March 12, 2020
Membership Meeting
Agenda

• Welcome and Introductions
• Approval of staffing contract with The Conservation Foundation
• Membership update
• Summary of February 4th meeting with Illinois EPA
• PFAS Overview
• Spring Seasonal Outreach Campaign Materials
• Chloride Time-Limited Water Quality Standard update
Staffing Contract Approval

TCF Contract – March 1, 2020 – February 28, 2021

Annual contract amount - $111,940.40 – 1.425 FTE

- Hold executive board and membership meetings as needed.
- Continue to communicate with potential members, be available to attend/speak at board meetings to aid in bringing on new members.
- Maintain LDWG website to aid in keeping membership up-to-date on LDWG activities and provide outreach materials useful for MS4 compliance.
- Coordinate chloride reduction activities with other watershed groups in Will County (MS4 compliance)
- Commence NARP Committee to develop framework for NARP.
- Work with NARP Committee to define initial scope to identify appropriate water quality models for NARP development.
- Work with members as NPDES permits are renewed and ensure understanding of special conditions language about NARP development for Lower Des Plaines Watershed.
- Work with contractor(s) to implement Bioassessment plan for Lower Des Plaines River Watershed including
  - Midwest Biodiversity Institute contract
  - Lab contract for water and sediment chemistry analysis
  - Purchase and coordinate installation of 2 multi-parameter probes for continuous data collection
- Implement Education and Outreach program activities as presented to the membership.
Current Members

- Village of Burr Ridge
- Village of Channahon
- City of Crest Hill
- Village of Elwood
- Exxon Mobil
- Village of Frankfort
- Cook County Forest Preserve District
- Village of Hinsdale
- Illinois American Water
- Illinois Department of Transportation
- City of Joliet
- Village of Lockport
- MWRDGC
- Village of Manhattan
- Village of Mokena
- Village of New Lenox
- New Lenox Township
- Village of Romeoville
- Village of Western Springs
- Village of Westmont
- Will County
Membership Renewals are going out next week

Membership Expectations:

- Attend bi-monthly membership meetings
- Share your draft NPDES permits with our staff – LDWG specific language should be included and we can assist with discussions with Illinois EPA or EAGs
- Send key staff to Winter Deicing Workshops (required for Chloride Variance)
- Utilize Seasonal Outreach Materials available on the Member tab of the website and provide input on other outreach needs or formats
- Consider implementing a Rain Barrel sale program to engage with public on stormwater and groundwater recharge issues (Four easy steps to setup customized program)
February 4th Illinois EPA Meeting

- Review of activities
  - Watershed Group Membership
  - Monitoring Program update
  - Outreach activities
  - Chloride reduction efforts

- Special Condition language
  - Review language that should be put in all permits in watershed
  - Discuss when the three-party nutrient language would not apply
  - Discuss non-members

- Anticipated NARP components so far:
  - Utilize Identification and Prioritization Model (DRSCW) for Tributaries to help guide and prioritize projects
  - Expand Identification and Prioritization Model for large rivers
  - Identify appropriate water quality model needed and plan for development
  - Work with other watershed groups on nonpoint source reduction activities
  - Continue bioassessment monitoring program

- EAG engagement
Illinois EPA will be sampling ground and surface water sources for drinking water (not the finished drinking water) across Illinois this summer, results will be available late 2020 – early 2021.

Illinois EPA suggested that:

- we should be prepared for the public response to the data being released
- Start to identify potential sources of PFAS chemical use within our communities, particularly of industrial or commercial discharges to the WWTP
- Investigate how to reduce the sources of PFAS coming into WWTP
What are PFASs?

- Per-and poly-fluoroalkylsubstances
  - PFOA, perfluorooctanoic acid (Gen X); PFOS, perfluorooctanesulfonate
- Represent a group of man-made organic compounds that mainly contain carbon-fluorine bonds
- Highly stable and persistent in the environment - “forever” chemicals
- Resist heat, oil, grease, and water
- Bioaccumulate
What are PFASs?

- Over 3000 related compounds
- Industrial and consumer products since the 1950’s
- Several “long-chain” PFAS have recently been phased out
- “Short-Chain” replacements may not be any better
Products that have PFASs

- Carpets
- Carpet cleaning products
- Food packaging
- Furnishings
- Cosmetics
- Outdoor gear
- Clothing
- Adhesives and sealants
- Protective coatings
- Non-stick cookware
- Car seats
- Firefighting foam

www.sixclasses.org/videos/pfas
PFAS impacts to health and the environment

- PFAS chemicals leach into soil and water and readily move across the landscape, they are highly persistent. These chemicals do not easily breakdown and build up in the environment over time.

- Exposure to PFOA & PFAS has been linked to kidney and testicular cancer, ulcerative colitis, elevated cholesterol, decreased fertility, thyroid problems and changes in hormone functioning in adults as well as adverse developmental effects and decreased immune response in children.¹

Found in soil, air, water, wildlife and humans world-wide including the Arctic and Antarctica

2015 study by U.S. National Health and Nutrition Examination Survey: PFAS found in over 97% of human blood samples

2013-2015 Drinking Water Act testing: PFAS found in 66 water supplies serving more than 16 million Americans in 33 states with at least one sample at or above EPA drinking water health advisories.
**Per- and Polyfluoroalkyl Substances (PFAS)**

### HEALTH EFFECTS

Pregnant women, unborn fetus, and infants are most susceptible to adverse health effects once exposed to PFAS.

- Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), two common forms of long-chain PFAS, have been associated with the following:
  - Low Birth Weight
  - Delayed Puberty
  - Preterm Birth
  - Attention deficit/hyperactivity disorder (ADHD)
  - Pregnancy-induced hypertension/Pre-eclampsia
  - Immune Response Suppression

Health effects that have been associated with exposure to PFAS in non-pregnant adults include:

- Difficulty becoming pregnant
- Chronic kidney disease
- Cardiovascular disease
- Osteoarthritis

**CANCER**

- PFOA has been classified by the US EPA as "possibly carcinogenic to humans" [US EPA 2017]
- PFOA may cause prostate, testicular, bladder, liver, and/or kidney cancer [ATSDR 2018]

**LIFESTYLE ENVIRONMENTAL EXPOSURES AND DISEASE CENTER**

Support for this center is provided by grant P30ES005105 from the National Institute of Environmental Health Sciences, National Institutes of Health.

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### EXPOSURE

**KEY FACTS**

- PFAS are man-made chemicals that repel oil and water.
- PFOA and PFOS are the most widely studied forms of long-chain PFAS.
- They are used in many consumer products.
- PFAS can get into the environment and pollute water, soil, and air.

**EXPOSURE**

Once absorbed, PFOA and PFOS will remain in your body for upwards of 4 years.

It is possible to breathe in vaporized PFAS, however this exposure route is of minimal concern because PFAS does not easily aerosolize.

A very small, insignificant amount of PFAS can be absorbed through skin contact.

The most important exposure route of concern is consumption of PFAS contaminated water.

PFAS is readily absorbed in the gastrointestinal tract and will quickly enter your bloodstream.

Some PFAS may be broken down, but PFOS and PFOA will accumulate in your body with continued exposure.

**REDUCE EXPOSURE**

- Avoid or minimize drinking and cooking with PFAS contaminated water.
- Check fish advisories and avoid consuming fish from waters containing PFAS. Visit www.michigan.gov/fishadvisory for more information.
- Read consumer product labels and minimize use of products with non-stick, water-repellent, and stain-resistant properties.

**LIFESTYLE ENVIRONMENTAL EXPOSURES AND DISEASE CENTER**

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PFAS Cycle

Exposure to PFAS

PFAS Production/Using Industries

Homes & Offices

Landfill

Household products with PFAS:
fast food wrappers, non-stick cookware, shampoo, paint, detergent, etc.

Wastewater to WWTP

Wastewater discharge to stream

Wastewater discharge to stream

Leachate to WWTP

Biosolids

Waste Water Treatment Plant (WWTP)

Soil / Farmland

Food Products

Infiltrate into groundwater

Plant uptake

Drinking water

Firefighting foam

River

Groundwater

Pennsylvania Department of Environmental Protection

www.dep.pa.gov/pfas

Figure 2 The PFAS cycle and its exposure pathways
Sources of PFAS

• Manufacturing – textile & leather processors, paper mills, metal finishers, wire manufacturers, plating facilities, as well as facilities using surfactants, resins, molds, plastics, photolithography and semiconductors.

• Landfills constructed prior to 1990 that may not have synthetic membrane liners or leachate collection systems

• Municipal and Industrial WWTP – PFAS in the influent

• Biosolids – PFAS can be concentrated in sludge and then transferred elsewhere.

• Training facilities that use Aqueous Film Forming Foam
Perfluoroalkyl and polyfluoroalkyl substances – PFAS refers to a large group of over 3000 man-made compounds that include Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA). These chemicals have been used in industrial and consumer products since the 1950s including non-stick products like Teflon, stain and water-resistant fabrics and textiles, cosmetics, polishes, grease-resistant food wrappers and fire-fighting foams.

These chemicals are persistent in the environment and can bioaccumulate in animals and people over time. Illinois Environmental Protection Agency will be testing groundwater sources across the state in 2020, results should be available in late 2020, early 2021. Below is a collection of resources from across the web that can be used to help answer questions that may arise. This is just a starting point to get acquainted with PFAS.
New Website Pages

GET INVOLVED

Help Protect Our Watershed!

We all have an impact on the health of our watershed. Learn about the main issues affecting our watershed and what you can do to help!

Chlorides

Rain Barrels
The Issue: Polluted Runoff and Residential Flooding

Looking to reduce flooding in your neighborhood and cut down on the amount of polluted stormwater that ends up in local streams? A rain barrel on your property is a great way to start!
Seasonal Outreach - Spring

Using the same state-approved data collection and analyses as other major watershed groups in the region, we will incorporate our data into a tool that will identify and rank restorability projects at the stream reach level.

The Lower Des Plaines Watershed Group

Improving surface waters in Illinois
Seasonal Outreach - Spring

To make it easy for municipalities to conduct outreach with residents about important stormwater management topics, the Coalition has worked to develop four seasonal outreach campaigns. Municipalities can customize and incorporate these messages into their existing communications strategies.

Check this page for routine updates throughout each season! Members can contact Lea Rodbarry at lrodbarry@theconservationfoundation.org or (630)428-4500 x109 with any questions or requests to customize material to your agency.

RECENT ARTICLES

Winter Clean-Up Tips  
November 13, 2019

What to Expect During a Storm  
November 12, 2019

Salt Smart Tips for Staying Safe on the Roads this Winter  
November 13, 2019

UPCOMING EVENTS

There are no upcoming events at this time.

NAVIGATE

Our Watershed
Our Work
Seasonal Outreach - Spring

• Blog posts and supporting social media graphics
  • Benefits of rain gardens
  • Travels of a raindrop
  • Benefits of using rain barrels

• Flyer/poster on rain barrels for residents

• Informational piece for members on setting up a municipal/organizational rain barrel program

• Rain barrel program page on website
Let us know how you used Winter materials

Winter Campaign Checklist

Blog Posts
- Salt Smart Tips for Staying Safe on the Roads this Winter
- What to Expect During a Snow Storm
- Winter Clean-Up Tips

Newsletter articles
- Salt Smart Tips for Staying Safe on the Roads this Winter
- What to Expect During a Snow Storm
- Winter Clean-Up Tips

Handouts
- Bookmark for residents
- Infographic handout (also available as webpage infographic)
- Snow Removal FAQs (also online at saltsmart.org/list)

Social Media Posts
- Salt Smart Tips for Staying Safe on the Roads

What to Expect During a Snow Storm

Winter Clean-Up Tips

Outreach Effort Totals
- # of blog posts
- # of newsletter articles
- # of handouts
- # of social media posts

Pick and choose the messaging that fits your community. Contact us to customize social media posts with your logo, images, or unique messaging:

Lee Robbany, Watershed Communications Specialist:
leerobbany@thewatershieldfoundation.org
Seasonal Outreach

• March 18th meeting for communications staff - here
• For questions or to customize materials:

Lea Rodbarry,
Communications Specialist

lrodbarry@theconservationfoundation.org
Chloride Time-Limited Water Quality Standard

Approximately 50 Petitioners in CAWS and Lower DesPlaines

Current Members
• Village of Channahon
• City of Crest Hill
• Village of Elwood
• Village of Frankfort
• City of Joliet
• City of Lockport
• Village of Mokena
• Village of New Lenox
• Village of Romeoville
• MDRD
• Exxon Mobil
• Illinois DOT

Potential Members
• City of Country Club Hills
• Village of LaGrange
• Village of Orland Park
• Village of Tinley Park
• Village of Richton Park
• Village of Riverside
• City of Chicago

• Citgo Holding, Inc.
• Flint Hill Resources
• IMTT Illinois LLC
• Ingredion Inc.
• Midwest Marine Terminals
• Ozinga Ready Mix
• Stepan Co
• Cook County DOT
Public Hearing was held on February 18th in Chicago

Hearing briefs will be completed in March

Ongoing discussions between petitioners, EAGs and IPCB

Official comments from USEPA Region 5 have not been requested yet

Approval possibly late 2020?
Lower Des Plaines Watershed Group Contacts:

• Allison Swisher, City of Joliet
  aswisher@jolietcity.org
  815-724-4222

• Jennifer Hammer & Lea Rodbarry, The Conservation Foundation
  jhammer@theconservationfoundation.org
  630-428-4500 x114
  lrodbarry@theconservationfoundation.org
  630-428-4500 x114, x123
  www.lowerdesplaineswatershed.org