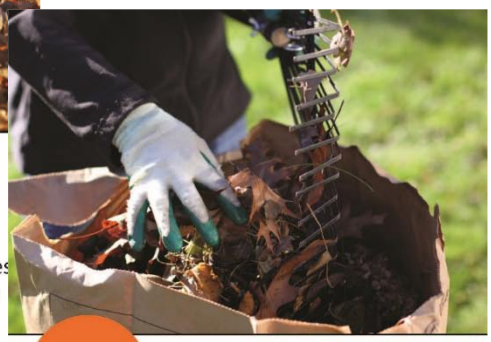
[Town] is reminding all residents to rake their leaves to the curb as part of our leaf pickup program. This program is designed to make it easy for you to dispose of unwanted leaves.

To participate in [town]'s leaf collection program, remember to keep your leaves out of the street. **Leaves raked to the curb will be picked up by [town or waste hauler] [weekly/monthly/on specified dates].**

Together, we can keep our community looking good and our rivers healthy.

[City LOGO]

[Town] is part of the Lower Des Plaines Watershed Group, a collection of communities and local stakeholders working together to improve the health of the Des Plaines River.



Bag it and we'll snag it

[Town] is reminding all residents to bag their leaves as part of our leaf pickup program, instead of raking them to the curb or the street. This program is designed to make it easy for you to dispose of unwanted leaves.

Purchase kraft paper bags at a local retailer and put your leaves into the bags and place them at the curb to be picked up. Bagged leaves will be picked up by [town or waste hauler] [weekly/monthly/on specified dates].

Together, we can keep our community looking good and our rivers healthy.

[City LOGO]

[Town] is part of the Lower Des Plaines Watershed Group, a collection of communities and local stakeholders working together to improve the health of the Des Plaines River.

Winter Campaign bill inserts, hand out, cup design and truck magnet

Salt Smart materials for members.

Salt Smart Social Media Posts