DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency

CRS COMMUNITY CERTIFICATIONS

OMB Control Number: 1660-0022
Expiration: 10/31/2023

Community Deerfield, Village of State IL CID 170361
(6-digit NFIP Community Identification Number)

Note: Please cross out any incorrect items, below, as needed, and insert the updated information.

CC-213 Recertification

Recertification due date 2/1/2024

	Chief Executive Officer	CRS Coordinator
Name	Kent S. Street	Tyler Dickinson, P.E.
Title	Village Manager	Assistant Director of Public Works and Engineering
Address	850 Waukegan Road Deerfield, IL 60015	465 Elm Street Deerfield, IL 60015
Phone number	(847) 945-5000	(847) 719-7463
E-mail address	kstreet@deerfield.il.us	tdickinson@deerfield.il.us

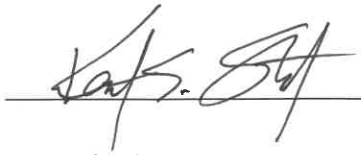
I hereby certify that Village of Deerfield [community name] is implementing the following activities on the attached pages as credited under the Community Rating System and described in our original application to the CRS and subsequent modifications.

I hereby certify that, to the best of my knowledge and belief, we are in full compliance with the minimum requirements of the NFIP and we understand that we must remain in full compliance with the minimum requirements of the NFIP. We understand that at any time we are not to be in full compliance, we will retrograde to a CRS Class 10.

I hereby certify that we will continue to maintain FEMA Elevation Certificates on all new buildings and substantial improvements constructed in the Special Flood Hazard Area following the date at which we joined the CRS.

I hereby certify that if there are one or more repetitive loss properties in our community that we must take certain actions that include reviewing and updating the list of repetitive loss properties, mapping repetitive loss areas, describing the cause of the losses, and sending an outreach project to those areas each year, and if we have fifty (50) or more unmitigated repetitive loss properties we must earn credit under Activity 510 (Floodplain Management Planning) for either a repetitive loss area analysis (RLAA) or a floodplain management plan (FMP).

I hereby certify that, to the best of my knowledge and belief, we are maintaining in force flood insurance policies for insurable buildings owned by us and located in the Special Flood Hazard Area (SFHA) shown on our Flood Insurance Rate Map. I further understand that disaster assistance for any community-owned building located in the SFHA is reduced by the amount of National Flood Insurance Program (NFIP) flood insurance coverage (structure and contents) that a community should be carrying on the building, regardless of whether the community is carrying a policy.

Signature  (Chief Executive Officer)

Date 1/16/2024

CC-213-1

[continued on next page]

Community Deerfield, Village of State IL CID 170361

(6-digit NFIP Community Identification Number)

CRS Program Data Table	A. In the SFHA	B. In a regulated floodplain outside the SFHA	C. In the rest of the community
1. Last report's number of buildings in the SFHA (bSF) (line 6, last report)	101		
2. Number of new buildings constructed since last report	+ 0	0	0
3. Number of buildings removed/demolished since last report	- 0	0	
4. Number of buildings affected by map revisions since last report (+ or -)	0	0	
5. Number of buildings affected by corporate limits changes (+ or -)	0	0	
6. Current total number of buildings in the SFHA (bSF) (total lines 1-5)	101		
7. Number of substantial improvement/damage projects since last report	0	0	
8. Number of repetitive loss properties mitigated since last report	0	0	0
9. Number of LOMRs and map revisions (not LOMAs) since last report	0		
10. Acreage of the SFHA (aSFHA) as of the last report (line 13, last report)	237.7		
11. Acreage of area(s) affected by map revisions since last report (+ or -)	0	0	
12. Acreage of area(s) affected by corporate limits changes (+ or -)	0	0	
13. Current acreage of the SFHA (total lines 10-12)	237.7		
14. Primary source for building data:	Building Department		
15. Primary source for area data:	Engineering Department and GIS		
16. Period covered: February 2023 - January 2024	Current FIRM date	September 18, 2013	
If available, the following data would be useful:			
17. Number of new manufactured homes installed since last report	0	0	0
18. Number of other new 1 -4 family buildings constructed since last report	0	0	0
19. Number of all other buildings constructed/installed since last report	0	0	0

Comments:

(Please note the number of the line to which the comment refers.)

CC-213-2

[continued on next page]

Community Deerfield, Village of State IL CID 170361
(6-digit NFIP Community Identification Number)

Instructions

At the first verification visit after the effective date of the 2013 *CRS Coordinator's Manual*, ONLY LINES 6 AND 13 NEED TO BE COMPLETED. These lines form the baseline data about the number of buildings and area of the SFHA for when the table is completed as part of the next annual recertification. The "period covered" entered in line 16 is the date that lines 6 and 13 are first completed.
At all subsequent annual recertifications and cycle verification visits, the entire table is completed. The information in lines 6 and 13 from the last report is transferred to lines 1 and 10 in the next report.

Instructions for the Columns

Column A numbers are for the SFHA (the A and V Zones shown on the Flood Insurance Rate Map) (FIRM)). Use the FIRM currently in effect, not a draft or pending revision.
Column B is completed only if the community receives CRS credit for regulating floodplain development outside the SFHA under Activity 410 (Floodplain Mapping) or Activity 430 (Higher Regulatory Standards).
Column C numbers help relate what happens in the floodplain to what is happening in the rest of the community.
Enter "0" if there are no numbers to report for this period. Do not leave a cell blank. Do not fill in the shaded boxes.

Instructions for the Lines

Lines 1-7 deal with buildings.

- Section 301.a of the *CRS Coordinator's Manual* defines what constitutes a "building" and lists examples of structures that are not counted as "buildings" by the CRS.
- Section 302.a of the *CRS Coordinator's Manual* describes how the CRS counts buildings. For example, accessory structures are not counted.
- As noted in Section 302.a, to determine building counts, communities may use any method that yields reasonably good estimates of the number of buildings. Examples of acceptable methods are listed in Section 302.a. Precision is less important for large numbers. For example, the impact of the numbers will not change much if there are 10,000 buildings or 10,100 buildings.
- If a building is out of the SFHA, but in a parcel that is partly in the SFHA, it is not counted in column A --In the SFHA.
- In line 14, note how the building counts were obtained or estimated. Use the comments area, if needed.

Line 4 refers to map revisions. These include physical map revisions, Letters of Map Revision (LOMR), and Letters of Map Amendment (LOMA). If a building is removed from the SFHA by FEMA through a LOMA, but the community still administers its floodplain management regulations on the property, the building should not be included in the line 4 count in column A --In the SFHA. However, communities that still regulate areas removed by LOMAs can receive credit under Activities 410 or 430. If the community is receiving such credit, the building should be counted under column B --In a regulated floodplain outside the SFHA.

Line 7 is for the total number of buildings that were substantially improved plus the number of buildings that were substantially damaged during the period covered.

Lines 10 -13 deal with areas.

- These areas are based on the areas shown on the community's FIRM including LOMRs or LOMAs. Section 403.b discusses those portions of the SFHA that are subtracted from the area of the SFHA to calculate the community's aSFHA used in credit calculations.
- Section 403.e of the *CRS Coordinator's Manual* discusses calculating areas for CRS purposes.
- Section 403.e notes that communities "should not spend an inordinate amount of time measuring areas." As with buildings, communities may use any method that yields reasonably good estimates. Examples of acceptable approaches are listed in Section 403.e.
- Line 13 asks for the current acreage of the SFHA. The best source for this number is a GIS layer that shows the SFHA. If the community does not have GIS, the county, regional agency, or state NFIP mapping office may have SFHA layers and may be able to provide the data. If the community has a relatively recent FIRM, the study contractor or consulting engineer may have the data.
- In line 15, note how the area calculations were obtained or estimated. Use the comments area, if needed.

Lines 17 -19 are voluntary, if the numbers are readily available.

- Line 17 includes replacing an existing manufactured home with a new one. The newly placed manufactured home is counted as a new, post-FIRM, building.
- The total of lines 17 -19 should equal the value entered in line 2.

CC-213-3

Community Deerfield, Village of State IL CID 170361

County Cook, Lake

COMMUNITY RATING SYSTEM ANNUAL RECERTIFICATION

Your community has been verified as receiving CRS credit for the following Activities.

- If your community is still implementing these activities the CRS coordinator is required to put his or her initials in the blank (do not use a checkmark or an "X") and **attach** the appropriate items. A blank with no initials indicates you are not implementing that Activity anymore, and will result in loss of points (and possible CRS Class).
- If the word "**attached**" is used you must provide the requested documentation for that Activity. If no documentation has been acquired for that Activity, please explain why there is no documentation from the past year.

FD 310 EC: We are maintaining Elevation Certificates, Floodproofing Certificates, Basement Floodproofing Certificates, V Zone design certificates and engineered opening certificates on all new construction and substantially improved buildings in our Special Flood Hazard Area (SFHA) and make copies of all Certificates available at our present office location. [FD *Initial here is you have had no new construction or substantial improvement in the SFHA in the last year.*

N/A 310 EC: **Attached is the permit list for only new or substantially improved structures in the SFHA that have been completed in the last year.** We have permitted 0 new building and substantial improvements in the SFHA during this reporting period.

n/a 310 EC: **Attached are all the Certificates for new or substantially improved structures that have been completed during this reporting period that are included on the above permit list.** (Note: The total number of Elevation and Floodproofing certificates should match the number of permits issued and completed within the reporting period defined above. All permits issued for new construction or substantial improvement within the V zone should have both an Elevation Certificate and a V Zone Certificate, and all buildings with basements within the basement exemption communities should have both an Elevation Certificate and a Basement Floodproofing Certificate).

FC 320 MI 1: We are providing basic flood information to inquirers. We also continue to provide the following to inquirers:

FC MI 2 additional FIRM information
FC MI 6 historical flood information
MI 7 natural floodplain functions

FC 320 MI: **Attached is a copy of the publicity for the credited elements of this service this year.**

Community Deerfield, Village of State IL CID 170361

County Cook, Lake

COMMUNITY RATING SYSTEM ANNUAL RECERTIFICATION

TO 320 MI: **Attached is a copy of one page of the log, a letter, or other record that we kept on this service this year.**

TO 320 MI: We are continuing to keep our FIRM updated and maintain old copies of our FIRM.

TO 330 OP: We continue to conduct or provide all credited outreach projects.

TO 340 ODR: People looking to purchase flood prone property are being advised of the flood hazard through our credited hazard disclosure measures.

TO 350 LIB/LPD: Our public library continues to maintain flood protection materials.

TO 350 WEB: We continue to conduct an annual review and update of the information and links in our flood protection website.

TO 360 PPA: We continue to provide flood protection advice to inquirers.

TO 360 PPV: We continue to provide on-site flood protection assistance to inquirers.

TO 360 PPA/PPV: **Attached is a copy of one page of the log, up to three letters, or other records that we kept on this service this year.**

TO 360 PPA/PPV: **Attached is a copy of the document that told others about these services this year.**

TO 410 MAP: We continue to use our additional regulatory flood data before a new development can proceed in our floodplain.

TO 420 OSP: We continue to preserve our open space in the floodplain.

TO 430: We continue to enforce the floodplain management provisions of our zoning, subdivision and building code ordinances for which we are receiving credit.
[____] Initial here if you have amended your floodplain regulations. ***Attach a copy of the amended regulations, provide a summary of the changes and mark up the regulations indicating what's been changed.***

TO 440 AMD: We continue to use and update our flood data maintenance system on an annual basis as needed.

TO 440 BMM: We continue to maintain our system of Benchmarks. [TO] *Initial here if any Benchmarks were found to be missing or inaccurate.* ***Attach a copy of the correct elevation or a description of the missing Benchmark(s).***

Community Deerfield, Village of State IL CID 170361

County Cook, Lake

COMMUNITY RATING SYSTEM ANNUAL RECERTIFICATION

IC 440 FM: We continue to maintain our historical Flood Hazard Boundary Map, FIRMs and Flood Insurance Studies.

IC 450 SMR: We continue to enforce the stormwater management and low impact development provisions of our zoning, subdivision and building code ordinances for new developments in the watershed. *[____] Initial here if you have amended your stormwater management regulations that will impact your CRS program.* ***Attach a copy of the amended regulations, provide a summary of the changes and mark up the regulations indicating what's been changed.***

IC 450 ESC/WQ: We continue to enforce the provisions of our zoning, subdivision and building codes as they pertain to erosion and sediment control and water quality.

IC 502 RL: We currently have 9 per FEMA repetitive loss properties and send our notice to 107 properties in the repetitive loss areas.

IC 502 RL: **Attached is a copy of this year's notice on property protection, flood insurance and financial assistance that we sent to our repetitive loss areas.**

IC 510 FMP: **Attached is a copy of our floodplain management plan's annual progress report for the action items contained in the plan.** We have included a progress report template for you to use (in the email notification) if you don't have one of your own.

IC 510 FMP: We have provided copies of this progress report to our governing board and local media.

IC 540 CDR: We continue to implement our drainage system maintenance program.

IC 540 CDR: **Attached is <u>one</u> completed copy of a typical inspection report and <u>one</u> completed copy of the record that shows that any needed maintenance was performed on the credited components of our natural drainage system.**

IC 540 CIP: We continue to implement the sections of our Capital Improvements Program which pertain to the drainage system maintenance.

IC 540 SDR: We continue to enforce our stream dumping regulations.

IC 540 SDR: **Attached is a copy of this year's outreach project that explained our stream dumping regulations.**

Community Deerfield, Village of State IL CID 170361

County Cook, Lake

COMMUNITY RATING SYSTEM ANNUAL RECERTIFICATION

Additional Comments:

Attachments:

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

RE: Activity 310 - No Development in the Regulatory Floodplain

Dear Mr. Arkens:

Since our last cycle visit on September 24, 2020, there has been no new or substantially improved buildings in our regulatory floodplain and therefore, we have no new construction certificates for our reporting period.

When new or substantially improved structures are permitted, we will require Elevation Certificates as part of our permitting process, will review them for accuracy and completion and will maintain copies of them. We are also making the Elevation Certificates we have on file available to the public.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 320 - Map Information

Dear Mr. Arkens:

Each year, the Village of Deerfield Engineering Department receives phones call from residents, potential residents, and realtors regarding floodplain questions, many of which require mapping assistance. Attached you will find the 2023 map inquiry log. When needed, the Village will send a copy of a customized map from our in-house GIS system. However, residents are typically directed toward the floodsmart.gov website for flood maps that are generated by FEMA, since we feel the best mapping for insurance and mortgage purposes should be provided by the source.

The Village of Deerfield is currently able to provide information to residents for the following:

MI1 – Basic FIRM Information
MI2 – Additional FIRM Information
MI7 – Natural Flood Plain Functions

Although electronic files are generally used nowadays, hard copies of Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) are still kept within the offices of the Department of Public Works and Engineering. Copies of annexations and new subdivisions are stored on the server and managed by the Planning Department. Older versions of maps have been scanned into digital format and are kept on the Village server. Copies of the most recent FIRM's and FIS's are kept at the Village of Deerfield Public Library.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

VILLAGE OF DEERFIELD

D-Tales

JULY/AUGUST 2023 VOLUME 45, NO. 4

INSIDE

Village News	2
Board Report	3
Community Calendar	3
Public Works Update	4
Annual Drinking Water Quality Report	5
Police Department News	9
Our Community	10
Meeting Schedule	12



4,600+
feet of distance along July 4th parade route

12
Family Days carnival rides

60
years of annual Deerfield Fourth of July festivities

Deerfield Family Days Back in Person

Deerfield Family Days will kick off another two days of fun July 3rd and 4th. Join family and friends for a holiday filled with fun and entertainment!

The spectacular fireworks show will be held Monday, July 3rd, at Shepard Park with live entertainment and kids' activities. The gates will open at 5 p.m. and food and drink concessions will be available for purchase.

On Tuesday, July 4th, head on over to the festivities at Jewett Park including breakfast in the park, the dog show, and a variety of games. Join the bike parade at 8:30 a.m. at the Rosemary Terrace parking lot. *New Parade Route:* The parade starts at noon on Monday and will travel from Deerspring Pool, west on Deerfield Road and north on Park Avenue where it will end at Jewett Park.

This year's Parade Marshals are Mayor Emeritus Harriet Rosenthal and the League of Women Voters of Deerfield/Lincolnshire. Rosenthal served 12 years as Mayor and 24 years as a Village Trustee. The League of Women Voters was founded in Chicago on February 14, 1920. Since then, the League has worked to register voters, sponsor candidate forums, provide non-partisan election materials about candidates, and study issues on the local, state and national levels in order to create a better-informed electorate.

For more information please visit deerfield.il.us/familydays





Business Facade Rebate Program Update

Village staff is working with the third applicant for the Village's Business Facade Rebate Program since the program started 18 months ago. The first applicant received a grant to update the building and site at 827 and 829 Waukegan Road (theCoderSchool and Top Issue). The second applicant received approval from the Board of Trustees for a complete facade renovation at 728 Waukegan Road (former Barnes and Noble tenant space). The existing space will be divided into five (5) retail shops with office space above. The entire facade was removed and will be replaced with sleek, contemporary materials. A new outdoor patio will be part of the project. The third applicant is located at 806-808 Waukegan Road (Walter Tailor and Cherry Pit Cafe). They plan to replace all of the outdated windows, signage and awnings to give the building a fresh appearance, while maintaining its historical character. The program is set to run until the end of the year.

Interested businesses should contact Planning & Design Specialist Liz Delevitt at edelevitt@deerfield.il.us or 847.719.7483 for more information.

Harvest Fest

DEERFIELD HARVEST FEST

Deerfield's Harvest Fest is back September 9 with fun community events for everyone.

Start the day with your neighbors at the Deerfield Farmers Market between 7 a.m. and 12:30 p.m. with special kids' activities and the popular touch-a-truck.

Gates open at the intersection of Deerfield Road and Park Avenue at 4:30 p.m. We'll have live concerts from West End 40 and 7th Heaven, food, a beer tent and more. Register in advance for our bags tournament to receive a one-of-a-kind trophy.

Harvest Fest is hosted by the Village of Deerfield and the DBR Chamber of Commerce. Watch for an event mailer with more details and a list of sponsors in late August.



VILLAGE SPOTLIGHT

In May, Highland Park Mayor Nancy Rotering, City Manager Ghida S. Neukirch and Police Chief Lou Jogmen presented a Highland Park flag and certificate to Mayor Shapiro for the Village's assistance on and following the July 4th shooting. Both are now proudly on prominent display in the Village Hall lobby.

"It serves as a reminder that in times of adversity, neighboring communities can rely on each other for support, comfort and solace."

DANIEL C. SHAPIRO, MAYOR

Board Report



For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit deerfield.il.us.

VILLAGE BOARD ACTION

Approved an Ordinance amending Chapter 3 of the Municipal Code to create a new Class L Liquor License to allow for product sampling and regulations related thereto

Approved a Resolution granting an extension to a development schedule for 8 Parkway North in the Parkway North Center Planned Unit Development (Quadrangle Development Corporation)

Approved a Resolution authorizing an economic incentive agreement with 2300 Carlson, LLC (Shake Shack - 560 Waukegan Road)

Approved a Resolution adopting the All Natural Hazards Mitigation Plan

Approved an Ordinance amending the Village of Deerfield Wage and Salary Plan

Approved a Resolution to reject all bids for 2023 Street Rehabilitation Program

Approved a Resolution to award Family Days fireworks contract

Approved a Resolution approving High School Dist. 113 school resource officer agreement

HONORS AND RECOGNITIONS

Recognized National First Place Rochelle Zell Jewish High School Model UN Team

Proclaimed May Asian American and Pacific Islander Heritage Month

Proclaimed May Jewish American Heritage Month

Proclaimed May 21 - May 27, 2023, as National Public Works Week

Proclaimed May 15 - May 21, 2023, as National Police Week

Proclaimed April 28, 2023, as Arbor Day

Proclaimed June as LGBTQ Pride Month

Appointed Rai Copeland-Keefe to Fine Arts Commission

Community Calendar

Deerfield Park District
For more information or to register for Park District programs, call 847.945.0650 or visit deerfieldparks.org.

Enjoy Summer Concerts at Floral Park from 5-6:30 p.m. in July and August. Join your friends and neighbors, bring a picnic dinner, chair or blanket while different artists perform each week. Dates and artist bios can be found at deerfieldparks.org/events.

Our summer celebration of music continues as we proudly welcome the return of John Maxson and the North Shore Line to the Patty Turner Center for Elmstock II: The Summer Celebration for our 50+ adult audience on August 16 from 5:30-7:30 p.m. Call 847.940.4010 to register.

Open Pickleball at Sachs Recreation Center for all players no matter their age or ability level. Drop in and play on one of our seven courts. The spring/summer Open Play schedule runs April 3-August 11. Open play is rack format M/W/F 8 a.m.-12 p.m. $7R/9NR/Free for SRC Members.

Eat to the Beat Concerts for our young audiences and their caregivers at Jewett Park Pavilion from 11:30 a.m.-12:15 p.m. on July 5, 12, 19 & 26. Bring a picnic lunch, listen to music and play in the park!

Deerfield Family Theater Auditions for Beauty and the Beast will be held in August. Visit deerfieldfamilytheater.com to select an audition slot!

Deerfield Library
All Library programs are free and open to the public. Register in advance by phone at 847.945.3311, online at deerfieldlibrary.org, or in person at 920 Waukegan Rd. Online program description notes program platform (online, in-person, or hybrid).

Memory Cafe
July 5 and August 2, 10-11:15 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. To register, contact Judy Hoffman at 847.580.8954 or jhoffman@deerfieldlibrary.org.

Professor Moptop Presents: Grateful Dead
July 18, 7-8:30 p.m.
The program will focus on the roots of the Grateful Dead and many of the songs composed by them and others, including Johnny Cash, Chuck Berry, and Bobby "Blue" Bland.

It's Juggle Time! Become the Pro!
July 22, 10-11 a.m., Youth-All Ages
Enjoy a comedy juggling and variety show, and an interactive workshop to learn juggling and balancing skills.

Balloon Creation Station
July 26, 4:30-5:30 p.m., Ages 8-12
Learn how to make balloon creations and leave with an armful of colorful balloons.

Jigglejams Concert
August 5, 10-11 a.m., Youth-All Ages
Wiggle, jiggle, and giggle to Jodi Koplin's interactive songs in this fun family-friendly concert.

Lunch & Listen: Appalachia Music & Culture
August 18, 12-1:15 p.m.
Explore the music of the mountains with L.J. Slavin and his banjo, harmonica, penny whistle and musical saw. Bring your lunch; dessert will be provided.

PUBLIC WORKS BY THE NUMBERS

66 lane miles
of roadway

107 miles
of water main

110 linear miles
of storm sewers



Waukegan Road Water Main Project

The Waukegan Road Water Main Project began in early April and is expected to be completed by early September. The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction. Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day. Public meetings were held in advance of the project for residents and local businesses.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at www.deerfeld.il.us under "Notify Me."

For more information, contact the Engineering Department at 847.317.2490.



Residents learned about water main breaks at the Public Works Open House in May.

Lawn Irrigation RPZ Regulations

All irrigation systems are required to have a backflow prevention device called a Reduced Pressure Zone Backflow Preventer (RPZ). This must be certified annually by a licensed Cross Connection Device Inspector. This testing and certification must be completed every year prior to the system going into service.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the backflow prevention tracking program. The annual backflow assembly test report must be submitted electronically by your inspector at BsiOnline.com

For more information, contact the Public Works Department at 847.317.7245.

Flood Information

Natural & Beneficial Functions

Floodplains provide a lot of benefits and play a role in providing natural and beneficial functions to the Deerfield area. Parts of both the Middle and West Forks of the North Branch of the Chicago River floodplain help filter chemical run-off so these areas can maintain bio-diversity and ecosystem sustainability. They enhance waterfowl, fish and other wildlife habitats and provide open space and natural erosion control to reduce further flood damage.

Drainage System Maintenance

Keeping smaller ditches and streams free of debris can dramatically improve the run-off capacity of low-lying areas, as well as greatly reduce incidental blockage that significantly contributes to flooding. Please alert the Deerfield Engineering Department of any illegal dumping of materials into a regulated waterway as violators may be fined.

Additional Information

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess the problem and may be able to offer solutions. The localized flood protection service is provided by the Engineering Department. Anyone with questions, please contact the Engineering Department at 847.317.2490.

If you need more detailed information regarding flood-related issues in Deerfield, please visit the Additional Flood Information page on the Village website.

Reminder: Sprinkling Restrictions in Effect

The Illinois Division of Water Resources requires that municipalities using Lake Michigan water restrict lawn sprinkling between May 15th and September 15th. Accordingly, Deerfield's restrictions during this period are as follows:

Even numbered addresses may sprinkle on even numbered days from midnight to noon and from 6:00 p.m. to midnight.

Odd numbered addresses may sprinkle on odd numbered days from midnight to noon and from 6:00 p.m. to midnight.

VILLAGE OF DEERFIELD

Annual Drinking Water Quality Report Village of Deerfield 2022

This information is being published in accordance with the 1996 Safe Water Drinking Act as directed by the U.S. Environmental Protection Agency.

We are once again pleased and proud to present to you the Annual Drinking Water Quality Report. This Consumer Confidence Report (CCR) is designed to inform you about the water we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. The Village is committed to ensuring the quality and delivery of your water. We hope you find this information useful.

The drinking water provided by the Village meets or exceeds all State of Illinois and United States Environmental Protection Agency (EPA) regulations and we are not operating under any variance or exemption from the established drinking water regulations or standards. Opportunities for participation in the decision making processes that affect drinking water quality are also available at the monthly Village of Deerfield Board meetings on the first and third Mondays of every month. If you have questions about this report or water quality, please contact Tyler Dickinson, Responsible Operator in Charge, at 847.317.7245, or e-mail pw@deerfield.il.us.

Source of Drinking Water

The Village of Deerfield purchases all water from the City of Highland Park. The City of Highland Park draws its raw water from a 54-inch intake pipe located a mile off shore in Lake Michigan at a depth of approximately 30 feet. In addition, there are two smaller pipes used as secondary intakes, which are 16 and 20 inches in diameter.

Susceptibility to Contamination

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those elements may be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Susceptibility is defined as the likelihood for the source water of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA (IEPA) considers all surface sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution. Hence, the reason for mandatory treatment for all surface water supplies in Illinois.

As mentioned above, Highland Park has three intake lines. The 54-inch intake pipe is normally used alone, with the two smaller intakes used to augment high demand or during maintenance of the 54-inch pipe. As these are closer to the shore, they have a greater susceptibility to be influenced by potential sources of contaminants. Regardless of which lines are used, the finished water leaving the Highland Park Water Plant always meets or exceeds all IEPA and EPA regulations.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791. To access the Highland Park Water Assessment Summary, visit rb.gy/k8epg.

Contaminants Monitoring Results

The Village of Deerfield and City of Highland Park routinely monitor for contaminants in your drinking water according to Federal and State Laws.

General

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

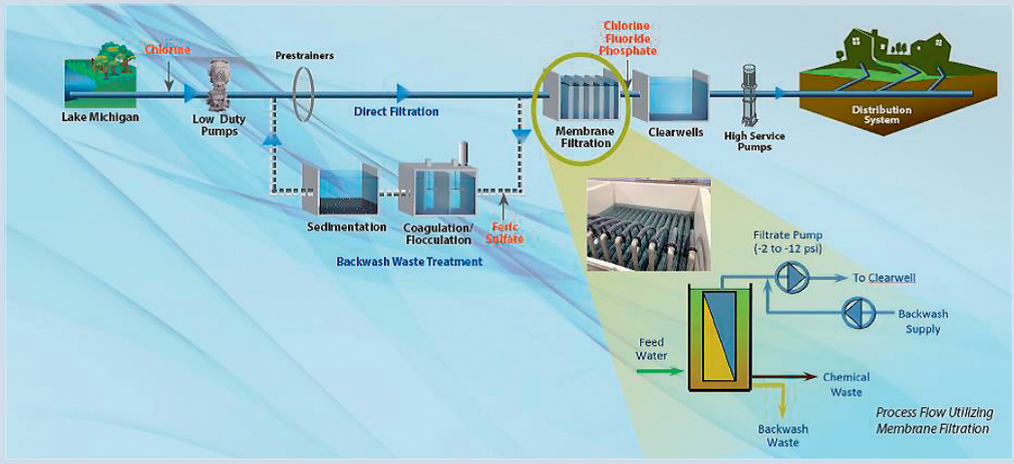
Radioactive contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

2022 Water Quality Data – January 1, 2022 to December 31, 2022

Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Microbial Contaminants							
Turbidity (%<0.3 NTU)*	n/a	0.3 NTU	100%	n/a	NO	2022	Soil runoff
Turbidity (1.0 NTU)* Highest Single Measurement	n/a	1 NTU	0.166 NTU	n/a	NO	2022	Soil runoff
Disinfection / Disinfection Byproducts							
Chlorine (ppm)	4	4	1.55	0.50-2.13	NO	2022	Water additive used to control microbes
Total Haloacetic Acids [HAAS] (ppb)	n/a	60	21.6	7.8.-35.3	NO	2022	By product of drinking water chlorination
TTHM [Total Trihalomethanes] (ppb)	n/a	80	59.2	17.0-66.4	NO	2022	By product of drinking water chlorination
Inorganic Contaminants							
Barium (ppm)	2	2	0.019	.019-.019	NO	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.708	0.708-0.708	NO	2022	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Coliform	0	0	0	0 Plus	NO	2022	Naturally present in the environment

This schematic drawing details the water purification process that Highland Park utilizes to provide clean water to all of its customers, including Deerfield.



Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Unregulated Contaminants reported by the City of Highland Park							
Sulfate (ppm)	n/a	n/a	23.0	23.0-23.0	NO	2022	This contaminate is not currently regulated by the USEPA. However the state regulates. Naturally occurring; discharge from metal factories.
Chloride	n/a	n/a	20.0	20.0-20.0	NO	2022	This contaminant is not currently regulated by the USEPA. However the state regulates. Naturally occurring; run-off from road salts.
Calcium	n/a	n/a	35	35.0-35.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Magnesium	n/a	n/a	13	13.0-13.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Sodium	n/a	n/a	13	13.0-13.0	NO	2022	Erosion from naturally occurring deposits. Used in water softener regeneration.
Hardness Total (ppm as CaCo3)	n/a	n/a	140	140-140	NO	2022	Erosion from naturally occurring deposits.
Alkalinity	n/a	n/a	98	98-98	NO	2022	Erosion from naturally occurring deposits.
Total Dissolved Solids	n/a	n/a	170	170-170	NO	2022	Erosion from naturally occurring deposits.

Lead and Copper

The IEPA lead and copper testing program began in 1992. Due to consistent low concentration levels of lead and copper, the Village has been placed on a reduced testing cycle by the Illinois Environmental Protection Agency (IEPA) and is only required to test every three years. Currently, a round of testing consists of 30 samples. Our most recent round of lead and copper testing took place in 2021 with all samples reporting below the action levels for lead and copper. Copies of the lead sampling results are available on the Village website at deerfield.il.us. Our next round of testing will occur in 2024.

The Village of Deerfield is in full compliance with all State and Federal regulations governing the control of lead and copper within public drinking water supplies. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Deerfield is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at epa.gov/safewater/lead.

Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. The following table shows the results of our lead and copper monitoring for the period of January 1 to December 31, 2021.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	#Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	#Sites Over Copper AL	Likely Source of Contamination
0	15ppb	0 ppb	0	1.3ppm	1.3 ppm	0.19 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

In the previous tables you will find many terms and abbreviations you may not be familiar with. To help you better understand these terms we have provided the following definitions:

ppm - parts per million or milligrams per liter (mg/l) or one ounce per 7,350 gallons of water.

ppb - parts per billion or micrograms per liter (mcg/l) or one ounce per 7,350,000 gallons of water.

ppt - parts per trillion or nanograms per liter (nanograms/l) or one ounce per 7,350,000,000 gallons of water.

NTU - Nephelometric Turbidity Unit, used to measure of the cloudiness in drinking water.

% < 0.3 NTU - percent samples less than 0.3 NTU.

Mrem/yr - millirems per year, used to measure radiation absorbed by the body.

pCi/l - picocuries per liter, used to measure radioactivity.

 # pos/mo - number of positives per month.

AL - Action Level or the concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

MCL - Maximum Contaminant Level or the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

n/a - not applicable.

About The Data

Organic Carbon - The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Turbidity (NTU) - Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration and disinfectants.

Sodium - There is not a state or federal MCL for sodium. Monitoring is performed to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Lead & Copper - The Village of Deerfield has been in compliance with regulations for lead and copper control. (See Lead and Copper Explanation on page 7.)

Unregulated Contaminants - A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

In addition to the above mentioned tests, Deerfield continuously monitors and tests your water through our water control system as well as weekly physical samples. These samples are submitted to the IEPA certified Central Lake County Joint Action Water Agency for analysis. This ensures a rapid response should there ever be a problem.

Special Information Available

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791.

Top Ways to Conserve Water

Conserving water is easy if you follow these helpful tips:

- Test for a leaking toilet by adding food coloring to the tank.
- If any color appears in the bowl after 30 minutes, your toilet is leaking. Leaking toilets can waste thousands of gallons of water. Flush as soon as the test is done, since food coloring may stain the tank.
- Use water-conserving plumbing fixtures and water-flow restrictors on sinks and showers. Bathroom facilities typically constitute 75% of the water used in homes.
- Run your dishwasher and washing machine when you have a full load.
- Take a short shower instead of a bath. A bath uses 30 to 50 gallons of water. Showers use about a gallon of water per minute.
- Store drinking water in the refrigerator instead of letting the tap run every time you want a glass of cool water.
- Never put water down the drain when there may be another use for it such as watering a plant or garden, or doing housework.
- Be conscientious of the amount of water you use when running your garbage disposal. Have your food scraps cut into small pieces so they can be disposed of quickly, minimizing the amount of time you need to run the faucet.
- For landscaping and gardens, choose plants that are native to the area in which you live or plants that are drought resistant. Native plants are accustomed to the natural amount of precipitation that occurs in the area where they are found and normally do not require any additional watering. Group plants together based on similar watering needs.
- Water your lawn and/or garden during the coolest part of the day to minimize evaporation. Apply water slowly, exactly where it is needed. Position sprinklers so that water lands on the lawn and shrubs, not on paved areas. Keep in mind that sprinkling restrictions are in place from May 15 - September 15.

For More Information

If you have any questions about this report, your water quality in general, or simply want more information, please contact the Village of Deerfield Water Department at 847.317.7245 or pw@deerfield.il.us or visit our website at deerfield.il.us.

Police Department News

Fireworks Safety Tips

The Fourth of July should be a fun time with great memories. The optimal way to enjoy fireworks will be at the Deerfield Family Days professional display at dusk on July 3rd, 2023, at Shepard Park. The use of fireworks in Deerfield is significantly restricted by Village Ordinance.

Each July 4th, thousands of people nationwide, most often children and teens, are injured while using consumer fireworks. Also, unsanctioned fireworks can have unintended consequences for combat veterans with post-traumatic stress disorder; while veterans anticipate the sound of fireworks on the 4th of July, civilians who shoot them off on random days before and after the holiday can be a source of real anxiety.

Curfew

Our curfew ordinance was created for the safety of minors as well as to maintain the quality of life throughout Deerfield. It is applicable to those 17 and Under:

Sunday - Thursday: 11 p.m. - 6 a.m.
Friday - Saturday: 12:00 a.m. - 6 a.m.

Drivers under the age of 18 may not operate a motor vehicle between the hours of 10 p.m. and 6 a.m., Sunday through Thursday, and between 11 p.m. and 6 a.m., Friday and Saturday. During allowed driving times, the number of passengers is limited to one person under the age of 20, unless the additional passenger is a sibling, step-sibling, child, or step-child of the driver.

Exemptions in the law allow new drivers to drive to and from employment or school-sanctioned activities outside the restricted times. Underage drivers convicted of violating the new driving curfews may have their driver's license suspended.

2023 Cop on a Rooftop

Members of the Police Department, in cooperation with Dunkin' of Deerfield, participated in the annual Cop on a Rooftop event on May 19 to benefit the Special Olympics Illinois Law Enforcement Torch Run. Department members called down to customers from the roof of Dunkin' while others collected donations on the ground with Special Olympics Gold Medal Winning Athlete and Global Messenger Ella Stoklosa. Lutheran Church Charities K-9 Ministry were also in attendance with Comfort Dogs. More than $4,200 was raised at the Deerfield location for Special Olympics Illinois.



Overnight Parking

By Village Ordinance, vehicles are not allowed to park on the street between the hours of 2 a.m. and 6 a.m. This ordinance helps to reduce crime and improve the overall safety and appearance of our community. If you require an exception, call the Deerfield Police non-emergency number 847.945.8636, before 2 a.m., and be prepared to provide the license plates of the effected vehicles.

Police Department Lobby Closure

The Police Department's Communications Center is getting an upgrade and expanding. During construction there may be times the Police Department lobby will be closed to the public as a safety precaution. If you need police service, please call 847.945.8636. For the records department, please contact 847.945.5007.

The Communications Center was last remodeled more than twenty years ago. The dispatch consoles were later replaced in 2004. The Center was originally designed to accommodate dispatching personnel to provide service for two communities, Deerfield and Bannockburn. Since that time, the Center has seen modest growth with the addition of Riverwoods and Lincolnshire, resulting in significant use of the center and equipment which is staffed and operational 24 hours a day, seven days a week.

STAY CONNECTED

Instagram: deerfieldpolice
Nextdoor.com: Deerfield Police Department

In 2022, the Deerfield Police Communications Center managed a total of 59,051 calls for service.

15,483
Deerfield calls for service

8,091
Bannockburn Police calls for service

5,476
Riverwoods Police calls for service

19,139
Lincolnshire Police calls for service

10,862
Communications Center calls for administrative issues



VILLAGE HISTORY

The Historic Village consists of five buildings dating from 1837 to 1905 that offer you a look at a typical prairie community.

George Luther House, c. 1847
This is a well preserved example of the larger "three room log cabin" built before the arrival of the first sawmill in 1850. After the Civil War, the house was modernized by the addition of Greek Revival white siding and green trim. The building houses a visitor center and exhibits.

Bartle Sacker Farmhouse, c. 1854
Nicknamed "The Little House on the Prairie," this two-story frame house is furnished with artifacts used in the daily life of an active farm family. View photos of the farmhouse being moved to the Historic Village from its original site at 1428 Waukegan Road at digitalpast.org.

Little Red Schoolhouse, c. 1890
Is a replica of a 19th century One-room school furnished with period school items. Every child in District 109 attends class for one day at the schoolhouse as part of their local history program.

Carriage House, c. 1905
Antique carriages and farm equipment are housed in this replica. The Carriage House was built with materials salvaged from four area buildings, and the first four carriages were put on display in 1984.



Caspar Ott Log House, c. 1837
The one-room log home where journeyman tailor Caspar Ott (1814-1876) and his wife, Catherine Trier (1816-1891), raised their seven children is the oldest standing building in Lake County. In 1970, just one week before it was to be demolished, the log house was discovered under the plaster walls of the dining room in the Siljerstrom farmhouse, located on the east side of Sanders Road. In 1971, the log house was moved to the Deerfield Historic Village.

A Look Back in Time

"The roots of a community are in its history and Deerfield is fortunate to have our early beginnings preserved at the Deerfield Historic Village."

JEAN SPAGNOLI
PRESIDENT,
DEERIELD AREA
HISTORICAL SOCIETY

Deerfield Area Historical Society

Tour the Deerfield Historic Village
The Deerfield Area Historical Society hosts free tours of the Deerfield Historic Village, located at the corner of Deerfield Road and Kipling Place, on Sundays from 2 to 4 p.m. from June through September. Visit historic buildings ranging from Lake County's oldest log cabin to a one-room schoolhouse that has been a favorite of children for many years. The Historical Society, a donor-supported, nonprofit organization, maintains the Historic Village.

Save the Date:
DAHS Annual Fall Festival
Sunday, October 1
Noon to 4 p.m.
Deerfield Historic Village
Enjoy the afternoon with fun for the whole family! Step into Deerfield's past with activities, exhibits, food, craft show and historic building tours.

Attention Crafters
The Historical Society is looking for traditional crafters who would like to join the Fall Festival. Show off your talent: knitting, weaving, woodworking, etc. Demonstrate your craft (if possible) and sell your wares. If interested, email deerfieldhistory@gmail.com and ask for an application.



Farmer's Market - Food, Friends and Fun



The Farmers Market season is underway with lots of food, friends and fun! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning through October 14 from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet! Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less. We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/ Farmers-Market.

District 109 Updates

Although it's summer, there's still a lot happening at District 109! Follow us on Facebook and Twitter at DPS109.

The first day of the 2023-2024 school year is Monday, August 21. We look forward to seeing all of our students and staff back at school!

As the school year draws closer, we are always in need of substitute teachers. You can set your schedule of how often you work! Fill out an application today at dps109.org/jobs.



Come visit us at the Deerfield Farmers Market on Saturday, August 26th! Our superintendent and Board of Education members will be there to say hi, answer questions, and hand out some District 109 swag!

Congratulations to the Class of 2023 from Caruso and Shepard Middle Schools! We wish you well as you head off to Deerfield High School!

DID YOU KNOW?

Wilmot School recently celebrated its demisemi-septcentennial! (That's 175 years!) The school held a day-long party in early June full of activities. Students and staff also recently opened a time capsule from 1997 that showcased what elementary students used at the time. Among the items: a Tamagotchi, Beanie Babies, Hot Wheels, a Michael Jordan poster, and more! This year's group put items inside a new time capsule that will be opened 25 years from now!

VILLAGE OF DEERFIELD

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 | deerfield.il.us

PRESORTED
STANDARD U.S.
POSTAGE
PAID
PERMIT NO. 1
DEERFIELD, ILLINOIS

Postal Customer
Deerfield, Illinois 60015

VILLAGE OFFICIALS

Mayor
Daniel C. Shapiro
847.719.7402
dshapiro@deerfield.il.us

Trustees
Robert "Bob" L. Benton
847.945.1570
rbenton@deerfield.il.us

Larry Berg
847.612.0777
lberg@deerfield.il.us

Elaine Jacoby
847.644.3354
ejacoby@deerfield.il.us

Rebekah Metts-Childers
847.899.1449
rmettschilders@deerfield.il.us

Mary M. Oppenheim
847.948.9423
moppenheim@deerfield.il.us

William S. Seiden
847.945.2442
wseiden@deerfield.il.us

Village Manager
Kent S. Street - 847.719.7400
kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015

Switchboard and Finance
847.945.5000

Community Development
847.719.7484

Police non-emergency
847.945.8636

Public Works and Engineering
465 Elm Street
847.317.7245
847.317.2490 (Engineering)



May 17, June 21, July 19, Aug. 16, Sept. 20

4:30 p.m. to 8 p.m. at Jewett Park Hazel Avenue Parking Lot

Live Music | Kids Activities

Sponsored by: The Village of Deerfield

MEETING SCHEDULE

For a complete list of meetings, please visit deerfield.il.us. *Times/dates subject to change.*

July

Board of Trustees
July 5 & 17, 7:30 p.m.

Community Relations Commission
July 11, 6:30 p.m.

Plan Commission
July 13 & 27, 7:30 p.m.

Appearance Review Commission
July 24, 7:30 p.m.

August

Board of Trustees
August 7 & 21, 7:30 p.m.

Community Relations Commission
August 8, 6:30 p.m.

Plan Commission
August 10 & 24, 7:30 p.m.

Appearance Review Commission
August 21, 7:30 p.m.

2023 DRAINAGE ISSUES

No.	Date:		Location	Reported By:	Via	Staff	Phone	Email	Status	Notes
	3/1/2023		65 Bent Creek	Anthony Greis	email	TKD	847-513-3214 cell			
	3/2/2023		830 Northwoods	Mr. Miller		TKD				
	3/7/2023		1023 Greenwood	Laurie Heyl		TKD		2lheyl@comcast.net		
	3/13/2023		1115 wayne	Marshall Brill	Email	JSG		marshalll.brill@gmail.com		
	3/14/2023		802 Wilmot	Aaron Appelbaum		TKD	224-456-5959			
	3/23/2023		1620 Dartmouth	Ciprian Sabau	email	TKD				
	3/28/2023		903 Greenwood	Cindy Caliskan		JSG	847-830-6429			
	4/3/2023		1023 Greenwood	Laurie Heyl		TKD		2lheyl@comcast.net		
	4/6/2023		1645 Portage Pass	Ms. Ernstein		TKD	847-826-5719			
	4/11/2023		1330 Knollwood	Jimmy Karanikolas		TKD				
	4/11/2023		1336 Knollwood	Lela Hutchinson		TKD				Village led design - residents did not elect to fund project
	4/11/2023		1218 Norman	Mr. Bloom		TKD	847-529-6888			
	4/13/2023		595 Carriage Way	Gary Schikman		TKD	847-877-1028			
	4/13/2023		140 Ferndale			JSG				
	Various		520 Brierhill	Susan O'Malley	Phone/Field	TKD	847-624-7609	Susan O'Malley <somalley779@gmail.com>		
	4/13/2023		153 Plumtree	Maggie Crane		TKD				
	4/13/2023		1447 Wilmot	Dave Reynolds		TKD				
	4/14/2023		415 Castlewood	Ms. Miller		TKD	847-942-2894			
	4/14/2023		1023 Greenwood	Laurie Heyl		TKD		2lheyl@comcast.net		
	4/18/2023		912 Warrington	Kurt Benson		TKD	847-877-6219			Village involved correction
	4/18/2023		244 Fairview	Miriam Treshansky		TKD	847-302-8984			
	4/19/2023		900 Westcliff	Carol Noble		TKD	847-772-2132			H.O. to send photos of issues to TKD
	4/20/2023		Northwoods HOA			TKD				Met in VH conference room
	4/27/2023		1144 Oakley	Paul Weiss		TKD				About neighbor's property
	4/27/2023		912 Warrington	Kurt Benson		TKD	847-877-6219			
	5/11/2023		1645 Portage Pass	Ms. Ernstein		TKD	847-826-5719			
	5/26/2023		912 Warrington	Kurt Benson		TKD	847-877-6219			
	5/26/2023		1351 Berkley	Danny & Marisa Pogofsky		TKD	847-507-0018			
	7/5/2023		1330/1336 Knollwood Group			TKD				
	8/4/2023		1233 Stratford	Mr. Tolari		TKD	847-219-6677			
	9/12/2023		840 Summit			JSG				
	9/28/2023		685 Carlisle	Jim		TKD	773-450-7941			
	10/3/2023		1050 Kenton	Martha Berry		TKD	248-568-9136			
	10/17/2023		Marshall Mall			TKD				
	11/20/2023		909 Faountain Dr	Mr. Riboh		TKD	847-372-8698			
	1/8/2024		85 Cody Ct	Mr. Smerling		TKD	312.953.4943	msmerling@lcibrands.com		

FEMA Map Information Inquiry Log

Date	Type	Address	Panel	Zone	Floodplain	Floodway	Elevation	Insurance Information Given (Yes/No)	Historical Flood Info	Wetland
1/17/2023	T	1114 Hampton Ct	286K	AE	Y	N	659	Y	Y	N
Multiple	T	211 Landis	286K	AE	Y	Y			Y	
5/23/2023	E	1309 Holly	286K	AE	Y	Y	656.7	N	N	N
6/12/2023	E	1163 Holly Lane	286K	AE	Y	Y	656.5	N	N	N
7/27/2023	E	480 Carriage Way	286K	AE	Y	Y	652.9	N		
Multiple	T / E	0 Cranshire Ct	286K	AE	Y	Y				
10/11/2023	E	1160 Deerfield Rd	286K	AE	Y	Y	656.2	N		

Type Codes:
W - Walk-in
V- Verbal
WR - Written
H - Hand -out
T - Telephone
OM - Onsite Meeting
E - email
WS- Website Submitted / FOIA
N/A - Not Applicable

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 330 - Outreach Projects

Dear Mr. Arkens:

The Village of Deerfield sent four installments concerning Deerfield Floodplain information in the March/April 2023, May/June 2023, July/August 2023, and September/October 2023 editions of D-Tales. One of each newsletter was mailed to every residence and they are all available on the Village website and at Village buildings. The Department also mails out letters to properties within the repetitive loss area and a copy of the maps, letters, and mailing list is provided in Activity 502. Additionally, the Department mails out real estate brochures to industry professionals. A copy of the letter, brochures, and mailing list is provided in Activity 340. Activities 360 and 540 are included in these mailings and newsletters.

The Village of Deerfield Engineering Department includes a public works table with FEMA and Flood Insurance Information at the Public Works Open house. The event is advertised to all residents and open to the public. A licensed professional engineer runs the table and advises attendees about the resources available at the Engineering Department and online. Though a photo was not taken at this year's event, a photo of the standard set up from the 2022 event is attached.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

March/April 2023 Vol. 45, No. 2

D-Tales

Your Municipal News Source

Village of Deerfield

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000

Visit us online at
www.deerfield.il.us

Meeting Schedule

Meeting times/dates subject to change.

For a complete list of meetings visit, www.deerfield.il.us

March

Board of Trustees
March 6 & 20, 7:30 p.m.

Plan Commission
March 9 & 23, 7:30 p.m.

Community Relations Commission
March 14, 6:30 p.m.

Sustainability Commission
March 16, 7:00 p.m.

Appearance Review Commission
March 27, 7:30 p.m.

April

Board of Trustees
April 3 & 17, 7:30 p.m.

Community Relations Commission
April 11, 6:30 p.m.

Plan Commission
April 13 & 27, 7:30 p.m.

Appearance Review Commission
April 24, 7:00 p.m.

Daylight Saving Time is March 12. Don't forget to turn your clocks forward by one hour and check the batteries on your smoke and carbon monoxide detectors.

Waukegan Road Water Main Replacement

Starting this spring, aged water main that runs down the middle of Waukegan Road will be replaced between Deerfield Road and North Avenue. The $4 million project was previously planned for 2022, but moved to this year due to supply-chain issues.

With all of the new main pipes delivered earlier this year, the project is anticipated to begin in late March or early April and is expected to be completed by early September, weather depending.

The project was competitively bid and awarded to Lenny Hoffman Excavating by the Village Board in November 2022.

The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and will require traffic to be reduced to one lane in each direction. Construction will be sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day.

A public meeting will be held for area businesses on March 22 at 2 p.m. and a meeting for residents will be held on the same day at 6:30 p.m. Both meetings will be held at the Village Hall Council Chambers.

Updates on the project will be shared via the Village website and interested parties can sign up to receive e-mail and/or text message updates on the project at www.deerfield.il.us under "Notify Me," "Blog," "2023 Waukegan Road Water Main Replacement Project."

For more information, contact the Public Works Department at *847.317.7245*.

Public Works Open House - Saturday, May 20

Join the Village of Deerfield and Deerfield Park District from 10 a.m.-1 p.m. on Saturday, May 20, for a kid and adult friendly Open House at Deerfield's Public Works Facility, 465 Elm Street. Parking is available at the Patty Turner Center, 375 Elm Street.



Come watch demonstrations about water safety, how crews fix a water main break, and check out our fleet of vehicles, from vacuum trucks to snow plows to front-end loaders.

This event is free for all ages and will feature:

- Tours & Exhibits
- Fun Giveaways
- Hands-On Activities
- Prizes
- Vendors & Education
- Public Works Swag

For more information, contact the Public Works Department at *847.317.7245*.

Check it out!

Page 2:
• Downtown TIF District

Page 4:
• Protect Water Quality

Page 8:
• Food Truck Wednesdays

New Downtown TIF District Created

In order to help achieve the goals and objectives of the Village's Comprehensive Plan and the Northwest Quadrant Sub Area Plan, the Village Board adopted enabling ordinances for a Downtown TIF District (#3) on January 3, 2023.

Tax Increment Financing is an economic development tool which uses future tax revenues to finance redevelopment activity. The TIF District is primarily located in the area between Hazel Avenue to the north and Deerfield Road to the south, and between Chestnut Street to the west and Rosemary Terrace to the east. This area has been designated as a Redevelopment Project Area ("RPA"), pursuant to the TIF Act, because it has been found to face certain qualifying impediments to redevelopment.

The RPA permits the use of tax increment financing in order to alleviate those conditions which deter private investment in the area and meet the Village's redevelopment goals and objectives. It is anticipated that the implementation of this economic development tool will have a positive financial impact on the affected taxing districts.

The following list summarizes goals in the Village's Comprehensive Plan and Northwest Quadrant Master Plan that are applicable to the RPA:

- Seek to strengthen the commercial areas of the Village in order to provide a sound economic base while maintaining a compatible relationship between the commercial areas and other areas of the Village.
- Maintain the Village Center as the governmental, recreational, cultural and visual center of Deerfield.
- Guide future growth within Deerfield's Planning Jurisdiction so that public facilities and amenities can be effectively and economically provided, and that such growth does not adversely change the Village.
- Maintain the variety of the existing housing stock and supplement it in suitable locations with safe, well-constructed housing of a density scale and character compatible with adjacent housing.
- Continue to maintain and improve traffic circulation within Deerfield by supporting transportation system improvements and managing traffic to ensure safe, coordinated and efficient flow of vehicles and people within and through the Village.
- Encourage and provide a safe and convenient environment for pedestrians and bicyclists.
- Help protect recreational and open space areas to encourage the acquisition of additional recreational and open space facilities.

Strategies will be encouraged to promote growth via private investments within the area, while specific objectives will be geared toward stabilizing the RPA's existing strengths and revitalizing the RPA's redevelopment potential.

Factors which constitute evidence of qualifying TIF factors and which impair sound growth in the RPA are: (i) lagging equalized assessed value, (ii) obsolescence, (iii) deterioration of structures or site improvements, (iv) deleterious layout, (v) excessive vacancies, (vi) inadequate utilities; and, (vii) lack of community planning.

The Village has used TIF District sparingly over the years and only when most warranted. The Village's past TIF Districts were extremely successful and brought many of the developments in the Downtown and along Lake Cook Road that our residents, visitors and businesses enjoy today. The TIF District may be in place for up to twenty-three years.

For more information, contact Assistant Village Manager/Community Development Director Andrew Lichterman at alichterman@deerfield.il.us or 847.719.7403.

April 4 Consolidated Election Information

The Consolidated Election will be held Tuesday, April 4, for election of municipal offices, library trustees, park district commissioners, school board members and more.

On Election Day, polls will be open from 6 a.m. to 7 p.m. Residents can find their designated Election Day polling place at the County's website *LakeVoterPower.info*.

Early voting runs March 20 through April 3 from 9 a.m. to 5 p.m., Monday through Friday, and from 9 a.m. to 2 p.m. on Saturdays. Deerspring Pool located at 200 Deerfield Road is an early voting site.

Voting by mail is available through the Lake County Clerk's office. Residents may request a ballot by mail at *LakeVoterPower.info* or by calling *847.377.2406*.

Information about Early Voting sites and Election Day polling places is available at *LakeVoterPower.info* or by calling the West Deerfield Township at *847.945.0614*.

Electric Vehicles

As part of the Climate Action Plan adopted in 2022, the Village has begun purchasing electric and hybrid vehicles along with installing electric charging stations at public buildings.

The Village has made progress towards our goal of purchasing 16 electric and hybrid vehicles by 2030 by purchasing two electric vehicles in 2022 and an electric and a hybrid vehicle so far in 2023. Earlier this year, three stations that can charge six vehicles were installed at the Public Works building. Additional charging stations are scheduled to be installed at Village Hall and other public locations later this year.

While the Public Works stations are for Village vehicles only, the other stations will be open to the public.

Help give our Veterans an Egg-cellent Easter

The Deerfield Police Department will be collecting Easter well wishes for local veterans. Items include cards, notes and sweet treats. Please drop off any donations by April 14 at the Deerfield Police Department, 850 Waukegan Road.

Remind our veterans they are some-bunny special to all of us and how we are so grateful for their sacrifice and service.

For more information, contact Police Communications Director Mary Anne Glowacz at 847.945.8636 or mglowacz@deerfield.il.us.

National Telecommunicators Week - April 9-15

Each year, the second full week of April is dedicated to the men and women who serve as Telecommunication Officers. In October 1991, Congress made a formal proclamation to recognize this week as National Telecommunicators Week.

Deerfield has eight full-time and six part-time Telecommunicators who serve as an indispensable link between the officers and the public, as well as a vital support service in the public safety community. They provide radio, telephone and dispatch services with dedication and professionalism. The Village will celebrate the week by issuing a proclamation from Mayor Shapiro and the Village Board.

For more information, contact Police Communications Director Mary Anne Glowacz at 847.945.8636 or mglowacz@deerfield.il.us.

Scooter, Bike and Pedestrian Safety

Scooters, bikes, in-line skates and skateboards are associated with numerous injuries yearly. Here are some safety tips for you and your family to enjoy them safely:

- Wear a comfortable, properly fitted helmet bearing the label of an independent testing lab. Be sure that the helmet sits level on top of the head–not rocking in any direction–and always fasten the safety strap.
- Be sure that safety gear (wrist, elbow and kneepads) fits properly and does not interfere with the rider's movement, vision or hearing. Wrist pads are not recommended for scooter riders as they may affect their ability to maneuver.
- Ride scooters and bikes only on smooth, paved surfaces and only ride during daylight hours.
- Learn the proper hand signals and use them when you turn or stop.
- Come to a complete stop before entering driveways, paths or sidewalks, then look left, right and left again for bikes, cars or pedestrians.
- Teach crossing safety to children by example.

Hide, Lock, Take!

The Village of Deerfield and neighboring communities have experienced an increase in reports of burglary to motor vehicles. In most cases these crimes are committed in unlocked vehicles.

Car burglaries are crimes of opportunity and failing to lock your vehicle makes it a target for thieves. A vehicle can be burglarized or stolen while on your street, in your driveway, or in a parking lot—even if it is only unattended for a short time.

Every time you exit your vehicle, remember to Hide, Lock, Take:

1. Hide (or remove) your valuables
2. Lock your car doors
3. Take your keys

Other safety precautions include keeping the car windows closed, removing the garage door opener from your vehicle and keeping your garage door closed.

If you see something, say something. Remain vigilant and report any suspicious people, vehicles or circumstances to the Police at *9-1-1* or *847.945.8636*.

Regulations for Political Signage

During the political campaign season, the Village wants to remind residents about regulations for placing political campaign signs on your property.

Permits are not required for temporary signs, and residents can place any number of political signs on their property as long as the aggregate gross surface area does not exceed 20 square feet.

Signs must be:

- on private property;
- at least 5 feet toward the house side of the sidewalk;
- at least 10 feet toward the house side of a carriage walk; and
- at least 15 feet from the street edge or back of curb if no sidewalk.

Signs must not be:

- placed in the public right-of-way;
- attached to trees, traffic or light poles, utility poles or fire hydrants; or higher than 10 feet above curb level.

For more information, contact the Community Development Department at 847.719.7484.

Overnight Parking

By Village Ordinance, vehicles are not allowed to park on the street between the hours of 2 a.m. and 6 a.m. This ordinance helps to reduce crime and improve the safety and appearance of our community.

If you require an exception, call the Deerfield Police non-emergency number, *847.945.8636*, before 2 a.m. and be prepared to provide the license plates of the effected vehicles.

Fire Hydrant Flushing

During the week of April 17, the Public Works Department will begin flushing all fire hydrants within the Village.

Opening fire hydrants and flushing out water on an annual basis allows Public Works to ensure that hydrants are in proper working condition to protect your property and helps to flush sediment out of the distribution system.

Signs will be posted in each area before flushing begins. The work is typically performed between 7:30 a.m. and 3:30 p.m., Monday through Friday, and takes approximately two weeks to be completed for the entire Village.

Do not do laundry on the day hydrants are flushed in your area. Flushing may stir up rust that can enter washing machines and cause discoloration to certain types of clothing. Additionally, there may be discoloration in the water coming from the faucets in your home after hydrant flushing is complete in your area. It is recommended that residents flush water from their interior system through a tub spout for a few minutes to clear out sediment. Please note that the water from the tap is safe to drink at all times.

Contact the Public Works Water Department at 847.317.7245 for more information.

Underground Sprinkler & Fire Suppression System Testing

To protect the drinking water supply, the Village would like to remind residents that all irrigation systems are required to have a backflow prevention device. This equipment is also known as a Reduced Pressure Zone device (RPZ). The device must be certified and tested annually by a licensed inspector prior to the system going into service.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the RPZ tracking program. The annual backflow assembly test report must be submitted electronically, by your certified inspector, via the BSI Online system at *www.bsionlinetracking.com* by June 30.

For more information, contact Public Works at 847.317.7245 or visit www.deerfield.il.us.

Protecting Water Quality

It is important to remember that the Village storm sewer drains and roadside ditches lead to our nearby lakes and creeks. So, any oil, pet waste, leaves, landscaping debris or dirty water from outside activities that enter a storm drain end up in our lakes and streams.

Never dump oil, chemicals, soapy water, grass clippings or anything besides clean water down the storm sewer drain. By keeping waste and hazardous materials out of storm sewer drains, you are helping reduce flooding and pollution in our local waterways. Some permitted discharges and ways to reduce water pollution are below.

The following discharges are permitted:

- Discharges from potable water sources (fire hydrant flushing)
- Irrigation water
- Foundation drains, pumped ground water, and water from crawl spaces
- De-chlorinated and pH neutral swimming pool discharges

The following are common ways to help reduce water pollution:

- Clean up after pets
- Sweep up grass clippings, soil and fertilizer from driveways, sidewalks and streets
- Use lawn chemicals sparingly
- Properly store and dispose of household cleaners, chemicals and oil

Tree City USA

The Village of Deerfield has been named a Tree City USA community by the Arbor Day Foundation for the 12th consecutive year. To earn this award, a municipality must have an annual tree budget of at least $2 per capita.

In 2022, the Village spent over $100,000 on tree planting and maintenance. This includes planting dozens of trees and completing the annual tree trimming program.

Ask the Arborist – March 11

The Sustainability Commission invites you to join the Village Arborist for a FREE tree consultation. Residents are encouraged to submit pictures/videos of their trees and tree related questions in advance so they can be answered by the Arborist. The Ask the Arborist program will be held on March 11, from 10 a.m. to 11 a.m. at the Deerfield Public Library, 920 Waukegan Road.

Questions with pictures/short videos should be sent by March 8 to *alichterman@deerfield.il.us*. The Arborist will give priority to questions submitted in advance and will take questions from the audience, if time permits.

In addition to answering resident's specific tree-related questions, Village staff will discuss the Village's programs and initiatives related to preserving the urban forest, heritage trees, the 50/50 Parkway Tree Program and other sustainable and native planting programs.

Attendees will receive a hard copy of "Under the Canopy: Creating Personal Greenspace," which is a guide to selecting, planting and caring for trees in Illinois.

Arbor Day 2023

In celebration of Arbor Day, the Sustainability Commission and Mayor Shapiro will plant a tree on April 28, at a District 109 school.

The Village urges all citizens to celebrate Arbor Day and to support efforts to protect our trees and woodlands. Visit *Arborday.org* for more information about planting and caring for trees.

BOARDREPORT

The following is a synopsis of actions taken by the Village Board since the last issue of D-Tales. For complete sets of minutes from Village Board meetings or to watch recorded meetings on-demand, please visit the Village's website at *www.deerfield.il.us*.

Village Board Action

Approved a Resolution to award landscape maintenance contract
Approved a Resolution to purchase landscape planting material
Approved a Resolution to award sanitary sewer lining contract
Approved a Resolution to award storm sewer lining contract
Approved a Resolution to purchase bulk rock salt through the Illinois Department of Central Management Services and Lake County
Approved a Resolution approving and authorizing a memorandum of understanding with the Lake County Health Department for participation in A Way Out Program
Approved a Resolution to approve the JK Wilmot resubdivision development
Approved an Ordinance approving a Tax Increment Redevelopment Plan and Project for the Downtown/Village Center Redevelopment Area
Approved an Ordinance Designating the Downtown/Village Center Redevelopment Project Area Pursuant to the Tax Increment Allocation Redevelopment Act
Approved a Resolution ratifying the purchase of a vehicle
Approved a Resolution awarding a pumping station pump and floor door replacement project assistance
Approved a Resolution authorizing purchase order for biosolids removal services
Approved a Resolution approving pavement condition assessment contract
Approved an Ordinance authorizing a special use to allow a massage establishment at 405 Lake Cook Road, Unit A3
Approved an Ordinance authorizing an amendment to the Rosebud Restaurant special use to permit the expansion into the adjacent tenant space
Approved an Ordinance authorizing a text amendment to allow a drive-thru restaurant in the C-1 Village Center District as a special use
Approved an Ordinance authorizing a special use to permit the establishment of a drive-thru restaurant with an outdoor seating area and approval of menu boards at 560 Waukegan Road for a Shake Shack restaurant
Approved a Resolution to award contract for 2023 street light system upgrades
Approved a Resolution waiving competitive bidding and awarding a contract for a Tree Inventory Survey

COMMUNITYCALENDAR

DEERFIELD PARK DISTRICT

Summer Camps & Jobs
Apply online NOW for Summer Jobs including lifeguards, camp staff and golf course staff at *deerfieldparks.org/jobs*.

Spring and Summer Program Registration and Summer Pool Pass Sales begin March 6 for residents. Non-resident Program Registration begins March 13. Visit *deerfieldparks.org* to view the online guide of classes and events!

Summer Camp Registration
Visit *deerfieldparks.org/summer-camps* to find a camp to fill your child's summer with exciting adventures!

Sachs Recreation Center Community Days are March 14-16 from 9 a.m. to 7 p.m. and March 19, from 11 a.m. to 2 p.m. Come visit the facility for tours, give-aways and more! Visit our calendar of events for more details *deerfieldparks.org/events*.

Shelter Permits go on sale March 1 for residents and April 3 for non-residents. Visit *deerfieldparks.org* for more information and to rent a shelter.

Become a member at the **Patty Turner Center** today, a place where adults 50+ participate in a wide variety of in-person and virtual classes and events. Visit pattyturnercenter.org or call *847-940-4010* for more information!

Remaining **permanent tee times** for the 2023 season at Deerfield Golf Club are available at *deerfieldgolf.org*.

For more information or to register for Park District programs, call 847.945.0650, or visit www.deerfieldparks.org.

DEERFIELD PUBLIC LIBRARY

All Library programs are free and open to the public. Register in advance by phone at *847.945.3311*, online at *deerfieldlibrary.org*, or in person at 920 Waukegan Rd. Online program description notes program platform (online, in-person, or hybrid).

Disney Escape Room
March 11, Grades 3-5
Register for only one session (each is about 45 minutes): 9:30 a.m., 11 a.m., 1 p.m., 2:30 p.m., 4 p.m. Work as a team to help your favorite characters solve the puzzles.

Let's Draw: The Secret of the Mysterious Whodunit
March 17, 4-5 p.m., Grades K-6
Help cartoon the clues, sketch the suspects and puzzle out the pictures to find out whodunit.

Tuesday New Movie Night
March 14, April 11, 6:30 p.m.
The movies to be shown will be announced a couple weeks prior to the movie night. Snacks provided.

Lunch & Listen: Concert with Frogwater
March 24, 12-1 p.m.
Frogwater's repertoire spans from Celtic to Delta blues, and from classical to pop. Bring your lunch; dessert will be provided.

Spring Break Boredom Busters
March 28-30, 2-4 p.m., Youth All Ages
Drop-in and spend the afternoon building with LEGOs (Tuesday), crafting (Wednesday), or play a board game (Thursday).

Author Visit: Lisa Barr
April 13, 7-8 p.m.
Deerfield's own bestselling author Lisa Barr joins us for a conversation on her thrilling novel, Woman on Fire. Books will be available for purchase and signing.

For more information and a full listing of events, please visit www.deerfieldlibrary.org.

Farmers Market Civic Groups Return

Calling all Deerfield-based nonprofit organizations. Are you looking for an opportunity to educate our local community about your mission? The Deerfield Farmers Market is the perfect community gathering spot to do so!

The Deerfield Farmers Market Committee invites you to submit an application to host a civic booth at the market this season. The 2023 Farmers Market Season runs from June 10 through October 14. Please note that participation is determined on a first-come, first-serve basis, with two nonprofit organizations scheduled per market. Farmers Market civic applications are now available online at *www.deerfield.il.us/301/Farmers-Market*. The application deadline is Friday, April 27.

For more information, contact Assistant to the Village Manager Justin Keenan at jkeenan@deerfield.il.us or 847.719.7462.

Monthly Memory Cafe on First Wednesdays

The Memory Café is a place for persons who are experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities.

The meetings are held the first Wednesday of every month from 10:00 - 11:30 a.m. at the Deerfield Public Library, 920 Waukegan Road.

Please note that COVID-19 safety precautions will be in place. Space is limited, register today.

For more information and to register contact Judy Hoffman at the Deerfield Public Library at jhoffman@deerfieldlibrary.org or call 847.580.8954.

green Up Deerfield

Make Your Yard an Oasis for Migratory Birds

Each spring from March to June, birds of every kind make their way from their winter homes in the south to their summer breeding grounds in places as far north as the Arctic. Along the way they encounter a myriad of perils - storms, limited food supplies and exhaustion. Compounding these natural threats are a myriad of additional ones created by humans, including the bright lights and tall structures of cities, prowling domestic pets and toxic lawns.

Fortunately, people can help ensure a safer journey for migrating birds this spring by following these simple steps:

- Turn off lights at night: Birds become disoriented by artificial light, which often results in fatal collisions with buildings, homes, and other structures. To prevent this, turn off exterior and interior lights as much as possible each night during the peak migration period of April-June.
- Prevent window collisions: Many birds strike windows after being startled off a feeder, seeing escape routes mirrored in reflective glass. To avoid this, reduce reflectivity with light-colored shades, blinds, or drapes; place netting or a screen in front of the window. Place bird feeders farther from windows – at 3 feet birds do not have enough distance to reach a high speed and are therefore less likely to get injured in a collision.
- Keep cats indoors: It is estimated that cats kill more than a billion birds each year. Keeping cats indoors helps keep the birds outdoors safe, and it also reduces risks to cats, especially from injuries and disease.
- Eliminate pesticides: Use the least toxic alternatives for combating pests.
- Keep feeders stocked and clean: Birds will need places to rest and refuel, so make sure that your yard includes native plants and your bird feeders are well-stocked. Along with feeders and native plants, provide a source of fresh water for the thirsty travelers.

For more information on how to keep birds safe, visit the Audubon At Home website at www.audubonathome.org and go to the "Keeping Wildlife Safe" link on the left-hand side of the page.

Go Green: Get Your Third Cart to the Curb



Deerfield Flood Information:

Floodplain Permit Requirements

All developments within the 100-year floodplain (not just construction of buildings, but filling, excavation, fences, etc.) are required to undergo a formal review by the Engineering Department. Approval must be granted prior to doing any work in a floodplain area. Please contact the Engineering Department at *847.317.2490* to receive all the information you will need in order to properly develop in the floodplain.

Substantial Improvement/ Damage

The National Flood Insurance Program (NFIP) requires that if the cost of improvements to a building in a floodplain or the cost to repair damages (from any cause) to a building in a floodplain exceeds 50 percent of the market value of the building (excluding land value), the entire building must be brought up to current floodplain management standards. Building improvement projects include exterior and interior remodeling, rehabilitation, additions and repair and reconstruction projects.

Additionally, the cost of currently planned improvements will be added to the cost of previously made improvements and compared to the existing market value to determine if the improvements exceed 50 percent of the structure's value. Please contact the Engineering Department at *847.317.2490* for further information.

Flood Insurance

If you do not have flood insurance, talk to your insurance agent. Most homeowners' insurance policies do not cover damage from floods. Flood insurance is only available to those communities participating in the NFIP. Because of our floodplain management programs, Deerfield residents are able to obtain flood insurance.

Additionally, because the Village participates in FEMA's CRS program, flood insurance premiums are discounted. Be sure to check your policy to ensure you have adequate coverage.

These policies usually cover the building structure, but not its contents. Contents coverage can also be obtained upon request. There is a 30-day waiting period before flood insurance coverage becomes effective. Plan ahead - do not wait until a flood is predicted before purchasing flood insurance. If you are building inside the floodplain, the purchase of flood insurance is mandatory if using a federally regulated/ insured bank for a loan.

Additional Information

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess the problem and may be able to offer solutions. The localized flood protection service is provided by the Engineering Department. Please contact the Engineering Department at *847.317.2490* with questions.

If you should require further or more detailed information regarding flood-related issues in Deerfield, here are some additional sources:

- FEMA.gov website
- Village of Deerfield Engineering Department
  465 Elm Street
  Deerfield, IL 60015
- Engineering Department Phone Number: *847.317.2490*
- Flood FAQs page on the Village's website at *www.deerfield.il.us*
- Deerfield Public Library
  920 Waukegan Road
  847.945.3311

Landscape Waste Pickup Resumes in April

Bagged landscape waste pickup starts the first week of April on your regular collection days. Yard waste must be placed in a 30-gallon paper bag and placed at the curb with a sticker affixed for collection.

A sticker is also required for each bundle of sticks or other yard waste and cannot exceed 4 feet in length, 30 inches in circumference and 50 pounds in weight. The price of landscape waste stickers this year is $3.11. Collection runs April 1 through December 15.

Keep in mind that your compost containers can be used at no additional cost for yard waste, as well. Organic (compostable) material, such as yard waste and food waste, account for 24.9% of all the landfill waste in Lake County. Diverting organic materials to a compost bin means that our landfills won't fill up as fast. Instead, food waste can be turned into healthy soil that can be used on farms and in many other ways.

For more information, contact the Finance Department at 847.945.5000.

LRS Cart Reminders

Per Village ordinance, refuse, recycling and organics carts can be set out as early as sundown the day before collection and no later than 7 a.m. the day of collection. Collection on Waukegan and Deerfield Roads must be out no later than 6:30 a.m. on the scheduled collection day.

Be courteous to your neighbors by following Village regulations on when carts are permitted in your driveway.

After collection, all carts should be removed from the front yard no later than the evening of your collection day. On non-collections days, all containers should be stored in the garage or out of plain sight from the street in an effort to make the containers inconspicuous from the public way.

Residents can call Lakeshore Recycling at *844.NEED.LRS* (*844.633.3577*) or e-mail at *Service@LRSrecycles.com* with any questions or concerns.

VILLAGE OF DEERFIELD

D-Tales
850 Waukegan Road
Deerfield, Illinois 60015

**PRESORTED
STANDARD U.S.
POSTAGE
PAID
Permit No. 1
Deerfield, Illinois**

POSTAL CUSTOMER
DEERFIELD, ILLINOIS 60015

VILLAGENOTES



May 17, June 21, July 19, Aug. 16, Sept. 20

4:30 p.m. to 8 p.m. at Jewett Park Hazel Avenue Parking Lot

Live Music | Kids Activities

Sponsored by: The Village of Deerfield

Village Officials:
Mayor:
Daniel C. Shapiro - 847.719.7402
E-mail: dshapiro@deerfield.il.us

Trustees:
Robert "Bob" L. Benton - 847.945.1570
E-mail: rbenton@deerfield.il.us
Larry Berg - 847.612.0777
E-mail: lberg@deerfield.il.us
Elaine Jacoby - 847.644.3354
E-mail: ejacoby@deerfield.il.us
Rebekah Metts-Childers - 847.899.1449
E-mail: rmettschilders@deerfield.il.us
Mary M. Oppenheim - 847.948.9423
E-mail: moppenheim@deerfield.il.us
William S. Seiden - 847.945.2442
E-mail: wseiden@deerfield.il.us

Village Manager:
Kent S. Street - 847.719.7400
E-mail: kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 (Switchboard and Finance)
847.719.7484 (Community Development)
847.945.8636 (Police non-emergency)

Public Works and Engineering
465 Elm Street
847.317.7245 (Public Works)
847.317.2490 (Engineering)

May/June 2023 Vol. 45 No. 3

D-Tales

Your Municipal News Source

Village of Deerfield

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000

Visit us online at
www.deerfield.il.us

Meeting Schedule

Meeting times/dates subject to change.

For a complete list of meetings visit, www.deerfield.il.us

May
Board of Trustees
May 1 & 15, 7:30 p.m.

Sustainability Commission
May 4, 7:00 p.m.

Community Relations Commission
May 9, 6:30 p.m.

Plan Commission
May 11 & 25, 7:30 p.m.

Appearance Review Commission
May 22, 7:30 p.m.

June
Board of Trustees
June 5 & 19, 7:30 p.m.

Family Days Commission
June 5, 5:00 p.m.

Plan Commission
June 8 & 22, 7:30 p.m.

Community Relations Commission
June 13, 6:30 p.m.

Appearance Review Commission
June 26, 7:30 p.m.

A Message from Mayor Daniel C. Shapiro on Family Days



As we enter into nicer weather, I wanted to take a moment to address the Board's plans for this year's Family Days celebration.

We have given a lot of thought and consideration as to how and whether to celebrate the Fourth of July. We are aware and sensitive to the tragedy in Highland Park last year and understand that people are still grieving. We have given thought as to what Family Days means for our community and the importance of not only remembering those who were affected, but also those who want to come together for one of our most popular events of the year. Despite the horrific shooting last year in Highland Park, we will go on. We will celebrate yet respect those who were impacted by the senseless killings.

I want to assure you that as we plan for this year's July 4th parade and other activities, we have carefully considered how to move forward together. To be clear, safety is our top priority. We have been working closely with our Police Department, Public Works Department and other agencies to ensure that all necessary precautions are taken to make Family Days as safe as possible.

This year's Family Days Parade will not only be a celebration of our nation's independence, but also a chance for us to come together as a community and show our support for one another. We do this in solidarity with our neighboring towns.

We will celebrate this year's Family Days together.

Best,
Dan

Deerfield Art Festival Returns June 3 and 4 with Amdur Productions

Amdur Productions is excited to announce its first ever art show in Deerfield.

Scheduled for 10 a.m. to 5 p.m. Saturday and Sunday, June 3 and 4, this new event takes place in the heart of downtown Deerfield and will feature about 100 juried artists showcasing and selling their one-of-a-kind pieces including paintings, photography, ceramics, furniture, jewelry, wood, fiber and more! Live music, activities for kids, painting classes, selfie stations, and the brand new "Kids Art Stop" where artists invite children to stop at their booth to learn more about the art-making process, add to the family-friendly vibe of this event. Festival food on site and several restaurants just steps away from the artist's booths will ensure that no one goes hungry!

In addition to the viewing and purchasing of art, guests are invited to bring their own gently used wall art to the festival where it will be donated to the Chicago Furniture Bank, a nonprofit that distributes furnishings and art to those leaving shelters and moving into permanent housing. Several artists from this show will also be supporting the Chicago

Art Festival Continued on Page 2

CHECK IT OUT!

Page 2:
• Mayor: Stop the Violence
Page 4:
• Public Works Open House May 20
Page 7:
• Door-to-Door Solicitation Rules

Art Festival Continued from Page 1

Furniture Bank by participating in Amdur Productions' Green Ribbon Project where artists place a green ribbon on a piece of art in their booth, and if the piece is sold, 10% of the sale will be donated.

"We've partnered with the Chicago Furniture Bank for the past couple of years, and we're looking forward to working with them again," said Amy Amdur, president of Amdur Productions. "The amount of wall art that has been donated at our shows in the past is truly incredible," she added. "It feels good to make this kind of an impact and to see so many people join us for such an important cause," she continued.

The Deerfield Art Festival is located along Park Avenue. The fest is free and there is plenty of nearby free parking. Those traveling by METRA will be pleased to know that there is a train stop right at the fest in Downtown Deerfield! Leashed dogs are welcome.

"When folks come to the Deerfield Art Festival, we hope they make a day of it and take time to visit the nearby park, local shops and great restaurants that make Deerfield such a wonderful and welcoming community," said Amdur. "We can hardly wait for this show, and our artists are very excited to be part of this new fest!"

For more information, call 847.926.4300 or visit www.AmdurProductions.com

Food Truck Wednesdays

Join us this summer for the Food Truck Wednesday Summer Series at the Jewett Park Hazel Avenue Parking Lot on May 17, June 21, July 19, August 16 and September 20.

The Village will host food trucks and kid's activities from 4:30 to 8 p.m. with live music from 5 p.m. to 7 p.m. The food vendors and entertainment will rotate month to month, so be sure to follow us on social media for a listing of vendors for each event.

A Message from Mayor Daniel C. Shapiro: Stop the Violence



It is time that we stop the hatred, the unnecessary violence and the overheated rhetoric. It is time to call out the evils of intolerance and consider good over guns, kindness over killings and civility over criminality. Giving cover to those who want an excuse to harm our kids, our community and our residents must end. The racist, antisemitic rants serve no purpose other than to energize more unnecessary killings, threats and vitriolic behavior.

According to the FBI, more than half of religious hate crimes in America in 2021 targeted Jews and were motivated by antisemitism. The Anti-Defamation League similarly found that in 2022, antisemitic incidents in America reached their highest levels on record since it started tracking incidents more than 40 years ago. Hate must not have any space for harbor.

We cannot have more mass murders than there are days of the year, nor can we turn a blind eye to outrageous acts of violence, discrimination and antisemitism. We cannot each week see children's lives gunned down in their classrooms, swastikas spray painted in our communities or people treated with disdain because of their gender, sexual orientation or color of their skin. It is harmful to who we are, to the soul of our communities and to our next generations.

Call out the hatred and stop these most challenging days where we seem to have daily newscasts about unnecessary loss of lives or acts of evil. I am confident that from moments of darkness we will find joy and hope and light. I am convinced that rather than act in ways which drive us apart, we must see each other as we should as fellow human beings. Hug your kids, tell them you love them. Call your parents, reach out to a friend you have not talked to in a while. Courage and decency are contagious, and hope will take a life of its own.

Removing Buckthorn

Buckthorn, a non-native invasive shrub or tree that can grow up to 22 feet tall, poses a serious threat to native plants and wildlife. Its rapid spread across property lines can create dense thickets that can overtake natural areas and re-invade cleared habitats if left untreated.

To combat this problem, the Lake County Forest Preserves has developed a library of free resources to help residents eradicate common or European Buckthorn. These resources include educational removal videos and articles, guides for applying herbicide, and answers to frequently asked questions.

Once a homeowner has cleared the species from their property, they can request a "Buckthorn-Free" garden flag made of weather-resistant vinyl. These flags are offered free of charge to qualifying residents, thanks to a grant from the Preservation Foundation, the charitable partner of the Lake County Forest Preserves. To apply for a flag, residents must complete a brief form on the Forest Preserves' website, *LCFPD.org*.

Help protect the native ecosystem and get involved today! Access to these free and easy-to-use resources can be found at *LCFPD.org/buckthorn* and *LCFPD.org/nativeplants*

Family Days Vendors Wanted July 4

The Deerfield Family Days arts and crafts expo is celebrating 70 years! The Family Days Commission is seeking artists and vendors to join the show on July 4th. Applications and a small fee of $25 is due no later than June 23.

The application is available on the Family Days website.

For more, information contact Jessica Sciarretta at jsciarretta@deerfield.il.us.

Crime Prevention Tips for the Summer

Tips for Homeowners :

- Keep doors to your home and cars closed and locked, including garage doors. An open door is an invitation.
- Be a good neighbor and alert police to any unusual activity in your neighborhood. Plan for vacation by having your mail and newspapers stopped or having a neighbor pick them up. Leave inside lights on timers to create the impression that your house is occupied. Be sure to set your alarm system. Have a lawn service or neighbor mow your lawn.
- Avoid home improvement scams and deception burglaries by taking a proactive approach. Be particularly alert to anyone in your neighborhood looking to perform home repairs and asking to gain entry into your home. Ask to see identification and let them know you are going to call and get verification from their company before allowing them inside. If they are legitimate, they won't mind the wait.

Tips for Drivers:

- Do not leave valuables or cash in your car. If you must leave items in the car, lock them in the trunk.
- Be alert for children playing in neighborhoods and residential areas.
- Drive safely and slowly around parks and playgrounds. More children are out playing during the summer.

Tips for Parents:

- Provide a list of phone numbers of neighbors, family and friends that your child can call in an emergency. Make sure your child knows how to dial 9-1-1 and when it is appropriate to do so.
- Know the route your child will take to and from a given location. Remind your child never to take a shortcut or deviate from the agreed-upon route.
- Establish rules for using the internet. Children should have adult supervision when online. Make sure your child knows to never give out personal information on the internet.
- Require your child to check in with a parent before leaving the house and when returning home. Teach your child that there is safety in numbers and that it is best to be with a group of friends when going places without an adult.

Keyless Entry Car Theft

Cars with keyless entry and keyless start are a growing target for thieves. With the help of modern technology, these cars may be broken into or stolen while the owner's key fob sits inside their home. Many new cars and trucks no longer require a key to unlock the doors and start the engine, instead using an electronic fob that transmits a radio signal to gain entry, or "keyless entry."

Thieves use portable amplifiers to boost the signal of fobs located in the home to unlock the vehicle doors. Once they gain entry to the vehicle they are able steal valuables from inside and possibly start the vehicle (depending on the type of vehicle). Keyless car thefts generally take less than two minutes, make little noise, and leave behind no broken glass as evidence a crime has even taken place.

Residents with cars with keyless entry can take the following precautions to lessen the chance of thieves getting into their vehicle:

- Store key fobs in a metal container or a bag designed to shield the fob signal and prevent hacking; such as RFID sleeves and Faraday bags.
- Consider adding a wheel lock or clamp to your car to deter thieves.
- Do not leave valuables such as navigation devices, purses, shopping bags or electronics in the vehicle.
- If possible, park in a garage or well-lit area with security cameras.

As always, if you see any suspicious activity call 9-1-1.

Bike Safety Tips

There are so many great reasons to ride your bike: It offers fun, freedom and exercise, and it's good for the environment.

Here are a few tips so that you'll be safe while you do so:

- Wear a properly-fitted helmet. Properly-fitted helmets can reduce the risk of head injuries by at least 45 percent – yet less than half of children 14 and under usually wear a bike helmet.
- Ride on the sidewalk when you can. If not, ride in the same direction as traffic as far on the right-hand side as possible.
- Use hand signals and follow the rules of the road. Be predictable by making sure you ride in a straight line and don't swerve between cars.
- Wear bright colors and use lights, especially when riding at night and in the morning. Reflectors on your clothes and bike will help you be seen.
- Ride with your children. Stick together until you are comfortable that your kids are ready to ride on their own.

Cop on a Rooftop

On Friday, May 19, Deerfield Police Officers will spend the day on the roof of our local Dunkin Donuts, 499 Lake Cook Road, not on surveillance, but rather raising awareness and funds for Special Olympics Illinois. Officers will participate from 5 a.m. to noon at the annual "Dunkin - Cop on a Rooftop" event in the hopes of raising $5,000. Last year over $4,000 was raised.

Consider purchasing donuts for your office or business during this event. Every donation comes with a free donut from Dunkin. As part of our commitment to this cause, we will be selling raffle tickets for $10 for a new Harley Davidson and Camper, as well as Special Olympics merchandise.

For More Communications Director Mary Anne Glowacz at 847-794-7501 or e-mail mglowacz@deerfield.il.us.

Lawn Sprinkling and Irrigation Regulations

From May 15 through September 15, lawn sprinkling regulations will be place.

Even numbered addresses may water on even numbered dates from midnight to noon and/or from 6 p.m. to midnight. Odd numbered addresses may water on odd numbered dates from midnight to noon and/or from 6 p.m. to midnight. This applies only to lawn sprinkling.

All irrigation systems are required to have a backflow prevention device called a Reduced Pressure Zone Backflow Preventer (RPZ) that is certified annually by a licensed inspector. This testing and certification must be completed every year.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the backflow prevention tracking program. The annual backflow assembly test report must be submitted electronically by your inspector via the BSI Online system at *www.BsiOnline.com*.

For more information, contact the Public Works Department at 847.317.7245.

Public Works Open House – Saturday, May 20

Join the Village of Deerfield and Deerfield Park District from 10 a.m. – 1 p.m. on Saturday, May 20, for a kid and adult friendly Open House at Deerfield's Public Works Facility, 465 Elm Street. Parking is available at the Patty Turner Center, 375 Elm Street.

This event is free for all ages and will feature:

- Tours & Exhibits
- Fun Giveaways
- Hands-On Activities
- Vehicles & Equipment
- Prizes
- Vendors & Education
- Public Works Merchandise

For more information, contact the Public Works Department at 847.317.7245.

Waukegan Road Water Main Project

The Waukegan Road Water Main Project began in early April and is expected to be completed by early September. The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction.

Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day. Public meetings were held in advance of the project for residents and local businesses.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at www.deerfeld.il.us under "Notify Me."

For more information, contact the Engineering Department at 847.317.2490.

Deerfield Flood Information

Special Flood Hazard Areas (100-year floodplain) in the Village of Deerfield are located near the Middle Fork and West Fork of the North Branch of the Chicago River. The eastern portion of Deerfield is in the Middle Fork watershed, while the western part of town is in the West Fork watershed. For a detailed map visit the Village of Deerfield website *www.deerfield.il.us* under maps and information.

Information on whether your property is in the 100-year floodplain can be obtained by visiting the Engineering Department and having a staff member help you.

Contact the Engineering Department at *847.317.2490* for further assistance.

Flood Safety

The following common-sense guidelines can help protect you from the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else. Do not drive around barriers.
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet.

Flood Recommendations

- Stay away from power lines and electrical wires. If your house is about to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the second leading cause of death during floods.
- Be alert for gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to a Village official or your gas company. Do not use candles, lanterns or open flames if you smell gas or are unsure whether your gas has been shut off.
- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry items that have dislodged themselves.
- Clean everything that has been wet. Flood water will be contaminated with sewage and other chemicals that pose severe health threats.
- Look out for animals, especially snakes. Small animals flooded out of their homes may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

More detailed information regarding flood-related issues in Deerfield is available from:

- *FEMA.gov*
- Village of Deerfield Engineering Department:
  847.317.2490
  465 Elm Street
  Deerfield, IL 60015
- Deerfield Public Library:
  847.945.3311
  920 Waukegan Road
  Deerfield, IL 60015

BOARDREPORT

The following is a synopsis of actions taken by the Village Board since the last issue of D-Tales. For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit the Village's website at *www.deerfield.il.us*.

Village board action

Accepted a report of staff about Climate Action Report update

Approved a Resolution authorizing a purchase and sale agreement and the acquisition of real property

Approved an Ordinance amending Chapter 3 of the Municipal Code regarding alcoholic beverages

Approved a Resolution authorizing a license agreement with the Village of Bannockburn

Approved a Resolution authorizing an award of contract to Unmanned Vehicle Technologies for a drone

Approved a Resolution authorizing an agreement for professional therapy services with First Responders Wellness Center, LLC

Approved a Resolution authorizing an agreement with Ryan, LLC to provide Phase II TIF consultant services for creation of Lake Cook Road TIF District (TIF#4)

Approved a Resolution granting a one-year extension to a development schedule for a commercial planned development (REVA)

Approved a Resolution to award a contract for 2023 water system valving improvements

Proclamations and Honors

Proclamation recognizing Women's History Month

Proclamation recognizing Arbor Day

Proclamation recognizing Telecommunicator Week

Recognized Joshua Davlatov, USA Judo Youth National Champion Intermediate Male Under 42kg

Recognized Drew Spiegel, Out-going Community Relations Commission Student Member

COMMUNITYCALENDAR

DEERFIELD PARK DISTRICT

For more information or to register for Park District programs, call 847.945.0650, or visit www.deerfieldparks.org.

Apply online NOW for Summer Jobs including Summer Camp Counselors, Swim Instructors, Summer Groundskeeper, Lifeguard and Pool Cashiers at the Golf Course at *deerfieldparks.org/jobs*

Stop to shop for great deals and support young entrepreneurs at our Flea Market on Sunday, May 21 from 1-3 p.m. in the Jewett Park Community Center's parking lot. Kids will be selling their old games, books, toys, stuffed animals, sports equipment, bikes, trading cards and more!

Pool passes are on sale now. Take advantage of our EARLY Bird rate through May 26.

Re-Use-A-Rama is returning to the Sachs Recreation Center on June 10 from 11 a.m. – 1 p.m. Visit *deerfieldparks.org/event*s for a full list of accepted items!

Remaining permanent tee times for the 2023 season at Deerfield Golf Club are available at *deerfieldgolf.org*

For more information or to register for Park District programs, call *847.945.0650* or visit *deerfieldparks.org*

DEERFIELD PUBLIC LIBRARY

All Library programs are free and open to the public. Program descriptions and advance registration at *deerfieldlibrary.org*, click on "Programs" at the top. Questions? Email *reference@deerfieldlibrary.org*

Tuesday New Movie Night
May 9, June 13, Films begin at 6:30 p.m.
The movies to be shown will be announced a couple weeks prior to the movie night. Snacks provided.

Let's Draw: Cartoon Cryptids
May 12, 4-5 p.m., Grades K-6
Learn to draw familiar creatures like Bigfoot and the Loch Ness Monster, but also lesser known beasts.

The Bonds of War (Civil War)
May 18, 7-8 p.m.
Learn the story of five immigrants from Britain and Ireland, who served in the American Civil War. Inspired by a portrait in the collection of the Bess Bower Dunn Museum.

Memory Cafe
June 7, 10-11:15 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. For more info or to register, contact Judy Hoffman, 847-580-8954, jhoffman@deerfieldlibrary.org.

Lunch & Listen: Jazz for the Generations
June 10, 12-1 p.m.
Enjoy this jazz trio live at DPL! Enjoy the extraordinary arrangements of familiar tunes from the 60s. Bring your lunch; dessert will be provided.

Chicago "Scavenger Hunt"
June 14, 7-8:15 p.m.
Come test your knowledge of Chicago's neighborhoods and connect with the city like never before.

Summer Solstice Yoga and Mindfulness
June 16, 2:30-3:30 p.m.
Explore gentle movement and stretches to stimulate the mind and body.

For more information and a full listing of events, please visit www.deerfieldlibrary.org

Farmers Market

The Village and the Farmers Market Committee are looking forward to opening day of the 29th consecutive Deerfield Farmers Market season! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning, June 11 through October 14, from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet!

Excitingly, the market will once again be focused on the promise of "food, friends and fun" with the return of many beloved market activities this season. This market promise will be delivered alongside our continued goal of presenting a market that is dedicated to providing fresh, locally grown and prepared food in a safe, open-air shopping experience.

This season, patrons will be able to enjoy many traditional market activities tailored to fit into our new market environment. Returning market activities will include live musical performances, kids' activities, civic group participation, and special events. Some of these activities were present at the market in a reduced capacity last season, but will be returning to a full schedule this season.

The 2023 Farmers Market Events Calendar will be available on the Village's website prior to the start of the season.

Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less.

We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/Farmers-Market.

10 Tips to Reduce Mosquitoes

The South Lake Mosquito Abatement District offers the following tips to defend yourself from mosquitoes and the West Nile Virus.

Every week:

- Tip free-standing containers such as flowerpots, watering cans and buckets.
- Change the water and clean bird baths.
- Empty water that collects in folds of tarps.
- Position corrugated drain pipes to ensure drainage or dump out water.

As necessary:

- Clean leaves and debris from gutters.
- Store or recycle old tires.
- Clear debris to allow water to flow freely from drainage ditches and culverts.
- Filter or aerate ornamental ponds using a circulation pump, or stock it with fish.
- Drain or fill-in areas of your yard that remain wet for more than a week.
- Check windows and screens for holes.

For more information, visit www.slmad.org

Village Vehicle Sticker Registration Beginning Mid-May

Applications for 2023 vehicle stickers will be mailed in mid-May. Stickers must be displayed on all vehicles registered or garaged in Deerfield by July 1.

Stickers for passenger vehicles cost $30 if purchased by June 30. After June 30, a 50 percent late penalty is assessed. If you do not receive your application, you still need to have your stickers by July 1.

Additional applications are available online or at Village Hall.

The Village offers an online payment system for vehicle stickers. Visit *www.deerfield.il.us* and click the "Pay Online" button on the website's homepage. There is no additional charge for online payment.

Additional vehicle sticker purchasing options include in-person at Village Hall, returning the renewal application by mail, or using the payment drop box located in the median just south of Village Hall on Jewett Park Drive.

This year's vehicle sticker design features a "Climate Action Plan" theme. The Village has set a goal to reduce carbon emissions by 45% by 2030 and become carbon neutral by 2050.

Remember, the deadline to display a new 2023 sticker is July 1.

For more information, contact the Finance Department at 847.945.5000 or visit www.deerfield.il.us

Dementia Friendly

West Deerfield Township is planning a celebratory event to highlight all the Dementia Friendly work the township has accomplished after being recognized as a dementia friendly community.

The event is on Thursday, May 18 at Deerfield Village Hall from 1:00 to 2:30 p.m. with a refreshment reception following.

Learn why West Deerfield Township is a Dementia Friendly community that supports, empowers and understands fellow community members and families living with dementia.

There will be a panel discussion and information will be available about local assistance for those with dementia. All residents of the Township are invited.

Please RSVP to Alyson Feiger, Township Supervisor, at *alysonfeiger@westdeerfield*.org or call *847.945.0614*.
Office at 847.719.7400.

DEERFIELD AREA HISTORICAL SOCIETY

The Deerfield Historic Village will be open for tours Sundays 2 p.m. to 4 p.m., June through September.

The site, located at the southwest corner of Kipling & Deerfield Roads, includes the Caspar Ott log cabin (the oldest house in Lake County), the little red school house, the carriage house, and the Luther and Sack homes - take a step back in time!

The DAHS survives because of its volunteers. Please consider joining us. If you have an interest in volunteering for events, helping with the website, corporate fundraising, gardening, giving tours, etc., please email us at *deerfieldhistory@gmail.com*

DAHS Annual Spaghetti Dinner Fundraiser

Did you know Deerfield played a significant role in the Underground Railroad in Lake County, Illinois? Find out how the Ott and Wilmot families assisted those going North in search of freedom.

Join the Deerfield Area Historical Society for the Annual Spaghetti Dinner Fundraiser on Tuesday, May 23, 5:30 – 7:30 p.m. at the Patty Turner Center in Deerfield.

Enjoy a spaghetti dinner catered by Deerfield's own Italian Kitchen and a special presentation by Nicole Stocker of the Lake County Forest Preserve's Dunn Museum.

Register online at *dbrchamber.com* or email us at deerfieldhistory@gmail.com. Bring the whole family, $25 per person, $15 students. All proceeds benefit the Deerfield Area Historical Society and Historic Village.

ComEd FREE Energy Efficiency Program

The Village of Deerfield's Sustainability Commission has endorsed and tested a free Energy Efficiency Program that can save Deerfield residents an average of $377 annually!

The program, funded by ComEd customers, offers a range of free products and services including showerheads, LED lightbulbs, pipe insulation, programmable thermostats, and a one-hour assessment to help reduce energy usage and save money.

Certified professionals authorized by ComEd perform the program, and both in-person and virtual assessments are available.

The Sustainability Commission encourages Deerfield residents to take advantage of this free program and schedule their assessment today at *855.433.2700*.

To learn more and discover additional ways to save, visit www.deerfield.il.us/green or ComEd.com/HomeSavings.

Door-to-Door Solicitor Rules

Solicitor season is upon us. Solicitors must adhere to the following guidelines and rules regulating door-to-door solicitation:

- Must cease solicitation upon owner or occupant request.
- Must obey posted No Solicitors signs.
- Must carry and display their permit while they are soliciting.
- May only ring bells, knock or engage with residents for solicitation between the hours of 9:00 a.m. and 9:00 p.m.

If a solicitor does not display or cannot produce a permit, they may not be licensed to solicit within Deerfield and can be reported to the Deerfield Police Department by calling *847.945-8636*. Please visit the Solicitor Permit page on the Village website to see a list of current solicitor permit holders.

To prevent solicitors at your home, prominently display a no soliciting notice on or near the main entrance by way of a sign measuring at least 3 inches by 4 inches in size. No soliciting notices should read in letters at least 1/3 inch in height "No Solicitors Invited" or comparable language. It is illegal in the Village of Deerfield to solicit at a location where proper No Soliciting signage has been posted.

With or without a sign, residents should not ever be afraid to exercise boundaries with solicitors by refusing to answer their door or by politely stating 'no thank you' or 'not interested' and shutting and locking their door. Remember however, that as a homeowner or occupant you may at any time ask a solicitor to leave your property. Every resident has the right to feel secure in their home, should you feel threatened or unsafe based upon a solicitor's behavior, contact the Police immediately at *847.945.8636*.

The First amendment and the U.S. Constitution protect the rights of door-to-door solicitors and preclude the ability of a community to ban or significantly limit door-to-door sales. The U.S. Supreme Court has upheld free speech for commercial purposes and the Village's ability to restrict commercial door-to-door solicitation is limited to local regulations restricting the time, place and manner of door-to-door solicitations. Homeowners and occupants, however, do have the ultimate right to determine whether solicitors shall or shall not be invited to their residences or property.

For more information, contact Deputy Village Clerk Danny VanDusen at 847.719.7404 or visit www.deerfield.il.us

TeenConnect

Deerfield's TeenConnect program aims to connect teens who are able to do outside yard work, including lawn mowing, with Deerfield residents who need the service.

The TeenConnect list will provide contact information for Deerfield teens including the name and phone number of the teen, days of availability, type of work they are willing to do and their expected rate of pay.

For more information or to sign up, visit www.deerfield.il.us or call the Village Manager's Office at 847.719.7400.

VILLAGE OF DEERFIELD

D-Tales
850 Waukegan Road
Deerfield, Illinois 60015

PRESORTED
STANDARD U.S.
POSTAGE
PAID
Permit No. 1
Deerfield, Illinois

POSTAL CUSTOMER
DEERFIELD, ILLINOIS 60015

VILLAGENOTES

Deerfield FAMILY DAYS

Save the Date!

Deerfield Family Days 2023
July 3 & 4

July 3- Shepard Park:
The Park will open at 5 p.m.
Fireworks, Food Vendors, Games & Live Entertainment!

July 4 - Jewett Park:
All-day (8 a.m. - 3 p.m.)
Activities include: Breakfast in the Park, Dog Show, Arts and Crafts Fair, Parade, 5K Run, Bike Parade, Flower Show, Games & Rides!

Donations: Family Days is funded by sponsors and donations from local residents and the Village. Please consider making a donation to Family Days at Village Hall or at *www.deerfield.il.us/familydays*. Donations help pay for the July 3 Fireworks and the July 4 Parade.

Parade Route: Please note that the Family Days Parade will have a new route this year due to the Waukegan Road Water Main Replacement Project. The parade will start at Deerspring Pool and head west on Deerfield Road and then north on Park Avenue before ending at Hazel Avenue.

5K Rotary Race: Register for the race at *www.deerfield.il.us*.

Questions?: Contact Ryan Oates, Public Works Analyst, at *847.719.7466*.

Village Officials:
Mayor:
Daniel C. Shapiro - 847.719.7402
E-mail: dshapiro@deerfield.il.us

Trustees:
Robert "Bob" L. Benton - 847.945.1570
E-mail: rbenton@deerfield.il.us
Larry Berg - 847.612.0777
E-mail: lberg@deerfield.il.us
Elaine Jacoby - 847.644.3354
E-mail: ejacoby@deerfield.il.us
Rebekah Metts-Childers - 847.899.1449
E-mail: rmettschilders@deerfield.il.us
Mary M. Oppenheim - 847.948.9423
E-mail: moppenheim@deerfield.il.us
William S. Seiden - 847.945.2442
E-mail: wseiden@deerfield.il.us

Village Manager:
Kent S. Street - 847.719.7400
E-mail: kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 (Switchboard and Finance)
847.719.7484 (Community Development)
847.945.8636 (Police non-emergency)

Public Works and Engineering
465 Elm Street
847.317.7245 (Public Works)
847.317.2490 (Engineering)

VILLAGE OF DEERFIELD

D-Tales

JULY/AUGUST 2023 VOLUME 45, NO. 4

INSIDE

Village News	2
Board Report	3
Community Calendar	3
Public Works Update	4
Annual Drinking Water Quality Report	5
Police Department News	9
Our Community	10
Meeting Schedule	12



4,600+
feet of distance along July 4th parade route

12
Family Days carnival rides

60
years of annual Deerfield Fourth of July festivities

Deerfield Family Days Back in Person

Deerfield Family Days will kick off another two days of fun July 3rd and 4th. Join family and friends for a holiday filled with fun and entertainment!

The spectacular fireworks show will be held Monday, July 3rd, at Shepard Park with live entertainment and kids' activities. The gates will open at 5 p.m. and food and drink concessions will be available for purchase.

On Tuesday, July 4th, head on over to the festivities at Jewett Park including breakfast in the park, the dog show, and a variety of games. Join the bike parade at 8:30 a.m. at the Rosemary Terrace parking lot. *New Parade Route:* The parade starts at noon on Monday and will travel from Deerspring Pool, west on Deerfield Road and north on Park Avenue where it will end at Jewett Park.

This year's Parade Marshals are Mayor Emeritus Harriet Rosenthal and the League of Women Voters of Deerfield/Lincolnshire. Rosenthal served 12 years as Mayor and 24 years as a Village Trustee. The League of Women Voters was founded in Chicago on February 14, 1920. Since then, the League has worked to register voters, sponsor candidate forums, provide non-partisan election materials about candidates, and study issues on the local, state and national levels in order to create a better-informed electorate.

For more information please visit deerfield.il.us/familydays





Business Facade Rebate Program Update

Village staff is working with the third applicant for the Village's Business Facade Rebate Program since the program started 18 months ago. The first applicant received a grant to update the building and site at 827 and 829 Waukegan Road (theCoderSchool and Top Issue). The second applicant received approval from the Board of Trustees for a complete facade renovation at 728 Waukegan Road (former Barnes and Noble tenant space). The existing space will be divided into five (5) retail shops with office space above. The entire facade was removed and will be replaced with sleek, contemporary materials. A new outdoor patio will be part of the project. The third applicant is located at 806-808 Waukegan Road (Walter Tailor and Cherry Pit Cafe). They plan to replace all of the outdated windows, signage and awnings to give the building a fresh appearance, while maintaining its historical character. The program is set to run until the end of the year.

Interested businesses should contact Planning & Design Specialist Liz Delevitt at edelevitt@deerfield.il.us or 847.719.7483 for more information.

Harvest Fest

DEERFIELD HARVEST FEST

Deerfield's Harvest Fest is back September 9 with fun community events for everyone.

Start the day with your neighbors at the Deerfield Farmers Market between 7 a.m. and 12:30 p.m. with special kids' activities and the popular touch-a-truck.

Gates open at the intersection of Deerfield Road and Park Avenue at 4:30 p.m. We'll have live concerts from West End 40 and 7th Heaven, food, a beer tent and more. Register in advance for our bags tournament to receive a one-of-a-kind trophy.

Harvest Fest is hosted by the Village of Deerfield and the DBR Chamber of Commerce. Watch for an event mailer with more details and a list of sponsors in late August.



VILLAGE SPOTLIGHT

In May, Highland Park Mayor Nancy Rotering, City Manager Ghida S. Neukirch and Police Chief Lou Jogmen presented a Highland Park flag and certificate to Mayor Shapiro for the Village's assistance on and following the July 4th shooting. Both are now proudly on prominent display in the Village Hall lobby.

"It serves as a reminder that in times of adversity, neighboring communities can rely on each other for support, comfort and solace."

DANIEL C. SHAPIRO, MAYOR

Board Report



For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit deerfield.il.us.

VILLAGE BOARD ACTION

Approved an Ordinance amending Chapter 3 of the Municipal Code to create a new Class L Liquor License to allow for product sampling and regulations related thereto

Approved a Resolution granting an extension to a development schedule for 8 Parkway North in the Parkway North Center Planned Unit Development (Quadrangle Development Corporation)

Approved a Resolution authorizing an economic incentive agreement with 2300 Carlson, LLC (Shake Shack - 560 Waukegan Road)

Approved a Resolution adopting the All Natural Hazards Mitigation Plan

Approved an Ordinance amending the Village of Deerfield Wage and Salary Plan

Approved a Resolution to reject all bids for 2023 Street Rehabilitation Program

Approved a Resolution to award Family Days fireworks contract

Approved a Resolution approving High School Dist. 113 school resource officer agreement

HONORS AND RECOGNITIONS

Recognized National First Place Rochelle Zell Jewish High School Model UN Team

Proclaimed May Asian American and Pacific Islander Heritage Month

Proclaimed May Jewish American Heritage Month

Proclaimed May 21 - May 27, 2023, as National Public Works Week

Proclaimed May 15 - May 21, 2023, as National Police Week

Proclaimed April 28, 2023, as Arbor Day

Proclaimed June as LGBTQ Pride Month

Appointed Rai Copeland-Keefe to Fine Arts Commission

Community Calendar

Deerfield Park District
For more information or to register for Park District programs, call 847.945.0650 or visit deerfieldparks.org.

Enjoy Summer Concerts at Floral Park from 5-6:30 p.m. in July and August. Join your friends and neighbors, bring a picnic dinner, chair or blanket while different artists perform each week. Dates and artist bios can be found at deerfieldparks.org/events.

Our summer celebration of music continues as we proudly welcome the return of John Maxson and the North Shore Line to the Patty Turner Center for Elmstock II: The Summer Celebration for our 50+ adult audience on August 16 from 5:30-7:30 p.m. Call 847.940.4010 to register.

Open Pickleball at Sachs Recreation Center for all players no matter their age or ability level. Drop in and play on one of our seven courts. The spring/summer Open Play schedule runs April 3-August 11. Open play is rack format M/W/F 8 a.m.-12 p.m. $7R/9NR/Free for SRC Members.

Eat to the Beat Concerts for our young audiences and their caregivers at Jewett Park Pavilion from 11:30 a.m.-12:15 p.m. on July 5, 12, 19 & 26. Bring a picnic lunch, listen to music and play in the park!

Deerfield Family Theater Auditions for Beauty and the Beast will be held in August. Visit deerfieldfamilytheater.com to select an audition slot!

Deerfield Library
All Library programs are free and open to the public. Register in advance by phone at 847.945.3311, online at deerfieldlibrary.org, or in person at 920 Waukegan Rd. Online program description notes program platform (online, in-person, or hybrid).

Memory Cafe
July 5 and August 2, 10-11:15 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. To register, contact Judy Hoffman at 847.580.8954 or jhoffman@deerfieldlibrary.org.

Professor Moptop Presents: Grateful Dead
July 18, 7-8:30 p.m.
The program will focus on the roots of the Grateful Dead and many of the songs composed by them and others, including Johnny Cash, Chuck Berry, and Bobby "Blue" Bland.

It's Juggle Time! Become the Pro!
July 22, 10-11 a.m., Youth-All Ages
Enjoy a comedy juggling and variety show, and an interactive workshop to learn juggling and balancing skills.

Balloon Creation Station
July 26, 4:30-5:30 p.m., Ages 8-12
Learn how to make balloon creations and leave with an armful of colorful balloons.

Jigglejams Concert
August 5, 10-11 a.m., Youth-All Ages
Wiggle, jiggle, and giggle to Jodi Koplin's interactive songs in this fun family-friendly concert.

Lunch & Listen: Appalachia Music & Culture
August 18, 12-1:15 p.m.
Explore the music of the mountains with L.J. Slavin and his banjo, harmonica, penny whistle and musical saw. Bring your lunch; dessert will be provided.

PUBLIC WORKS BY THE NUMBERS

66 lane miles
of roadway

107 miles
of water main

110 linear miles
of storm sewers



Waukegan Road Water Main Project

The Waukegan Road Water Main Project began in early April and is expected to be completed by early September. The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction. Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day. Public meetings were held in advance of the project for residents and local businesses.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at www.deerfeld.il.us under "Notify Me."

For more information, contact the Engineering Department at 847.317.2490.



Residents learned about water main breaks at the Public Works Open House in May.

Lawn Irrigation RPZ Regulations

All irrigation systems are required to have a backflow prevention device called a Reduced Pressure Zone Backflow Preventer (RPZ). This must be certified annually by a licensed Cross Connection Device Inspector. This testing and certification must be completed every year prior to the system going into service.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the backflow prevention tracking program. The annual backflow assembly test report must be submitted electronically by your inspector at BsiOnline.com

For more information, contact the Public Works Department at 847.317.7245.

Flood Information

Natural & Beneficial Functions

Floodplains provide a lot of benefits and play a role in providing natural and beneficial functions to the Deerfield area. Parts of both the Middle and West Forks of the North Branch of the Chicago River floodplain help filter chemical run-off so these areas can maintain bio-diversity and ecosystem sustainability. They enhance waterfowl, fish and other wildlife habitats and provide open space and natural erosion control to reduce further flood damage.

Drainage System Maintenance

Keeping smaller ditches and streams free of debris can dramatically improve the run-off capacity of low-lying areas, as well as greatly reduce incidental blockage that significantly contributes to flooding. Please alert the Deerfield Engineering Department of any illegal dumping of materials into a regulated waterway as violators may be fined.

Additional Information

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess the problem and may be able to offer solutions. The localized flood protection service is provided by the Engineering Department. Anyone with questions, please contact the Engineering Department at 847.317.2490.

If you need more detailed information regarding flood-related issues in Deerfield, please visit the Additional Flood Information page on the Village website.

Reminder: Sprinkling Restrictions in Effect

The Illinois Division of Water Resources requires that municipalities using Lake Michigan water restrict lawn sprinkling between May 15th and September 15th. Accordingly, Deerfield's restrictions during this period are as follows:

Even numbered addresses may sprinkle on even numbered days from midnight to noon and from 6:00 p.m. to midnight.

Odd numbered addresses may sprinkle on odd numbered days from midnight to noon and from 6:00 p.m. to midnight.

VILLAGE OF DEERFIELD

Annual Drinking Water Quality Report Village of Deerfield 2022

This information is being published in accordance with the 1996 Safe Water Drinking Act as directed by the U.S. Environmental Protection Agency.

We are once again pleased and proud to present to you the Annual Drinking Water Quality Report. This Consumer Confidence Report (CCR) is designed to inform you about the water we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. The Village is committed to ensuring the quality and delivery of your water. We hope you find this information useful.

The drinking water provided by the Village meets or exceeds all State of Illinois and United States Environmental Protection Agency (EPA) regulations and we are not operating under any variance or exemption from the established drinking water regulations or standards. Opportunities for participation in the decision making processes that affect drinking water quality are also available at the monthly Village of Deerfield Board meetings on the first and third Mondays of every month. If you have questions about this report or water quality, please contact Tyler Dickinson, Responsible Operator in Charge, at 847.317.7245, or e-mail pw@deerfield.il.us.

Source of Drinking Water

The Village of Deerfield purchases all water from the City of Highland Park. The City of Highland Park draws its raw water from a 54-inch intake pipe located a mile off shore in Lake Michigan at a depth of approximately 30 feet. In addition, there are two smaller pipes used as secondary intakes, which are 16 and 20 inches in diameter.

Susceptibility to Contamination

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those elements may be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Susceptibility is defined as the likelihood for the source water of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA (IEPA) considers all surface sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution. Hence, the reason for mandatory treatment for all surface water supplies in Illinois.

As mentioned above, Highland Park has three intake lines. The 54-inch intake pipe is normally used alone, with the two smaller intakes used to augment high demand or during maintenance of the 54-inch pipe. As these are closer to the shore, they have a greater susceptibility to be influenced by potential sources of contaminants. Regardless of which lines are used, the finished water leaving the Highland Park Water Plant always meets or exceeds all IEPA and EPA regulations.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791. To access the Highland Park Water Assessment Summary, visit rb.gy/k8epg.

Contaminants Monitoring Results

The Village of Deerfield and City of Highland Park routinely monitor for contaminants in your drinking water according to Federal and State Laws.

General

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

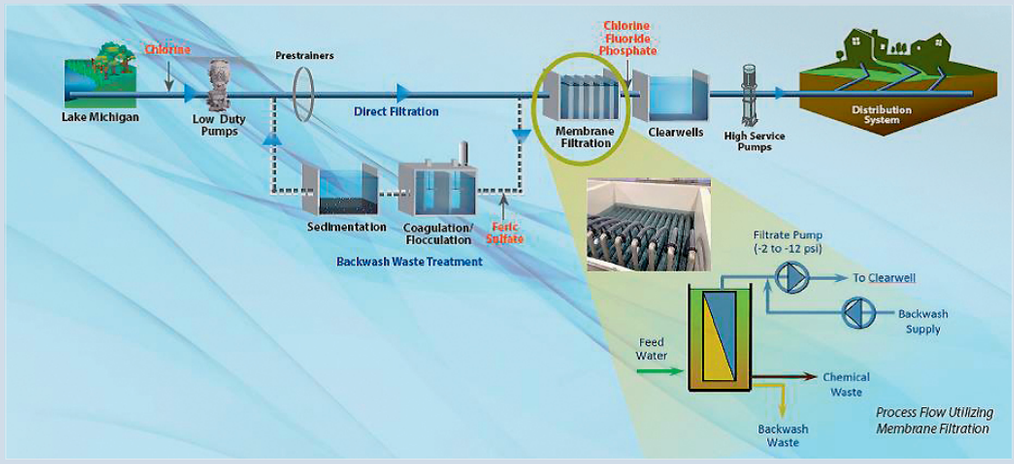
Radioactive contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

2022 Water Quality Data – January 1, 2022 to December 31, 2022

Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Microbial Contaminants							
Turbidity (%<0.3 NTU)*	n/a	0.3 NTU	100%	n/a	NO	2022	Soil runoff
Turbidity (1.0 NTU)* Highest Single Measurement	n/a	1 NTU	0.166 NTU	n/a	NO	2022	Soil runoff
Disinfection / Disinfection Byproducts							
Chlorine (ppm)	4	4	1.55	0.50-2.13	NO	2022	Water additive used to control microbes
Total Haloacetic Acids [HAAS] (ppb)	n/a	60	21.6	7.8.-35.3	NO	2022	By product of drinking water chlorination
TTHM [Total Trihalomethanes] (ppb)	n/a	80	59.2	17.0-66.4	NO	2022	By product of drinking water chlorination
Inorganic Contaminants							
Barium (ppm)	2	2	0.019	.019-.019	NO	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.708	0.708-0.708	NO	2022	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Coliform	0	0	0	0 Plus	NO	2022	Naturally present in the environment

This schematic drawing details the water purification process that Highland Park utilizes to provide clean water to all of its customers, including Deerfield.



Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Unregulated Contaminants reported by the City of Highland Park							
Sulfate (ppm)	n/a	n/a	23.0	23.0-23.0	NO	2022	This contaminate is not currently regulated by the USEPA. However the state regulates. Naturally occurring; discharge from metal factories.
Chloride	n/a	n/a	20.0	20.0-20.0	NO	2022	This contaminant is not currently regulated by the USEPA. However the state regulates. Naturally occurring; run-off from road salts.
Calcium	n/a	n/a	35	35.0-35.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Magnesium	n/a	n/a	13	13.0-13.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Sodium	n/a	n/a	13	13.0-13.0	NO	2022	Erosion from naturally occurring deposits. Used in water softener regeneration.
Hardness Total (ppm as CaCo3)	n/a	n/a	140	140-140	NO	2022	Erosion from naturally occurring deposits.
Alkalinity	n/a	n/a	98	98-98	NO	2022	Erosion from naturally occurring deposits.
Total Dissolved Solids	n/a	n/a	170	170-170	NO	2022	Erosion from naturally occurring deposits.

Lead and Copper

The IEPA lead and copper testing program began in 1992. Due to consistent low concentration levels of lead and copper, the Village has been placed on a reduced testing cycle by the Illinois Environmental Protection Agency (IEPA) and is only required to test every three years. Currently, a round of testing consists of 30 samples. Our most recent round of lead and copper testing took place in 2021 with all samples reporting below the action levels for lead and copper. Copies of the lead sampling results are available on the Village website at deerfield.il.us. Our next round of testing will occur in 2024.

The Village of Deerfield is in full compliance with all State and Federal regulations governing the control of lead and copper within public drinking water supplies. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Deerfield is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at epa.gov/safewater/lead.

Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. The following table shows the results of our lead and copper monitoring for the period of January 1 to December 31, 2021.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	#Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	#Sites Over Copper AL	Likely Source of Contamination
0	15ppb	0 ppb	0	1.3ppm	1.3 ppm	0.19 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

In the previous tables you will find many terms and abbreviations you may not be familiar with. To help you better understand these terms we have provided the following definitions:

ppm - parts per million or milligrams per liter (mg/l) or one ounce per 7,350 gallons of water.

ppb - parts per billion or micrograms per liter (mcg/l) or one ounce per 7,350,000 gallons of water.

ppt - parts per trillion or nanograms per liter (nanograms/l) or one ounce per 7,350,000,000 gallons of water.

NTU - Nephelometric Turbidity Unit, used to measure of the cloudiness in drinking water.

% < 0.3 NTU - percent samples less than 0.3 NTU.

Mrem/yr - millirems per year, used to measure radiation absorbed by the body.

pCi/l - picocuries per liter, used to measure radioactivity.

 # pos/mo - number of positives per month.

AL - Action Level or the concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

MCL - Maximum Contaminant Level or the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

n/a - not applicable.

About The Data

Organic Carbon - The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Turbidity (NTU) - Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration and disinfectants.

Sodium - There is not a state or federal MCL for sodium. Monitoring is performed to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Lead & Copper - The Village of Deerfield has been in compliance with regulations for lead and copper control. (See Lead and Copper Explanation on page 7.)

Unregulated Contaminants - A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

In addition to the above mentioned tests, Deerfield continuously monitors and tests your water through our water control system as well as weekly physical samples. These samples are submitted to the IEPA certified Central Lake County Joint Action Water Agency for analysis. This ensures a rapid response should there ever be a problem.

Special Information Available

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791.

Top Ways to Conserve Water

Conserving water is easy if you follow these helpful tips:

- Test for a leaking toilet by adding food coloring to the tank.
- If any color appears in the bowl after 30 minutes, your toilet is leaking. Leaking toilets can waste thousands of gallons of water. Flush as soon as the test is done, since food coloring may stain the tank.
- Use water-conserving plumbing fixtures and water-flow restrictors on sinks and showers. Bathroom facilities typically constitute 75% of the water used in homes.
- Run your dishwasher and washing machine when you have a full load.
- Take a short shower instead of a bath. A bath uses 30 to 50 gallons of water. Showers use about a gallon of water per minute.
- Store drinking water in the refrigerator instead of letting the tap run every time you want a glass of cool water.
- Never put water down the drain when there may be another use for it such as watering a plant or garden, or doing housework.
- Be conscientious of the amount of water you use when running your garbage disposal. Have your food scraps cut into small pieces so they can be disposed of quickly, minimizing the amount of time you need to run the faucet.
- For landscaping and gardens, choose plants that are native to the area in which you live or plants that are drought resistant. Native plants are accustomed to the natural amount of precipitation that occurs in the area where they are found and normally do not require any additional watering. Group plants together based on similar watering needs.
- Water your lawn and/or garden during the coolest part of the day to minimize evaporation. Apply water slowly, exactly where it is needed. Position sprinklers so that water lands on the lawn and shrubs, not on paved areas. Keep in mind that sprinkling restrictions are in place from May 15 - September 15.

For More Information

If you have any questions about this report, your water quality in general, or simply want more information, please contact the Village of Deerfield Water Department at 847.317.7245 or pw@deerfield.il.us or visit our website at deerfield.il.us.

Police Department News

Fireworks Safety Tips

The Fourth of July should be a fun time with great memories. The optimal way to enjoy fireworks will be at the Deerfield Family Days professional display at dusk on July 3rd, 2023, at Shepard Park. The use of fireworks in Deerfield is significantly restricted by Village Ordinance.

Each July 4th, thousands of people nationwide, most often children and teens, are injured while using consumer fireworks. Also, unsanctioned fireworks can have unintended consequences for combat veterans with post-traumatic stress disorder; while veterans anticipate the sound of fireworks on the 4th of July, civilians who shoot them off on random days before and after the holiday can be a source of real anxiety.

Curfew

Our curfew ordinance was created for the safety of minors as well as to maintain the quality of life throughout Deerfield. It is applicable to those 17 and Under:

Sunday - Thursday: 11 p.m. - 6 a.m.
Friday - Saturday: 12:00 a.m. - 6 a.m.

Drivers under the age of 18 may not operate a motor vehicle between the hours of 10 p.m. and 6 a.m., Sunday through Thursday, and between 11 p.m. and 6 a.m., Friday and Saturday. During allowed driving times, the number of passengers is limited to one person under the age of 20, unless the additional passenger is a sibling, step-sibling, child, or step-child of the driver.

Exemptions in the law allow new drivers to drive to and from employment or school-sanctioned activities outside the restricted times. Underage drivers convicted of violating the new driving curfews may have their driver's license suspended.

2023 Cop on a Rooftop

Members of the Police Department, in cooperation with Dunkin' of Deerfield, participated in the annual Cop on a Rooftop event on May 19 to benefit the Special Olympics Illinois Law Enforcement Torch Run. Department members called down to customers from the roof of Dunkin' while others collected donations on the ground with Special Olympics Gold Medal Winning Athlete and Global Messenger Ella Stoklosa. Lutheran Church Charities K-9 Ministry were also in attendance with Comfort Dogs. More than $4,200 was raised at the Deerfield location for Special Olympics Illinois.



Overnight Parking

By Village Ordinance, vehicles are not allowed to park on the street between the hours of 2 a.m. and 6 a.m. This ordinance helps to reduce crime and improve the overall safety and appearance of our community. If you require an exception, call the Deerfield Police non-emergency number 847.945.8636, before 2 a.m., and be prepared to provide the license plates of the effected vehicles.

Police Department Lobby Closure

The Police Department's Communications Center is getting an upgrade and expanding. During construction there may be times the Police Department lobby will be closed to the public as a safety precaution. If you need police service, please call 847.945.8636. For the records department, please contact 847.945.5007.

The Communications Center was last remodeled more than twenty years ago. The dispatch consoles were later replaced in 2004. The Center was originally designed to accommodate dispatching personnel to provide service for two communities, Deerfield and Bannockburn. Since that time, the Center has seen modest growth with the addition of Riverwoods and Lincolnshire, resulting in significant use of the center and equipment which is staffed and operational 24 hours a day, seven days a week.

STAY CONNECTED

Instagram: deerfieldpolice
Nextdoor.com: Deerfield Police Department

In 2022, the Deerfield Police Communications Center managed a total of 59,051 calls for service.

15,483
Deerfield calls for service

8,091
Bannockburn Police calls for service

5,476
Riverwoods Police calls for service

19,139
Lincolnshire Police calls for service

10,862
Communications Center calls for administrative issues



VILLAGE HISTORY

The Historic Village consists of five buildings dating from 1837 to 1905 that offer you a look at a typical prairie community.

George Luther House, c. 1847
This is a well preserved example of the larger "three room log cabin" built before the arrival of the first sawmill in 1850. After the Civil War, the house was modernized by the addition of Greek Revival white siding and green trim. The building houses a visitor center and exhibits.

Bartle Sacker Farmhouse, c. 1854
Nicknamed "The Little House on the Prairie," this two-story frame house is furnished with artifacts used in the daily life of an active farm family. View photos of the farmhouse being moved to the Historic Village from its original site at 1428 Waukegan Road at digitalpast.org.

Little Red Schoolhouse, c. 1890
Is a replica of a 19th century One-room school furnished with period school items. Every child in District 109 attends class for one day at the schoolhouse as part of their local history program.

Carriage House, c. 1905
Antique carriages and farm equipment are housed in this replica. The Carriage House was built with materials salvaged from four area buildings, and the first four carriages were put on display in 1984.



Caspar Ott Log House, c. 1837
The one-room log home where journeyman tailor Caspar Ott (1814-1876) and his wife, Catherine Trier (1816-1891), raised their seven children is the oldest standing building in Lake County. In 1970, just one week before it was to be demolished, the log house was discovered under the plaster walls of the dining room in the Siljerstrom farmhouse, located on the east side of Sanders Road. In 1971, the log house was moved to the Deerfield Historic Village.

A Look Back in Time

"The roots of a community are in its history and Deerfield is fortunate to have our early beginnings preserved at the Deerfield Historic Village."

JEAN SPAGNOLI
PRESIDENT,
DEERIELD AREA
HISTORICAL SOCIETY

Deerfield Area Historical Society

Tour the Deerfield Historic Village
The Deerfield Area Historical Society hosts free tours of the Deerfield Historic Village, located at the corner of Deerfield Road and Kipling Place, on Sundays from 2 to 4 p.m. from June through September. Visit historic buildings ranging from Lake County's oldest log cabin to a one-room schoolhouse that has been a favorite of children for many years. The Historical Society, a donor-supported, nonprofit organization, maintains the Historic Village.

Save the Date:
DAHS Annual Fall Festival
Sunday, October 1
Noon to 4 p.m.
Deerfield Historic Village
Enjoy the afternoon with fun for the whole family! Step into Deerfield's past with activities, exhibits, food, craft show and historic building tours.

Attention Crafters
The Historical Society is looking for traditional crafters who would like to join the Fall Festival. Show off your talent: knitting, weaving, woodworking, etc. Demonstrate your craft (if possible) and sell your wares. If interested, email deerfieldhistory@gmail.com and ask for an application.



Farmer's Market - Food, Friends and Fun



The Farmers Market season is underway with lots of food, friends and fun! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning through October 14 from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet! Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less. We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/ Farmers-Market.

District 109 Updates

Although it's summer, there's still a lot happening at District 109! Follow us on Facebook and Twitter at DPS109.

The first day of the 2023-2024 school year is Monday, August 21. We look forward to seeing all of our students and staff back at school!

As the school year draws closer, we are always in need of substitute teachers. You can set your schedule of how often you work! Fill out an application today at dps109.org/jobs.



Come visit us at the Deerfield Farmers Market on Saturday, August 26th! Our superintendent and Board of Education members will be there to say hi, answer questions, and hand out some District 109 swag!

Congratulations to the Class of 2023 from Caruso and Shepard Middle Schools! We wish you well as you head off to Deerfield High School!

DID YOU KNOW?

Wilmot School recently celebrated its demisemi-septcentennial! (That's 175 years!) The school held a day-long party in early June full of activities. Students and staff also recently opened a time capsule from 1997 that showcased what elementary students used at the time. Among the items: a Tamagotchi, Beanie Babies, Hot Wheels, a Michael Jordan poster, and more! This year's group put items inside a new time capsule that will be opened 25 years from now!

VILLAGE OF DEERFIELD

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 | deerfield.il.us

PRESORTED
STANDARD U.S.
POSTAGE
PAID
PERMIT NO. 1
DEERFIELD, ILLINOIS

Postal Customer
Deerfield, Illinois 60015

VILLAGE OFFICIALS

Mayor
Daniel C. Shapiro
847.719.7402
dshapiro@deerfield.il.us

Trustees
Robert "Bob" L. Benton
847.945.1570
rbenton@deerfield.il.us

Larry Berg
847.612.0777
lberg@deerfield.il.us

Elaine Jacoby
847.644.3354
ejacoby@deerfield.il.us

Rebekah Metts-Childers
847.899.1449
rmettschilders@deerfield.il.us

Mary M. Oppenheim
847.948.9423
moppenheim@deerfield.il.us

William S. Seiden
847.945.2442
wseiden@deerfield.il.us

Village Manager
Kent S. Street - 847.719.7400
kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015

Switchboard and Finance
847.945.5000

Community Development
847.719.7484

Police non-emergency
847.945.8636

Public Works and Engineering
465 Elm Street
847.317.7245
847.317.2490 (Engineering)



May 17, June 21, July 19, Aug. 16, Sept. 20

4:30 p.m. to 8 p.m. at Jewett Park Hazel Avenue Parking Lot

Live Music | Kids Activities

Sponsored by: The Village of Deerfield

MEETING SCHEDULE

For a complete list of meetings, please visit deerfield.il.us. *Times/dates subject to change.*

July

Board of Trustees
July 5 & 17, 7:30 p.m.

Community Relations Commission
July 11, 6:30 p.m.

Plan Commission
July 13 & 27, 7:30 p.m.

Appearance Review Commission
July 24, 7:30 p.m.

August

Board of Trustees
August 7 & 21, 7:30 p.m.

Community Relations Commission
August 8, 6:30 p.m.

Plan Commission
August 10 & 24, 7:30 p.m.

Appearance Review Commission
August 21, 7:30 p.m.

VILLAGE OF DEERFIELD

D-Tales

SEPTEMBER/OCTOBER 2023 VOLUME 45, NO. 5

INSIDE

Village News	2
Board Report	3
Community Calendar	3
Public Works News	4
Police Department News	5
Our Community	6
Meeting Schedule	8



Harvest Fest Returns September 9 on Park Avenue

Deerfield's Harvest Fest is back September 9 on Park Avenue with fun community events for everyone.

Start the day at the Deerfield Farmers Market between 7 a.m. and 12:30 p.m., featuring a touch-a-truck event. RC Juggles will also be at the market from 9 a.m. to noon creating free, custom-made balloon art and filling Jewett Park with giant bubbles.

Visit Deerfield Road and Park Avenue Saturday afternoon for music, food and fun. Gates open at 5 p.m. for events including a live concert, food vendors, a beer tent and a bags tournament.

The event will have live music from West End 40 from 5 p.m. to 6 p.m. followed by 7th Heaven from 6:30 p.m. to 9:00 p.m. Get ready for the annual Harvest Fest bags tournament. Participants are encouraged to register early on the Village's website. Food vendors include Rosebud-Deerfield, Caldwell's Grille, The Wild Roaster, Nothing Bundt Cakes, Serna's Grill, Mario's Cart, Da Pizza Dude and La Humita. Bring a chair and enjoy the show!

Harvest Fest is hosted by the Village of Deerfield and the DBR Chamber of Commerce. Thank you to our sponsors, Parkway Bank, KGH Autism Services and Lakeshore Recycling.

For more information please visit deerfield.il.us

7th
year for Harvest Fest

8
food vendors

1,000+
estimated 2022 attendance

44
bags tournament teams in 2022



Sign up for the Solar Tour

Do you want to learn more about the benefits of solar energy or sing the praises of your own solar panels? Save the date and mark your calendars for September 30!

The Village of Deerfield is partnering with the Illinois Solar Education Association (ISEA) to spread the word about solar right here in Deerfield!

The Solar Tour is an annual, free event that offers the public the opportunity to view innovative green homes and buildings and see how solar energy can be used efficiently. The Tour is a chance for everyone to view affordable and practical technologies in their own neighborhood that benefit the environment and are part of the solution to our nation's energy issues.

Register to attend the 2023 Solar Tour at illinoissolar.org



My Name is Lopez: Viewing & Discussion

Thursday, September 28, 6:00-8:30 p.m.
Deerfield Public Library

Guitarist/singer Trini Lopez was born of undocumented Mexican immigrants and overcame all odds in 1960s America to become a true American rock and roll legend, and one of the first Latino rock stars. Co-producer, and former Deerfield resident, Gary Gand will discuss the 2021 documentary following the screening.

Presented in partnership with the Deerfield Community Relations Commission in recognition of National Hispanic Heritage Month.



PUT THE 'DEAR' IN DEERFIELD

Every act of kindness, large or small, spontaneous or planned, defines the spirit of our community. The Deerfield Community Relations Commission seeks to shine a light on acts of kindness that make Deerfield a special place to live and work. The Commission invites you to share a story of a person or group that illuminates the "Dear in Deerfield."

Visit deerfield.il.us or use the QR Code to share your story. Watch this space for updates.

Board Report

For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit deerfield.il.us.

VILLAGE BOARD ACTION

Approved a Resolution to award contract for an ADA Transition Plan

Approved a Resolution authorizing purchase of two new Police administrative vehicles

Approved an Ordinance authorizing an Amendment to the Deerfield Park District special use to permit Phase 2 renovations to Jewett Park

Approved an Ordinance authorizing Amendments to the Deerfield Zoning Ordinance to create a new entertainment and limited retail business zoning district south of Lake Cook Road

Approved a Resolution approving an agreement for Police peer support and mental health network participation with Velan Solutions, LLC

Approved an Ordinance authorizing an Amendment to the Tennaqua special use to allow changes to the Tennaqua Master Plan and renovations to the Tennaqua Club at One Tennaqua Lane

Approved a Resolution amending the annual fee resolution of the Village of Deerfield regarding construction fees for patios/walkways/ other miscellaneous slabs and solar permits



HONORS AND RECOGNITIONS

Recognized Mason Tepper with Worry Free Wednesdays (above)

Recognized Lisa Dunn for service to Appearance Review Commission

Appointed Sherry Flores to Chair of Appearance Review Commission

Appointed Amy Charlson to Appearance Review Commission

Appointed Dustin Goffron to Appearance Review Commission

Recognized Alex Shvartsman, USA Judo Youth National Champion Intermediate Male Over 42kg

Proclaimed June 19 as Juneteenth in the Village of Deerfield

Community Calendar

Deerfield Park District
For more information or to register for Park District programs, call 847.945.0650 or visit deerfieldparks.org.

Apply Online for Jobs
Join our AMAZING team! We have a job to fit your schedule. After school & before school counselors, lifeguards, fitness floor attendants, driving range attendants, special recreation inclusion and more, at deerfieldparks.org/jobs.

Patty Turner Center's 20th Anniversary
Wednesday, September 27, 5:30 p.m. Reception, 6:15 p.m. Dinner, 7:30 p.m. Concert Celebrate the Patty Turner Center's 20th Anniversary in grand style! Indulge in a delicious buffet from the Italian Kitchen of Deerfield, savor sparkling champagne and delight in an evening of music.

Deerfield Golf Club Championship
September 30 and October 1.Tournament open to all Public Play with a valid 2023 CDGA or USGA Handicap. Weekend tournament with, 18 Hole round with cart (shared), hole contests, medium range balls and tee gift, putting championship contest following Round 1.

Halloween Hoopla Family Fun Fest
Saturday, October 21, 2-4:30 p.m. Join us for an afternoon of Halloween fun featuring kid's games, a hayride, inflatables, Trick or Treat Trail, costumed characters, balloon twisters, a magician, face painting, entertainment and more!

Deerfield Library
All Library programs are free and open to the public. Register in advance by phone at 847.945.3311, online at deerfieldlibrary.org, or in person at 920 Waukegan Rd. Online program description notes program platform (online, in-person, or hybrid).

Memory Cafe
September 6 & October 4, 10:30-11:45 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. To register, contact Judy Hoffman at 847.580.8954 or jhoffman@deerfieldlibrary.org.

Morris, the Magic Man
September 9, 10-11 p.m., Ages 8-12
Prepare to be amazed by Morris the Magician in this show filled with magic, puppets, and fun.

Super Stolie Bilingual Show
September 13, 4-5 p.m., Kids & Families
Join us for a fun and educational show where you'll sing, dance, and learn some Spanish.

Let's Draw: Hilarious Hiking
September 22, 4-5 p.m., Grades K-6
Let's go on a cartoon hike where you decide where we go, who we meet, and what happens next!

Take a Minute for Medicare
October 11, 6:30-8 p.m.
We will help you prepare for the Medicare annual enrollment, and provide key information if you are coming to Medicare for the first time.

Haunted Library (After Hours)
October 13, 5-8 p.m., Kids & Families
You are cordially invited to come in costume (no weapons, masks, or clowns) for a bone-chilling event with a variety of spooky and not-so-spooky activities.

PUBLIC WORKS BY THE NUMBERS

66 lane miles
of roadway

7,763 cubic yards
of leaves collected in 2022

6,108 cubic yards
of leaves collected in 2021

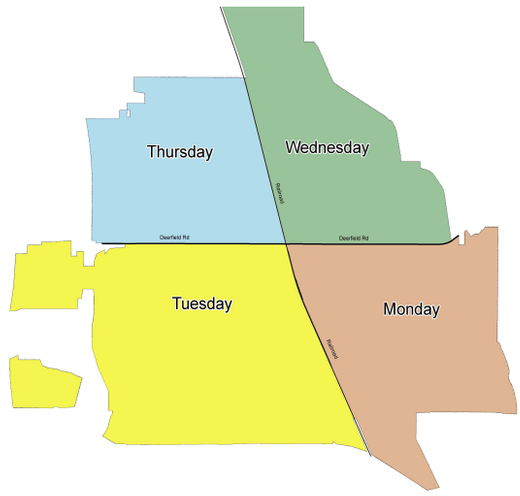
Leaf Collection Starts October 30

The Village's annual leaf collection program provides residents with an alternate way to dispose of their leaves. Residents who do not mulch or bag their leaves may rake them to the curb or carriage walk line the night before their scheduled pickup.

Beginning the week of October 30 and continuing through December 1, Public Works Department crews will make one pass by each house in the Village every week during the five-week program.

See the following guidelines and reminders for leaf pickup:

- Rake leaves into piles no greater than five feet in width.
- Do not rake leaves into the streets, sidewalks or carriage walks.
- Do not put out leaves more than one day prior to pickup day.
- Do not park on the street the day of your pickup.
- Do not rake grass clippings, sticks, rocks, branches or mud to the curb with your leaves.
- Try to put leaves out each week.
- Inclement weather may delay pickups, but crews will make at least five trips through each neighborhood.
- Direct landscapers to abide by the Village's guidelines for leaf collection.





Public Works collecting leaves.

Help Burst Those Flood Insurance Myths

An important component of promoting flood insurance is dispelling the myths that persist about it. Below are a few of the most salient misunderstandings about flood insurance and some straightforward explanations of what is really true.

MYTH: My homeowner's insurance covers flooding
Almost no homeowner's insurance policies cover flood damage. That is why the federal government created the National Flood Insurance Program (NFIP). Flood insurance is sold as a separate policy. *To find an agent, contact the NFIP call center at 800-427-4661 or www.FloodSmart.gov.*

MYTH: I don't need flood insurance because I'm not in a high-risk zone
It can flood almost anywhere, and it doesn't take much water to cause expensive damage. About 1/3 of all flood disaster assistance goes to people outside the high-risk zone. With a changing climate, extreme weather events will be more likely in the future

MYTH: I can't get flood insurance, because I'm not in a high-risk zone

Virtually anyone who lives in or owns property in an NFIP-participating community can buy flood insurance for a residential building, business, condo, or apartment, and the contents can be insured as well.

MYTH: Even if my house floods, it wouldn't be much
There may not be very much water, but that doesn't mean there won't be much damage. Only one inch of water in an average home can cause more than $25,000 in damage.

MYTH: I don't need flood insurance because FEMA gives disaster assistance
FEMA can only provide disaster assistance when the President issues a disaster declaration—this happens for less than half of all floods.

If you need more information on floods, please visit the Additional Flood Information page on the Village website.

Waukegan Road Water Main Project
The Waukegan Road Water Main Project began in early April and is expected to be completed by mid-September.

The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction. Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at by clicking on "Notify Me" at deerfield.il.us.

For more information, contact the Engineering Department at 847.317.2490.

Illinois School Bus Stop Law

With school back in session, all drivers should take a minute to familiarize themselves with the laws in Illinois as they relate to stopping for school buses. It is illegal to pass a stopped school bus in either direction while the bus stop arm is out and children are loading or unloading. If you are convicted of improperly passing a school bus, the Secretary of State can suspend your license.

The law states that a driver shall stop before meeting or overtaking, from either direction, any school bus stopped on a highway, roadway, private road, parking lot, school property or anywhere else. When the school bus displays the visual stop arm, a driver must come to a full and complete stop prior to reaching the bus and must remain stopped until one of the following occur: the school bus resumes motion, the bus driver gives a signal for the driver to proceed, or the school bus stop signals are no longer actuated.

A driver is not required to stop on a highway having four or more lanes that has at least 2 lanes of traffic in each direction provided the driver is traveling in the opposite direction as the school bus. The driver will be required to stop on a highway if he is traveling in the same direction as the school bus.

Catalytic Converter Thefts

Catalytic converter theft continues to be an issue throughout Deerfield and neighboring communities. Catalytic converters are exhaust emission control devices that reduce toxic gases and pollutants in exhaust gas and are valuable because of the metals they contain, such as copper, nickel and platinum.

Those stealing catalytic converters typically steal them by using a small portable reciprocating saw to cut the device off quickly from the underside of the vehicle. It can cost close to $2,000 to replace a missing catalytic converter, and it is illegal to drive a car without one.

To avoid theft, it is recommend to park in a garage when possible, using or adding a motion-sensing light in driveways and parking in well-lit areas when parking in public. Residents are also encouraged to call 9-1-1 to report suspicious activity immediately.



Pink Patch Patrol

The Deerfield Police Department has once again partnered with the Cancer Wellness Center of Northbrook for the Pink Patch Patrol fundraiser. Throughout the month of October you may see Deerfield Police employees wearing uniforms with pink patches to raise awareness and show their support for the cause. Pink Deerfield Police patches are available to the public for a minimum of $10 donation to the Cancer Wellness Center.

The Cancer Wellness Center provides education, wellness services and psychosocial support to those impacted by cancer and their loved ones. In 2022 the Deerfield Police Department raised $2,000 through the Pink Patch Patrol.

9PM Routine

The 9PM Routine is designed to help you prevent burglaries and thefts from your home, cars or personal property. Too often these are crimes of opportunity perpetrated by criminals looking for an easy target. An unlocked car with valuables easily visible is an irresistible temptation for some thieves. Similarly, a residence with poor exterior lighting or an open garage door might entice a burglar to take a closer look at your property.

Every night at 9 p.m., we encourage the community to: BRING IN valuables from your car, yard, and patio; LOCK UP your car, house, windows, garage, gates and shed; TURN ON exterior lights and alarm systems.

In 2022, the Deerfield Police Department raised $17,775 for charities and non-profit organizations.

$4,500

Special Olympics Illinois Cop On A Rooftop

$2,375

Special Olympics Illinois Law Enforcement Torch Run

$2,000

Cancer Wellness Center of Northbrook Pink Patch Patrol

$8,900

The Cure Starts Now Beard It Up Campaign

WRF 101





WATER RECLAMATION FACILITY

Since 1956, the Village of Deerfield has owned and operated a wastewater treatment plant known as the Water Reclamation Facility (WRF), or the Wastewater Treatment Plant. The plant is located at 1045 Hackberry Road, and an innovative reconstruction of the facility was completed in 2013. The facility is designed to meet water quality requirements determined by the Illinois EPA.

Over the years, the equipment, staff and regulations have changed, but the results are the same – turning waste into a resource. Each day, regardless of conditions, the WRF treats approximately three million gallons of wastewater.

The WRF by the numbers in 2022:

880 million gallons

of wastewater cleaned

98%

of all pollutants cleaned

61.5 acres

of farmland fertilized with biosolids

Treatment Process

The process begins with the collection of wastewater from each home or business in the Village.

This is done via underground pipes and manholes that direct all of the flow to the WRF. The raw wastewater is pumped up into our headworks building where it is screened and de-gritted.

The fine screens act as strainers, letting the liquid go through and pulling out plastics and paper products (mostly wet wipes, or "flushable wipes," which should, in fact, never be flushed).

Next, the grit or heavy inorganic material such as sand, egg shells, coffee grounds, etc. are settled out and removed. The wastewater then flows to aeration tanks where it is mixed in with millions and billions and trillions of bacteria and other micro-organisms that consume the organic material and turn it from dirty to clean.

This soup of microorganism-filled water flows to the secondary clarifiers, where the microorganisms settle to the bottom and the clear water comes off the top. This treated water flows down to the UV disinfection channels where any remaining bacteria and viruses are destroyed by UV lights that are in the water, like an underwater tanning bed. Finally, this screened, de-gritted, biologically treated, clarified and disinfected water is discharged to the West Fork of the North Branch of the Chicago River, which runs along the west side of the WRF.

The microorganisms and solids that settled in the clarifiers are constantly pumped back into the aeration tanks so that we have a steady supply of microorganisms. A portion of these solids need to be removed from the treatment process to keep the WRF ecosystem healthy. This portion of the solids is sent to digesters where it is mixed and aerated to further break down, or digest, the material. After a number of weeks, the solids are dewatered in a centrifuge and stock piled in the WRF's storage barn. This material is similar to the consistency of potting soil and is removed to fields or landfills.



Farmers Market - Food, Friends and Fun



The Farmers Market season is underway with lots of food, friends and fun! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning through October 14 from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet! Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less. We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/ Farmers-Market.

IL SOS Skip-the-Line

The Skip-the-Line program is a customer service initiative launched by Secretary of State Giannoulias to eliminate the unpredictability of wait times at Illinois DMVs. The program begins September 1, 2023.

The Skip-the-Line program includes:

- Simplified Online Services – Customers are encouraged to take advantage of the many services offered online, including renewing their driver's license or ID card and license plate sticker online.



- Appointment Scheduling – Customers will be required to make appointments for in-person visits at 44 of the busiest DMVs including all Chicago and suburban locations and some central and downstate DMVs for those seeking REAL ID, driver's license and ID card services, and in-car driving tests.
- New Extended Hours of Operation – All DMVs statewide will extend hours of operation, with 16 facilities open six days a week – Monday through Saturday.
- All DMVs will change their days and hours of operation from Tues-Sat to Mon-Fri, 8 a.m.-5:30 p.m.
- 16 DMVs will also be open on Saturday, 8 a.m.-12:30 p.m., including the Deerfield Secretary of State location at 405 Lake Cook Road.

VILLAGE OF DEERFIELD

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 | deerfield.il.us

PRESORTED
STANDARD U.S.
POSTAGE
PAID
PERMIT NO. 1
DEERFIELD, ILLINOIS

Postal Customer
Deerfield, Illinois 60015

VILLAGE OFFICIALS

Mayor
Daniel C. Shapiro
847.719.7402
dshapiro@deerfield.il.us

Trustees
Robert "Bob" L. Benton
847.945.1570
rbenton@deerfield.il.us

Larry Berg
847.612.0777
lberg@deerfield.il.us

Elaine Jacoby
847.644.3354
ejacoby@deerfield.il.us

Rebekah Metts-Childers
847.899.1449
rmettschilders@deerfield.il.us

Mary M. Oppenheim
847.948.9423
moppenheim@deerfield.il.us

William S. Seiden
847.945.2442
wseiden@deerfield.il.us

Village Manager
Kent S. Street - 847.719.7400
kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015

Switchboard and Finance
847.945.5000

Community Development
847.719.7484

Police non-emergency
847.945.8636

Public Works and Engineering
465 Elm Street
847.317.7245
847.317.2490 (Engineering)



MEETING SCHEDULE

For a complete list of meetings, please visit deerfield.il.us. *Times/dates subject to change.*

September

Board of Trustees
September 5 & 18, 7:30 p.m.

Community Relations Commission
September 12, 6:30 p.m.

Plan Commission
September 14 & 28, 7:30 p.m.

Appearance Review Commission
September 18, 7:30 p.m.

October

Board of Trustees
October 2 & 16, 7:30 p.m.

Community Relations Commission
October 10, 6:30 p.m.

Plan Commission
October 12 & 26, 7:30 p.m.

Appearance Review Commission
October 23, 7:30 p.m.

Public Works Open House – May 20, 2023

Photo Date: May 21, 2022

Standard Set up of the Engineering Table with FEMA related information provided at the 2023 event



VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 340 – Hazard Disclosure

Dear Mr. Arkens:

As stated in Activity 330, the Village of Deerfield Engineering Department sends out real estate brochures to local industry professionals. A copy of the letter, FEMA materials including the "Check before you buy" handout, and the mailing list is provided. Further, the Village also advises the public on flood prone properties with respect to historical flooding, insurance possibilities, and potential hazards when contacted. A log of properties that were inquired about is also provided.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

THE VILLAGE OF
DEERFIELD

Winter 2023/2024

Dear Real Estate Professional:

The purpose of this letter is to inform real estate professionals of the importance of flood insurance for residential properties and offer guidance in the event of a flood. The Village of Deerfield is a participating member of the National Flood Insurance Program (NFIP). The NFIP enables residents within participating communities to purchase flood insurance. Though in some instances homeowners are not eligible to purchase flood insurance, most will benefit from their community taking part in the NFIP. Nationwide, more than 22,000 communities have joined the program and, as a result, millions of homeowners are eligible to purchase flood insurance.

There are many private residences within the Village of Deerfield that fall within or directly adjacent to the Federal Emergency Management Agency (FEMA) designated Special Flood Hazard Area (SFHA). A property located within a SFHA has a 26% chance of being damaged by a flood over the life of a 30-year mortgage. Unfortunately, many home and business owners do not find out, until it is too late, that their homeowner's insurance will not cover flood damage. The NFIP offers a separate policy that protects the single most important financial asset, which for most people is their home or business. NFIP flood insurance is sold through private insurance companies and agents and is backed by the federal government. It is the ethical responsibility of each real estate professional to provide the proper due diligence when advising their clients on home purchases.

For the Village to maintain the current standing with the NFIP, we are required to provide information for all Real Estate Professionals that they can share with prospective clients. It is also a requirement for the Village to provide proof of receipt for all Real Estate Professionals that have been provided this information. To acknowledge your receipt of the above-mentioned information, please sign the next page and scan a copy back to our office at engineering@deerfield.il.us or fax it to (847) 317-7248.

If you have questions or need additional information regarding the NFIP or floodplain related issues, please contact the Village of Deerfield Engineering Department at 847-317-2490 or visit our website at www.deerfield.il.us. Copies of a couple informative FEMA floodplain brochures, which are available at https://agents.floodsmart.gov/Resource-Library, have been included within this letter for your reference.

Sincerely,

Tyler Dickinson, P.E.
Assistant Director of Public Works and Engineering

Flood Hazard: Check Before You Buy

Most everyone knows that coastal properties are subject to flooding and wind damage from hurricanes. There are maps that show areas predicted to flood. To find out more about flood-prone area maps, check with the Village of Deerfield Engineering Department.

However, flooding and other surface drainage problems can occur well away from the coast. If you're looking at a property, it's a good idea to check out the possible flood hazard before you buy. Here's why:

- The force of moving water or waves can destroy a building.
- Slow-moving floodwaters can knock people off their feet or float a car.
- Even standing water can float a building, collapse basement walls, or buckle a concrete floor.
- Water-soaked contents, such as carpeting, clothing, upholstered furniture, and mattresses, may have to be thrown away after a flood.
- Some items, such as photographs and heirlooms, may never be restored to their original condition.
- Floodwaters are not clean: floods carry mud, farm chemicals, road oil, and other noxious substances that cause health hazards.
- Flooded buildings breed mold and other problems if they are not repaired quickly and properly.
- The impact of a flood—cleaning up, making repairs, and the personal losses—can cause great stress to you, your family, and your finances.

Floodplain Regulations: The Village of Deerfield regulates construction and development in the floodplain to ensure that buildings will be protected from flood damage. Filling and similar projects are prohibited in certain areas. Houses substantially damaged by fire, flood, or any other cause must be elevated to or above the regulatory flood level when they are repaired. More information can be obtained from the Engineering Department at 847-317-2490.

Check for a Flood Hazard: Before you commit yourself to buying property, do the following:

- Ask the Deerfield Engineering Department if the property is in a floodplain; if it has ever been flooded; what the flood depth, velocity, and warning time are; if it is subject to any other hazards; and what building or zoning regulations are in effect.
- Ask the real estate agent if the property is in a floodplain, if it has ever been flooded, and if it is subject to any other hazards, such as sewer backup or subsidence.
- Ask the seller and the neighbors if the property is in a floodplain, how long they have lived there, if the property has ever been flooded, and if it is subject to any other hazards.

Flood Protection: A building can be protected from most flood hazards, sometimes at a relatively low cost. New buildings and additions can be elevated above flood levels. Existing buildings can be protected from shallow floodwaters by regrading, berms, or floodwalls. There are other retrofitting techniques that can protect a building from surface or subsurface water.

Flood Insurance: Homeowners insurance usually does not include coverage for a flood. One of the best protection measures for a building with a flood problem is a flood insurance policy under the National Flood Insurance Program, which can be purchased through any licensed property insurance agent. If the building is located in a floodplain, flood insurance will be required by most federally backed mortgage lenders. Ask an insurance agent how much a flood insurance policy would cost.

Flood Insurance:

Make it your business.

FEMA

NATIONAL FLOOD INSURANCE PROGRAM

Flooding can happen anywhere

Flooding is the most common and costly natural disaster in the United States, affecting every region and state. In fact, more than 20 percent of claims come from outside high-risk areas. Yet many property owners are unaware of their risk.

That is why FEMA's National Flood Insurance Program (NFIP) is committed to educating customers and communities about flood risk and protecting property owners through flood insurance. We're committed to partnering with agents across the country to provide lower-cost, effective insurance solutions, protecting property owners from the financial devastation caused by flooding, and ultimately building more flood resilient communities.

You can make a difference

In a moment, flooding can undo the financial security that took a lifetime to build. But you can make a difference. Talk to your clients about flood risk. Inform them of their flood insurance choices. By making flood insurance your business, you can help protect your clients and community while generating additional revenue.

Your clients may think they are protected

Nearly 1 in 4 property owners think their homeowners insurance covers damage caused by flooding. As you know, in most cases, it does not. Whatever the cause of the flood—heavy rains, a blocked creek, inadequate drainage, or an overtopped levee—for most people, flood insurance is the best way to protect against the financial devastation caused by flooding.

Protect your clients, protect yourself

People need flood insurance to protect their most important investment: their homes or businesses.

By offering flood insurance to your clients, you help protect them from financial harm, and protect yourself from errors and omissions liability.

Standard Flood Insurance Policies (SFIPs)

For property owners in high-risk flood areas, the purchase of a SFIP is required by federally backed lenders. As an agent, you can help clients living in high-risk flood areas understand the value of flood insurance, as well as important flood mitigation steps that they can take to lower their insurance costs and protect their home.

Even if flood insurance is not mandated for your client's property, they are still at risk. Encourage clients living in moderate- to low-risk areas to protect the lives they've built by purchasing a lower-cost Preferred Risk Policy.

For more information:

- Contact your company's underwriting department or marketing representatative or contact NFIP Direct at **1-800-638-6620**.
- Attend a flood insurance training seminar. Visit **NFIPservices.FloodSmart.gov** for information about agent training.
- Visit **Agents.FloodSmart.gov** for more tools for agents and information on the NFIP.

Preferred Risk Policies (PRPs)

The preferred policy for clients with a choice

PRPs offer the same level of protection as standard policies, including contents coverage, with a lower premium. Preferred risk coverage can be obtained for both residential and commercial properties, and contents-only coverage is available for renters and business owners who lease their space.

PRPs help you retain flood insurance policies and commissions. Flood insurance, whether required or not, is always the right choice.

PRPs increase client satisfaction

Savings on premiums make for satisfied clients who know that their agent is looking out for the full range of their insurance needs.

PRPs are easy to write

Whether you are converting a standard policy to a PRP or writing a new policy, the process is simple and straightforward.

Allstate Insurance Company - Marc Turim
400 Lake Cook Rd,
Deerfield, IL 60015

US Bank
700 Deerfield Rd
Deerfield, IL 60015

First Midwest Bank
725 Waukegan Road,
Deerfield, IL 60015

Michael Rizzo - State Farm Insurance Agent
825 Waukegan Rd
Deerfield, IL 60015

Guaranteed Rate
111 S Pfingsten Rd Ste 124
Deerfield, IL 60015

Home Loan Solutions
420 Lake Cook Rd #104
Deerfield, IL 60015

CrossCountry Mortgage
500 Lake Cook Rd, Ste 420
Deerfield, IL 60015

Prism Mortgage
770 Lake Cook Rd Unit 145
Deerfield, IL 60015

Varo Real Estate
500 Lake Cook Rd Ste 350
Deerfield, IL 60015

Coldwell Banker Realty
675 Deerfield Rd Ste 125
Deerfield, IL 60015

FEMA Map Information Inquiry Log

Date	Type	Address	Panel	Zone	Floodplain	Floodway	Elevation	Insurance Information Given (Yes/No)	Historical Flood Info	Wetland
1/17/2023	T	1114 Hampton Ct	286K	AE	Y	N	659	Y	Y	N
Multiple	T	211 Landis	286K	AE	Y	Y			Y	
5/23/2023	E	1309 Holly	286K	AE	Y	Y	656.7	N	N	N
6/12/2023	E	1163 Holly Lane	286K	AE	Y	Y	656.5	N	N	N
7/27/2023	E	480 Carriage Way	286K	AE	Y	Y	652.9	N		
Multiple	T / E	0 Cranshire Ct	286K	AE	Y	Y				
10/11/2023	E	1160 Deerfield Rd	286K	AE	Y	Y	656.2	N		

Type Codes:
W - Walk-in
V- Verbal
WR - Written
H - Hand -out
T - Telephone
OM - Onsite Meeting
E - email
WS- Website Submitted / FOIA
N/A - Not Applicable

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 350 – Flood Protection Information

Dear Mr. Arkens:

The Village of Deerfield hosts various floodplain links and information on the Village's webpage. All associated links were functional as of 1/16/2024 and the various pages have been provided as PDFs. Additionally, many flood information documents are also maintained in the Deerfield Public Library. Please see the attached letter from the Library that lists the various documents.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

Website: https://www.deerfield.il.us/190/Additional-Flood-Information-Village-Ser

Additional Flood Information & Village Services

Flood Hazard Areas

Special Flood Hazard Areas (100-year floodplain) in the Village of Deerfield are located near the Middle Fork and West Fork of the North Branch of the Chicago River. The eastern portion of Deerfield is in the Middle Fork floodplain, while the western part of town is in the West Fork floodplain. For a detailed map visit the Village of Deerfield website www.deerfield.il.us under maps and information.

Guidance on whether your property is in the 100-year floodplain can be obtained by visiting the Engineering Department and having a staff member help you. However, staff cannot make an official determination but can advice residents on the process with FEMA. Maps are available to look at as well as other flood-related information. Contact the Engineering Department at 847-317-2490 for further assistance.

Flood Safety

The following common sense guidelines can help protect you from the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else.
- Do not drive around barriers.
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet.

Village of Deerfield Flood Recommendations

- Stay away from power lines and electrical wires. If your house is about to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the 2nd leading cause of death during floods.

- Be alert to gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to a Village official or your gas company. Do not use candles, lanterns or open flames if you smell gas or are unsure if your gas has been shut off.
- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry unimaginable items that have dislodged themselves. Culverts may suck smaller people into them rendering them helpless.
- Clean everything that has been wet. Flood water will be contaminated with sewage and other chemicals which pose severe health threats.
- Look out for animals, especially snakes. Small animals that have been flooded out of their home may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

Property Protection Measures

If your property is susceptible to flooding, there are many flood damage reduction measures you can employ:

- Watertight seals can be applied to brick and block walls to protect against low-level flooding.
- Utilities such as heating and air conditioning systems, water heaters and other major appliances can be elevated to higher floors in the structure or on raised platforms.
- Temporary measures such as moving furniture and other valuables to higher floors or sandbagging exterior openings will also help.
- Elevating or relocating the entire structure may also be a feasible option.

Historical Flooding & Natural Floodplain Functions

In addition to floodplain mapping assistance the Village of Deerfield Engineering Department provides the following services:

- Historical flooding information.
- Natural flood plain function information.
- Information on soil types when available.
- Flood protection assistance recommendations.

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess

the problem and may be able to offer solutions. Also, guidance on whether your property is in the 100-year floodplain, floodway, wetland or historical flooding area, can be obtained by contacting the Engineering Department and having a staff member help you. Maps are available to look at as well as other flood-related information. With questions please contact the Engineering Department at 847-317-2490.

Additional Information

If you should require further or more detailed information regarding flood-related issues in Deerfield, here are some additional sources:

- FEMA.gov website
- Physical Address of Village of Deerfield Engineering Department
  465 Elm Street
  Deerfield, IL 60015
- Engineering Phone Number: 847-317-2490
- Flood FAQs
- Deerfield Public Library
- Lake County Flood Information, Programs and All Natural Hazards Mitigation Plan (ANHMP)
- Deerfield 2024 Annual Progress Report

Website: https://www.deerfield.il.us/180/Engineering

Engineering

Overview

The Engineering Division provides civil engineering assistance to other Village departments, residents, builders and developers. As such, the division oversees the design, development, and construction of public facilities and capital improvements for Village projects and private development projects within the Village. These facilities include roadways, water supply, wastewater treatment plant and storm drainage. In addition, the division is responsible for issuing permits for any work to be performed on Village property or within the Village right-of-way. This division also secures funding for projects, often from outside agencies (state and federal sources), and prepares all required project documentation and regulatory agency reports.

The division's activities can be divided into 4 main areas of responsibility:

Capital Improvement Project Planning & Management

- Current Project Information & Schedules
- Contractor Details & Specifications
- Complete Street Policy
- Site Management Requirements

Residential & Commercial Development Plan Review

- Engineering Plan Review Checklist
- Utility Inspections

Construction Guidelines & Permits

- Drainage Compliance (Lake County Watershed Development Ordinance)
- Tree Preservation

Website: **https://www.deerfield.il.us/180/Engineering**

- Parkway Tree Maintenance
- Details & Specifications
- Tree Removal Permit

Maps and Additional Information

- FEMA Floodplain
- Flood Information (e.g. hazards, preventions, protections, etc.)
- Flood Plain Management Efforts
- GIS Maps

Website: https://www.deerfield.il.us/189/Flood-Information

Flood Information

FEMA CRS Accredited Community

The Village of Deerfield is a participating member of the National Flood Insurance Program (NFIP). Anyone can purchase flood insurance through their local insurance agent via the NFIP. There is a 30 day waiting period for flood insurance coverage to begin. A property located within a Special Flood Hazard Area (SFHA) has a 26% chance of being damaged by a flood over the life of a 30-year mortgage. Your homeowner's insurance **will not** cover flood damages. This is why flood insurance is mandatory for all federally backed mortgages, when a property that is located within a Special Flood Hazard Area (SFHA). The Village of Deerfield participates in FEMA's "Community Rating System" which can further reduce flood insurance premiums.

Read about how Deerfield's Flood Plain Management Efforts Earn Lower Flood Insurance Rates for Residents.

Floodplain Questions

If you want to know if a property is in the Special Flood Hazard Area, check out the Federal Emergency Management Agency (FEMA)'s website. You can also call the Building Department at 847-719-7484, or the Engineering Department 847-317-2490 with your floodplain questions. The Building Department has copies of FEMA elevation certificates for all buildings constructed in the floodplain since 1987.

Find additional flood information and Village services related to flooding.

Deerfield FEMA Brochures & Map

1. 2014 Deerfield Flood Brochure (PDF)
2. Contractor Combined September 5 2008 (PDF)
3. FEMA Update (PDF)

FEMA Links

1. FEMA Map Service
2. The National Flood Insurance Program (on FEMA)
3. Protect Your House from Flooding

Website: **https://www.deerfield.il.us/189/Flood-Information**

4. Homowner's Guide to Retrofitting
5. Guide to Flood Protection in NE Illinois
6. Elevation Certification Website

View All Links

Website: https://www.deerfield.il.us/191/Flood-Plain-Management-Efforts

Flood Plain Management Efforts

Deerfield's Flood Plain Management Efforts Earn Lower Flood Insurance Rates for Residents

Program Implementation

Deerfield's long term commitment to aggressive flood plain management has been recognized yearly by the National Flood Insurance Program (NFIP) who has certified the Village's efforts in achieving a Class 6 rating by the Federal Emergency Management Agency. The National Flood Insurance Program Community Rating System was implemented in 1990 to recognize and encourage community floodplain management that exceeds the minimum National Flood Insurance Program standards. Since the Village's voluntary participation in the program began in 1993, the Village of Deerfield has undertaken a series of meaningful activities to protect residents from flood losses.

Extra Efforts

Some of these extra efforts include:

- More restrictive floodplain regulations
- Increased flood protection such as higher freeboard requirements, compensatory storage for fill placed in floodplains, and higher substantial improvement requirements
- Construction of the Lake Cook Road at Pfingsten Road Storm Water Detention basin
- More frequent inspections and maintenance of creeks and other storm drainage facilities
- Continual outreach programs regarding community floodplain construction regulations
- Continual education of the public in regard to flood insurance availability and requirements
- Providing assistance to property owners in determining if their property is located in/around a Special Flood Hazard Area (SFHA).
- Preserving floodplain (currently 236 acres) as open space

Website: **https://www.deerfield.il.us/191/Flood-Plain-Management-Efforts**

Results

There are currently 20,100 communities nationwide in the National Flood Insurance Program but only 1,048 participate in the CRS program. Of those 1,048, only 100 have achieved a CRS Class rating of 6. What all this means is that any homeowner in the Village of Deerfield who must carry flood insurance because their home is located in a SFHA receives a 20% reduction on their flood insurance premiums. Homeowners outside of the SFHA who choose to carry flood insurance will receive a 10% reduction in addition to the reduction already offered to them due to their reduced risk policy.

If you have any questions or need additional information regarding the National Flood Insurance Program please contact the Department of Public Works and Engineering at 847-317-2490 or visit the Village of Deerfield's Flood Information page on our website.

DEERFIELD
PUBLIC LIBRARY
deerfieldlibrary.org

January 18, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation
6450 W 82 St.
Burbank IL 60459

Subject: Activity 350 - Flood Protection Information-

Dear Mr. Arkens:

The Village of Deerfield Public Library currently maintains copies of the following FEMA publications:

- FEMA-15 | Design Guidelines for Flood Damage Reduction
- FEMA 54 | Elevated Residential Structures
- FEMA F-084 | Answers to Questions about the National Flood Insurance Program
- FEMA 85 | Manufactured Home Installation in Flood Hazard Areas
- FEMA P-85, Second Edition | Protecting Manufactured Homes from Floods and Other Hazards
- FEMA 102 | Floodproofing Non-Residential Structures
- FEMA 114 | Retrofitting Flood-Prone Residential Structures
- FEMA 116 | Reducing Losses in High Risk Flood Hazard Area: A Guidebook for Local Officials
- FEMA-168 | Conceptual Framework and Basic Strategies and Tools for Implementing a Unified National Program for Floodplain Management
- FEMA 186 | Mandatory Purchase of Flood Insurance Guidelines
- FEMA P-347 | Above the Flood: Elevating Your Floodprone House
- FEMA P-348, Edition 1 | Protecting Building Utilities from Flood Damage
- FEMA P-511 | Reducing Damage from Localized Flooding

The Public Library also maintains copies of local flood information documents.

If you have any questions or need more information please feel free to call me at, 847.945.3311

Sincerely,

Amy Falasz-Peterson

Amy Falasz-Peterson, Director

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 360 – Flood Protection Assistance

Dear Mr. Arkens:

The Village of Deerfield has three qualified staff members that are available to assist residents that encounter flooding problems. The staff members are Robert Phillips, P.E. (Director of Public Works and Engineering), John Guccione (Engineering Project Manager), and Tyler Dickinson, P.E. (Assistant Director of Public Works & Engineering). The three staff members have over 40 years of experience of performing drainage inspections/recommendations. They all have the proper qualifications and/or education to assist with local flooding problems. Mr. Phillips has completed the E273 - Managing Floodplain Development course and Mr. Dickinson has completed the L278 – Community Rating System course through the National Flood Insurance Program.

The Village of Deerfield publicizes the Department's flood protection assistance in our Flood Information column within the D-Tales publications. Additionally, this service is advertised on the Village website. This assistance is a well-known service within the community with around 35 locations discussed with residents last year by the Department, many of which require on-site inspections. Attached are two email chains confirming said meetings.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

May/June 2023 Vol. 45 No. 3

D-Tales

Your Municipal News Source

Village of Deerfield

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000

Visit us online at
www.deerfield.il.us

Meeting Schedule

Meeting times/dates subject to change.

For a complete list of meetings visit, www.deerfield.il.us

May
Board of Trustees
May 1 & 15, 7:30 p.m.

Sustainability Commission
May 4, 7:00 p.m.

Community Relations Commission
May 9, 6:30 p.m.

Plan Commission
May 11 & 25, 7:30 p.m.

Appearance Review Commission
May 22, 7:30 p.m.

June
Board of Trustees
June 5 & 19, 7:30 p.m.

Family Days Commission
June 5, 5:00 p.m.

Plan Commission
June 8 & 22, 7:30 p.m.

Community Relations Commission
June 13, 6:30 p.m.

Appearance Review Commission
June 26, 7:30 p.m.

A Message from Mayor Daniel C. Shapiro on Family Days



As we enter into nicer weather, I wanted to take a moment to address the Board's plans for this year's Family Days celebration.

We have given a lot of thought and consideration as to how and whether to celebrate the Fourth of July. We are aware and sensitive to the tragedy in Highland Park last year and understand that people are still grieving. We have given thought as to what Family Days means for our community and the importance of not only remembering those who were affected, but also those who want to come together for one of our most popular events of the year. Despite the horrific shooting last year in Highland Park, we will go on. We will celebrate yet respect those who were impacted by the senseless killings.

I want to assure you that as we plan for this year's July 4th parade and other activities, we have carefully considered how to move forward together. To be clear, safety is our top priority. We have been working closely with our Police Department, Public Works Department and other agencies to ensure that all necessary precautions are taken to make Family Days as safe as possible.

This year's Family Days Parade will not only be a celebration of our nation's independence, but also a chance for us to come together as a community and show our support for one another. We do this in solidarity with our neighboring towns.

We will celebrate this year's Family Days together.

Best,
Dan

Deerfield Art Festival Returns June 3 and 4 with Amdur Productions

Amdur Productions is excited to announce its first ever art show in Deerfield.

Scheduled for 10 a.m. to 5 p.m. Saturday and Sunday, June 3 and 4, this new event takes place in the heart of downtown Deerfield and will feature about 100 juried artists showcasing and selling their one-of-a-kind pieces including paintings, photography, ceramics, furniture, jewelry, wood, fiber and more! Live music, activities for kids, painting classes, selfie stations, and the brand new "Kids Art Stop" where artists invite children to stop at their booth to learn more about the art-making process, add to the family-friendly vibe of this event. Festival food on site and several restaurants just steps away from the artist's booths will ensure that no one goes hungry!

In addition to the viewing and purchasing of art, guests are invited to bring their own gently used wall art to the festival where it will be donated to the Chicago Furniture Bank, a nonprofit that distributes furnishings and art to those leaving shelters and moving into permanent housing. Several artists from this show will also be supporting the Chicago

Art Festival Continued on Page 2

CHECK IT OUT!

Page 2:
• Mayor: Stop the Violence
Page 4:
• Public Works Open House May 20
Page 7:
• Door-to-Door Solicitation Rules

Art Festival Continued from Page 1

Furniture Bank by participating in Amdur Productions' Green Ribbon Project where artists place a green ribbon on a piece of art in their booth, and if the piece is sold, 10% of the sale will be donated.

"We've partnered with the Chicago Furniture Bank for the past couple of years, and we're looking forward to working with them again," said Amy Amdur, president of Amdur Productions. "The amount of wall art that has been donated at our shows in the past is truly incredible," she added. "It feels good to make this kind of an impact and to see so many people join us for such an important cause," she continued.

The Deerfield Art Festival is located along Park Avenue. The fest is free and there is plenty of nearby free parking. Those traveling by METRA will be pleased to know that there is a train stop right at the fest in Downtown Deerfield! Leashed dogs are welcome.

"When folks come to the Deerfield Art Festival, we hope they make a day of it and take time to visit the nearby park, local shops and great restaurants that make Deerfield such a wonderful and welcoming community," said Amdur. "We can hardly wait for this show, and our artists are very excited to be part of this new fest!"

For more information, call 847.926.4300 or visit www.AmdurProductions.com

Food Truck Wednesdays

Join us this summer for the Food Truck Wednesday Summer Series at the Jewett Park Hazel Avenue Parking Lot on May 17, June 21, July 19, August 16 and September 20.

The Village will host food trucks and kid's activities from 4:30 to 8 p.m. with live music from 5 p.m. to 7 p.m. The food vendors and entertainment will rotate month to month, so be sure to follow us on social media for a listing of vendors for each event.

A Message from Mayor Daniel C. Shapiro: Stop the Violence



It is time that we stop the hatred, the unnecessary violence and the overheated rhetoric. It is time to call out the evils of intolerance and consider good over guns, kindness over killings and civility over criminality. Giving cover to those who want an excuse to harm our kids, our community and our residents must end. The racist, antisemitic rants serve no purpose other than to energize more unnecessary killings, threats and vitriolic behavior.

According to the FBI, more than half of religious hate crimes in America in 2021 targeted Jews and were motivated by antisemitism. The Anti-Defamation League similarly found that in 2022, antisemitic incidents in America reached their highest levels on record since it started tracking incidents more than 40 years ago. Hate must not have any space for harbor.

We cannot have more mass murders than there are days of the year, nor can we turn a blind eye to outrageous acts of violence, discrimination and antisemitism. We cannot each week see children's lives gunned down in their classrooms, swastikas spray painted in our communities or people treated with disdain because of their gender, sexual orientation or color of their skin. It is harmful to who we are, to the soul of our communities and to our next generations.

Call out the hatred and stop these most challenging days where we seem to have daily newscasts about unnecessary loss of lives or acts of evil. I am confident that from moments of darkness we will find joy and hope and light. I am convinced that rather than act in ways which drive us apart, we must see each other as we should as fellow human beings. Hug your kids, tell them you love them. Call your parents, reach out to a friend you have not talked to in a while. Courage and decency are contagious, and hope will take a life of its own.

Removing Buckthorn

Buckthorn, a non-native invasive shrub or tree that can grow up to 22 feet tall, poses a serious threat to native plants and wildlife. Its rapid spread across property lines can create dense thickets that can overtake natural areas and re-invade cleared habitats if left untreated.

To combat this problem, the Lake County Forest Preserves has developed a library of free resources to help residents eradicate common or European Buckthorn. These resources include educational removal videos and articles, guides for applying herbicide, and answers to frequently asked questions.

Once a homeowner has cleared the species from their property, they can request a "Buckthorn-Free" garden flag made of weather-resistant vinyl. These flags are offered free of charge to qualifying residents, thanks to a grant from the Preservation Foundation, the charitable partner of the Lake County Forest Preserves. To apply for a flag, residents must complete a brief form on the Forest Preserves' website, *LCFPD.org*.

Help protect the native ecosystem and get involved today! Access to these free and easy-to-use resources can be found at *LCFPD.org/buckthorn* and *LCFPD.org/nativeplants*

Family Days Vendors Wanted July 4

The Deerfield Family Days arts and crafts expo is celebrating 70 years! The Family Days Commission is seeking artists and vendors to join the show on July 4th. Applications and a small fee of $25 is due no later than June 23.

The application is available on the Family Days website.

For more, information contact Jessica Sciarretta at jsciarretta@deerfield.il.us.

Crime Prevention Tips for the Summer

Tips for Homeowners :

- Keep doors to your home and cars closed and locked, including garage doors. An open door is an invitation.
- Be a good neighbor and alert police to any unusual activity in your neighborhood. Plan for vacation by having your mail and newspapers stopped or having a neighbor pick them up. Leave inside lights on timers to create the impression that your house is occupied. Be sure to set your alarm system. Have a lawn service or neighbor mow your lawn.
- Avoid home improvement scams and deception burglaries by taking a proactive approach. Be particularly alert to anyone in your neighborhood looking to perform home repairs and asking to gain entry into your home. Ask to see identification and let them know you are going to call and get verification from their company before allowing them inside. If they are legitimate, they won't mind the wait.

Tips for Drivers:

- Do not leave valuables or cash in your car. If you must leave items in the car, lock them in the trunk.
- Be alert for children playing in neighborhoods and residential areas.
- Drive safely and slowly around parks and playgrounds. More children are out playing during the summer.

Tips for Parents:

- Provide a list of phone numbers of neighbors, family and friends that your child can call in an emergency. Make sure your child knows how to dial 9-1-1 and when it is appropriate to do so.
- Know the route your child will take to and from a given location. Remind your child never to take a shortcut or deviate from the agreed-upon route.
- Establish rules for using the internet. Children should have adult supervision when online. Make sure your child knows to never give out personal information on the internet.
- Require your child to check in with a parent before leaving the house and when returning home. Teach your child that there is safety in numbers and that it is best to be with a group of friends when going places without an adult.

Keyless Entry Car Theft

Cars with keyless entry and keyless start are a growing target for thieves. With the help of modern technology, these cars may be broken into or stolen while the owner's key fob sits inside their home. Many new cars and trucks no longer require a key to unlock the doors and start the engine, instead using an electronic fob that transmits a radio signal to gain entry, or "keyless entry."

Thieves use portable amplifiers to boost the signal of fobs located in the home to unlock the vehicle doors. Once they gain entry to the vehicle they are able steal valuables from inside and possibly start the vehicle (depending on the type of vehicle). Keyless car thefts generally take less than two minutes, make little noise, and leave behind no broken glass as evidence a crime has even taken place.

Residents with cars with keyless entry can take the following precautions to lessen the chance of thieves getting into their vehicle:

- Store key fobs in a metal container or a bag designed to shield the fob signal and prevent hacking; such as RFID sleeves and Faraday bags.
- Consider adding a wheel lock or clamp to your car to deter thieves.
- Do not leave valuables such as navigation devices, purses, shopping bags or electronics in the vehicle.
- If possible, park in a garage or well-lit area with security cameras.

As always, if you see any suspicious activity call 9-1-1.

Bike Safety Tips

There are so many great reasons to ride your bike: It offers fun, freedom and exercise, and it's good for the environment.

Here are a few tips so that you'll be safe while you do so:

- Wear a properly-fitted helmet. Properly-fitted helmets can reduce the risk of head injuries by at least 45 percent – yet less than half of children 14 and under usually wear a bike helmet.
- Ride on the sidewalk when you can. If not, ride in the same direction as traffic as far on the right-hand side as possible.
- Use hand signals and follow the rules of the road. Be predictable by making sure you ride in a straight line and don't swerve between cars.
- Wear bright colors and use lights, especially when riding at night and in the morning. Reflectors on your clothes and bike will help you be seen.
- Ride with your children. Stick together until you are comfortable that your kids are ready to ride on their own.

Cop on a Rooftop

On Friday, May 19, Deerfield Police Officers will spend the day on the roof of our local Dunkin Donuts, 499 Lake Cook Road, not on surveillance, but rather raising awareness and funds for Special Olympics Illinois. Officers will participate from 5 a.m. to noon at the annual "Dunkin - Cop on a Rooftop" event in the hopes of raising $5,000. Last year over $4,000 was raised.

Consider purchasing donuts for your office or business during this event. Every donation comes with a free donut from Dunkin. As part of our commitment to this cause, we will be selling raffle tickets for $10 for a new Harley Davidson and Camper, as well as Special Olympics merchandise.

For More Communications Director Mary Anne Glowacz at 847-794-7501 or e-mail mglowacz@deerfield.il.us.

Lawn Sprinkling and Irrigation Regulations

From May 15 through September 15, lawn sprinkling regulations will be place.

Even numbered addresses may water on even numbered dates from midnight to noon and/or from 6 p.m. to midnight. Odd numbered addresses may water on odd numbered dates from midnight to noon and/or from 6 p.m. to midnight. This applies only to lawn sprinkling.

All irrigation systems are required to have a backflow prevention device called a Reduced Pressure Zone Backflow Preventer (RPZ) that is certified annually by a licensed inspector. This testing and certification must be completed every year.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the backflow prevention tracking program. The annual backflow assembly test report must be submitted electronically by your inspector via the BSI Online system at *www.BsiOnline.com*.

For more information, contact the Public Works Department at 847.317.7245.

Public Works Open House – Saturday, May 20

Join the Village of Deerfield and Deerfield Park District from 10 a.m. – 1 p.m. on Saturday, May 20, for a kid and adult friendly Open House at Deerfield's Public Works Facility, 465 Elm Street. Parking is available at the Patty Turner Center, 375 Elm Street.

This event is free for all ages and will feature:

- Tours & Exhibits
- Fun Giveaways
- Hands-On Activities
- Vehicles & Equipment
- Prizes
- Vendors & Education
- Public Works Merchandise

For more information, contact the Public Works Department at 847.317.7245.

Waukegan Road Water Main Project

The Waukegan Road Water Main Project began in early April and is expected to be completed by early September. The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction.

Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day. Public meetings were held in advance of the project for residents and local businesses.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at www.deerfeld.il.us under "Notify Me."

For more information, contact the Engineering Department at 847.317.2490.

Deerfield Flood Information

Special Flood Hazard Areas (100-year floodplain) in the Village of Deerfield are located near the Middle Fork and West Fork of the North Branch of the Chicago River. The eastern portion of Deerfield is in the Middle Fork watershed, while the western part of town is in the West Fork watershed. For a detailed map visit the Village of Deerfield website *www.deerfield.il.us* under maps and information.

Information on whether your property is in the 100-year floodplain can be obtained by visiting the Engineering Department and having a staff member help you.

Contact the Engineering Department at *847.317.2490* for further assistance.

Flood Safety

The following common-sense guidelines can help protect you from the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else. Do not drive around barriers.
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet.

Flood Recommendations

- Stay away from power lines and electrical wires. If your house is about to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the second leading cause of death during floods.
- Be alert for gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to a Village official or your gas company. Do not use candles, lanterns or open flames if you smell gas or are unsure whether your gas has been shut off.
- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry items that have dislodged themselves.
- Clean everything that has been wet. Flood water will be contaminated with sewage and other chemicals that pose severe health threats.
- Look out for animals, especially snakes. Small animals flooded out of their homes may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

More detailed information regarding flood-related issues in Deerfield is available from:

- *FEMA.gov*
- Village of Deerfield Engineering Department:
  847.317.2490
  465 Elm Street
  Deerfield, IL 60015
- Deerfield Public Library:
  847.945.3311
  920 Waukegan Road
  Deerfield, IL 60015

BOARDREPORT

The following is a synopsis of actions taken by the Village Board since the last issue of D-Tales. For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit the Village's website at *www.deerfield.il.us*.

Village board action

Accepted a report of staff about Climate Action Report update

Approved a Resolution authorizing a purchase and sale agreement and the acquisition of real property

Approved an Ordinance amending Chapter 3 of the Municipal Code regarding alcoholic beverages

Approved a Resolution authorizing a license agreement with the Village of Bannockburn

Approved a Resolution authorizing an award of contract to Unmanned Vehicle Technologies for a drone

Approved a Resolution authorizing an agreement for professional therapy services with First Responders Wellness Center, LLC

Approved a Resolution authorizing an agreement with Ryan, LLC to provide Phase II TIF consultant services for creation of Lake Cook Road TIF District (TIF#4)

Approved a Resolution granting a one-year extension to a development schedule for a commercial planned development (REVA)

Approved a Resolution to award a contract for 2023 water system valving improvements

Proclamations and Honors

Proclamation recognizing Women's History Month

Proclamation recognizing Arbor Day

Proclamation recognizing Telecommunicator Week

Recognized Joshua Davlatov, USA Judo Youth National Champion Intermediate Male Under 42kg

Recognized Drew Spiegel, Out-going Community Relations Commission Student Member

COMMUNITYCALENDAR

DEERFIELD PARK DISTRICT

For more information or to register for Park District programs, call 847.945.0650, or visit www.deerfieldparks.org.

Apply online NOW for Summer Jobs including Summer Camp Counselors, Swim Instructors, Summer Groundskeeper, Lifeguard and Pool Cashiers at the Golf Course at *deerfieldparks.org/jobs*

Stop to shop for great deals and support young entrepreneurs at our Flea Market on Sunday, May 21 from 1-3 p.m. in the Jewett Park Community Center's parking lot. Kids will be selling their old games, books, toys, stuffed animals, sports equipment, bikes, trading cards and more!

Pool passes are on sale now. Take advantage of our EARLY Bird rate through May 26.

Re-Use-A-Rama is returning to the Sachs Recreation Center on June 10 from 11 a.m. – 1 p.m. Visit *deerfieldparks.org/event*s for a full list of accepted items!

Remaining permanent tee times for the 2023 season at Deerfield Golf Club are available at *deerfieldgolf.org*

For more information or to register for Park District programs, call *847.945.0650* or visit *deerfieldparks.org*

DEERFIELD PUBLIC LIBRARY

All Library programs are free and open to the public. Program descriptions and advance registration at *deerfieldlibrary.org*, click on "Programs" at the top. Questions? Email *reference@deerfieldlibrary.org*

Tuesday New Movie Night
May 9, June 13, Films begin at 6:30 p.m.
The movies to be shown will be announced a couple weeks prior to the movie night. Snacks provided.

Let's Draw: Cartoon Cryptids
May 12, 4-5 p.m., Grades K-6
Learn to draw familiar creatures like Bigfoot and the Loch Ness Monster, but also lesser known beasts.

The Bonds of War (Civil War)
May 18, 7-8 p.m.
Learn the story of five immigrants from Britain and Ireland, who served in the American Civil War. Inspired by a portrait in the collection of the Bess Bower Dunn Museum.

Memory Cafe
June 7, 10-11:15 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. For more info or to register, contact Judy Hoffman, 847-580-8954, jhoffman@deerfieldlibrary.org.

Lunch & Listen: Jazz for the Generations
June 10, 12-1 p.m.
Enjoy this jazz trio live at DPL! Enjoy the extraordinary arrangements of familiar tunes from the 60s. Bring your lunch; dessert will be provided.

Chicago "Scavenger Hunt"
June 14, 7-8:15 p.m.
Come test your knowledge of Chicago's neighborhoods and connect with the city like never before.

Summer Solstice Yoga and Mindfulness
June 16, 2:30-3:30 p.m.
Explore gentle movement and stretches to stimulate the mind and body.

For more information and a full listing of events, please visit www.deerfieldlibrary.org

Farmers Market

The Village and the Farmers Market Committee are looking forward to opening day of the 29th consecutive Deerfield Farmers Market season! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning, June 11 through October 14, from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet!

Excitingly, the market will once again be focused on the promise of "food, friends and fun" with the return of many beloved market activities this season. This market promise will be delivered alongside our continued goal of presenting a market that is dedicated to providing fresh, locally grown and prepared food in a safe, open-air shopping experience.

This season, patrons will be able to enjoy many traditional market activities tailored to fit into our new market environment. Returning market activities will include live musical performances, kids' activities, civic group participation, and special events. Some of these activities were present at the market in a reduced capacity last season, but will be returning to a full schedule this season.

The 2023 Farmers Market Events Calendar will be available on the Village's website prior to the start of the season.

Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less.

We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/Farmers-Market.

10 Tips to Reduce Mosquitoes

The South Lake Mosquito Abatement District offers the following tips to defend yourself from mosquitoes and the West Nile Virus.

Every week:

- Tip free-standing containers such as flowerpots, watering cans and buckets.
- Change the water and clean bird baths.
- Empty water that collects in folds of tarps.
- Position corrugated drain pipes to ensure drainage or dump out water.

As necessary:

- Clean leaves and debris from gutters.
- Store or recycle old tires.
- Clear debris to allow water to flow freely from drainage ditches and culverts.
- Filter or aerate ornamental ponds using a circulation pump, or stock it with fish.
- Drain or fill-in areas of your yard that remain wet for more than a week.
- Check windows and screens for holes.

For more information, visit www.slmad.org

Village Vehicle Sticker Registration Beginning Mid-May

Applications for 2023 vehicle stickers will be mailed in mid-May. Stickers must be displayed on all vehicles registered or garaged in Deerfield by July 1.

Stickers for passenger vehicles cost $30 if purchased by June 30. After June 30, a 50 percent late penalty is assessed. If you do not receive your application, you still need to have your stickers by July 1.

Additional applications are available online or at Village Hall.

The Village offers an online payment system for vehicle stickers. Visit *www.deerfield.il.us* and click the "Pay Online" button on the website's homepage. There is no additional charge for online payment.

Additional vehicle sticker purchasing options include in-person at Village Hall, returning the renewal application by mail, or using the payment drop box located in the median just south of Village Hall on Jewett Park Drive.

This year's vehicle sticker design features a "Climate Action Plan" theme. The Village has set a goal to reduce carbon emissions by 45% by 2030 and become carbon neutral by 2050.

Remember, the deadline to display a new 2023 sticker is July 1.

For more information, contact the Finance Department at 847.945.5000 or visit www.deerfield.il.us

Dementia Friendly

West Deerfield Township is planning a celebratory event to highlight all the Dementia Friendly work the township has accomplished after being recognized as a dementia friendly community.

The event is on Thursday, May 18 at Deerfield Village Hall from 1:00 to 2:30 p.m. with a refreshment reception following.

Learn why West Deerfield Township is a Dementia Friendly community that supports, empowers and understands fellow community members and families living with dementia.

There will be a panel discussion and information will be available about local assistance for those with dementia. All residents of the Township are invited.

Please RSVP to Alyson Feiger, Township Supervisor, at *alysonfeiger@westdeerfield*.org or call *847.945.0614*.
Office at 847.719.7400.

DEERFIELD AREA HISTORICAL SOCIETY

The Deerfield Historic Village will be open for tours Sundays 2 p.m. to 4 p.m., June through September.

The site, located at the southwest corner of Kipling & Deerfield Roads, includes the Caspar Ott log cabin (the oldest house in Lake County), the little red school house, the carriage house, and the Luther and Sack homes - take a step back in time!

The DAHS survives because of its volunteers. Please consider joining us. If you have an interest in volunteering for events, helping with the website, corporate fundraising, gardening, giving tours, etc., please email us at *deerfieldhistory@gmail.com*

DAHS Annual Spaghetti Dinner Fundraiser

Did you know Deerfield played a significant role in the Underground Railroad in Lake County, Illinois? Find out how the Ott and Wilmot families assisted those going North in search of freedom.

Join the Deerfield Area Historical Society for the Annual Spaghetti Dinner Fundraiser on Tuesday, May 23, 5:30 – 7:30 p.m. at the Patty Turner Center in Deerfield.

Enjoy a spaghetti dinner catered by Deerfield's own Italian Kitchen and a special presentation by Nicole Stocker of the Lake County Forest Preserve's Dunn Museum.

Register online at *dbrchamber.com* or email us at deerfieldhistory@gmail.com. Bring the whole family, $25 per person, $15 students. All proceeds benefit the Deerfield Area Historical Society and Historic Village.

ComEd FREE Energy Efficiency Program

The Village of Deerfield's Sustainability Commission has endorsed and tested a free Energy Efficiency Program that can save Deerfield residents an average of $377 annually!

The program, funded by ComEd customers, offers a range of free products and services including showerheads, LED lightbulbs, pipe insulation, programmable thermostats, and a one-hour assessment to help reduce energy usage and save money.

Certified professionals authorized by ComEd perform the program, and both in-person and virtual assessments are available.

The Sustainability Commission encourages Deerfield residents to take advantage of this free program and schedule their assessment today at *855.433.2700*.

To learn more and discover additional ways to save, visit www.deerfield.il.us/green or ComEd.com/HomeSavings.

Door-to-Door Solicitor Rules

Solicitor season is upon us. Solicitors must adhere to the following guidelines and rules regulating door-to-door solicitation:

- Must cease solicitation upon owner or occupant request.
- Must obey posted No Solicitors signs.
- Must carry and display their permit while they are soliciting.
- May only ring bells, knock or engage with residents for solicitation between the hours of 9:00 a.m. and 9:00 p.m.

If a solicitor does not display or cannot produce a permit, they may not be licensed to solicit within Deerfield and can be reported to the Deerfield Police Department by calling *847.945-8636*. Please visit the Solicitor Permit page on the Village website to see a list of current solicitor permit holders.

To prevent solicitors at your home, prominently display a no soliciting notice on or near the main entrance by way of a sign measuring at least 3 inches by 4 inches in size. No soliciting notices should read in letters at least 1/3 inch in height "No Solicitors Invited" or comparable language. It is illegal in the Village of Deerfield to solicit at a location where proper No Soliciting signage has been posted.

With or without a sign, residents should not ever be afraid to exercise boundaries with solicitors by refusing to answer their door or by politely stating 'no thank you' or 'not interested' and shutting and locking their door. Remember however, that as a homeowner or occupant you may at any time ask a solicitor to leave your property. Every resident has the right to feel secure in their home, should you feel threatened or unsafe based upon a solicitor's behavior, contact the Police immediately at *847.945.8636*.

The First amendment and the U.S. Constitution protect the rights of door-to-door solicitors and preclude the ability of a community to ban or significantly limit door-to-door sales. The U.S. Supreme Court has upheld free speech for commercial purposes and the Village's ability to restrict commercial door-to-door solicitation is limited to local regulations restricting the time, place and manner of door-to-door solicitations. Homeowners and occupants, however, do have the ultimate right to determine whether solicitors shall or shall not be invited to their residences or property.

For more information, contact Deputy Village Clerk Danny VanDusen at 847.719.7404 or visit www.deerfield.il.us

TeenConnect

Deerfield's TeenConnect program aims to connect teens who are able to do outside yard work, including lawn mowing, with Deerfield residents who need the service.

The TeenConnect list will provide contact information for Deerfield teens including the name and phone number of the teen, days of availability, type of work they are willing to do and their expected rate of pay.

For more information or to sign up, visit www.deerfield.il.us or call the Village Manager's Office at 847.719.7400.

VILLAGE OF DEERFIELD

D-Tales
850 Waukegan Road
Deerfield, Illinois 60015

PRESORTED
STANDARD U.S.
POSTAGE
PAID
Permit No. 1
Deerfield, Illinois

POSTAL CUSTOMER
DEERFIELD, ILLINOIS 60015

VILLAGENOTES

Deerfield FAMILY DAYS

Save the Date!

Deerfield Family Days 2023
July 3 & 4

July 3- Shepard Park:
The Park will open at 5 p.m.
Fireworks, Food Vendors, Games & Live Entertainment!

July 4 - Jewett Park:
All-day (8 a.m. - 3 p.m.)
Activities include: Breakfast in the Park, Dog Show, Arts and Crafts Fair, Parade, 5K Run, Bike Parade, Flower Show, Games & Rides!

Donations: Family Days is funded by sponsors and donations from local residents and the Village. Please consider making a donation to Family Days at Village Hall or at *www.deerfield.il.us/familydays*. Donations help pay for the July 3 Fireworks and the July 4 Parade.

Parade Route: Please note that the Family Days Parade will have a new route this year due to the Waukegan Road Water Main Replacement Project. The parade will start at Deerspring Pool and head west on Deerfield Road and then north on Park Avenue before ending at Hazel Avenue.

5K Rotary Race: Register for the race at *www.deerfield.il.us*.

Questions?: Contact Ryan Oates, Public Works Analyst, at *847.719.7466*.

Village Officials:
Mayor:
Daniel C. Shapiro - 847.719.7402
E-mail: dshapiro@deerfield.il.us

Trustees:
Robert "Bob" L. Benton - 847.945.1570
E-mail: rbenton@deerfield.il.us
Larry Berg - 847.612.0777
E-mail: lberg@deerfield.il.us
Elaine Jacoby - 847.644.3354
E-mail: ejacoby@deerfield.il.us
Rebekah Metts-Childers - 847.899.1449
E-mail: rmettschilders@deerfield.il.us
Mary M. Oppenheim - 847.948.9423
E-mail: moppenheim@deerfield.il.us
William S. Seiden - 847.945.2442
E-mail: wseiden@deerfield.il.us

Village Manager:
Kent S. Street - 847.719.7400
E-mail: kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 (Switchboard and Finance)
847.719.7484 (Community Development)
847.945.8636 (Police non-emergency)

Public Works and Engineering
465 Elm Street
847.317.7245 (Public Works)
847.317.2490 (Engineering)

VILLAGE OF DEERFIELD

D-Tales

JULY/AUGUST 2023 VOLUME 45, NO. 4

INSIDE

Village News	2
Board Report	3
Community Calendar	3
Public Works Update	4
Annual Drinking Water Quality Report	5
Police Department News	9
Our Community	10
Meeting Schedule	12



4,600+
feet of distance along July 4th parade route

12
Family Days carnival rides

60
years of annual Deerfield Fourth of July festivities

Deerfield Family Days Back in Person

Deerfield Family Days will kick off another two days of fun July 3rd and 4th. Join family and friends for a holiday filled with fun and entertainment!

The spectacular fireworks show will be held Monday, July 3rd, at Shepard Park with live entertainment and kids' activities. The gates will open at 5 p.m. and food and drink concessions will be available for purchase.

On Tuesday, July 4th, head on over to the festivities at Jewett Park including breakfast in the park, the dog show, and a variety of games. Join the bike parade at 8:30 a.m. at the Rosemary Terrace parking lot. *New Parade Route:* The parade starts at noon on Monday and will travel from Deerspring Pool, west on Deerfield Road and north on Park Avenue where it will end at Jewett Park.

This year's Parade Marshals are Mayor Emeritus Harriet Rosenthal and the League of Women Voters of Deerfield/Lincolnshire. Rosenthal served 12 years as Mayor and 24 years as a Village Trustee. The League of Women Voters was founded in Chicago on February 14, 1920. Since then, the League has worked to register voters, sponsor candidate forums, provide non-partisan election materials about candidates, and study issues on the local, state and national levels in order to create a better-informed electorate.

For more information please visit deerfield.il.us/familydays





Business Facade Rebate Program Update

Village staff is working with the third applicant for the Village's Business Facade Rebate Program since the program started 18 months ago. The first applicant received a grant to update the building and site at 827 and 829 Waukegan Road (theCoderSchool and Top Issue). The second applicant received approval from the Board of Trustees for a complete facade renovation at 728 Waukegan Road (former Barnes and Noble tenant space). The existing space will be divided into five (5) retail shops with office space above. The entire facade was removed and will be replaced with sleek, contemporary materials. A new outdoor patio will be part of the project. The third applicant is located at 806-808 Waukegan Road (Walter Tailor and Cherry Pit Cafe). They plan to replace all of the outdated windows, signage and awnings to give the building a fresh appearance, while maintaining its historical character. The program is set to run until the end of the year.

Interested businesses should contact Planning & Design Specialist Liz Delevitt at edelevitt@deerfield.il.us or 847.719.7483 for more information.

Harvest Fest

DEERFIELD HARVEST FEST

Deerfield's Harvest Fest is back September 9 with fun community events for everyone.

Start the day with your neighbors at the Deerfield Farmers Market between 7 a.m. and 12:30 p.m. with special kids' activities and the popular touch-a-truck.

Gates open at the intersection of Deerfield Road and Park Avenue at 4:30 p.m. We'll have live concerts from West End 40 and 7th Heaven, food, a beer tent and more. Register in advance for our bags tournament to receive a one-of-a-kind trophy.

Harvest Fest is hosted by the Village of Deerfield and the DBR Chamber of Commerce. Watch for an event mailer with more details and a list of sponsors in late August.



VILLAGE SPOTLIGHT

In May, Highland Park Mayor Nancy Rotering, City Manager Ghida S. Neukirch and Police Chief Lou Jogmen presented a Highland Park flag and certificate to Mayor Shapiro for the Village's assistance on and following the July 4th shooting. Both are now proudly on prominent display in the Village Hall lobby.

"It serves as a reminder that in times of adversity, neighboring communities can rely on each other for support, comfort and solace."

DANIEL C. SHAPIRO, MAYOR

Board Report



For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit deerfield.il.us.

VILLAGE BOARD ACTION

Approved an Ordinance amending Chapter 3 of the Municipal Code to create a new Class L Liquor License to allow for product sampling and regulations related thereto

Approved a Resolution granting an extension to a development schedule for 8 Parkway North in the Parkway North Center Planned Unit Development (Quadrangle Development Corporation)

Approved a Resolution authorizing an economic incentive agreement with 2300 Carlson, LLC (Shake Shack - 560 Waukegan Road)

Approved a Resolution adopting the All Natural Hazards Mitigation Plan

Approved an Ordinance amending the Village of Deerfield Wage and Salary Plan

Approved a Resolution to reject all bids for 2023 Street Rehabilitation Program

Approved a Resolution to award Family Days fireworks contract

Approved a Resolution approving High School Dist. 113 school resource officer agreement

HONORS AND RECOGNITIONS

Recognized National First Place Rochelle Zell Jewish High School Model UN Team

Proclaimed May Asian American and Pacific Islander Heritage Month

Proclaimed May Jewish American Heritage Month

Proclaimed May 21 - May 27, 2023, as National Public Works Week

Proclaimed May 15 - May 21, 2023, as National Police Week

Proclaimed April 28, 2023, as Arbor Day

Proclaimed June as LGBTQ Pride Month

Appointed Rai Copeland-Keefe to Fine Arts Commission

Community Calendar

Deerfield Park District
For more information or to register for Park District programs, call 847.945.0650 or visit deerfieldparks.org.

Enjoy Summer Concerts at Floral Park from 5-6:30 p.m. in July and August. Join your friends and neighbors, bring a picnic dinner, chair or blanket while different artists perform each week. Dates and artist bios can be found at deerfieldparks.org/events.

Our summer celebration of music continues as we proudly welcome the return of John Maxson and the North Shore Line to the Patty Turner Center for Elmstock II: The Summer Celebration for our 50+ adult audience on August 16 from 5:30-7:30 p.m. Call 847.940.4010 to register.

Open Pickleball at Sachs Recreation Center for all players no matter their age or ability level. Drop in and play on one of our seven courts. The spring/summer Open Play schedule runs April 3-August 11. Open play is rack format M/W/F 8 a.m.-12 p.m. $7R/9NR/Free for SRC Members.

Eat to the Beat Concerts for our young audiences and their caregivers at Jewett Park Pavilion from 11:30 a.m.-12:15 p.m. on July 5, 12, 19 & 26. Bring a picnic lunch, listen to music and play in the park!

Deerfield Family Theater Auditions for Beauty and the Beast will be held in August. Visit deerfieldfamilytheater.com to select an audition slot!

Deerfield Library
All Library programs are free and open to the public. Register in advance by phone at 847.945.3311, online at deerfieldlibrary.org, or in person at 920 Waukegan Rd. Online program description notes program platform (online, in-person, or hybrid).

Memory Cafe
July 5 and August 2, 10-11:15 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. To register, contact Judy Hoffman at 847.580.8954 or jhoffman@deerfieldlibrary.org.

Professor Moptop Presents: Grateful Dead
July 18, 7-8:30 p.m.
The program will focus on the roots of the Grateful Dead and many of the songs composed by them and others, including Johnny Cash, Chuck Berry, and Bobby "Blue" Bland.

It's Juggle Time! Become the Pro!
July 22, 10-11 a.m., Youth-All Ages
Enjoy a comedy juggling and variety show, and an interactive workshop to learn juggling and balancing skills.

Balloon Creation Station
July 26, 4:30-5:30 p.m., Ages 8-12
Learn how to make balloon creations and leave with an armful of colorful balloons.

Jigglejams Concert
August 5, 10-11 a.m., Youth-All Ages
Wiggle, jiggle, and giggle to Jodi Koplin's interactive songs in this fun family-friendly concert.

Lunch & Listen: Appalachia Music & Culture
August 18, 12-1:15 p.m.
Explore the music of the mountains with L.J. Slavin and his banjo, harmonica, penny whistle and musical saw. Bring your lunch; dessert will be provided.

PUBLIC WORKS BY THE NUMBERS

66 lane miles
of roadway

107 miles
of water main

110 linear miles
of storm sewers



Waukegan Road Water Main Project

The Waukegan Road Water Main Project began in early April and is expected to be completed by early September. The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction. Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day. Public meetings were held in advance of the project for residents and local businesses.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at www.deerfeld.il.us under "Notify Me."

For more information, contact the Engineering Department at 847.317.2490.



Residents learned about water main breaks at the Public Works Open House in May.

Lawn Irrigation RPZ Regulations

All irrigation systems are required to have a backflow prevention device called a Reduced Pressure Zone Backflow Preventer (RPZ). This must be certified annually by a licensed Cross Connection Device Inspector. This testing and certification must be completed every year prior to the system going into service.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the backflow prevention tracking program. The annual backflow assembly test report must be submitted electronically by your inspector at BsiOnline.com

For more information, contact the Public Works Department at 847.317.7245.

Flood Information

Natural & Beneficial Functions

Floodplains provide a lot of benefits and play a role in providing natural and beneficial functions to the Deerfield area. Parts of both the Middle and West Forks of the North Branch of the Chicago River floodplain help filter chemical run-off so these areas can maintain bio-diversity and ecosystem sustainability. They enhance waterfowl, fish and other wildlife habitats and provide open space and natural erosion control to reduce further flood damage.

Drainage System Maintenance

Keeping smaller ditches and streams free of debris can dramatically improve the run-off capacity of low-lying areas, as well as greatly reduce incidental blockage that significantly contributes to flooding. Please alert the Deerfield Engineering Department of any illegal dumping of materials into a regulated waterway as violators may be fined.

Additional Information

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess the problem and may be able to offer solutions. The localized flood protection service is provided by the Engineering Department. Anyone with questions, please contact the Engineering Department at 847.317.2490.

If you need more detailed information regarding flood-related issues in Deerfield, please visit the Additional Flood Information page on the Village website.

Reminder: Sprinkling Restrictions in Effect

The Illinois Division of Water Resources requires that municipalities using Lake Michigan water restrict lawn sprinkling between May 15th and September 15th. Accordingly, Deerfield's restrictions during this period are as follows:

Even numbered addresses may sprinkle on even numbered days from midnight to noon and from 6:00 p.m. to midnight.

Odd numbered addresses may sprinkle on odd numbered days from midnight to noon and from 6:00 p.m. to midnight.

VILLAGE OF DEERFIELD

Annual Drinking Water Quality Report Village of Deerfield 2022

This information is being published in accordance with the 1996 Safe Water Drinking Act as directed by the U.S. Environmental Protection Agency.

We are once again pleased and proud to present to you the Annual Drinking Water Quality Report. This Consumer Confidence Report (CCR) is designed to inform you about the water we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. The Village is committed to ensuring the quality and delivery of your water. We hope you find this information useful.

The drinking water provided by the Village meets or exceeds all State of Illinois and United States Environmental Protection Agency (EPA) regulations and we are not operating under any variance or exemption from the established drinking water regulations or standards. Opportunities for participation in the decision making processes that affect drinking water quality are also available at the monthly Village of Deerfield Board meetings on the first and third Mondays of every month. If you have questions about this report or water quality, please contact Tyler Dickinson, Responsible Operator in Charge, at 847.317.7245, or e-mail pw@deerfield.il.us.

Source of Drinking Water

The Village of Deerfield purchases all water from the City of Highland Park. The City of Highland Park draws its raw water from a 54-inch intake pipe located a mile off shore in Lake Michigan at a depth of approximately 30 feet. In addition, there are two smaller pipes used as secondary intakes, which are 16 and 20 inches in diameter.

Susceptibility to Contamination

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those elements may be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Susceptibility is defined as the likelihood for the source water of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA (IEPA) considers all surface sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution. Hence, the reason for mandatory treatment for all surface water supplies in Illinois.

As mentioned above, Highland Park has three intake lines. The 54-inch intake pipe is normally used alone, with the two smaller intakes used to augment high demand or during maintenance of the 54-inch pipe. As these are closer to the shore, they have a greater susceptibility to be influenced by potential sources of contaminants. Regardless of which lines are used, the finished water leaving the Highland Park Water Plant always meets or exceeds all IEPA and EPA regulations.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791. To access the Highland Park Water Assessment Summary, visit rb.gy/k8epg.

Contaminants Monitoring Results

The Village of Deerfield and City of Highland Park routinely monitor for contaminants in your drinking water according to Federal and State Laws.

General

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

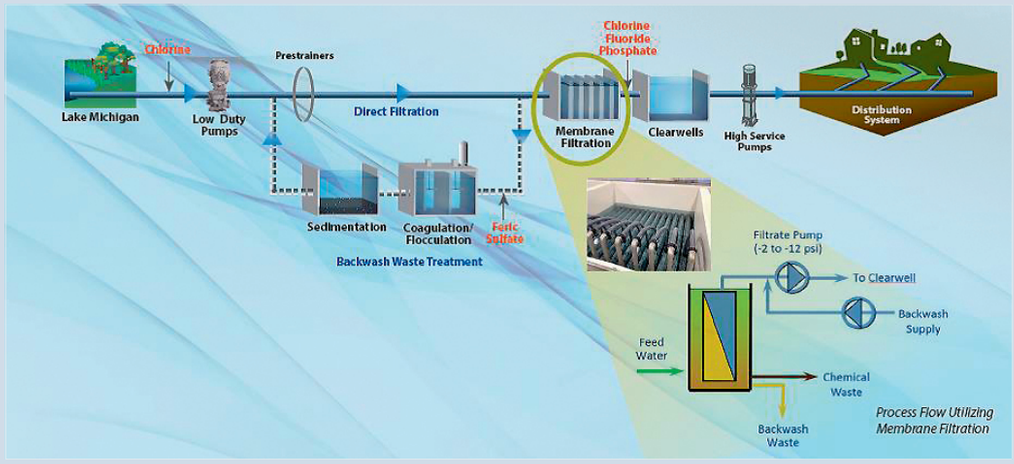
Radioactive contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

2022 Water Quality Data – January 1, 2022 to December 31, 2022

Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Microbial Contaminants							
Turbidity (%<0.3 NTU)*	n/a	0.3 NTU	100%	n/a	NO	2022	Soil runoff
Turbidity (1.0 NTU)* Highest Single Measurement	n/a	1 NTU	0.166 NTU	n/a	NO	2022	Soil runoff
Disinfection / Disinfection Byproducts							
Chlorine (ppm)	4	4	1.55	0.50-2.13	NO	2022	Water additive used to control microbes
Total Haloacetic Acids [HAAS] (ppb)	n/a	60	21.6	7.8.-35.3	NO	2022	By product of drinking water chlorination
TTHM [Total Trihalomethanes] (ppb)	n/a	80	59.2	17.0-66.4	NO	2022	By product of drinking water chlorination
Inorganic Contaminants							
Barium (ppm)	2	2	0.019	.019-.019	NO	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.708	0.708-0.708	NO	2022	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Coliform	0	0	0	0 Plus	NO	2022	Naturally present in the environment

This schematic drawing details the water purification process that Highland Park utilizes to provide clean water to all of its customers, including Deerfield.



Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Unregulated Contaminants reported by the City of Highland Park							
Sulfate (ppm)	n/a	n/a	23.0	23.0-23.0	NO	2022	This contaminate is not currently regulated by the USEPA. However the state regulates. Naturally occurring; discharge from metal factories.
Chloride	n/a	n/a	20.0	20.0-20.0	NO	2022	This contaminant is not currently regulated by the USEPA. However the state regulates. Naturally occurring; run-off from road salts.
Calcium	n/a	n/a	35	35.0-35.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Magnesium	n/a	n/a	13	13.0-13.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Sodium	n/a	n/a	13	13.0-13.0	NO	2022	Erosion from naturally occurring deposits. Used in water softener regeneration.
Hardness Total (ppm as CaCo3)	n/a	n/a	140	140-140	NO	2022	Erosion from naturally occurring deposits.
Alkalinity	n/a	n/a	98	98-98	NO	2022	Erosion from naturally occurring deposits.
Total Dissolved Solids	n/a	n/a	170	170-170	NO	2022	Erosion from naturally occurring deposits.

Lead and Copper

The IEPA lead and copper testing program began in 1992. Due to consistent low concentration levels of lead and copper, the Village has been placed on a reduced testing cycle by the Illinois Environmental Protection Agency (IEPA) and is only required to test every three years. Currently, a round of testing consists of 30 samples. Our most recent round of lead and copper testing took place in 2021 with all samples reporting below the action levels for lead and copper. Copies of the lead sampling results are available on the Village website at deerfield.il.us. Our next round of testing will occur in 2024.

The Village of Deerfield is in full compliance with all State and Federal regulations governing the control of lead and copper within public drinking water supplies. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Deerfield is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at epa.gov/safewater/lead.

Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. The following table shows the results of our lead and copper monitoring for the period of January 1 to December 31, 2021.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	#Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	#Sites Over Copper AL	Likely Source of Contamination
0	15ppb	0 ppb	0	1.3ppm	1.3 ppm	0.19 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

In the previous tables you will find many terms and abbreviations you may not be familiar with. To help you better understand these terms we have provided the following definitions:

ppm - parts per million or milligrams per liter (mg/l) or one ounce per 7,350 gallons of water.

ppb - parts per billion or micrograms per liter (mcg/l) or one ounce per 7,350,000 gallons of water.

ppt - parts per trillion or nanograms per liter (nanograms/l) or one ounce per 7,350,000,000 gallons of water.

NTU - Nephelometric Turbidity Unit, used to measure of the cloudiness in drinking water.

% < 0.3 NTU - percent samples less than 0.3 NTU.

Mrem/yr - millirems per year, used to measure radiation absorbed by the body.

pCi/l - picocuries per liter, used to measure radioactivity.

 # pos/mo - number of positives per month.

AL - Action Level or the concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

MCL - Maximum Contaminant Level or the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

n/a - not applicable.

About The Data

Organic Carbon - The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Turbidity (NTU) - Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration and disinfectants.

Sodium - There is not a state or federal MCL for sodium. Monitoring is performed to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Lead & Copper - The Village of Deerfield has been in compliance with regulations for lead and copper control. (See Lead and Copper Explanation on page 7.)

Unregulated Contaminants - A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

In addition to the above mentioned tests, Deerfield continuously monitors and tests your water through our water control system as well as weekly physical samples. These samples are submitted to the IEPA certified Central Lake County Joint Action Water Agency for analysis. This ensures a rapid response should there ever be a problem.

Special Information Available

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791.

Top Ways to Conserve Water

Conserving water is easy if you follow these helpful tips:

- Test for a leaking toilet by adding food coloring to the tank.
- If any color appears in the bowl after 30 minutes, your toilet is leaking. Leaking toilets can waste thousands of gallons of water. Flush as soon as the test is done, since food coloring may stain the tank.
- Use water-conserving plumbing fixtures and water-flow restrictors on sinks and showers. Bathroom facilities typically constitute 75% of the water used in homes.
- Run your dishwasher and washing machine when you have a full load.
- Take a short shower instead of a bath. A bath uses 30 to 50 gallons of water. Showers use about a gallon of water per minute.
- Store drinking water in the refrigerator instead of letting the tap run every time you want a glass of cool water.
- Never put water down the drain when there may be another use for it such as watering a plant or garden, or doing housework.
- Be conscientious of the amount of water you use when running your garbage disposal. Have your food scraps cut into small pieces so they can be disposed of quickly, minimizing the amount of time you need to run the faucet.
- For landscaping and gardens, choose plants that are native to the area in which you live or plants that are drought resistant. Native plants are accustomed to the natural amount of precipitation that occurs in the area where they are found and normally do not require any additional watering. Group plants together based on similar watering needs.
- Water your lawn and/or garden during the coolest part of the day to minimize evaporation. Apply water slowly, exactly where it is needed. Position sprinklers so that water lands on the lawn and shrubs, not on paved areas. Keep in mind that sprinkling restrictions are in place from May 15 - September 15.

For More Information

If you have any questions about this report, your water quality in general, or simply want more information, please contact the Village of Deerfield Water Department at 847.317.7245 or pw@deerfield.il.us or visit our website at deerfield.il.us.

Police Department News

Fireworks Safety Tips

The Fourth of July should be a fun time with great memories. The optimal way to enjoy fireworks will be at the Deerfield Family Days professional display at dusk on July 3rd, 2023, at Shepard Park. The use of fireworks in Deerfield is significantly restricted by Village Ordinance.

Each July 4th, thousands of people nationwide, most often children and teens, are injured while using consumer fireworks. Also, unsanctioned fireworks can have unintended consequences for combat veterans with post-traumatic stress disorder; while veterans anticipate the sound of fireworks on the 4th of July, civilians who shoot them off on random days before and after the holiday can be a source of real anxiety.

Curfew

Our curfew ordinance was created for the safety of minors as well as to maintain the quality of life throughout Deerfield. It is applicable to those 17 and Under:

Sunday - Thursday: 11 p.m. - 6 a.m.
Friday - Saturday: 12:00 a.m. - 6 a.m.

Drivers under the age of 18 may not operate a motor vehicle between the hours of 10 p.m. and 6 a.m., Sunday through Thursday, and between 11 p.m. and 6 a.m., Friday and Saturday. During allowed driving times, the number of passengers is limited to one person under the age of 20, unless the additional passenger is a sibling, step-sibling, child, or step-child of the driver.

Exemptions in the law allow new drivers to drive to and from employment or school-sanctioned activities outside the restricted times. Underage drivers convicted of violating the new driving curfews may have their driver's license suspended.

2023 Cop on a Rooftop

Members of the Police Department, in cooperation with Dunkin' of Deerfield, participated in the annual Cop on a Rooftop event on May 19 to benefit the Special Olympics Illinois Law Enforcement Torch Run. Department members called down to customers from the roof of Dunkin' while others collected donations on the ground with Special Olympics Gold Medal Winning Athlete and Global Messenger Ella Stoklosa. Lutheran Church Charities K-9 Ministry were also in attendance with Comfort Dogs. More than $4,200 was raised at the Deerfield location for Special Olympics Illinois.



Overnight Parking

By Village Ordinance, vehicles are not allowed to park on the street between the hours of 2 a.m. and 6 a.m. This ordinance helps to reduce crime and improve the overall safety and appearance of our community. If you require an exception, call the Deerfield Police non-emergency number 847.945.8636, before 2 a.m., and be prepared to provide the license plates of the effected vehicles.

Police Department Lobby Closure

The Police Department's Communications Center is getting an upgrade and expanding. During construction there may be times the Police Department lobby will be closed to the public as a safety precaution. If you need police service, please call 847.945.8636. For the records department, please contact 847.945.5007.

The Communications Center was last remodeled more than twenty years ago. The dispatch consoles were later replaced in 2004. The Center was originally designed to accommodate dispatching personnel to provide service for two communities, Deerfield and Bannockburn. Since that time, the Center has seen modest growth with the addition of Riverwoods and Lincolnshire, resulting in significant use of the center and equipment which is staffed and operational 24 hours a day, seven days a week.

STAY CONNECTED

Instagram: deerfieldpolice
Nextdoor.com: Deerfield Police Department

In 2022, the Deerfield Police Communications Center managed a total of 59,051 calls for service.

15,483
Deerfield calls for service

8,091
Bannockburn Police calls for service

5,476
Riverwoods Police calls for service

19,139
Lincolnshire Police calls for service

10,862
Communications Center calls for administrative issues



VILLAGE HISTORY

The Historic Village consists of five buildings dating from 1837 to 1905 that offer you a look at a typical prairie community.

George Luther House, c. 1847
This is a well preserved example of the larger "three room log cabin" built before the arrival of the first sawmill in 1850. After the Civil War, the house was modernized by the addition of Greek Revival white siding and green trim. The building houses a visitor center and exhibits.

Bartle Sacker Farmhouse, c. 1854
Nicknamed "The Little House on the Prairie," this two-story frame house is furnished with artifacts used in the daily life of an active farm family. View photos of the farmhouse being moved to the Historic Village from its original site at 1428 Waukegan Road at digitalpast.org.

Little Red Schoolhouse, c. 1890
Is a replica of a 19th century One-room school furnished with period school items. Every child in District 109 attends class for one day at the schoolhouse as part of their local history program.

Carriage House, c. 1905
Antique carriages and farm equipment are housed in this replica. The Carriage House was built with materials salvaged from four area buildings, and the first four carriages were put on display in 1984.



Caspar Ott Log House, c. 1837
The one-room log home where journeyman tailor Caspar Ott (1814-1876) and his wife, Catherine Trier (1816-1891), raised their seven children is the oldest standing building in Lake County. In 1970, just one week before it was to be demolished, the log house was discovered under the plaster walls of the dining room in the Siljerstrom farmhouse, located on the east side of Sanders Road. In 1971, the log house was moved to the Deerfield Historic Village.

A Look Back in Time

"The roots of a community are in its history and Deerfield is fortunate to have our early beginnings preserved at the Deerfield Historic Village."

JEAN SPAGNOLI
PRESIDENT,
DEERIELD AREA
HISTORICAL SOCIETY

Deerfield Area Historical Society

Tour the Deerfield Historic Village
The Deerfield Area Historical Society hosts free tours of the Deerfield Historic Village, located at the corner of Deerfield Road and Kipling Place, on Sundays from 2 to 4 p.m. from June through September. Visit historic buildings ranging from Lake County's oldest log cabin to a one-room schoolhouse that has been a favorite of children for many years. The Historical Society, a donor-supported, nonprofit organization, maintains the Historic Village.

Save the Date:
DAHS Annual Fall Festival
Sunday, October 1
Noon to 4 p.m.
Deerfield Historic Village
Enjoy the afternoon with fun for the whole family! Step into Deerfield's past with activities, exhibits, food, craft show and historic building tours.

Attention Crafters
The Historical Society is looking for traditional crafters who would like to join the Fall Festival. Show off your talent: knitting, weaving, woodworking, etc. Demonstrate your craft (if possible) and sell your wares. If interested, email deerfieldhistory@gmail.com and ask for an application.



Farmer's Market - Food, Friends and Fun



The Farmers Market season is underway with lots of food, friends and fun! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning through October 14 from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet! Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less. We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/ Farmers-Market.

District 109 Updates

Although it's summer, there's still a lot happening at District 109! Follow us on Facebook and Twitter at DPS109.

The first day of the 2023-2024 school year is Monday, August 21. We look forward to seeing all of our students and staff back at school!

As the school year draws closer, we are always in need of substitute teachers. You can set your schedule of how often you work! Fill out an application today at dps109.org/jobs.



Come visit us at the Deerfield Farmers Market on Saturday, August 26th! Our superintendent and Board of Education members will be there to say hi, answer questions, and hand out some District 109 swag!

Congratulations to the Class of 2023 from Caruso and Shepard Middle Schools! We wish you well as you head off to Deerfield High School!

DID YOU KNOW?

Wilmot School recently celebrated its demisemi-septcentennial! (That's 175 years!) The school held a day-long party in early June full of activities. Students and staff also recently opened a time capsule from 1997 that showcased what elementary students used at the time. Among the items: a Tamagotchi, Beanie Babies, Hot Wheels, a Michael Jordan poster, and more! This year's group put items inside a new time capsule that will be opened 25 years from now!

VILLAGE OF DEERFIELD

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 | deerfield.il.us

PRESORTED
STANDARD U.S.
POSTAGE
PAID
PERMIT NO. 1
DEERFIELD, ILLINOIS

Postal Customer
Deerfield, Illinois 60015

VILLAGE OFFICIALS

Mayor
Daniel C. Shapiro
847.719.7402
dshapiro@deerfield.il.us

Trustees
Robert "Bob" L. Benton
847.945.1570
rbenton@deerfield.il.us

Larry Berg
847.612.0777
lberg@deerfield.il.us

Elaine Jacoby
847.644.3354
ejacoby@deerfield.il.us

Rebekah Metts-Childers
847.899.1449
rmettschilders@deerfield.il.us

Mary M. Oppenheim
847.948.9423
moppenheim@deerfield.il.us

William S. Seiden
847.945.2442
wseiden@deerfield.il.us

Village Manager
Kent S. Street - 847.719.7400
kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015

Switchboard and Finance
847.945.5000

Community Development
847.719.7484

Police non-emergency
847.945.8636

Public Works and Engineering
465 Elm Street
847.317.7245
847.317.2490 (Engineering)



May 17, June 21, July 19, Aug. 16, Sept. 20

4:30 p.m. to 8 p.m. at Jewett Park Hazel Avenue Parking Lot

Live Music | Kids Activities

Sponsored by: The Village of Deerfield

MEETING SCHEDULE

For a complete list of meetings, please visit deerfield.il.us. *Times/dates subject to change.*

July

Board of Trustees
July 5 & 17, 7:30 p.m.

Community Relations Commission
July 11, 6:30 p.m.

Plan Commission
July 13 & 27, 7:30 p.m.

Appearance Review Commission
July 24, 7:30 p.m.

August

Board of Trustees
August 7 & 21, 7:30 p.m.

Community Relations Commission
August 8, 6:30 p.m.

Plan Commission
August 10 & 24, 7:30 p.m.

Appearance Review Commission
August 21, 7:30 p.m.

Website: https://www.deerfield.il.us/190/Additional-Flood-Information-Village-Ser

Additional Flood Information & Village Services

Flood Hazard Areas

Special Flood Hazard Areas (100-year floodplain) in the Village of Deerfield are located near the Middle Fork and West Fork of the North Branch of the Chicago River. The eastern portion of Deerfield is in the Middle Fork floodplain, while the western part of town is in the West Fork floodplain. For a detailed map visit the Village of Deerfield website www.deerfield.il.us under maps and information.

Guidance on whether your property is in the 100-year floodplain can be obtained by visiting the Engineering Department and having a staff member help you. However, staff cannot make an official determination but can advice residents on the process with FEMA. Maps are available to look at as well as other flood-related information. Contact the Engineering Department at 847-317-2490 for further assistance.

Flood Safety

The following common sense guidelines can help protect you from the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else.
- Do not drive around barriers.
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet.

Village of Deerfield Flood Recommendations

- Stay away from power lines and electrical wires. If your house is about to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the 2nd leading cause of death during floods.

- Be alert to gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to a Village official or your gas company. Do not use candles, lanterns or open flames if you smell gas or are unsure if your gas has been shut off.
- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry unimaginable items that have dislodged themselves. Culverts may suck smaller people into them rendering them helpless.
- Clean everything that has been wet. Flood water will be contaminated with sewage and other chemicals which pose severe health threats.
- Look out for animals, especially snakes. Small animals that have been flooded out of their home may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

Property Protection Measures

If your property is susceptible to flooding, there are many flood damage reduction measures you can employ:

- Watertight seals can be applied to brick and block walls to protect against low-level flooding.
- Utilities such as heating and air conditioning systems, water heaters and other major appliances can be elevated to higher floors in the structure or on raised platforms.
- Temporary measures such as moving furniture and other valuables to higher floors or sandbagging exterior openings will also help.
- Elevating or relocating the entire structure may also be a feasible option.

Historical Flooding & Natural Floodplain Functions

In addition to floodplain mapping assistance the Village of Deerfield Engineering Department provides the following services:

- Historical flooding information.
- Natural flood plain function information.
- Information on soil types when available.
- Flood protection assistance recommendations.

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess

the problem and may be able to offer solutions. Also, guidance on whether your property is in the 100-year floodplain, floodway, wetland or historical flooding area, can be obtained by contacting the Engineering Department and having a staff member help you. Maps are available to look at as well as other flood-related information. With questions please contact the Engineering Department at 847-317-2490.

Additional Information

If you should require further or more detailed information regarding flood-related issues in Deerfield, here are some additional sources:

- FEMA.gov website
- Physical Address of Village of Deerfield Engineering Department
  465 Elm Street
  Deerfield, IL 60015
- Engineering Phone Number: 847-317-2490
- Flood FAQs
- Deerfield Public Library
- Lake County Flood Information, Programs and All Natural Hazards Mitigation Plan (ANHMP)
- Deerfield 2024 Annual Progress Report

2023 DRAINAGE ISSUES

No.	Date:		Location	Reported By:	Via	Staff	Phone	Email	Status	Notes
	3/1/2023		65 Bent Creek	Anthony Greis	email	TKD	847-513-3214 cell			
	3/2/2023		830 Northwoods	Mr. Miller		TKD				
	3/7/2023		1023 Greenwood	Laurie Heyl		TKD		2lheyl@comcast.net		
	3/13/2023		1115 wayne	Marshall Brill	Email	JSG		marshalll.brill@gmail.com		
	3/14/2023		802 Wilmot	Aaron Appelbaum		TKD	224-456-5959			
	3/23/2023		1620 Dartmouth	Ciprian Sabau	email	TKD				
	3/28/2023		903 Greenwood	Cindy Caliskan		JSG	847-830-6429			
	4/3/2023		1023 Greenwood	Laurie Heyl		TKD		2lheyl@comcast.net		
	4/6/2023		1645 Portage Pass	Ms. Ernstein		TKD	847-826-5719			
	4/11/2023		1330 Knollwood	Jimmy Karanikolas		TKD				
	4/11/2023		1336 Knollwood	Lela Hutchinson		TKD				Village led design - residents did not elect to fund project
	4/11/2023		1218 Norman	Mr. Bloom		TKD	847-529-6888			
	4/13/2023		595 Carriage Way	Gary Schikman		TKD	847-877-1028			
	4/13/2023		140 Ferndale			JSG				
	Various		520 Brierhill	Susan O'Malley	Phone/Field	TKD	847-624-7609	Susan O'Malley <somalley779@gmail.com>		
	4/13/2023		153 Plumtree	Maggie Crane		TKD				
	4/13/2023		1447 Wilmot	Dave Reynolds		TKD				
	4/14/2023		415 Castlewood	Ms. Miller		TKD	847-942-2894			
	4/14/2023		1023 Greenwood	Laurie Heyl		TKD		2lheyl@comcast.net		
	4/18/2023		912 Warrington	Kurt Benson		TKD	847-877-6219			Village involved correction
	4/18/2023		244 Fairview	Miriam Treshansky		TKD	847-302-8984			
	4/19/2023		900 Westcliff	Carol Noble		TKD	847-772-2132			H.O. to send photos of issues to TKD
	4/20/2023		Northwoods HOA			TKD				Met in VH conference room
	4/27/2023		1144 Oakley	Paul Weiss		TKD				About neighbor's property
	4/27/2023		912 Warrington	Kurt Benson		TKD	847-877-6219			
	5/11/2023		1645 Portage Pass	Ms. Ernstein		TKD	847-826-5719			
	5/26/2023		912 Warrington	Kurt Benson		TKD	847-877-6219			
	5/26/2023		1351 Berkley	Danny & Marisa Pogofsky		TKD	847-507-0018			
	7/5/2023		1330/1336 Knollwood Group			TKD				
	8/4/2023		1233 Stratford	Mr. Tolari		TKD	847-219-6677			
	9/12/2023		840 Summit			JSG				
	9/28/2023		685 Carlisle	Jim		TKD	773-450-7941			
	10/3/2023		1050 Kenton	Martha Berry		TKD	248-568-9136			
	10/17/2023		Marshall Mall			TKD				
	11/20/2023		909 Faountain Dr	Mr. Riboh		TKD	847-372-8698			
	1/8/2024		85 Cody Ct	Mr. Smerling		TKD	312.953.4943	msmerling@lcibrands.com		

Tyler Dickinson, P.E.

From: Demetrios Karanikolas <karanid@icloud.com>
Sent: Thursday, April 6, 2023 12:41 PM
To: Tyler Dickinson, P.E.
Cc: Lela Hutchinson; Ilioula Karanikolas; Robert Phillips, P.E.; Mark Smrecek
Subject: Re: Knollwood Flooding

[EXTERNAL EMAIL]

Thank you.

> On Apr 6, 2023, at 12:40, Tyler Dickinson, P.E. <tdickinson@deerfield.il.us> wrote:
>
> We'll meet onsite at your house so we can look at the specifics of the properties. I'll see you all next Tuesday.
>
> ---
>
> **From:** Demetrios Karanikolas <karanid@icloud.com>
> **Sent:** Thursday, April 6, 2023 9:58 AM
> **To:** Tyler Dickinson, P.E. <tdickinson@deerfield.il.us>
> **Cc:** Lela Hutchinson <lela31@hotmail.com>; Ilioula Karanikolas <ilioulamt23@yahoo.com>; Robert Phillips, P.E. <rphillips@deerfield.il.us>; Mark Smrecek <smrecekm@yahoo.com>
> **Subject:** Re: Knollwood Flooding
>
> **[EXTERNAL EMAIL]**
>
> ---
>
> Tyler, where are we meeting you ?
>
> > On Apr 6, 2023, at 09:52, Tyler Dickinson, P.E. <tdickinson@deerfield.il.us> wrote:
> >
> >
> > <1.jpg>
> >
> > **Tyler Dickinson, P.E.**
> > Assistant Director of Public Works and Engineering | Deerfield Public Works and Engineering
> > 465 Elm St | Deerfield, IL 60015
> > 847.719.7463
> >
> > **Follow Us:** <3.jpg><0.jpg><2.jpg>
> >

Thanks Jimmy. I don't think it'll take an hour but I've blocked it off if needed.

See you all Tuesday.

From: Demetrios Karanikolas <karanid@icloud.com>
Sent: Thursday, April 6, 2023 8:54 AM
To: Tyler Dickinson, P.E. <tdickinson@deerfield.il.us>
Cc: Lela Hutchinson <lela31@hotmail.com>; Ilioula Karanikolas <ilioulamt23@yahoo.com>; Robert Phillips, P.E. <rphillips@deerfield.il.us>; Mark Smrecek <smrecekm@yahoo.com>
Subject: Re: Knollwood Flooding

[EXTERNAL EMAIL]

Good Morning Tyler,
Tuesday, April 11th, 8:00 AM - 9:00 AM works for all of us. Please let us know the meeting place.

On Apr 5, 2023, at 14:09, Tyler Dickinson, P.E. <tdickinson@deerfield.il.us> wrote:

<1.jpg>

Tyler Dickinson, P.E.
Assistant Director of Public Works and Engineering | Deerfield Public Works and Engineering
465 Elm St | Deerfield, IL 60015
847.719.7463
Follow Us: <3.jpg><0.jpg><2.jpg>

Jimmy, thanks for sending along the videos and taking the time yesterday to discuss the issue. We'd be happy to meet to discuss this and ways to alleviate the issue. I am available next week, Tuesday or Thursday from 7:30a – 3pm. Please let me know of a time that'll work best for the group and we can schedule the meeting.

Thanks,

From: Demetrios Karanikolas <karanid@icloud.com>
Sent: Tuesday, April 4, 2023 7:38 PM
To: Lela Hutchinson <lela31@hotmail.com>; Ilioula Karanikolas <ilioulamt23@yahoo.com>; Tyler Dickinson, P.E. <tdickinson@deerfield.il.us>; Robert Phillips, P.E.

<rphillips@deerfield.il.us>; Mark Smrecek <smrecekm@yahoo.com>
Subject: Re: Knollwood Flooding

[EXTERNAL EMAIL]

++ looping in Mark Smrecek

Sent from my iPad

On Apr 4, 2023, at 7:31 PM, Demetrios Karanikolas <karanid@icloud.com> wrote:

<1.jpg>

Tyler Dickinson, P.E.
Assistant Director of Public Works and Engineering | Deerfield Public Works and Enginee
465 Elm St | Deerfield, IL 60015
847.719.7463
Follow Us: <3.jpg><0.jpg><2.jpg>

Download Attachment
Available until May 4, 2023

Hi Tyler, thank you for coming out today to survey the flooding at 1330-1336 Knollwood Rd. As discussed, we are very motivated and have been for more than almost 14 years on getting the flooding situation rectified. I have cc'd my neighbors at 1336 Knollwood Rd (Mark Smrecek & Lela Hutchison) on this email thread. We are looking forward to meeting with you and your team to discuss next steps on possible solutions.

Fair warning, I was being very sarcastic on the attached video, nothing against you, but our neighbors Mark, Lela, my wife Youla and I have been dealing with this for more than a decade and have plenty of videos and pictures to share upon request.

Click to Download
IMG_1888.MOV
0 bytes

Click to Download
IMG_1889.MOV
0 bytes

Jimmy Karanikolas
847-878-1782
1330 Knollwood Rd

Tyler Dickinson, P.E.

From: Tyler Dickinson, P.E.
Sent: Wednesday, April 12, 2023 3:42 PM
To: Benson, Kurt
Cc: Judy; John Guccione; Robert Phillips, P.E.
Subject: RE: [EXTERNAL] Fw: 912 Warrington Rd. Zoning Inquiry

Kurt, let's go with Tuesday at 9am. Thanks and see you then.

From: Benson, Kurt <kurt.benson@united.com>
Sent: Wednesday, April 12, 2023 3:24 PM
To: Tyler Dickinson, P.E. <tdickinson@deerfield.il.us>
Cc: Judy <bensonsrus@yahoo.com>; John Guccione <jguccione@deerfield.il.us>; Robert Phillips, P.E. <rphillips@deerfield.il.us>
Subject: RE: [EXTERNAL] Fw: 912 Warrington Rd. Zoning Inquiry

[EXTERNAL EMAIL]

Hello Tyler,

Thank you for getting back to us so quickly!!

I work from home so next Tuesday from 9am to 12pm would work great for me. The other days I am busy with meetings. Please let me know if that time frame works for you.

Look forward to speaking with you.

Have a great day!!

Thank you,

Kurt Benson

United Information Technology
Senior Engineer – IT systems | Citrix Operations
233 S. Wacker Drive, 15th Floor | Chicago, IL 60606
Tel 872 825 9397 | Kurt.Benson@united.com



For all issues, please contact the Service Desk 800-255-5801

----- Forwarded Message -----
From: "Tyler Dickinson, P.E." <tdickinson@deerfield.il.us>
To: "Judy" <bensonsrus@yahoo.com>
Cc: "John Guccione" <jguccione@deerfield.il.us>, "Robert Phillips, P.E." <rphillips@deerfield.il.us>

Sent: Wed, Apr 12, 2023 at 2:21 PM
Subject: RE: 912 Warrington Rd. Zoning Inquiry

Good afternoon Bensons,

Appreciate you sending over the information. After taking a look at everything, I feel it's probably best to meet onsite to discuss the issues first hand. This way, we can take a look at the surrounding properties and see what improvements can be made.

I am available next Tuesday 8am – 3pm, Wednesday 10am – 3pm, or Thursday 8am – 11am. Please let me know one of these times that will work for you. Thanks,

VILLAGE OF DEERFIELD

Tyler Dickinson, P.E.
Assistant Director of Public Works and Engineering | Deerfield Public Works and Engineering
465 Elm St | Deerfield, IL 60015
847.719.7463
Follow Us:

From: Clinton Case <ccase@deerfield.il.us>
Sent: Wednesday, April 12, 2023 11:21 AM
To: Judy <bensonsrus@yahoo.com>; Tyler Dickinson, P.E. <tdickinson@deerfield.il.us>
Subject: RE: 912 Warrington Rd. Zoning Inquiry

Judy,

Based on your description, this is an engineering matter.

Tyler Dickinson, the Village's Assistant Director of Public Works and Engineering

Is better able to address your concerns.

Clint

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------

From: Judy <bensonsrus@yahoo.com>

Date: 4/12/23 10:21 AM (GMT-06:00)

To: Clinton Case <ccase@deerfield.il.us>

Cc: "KnJ B." <bensonsrus@yahoo.com>, Kurt Benson <kurt.benson@united.com>

Subject: 912 Warrington Rd. Zoning Inquiry

[EXTERNAL EMAIL]

Dear Mr. Case,

We are reaching out after several years of labor intensive attempts at maintaining yard drainage from what we believe is caused by

multi-home zoning issues.

Please refer to our attached letter and photos.

We look forward to collaborating with you on a resolution to this decades long extreme drainage concern.

Sincerely,
Kurt and Judy Benson
Mobile: 847-877-6219(text)

Sent from Yahoo Mail on Android

Clinton Case
Code Enforcement Supervisor

Extension 7472

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 440 – Flood Data Maintenance

Dear Mr. Arkens:

Attached is a list of the 75 benchmarks with their locations and elevations. The vertical control order is of second order and stability rating for each benchmark is of Quality Code A. These benchmarks were verified by HLR Engineering in 2008.

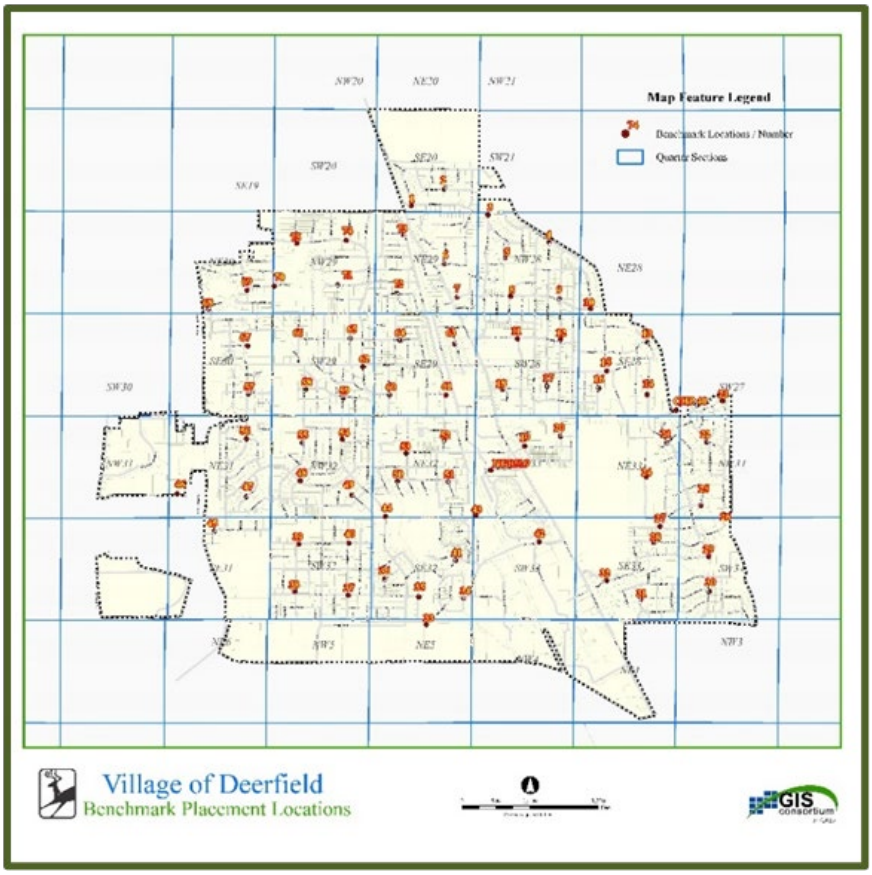
In the summer of 2021, all benchmarks were again verified with only one of the Village owned benchmarks not found and one requiring an elevation correction, making the system highly accurate overall. The verification report is attached.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

Benchmark Verification

For the Village of Deerfield
-at-
Village-Wide Benchmark Control System



Prepared by:

DOLAND ENGINEERING, LLC

334 E. Colfax Street, Suite C
Palatine, IL 60067
(847)991-5088

January 18, 2021

Observations and Results

Observations

Verification of Existing Benchmark Data Sheets
In order to accomplish this, reviewed all seventy-five (75) of the Village Benchmark Data Sheets, field located each benchmark and collected GPS data collection in Real-Time Kinetic (RTK) mode. The objective of our work was to firstly verify the existence of each benchmark and secondly to check the accuracy of the benchmark data (within the accuracy limits of RTK observation). The pages that follow provide a spreadsheet presentation of the data for each Village Benchmark, including a tabulation of the variation found between the record benchmark data and the observed benchmark data.

Results

As you will notice on the attached data sheets, the elevations of the benchmarks were found to have a high degree of accuracy except at the following locations:

- Benchmark #70 – Not found – appears to be removed by construction
- Benchmark #40 – Appears to be lower than the record elevation by 0.23' giving this benchmark a corrected elevation of 663.24
- Non-Village BenchmarkNG0519 – Not found
- Non-Village Benchmark CHP40 – Not found

The data sheets that follow provide the following columns for comparison

- Benchmark Record Data
    - Northing
    - Easting
    - Elevation
- 2021 Observation
    - Northing
    - Easting
    - Elevation
- Deviation
    - Northing
    - Easting
    - Elevation

Since the Village Benchmarks are predominantly used for elevation, with the one correction of BM#40 and the elimination of BM#70, the list is verified to be highly accurate. Location wise, the data provided on the following pages illustrates strong general accuracy with only a few instances of deviation from the record values. Since 0.08-feet is the general tolerance level for RTK observations, we have highlighted in yellow the observations that deviated in excess of

0.08-feet from the record values. If any of the data sheets are desired to be updated with “static observations” for ¼-inch accuracy tolerance, that can be performed; however, given the use and the accuracy found, the existing benchmark list appears to be both adequate and accurate. The Village Benchmark data is sufficient for surveyor coordination on both municipal and private projects. On projects in the Village where the highest accuracy standards are to be met, we recommend that multiple observations be made on multiple Village Benchmarks which will inherently average out minor errors. Alternatively, static observations of the Village Benchmarks coupled with coordination with a GPS network can be an option for those who wish to increase accuracy and coordination with Illinois State Plane coordinates.

BM #	Benchmark Record Data			2021 Observation			Deviation		
	N	E	Elev.	N	E	Elev	N	E	Eev
1	2009382.24	1114248.62	667.56	2009382.19	1114248.65	667.54	0.05	-0.03	0.02
2	2009815.23	1115109.9	661.52	2009815.21	1115109.99	661.53	0.02	-0.09	-0.01
3	2009144.69	1116234.73	665.42	2009144.62	1116234.83	665.41	0.07	-0.1	0.01
4	2008446.25	1117817.51	654.05	2008446.27	1117817.61	654.03	-0.02	-0.1	0.02
5	2008031.72	1116678.37	671.07	2008031.7	1116678.42	671.05	0.02	-0.05	0.02
6	2007883.82	1115108.73	683.42	2007883.87	1115108.79	683.38	-0.05	-0.06	0.04
7	2007012.74	1115439.57	685.36	2007012.71	1115439.68	685.37	0.03	-0.11	-0.01
8	2007035.57	1116824.07	676.65	2007035.53	1116824.18	676.61	0.04	-0.11	0.04
9	2006966.36	1118074.79	667.92	2006966.29	1118074.9	667.95	0.07	-0.11	-0.03
10	2006719.84	1118896.78	657.5	2006719.77	1118896.88	657.48	0.07	-0.1	0.02
11	2005935.13	1117002.54	678.4	2005935.15	1117002.61	678.34	-0.02	-0.07	0.06
12	2005930.2	1118117.69	672.1	2005930.23	1118117.79	672.07	-0.03	-0.1	0.03
13	2005849.05	1120359.93	655.82	2005849.07	1120360.04	655.81	-0.02	-0.11	0.01
14	2004491.17	1120342.6	661.82	2004491.16	1120342.68	661.83	0.01	-0.08	-0.01
15	2005109.12	1119307.12	665.93	2005109.06	1119307.18	665.94	0.06	-0.06	-0.01
16	2004655.36	1119091.23	673.06	2004655.33	1119091.35	673.07	0.03	-0.12	-0.01
17	2004706.97	1117763.76	676.36	2004706.96	1117763.85	676.38	0.01	-0.09	-0.02
18	2004629.55	1116614.68	690.89	2004629.55	1116614.71	690.88	0	-0.03	0.01
19	2003159.72	1117179.24	688.77	2003159.72	1117179.31	688.73	0	-0.07	0.04
20	2003421.36	1118104.64	686.98	2003421.37	1118104.59	686.98	-0.01	0.05	0
21	2003248.53	1120855.2	659.08	2003248.49	1120855.3	659.1	0.04	-0.1	-0.02
22	2003277.74	1121897.39	655.89	2003277.68	1121897.45	655.88	0.06	-0.06	0.01
23	2004327.51	1122305.11	663.6	2004327.48	1122305.19	663.62	0.03	-0.08	-0.02
24	2002374.3	1120326.2	666.36	2002374.29	1120326.31	666.34	0.01	-0.11	0.02
25	2001641.38	1121738.81	653.63	2001641.37	1121738.88	653.6	0.01	-0.07	0.03
26	2001387.94	1122329.16	653.77	2001387.88	1122329.25	653.79	0.06	-0.09	-0.02
27	2001091.12	1120682.49	670.91	2001091.09	1120682.56	670.96	0.03	-0.07	-0.05
28	2000672.01	1120525.14	667.21	2000671.96	1120525.18	667.23	0.05	-0.04	-0.02
29	2000309.38	1121951.63	657.3	2000309.38	1121951.69	657.28	0	-0.06	0.02
30	1999410.2	1121954.57	665.73	1999410.21	1121954.63	665.68	-0.01	-0.06	0.05
31	1999191.61	1120182.68	680.01	1999191.58	1120182.75	679.97	0.03	-0.07	0.04
32	1999697.8	1119299.71	676.26	1999697.74	1119299.76	676.23	0.06	-0.05	0.03
33	1998555.51	1114633.85	659.18	1998555.5	1114633.9	659.18	0.01	-0.05	0
34	1999237.6	1115606.17	659.1	1999237.6	1115606.25	659.09	0	-0.08	0.01
35	1999263.81	1114442.86	655.04	1999263.83	1114442.9	655.02	-0.02	-0.04	0.02
36	1999723.47	1113554.1	661.89	1999723.45	1113554.15	661.93	0.02	-0.05	-0.04
37	1999304.32	1112617.92	667.2	1999304.33	1112617.96	667.2	-0.01	-0.04	0
38	1999406.9	1111237.86	674.5	1999406.89	1111237.9	674.53	0.01	-0.04	-0.03

BM #	Benchmark Record Data			2021 Observation			Deviation		
	N	E	Elev.	N	E	Elev	N	E	Eev
39	2000630.61	1111338.35	672.16	2000630.59	1111338.41	672.14	0.02	-0.06	0.02
40	2000660.85	1112633.02	663.47	2000660.84	1112633.08	663.24	0.01	-0.06	0.23
41	2000200.9	1115389.26	655.2	2000200.86	1115389.35	655.19	0.04	-0.09	0.01
42	2000686.54	1117562.97	680.81	2000686.52	1117563.08	680.78	0.02	-0.11	0.03
43	2001386.45	1115918.14	675.91	2001386.43	1115918.18	675.86	0.02	-0.04	0.05
44	2001341.3	1113583.96	654.73	2001341.26	1113584.01	654.75	0.04	-0.05	-0.02
45	2000950.31	1109149.44	675.36	2000950.29	1109149.5	675.33	0.02	-0.06	0.03
46	2001927.67	1108197.08	680.32	2001927.67	1108197.16	680.36	0	-0.08	-0.04
47	2001863.45	1109985.29	672.29	2001863.42	1109985.35	672.29	0.03	-0.06	0
48	2002261.64	1111379.17	664.48	2002261.6	1111379.22	664.48	0.04	-0.05	0
49	2001898.12	1112715.57	661.09	2001898.09	1112715.68	661.12	0.03	-0.11	-0.03
50	2002256.7	1113897.7	654.37	2002256.67	1113897.75	654.36	0.03	-0.05	0.01
51	2002233.75	1115209.8	666.1	2002233.7	1115209.85	666.14	0.05	-0.05	-0.04
52	2003320.14	1115104.35	671.31	2003320.13	1115104.43	671.3	0.01	-0.08	0.01
53	2002980.86	1114121.47	660.63	2002980.87	1114121.57	660.65	-0.01	-0.1	-0.02
54	2003334.31	1112473.67	658.68	2003334.35	1112473.78	658.69	-0.04	-0.11	-0.01
55	2003250.16	1111433.39	663.01	2003250.21	1111433.47	663.05	-0.05	-0.08	-0.04
56	2003352.93	1109979.66	670.1	2003352.97	1109979.73	670.08	-0.04	-0.07	0.02
57	2004519.38	1110033.53	665.25	2004519.43	1110033.55	665.26	-0.05	-0.02	-0.01
58	2004639.71	1111508.84	660.6	2004639.74	1111508.91	660.61	-0.03	-0.07	-0.01
59	2004416.6	1112485.41	655.59	2004416.58	1112485.48	655.55	0.02	-0.07	0.04
60	2004483.34	1113697.04	658.23	2004483.36	1113697.06	658.17	-0.02	-0.02	0.06
61	2004478.66	1115146.85	669.36	2004478.61	1115146.95	669.34	0.05	-0.1	0.02
62	2005221.04	1112996.43	659.58	2005220.99	1112996.48	659.51	0.05	-0.05	0.07
63	2005806.83	1115370.74	688.52	2005806.81	1115370.84	688.52	0.02	-0.1	0
64	2005896.11	1113961.36	679.5	2005896.04	1113961.43	679.54	0.07	-0.07	-0.04
65	2005954.96	1112671.1	663.13	2005955.01	1112671.19	663.12	-0.05	-0.09	0.01
66	2006074.19	1111304.29	660.18	2006074.18	1111304.42	660.19	0.01	-0.13	-0.01
67	2005756.02	1110016.92	659.86	2005755.99	1110016.99	659.86	0.03	-0.07	0
68	2006715.81	1109005.12	663.18	2006715.77	1109005.16	663.14	0.04	-0.04	0.04
69	2007202.29	1110007.21	662.99	2007202.29	1110007.26	663.05	0	-0.05	-0.06
70	2007297.41	1110707.4	668.29	Benchmark #70 has been removed					
71	2007335.19	1112346.95	683.83	2007335.22	1112346.76	683.83	-0.03	0.19	0
72	2007118.13	1113871.19	683.8	2007118.08	1113871.2	683.79	0.05	-0.01	0.01
73	2008633.13	1114048.04	674.64	2008633.1	1114048.09	674.65	0.03	-0.05	-0.01
74	2008488.25	1112567.9	688.05	2008488.19	1112567.97	688.11	0.06	-0.07	-0.06
75	2008413.88	1111287.94	679.42	2008413.84	1111288.02	679.4	0.04	-0.08	0.02

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

RE: Activity 450 – Stormwater Management Regulations

Dear Mr. Arkens:

The Village continues to enforce and update as necessary all pertinent stormwater management regulations. These regulations include the Village adopted Lake County Watershed Development Ordinance as well as the Village's more stringent municipal code. A revised Lake County WDO was issued in October 2020 and the Village adopted the revised ordinance most recently in August 2023.

Attached is the revised WDO and the full list of the amendments. Also attached is additional information regarding the stormwater management regulations in the Village of Deerfield.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

VILLAGE OF DEERFIELD

ORDINANCE NO. 2023 - O-23-25

AN ORDINANCE ADOPTING BY REFERENCE OF THE LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE.

ADOPTED BY THE

MAYOR AND BOARD OF TRUSTEES

OF THE

VILLAGE OF DEERFIELD

THIS 21st DAY OF AUGUST, 2023.

PUBLISHED IN PAMPHLET FORM BY THE AUTHORITY OF THE MAYOR AND BOARD OF TRUSTEES OF THE VILLAGE OF DEERFIELD ILLINOIS, THIS 21st DAY OF AUGUST, 2023.

ORDINANCE NO. 2023 - O-23-25

AN ORDINANCE ADOPTING BY REFERENCE OF THE LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE.

WHEREAS, the County of Lake, pursuant to the powers granted to it by 55 ILCS 5/5- 1062, adopted the Lake County Watershed Development Ordinance on or about July 11, 2023 establishing rules and regulations for floodplain and stormwater management throughout the County of Lake and superseding any less restrictive municipal rules and regulations therein; and,

WHEREAS, the Mayor and Board of Trustees of the Village of Deerfield have previously adopted by reference the Lake County Watershed Development Ordinances; and

WHEREAS, the County of Lake, pursuant to the powers granted to it by 55 ILCS 5/5-1062, adopted a resolution approving amendments to the Lake County Watershed Development Ordinance on or about July 11, 2023, effective immediately; and

WHEREAS, the Mayor and Board of Trustees of the Village of Deerfield find it to be in the best interests of the Village of Deerfield to require all development to meet, at least, the minimum standards prescribed by the WDO to the fullest extent practicable; and

WHEREAS, three copies of the Lake County Watershed Development Ordinance have been on file in the Office of the Village Clerk of the Village of Deerfield, and available for inspection, for not less than thirty (30) days.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Deerfield, Lake and Cook Counties, Illinois, as follows:

SECTION I: That there is hereby adopted by reference, as if fully set out herein, that certain ordinance known as the Lake County Watershed Development Ordinance, approved as amended by the County of Lake, State of Illinois, three copies of which have been, for a period of not less than thirty (30) days prior to the effective date hereof, and now are on file in the office of the Village Clerk.

SECTION II: That in the event that the rules, regulations, terms or conditions imposed pursuant to the Lake County Watershed Development Ordinance are either more restrictive or less restrictive than comparable rules, regulations, terms or conditions imposed by any other applicable rule, regulation, resolution, ordinance, statute or law, then the most restrictive rules, regulations, terms or conditions shall govern.

SECTION III: The Lake County Watershed Development Ordinance, as approved as Amended by the Lake County Board on July 11, 2023

STORMWATER MANAGEMENT REGULATIONS:

The Lake County Watershed Development Ordinance, as most recently amended by the County of Lake on July 11, 2023, is hereby adopted by reference and is in full force and effect within the Village of Deerfield and is found in its own compilation.

SECTION IV: That all ordinances and resolutions, or parts thereof, in conflict with the provisions of this Ordinance are, to the extent of such conflict, expressly repealed.

SECTION V: That this Ordinance shall be in full force and effect ten (10) days after its passage, approval and publication in pamphlet form, as provided by law.

PASSED and approved by the Mayor and Board of Trustees of the

Village of Deerfield, Lake and Cook Counties, Illinois,

this 21st day of August, 2023 by a roll call vote as follows:

TRUSTEES	**AYE**	**NAY**
1. Benton	X	____
2. Berg	X	____
3. Jacoby	X	____
4. Metts-Childers	X	____
5. Oppenheim	X	____
6. Seiden	X	____

APPROVED THIS 21st DAY OF August, 2023;

By: _____
MAYOR
VILLAGE OF DEERFIELD

ATTEST:

_____
Village Clerk

STATE OF ILLINOIS)
) ss.
COUNTY OF LAKE)

I, Kent S. Street do hereby certify that I am duly appointed, qualified and acting as Village Clerk of the Village of Deerfield, Lake and Cook Counties, Illinois, and keeper of the records and seal of said Village, and that the attached and foregoing Ordinance is a true and correct copy of said Ordinance entitled:

ORDINANCE NO. 2023 - O-23-25

AN ORDINANCE ADOPTING BY REFERENCE OF THE LAKE COUNTY WATERSHE DEVELOPMENT ORDINANCE.

ADOPTED BY THE
MAYOR AND BOARD OF TRUSTEES
OF THE VILLAGE OF DEERFIELD,
THIS 21st DAY OF AUGUST, 2023.

In Witness Whereof, I have hereunto set my hand and caused to be affixed the Corporate Seal of the Village of Deerfield, Lake County, Illinois.

Done at: Deerfield, Illinois this 21st day of August, 2023.

(SEAL)

VILLAGE OF DEERFIELD ★ CORPORATE SEAL ★ DEERFIELD, ILLINOIS

Village Clerk

CERTIFICATIONS

I, Kent S. Street, do hereby certify that I am the duly appointed, acting and qualified Village Clerk of the Village of Deerfield, Lake and Cook Counties, Illinois, and that as such Clerk, I am the keeper of the records and minutes and proceedings of the Mayor and Trustees of said Village of Deerfield.

I do hereby further certify that at a regular meeting of the Mayor and Trustees of the Village of Deerfield, held on the 21st day of August, the foregoing Ordinance entitled: "AN ORDINANCE ADOPTING BY REFERENCE OF THE LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE" was duly passed by theMayor and Board of Trustees of the Village of Deerfield.

The pamphlet form of **Ordinance 2023 -** O-23-25 including the Ordinance and a cover sheet thereof, was prepared, and a copy of such Ordinance was posted in the Village Hall, commencing on the 21st day of August 2023, and continuing for at least 10 days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I DO FURTHER certify that the original, of which the attached is true and correct copy, is entrusted to me as the Clerk of said Village for safekeeping, and that I am the lawful custodian and keeper of the same.

GIVEN under my hand and seal this 21st day of August 2023.

Kent S. Street
Village Clerk
Village of Deerfield,
Lake and Cook Counties, Illinois

WDO Amendment #1a
§ 404.02.I: Asbuilt Lowest Structural Member

I. Elevation of the bottom of the lowest horizontal structural member of the lowest floor, and whether the structure has a basement, for structures located in a coastal high hazard area.

Purpose: Comply with FEMA Coastal High Hazard Area Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1b
§ 505.09.D: may vs shall

D. Boat docks, boathouses, and piers ~~shall~~ **may** be allowed and the provisions of 505.09B shall apply.

Purpose: Correct grammatical error.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1c
§ 700: BFE projection not for CHHA

§700.01 The Regulatory Floodplain is delineated within a development by projecting the base flood elevation (BFE) onto the site topography**, unless the area is shown to be within a coastal high hazard area.**

§700.02 The BFE shall be as delineated by the 100-year flood profiles, as indicated on the floodplain studies noted in 700.02A through 700.02**E**~~D~~: …

Purpose: Comply with FEMA Coastal High Hazard Area Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1d
§ 700.02.D.2: Flood of Record plus 3 feet

2. For a non-riverine Regulatory Floodplain, the historic flood of record (as determined by the Enforcement Officer according to 700.02D) plus three (3) feet may be used for the BFE instead of performing a detailed hydrologic and hydraulic study. **This BFE option cannot be used within a FEMA mapped SFHA for proposed development greater than 50 lots or 5 acres.**

Purpose: Comply with FEMA Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1e
§ 700.02.E: Lake Michigan BFE

E. **The base flood elevation for a Regulatory Floodplain subject to flooding effects from Lake Michigan shall be the elevation (or in zone AO, the depth) identified on the FIRM for the site, or the 1% annual chance still water elevation of Lake Michigan identified in the Flood Insurance Study, whichever elevation is higher.**

Purpose: Comply with FEMA Coastal High Hazard Area Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1f
§ 700.03: Mapped CHHA

§700.03 The location of the Regulatory Floodway **and the location of the Coastal High Hazard Area shall** be as delineated on the maps referenced in Appendix C: FEMA Flood Insurance Study Maps and Profiles. Where interpretation is needed to determine the exact location of the Regulatory Floodway boundary, IDNR/OWR should be contacted.

Purpose: Comply with FEMA Coastal High Hazard Area Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1g
§ 706: Building Protection Requirement for areas outside of the CHHA

§ 706 Building Protection Requirements **for Regulatory Floodplains not within Coastal High Hazard Areas**

Purpose: Comply with FEMA Coastal High Hazard Area Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1i
§ 708: Building Protection Requirements for CHHA

§ 708 **Building Protection Requirements for Coastal High Hazard Areas**

The building protection requirements of Section 708 apply to development, including new construction and substantial improvements in, or partly in, a Coastal High Hazard Area according to the FIRM.

708.01 **All new construction and substantial improvements shall be elevated on pilings or columns so that the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the BFE-plus-one-foot elevation, and the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.**

A. **Water loading values used shall be those associated with the base flood.**

B. **Wind loading values shall be those required by applicable state or local building standards. If no state or local building standards require the application of wind loading values to structural design, then wind loading values shall be those defined**

according to American Society of Civil Engineers 7-16 Minimum design loads and associated criteria for buildings and other structures, or other equivalent standard.

708.02 **A licensed professional structural engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Section 708.01.**

708.03 **All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls open wood lattice-work, or insect screening intended to collapse without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.**

A. **For the purpose of Section 708.03, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot.**

B. **Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or where so required by local or state codes) may be permitted only if a licensed professional structural engineer or architect certifies that the designs proposed meet all of the following conditions:**

1. **Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and**

2. **The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values shall be those associated with the base flood. Wind loading values shall be those required by applicable state or local building standards. If no state or local building standards require the application of wind loading values to structural design, then wind loading values shall be those defined according to American Society of Civil Engineers 7-16 Minimum design loads and associated criteria for buildings and other structures, or other equivalent standard.**

C. **All space enclosed by breakaway walls, open wood lattice-work, or insect screening below the lowest floor shall be used solely for parking of vehicles, building access, or storage.**

708.04 **Placement or substantial improvement of manufactured homes must comply with 708.01 through 708.03.**

708.05 **Recreational vehicles, including park models, must either:**

A. **Be on site for fewer than 180 consecutive days; or**

B. **Be fully licensed and ready for highway use; or**

C. **Comply with Section 708.01 through 708.3.**

708.06 **The use of fill for structural support of buildings within a Coastal High Hazard Area is prohibited.**

A. Non-structural fill within a Coastal High Hazard Area shall be permitted only if an engineering report demonstrates that the fill will not cause wave runup, ramping, or deflection of floodwaters that cause damage to buildings.

708.07 Man-made alterations of sand dunes within a Coastal High Hazard Area are prohibited unless and engineering report documents that the alterations will not increase potential flood damage by reducing the wave and flow dissipation characteristics of the sand dunes.

708.08 Within a Coastal High Hazard Area, bulkheads, seawalls, revetments, and other erosion control structures shall not be connected to the foundation or superstructure of a building, and shall be designed and constructed so as not to direct floodwaters or increase flood forces or erosion impacts on the foundation or superstructure of any building.

Purpose: Comply with FEMA Coastal High Hazard Area Regulations and reduce required freeboard in the section from 2' to 1'.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #1j
§ Appendix A: CHHA Definitions

…

boathouse: A structure erected for the purpose of storing boats.

breakaway wall: A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

…

coastal high hazard area: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast, and any other area subject to high velocity wave action from storms or seismic other sources. A coastal high hazard area is identified on a community's FIRM by the designation of zone VE or a moderate wave action area (MoWA).

…

limit of moderate wave action (LiMWA): A line shown on a Flood Insurance Rate Map to indicate the inland limit of the 1.5-ft breaking wave height during the base flood.

…

lowest adjacent grade: The lowest finished grade adjacent to a structure~~, including the bottom of window wells~~.

…

moderate wave action area (MoWA): A special flood hazard area subject to the potential for breaking wave heights of greater than or equal to 1.5 feet, but less than 3 feet, where the primary source of flooding is astronomical tides, storm surges, seiches, and/or tsunamis. A MoWA is an area within zone AE on a FIRM that is between the inland limit of zone VE and a Limit of Moderate Wave Action, where identified. (Also known as "Coastal A zone")

…

Regulatory Floodplain: Regulatory Floodplains may be either riverine or non-riverine depressional areas. **Except for coastal flooding effects of Lake Michigan,** floodplain boundaries shall be delineated by projecting the base flood elevation onto the best available topography and by superimposing the Special Flood Hazard Area onto the base map. A flood-prone area is a Regulatory Floodplain if it meets any of the following descriptions:

A. Any riverine area inundated by the base flood where there is at least 640 acres of tributary drainage area.
B. Any non-riverine area with a storage volume of 0.75 acre-foot or more when inundated by the base flood.
C. Any area indicated as a Special Flood Hazard Area on the FEMA Flood Insurance Rate Map or Letter of Map Revision.

Purpose: Comply with FEMA Coastal High Hazard Area Regulations.

TAC Vote: 03/16/2023: Approved 9-0-1

WDO Amendment #1k
§ 704: Compensatory Storage

704.08 Compensatory Storage is not required in Coastal High Hazard Areas.

Purpose: To clarify that there is not a requirement to provide Compensatory Storage within CHHA.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #2a
Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

§B.2. Physical Description (Second sentence)

… as required by this Ordinance, and ~~SCS~~**NRCS** soil survey map and soil unit description.

Purpose: The Soil Conservation Service (SCS) agency name was changed to Natural Resource Conservation Service (NRCS). This amendment reflects agency's current name.

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2b
Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

§C.3. Soils (Second paragraph)

If the mitigation site contains a drained hydric soil, include the ~~SCS~~**NRCS** soil map unit description…

Purpose: The Soil Conservation Service (SCS) agency name was changed to Natural Resource Conservation Service (NRCS). This amendment reflects agency's current name.

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2c
Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

§H.2.d. Invasive Species Dominance

By the end of the performance period, none of the three **~~e.~~ dominant plant species in the emergent, wet prairie, or sedge meadow communities shall be non-native or weedy species, including, but not limited to: ……**

Purpose: Correct editorial error – the complete text of Section d. was inadvertently truncated, creating a section e. Remove e. and correct such that all text now under d.

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2d
Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

§H.2.c. Vegetative Cover (emergent, wet prairie, or sedge meadow wetland communities)

By the end of the performance period, no area greater than ~~one hundred (100)~~ **ten (10)** square feet within the created or enhanced wetlands shall be devoid of vegetation, as measured by percent areal coverage. Areas not meeting this standard shall be re-planted.

Purpose: Bring wetland mitigation performance criterion into consistency with USACE's standard for final vegetative coverage approval (2017).

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2e
Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

§H.3.b. Vegetative Cover (mesic prairie buffers)

By the end of the performance period, no area greater than ~~one hundred (100)~~ **ten (10)** square feet within the created or enhanced mesic prairie buffers shall be devoid of vegetation, as measured by percent areal coverage.

Purpose: Bring wetland mitigation performance criterion into consistency with USACE's standard for final vegetative coverage approval (2017).

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2f
§ Appendix A: Definition of Isolated Waters of Lake County – Section B.

B. The following shall not be considered as meeting the exclusion criteria in Section A. of this definition:

1. All areas meeting the definition of *high-quality aquatic resources*, **other than areas meeting exclusion criteria A.1 or A.4.**

2. Wetland *mitigation* areas created to meet the requirements of this Ordinance or Section 404 of the Clean Water Act.

3. Wetland areas created or restored using public funds.

Purpose: Remove confusion over constructed stormwater management features that meet the HQAR criteria in WDO Appendix L.

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2g
§1002 Isolated Waters of Lake County Exclusions

Excluded areas are as specified in Appendix A: Definitions of *Isolated Waters of Lake County*. **Community enforcement officers shall provide SMC with a copy of all exclusion determinations.**

Purpose: Provide documentation for SMC's permit files to remove uncertainty as to which IWLC on a development site are excluded and which remain subject to WDO regulation. SMC regulatory staff need this documentation for IWLC impact reviews.

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2h
Appendix M, SMC-Approved Wetland Mitigation Banking Requirements

§S: PERFORMANCE STANDARDS (Species Dominance)

The native perennial species within each wetland plant community shall represent at least 80% of the total dominance measure. **A lower percent native perennial species of the total dominance measure may be acceptable if transect data demonstrate the remaining dominance percentage, up to a maximum of 15 percent, is by native annual and biannual species with a wetness indicator status of FAC or wetter and the native FQI and mean C performance standards are met.**

Purpose: Change to be like the Corps' standard for this metric, but with SMC-added caveats on maximum percentage allowance for native annual and biannual species to make up balance and such species must be FAC or wetter.

TAC Vote: 03/16/2023: Approved 10-0-0

WDO Amendment #2i
Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

§H.2.b. Mean Wetness Coefficient

a. Mean Wetness Coefficient: By the end of the performance period, the mean wetness coefficient (mean W) shall be less than or equal to 0 in each wetland community. Wetness coefficients are listed below, based on the category of each plant species designated in the National Wetland Plant List - Midwest Regional Plant List (U.S. Army Corps of Engineers, most recent version). The mean W for each wetland community is calculated by the following equation: Sum of wetness coefficients for all species/number of species.

Wetness Coefficients

National Wetland Category	*Wetness Coefficient*
Obligate (OBL)	**-2**
Facultative Wetland (FACW)	**-1**
Facultative (FAC)	0
Facultative Upland (FACU)	1
Upland (UPL)	2

Purpose: Add negative "-" symbol before OBL and FACW categories (not: this was an oversight in the previous WDO). This numeric system is included in the Army Corps-Chicago Region's Floristic Quality Assessment calculator tool (2017) to determine the mean W of a wetland plant community.

TAC Vote: 04/20/2023: Approved 8-0-0

WDO Amendment #3a
§ 400.01: Minor Developments

400.01 A completed *Watershed Development Permit* application signed by the *applicant* or applicant's agent, and when required, a **Licensed** *Professional Engineer* and *Certified Wetland Specialist*.

Purpose: Add "**Licensed**" for WDO consistency.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3b
§ 404.01: As-Built Drawings

404.01 *As-built drawings*, signed and sealed by a **Licensed** Professional Engineer, shall be required for all major developments, public road developments, and other types of development as determined by the Enforcement Officer (such as those developments that affect stormwater runoff rates or volume, impact wetlands or wetland buffers, or are adjacent to floodplains).

Purpose: Add "**Licensed**" for WDO consistency.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3c
§ 706.02.A: Floodplain Protection Requirements *(and sections listed below in Purpose)*

A. The *lowest floor*, including *basements,* of all new non-residential *buildings***,** including additions, shall be elevated at least to the FPE or be structurally dry flood-proofed to at least the FPE. A non-residential building may be structurally dry flood-proofed (in lieu of elevation) provided that a ~~Registered~~***Licensed*** *Professional Engineer*, ~~Registered~~**Licensed** Structural Engineer, or Licensed Architect shall certify…

Purpose: Keep Licensed instead of using Registered. Replace "Registered" with "Licensed" throughout WDO for consistency. **Sections included: 201.01. E, 401.10, 401.11, 500.03, 507.08, 700.02, 700.04 701.02, 703.04, 706.01, 801.01, 801.02, 801.03, 901.01, Appendix A: Definitions, and Appendix E: Enforcement Officer Duties.**

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3g
§ 1102.02: Additional Protection Measures

1102.01 If at any stage of the grading of any *development* site the *Enforcement Officer* determines that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, *stream*, *lake*, wetland, or drainage structure, the Enforcement Officer may require, as a condition of allowing the work to be done, that such reasonable additional protective measures be taken as is considered advisable to avoid the likelihood of such peril. Additional protective measures may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, or cribbing, installation of plant materials for *erosion* control, and recommendations of a **L**~~l~~icensed **Geotechnical**~~soils~~ **E**~~e~~ngineer and/or ~~engineering~~**Licensed Professional G**~~g~~eologist which may be made requirements for further work.

Purpose: Update professional titles.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3h
Appendix E: Enforcement Officer Duties

F. A ***Licensed*** *Professional Engineer* in the employ or under contract with SMC or *Certified Community* shall review **or supervise the review of** any plans, calculations, or analyses submitted by a **Licensed** Professional Engineer pursuant to the requirements of this Ordinance.

Purpose: To be consist with Section 201.01.E of the WDO.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3i
Appendix A: Definitions

basin: Sub-*watershed* areas within Lake County that include the Fox River mainstem (including the Chain O' Lakes), Flint Creek, Tower Lake Drain, Slocum Drain, Mutton Creek**, Manitou** ~~Squaw~~ Creek, …

Purpose: Update creek name from "Squaw" to "Manitou".

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3j
Appendix A: Definitions

Enforcement Officer: A person meeting the requirements of 201.02K and designated as follows:

A. Within *communities* that have received Standard Certification, the Enforcement Officer shall be a person designated in writing by the community for the purpose of permitting *development*, and administering and enforcing all of the provisions of this Ordinance except as noted in Article 13: Variances.

B. Within *communities* that have not received Standard Certification, the Enforcement Officer shall be the *SMC Chief Engineer*.

C. Recertification as an Enforcement Officer shall be required every **five (5)** ~~three (3)~~ years through the SMC. A minimum of **eight (8)** ~~twenty-four (24)~~ work-related professional development hours including SMC mandatory training for this type of certification shall be obtained **per year** ~~within the three-year period~~ in order to qualify for recertification. Documentation shall be self-monitoring and shall be provided to SMC upon **request** ~~application of certification or recertification~~.

Purpose: Update EO recertification requirement to be consistent with community recertification.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #3k
Appendix J: Watershed Specific Release Rates

Manitou~~Squaw~~ Creek Mainstem

Purpose: Update creek name from “Squaw” to “Manitou”.

TAC Vote: 04/20/2023: Approved 10-0-0

WDO Amendment #4a
§ 702.04: Regulatory Floodplain Performance Standards

702.04 If the proposed *development* would result in a change in the ~~mapped *Regulatory Floodplain* or~~ BFE **of a SFHA** ~~on a site~~, the *applicant* shall submit sufficient data to *FEMA* and SMC to obtain a *Letter of Map Revision* (LOMR). Proposed changes to Regulatory Floodplain and *Regulatory Floodway* delineation and BFE shall be submitted to SMC (see Appendix E: Enforcement Officer Duties). *IDNR/OWR* concurrence is required for changes to the BFE and floodway delineation.

Purpose: Remove LOMR requirement for changes in the mapped Regulatory Floodplain along with removing “on a site” given it does not add value to this section.

TAC Vote: 04/20/2023: Approved 9-0-0

WDO Amendment #4b
§ 706.04: Building Protection

706.04 Tool sheds, detached garages, and attached garages which are not *substantial improvements* on an existing single-family platted lot may be constructed with the *lowest floor* below ~~the FPE~~ **one-half (0.5) foot above the BFE** in accordance with the following:

A. The *building* shall not be used for human habitation.

B. All areas below the **FPE**~~BFE~~ shall be constructed with **materials resistant to flood damage** ~~waterproof material~~. Structures located in a *Regulatory Floodway* shall be constructed and placed on a development site so as not to block the flow of flood waters and shall also meet the *Appropriate Use* criteria of §703 Regulatory Floodway Performance Standards. In addition, all other requirements of this Ordinance must be met.

C. The *structure* shall be anchored to prevent flotation.

D. Service facilities such as electrical and heating equipment shall be elevated or flood-proofed to the FPE.

E. The *building* shall be used only for the storage of vehicles or tools and may not contain other rooms, workshops, greenhouses, or similar uses.

F. If a residence is elevated appropriately, then the area below the residence can be used as a garage, as long as the garage conforms to 706.04A through 706.04E and includes permanent flow through openings as described in 706.01A.2.

G. The *building* shall be valued at less than **$24,550**~~17,250~~ (**Feb.** 20**23**~~11~~ costs) and be no greater than **600**~~576~~ square feet in floor size.

Purpose: Update regulations and values on accessory structures. Increased value by an additional 4.2% due to size increase 600 sf vs 576 sf.

TAC Vote: 04/20/2023: Approved 9-0-0

WDO Amendment #4c
§ 901.04 Building Protection Requirements

901.04 Accessory structures and attached garages may be constructed with the lowest floor below the FPE in accordance with the following:
A. The building shall not be used for human habitation.
B. The structure shall be anchored to prevent flotation.
C. Service facilities such as electrical and heating equipment shall be elevated or flood-proofed to the FPE.
D. All areas below the FPE shall be constructed with materials resistant to flood damage.
E. The floor must be elevated up to at least one-half (0.5) foot above the base flood elevation (BFE) unless it meets all the requirements of 706.04.

Purpose: To provide consistency with other accessory structure regulations.

TAC Vote: 04/20/2023: Approved 9-0-0

WDO Amendment #5a
§ 1101: Inspections

1101.02 The *Designated Erosion Control Inspector* (DECI) shall conduct inspections and document as described below, at a minimum, at the intervals in 1101.02A and **1102.02B**, for those developments that require a Designated Erosion Control Inspector, until permanent stabilization and Enforcement Officer approval of appropriate as-built documentation and drawings.

A. Upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading.
~~B. After stripping and clearing.~~
~~C. After rough grading.~~
~~D. After final grading.~~
~~E. After seeding and landscaping deadlines.~~
B~~F~~. After every seven (7) calendar days or storm event with greater than one-half (0.5) inch of rainfall or *liquid equivalent precipitation*.
C~~G~~. After final stabilization and landscaping, prior to removal of sediment and erosion controls.
D~~H~~. After removal of erosion and sediment controls.

~~**Minimum inspection documentation shall include: site observations and photos (at the discretion of the EO), inspector's name, date and time of inspection, status of perimeter control, and site outlet observations.**~~
Minimum inspection documentation, shall include: site observations and a sufficient number of photos depicting the conditions of the entire site, inspector's name, date and time of inspection, status of perimeter control, and site outlet observations.

Purpose: Include minimum DECI inspection documentation including photos. Note that §1101.01 references to §1102.02 will be updated to reflect the removal of sub-items B – E.

TAC Vote: 04/20/2023: Approved 9-0-0

SMC Revision: 06/01/2023: SMC decided that photos should be a requirement and revise the amendment language accordingly. Approved 8-0-0

WDO Amendment #5b
§ 1101: Inspections

1101.03 Designated Erosion Control Inspector inspections may be performed at a reduced frequency, at the discretion of the Enforcement Officer, for projects with a valid Watershed Development Permit, that are permanently stabilized, ~~have submitted a Notice of Termination to IEPA,~~ and are entering a prolonged period of inactivity. Designated Erosion Control Inspector inspections shall only be required after storm events with greater than one-half (0.5) inch of rainfall or *liquid equivalent precipitation*.

Purpose: Remove Notice of Termination requirement.

TAC Vote: 04/20/2023: Approved 9-0-0

WDO Amendment #6a
§ Appendix C: FEMA Flood Insurance Study Maps and Profiles

- Communities: Beach Park; Grayslake; Gurnee; Highland Park; Lake Bluff; Lake County Unincorp; Lake Forest; Lake Villa; Libertyville; Lindenhurst; North Chicago; Old Mill Creek
  Round Lake Beach; Round Lake Park; Third Lake; Wadsworth; Waukegan; Winthrop Harbor; Zion

Appendix C: FEMA Flood Insurance Study Maps and Profiles

COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
ANTIOCH	170358#	September 18, 2013	17097C0010 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0026 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0027 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0028 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0029 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0032 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0034 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0035 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0055 K	**October 5, 2023** ~~February 17, 2016~~
BANNOCKBURN	170359#	September 18, 2013	17097C0259 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0267 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0278 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0286 K	**October 5, 2023** ~~February 17, 2016~~
BARRINGTON HILLS	170058#	September 18, 2013	17097C0215 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0216 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0217 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0219 K	**October 5, 2023** ~~February 17, 2016~~
BARRINGTON	170057#	September 18, 2013	17097C0216 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0217 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0219 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0236 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0238 K	**October 5, 2023** ~~February 17, 2016~~
BEACH PARK	171022#	September 18, 2013	17097C0059 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0067 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0069 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0078 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0086 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0087 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0088 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0089 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
BUFFALO GROVE	170068#	September 18, 2013	17097C0253 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0254 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0261 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0262 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0263 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0264 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0266 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0270 K	**October 5, 2023** ~~February 17, 2016~~
DEERFIELD	170361#	September 18, 2013	17097C0267 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0270 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0278 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0286 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0287 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0288 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0289 K	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
DEER PARK	171028#	September 18, 2013	17097C0217 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0236 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0237 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0238 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0241 K	**October 5, 2023** ~~February 17, 2016~~
FOX LAKE	170362#	September 18, 2013	17097C0004 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0010 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0012 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0014 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0019 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0020 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0106 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0107 L	**October 5, 2023** ~~February 17, 2016~~
FOX RIVER GROVE	170477#	September 18, 2013	10797C0205 K	**October 5, 2023** ~~February 17, 2016~~
GRAYSLAKE	170363#	**October 5, 2023** ~~September 18, 2013~~	17097C0043 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0044 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0129 L	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~February 17, 2016~~	17097C0131 ~~L~~**M**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0132 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~February 17, 2016~~	17097C0133 ~~L~~**M**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0134 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0137 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0141 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0142 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0151 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0153 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
GREEN OAKS	170364#	September 18, 2013	17097C0158 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0159 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0166 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0167 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0168 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0169 K	**October 5, 2023** ~~February 17, 2016~~
GURNEE	170365#	**October 5, 2023** ~~September 18, 2013~~	17097C0044 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0063 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0064 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0068 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0069 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0132 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0151 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0152 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0153 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0154 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0156 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0157 K	**October 5, 2023** ~~February 17, 2016~~
HAINESVILLE	171005#	February 17, 2016	17097C0127 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0129 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0131 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0133 L	**October 5, 2023** ~~February 17, 2016~~
HAWTHORN WOODS	170366#	February 17, 2016	17097C0139 L	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
HAWTHORN WOODS	170366#	February 17, 2016	17097C0143 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0226 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0227 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0228 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0229 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0231 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0232 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0233 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0234 K	**October 5, 2023** ~~February 17, 2016~~
HIGHLAND PARK	170367#	**October 5, 2023** ~~September 18, 2013~~	17097C0277 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0278 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0279 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0283~~**17097C0281** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0285~~**17097C0283** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0286 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0287 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0289 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0291 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0293~~**17097C0292** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	~~17097C0295~~**17097C0293** K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0294L**	**October 5, 2023**
HIGHWOOD	171033#	September 18, 2013	17097C0279 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0283 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
INDIAN CREEK	170369#	September 18, 2013	17097C0251 K	**October 5, 2023** ~~February 17, 2016~~
ISLAND LAKE	170370#	September 18, 2013	17097C0112 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0114 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0116 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0118 K	**October 5, 2023** ~~February 17, 2016~~
KILDEER	170371#	September 18, 2013	17097C0233 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0234 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0237 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0241 K	**October 5, 2023** ~~February 17, 2016~~
LAKE BARRINGTON	170372#	September 18, 2013	17097C0118 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0205 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0206 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0207 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0208 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0209 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0215 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0216 K	**October 5, 2023** ~~February 17, 2016~~
LAKE BLUFF	170373#	September 18, 2013	17097C0167 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0169 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0186 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0188~~**17097C0187** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	~~17097C0190~~**17097C0188 K**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0189L**	**October 5, 2023** ~~February 17, 2016~~

LAKE COUNTY UNINCORPORATED AREAS	170357#	DFIRM PANEL NUMBERS LISTED SEPARATELY AT END OF APPENDIX		
LAKE FOREST	170374#	September 18, 2013	17097C0169 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0188 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C01**89**~~90~~ ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LAKE FOREST	170374#	September 18, 2013	17097C0257 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0259 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0276 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0277 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0278 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0279 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0285~~**17097C0281** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
LAKE VILLA	170375#	September 18, 2013	17097C0028 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0029 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0035 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0036 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0037 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0038 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0039 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0041 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0043 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
LAKE ZURICH	170376#	February 17, 2016	17097C0227 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0228 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0229 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0233 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0236 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0237 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0241 K	**October 5, 2023** ~~February 17, 2016~~
LAKEMOOR	170915#	September 18, 2013	17097C0102 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0104 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0106 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0108 K	**October 5, 2023** ~~February 17, 2016~~
LIBERTYVILLE	170377#	**October 5, 2023** ~~September 18, 2013~~	17097C0134 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0142 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0161 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0162 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0163 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0164 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0166 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0168 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0252 K	**October 5, 2023** ~~February 17, 2016~~
LINCOLNSHIRE	170378#	September 18, 2013	17097C0254 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0257 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0258 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0259 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0262 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0266 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0267 K	**October 5, 2023** ~~February 17, 2016~~
LINDENHURST	170379#	September 18, 2013	17097C0035 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0041 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0042 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0044 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
LONG GROVE	170380#	September 18, 2013	17097C0144 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0231 K	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LONG GROVE	170380#	September 18, 2013	17097C0232 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0233 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0234 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0241 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0242 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0251 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0253 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0254 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0261 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0263 K	**October 5, 2023** ~~February 17, 2016~~
METTAWA	170381#	September 18, 2013	17097C0164 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0168 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0169 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0252 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0256 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0257 K	**October 5, 2023** ~~February 17, 2016~~
MUNDELEIN	170382#	February 17, 2016	17097C0139 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0141 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0142 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0143 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0144 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0161 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0163 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0164 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0232 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0251 K	**October 5, 2023** ~~February 17, 2016~~
NORTH BARRINGTON	170383#	September 18, 2013	17097C0207 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0208 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0209 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0217 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0226 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0228 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0236 K	**October 5, 2023** ~~February 17, 2016~~
NORTH CHICAGO	170384#	September 18, 2013	17097C0159 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0167 K	**October 5, 2023** ~~February 17, 2016~~

		October 5, 2023	**17097C0179 L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0180 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0186 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0190~~**17097C0187** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
OLD MILL CREEK	170385#	September 18, 2013	17097C0034 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0042 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0044 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0055 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0061 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0062 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0063 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0064 K	**October 5, 2023** ~~February 17, 2016~~
PARK CITY	170386#	September 18, 2013	17097C0156 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0157 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0159 K	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
PORT BARRINGTON	170478#	September 18, 2013	17097C0114 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0118 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0205 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0206 K	**October 5, 2023** ~~February 17, 2016~~
RIVERWOODS	170387#	September 18, 2013	17097C0259 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0266 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0267 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0270 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0286 K	**October 5, 2023** ~~February 17, 2016~~
ROUND LAKE BEACH	170389#	September 18, 2013	17097C0038 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0039 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0043 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0126 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0127 L	**October 5, 2023** ~~February 17, 2016~~

		October 5, 2023 ~~February 17, 2016~~	17097C0131 ~~L~~**M**	**October 5, 2023** ~~February 17, 2016~~
ROUND LAKE HEIGHTS	170390#	September 18, 2013	17097C0038 K	**October 5, 2023** ~~February 17, 2016~~
ROUND LAKE PARK	170391#	February 17, 2016	17097C0127 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0129 L	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~February 17, 2016~~	17097C0133 ~~L~~**M**	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0137 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0141 L	**October 5, 2023** ~~February 17, 2016~~
ROUND LAKE	170388#	February 17, 2016	17097C0107 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0109 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0126 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0127 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0128 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0129 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0136 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0137 L	**October 5, 2023** ~~February 17, 2016~~
THIRD LAKE	170392#	**October 5, 2023** ~~September 18, 2013~~	17097C0043 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0044 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0132 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0151 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
TOWER LAKES	170393#	September 18, 2013	17097C0206 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0207 K	**October 5, 2023** ~~February 17, 2016~~
VERNON HILLS	170394#	September 18, 2013	17097C0163 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0164 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0251 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0252 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0253 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0254 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0256 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0258 K	**October 5, 2023** ~~February 17, 2016~~
VOLO	171042#	September 18, 2013	17097C0106 K	**October 5, 2023** ~~February 17, 2016~~

		February 17, 2016	17097C0107 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0108 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0109 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0116 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0117 L	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
WADSWORTH	170395#	September 18, 2013	17097C0055 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0056 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0057 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0058 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0059 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0062 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0064 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0066 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0067 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0068 K	**October 5, 2023** ~~February 17, 2016~~
WAUCONDA	170396#	September 18, 2013	17097C0116 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0117 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0118 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0119 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0136 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0138 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0206 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0207 K	**October 5, 2023** ~~February 17, 2016~~
WAUKEGAN	170397#	**October 5, 2023** ~~September 18, 2013~~	17097C0066 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0067 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0068 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0069 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0086 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0087 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0088 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0089 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0095~~**17097C0093** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0152 K**	**October 5, 2023**
		September 18, 2013	17097C0154 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0156 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0157 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0158 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0159 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0166 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0177 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0179 L**	**October 5, 2023**
		October 5, 2023 ~~September 18, 2013~~	17097C0180 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0185~~**17097C0181** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
WHEELING	170173#	September 18, 2013	17097C0264 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0270 K	**October 5, 2023** ~~February 17, 2016~~
WINTHROP HARBOR	170398#	**October 5, 2023** ~~September 18, 2013~~	17097C0076 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0077 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0078 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0079 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0081 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
ZION	170399#	September 18, 2013	17097C0057 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0059 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0076 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0077 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0078 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0079 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
ZION	170399#	**October 5, 2023** ~~September 18, 2013~~	17097C0081 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0085~~**17097C0083** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~

		October 5, 2023 ~~September 18, 2013~~	17097C0086 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0087 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
LAKE COUNTY UNINCORPORATED AREAS	170357#	September 18, 2013	17097C0004 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0010 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0012 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0014 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0019 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0020 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0026 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0027 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0028 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0029 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0032 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0034 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0035 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0036 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0037 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0038 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0039 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0041 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0042 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0043 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0044 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0055 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0056 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0057 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0058 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0059 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0061 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0062 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~

		October 5, 2023 ~~September 18, 2013~~	17097C0063 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0064 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0066 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0067 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0068 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0069 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0076 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0077 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0078 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0079 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0081 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0085~~**17097C0083** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0086 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0087 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0088 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0089 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0095~~**17097C0091** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0093 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LAKE COUNTY UNINCORPORATED AREAS	170357#	September 18, 2013	17097C0102 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0104 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0106 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0107 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0108 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0109 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0112 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0114 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0116 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0117 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0118 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0119 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0126 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0127 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0128 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0129 L	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~February 17, 2016~~	17097C0131 ~~L~~**M**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0132 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~February 17, 2016~~	17097C0133 ~~L~~**M**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0134 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0136 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0137 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0138 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0139 L	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0141 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0142 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0143 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0144 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0151 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0152 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0153 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0154 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0156 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0157 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0158 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0159 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0161 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0162 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0163 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0164 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0166 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0167 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0168 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0169 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0177 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0179 L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	17097C0180 ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023 ~~September 18, 2013~~	~~17097C0185~~**17097C0181** ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0186 K	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0187 L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0188 K	**October 5, 2023** ~~February 17, 2016~~
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LAKE COUNTY UNINCORPORATED AREAS	170357#	**October 5, 2023** ~~September 18, 2013~~	17097C01**89**~~90~~ ~~K~~**L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0205 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0206 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0207 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0208 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0209 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0215 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0216 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0217 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0226 K	**October 5, 2023** ~~February 17, 2016~~
		February 17, 2016	17097C0227 L	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0228 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0229 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0231 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0232 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0233 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0234 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0236 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0237 K	**October 5, 2023** ~~February 17, 2016~~

		September 18, 2013	17097C0241 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0242 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0251 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0252 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0253 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0254 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	17097C0256 K	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0257 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0258 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0259 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0261 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0262 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0263 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0266 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0267 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0270 K**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0277 L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0278 K**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0281 L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0283 L**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0286 K**	**October 5, 2023** ~~February 17, 2016~~
		September 18, 2013	**17097C0288 K**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0291 L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0292 L**	**October 5, 2023** ~~February 17, 2016~~
		October 5, 2023	**17097C0294 L**	**October 5, 2023** ~~February 17, 2016~~

Purpose: Update FIRM Panel(s) per October 05, 2023 FEMA Map updates **and FIS date.**

TAC Vote: 04/20/2023: Approved 9-0-0

2021 WDO Amendments

WDO Amendment #2 (2021)
§ Appendix A: Definitions

Regulatory Floodway: The channel, including on-stream lakes, and that portion of the Regulatory Floodplain adjacent to a stream or channel as designated by the Illinois Department of Natural Resources, Office of Water Resources, which is needed to store and convey the existing and anticipated future 100-year frequency flood discharge with no more than a 0.1 foot increase in stage due to the loss of flood conveyance or storage, and no more than a 10% increase in velocities. The location of the Regulatory Floodway shall be as delineated on the maps listed in Appendix C: FEMA Flood Insurance Study Maps and Profiles. Where interpretation is needed to determine the exact location of the Regulatory Floodway boundary, the IDNR/OWR should be contacted for the interpretation.

The need to preserve storage when defining the regulatory floodway will be waived by the SMC if the applicant receives approval from IDNR/OWR under 3708.60.d Floodway Construction in Northeastern Illinois.

Purpose: TAC-Member proposed amendment to be consistent with IDNR/OWR part 3708 rules for floodway construction.

Update: May 2023 – IDNR/OWR part 3708 rules have not been updated since this TAC discussion

TAC Vote: 05/20/2021: Approved: 9-1-0

WDO Amendment #3 (2021)
§ Appendix I: Rainfall Depth Duration Frequency Tables for Lake County

Table 7. Rainfall (inches) for Given Recurrence Interval for Section 2 (Northeast)

Storm Duration	2-month	3-month	4-month	6-month	9-month	1-year	2-year	5-year	10-year	25-year	50-year	100-year	500-year
5 minutes	0.19	0.22	0.24	0.27	0.31	0.33	0.40	0.52	0.62	0.77	0.90	1.03	1.35
10 minutes	0.35	0.40	0.43	0.49	0.56	0.61	0.73	0.95	1.13	1.42	1.65	1.89	2.47
10 minutes	0.33	0.38	0.41	0.47	0.53	0.58	0.70	0.90	1.08	1.35	1.58	1.80	2.36
15 minutes	0.42	0.49	0.53	0.61	0.69	0.75	0.90	1.16	1.39	1.74	2.03	2.32	3.04
30 minutes	0.58	0.66	0.73	0.83	0.94	1.03	1.24	1.59	1.91	2.39	2.78	3.17	4.16
1 hour	0.74	0.84	0.93	1.05	1.20	1.30	1.57	2.02	2.42	3.03	3.53	4.03	5.28
2 hours	0.91	1.04	1.14	1.30	1.48	1.61	1.94	2.49	2.99	3.74	4.35	4.97	6.52
3 hours	1.00	1.15	1.26	1.44	1.63	1.77	2.14	2.75	3.30	4.13	4.80	5.49	7.20
6 hours	1.18	1.35	1.48	1.68	1.91	2.08	2.51	3.23	3.86	4.84	5.63	6.43	8.43
12 hours	1.37	1.56	1.71	1.95	2.21	2.41	2.91	3.74	4.48	5.61	6.53	7.46	9.78
18 hours	1.48	1.69	1.85	2.11	2.39	2.61	3.14	4.04	4.84	6.06	7.05	8.06	10.57
24 hours	1.57	1.80	1.97	2.24	2.55	2.77	3.34	4.30	5.15	6.45	7.50	8.57	11.24
48 hours	1.72	1.97	2.16	2.46	2.79	3.04	3.66	4.71	5.62	6.99	8.13	9.28	12.10
72 hours	1.87	2.14	2.34	2.67	3.03	3.30	3.97	5.08	6.05	7.49	8.64	9.85	12.81
120 hours	2.08	2.38	2.61	2.97	3.37	3.67	4.42	5.63	6.68	8.16	9.39	10.66	13.81
240 hours	2.63	3.01	3.30	3.76	4.27	4.65	5.60	7.09	8.25	9.90	11.26	12.65	16.00

Purpose: Revise the 10-minute duration from the December 2019 to the March 2020 ISWS study.

Update: May 2023 – this ISWS rainfall data have not been updated since this TAC discussion

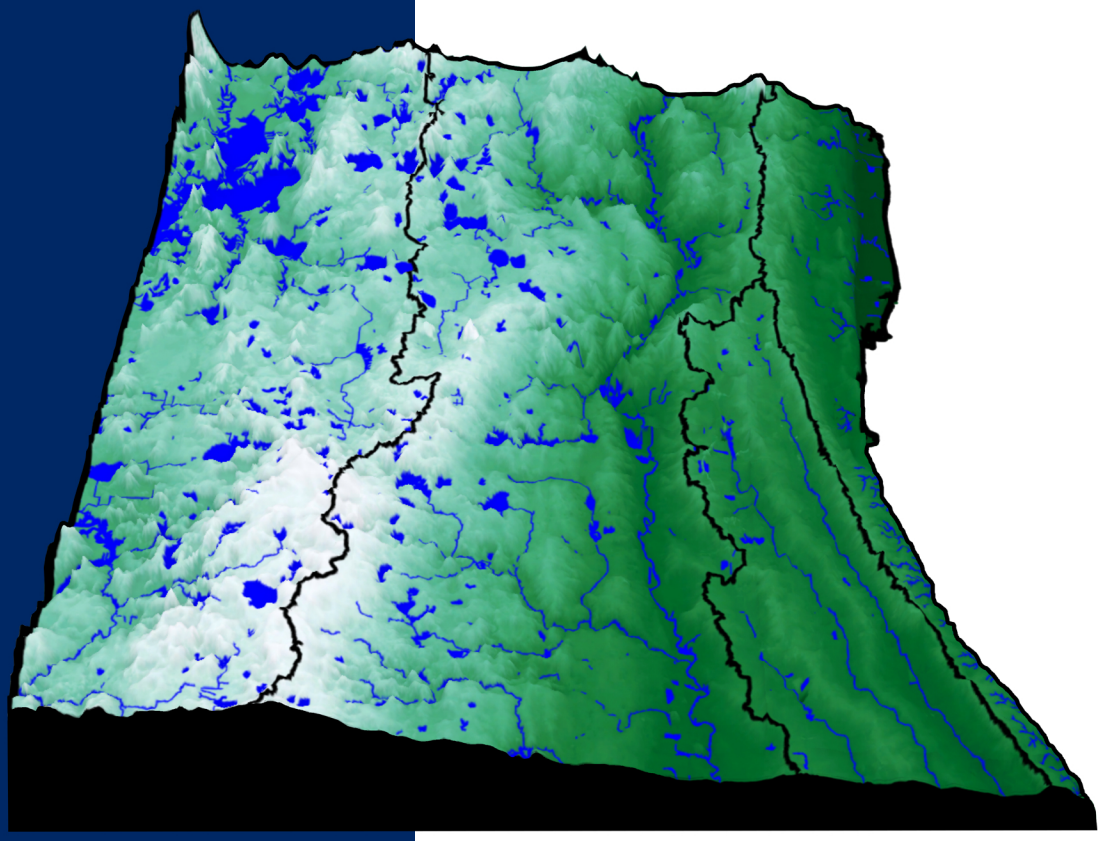
TAC Vote: 03/18/2021: Approved 11-0-0

23-0832 SMC Vote: 06/01/2023: Approved 8-0-0

WATERSHED

DEVELOPMENT

ORDINANCE



Lake County
Stormwater Management Commission
October 13, 2020

LAKE COUNTY
WATERSHED DEVELOPMENT ORDINANCE

OF

LAKE COUNTY, ILLINOIS

ORIGINAL EFFECTIVE DATE
October 18, 1992

Approved as Amended
By the
Lake County Board

July 12, 1994
August 10, 1999
October 10, 2000
August 14, 2001
November 8, 2005
January 10, 2006
October 10, 2006 (Appendix C)
November 18, 2008
July 10, 2012
June 11, 2013
October 13, 2015
October 13, 2020

Table of Contents

ARTICLE 1: AUTHORITY AND PURPOSE 1-1

§100 Introduction 1-1

§101 Authority 1-1

§102 Purpose 1-1

§103 Effective Date 1-2

ARTICLE 2: ADMINISTRATION AND ENFORCEMENT RESPONSIBILITIES 2-1

§200 Ordinance Enforcement 2-1

§201 Community Certification 2-1

ARTICLE 3: GENERAL PROVISIONS 3-1

§300 Regulated Development 3-1

§301 Contiguous Property and Development Phasing 3-2

§302 Exempted Development 3-2

§303 Development Classification 3-3

§304 Conditional Approval 3-3

§305 Earth Change Approval 3-3

§306 Countywide and General Permits 3-4

§307 Permit Fees 3-4

§308 Application Review Times 3-4

§309 Permit Extensions and Terminations 3-4

ARTICLE 4: APPLICATION REQUIREMENTS 4-1

§400 Minor Developments 4-1

§401 Major Developments 4-1

§402 Public Road Developments 4-5

§403 IDNR/OWR Dam Safety Permit 4-6

§404 As-Built Drawings 4-6

ARTICLE 5: GENERAL PERFORMANCE STANDARDS 5-1

§500 Platting, Approvals, and Development Process 5-1

§501 Runoff Calculations 5-2

§502 Release Rates and Discharges 5-3

§503 Runoff Volume Reduction (RVR) 5-3

§504 Water Quality Treatment 5-5
§505 Buffer Areas 5-6
§506 Stormwater Conveyance Systems 5-8
§507 Stormwater Facilities 5-11
§508 On-Stream Detention 5-12
§509 Fee-In-Lieu of On-Site Stormwater Storage 5-13

ARTICLE 6: SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS 6-16

§600 Performance Standards 6-16
§601 Designated Erosion Control Inspector Program Standards 6-19
§602 Stormwater Quality Runoff Standards 6-19

ARTICLE 7: REGULATORY FLOODPLAIN AND FLOODWAY REQUIREMENTS 7-1

§700 Location of Regulatory Floodplain, Base Flood Elevation, and Regulatory Floodway 7-1
§701 Application Requirements 7-2
§702 Regulatory Floodplain Performance Standards 7-4
§703 Regulatory Floodway Performance Standards 7-4
§704 Compensatory Storage Performance Standards 7-8
§705 Public Health Protection Standards 7-11
§706 Building Protection Requirements 7-11
§707 Bridge, Culvert Crossing, and Roadway Approach Performance Standards 7-16

ARTICLE 8: FLOOD-PRONE AREA REQUIREMENTS 8-1

§800 Flood-carrying Capacity 8-1
§801 Flood-prone Area Conveyance, Velocities, Flood Profiles, and Flood Storage 8-1

ARTICLE 9: FLOOD TABLE LAND REQUIREMENTS 9-1

§900 Public Health Protection Standards 9-1
§901 Building Protection Requirements 9-1

ARTICLE 10: WETLAND REQUIREMENTS 10-1

§1000 Wetland Delineation 10-1
§1001 Jurisdictional Determination 10-2
§1002 Isolated Waters of Lake County Exclusions 10-2

§1003 Letter of No Impact 10-2
§1004 Waters of the United States Impacts 10-2
§1005 Isolated Waters of Lake County Impacts 10-3
§1006 Wetland Hydrology for Isolated Waters of Lake County 10-4
§1007 Mitigation for Isolated Waters of Lake County 10-5
§1008 Detention in Isolated Waters of Lake County 10-7
§1009 Mitigation Hierarchy for Waters of the United States and Isolated Waters of Lake County 10-8

ARTICLE 11: INSPECTIONS AND ACCESS 11-1

§1100 Access Authority 11-1
§1101 Inspections 11-1
§1102 Additional Protective Measures 11-2
§1103 Designated Erosion Control Inspector Responsibilities 11-2

ARTICLE 12: PENALTIES AND LEGAL ACTIONS FOR NON-COMPLIANCE 12-1

§1200 Stop Work Order 12-1
§1201 Fines 12-1
§1202 Legal Actions 12-1

ARTICLE 13: VARIANCES 13-1

§1300 Administration 13-1
§1301 Variance Criteria 13-1
§1302 Conditions and Special Considerations 13-2

ARTICLE 14: APPEALS 14-1

§1400 Appeal Process 14-1

ARTICLE 15: DISCLAIMER OF LIABILITY 15-1

ARTICLE 16: SEPARABILITY 16-1

ARTICLE 17: ABROGATION AND GREATER RESTRICTIONS 17-1

APPENDIX A: DEFINITIONS A-1

APPENDIX B: SMC REGULATORY FLOODPLAIN MAPS AND PROFILES B-1

APPENDIX C: FEMA FLOOD INSURANCE STUDY MAPS AND PROFILES C-1

APPENDIX D: TOTAL SUSPENDED SOLIDS BACKGROUND LEVELS FOR LAKE COUNTY WATER BODIES D-1

APPENDIX E: ENFORCEMENT OFFICER DUTIES E-1

APPENDIX F: PUBLIC BODIES OF WATER IN LAKE COUNTY F-1

APPENDIX G: IDNR/OWR DAM SAFETY PERMITTING GUIDELINES G-1

APPENDIX H: PARTIAL LIST OF PERMITS REQUIRED (WHEN APPLICABLE) FOR DEVELOPMENT IN LAKE COUNTYH-1

APPENDIX I: RAINFALL DEPTH DURATION FREQUENCY TABLES FOR LAKE COUNTY I-1

APPENDIX J: WATERSHED SPECIFIC RELEASE RATES J-1

APPENDIX K: DETENTION VOLUME VERSUS CURVE NUMBER..... K-1

APPENDIX L: HIGH-QUALITY AQUATIC RESOURCES L-1

APPENDIX M: SMC-APPROVED WETLAND MITIGATION BANKING REQUIREMENTS M-1

APPENDIX N: WDO MITIGATION REQUIREMENTS AND GUIDELINES FOR ISOLATED WATERS OF LAKE COUNTY IMPACTSN-1

APPENDIX O: RUNOFF VOLUME REDUCTION..... O-1

Article 1: Authority and Purpose

§100 Introduction

This Ordinance is one part of the adopted Lake County Comprehensive Stormwater Management Plan. It sets forth the minimum requirements for the *stormwater management* aspects of *development* in Lake County. The Lake County *Stormwater Management Commission* is the corporate enforcement authority for the Ordinance. Illinois Compiled Statutes Chapter 55, Act 5, Section 5-1062 [55 ILCS 5/5-1062] states, "The purpose of this Section is to allow management and *mitigation* of the effects of urbanization on stormwater drainage… by consolidating the existing stormwater management framework into a united, countywide structure…" The Lake County Comprehensive Stormwater Management Plan, adopted by Ordinance on June 11, 1990 states, "… that the regulations be uniformly and consistently enforced throughout the County by all agencies." While local conditions may sometimes require extraordinary regulatory measures, the Lake County Stormwater Management Commission (SMC) has determined that uniform and consistent enforcement will be enhanced by municipalities adopting the standards of the Watershed Development Ordinance. In those instances where the requirements of this Ordinance are not stipulated in a municipal ordinance or do not meet the minimum requirements herein, this Ordinance shall prevail. A *community* may enact standards beyond the minimum presented in this Ordinance. The SMC has developed Technical Guidance Memoranda which are recommended guides for users of this Watershed Development Ordinance (WDO).

§101 Authority

This Ordinance is enacted pursuant to the police powers granted to Lake County by 55 ILCS 5/5-1062 (County) by 65 ILCS 5/1-2-1, 11-12-12, 11-30-8, 11-30-2, 11-31-2, and 615 ILCS 5/5 & 18g. The administration and enforcement of this Ordinance shall be performed by (a) Certified Communities, within their respective jurisdictions and (b) the *Stormwater Management Commission* and its agents or employees in all other areas of Lake County.

§102 Purpose

The purpose of this Ordinance is to establish reasonable rules and regulations for *development* in order to:

102.01 Meet the requirements of the Rivers, Lakes and Streams Act, [615 ILCS 5/18g] effective November 18, 1987.

102.02 Prevent additional harm due to periodic flooding, including loss of life and property and threats and inconveniences to public health, safety, and welfare.

102.03 Assure that *development* does not increase *flood* and drainage hazards to others, or create unstable conditions susceptible to *erosion*.

102.04 Create no new financial burden on the taxpayer for flood control projects, repairs to *flood* damaged public facilities and utilities, and for flood rescue and relief operations.

102.05 Protect, conserve, and promote the orderly development of land and water resources.

102.06 Protect *buildings* and improvements to buildings from *flood* *damage* to the greatest extent possible.

102.07 Conserve the *natural* hydrologic, hydraulic, water quality, and other beneficial functions of *flood-prone areas* and *Regulatory Floodplains*.

102.08 Prevent additional disruption of the economy and governmental services due to stormwater and *flood* drainage.

102.09 Maintain eligibility for the County and its municipalities in the National Flood Insurance Program by equaling or exceeding its requirements and thus make federally subsidized flood insurance available at reduced rates. Comply with the rules and regulations of the National Flood Insurance Program codified as 44 CFR 59-79, as amended.

102.10 Conserve the *natural* hydrologic, hydraulic, water quality, and other beneficial functions of *wetlands* by having, at a minimum, no net loss of wetlands in Lake County, and further these beneficial functions of wetlands by having an objective of a 'net gain' of wetland function as specified in the Wetland Restoration and Preservation Plan component of the Lake County Comprehensive Stormwater Management Plan.

§103 Effective Date

The effective date of this Ordinance shall be October 18, 1992.

Approved as amended by the Lake County Board, July 12, 1994

Approved as amended by the Lake County Board, August 10, 1999

Approved as amended by the Lake County Board, October 10, 2000

Approved as amended by the Lake County Board, August 14, 2001

Approved as amended by the Lake County Board, November 8, 2005

Approved as amended by the Lake County Board, January 10, 2006

Approved as amended by the Lake County Board, October 10, 2006

Approved as amended by the Lake County Board, November 18, 2008

Approved as amended by the Lake County Board, July 10, 2012

Approved as amended by the Lake County Board, June 11, 2013

Approved as amended by the Lake County Board, October 13, 2015

Approved as amended by the Lake County Board, October 13, 2020

Article 2: Administration and Enforcement Responsibilities

§200 Ordinance Enforcement

200.01 In *Certified Communities*, the appropriate development regulations officer shall be the *Enforcement Officer* for the Ordinance. In all other areas of Lake County, the *SMC Chief Engineer* shall be the Enforcement Officer. One of the primary duties of the Enforcement Officer shall be to review all watershed development applications and issue permits for those projects that are in compliance with the provisions of this Ordinance. The Enforcement Officer shall be responsible for the administration and enforcement of the Ordinance.

200.02 Included as part of this Ordinance as Appendix E: Enforcement Officer Duties is a delineation of requirements and duties required of and accepted by a *community* and its designated Enforcement Officer. Certain requirements or duties specified by *FEMA* and *IDNR/OWR* in Appendix E: Enforcement Officer Duties relate only to the intergovernmental relationship between a community and FEMA or IDNR/OWR for the purposes of that community obtaining or maintaining eligibility for the National Flood Insurance Program (NFIP) and delegation of state permit authority.

200.03 Enforcement Officers in Certified Communities have the responsibility to report a Designated Erosion Control Inspector's repeated or recurring non-compliance with Article 6: Soil Erosion and Sediment Control Requirements and Article 11: Inspections and Access in this Ordinance to the SMC Chief Engineer. The *SMC Chief Engineer* has the authority and responsibility to suspend a Designated Erosion Control Inspector's listing status for repeated or recurring non-compliance. A notification of suspension from listing shall be issued to the *Designated Erosion Control Inspector* and copied to the *applicant* a minimum of 30 days prior to suspension from listing. Revocation of listing status shall be the responsibility of the SMC per Commission-adopted procedure.

200.04 The SMC shall be responsible for the review, enforcement, and issuance of all *Public Road Development* Permits.

§201 Community Certification

A municipality or the County may be certified by SMC to enforce the provisions of this Ordinance. Upon certification, the *community's* designated *Enforcement Officer* shall enforce all provisions of this Ordinance within the community's jurisdiction. The criteria and process for certification follow:

201.01 Criteria

A. The *community* is participating in the regular phase of the National Flood Insurance Program.

B. The *community* has adopted and is enforcing the provisions of this Ordinance.

C. The *community* forwards appropriate portions of the *Regulatory Floodway* Development applications to SMC for transmittal to *IDNR/OWR* or its designee for concurrent review and approval.

D. The *community* maintains records and provides SMC with certain portions of these records as described in Appendix E: Enforcement Officer Duties, Section L.

E. The *community* will require all engineering information and plans prepared by a *Registered Professional Engineer* to be reviewed under the supervision of a Registered Professional Engineer under the employ or contract of the community for conformance with this Ordinance prior to permit issuance.

201.02 Process

A. *Communities* desiring certification may submit a letter of intent to petition for Certification.

B. A petition for Standard Certification or for Isolated Wetland Certification shall be submitted to the SMC indicating how the *community* meets the criteria for certification. A copy of the community's adopted ordinance shall be included with the petition.

C. Within 60 days of receipt of the petition and in conjunction with a scheduled SMC meeting, the staff recommendation shall be presented.

D. The SMC shall approve the petition as submitted, shall approve the petition with conditions, or shall deny the petition. A notice of the SMC action shall be submitted to the petitioning *community*.

E. *Certified Communities* shall petition for recertification every five (5) years. This petition shall include SMC-required documentation for the previous certification period.

F. Within the five (5) year certification period, the SMC Director shall periodically review the *community's* Ordinance enforcement records and performance and make remedial recommendations to the community, if necessary. Review findings will be used in the assessment of petitions for recertification from Certified Communities.

G. The SMC may rescind or place conditions on a *Certified Community's* certification status, after a public hearing, if any of the following circumstances has been documented:

1. Permits are recurringly issued not in compliance with the Watershed Development Ordinance;
2. Permit or Watershed Development Ordinance requirements are recurringly not enforced on permitted development;
3. Regulated development that has been brought through the multi-step Community Notification Procedure [due process] before Commission deliberation.

When any of the above circumstances are documented and presented by SMC Staff to the SMC, the SMC shall determine whether to hold a public hearing regarding the Certified Community's certification status. If a public hearing is to be held, a minimum 30-day notice to the Community is required. The public hearing shall be held in conjunction with a regularly scheduled SMC meeting. After close of the public hearing, the SMC shall have the authority to make a decision on any potential modifications to the *community's* certification status.

H. The SMC shall rescind a *community's* certification for the following reasons:

1. The community is no longer a participant in the National Flood Insurance Program.
2. The community adopts a Watershed Development Ordinance or amends its ordinance so that its ordinance in less restrictive than the SMC Watershed Development Ordinance.

I. If the *community* issues a *Regulatory Floodway* development permit not in accordance with §703 Regulatory Floodway Performance Standards SMC shall rescind the community's authority to administer the *IDNR/OWR* Regulatory Floodway permit program for *Appropriate Uses*.

J. Fee-in-lieu-of detention ordinances and procedures used by Certified Communities shall be reviewed and approved by the SMC as part of the regular certification process.

K. Certified Communities shall have a designated Enforcement Officer. To be qualified to act as an *Enforcement Officer*, the person shall pass the Lake County Enforcement Officer's Exam. If a community Enforcement Officer vacates that position, the community shall designate an Interim Enforcement Officer within thirty (30) days. Final designation of a qualified Enforcement Officer shall occur within six (6) months in order for the community to remain certified.

L. *Communities* with Isolated Wetland Certification shall have a designated *Certified Wetland Specialist* (CWS) either as an employee or contracted to administer *wetland* related provisions as specified in the Ordinance, under direction of the Enforcement Officer. SMC will administer Ordinance-specified wetland provisions for communities without isolated Wetland Certification.

If a community Certified Wetland Specialist vacates that position, the community shall designate a CWS within sixty (60) days or may utilize SMC CWS Staff capabilities on an interim basis prior to final designation. Final designation of a CWS shall occur within six (6) months in order for the community to remain Isolated Waters of Lake County-certified.

M. Communities with FIL50 Certification may administer WDO 509.04 for development under its respective permit authority.

Article 3: General Provisions

§300 Regulated Development

The performance standards, application requirements, and other provisions of this Ordinance apply to regulated development, as determined by the Enforcement Officer.

No person, firm, corporation, or governmental agency shall commence any *development* regulated by this Ordinance on any lot or parcel of land without first obtaining a *Watershed Development Permit* from the *Stormwater Management Commission* or, if applicable, the *Certified Community*. A permit shall be issued if the proposed development meets the requirements of this Ordinance or its Certified Community equivalent. A Watershed Development Permit is required for any development, including finalization of a plat, replat, Planned Unit Development (PUD), or Manufactured Home Park site plan, that:

300.01 Is located in a *Regulatory Floodplain*; or

300.02 Is located in a *flood-prone area* with one hundred (100) acres of tributary *drainage area* or more; or

300.03 Is located in a *depressional storage area* with a storage volume of 0.75 acre-foot or more for the *base flood*; or

300.04 Creates a *wetland impact* within an area defined as Waters of the U.S. or *Isolated Waters of Lake County*; or

300.05 Modifies the *flood-prone area* of a *channel* where the tributary *drainage area* is twenty (20) or more acres; or

300.06 Includes the total land area of an *ownership parcel* that results in:

A. More than one (1) acre of new *impervious surface* area; or

B. More than three (3) acres of *hydrologically disturbed* area, unless the total new *impervious surface* area is less than one-half (0.5) acre; or

C. An *impervious surface* area ratio of fifty percent (50%) or greater, unless the total new impervious surface area is less than one-half (0.5) acre.

The term “new” in this article refers to *impervious surface* area created after the original effective date of this Ordinance (10/18/92). *Redevelopment* of previously developed sites shall maintain existing storage volume and shall not increase the rate of runoff from the site. The *applicant* shall provide supporting data and calculations to the satisfaction of the *Enforcement Officer* to ensure the site design either provides a *watershed benefit* or meets the requirements of 502.03. New development on partially developed sites shall meet the release rate criteria in 502.01 for the new development, if the new development exceeds the thresholds in 300.06A, or 300.06B, or 300.06C; or

300.07 Any *public road development* meeting both of the following criteria:

A. One and one-half (1.5) acres or more of new impervious surface; and

B. One and one-half (1.5) acres or more of new *impervious surface* per mile, for linear or nonlinear projects; or

300.08 Any *development* that hydrologically disturbs 5,000 square feet or more. This development activity shall at a minimum meet the soil *erosion* and sediment control performance standards of §600 Performance Standards, with associated application requirements. *Public road developments* are required to meet the soil erosion and sediment control standards only for those projects which require permits according to 300.01, 300.02, 300.03, 300.04, 300.05, and 300.07; or

300.09 Any activity to a building in a Special Flood Hazard Area (SFHA) as described in FEMA Publication 480 National Flood Insurance Program Flood Management Requirements.

§301 Contiguous Property and Development Phasing

In order to preclude inappropriate phasing of *developments* to circumvent the intent of this Ordinance, when a proposed development activity will occur on a lot or parcel of land that has contiguous lots or parcels of lands owned in whole, or in part, by the same property owner at the time of subdivision subsequent to October 18, 1992, then the criteria as defined in this section will be applied to the total land area compiled from aggregate *ownership parcels*. If this aggregate ownership parcel area is greater than the minimum area requirements defined in §300 Regulated Development, then a *Watershed Development Permit* will be required.

§302 Exempted Development

All *development* shall meet the minimum state, federal, and local regulations. No development is exempt from the floodplain, floodway, *wetland*, and soil *erosion* and sediment control provisions of this Ordinance.

An exemption request under 302.01, or 302.02, or 302.03 shall be submitted in writing by the applicant to the *Enforcement Officer* for an exemption from specific performance standards of this Ordinance. The applicant's exemption request shall itemize each Ordinance provision that is requested for exemption. After review and verification by the *Enforcement Officer* that 302.01, or 302.02, or 302.03 are met, the specific Ordinance provision exemptions may be granted.

302.01 Annexation agreements, final plats, site development permits or current building permits approved prior to October 18, 1992 if the *stormwater management systems* are installed, functioning, and in compliance with all applicable stormwater regulations then in effect.

302.02 Annexation agreements, final plats, Planned Unit Developments, site development permits, or current building permits approved between October 18, 1992 and April 13, 2021 if the approved plans and designs are in conformance with the pre-October 13, 2020 Ordinance provisions. That portion of any annexation agreement, final plat, Planned Unit Development, site development permit, or current building permit which is amended after April 13, 2021 and which affects the *stormwater management system* is not exempt from the provisions of this Ordinance.

302.03 Re-subdivision of commercial or industrial subdivisions identified under 302.01, provided that the *stormwater management systems* are installed and functioning and there is no increase in *impervious surface* area permitted. Re-subdivision of

commercial or industrial subdivisions identified under 302.02, provided there is no increase in impervious surface area beyond that which was originally approved.

§303 Development Classification

All activities requiring a *Watershed Development Permit* shall be classified as a minor, major, or *public road development*. The definition for each classification follows:

303.01 Minor Development

A minor *development* is defined as any development that:

A. Is not located in a *Regulatory Floodplain*, or is located in a Regulatory Floodplain outside of the Regulatory Floodway, with no compensatory storage requirement; and

B. Does not create a *wetland impact* to *Waters of the United States* or *Isolated Waters of Lake County* exceeding the isolated wetland impact mitigation thresholds in 1007.01; and

C. Does not modify a *channel* where the tributary *drainage area* is greater than one hundred (100) acres, with no compensatory storage requirement; and

D. Does not require detention per 502.01.

303.02 Public Road Development

Any *development* activity which takes place in a public right-of-way or part thereof that is administered and funded, in whole or in part, by a public agency under its respective roadway jurisdiction. Rehabilitative maintenance and in-kind replacement are considered to be a *public road development* if located in a Regulatory Floodplain. A public road development located within a Regulatory Floodway and which has been approved by the Illinois Department of Transportation Division of Highways (IDOT/DOH), Bureau of Local Roads and Streets is exempt from the hydraulic analysis requirements of this Ordinance. Individual recreation trail systems being constructed that are not part of another development project and linear railroad development projects shall be considered public road developments with respect to the requirements of this Ordinance.

303.03 Major Development

A major *development* is defined as all other development.

§304 Conditional Approval

Conditional Approval for a *development* may be granted by the *Enforcement Officer* prior to the issuance of a Watershed Development Permit. The Conditional Approval will be based on conformance with applicable performance standards and submittal requirements of this Ordinance. A letter will be sent to the *applicant* stating the results of the review and the conditions placed on any approvals.

§305 Earth Change Approval

If all applicable performance standards and application requirements of this Ordinance have been met, except for obtaining all the required local, state, and federal approvals, a request for the commencement of grading activities may be made for a development site prior to the issuance of a *Watershed Development*

Permit. The proposed grading activity may commence with written approval from the *Enforcement Officer* of the Earth Change Approval plan that delineates the activities specifically allowed including appropriate soil erosion and sediment control measures. The written approval will state the conditions and limitations of the proposed grading activities. No *development* activity may occur in areas for which state and federal permits are required, except for IEPA sewer and water extension permits. Earth Change Approvals may not be granted for any development within a *Regulatory Floodplain*, except for excavations outside of the Regulatory Floodway and which do not require an IDNR/OWR permit.

§306 Countywide and General Permits

Under its authority and jurisdiction, the *SMC Chief Engineer* may, by issuance of a Countywide or General Permit, grant approval for specific types of *development*, which comply with all applicable -Ordinance standards and purpose (§102 Purpose). The specific types of development eligible for a Countywide or General Permit (e.g., Countywide Permit #1 and General Permit #2) may be authorized only after discussion at the Technical Advisory Committee, a minimum thirty (30) day public notice, and approval by the SMC in conjunction with a regularly scheduled SMC meeting.

§307 Permit Fees

A schedule of fees in accordance with the provisions of this Ordinance shall be established by separate resolution of the SMC. A separate fee schedule shall be developed and implemented by Certified Communities.

§308 Application Review Times

Permit applications shall be reviewed within thirty (30) days of receipt. Amended permit applications shall be reviewed within sixty (60) days of receipt. The *Enforcement Officer* shall approve, deny, or provide remedial recommendations within sixty (60) days. If no action has been taken by the Enforcement Officer within ninety (90) days after receipt of an application, or within a longer time period if requested in writing by the *applicant*, the application shall be deemed denied.

§309 Permit Extensions and Terminations

Among the causes for terminating a permit during its term or for denying a permit extension include, but are not limited to, the following:

309.01 Noncompliance with any condition of the permit; or

309.02 The permittee's failure to disclose fully all relevant facts in the application process or the permittee's misrepresentation of any relevant facts at any time; or

309.03 If the authorized work is not commenced within three (3) years after issuance of the permit, or if the authorized work is suspended or abandoned for a period of twelve (12) months after the time of commencing the work, unless an extension has been granted in writing by the *Enforcement Officer*. The extension should be requested of the Enforcement Officer in writing no sooner than ninety (90) days prior to the termination of the permit; or

309.04 A permit that includes a structure located within the Regulatory Floodplain, or will be located within the Regulatory Floodplain, shall be terminated without the possibility

of an extension, if the start of construction is not commenced within 180 days of the permit issuance date unless the structure is compliant with the following:

A. Any modification to National Flood Insurance Program regulations after permit issuance; or

B. Any modification to a FEMA FIRM or FIS after permit issuance.

For the purposes of this subsection, “start of construction” means the commencement of any repair, reconstruction, rehabilitation, addition, or improvement of a structure; or the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Article 4: Application Requirements

§400 Minor Developments

The following application requirements shall be submitted when applicable to the *development* as determined by the *Enforcement Officer*:

400.01 A completed *Watershed Development Permit* application signed by the *applicant* or applicant's agent, and when required, a Professional Engineer and *Certified Wetland Specialist*.

400.02 A general description of the existing and proposed *stormwater management system* including all discharge points, collection, conveyance, and storage facilities.

400.03 A grading plan showing proposed and existing contours.

400.04 A site drainage plan which depicts drainage features, *overland flow paths*, *stormwater management system* components, *flood-prone areas*, *Regulatory Floodplains*, *wetland* boundaries, *buffer* areas, existing or proposed septic systems and wells. A capacity analysis of the above stormwater system components may be required by the *Enforcement Officer*.

400.05 An area drainage plan locating the proposed *development* in the *watershed*.

400.06 A description and depiction of measures to be taken to control *erosion* (soil erosion and sediment control plan).

400.07 A description of the anticipated dates of initiation and completion of activity.

400.08 Provide an exhibit(s) for review which displays all *deed or plat restrictions* of record or to be recorded for the *stormwater management system*.

400.09 The federal, state, and local permit requirements of 401.13 [NRI] and 401.14 [NOI] are required when applicable to the *development* site, and 401.09 [maintenance plan] and 401.10 [PE seal] shall be required when requested by the *Enforcement Officer*.

400.10 A *wetland* submittal if required under Article 10: Wetland Requirements of this Ordinance.

400.11 Performance Guarantees: As specified in Appendix E: Enforcement Officer Duties, Section E.

400.12 For permits required only in accordance with 300.09, documentation shall be submitted towards the determination of a *substantial improvement*. Other submittal requirements may be waived.

§401 Major Developments

The following application requirements shall be submitted when applicable to the development as determined by the Enforcement Officer.

In addition to the requirements for minor *developments*, major development applications require the following information:

401.01 Name and legal address of the *applicant*, and common address of the location where the *development* will take place, mailing address of the property owner, and the signature of the applicant or the applicant's agent.

401.02 A topographic map of the existing conditions of the *development* site showing the location of all roads, all drainageways, the boundaries of predominate soil types, the boundaries of predominate vegetation, and the location of any drainage easements, detention or retention basins, including their inflow and outflow structures, if any. The map shall also include the location, size, and flowline elevations of all existing storm or combined sewers and other utility lines within the site. The map shall be prepared using a 2-foot or less contour interval and shall be prepared at an appropriate scale for the type of project and shall include specifications and dimensions of any proposed *channel modifications*, location and orientation of cross-sections, if any, north arrow, and a graphic or numerical scale. All elevations shall be referenced to North American Vertical Datum of 1988 (NAVD 88), which supersedes the NGVD29 datum used prior to September 18, 2013.

401.03 Include cross-section views for the *stormwater management system* showing existing and proposed conditions including principal dimensions of the work, and existing and proposed elevations, normal water and calculated *base flood elevations*, and overland flow depth and path. The elevations of *lowest floor* or *lowest adjacent grade* for *structures* shall be included on the *development* plan as applicable. Refer to 506.03, §706 Building Protection Requirements, and Article 9: Flood Table Land Requirements for elevation requirements of structures within or adjacent to flood-prone areas.

401.04 A vicinity map shall be included along with the *Parcel Identification Numbers* (PINs) of all parcels comprising the proposed *development*.

401.05 A report describing the hydrologic and hydraulic analysis performed for the project. The report shall include the name of *stream* or body of water affected, a statement of purpose of proposed activity, and a detailed determination of the runoff for the project site under existing and developed conditions. This includes documentation of the design volumes and rates of the proposed runoff for each portion of the *watershed* tributary to the *stormwater management system* and receiving *channel* and high water elevations. Runoff calculations shall include all discharges entering the site from upstream areas.

401.06 A section in the hydrologic and hydraulic analysis report describing how the runoff volume reduction requirements (as described in §503 Runoff Volume Reduction (RVR)) are incorporated into the development site plan. The section shall include the rationale for not selecting approaches with higher preference. The section shall also provide supporting calculations for meeting the runoff volume reduction requirements.

401.07 For *detention facilities*, a section in the hydrologic and hydraulic analysis report that includes a plot or tabulation of storage volumes and water surface areas with corresponding water surface elevations, stage-discharge or outlet rating curves, and design hydrographs of inflow and outflow for the 2-year, 24-hour and the 100-year, 24-hour storm events under existing and developed conditions.

401.08 A soil *erosion* and sediment control plan showing all measures appropriate for the *development*, as approved by the *Enforcement Officer*, to meet the objectives of this Ordinance throughout all phases of construction and permanently after completion of development of the site, including:

A. Location and description, including standard details, of all sediment control measures and design specifics of sediment basins and traps, including outlet details. The drainage area tributary to each sediment control measure shall be delineated on the soil *erosion* and sediment control plan.

B. Location and description of all soil stabilization and *erosion* control measures, including seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, kind and quantity of mulching for both temporary and permanent vegetative control measures, and types of non-vegetative stabilization measures.

C. Location and description of all runoff control measures, including diversions, waterways, and outlets.

D. Location and description of methods to prevent tracking of sediment off-site, including construction entrance details, as appropriate.

E. Description of dust and traffic control measures.

F. Locations of stockpiles and description of stabilization methods.

G. Description of off-site fill or borrow volumes, locations, and methods of stabilization.

H. Provisions for maintenance of control measures, including type and frequency of maintenance, easements, and estimates of the cost of maintenance.

I. Identification (name, address, and telephone) of the person(s) or entity which will have legal responsibility for maintenance of *erosion* control structures and measures during *development* and after development is completed.

J. A written narrative description of the proposed phasing (construction sequencing) of *development* of the site, including stripping and clearing, rough grading and construction, and final grading and landscaping. Phasing should identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, and the sequence of installation of temporary sediment control measures (including perimeter controls), clearing and grading, installation of temporary soil stabilization measures, installation of storm drainage, paving streets and parking areas, final grading and the establishment of permanent vegetative cover, and the removal of temporary measures. It shall be the responsibility of the *applicant* to notify the *Enforcement Officer* of any significant changes which occur in the site development schedule after the initial soil *erosion* and sediment control plan has been approved.

401.09 A maintenance plan for the ongoing maintenance of all *stormwater management system* components, including *wetlands*, is required prior to plan approval. The plan shall be referenced in the recorded deed or plat restriction document associated with the stormwater management system. The plan shall include:

A. Maintenance tasks and the type and frequency of maintenance of all components of the stormwater management system, including existing and replaced *drain tiles* within the ownership parcel which are part of the stormwater management system.

B. The party responsible for performing the maintenance tasks.

C. A description of all permanent public or private access deed or plat restricted areas for all *stormwater management system* components for the *development*.

D. A description of dedicated sources of funding for the required maintenance.

E. Measures to prohibit the dumping, depositing, dropping, throwing, discarding, or leaving of litter and construction material debris and all other *illicit discharges* into the *stormwater management system* and measures to be in continued compliance with IEPA NPDES Permit No. ILR40.

401.10 The Application form, development plans, and stormwater reports shall meet the requirements of this Ordinance and shall be signed and sealed by a *Registered Professional Engineer*.

401.11 Public trail and park facility projects which do not involve the placement of structures or fill can be submitted without the certification or seal of a *Registered Professional Engineer*.

401.12 A description of the anticipated dates of initiation and completion of activity.

401.13 A copy of the Natural Resources Inventory (NRI) shall be submitted by the *applicant* to the *Enforcement Officer* for *development* that is required to obtain a NRI performed by the McHenry-Lake County Soil and Water Conservation District pursuant to state statute [70 ILCS 405/22.02a].

401.14 For *development* sites requiring a National Pollutant Discharge Elimination System (NPDES) permit, the *applicant* shall submit a Notice of Intent (NOI) to the IEPA to comply with the NPDES Permit. The approved soil *erosion* and sediment control plan created pursuant to the requirements of this Ordinance shall fulfill the plan requirements in the NPDES permit.

401.15 If the soil mapping submitted for the *development* indicates the presence of soils classified as a *hydric soil* (USDA/NRCS Soil Classification), then the *applicant* shall provide site-specific soil mapping performed by a certified soil classifier or geotechnical investigation for the development. No *buildings* shall be constructed on these soils unless appropriate building methods, such as pilings, caissons, or removal and replacement of unsuitable soils, as approved by the *Enforcement Officer*, are used to provide and protect a suitable building foundation.

Development that is exempted from this requirement is any development activity not resulting in the construction of a building.

401.16 A copy of the consultation application to the Illinois Department of Natural Resources shall be submitted by the *applicant* to the *Enforcement Officer* for *development* that is required to comply with the consultation process of the Illinois Endangered Species Protection Act [520 ILCS 10/11] and the Illinois Natural Areas Preservation Act [525 ILCS 30/17].

401.17 Subsurface Drainage (Drain Tiles)

The *applicant* shall submit a subsurface drainage inventory. The inventory shall include locations of existing farm and storm drainage tiles by means of slit trenching and other appropriate methods performed by a qualified subsurface drainage consultant. All existing drain tile lines damaged during the investigation shall be repaired to their previous working status.

A. The *applicant* shall provide a topographical map of the *development* site showing:

1. Location of and depth of each slit trench and identified to correspond with the tile investigation report and surveyed points where the tile was field staked at approximately 50-foot intervals; and
2. Location of each drain tile with a flow direction arrow, tile size, and any connection to adjoining properties; and
3. A summary of the tile investigation report showing trench identification number, tile size, material and quality, percentage of the tile filled with water, percentage of restrictions caused by silting, depth of ground cover, and working status; and
4. Name, address, and phone number of person or firm conducting tile location investigation.

B. Information collected during the Subsurface Drainage Inventory shall be used as part of the design and construction of a *stormwater management system* that meets the requirements of this Ordinance.

401.18 A *wetland* submittal if required under Article 10: Wetland Requirements of this Ordinance.

401.19 A copy of the building plans and cost estimate in accordance with FEMA NFIP standards shall be submitted for modifications to existing structures in the Regulatory Floodplain.

§402 Public Road Developments

The following application requirements shall be submitted when applicable to the development as determined by the Enforcement Officer:

402.01 A copy of any applicable *IDNR/OWR* permit application.

402.02 A copy of any applicable U.S. Army Corps of Engineers permit application.

402.03 A copy of the proposed stormwater management system, including the location and size of all existing and proposed drainage improvements including plan, section, and profile views of storm sewers, field tiles, culverts, *channels*, and detention areas.

402.04 A copy of all calculations supporting the *stormwater management system*. Materials should be consistent with the submittal requirements of 401.05 and the engineering requirements of Article 5: General Performance Standards.

402.05 A soil *erosion* and sediment control plan consistent with §600 Performance Standards and §601 Designated Erosion Control Inspector Program Standards.

402.06 A wetland determination report and mitigation plan consistent with Article 10: Wetland Requirements, if applicable.

§403 IDNR/OWR Dam Safety Permit

The following application requirements shall be submitted when applicable to the development, as determined by the Enforcement Officer:

403.01 The *applicant* shall obtain and provide a copy of an IDNR/OWR Dam Safety Permit or a letter stating that a Dam Safety Permit is not required if the *development* includes a *dam* before the applicant requests or obtains a *Watershed Development Permit*. Reference Appendix G: IDNR/OWR Dam Safety Permitting Guidelines.

§404 As-Built Drawings

404.01 *As-built drawings*, signed and sealed by a Professional Engineer, shall be required for all major developments, public road developments, and other types of development as determined by the Enforcement Officer (such as those developments that affect stormwater runoff rates or volume, impact wetlands or wetland buffers, or are adjacent to floodplains).

404.02 *As-built drawings* and supporting information shall clearly show all as-built conditions, including, but not limited to:

A. Topographic spot elevations and contours for overland flow paths, detention ponds, storage facilities, and building pads.

B. Detention pond restrictor size, invert elevation, emergency overflow size, and elevation.

C. Verification of required native vegetation planted (seed tags, invoices).

D. Storm sewer sizes, inverts.

E. *Drain tile* information provided from the Subsurface Drainage Inventory, or identified during construction as follows: location, connection, size, material, and inverts for those drain tiles that are part of the stormwater management system.

F. Other information required under this Ordinance.

G. Applicable calculations or other information verifying conformance with the permitted plan set.

H. Lowest floor and low opening elevations of structures. Low opening sizes where vents are required.

I. Benchmark information.

Article 5: General Performance Standards

The following performance standards apply to *development* requiring a permit.

§500 Platting, Approvals, and Development Process

500.01 The requirements and performance standards of this Ordinance shall be considered for all *development* in site planning and appropriately addressed in the drainage plan component of subdivisions, annexation agreements, preliminary plats, final plats, re-plats, *manufactured home* parks, and Planned Unit Developments (PUD).

500.02 In addressing §503 Runoff Volume Reduction (RVR), streets, blocks, lots, deed or plat restricted areas, parks, and other public grounds shall be located in such a manner as to preserve and utilize *natural* streams, *wetlands*, *flood-prone areas,* and best management practices and undisturbed native soil/plant areas utilized to meet the runoff volume reduction requirements.

500.03 Subdivisions, annexation agreements, plats, re-plats, manufactured home parks, and PUDs shall show the *base flood elevation* (BFE) and *Regulatory Floodway* limits. The plats, re-plats, manufactured home parks, PUDs, or engineering plans and studies shall include a signed statement by a *Registered Professional Engineer* that accounts for changes in the drainage of surface waters in accordance with the Plat Act [765 ILCS 205/2].

500.04 All plats and subdivisions which border on or include public bodies of water as defined by *IDNR/OWR* and listed in Appendix F: Public Bodies of Water in Lake County of this Ordinance shall be submitted by the *applicant* to IDNR/OWR for review and approval.

500.05 A *community's* planning commission or corporate authority shall not approve any preliminary PUD or Plat of Subdivision located inside or outside its corporate limits unless such PUD or Plat is, at a minimum, subject to meeting the performance standards of the Lake County Watershed Development Ordinance.

500.06 A *community's* planning commission or corporate authority shall not approve any final PUD or Plat of Subdivision located inside or outside its corporate limits unless such PUD or Plat, at a minimum, meets the performance standards of the Lake County Watershed Development Ordinance.

500.07 Pursuant to state law, a property owner of a parcel being subdivided adjacent to a state or county road right-of-way shall notify the proper highway authority in writing of the proposed subdivision, and request that the proper highway authority provide, at the cost of the highway authority or otherwise provided by law, the amount of additional capacity in any stormwater *detention facility* to be constructed in the subdivision for the future availability of the highway authority for meeting stormwater detention requirements of any future public construction on the highway.

500.08 All *stormwater management systems* within the ownership parcel shall be located and described within a *deed or plat restriction*. Stormwater management systems that service a single parcel of property may be excused from this requirement upon approval of the *Enforcement Officer*.

500.09 Modifications to a *deed or plat restriction* for the *stormwater management system* shall be approved by the *Enforcement Officer*.

500.10 Soil *erosion* and sediment control measures and *stormwater management systems* shall be functional before general construction begins. Where *development* of a site is to proceed in phases, the soil erosion and sediment control measures and the stormwater management systems needed for each phase shall be functional before the construction of that phase begins.

500.11 Stormwater management systems shall be functional before building permits are issued for residential and non-residential *developments*.

§501 Runoff Calculations

501.01 For tributary *drainage areas* one hundred (100) acres or greater, and for the determination of detention and depressional storage requirements, an SMC-approved hydrograph-producing runoff calculation method shall be used. Appendix K: Detention Volume Versus Curve Number of this Ordinance may also be used, when appropriate and upon approval of the *Enforcement Officer*, for determination of detention storage volumes.

501.02 The Rational Method may be used to calculate discharges for areas of less than one hundred (100) acres. The Rational Method shall not be used to determine detention or depressional storage requirements.

501.03 Rainfall data as presented in Appendix I: Rainfall Depth Duration Frequency Tables for Lake County of this Ordinance shall be used for rainfall volume, storm distribution, return frequency, and event duration.

501.04 Runoff calculations for all off-site *drainage areas* may be based on anticipated future land use conditions or existing land use conditions. Anticipated future land use conditions will be based on future land use and existing storage facilities. Future *detention facilities* may be used for anticipated future land use conditions if approved by the *SMC Chief Engineer* or for tributary drainage areas less than 100 acres in a *Certified Community*, the *Enforcement Officer*. Existing land use conditions will be based on existing land use and existing storage facilities. For each frequency storm event, runoff calculations will be based on the critical duration, for all durations presented in Appendix I: Rainfall Depth Duration Frequency Tables for Lake County.

501.05 Existing depressional storage volume shall be maintained, and the volume of detention storage provided to meet the requirements of this Ordinance shall be in addition to the existing storage.

501.06 For determination of soil runoff characteristics, areas of the development that are hydrologically disturbed and compacted shall be changed to the next higher hydrologic soil group classification e.g., B to C, C to D, or as approved by the Enforcement Officer. Soil groups that are not hydrologically disturbed will retain their current runoff characteristics.

501.07 Areas that are deed or plat restricted for native planting areas may be determined to have lower runoff characteristics, and may be taken into account when meeting the runoff volume reduction requirements of this Ordinance (503.02). The Enforcement Officer may determine these areas can be excluded from the required detention volume calculation.

§502 Release Rates and Discharges

502.01 Unless otherwise specified in Appendix J: Watershed Specific Release Rates, an SMC-adopted *basin plan* or *floodplain study*, the detention volume required shall be calculated using a rating curve based on maximum release rates of 0.04 cubic feet per second per acre for the 2-year, 24-hour storm event and 0.15 cubic feet per second per acre for the 100-year, 24-hour storm event. The release rate requirement shall apply to the *hydrologically disturbed* area of the *ownership parcel* unless the *Enforcement Officer* determines that specific locations of the *ownership parcel* have unique circumstances such that the release rate shall apply to a broader or smaller area. The release rate requirements shall only apply to *developments* listed in 300.06 and 300.07.

502.02 Watershed specific release rates are tabulated in Appendix J: Watershed Specific Release Rates of this Ordinance.

502.03 All concentrated stormwater discharges must be conveyed into a *maintainable outlet* with *adequate downstream stormwater capacity* (as defined in Appendix A: Definitions) and will not result in increased *flood* and drainage hazard.

502.04 The design of *stormwater management systems* shall not result in the inter-basin transfer of drainage, unless no reasonable alternative exists. The *Enforcement Officer* may also allow inter-basin transfer if the transfer relieves a known drainage hazard and there is *adequate downstream stormwater capacity*.

502.05 The combined release from the *detention facility* outlet and the outlet designed to meet *wetland* hydrology requirements of §1006 Wetland Hydrology for Isolated Waters of Lake County shall not exceed either the 2- or 100-year allowable release rates, respectively. The wetland hydrology requirement or minimum outlet restrictor size may take precedence over the allowable release rate, provided there is adequate downstream capacity as determined by the *Enforcement Officer*.

502.06 The *applicant* shall prohibit *illicit discharges* generated during the *development* process from entering into the *stormwater management system*. Discharges of stormwater from a development site shall be in conformance with the Soil Erosion and Sediment Control practices contained in Article 6: Soil Erosion and Sediment Control Requirements of this Ordinance.

502.07 The performance standards of this Ordinance shall apply to all *public road developments*. The release rate performance standard of §502 Release Rates and Discharges shall apply only to additional *impervious surface* areas or in the case of new road construction, the *hydrologically disturbed* areas. This release rate requirement shall be used unless *watershed* specific release rates have been adopted or it is determined by the *Enforcement Officer* that other site conditions, including analysis of adequate downstream capacity, warrant further analysis and modification from this standard. Detention requirements shall be applied only to those projects described in 300.07.

§503 Runoff Volume Reduction (RVR)

503.01 An *applicant* shall choose strategies that minimize stormwater runoff volumes and address water quality impairments. The site development plan shall incorporate stormwater infiltration, evapotranspiration, reuse, or other methods into the project. The applicant shall use appropriate *green infrastructure* techniques and best

management practices to reduce runoff volume according to the following hierarchy, in order of preference, in preparing a stormwater management plan:

A. Preservation and enhancement of the stormwater management benefits of the *natural* resource features of the development site (e.g., areas of Hydrologic Soil Groups A and B, floodplains, Waters of the United States, *Isolated Waters of Lake County*, channels, drainageways, prairies, savannas, and woodlands);

B. Minimization or disconnection of impervious surfaces;

C. Enhancement of the infiltration and storage characteristics of the development site using appropriate best management practices;

D. The use of open *channels* with native vegetation to convey stormwater runoff;

E. Structural measures that provide water quality and volume reduction;

F. Structural measures that provide only volume reduction or other rainwater harvesting practices;

G. Measures that provide water quality and quantity control;

H. Measures that provide only quantity control.

503.02 Runoff Volume Reduction (RVR) Quantitative Standard

The minimum RVR quantitative standard shall be the volume achieved utilizing applicable RVR Credits, as determined by the applicant and approved by the Enforcement Officer, based on the *maximum extent practicable*, for the following development. The term "new" for the RVR Quantitative Standard refers to impervious surface area created after April 1, 2009.

Minor and Major Development that result in at least one (1) acre hydrologic disturbance and more than one-half (0.5) acre of new impervious surface area;

Redevelopment of previously developed sites that result in at least one (1) acre hydrologic disturbance;

Public Road Development that meet or exceed the thresholds in 300.07.

A. RVR Implementation Criteria

1. Runoff volume reduction quantity shall be implemented with appropriate methods, as approved by the Enforcement Officer, which may include the following: Best management practices; *green infrastructure*; detention facilities; and preservation or enhancement of natural streams, wetlands, and areas with deed restricted native vegetation.

2. Best management practices, and the portion of the detention facility designed to meet this provision, shall be designed to dewater the RVR quantity in no greater than 96 hours. The applicant shall provide infiltration rate information for each RVR practice. The use of an underdrain system may be incorporated into the design in order to achieve the required draw down time. Underdrain systems shall be designed to dewater the RVR quantity in not less than 48 hours.

B. RVR Credits

The following credits may be used alone or in combination to meet the RVR quantity requirement:

1. Detention Facility Credit – Up to 50% of the RVR quantity may be provided within the portion of the detention facilities that have been designed to meet this standard. The volume provided to meet this provision shall be below the elevation of the primary outlet for the RVR portion of the facility.
2. Native Vegetation Cover Credit – Up to 100% of the reduced 2-year, 24-hour runoff volume achieved with native vegetation in deed or plat restricted areas (e.g., compensatory storage and buffer areas) as described in Soil Runoff Characteristics (501.06) and Streams and Channels (506.02).
3. Isolated Wetland Hydrology Credit – A maximum of 100% of the existing 2-year, 24-hour runoff volume to a preserved IWLC if the Wetland Hydrology (§1006 Wetland Hydrology for Isolated Waters of Lake County) and Water Quality Treatment (§504 Water Quality Treatment) requirements are met.
4. Water Quality Treatment Credit – Up to 100% of the volume utilized to meet the Water Quality Treatment Volume (§504 Water Quality Treatment).
5. Off-Site RVR Credit – RVR practices may be provided on off-site, localized properties that are within the same basin. Deed or plat restrictions shall be obtained and recorded on off-site properties to assure perpetual operation and maintenance of RVR facilities.
6. Best Management Practice and Green Infrastructure Credits – Up to 100% of the volume within the practices designed to meet this standard.

§504 Water Quality Treatment

Water quality treatment standards can be achieved by combining the runoff volume reduction requirements in §503 Runoff Volume Reduction (RVR), the Stormwater Quality Runoff Standards in §602 Stormwater Quality Runoff Standards, and the following requirements:

504.01 The water quality treatment requirements in 504.02, 504.03, and 504.04 apply to developments that result in at least one-half (0.5) acre of new impervious surface area, where "new" is defined in 300.06 of this Ordinance. The volume of runoff kept on-site to meet the runoff volume reduction requirements of this Ordinance (503.02) may be deducted from the required water quality treatment volume.

504.02 Prior to discharging to *Waters of the United States*, *Isolated Waters of Lake County*, or adjoining property, the *development* shall divert and detain at least the first 0.01 inch of runoff for every 1% of *impervious surface* for the development with a minimum volume equal to 0.2 inch of runoff (e.g., 20% or less impervious = 0.2-inch, 50% impervious = 0.5-inch, 90% impervious = 0.9-inch); or provide an equivalent level of treatment of runoff as approved by the *Enforcement Officer* and consistent with best management practices.

504.03 A *buffer* shall be established between design normal and high water levels around *stormwater management* facilities constructed for water quality treatment to enhance treatment effectiveness. The buffer area planting plan shall use the

Native Plant Guide for Streams and Stormwater Facilities in Northeastern Illinois, NRCS, et al., (as amended) as a minimum standard.

504.04 Hydrocarbon (e.g., oil and grease) removal technology shall be required using a volume of one-half (0.5) inch of runoff for the new *impervious surface* tributary area to each treatment device and meeting a minimum 70% removal rate for *development* classified as follows:

A. Vehicle fueling and servicing facilities;

B. Parking lots with more than twenty-five (25) new stalls.

§505 Buffer Areas

505.01 *Buffer* areas shall be required for all areas defined as either *Waters of the United States* or *Isolated Waters of Lake County*. Buffer areas are divided into two types, linear buffers and water body buffers.

Waters of the United States is a defined term (Appendix A: Definitions) in this Ordinance and refers to areas that are under the jurisdictional authority and regulated by the United States Army Corps of Engineers. Isolated Waters of Lake County are under the jurisdictional authority of this Ordinance and is a defined term in Appendix A: Definitions.

A. Linear *buffers* shall be designated along both sides of all *channels* meeting the definition of *Waters of the United States* or *Isolated Waters of Lake County*. The buffer width shall be determined as follows:

1. When the *channel* has a *watershed* greater than twenty (20) acres but less than one (1) square mile, the minimum *buffer* shall be fifty (50) feet on each side of the channel.

2. When the *channel* has a *watershed* greater than one (1) square mile, the minimum *buffer* shall be thirty (30) feet on each side of the channel.

3. Linear high-quality aquatic resources and streams with an Index of Biotic Integrity (IBI) greater than forty (40) shall have a minimum *buffer* width of one hundred (100) feet on each side of the *channel*. (Initial IBI based on IEPA Illinois Water Quality Report, biannual. A site-specific IBI assessment may override this report.)

B. Water body *buffers* shall encompass all non-linear bodies of water meeting the definition of either *Waters of the United States* or *Isolated Waters of Lake County*. The buffer width shall be determined as follows:

1. For all water bodies or *wetlands* with a total surface area greater than one-third (1/3) acre but less than one (1) acre, a minimum *buffer* width of thirty (30) feet shall be established.

2. For all water bodies or *wetlands* with a total surface area greater than or equal to one (1) acre but less than two and one-half (2.5) acres, a minimum *buffer* width of forty (40) feet shall be established.

3. For all water bodies or *wetlands* with a total surface area greater than or equal to two and one-half (2.5) acres, a minimum *buffer* width of fifty (50) feet shall be established.

505.02 Non-linear high-quality aquatic resources shall have a minimum *buffer* width of one hundred (100) feet.

505.03 In areas where state or federal threatened and endangered species are present or for an Illinois Natural Area Inventory Site, *buffer* widths may be modified upon approval of the *Enforcement Officer*. Any modification requires approval by the Enforcement Officer following consultation with the Illinois Department of Natural Resources or United States Fish and Wildlife Service.

505.04 *Buffer* areas for water bodies meeting the definition of *Waters of the United States* or *Isolated Waters of Lake County* shall extend from the *ordinary high water mark*. Buffer areas for *wetlands* shall extend from the edge of the delineated wetland. A property may contain a buffer area that originates from Waters of the United States or Isolated Waters of Lake County on another property.

505.05 Features of the *stormwater management system* approved by SMC or *Certified Community* may be within the *buffer* area of a *development*.

505.06 Access through *buffer* areas shall be provided, when necessary, for maintenance purposes.

505.07 All roadside drainage ditches, existing excavated *detention facilities* (as of the amended date of this Ordinance, August 10, 1999), borrow pits, quarries, and improvements to existing *public road developments* or alignments are exempt from *buffer* requirements.

505.08 Stormwater discharges that enter a *buffer* shall have appropriate energy dissipation measures to prevent *erosion* and scour.

505.09 All *buffer* areas shall be maintained free from development including disturbance of the soil, dumping or filling, erection of structures, and placement of *impervious surfaces* except as follows:

A. A *buffer* area may be used for passive recreation (e.g., bird watching, walking, jogging, bicycling, horseback riding, and picnicking) and it may contain pedestrian, bicycle, or equestrian trails.

B. Structures and *impervious surfaces* (including trails, paths) may occupy a maximum of twenty percent (20%) of the *buffer* surface area provided the runoff from such facilities is diverted away from the *Waters of the United States* or *Isolated Waters of Lake County* or such runoff is directed to enter the buffer area as unconcentrated flow.

C. Utility maintenance, construction of stormwater facilities, and maintenance of stormwater facilities shall be allowed.

D. Boat docks, boathouses, and piers shall be allowed and the provisions of 505.09B shall apply.

E. *Buffer* areas *hydrologically disturbed* by allowing construction or as part of a revegetation plan shall be revegetated using the Native Plant Guide for Streams and Stormwater Facilities in Northeastern Illinois, NRCS, et al., (as amended) as a minimum standard.

505.10 A minimum of a one-foot temporary construction buffer from the limits of the *Waters of the United States* or *Isolated Waters of Lake County* shall be required unless the adjacent *wetland* is considered impacted or enhanced. The one-foot temporary

construction buffer shall be marked by construction fencing (IDOT Standard) and installed prior to the start of all other construction activities. All other construction activities, including soil *erosion* and sediment control features, shall take place on the non-wetland side of the construction fencing.

505.11 Buffer Averaging

The *buffer* width for a *development* site may be varied to a minimum of one-half (0.5) of the buffer width required, upon approval of the *Enforcement Officer*, provided that the total buffer area required is achieved adjacent to the *Waters of the United States* or *Isolated Waters of Lake County* being buffered. The consultation process of the IDNR or U.S. Fish & Wildlife Service may override the ability to average buffer areas upon approval of the Enforcement Officer.

505.12 Preservation of *buffer* areas shall be provided by *deed or plat restrictions*.

505.13 The *buffer* area of a *development* site may be subtracted from the water quality volume required.

§506 Stormwater Conveyance Systems

506.01 Storm Sewers and Swales

A. The 10-year *design storm* shall be used as a minimum for the design of storm sewers, *swales,* and appurtenances. Storm sewers shall have a minimum diameter of twelve (12) inches with the exception that storm sewers servicing a single parcel may be excused from this requirement upon approval of the *Enforcement Officer*. Storm sewer design analysis shall be calculated under full flow conditions, unless prior approval from the Enforcement Officer is received for an alternate flow condition (e.g., pressure flow).

B. *Development* shall not connect to sanitary sewers as an outflow for the *stormwater management system*.

C. For agricultural *drain tiles* (tiles) the following provisions shall apply:

1. Field tile systems disturbed during the process of *development* shall be reconnected by those responsible for their disturbance unless the approved drainage plan includes provisions for these.

2. Observation structures, or similar maintenance and inspection access structures, shall be installed within the development at suitable points of ingress or egress.

3. The *applicant* shall notify adjoining downstream property owners in writing of any proposed stormwater facility outlet location and design. The development design shall utilize, where practical and approved by the *Enforcement Officer*, outflow locations that have an existing tile leaving the development site. A subsurface connection to the tile shall be constructed as a low flow outlet. A surface outlet shall be designed for the development site outflows based on the assumption the downstream tile will cease to function.

4. Drain tiles within the disturbed portions of the ownership parcel shall be replaced or intercepted and connected into the proposed stormwater management system or a bypass. The system or bypass shall be of an equivalent size.

5. Drain tiles located within an ownership parcel may be removed or disabled provided that a *maintainable outlet* exists or is installed to prevent flood damages to off-site properties.

6. If the development stormwater management system depends on existing drain tiles for stormwater conveyance or water surface elevation control, a *maintainable outlet* is required.

7. The locations for existing drain tiles within the ownership parcel shall be defined using the Subsurface Drainage Inventory. Recorded deed or plat restrictions shall be provided for all existing and replaced drain tiles within the ownership parcel which are part of the stormwater management system. Drain tiles that service a single parcel of property may be excused from this requirement upon approval of the Enforcement Officer.

8. The maintenance plan per 401.09 shall include the type and frequency of maintenance for all existing and replaced drain tiles within the ownership parcel which are part of the stormwater management system.

D. All storm sewers shall be located in a public road right-of-way or maintenance easement of sufficient size to maintain or re-construct the sewer.

E. All on-site stormwater conveyance systems shall be designed and constructed to withstand the expected velocity of flow from all events up to the *base flood* without *erosion*. Stabilization adequate to prevent erosion shall be provided at the inlets and outlets for all pipes, transitions, and paved *channels*.

F. Swales being used as part of the *stormwater management system* for a *development* shall be located within a deed or plat restricted area of sufficient size to maintain or reconstruct the *swale*.

G. Surface outflows onto adjoining properties shall be designed to release as sheet flow using level spreader trenches unless alternative designs are approved by the *Enforcement Officer*.

506.02 Streams and Channels

The following items are general performance standards for streams and *channels* and do not excuse *development* from meeting all other requirements of this Ordinance.

A. *Natural* streams and *channels* are to be conserved.

B. Removal of streamside (riparian) vegetation shall be limited to one side of the *channel*.

C. Clearing of *channel* vegetation shall be limited to that which is essential for construction of the channel.

D. If a *stream* or *channel* meeting the definition of *Waters of the United States* or *Isolated Waters of Lake County* is modified, a stream or channel *mitigation* plan shall be submitted for review and approval to the *Enforcement Officer*. The plan shall show how the physical characteristics of the modified channel shall meet the existing channel length, cross-section, slope, sinuosity, and carrying capacity of the original channel. The plan shall also re-establish vegetation within the *channel modification* using the Native Plant Guide for Streams and

Stormwater Facilities in Northeastern Illinois, NRCS, et al., (as amended) as a minimum standard for the re-vegetation plan.

E. All disturbed areas associated with a *channel modification* shall be seeded or otherwise stabilized immediately according to 600.04.

F. If *channels* are modified, an approved and effective means to reduce *sedimentation* and degradation of downstream water quality must be installed before excavation begins and must be maintained throughout the construction period.

G. New or relocated *channels* shall be built in the dry and all items of construction, including vegetation, shall be completed prior to diversion of water into the new channel.

H. Streams and *channels* shall be expected to withstand all events up to the *base flood* without increased *erosion*. The use of armoring of banks using bulkheads, rip-rap, and other materials shall be avoided. Armoring shall only be used where erosion cannot be prevented in any other way such as use of vegetation or gradual slopes. Such armoring shall have minimal impact on other properties and the existing land configuration.

I. A minimum maintenance easement of twelve (12) feet from top of bank is required along one side of all *channels* draining twenty (20) or more acres. All drainage easements shall be accessible to vehicular equipment; however, linear accessibility for vehicular equipment is not required.

J. Construction vehicles shall cross streams by the means of existing bridges or culverts. Where an existing crossing is not available, a temporary crossing shall be constructed in which:

1. The approach roads will be one-half (0.5) foot or less above *natural* grade.
2. The crossing will allow stream flow to pass without backing up the water above the stream bank vegetation line or above any drainage tile or outfall.
3. The top of the roadway fill in the *channel* will be at least two (2) feet below the top of the lowest bank. Any fill in the channel shall be non-erosive material, such as rip-rap or gravel.
4. All disturbed *stream* banks will be seeded or otherwise stabilized as soon as possible in accordance with 600.04 upon installation and again upon removal of construction crossings.
5. The access road and temporary crossings will be removed within one (1) year after installation, unless an extension of time is granted by the *Enforcement Officer*.

506.03 Overland Flow Paths

The following items are general performance standards for *overland flow paths* and do not excuse *development* from meeting all other requirements of this Ordinance.

A. All areas of *development* must be provided with an *overland flow path* that will pass the *base flood* flow without *damage* to structures or property. If the upstream *drainage area* is less than twenty (20) acres, the storm sewer pipe

and inlet systems sized for the base flood can be constructed in lieu of providing an overland flow path.

B. The flow rate for a *base flood* shall be used to establish *overland flow path* limits, and it shall include all on-site and off-site tributary areas in accordance with §501 Runoff Calculations.

C. The *overland flow path* shall be protected from any activity, such as fencing, landscaping, or storage shed placement, which could impair its function. This protection shall be established through a *deed or plat restriction*.

D. For *overland flow paths* with less than twenty (20) acres tributary *drainage area*, all structures in parcels containing or adjoining to an overland flow path or other high water level designation shall have a *lowest adjacent grade* a minimum of one-half (0.5) foot above the design high water elevation.

E. For *overland flow paths* with greater than or equal to twenty (20) acres tributary *drainage area* but less than one hundred (100) acres, all structures in parcels containing or adjoining to an overland flow path or other high water level designation shall have a *lowest adjacent grade* a minimum of one (1) foot above the design high water elevation.

§507 Stormwater Facilities

507.01 All stormwater facilities, when determined applicable by the *Enforcement Officer*, shall be provided with:

A. An *emergency overflow* structure capable of passing the *critical duration base flood* inflow rate without damages to downstream structures or property.

B. The top of the impounding structure shall be a minimum of one (1) foot above the design high water level within the emergency overflow structure based on 507.01A.

C. A minimum 8-foot wide safety shelf with a maximum depth of three (3) feet below normal water level sloped back towards the shoreline.

D. Features for maintenance and emergency ingress and egress capability.

507.02 All parcels within the established flood table land's elevation criteria of a detention facility design high water level shall be protected from flooding as follows:

A. For detention facilities with less than one hundred (100) acres of tributary area, all structures in parcels containing or adjoining the facility shall have a lowest adjacent grade a minimum of one (1) foot above the design high water elevation within the emergency overflow structure.

B. For detention facilities with greater than or equal to one hundred (100) acres of tributary area, all structures in parcels containing or adjoining the facility shall meet the requirements of §705 Public Health Protection Standards, 706.01A, 706.02A, 706.03, and 706.04 of this Ordinance at an elevation two (2) feet above the design high water elevation within the emergency overflow structure. New residential structures may have the lowest floor below this elevation if structurally dry flood-proofed to at least two (2) feet above the design highwater elevation within the emergency overflow structure.

507.03 Single pipe outlets shall have a minimum inside diameter of twelve (12) inches. If design release rates call for smaller outlet, a design that minimizes the possibility of clogging shall be used. Minimum outlet restrictor size shall be four (4) inches in diameter provided there is adequate downstream capacity. Detention volume and corresponding high water level required for a *development* shall be determined by using the appropriate release rates specified in §502 Release Rates and Discharges, regardless of a minimum outlet restrictor size.

507.04 Stormwater infiltration, retention, and *detention facilities* required to meet a *development's* discharge requirements shall be designed to *by-pass* off-site tributary flow from streams and *channels* unless approved by the *Enforcement Officer*.

507.05 Any *development* involving the construction, modification, or removal of a *dam* as defined in Appendix A: Definitions per 17 Ill Adm. Code Part 3702 (Rules for Construction of Dams) shall obtain an IDNR/OWR Dam Safety Permit or a letter stating no permit is required prior to the start of such activity. Reference Appendix G: IDNR/OWR Dam Safety Permitting Guidelines.

507.06 Stormwater retention and *detention facilities* shall not be constructed in a *Regulatory Floodplain* unless approved by the *Enforcement Officer*. If a retention or detention facility is constructed in a Regulatory Floodplain, the *development* must meet the requirements of Article 7: Regulatory Floodplain and Floodway Requirements, of this Ordinance.

507.07 The placement of a detention basin in a floodplain area shall require *compensatory storage* per §704 Compensatory Storage Performance Standards. The volume of detention storage required to meet the standards of this Ordinance shall be in addition to the floodplain compensatory storage required for the *development*.

507.08 Impounding berms or walls for stormwater retention and *detention facilities* shall be designed and constructed to withstand all expected forces, including, but not limited to, *erosion*, pressure, and uplift. The *applicant* shall submit material and compaction design specifications for earthen impoundments and provide as-built information verifying that the constructed condition meets the design requirements. Impounding berms or walls shall be represented on the design plans and signed and sealed by a *Registered Professional Engineer or Structural Engineer.*

§508 On-Stream Detention

508.01 All *on-stream detention* shall provide a *Detention Volume Safety Factor* as follows:

A. The Detention Volume Safety Factor applies to the volume of *on-stream detention* necessary to meet this Ordinance's site requirements.

B. The Detention Volume Safety Factor is equal to one (1) plus 0.05 times the ratio of off-site tributary *drainage area* to on-site tributary drainage area.

C. The maximum Detention Volume Safety Factor shall be 1.5.

508.02 No *on-stream detention* shall be allowed with an off-site to on-site tributary *drainage area* ratio greater than 10:1 except for *development* providing a *watershed* benefit.

508.03 *On-stream detention* shall not be permissible if the tributary *drainage area* is greater than 640 acres except for detention that provides a *watershed* benefit.

508.04 The release rate shall be 0.04 cubic feet per second per acre of the total tributary *drainage area* (on-site and off-site) at the elevation created by impoundment of the on-site 2-year storm volume plus the *Detention Volume Safety Factor*, and 0.15 cubic feet per second per acre of the total tributary drainage area (on-site and off-site) at the elevation created by impoundment of the on-site 100-year storm volume plus the Detention Volume Safety Factor and the required *compensatory storage*. The release rate and on-site detention volume shall be calculated using the 24-hour storm event. This release rate calculation shall be used unless other site conditions warrant further analysis and modification from this standard or unless *watershed* specific release rates have been adopted.

508.05 *On-stream detention* shall provide water quality treatment. One of the following two methods shall be used:

A. A *wet detention facility* with a minimum permanent pool volume equal to the calculated sediment volume accumulated over a one-year period for the entire upstream *watershed* and an average normal water depth of at least four (4) feet. The facility shall also have a live storage volume that, at a minimum, equals the water quality treatment standards of §504 Water Quality Treatment of this Ordinance for the *development* site.

B. A separate off-line sediment basin with a volume meeting the water quality treatment standards of §504 Water Quality Treatment of this Ordinance for the tributary *drainage area* to the sediment basin.

508.06 Impoundment of the *stream* as part of *on-stream detention* shall be designed to allow the migration and movement of present or potentially present indigenous species, which require access to upstream areas as part of their life cycle. The impoundment shall not cause or contribute to the degradation of water quality or stream aquatic habitat.

508.07 *Compensatory storage* requirements shall be satisfied and shall be in addition to detention volume requirements.

508.08 No *on-stream detention* shall be allowed in areas designated as a high-quality aquatic resource.

§509 Fee-In-Lieu of On-Site Stormwater Storage

509.01 The SMC may require, as part of an adopted *basin plan* or *floodplain study*, the payment of a *fee-in-lieu of on-site stormwater storage* to fulfill all or part of the on-site stormwater storage requirement for a *development*. The adoption of a floodplain study or basin plan is per Appendix E: Enforcement Officer Duties, Section D of this Ordinance.

509.02 The following fee-in-lieu of on-site stormwater storage procedures apply to communities with adopted procedures for requiring and collecting fee-in-lieu of revenues for stormwater storage requirements in this Ordinance:

A. The *Enforcement Officer* may require, or the *applicant* may submit, a written request for the payment of a *fee-in-lieu of on-site stormwater storage* to fulfill all or part of the on-site detention requirement below the detention threshold minimum limit set by this Ordinance in 300.06 and 300.07 and for *compensatory storage* requirements for streambank and shoreline restoration fills of less than two hundred (200) cubic yards. A request for fee-in-lieu of on-

site stormwater storage shall be either rejected or approved within forty-five (45) days of the written request unless additional engineering studies are required.

B. Approval of a request for *fee-in-lieu of on-site stormwater storage* on a *development* site below the detention threshold in 300.06 and 300.07 of this Ordinance and for *compensatory storage* requirements for streambank and shoreline restoration fills of less than two hundred (200) cubic yards shall be determined by the *Enforcement Officer*.

C. *Fee-in-lieu of on-site stormwater storage* shall be the lesser of:

1. The fee computed for each acre-foot or cubic yard or part thereof of stormwater storage approved in accordance with the procedures and schedules as approved by the SMC for Non-Certified Communities or the community elected board of officials in a *Certified Community*; or

2. The estimated construction cost as approved by the SMC for Non-Certified Communities or the community elected board of officials in a Certified Community of the *applicant's* proposed and approved on-site stormwater storage, including land costs.

D. A fund will be maintained by the *Certified Community* or the SMC for Non-Certified Communities for each of the four major Lake County *watersheds* for the purpose of identifying and controlling all revenues and expenditures resulting from fee-in-lieu of on-site stormwater storage approvals. All *fee-in-lieu of on-site stormwater storage* revenues received from each *watershed* shall be deposited in these funds for use within that watershed. A Certified Community may opt to allow SMC to administer fee-in-lieu-of revenues and expenditures through execution of an Intergovernmental Agreement specifying that arrangement.

E. The following requirements must be met before a *fee-in-lieu of on-site stormwater storage* will be approved:

1. The downstream *stormwater management system* has "*adequate downstream stormwater capacity*" (see Appendix A: Definitions); and

2. The SMC for Non-Certified Communities or the community elected board of officials in a *Certified Community* has an adopted fee-in-lieu of on-site stormwater storage program.

F. *Fee-in-lieu of on-site stormwater storage* revenues may be used to plan, design, or construct an upgrade to existing or future *stormwater management systems* if the upgrade is consistent with a *basin plan*, *floodplain study*, or stormwater system improvement that has been approved by the SMC for Non-Certified Communities or the community elected board of officials in a *Certified Community*.

509.03 The fee-in-lieu of on-site stormwater storage option shall be authorized for all *public road developments* on existing alignments provided the downstream drainage system has adequate stormwater capacity and that it will not result in negative impacts to the drainage system.

509.04 The following fee-in-lieu of on-site stormwater storage procedures shall be authorized for all developments permitted after October 13, 2020.

A. The *Enforcement Officer* may require, or the *applicant* may submit, a written request for the payment of a *fee-in-lieu of on-site stormwater storage* to fulfill all or part of the on-site detention requirement above the 50-year, 24-hour detention volume using Appendix I: Rainfall Depth Duration Frequency Tables for Lake County. A request for fee-in-lieu of on-site stormwater storage shall be either rejected or approved within forty-five (45) days of the written request unless additional engineering studies are required.

B. Approval of a request for *fee-in-lieu of on-site stormwater storage* on a *development* site above the 50-year, 24-hour detention volume shall be determined by the *Enforcement Officer*.

C. *Fee-in-lieu of on-site stormwater storage* shall be the fee computed for each acre-foot or part thereof of stormwater storage approved in accordance with the procedures and schedules as approved by the SMC.

D. A fund will be maintained by the SMC for each of the four major Lake County *watersheds* for the purpose of identifying and controlling all revenues and expenditures resulting from fee-in-lieu of on-site stormwater storage approvals. All *fee-in-lieu of on-site stormwater storage* revenues received from each *watershed* shall be deposited in these funds for use within that watershed.

E. The following requirements must be met before a *fee-in-lieu of on-site stormwater storage* will be approved:

1. The downstream *stormwater management system* has "*adequate downstream stormwater capacity*" (see Appendix A: Definitions); and

2. The SMC has an adopted fee-in-lieu of on-site stormwater storage program.

F. *Fee-in-lieu of on-site stormwater storage* revenues shall be used to design, maintain, or construct an upgrade to existing or future *stormwater management systems* if the upgrade is consistent with a *basin plan*, *floodplain study*, or stormwater system improvement that has been approved by the SMC.

Article 6: Soil Erosion and Sediment Control Requirements

§600 Performance Standards

Soil *erosion* and sediment control related measures are required to be constructed and maintained for any land disturbance activity permitted under Article 3: General Provisions. The following requirements shall be met:

600.01 Soil disturbance shall be conducted in such a manner as to minimize *erosion*. Areas of the *development* site that are not to be graded shall be protected from construction traffic or other disturbance until final seeding is performed. Soil stabilization measures shall consider the time of year, site conditions, and the use of temporary or permanent measures.

600.02 Properties and *channels* adjoining *development* sites shall be protected from *erosion* and *sedimentation*. At points where concentrated flow leaves a development site, energy dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity of flow from the structure to the watercourse so that the *natural* physical and biological characteristics and functions are maintained and protected.

600.03 Sediment control measures shall be constructed prior to the commencement of hydrologic disturbance of upland areas.

600.04 Disturbed areas shall be stabilized with temporary or permanent measures within seven (7) calendar days following the end of active hydrologic disturbance, or redisturbance, consistent with the following criteria or using an appropriate measure as approved by the *Enforcement Officer*:

A. Appropriate temporary or permanent stabilization measures shall include seeding, mulching, sodding, and/or non-vegetative measures.

B. Disturbance to areas or embankments having slopes equal to or steeper than 3H:1V shall be minimized; disturbed slopes shall be stabilized with staked-in-place sod, appropriately specified mat or blanket, or other appropriate measure(s) in combination with seeding.

C. *Erosion* control blanket shall be required on all interior detention basin side slopes between normal water level and high water level.

D. The seven (7) calendar day stabilization requirement may be precluded by snow cover or where land disturbing activities will resume within fourteen (14) calendar days from when the active hydrologic disturbance ceased, provided that the disturbed portion of the development site has appropriate soil *erosion* and sediment controls.

600.05 Land disturbance activities in streams shall be avoided, where possible. If disturbance activities are unavoidable, the following requirements shall be met:

A. Where *stream* construction crossings are necessary, temporary crossings shall be constructed of non-erosive material.

B. The time and area of disturbance of a *stream* shall be kept to a minimum. The stream, including bed and banks, shall be restabilized within 48 hours after *channel* disturbance is completed or interrupted.

600.06 Soil *erosion* and sediment control measures shall be appropriate with regard to the amount of tributary *drainage area* as follows:

A. Disturbed areas draining greater than 5,000 ft^2 but less than one (1) acre shall, at a minimum, be protected by a filter barrier (including filter fences, which at a minimum, meet the applicable sections of the AASHTO Standard Specification 288-00, or equivalent control measures) to control all off-site runoff. Vegetated filter strips, with a minimum width of twenty-five (25) feet, in the direction of flow, may be used as an alternative only where runoff in sheet flow is expected.

B. Disturbed areas draining more than one (1) but fewer than five (5) acres shall, at a minimum, be protected by a sediment trap or equivalent control measure at a point downslope of the disturbed area.

C. Disturbed areas draining more than five (5) acres shall, at a minimum, be protected by a sediment basin with a perforated filtered riser pipe or equivalent control measure at a point downslope of the disturbed area.

D. Sediment basins shall have both a permanent pool (dead storage) and additional volume (live storage) with each volume equal to the runoff amount of a 2-year, 24-hour event over the on-site *hydrologically disturbed* tributary *drainage area* to the sediment basin. Two-year storm runoff volumes versus site runoff curve numbers are shown in Appendix K: Detention Volume Versus Curve Number of this Ordinance. The available sediment volume below normal water level, in addition to the dead storage volume, shall be sized to store the estimated sediment load generated from the site over the duration of the construction period. For construction periods exceeding one (1) year, the 1-year sediment load and a sediment removal schedule may be submitted.

   If the detention basin for the proposed *development* condition of the site is used for sediment basin, the above volume requirements will be explicitly met. Until the site is finally stabilized, the basin permanent pool of water shall meet the above volume requirements and have a filtered perforated riser protecting the outflow pipe.

600.07 All storm sewers that are or will be functioning during construction shall be protected by an appropriate sediment control measure.

600.08 If dewatering services are used, adjoining properties and discharge locations shall be protected from *erosion* and sedimentation. Discharges shall be routed through an approved anionic polymer dewatering system, or a similar measure, as approved by the Enforcement Officer. The Enforcement Officer, or approved representative, must be present at the commencement of dewatering activities.

600.09 All temporary soil erosion and sediment control measures shall be removed within thirty (30) days after final site stabilization is achieved or after the temporary measures are no longer needed. Trapped sediment and other disturbed soil areas shall be permanently stabilized with a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a minimum density of 70 percent or higher, at the discretion of the Enforcement Officer, on all unpaved areas and areas not covered by permanent structures or equivalent permanent stabilization measures.

600.10 A stabilized mat of crushed stone meeting IDOT gradation CA-1 underlain with filter fabric and in accordance with the Illinois Urban Manual, or other measure(s) as approved by the Enforcement Officer, shall be located at any point where traffic will be entering or leaving a development site to or from a public right-of-way, street, alley, or parking area. Pollutants from equipment and vehicle washing, wheel wash water, and other wash waters shall be treated in a sediment basin or other appropriate measure(s) designed to minimize the discharge of pollutants, as approved by the Enforcement Officer. Any sediment or soil reaching an improved public right-of-way, street, alley, or parking area shall be removed by scraping or street cleaning as accumulations warrant and transported to a controlled sediment disposal area. The *Enforcement Officer* may require additional stabilized construction entrance methods.

600.11 Earthen embankments shall be constructed with side slopes no steeper than 3H:1V. Steeper slopes may be constructed with appropriate stabilization as approved by the *Enforcement Officer*.

600.12 Stormwater conveyance *channels*, including ditches, *swales*, and diversions, and the outlet of all channels and pipes shall be designed and constructed to withstand the expected flow velocity from the 10-year frequency storm without *erosion*. All constructed or modified channels shall be stabilized within 48 hours.

600.13 Temporary diversions shall be constructed as necessary to direct all runoff from *hydrologically disturbed* areas to the appropriate sediment trap or basin.

600.14 Soil stockpiles shall not be located in a *flood-prone area* or a designated *buffer* protecting *Waters of the United States* or *Isolated Waters of Lake County*. Soil stockpiles are defined as having greater than 100 yd^3 of soil and will remain in place for more than seven (7) days. Soil stockpile locations shall be shown on the soil *erosion* and sediment control plan and shall have the appropriate measures to prevent erosion of the stockpile.

600.15 Handbooks

Standards and specifications contained in the *Illinois Urban Manual*, as amended, and the planning procedures sections of the Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control, as amended, are referenced in this Ordinance as guidance for presenting soil *erosion* and sediment control plan specifications and delineating procedures and methods of operation under site *development* for soil erosion and sediment control. In the event of conflict between provisions of said manuals and this Ordinance, this Ordinance shall govern.

600.16 The *applicant* shall provide adequate receptacles for the deposition of all construction material debris generated during the *development* process. The applicant shall not cause or permit the dumping, depositing, dropping, throwing, discarding, or leaving of construction material debris upon or into any development site, *channel*, Waters of the U.S., or *Isolated Waters of Lake County*. The applicant shall maintain the development site free of construction material debris.

600.17 The applicant shall minimize the discharge of pollutants from the exposure of building materials, building products, landscape materials (e.g., fertilizers, pesticides, herbicides), detergents, sanitary waste, and other on-site materials to precipitation and stormwater runoff.

600.18 If the installed soil erosion and sediment controls do not minimize sediment leaving the development site, additional measures such as anionic polymers or filtration systems may be required by the Enforcement Officer.

600.19 If stripping, clearing, grading, or landscaping are to be done in phases, the permittee shall plan for appropriate erosion control measures to be in place after each stage listed in §1101 Inspections.

§601 Designated Erosion Control Inspector Program Standards

601.01 A *Designated Erosion Control Inspector* (DECI), hired or employed by the *applicant*, shall be required for *development* in 601.01A and 601.01B, and may be required by the Enforcement Officer for 601.01C:

A. Exceeds ten (10) acres of hydrologic disturbance; or

B. Exceeds one (1) acre of hydrologic disturbance and has a *Regulatory Floodplain*, *Isolated Waters of Lake County*, or *Waters of the United States* on-site or on a downstream adjoining property; or

C. Is less than or equal to one (1) acre of hydrologic disturbance and has a Regulatory Floodplain, Isolated Waters of Lake County, or Waters of the United States on-site or on a downstream adjoining property.

601.02 Article 11: Inspections and Access of this Ordinance contains inspection requirements for *development* meeting the threshold for program inclusion in 601.01 and *Designated Erosion Control Inspector* requirements.

601.03 The *applicant* shall submit the name of the *Designated Erosion Control Inspector* to the *Enforcement Officer* at or before the pre-construction meeting or commencement of hydrologic disturbance for the *development*.

§602 Stormwater Quality Runoff Standards

The following standards shall be considered by *communities* with a separate adopted "Stormwater Quality Runoff Ordinance." The *Enforcement Officer* may set turbidity or total suspended solids limits for *development* sites that discharge to *Waters of the United States*, *Isolated Waters of Lake County*, or their *buffers* or that are in close proximity to the above, as determined by the Enforcement Officer. These standards shall apply to development site construction up to the point of permanent site stabilization as determined by the Enforcement Officer.

602.01 Turbidity or total suspended solids limits shall apply only to *development* requiring both a Storm Water Pollution Prevention Plan as part of their General NPDES Permit No. ILR10 and a detention *pond* or similar stormwater storage system in order to use that stormwater facility for additional treatment measures needed to meet the standards in §602 Stormwater Quality Runoff Standards.

602.02 If a singular storm event exceeds the 100-year design storm storage volume of the *development* site *stormwater management system*, water quality readings taken during that event will not be considered a violation of this Ordinance.

602.03 As applicable to the *development* site described in 602.01, one of the following limits shall apply to each discharge location:

A. For development sites adjacent to lakes with total suspended solids background levels established in Appendix D: Total Suspended Solids Background Levels for Lake County Water Bodies of this Ordinance, the discharge limit standard shall be no more than 120% of the maximum values.

B. A maximum Nephelometric Turbidity Unit reading of fifty (50) NTU may be used.

C. The Enforcement Officer may determine an individual NTU limit for discharge from the development based on site-specific discharge sampling.

D. Upon approval of the Enforcement Officer, the applicant may determine an individual site limit based on site-specific discharge sampling.

602.04 The developer should conduct site runoff sampling during storm events exceeding one-half (0.5) inch of rainfall and include the results in the weekly inspection reports required by the Storm Water Pollution Prevention Plan described in 602.01.

602.05 Exceptions to these limits shall be allowed for dredging or *development* activities within a Waters of the United States or Isolated Waters of Lake County. In these cases specific permit conditions may be set with regard to time allowed for the activity to be completed and additional *erosion* control measures to be implemented.

Article 7: Regulatory Floodplain and Floodway Requirements

§700 Location of Regulatory Floodplain, Base Flood Elevation, and Regulatory Floodway

700.01 The *Regulatory Floodplain* is delineated within a *development* by projecting the base flood elevation (BFE) onto the site topography.

700.02 The BFE shall be as delineated by the 100-year flood profiles, as indicated on the floodplain studies noted in 700.02A through 700.02D:

A. SMC *Floodplain* Studies, adopted by the SMC for regulatory use after receiving an Independent Technical Review and a 60-day public technical review and comment period. Approved SMC floodplain studies, maps, and profiles shall be posted on the SMC website. SMC floodplain studies, including maps and profiles, shall be effective where:

1. The elevations exceed the current effective Flood Insurance Study (FIS) maps and profiles, provided that the study has been submitted to IDNR or *FEMA* for approval; or

2. The *base flood elevations* had not previously been determined in the current effective FIS and are not within areas under the jurisdiction of the *IDNR/OWR*.

B. Should no SMC approved *Regulatory Floodplain* profile exist for the site, the *FEMA* Flood Insurance Study and profiles, as listed in Appendix C: FEMA Flood Insurance Study Maps and Profiles.

C. In the case of *FEMA* delineated “AH Zones” the elevation noted on the map shall be the BFE. In the case of FEMA delineated “AO Zones” the BFE shall be the depth number shown on the map added to the highest adjacent grade, or at least two (2) feet above the highest adjacent grade if no depth number is provided.

D. When no *base flood elevation* exists, the BFE shall be determined by a *Registered Professional Engineer* using an appropriate model or technique as approved by the SMC or *IDNR/OWR*. For *riverine* *flood-prone areas* with greater than one hundred (100) acres of tributary *drainage area*, non-riverine *flood-prone areas* with greater than twenty (20) acres of tributary drainage area, and all mapped *Special Flood Hazard Areas* regardless of drainage area, the BFE determination shall be submitted to SMC for approval prior to issuance of a *Watershed Development Permit*. The BFE determination for non-riverine depressional floodplains with less than twenty (20) acres of tributary drainage area shall be reviewed and approved by the *Enforcement Officer*. BFE determinations shall be based on the *critical duration* event.

1. Where a *channel* has a tributary *drainage area* of 640 acres or more, the analyses in 700.02D shall be submitted to SMC for approval by *IDNR/OWR*.

2. For a *non-riverine Regulatory Floodplain*, the historic flood of record (as determined by the *Enforcement Officer* according to 700.02D) plus three (3) feet may be used for the BFE instead of performing a detailed hydrologic and hydraulic study.

700.03 The location of the *Regulatory Floodway* shall be as delineated on the maps referenced in Appendix C: FEMA Flood Insurance Study Maps and Profiles. Where interpretation is needed to determine the exact location of the *Regulatory Floodway* boundary, *IDNR/OWR* should be contacted.

700.04 Nothing contained herein shall prohibit the application of these regulations to land that can be demonstrated by engineering survey to lie within any *Regulatory Floodplain*. Conversely, any lands (except for those located in a *Regulatory Floodway*) that can be demonstrated by a topographic survey certified by a *Registered Professional Engineer* or Registered Land Surveyor to lie beyond the Regulatory Floodplain, and show to the satisfaction of the *Enforcement Officer*, to have been higher than the BFE as of the date of the first floodplain map denoting the site to be in a *Special Flood Hazard Area* and as of the date of the current effective map, shall not be considered to be located in the Special Flood Hazard Area.

In the case of a site located in the Regulatory Floodway that is higher than the BFE, it is subject to the regulations of this section until such time as a Letter of Map Revision is received from the *IDNR/OWR* and *FEMA*.

§701 Application Requirements

701.01 Development in the Regulatory Floodplain

If the *development* is located in a *Regulatory Floodplain*, the *applicant* shall provide the following additional information:

A. Site location of the property, drawn to scale on the Regulatory Floodplain map.

B. A plan view of the project showing:

1. The *Regulatory Floodway* limit, *Regulatory Floodplain* limit, and for work in public bodies of water as defined by *IDNR/OWR*, the navigation *channels*.

2. Cross-section views of the project for the impacted reach showing existing and proposed conditions including principal dimensions of the work as shown in plan view, existing and proposed elevations, normal water elevation, 10-year frequency flood elevation, 100-year frequency flood elevation, and graphic or numerical scales (horizontal and vertical).

3. A copy of the *Regulatory Floodway* map with the project site delineated and marked to reflect any proposed change in the Regulatory Floodway location.

C. A listing of all local, state, and federal permits or approval letters that may be required for this type of *development*. The *applicant* shall obtain and provide copies of any and all required federal, state, and local permits for development in the *Regulatory Floodplain* before the applicant requests or obtains a *Watershed Development Permit*. Reference Appendix H: Partial List of Permits Required (When Applicable) for Development in Lake County for a partial list of permits that may be applicable.

D. Engineering calculations and supporting data showing that the proposed work will meet the performance standards of this Ordinance.

E. All changes in grade resulting from any proposed excavation or filling; and existing and proposed *Regulatory Floodplain* and *Regulatory Floodway* limits;

the location and dimension of all *buildings* and additions to buildings; and the elevation of the *lowest floor* (including *basement*) of all proposed buildings subject to the requirements of this Ordinance.

F. *Elevation certificate* of the *lowest floor* elevation (including *basements* and attached garages) or the elevation to which a non-residential *building* has been flood-proofed using a flood-proofing certificate for all buildings in the *Regulatory Floodplain*.

701.02 Development in the Regulatory Floodplain Without Regulatory Floodway

The applicant, through SMC, shall obtain approval from *IDNR/OWR* for *development* with a tributary *drainage area* of 640 acres or more located within the *Regulatory Floodplain* without a delineated *Regulatory Floodway*. The development shall not singularly or cumulatively result in an obstruction of *flood* flows or potential flood damages outside the development due to increased flood heights, velocities, or loss of floodplain storage. The applicant shall meet the requirements of Article 7: Regulatory Floodplain and Floodway Requirements of this Ordinance according to the following criteria:

A. Submit to SMC an engineering study performed by a *Registered Professional Engineer* which will determine a floodway which meets the definition of a *Regulatory Floodway* and show that the proposed *development* will meet the requirements of Article 7: Regulatory Floodplain and Floodway Requirements of this Ordinance; or

B. Submit to SMC an engineering study performed by a *Registered Professional Engineer* which will determine a *base flood elevation* and demonstrate that the proposed *development* will maintain the existing conditions conveyance, will not increase flood velocities, will not increase flood profiles, and will compensate for all lost flood storage at a ratio of 1.2:1 in a manner that is hydraulically equivalent; or

C. Submit to SMC an engineering study performed by a *Registered Professional Engineer* which will demonstrate that for a range of flood elevations (which would conservatively exceed the expected 100-year flood elevation) that the proposed *development* will maintain the existing conditions conveyance, will not increase flood velocities, will not increase flood profiles, and will compensate for all lost flood storage at a ratio of 1.2:1 in a manner that is hydraulically equivalent.

701.03 The *applicant* shall obtain and provide copies of any and all required federal, state, and local permits for *development* in the *Regulatory Floodplain* before the applicant requests or obtains a *Watershed Development Permit*. Reference Appendix H: Partial List of Permits Required (When Applicable) for Development in Lake County for a partial list of permits that may be applicable.

701.04 The *applicant* shall submit the data required to SMC and *FEMA* for proposed revisions to the *base flood elevation* of a *Regulatory Floodplain* study or relocation of a *Regulatory Floodway* boundary. The applicant shall also submit this data to IDNR/OWR when the tributary area is greater than one square mile.

701.05 The *applicant* shall provide, when applicable to the *development*: an affidavit or documentation to prove where the development was above the *base flood*

elevation (BFE) prior to the effective date of the first *Regulatory Floodplain* map; certification that the ground elevation existed prior to the effective date of the first Regulatory Floodplain map.

§702 Regulatory Floodplain Performance Standards

The performance standards of this section apply to *Regulatory Floodplain development* except when superseded by more stringent requirements in §701 Application Requirements, §703 Regulatory Floodway Performance Standards, §704 Compensatory Storage Performance Standards, §705 Public Health Protection Standards, §706 Building Protection Requirements, and §707 Bridge, Culvert Crossing, and Roadway Approach Performance Standards.

702.01 Modification and disturbance of *natural riverine Regulatory Floodplains* shall be avoided to protect existing hydrologic and environmental functions. Such disturbances shall be minimized and all negative impacts mitigated as described in a *mitigation* plan.

702.02 No *development* shall be allowed in the *Regulatory Floodplain* that shall singularly or cumulatively create a damaging or potentially damaging increase in *flood* heights or velocity or threat to public health, safety, and welfare or impair the *natural* hydrologic functions of the Regulatory Floodplain or *channel*.

702.03 For projects involving *channel modification*, fill, *stream* maintenance, or levees, the flood carrying capacity of the *Regulatory Floodplain* shall be maintained.

702.04 If the proposed *development* would result in a change in the mapped *Regulatory Floodplain* or BFE on a site, the *applicant* shall submit sufficient data to *FEMA* and SMC to obtain a *Letter of Map Revision* (LOMR). Proposed changes to Regulatory Floodplain and *Regulatory Floodway* delineation and BFE shall be submitted to SMC (see Appendix E: Enforcement Officer Duties). *IDNR/OWR* concurrence is required for changes to the BFE and floodway delineation.

702.05 If the *development* is located in a public body of water, as defined by *IDNR/OWR*, a permit must also be received from IDNR/OWR.

702.06 Any work involving construction or modification or removal of a *dam* or an on-stream structure to impound water shall obtain an IDNR/OWR Dam Safety Permit or letter indicating a permit is not required prior to the start of *development* activity. Reference Appendix G: IDNR/OWR Dam Safety Permitting Guidelines.

702.07 For *public flood control projects*, the permitting requirements of Article 7: Regulatory Floodplain and Floodway Requirements will be considered met if the *applicant* can demonstrate to *IDNR/OWR*, or SMC in areas outside of IDNR/OWR jurisdiction, through hydraulic and hydrologic calculation, that the proposed project will not singularly or cumulatively result in increased *flood* heights outside the project right-of-way or easements for all flood events up to and including the *base flood* event.

§703 Regulatory Floodway Performance Standards

The only *development* in a *Regulatory Floodway* which will be allowed are *Appropriate Uses* which will not cause an increase in *flood* heights for all flood events up to and including the *base flood*. Only those Appropriate Uses listed in 703.01 and in 17 Ill. Adm. Code Part 3708 will be allowed in the Regulatory

Floodway. Appropriate Uses do not include the construction or placement of any new structures, fill, *building* additions, buildings on stilts, piles, piers, or columns, fencing (including landscaping or planting designed to act as a fence), and storage of materials except as specifically defined in 703.01 as an Appropriate Use. If the development is proposed for the Regulatory Floodway portion of the *Regulatory Floodplain,* the following standards apply in addition to the previously stated standards for the Regulatory Floodplain:

703.01 Only the construction, modification, repair, or replacement of the following *Appropriate Uses* will be allowed in the *Regulatory Floodway*:

A. Public flood *control projects* and private improvements relating to the control of drainage, flooding of existing *buildings*, *erosion*, water quality, or habitat for fish and wildlife.

B. Structures or facilities relating to functionally water dependent uses such as facilities and improvements relating to recreational boating and as modifications or additions to existing wastewater treatment facilities.

C. Storm and sanitary sewer outfalls.

D. Underground and overhead utilities sufficiently flood-proofed.

E. Recreational facilities such as playing fields and trail systems including any related fencing (at least 50% open when viewed from any one direction) built parallel to the direction of *flood* flows, and including open air pavilions.

F. Detached garages, storage sheds, or other non-habitable structures without toilet facilities, accessory to existing *buildings* that will not block *flood* flows nor reduce *Regulatory Floodway* storage.

G. Bridges, culverts and associated roadways, sidewalks, and railways necessary for crossing over the *Regulatory Floodway* or for providing access to other *Appropriate Uses* in the Regulatory Floodway and any modification thereto.

H. Parking Lots

1. Parking lots (where the existing depth of flooding for the *base flood* event is less than one (1) foot) and aircraft parking aprons both built at or below ground elevation and any modifications thereto.

2. The depth of flooding can be greater than one (1) foot for parking lots used for short term outdoor recreational use facilities where the *applicant* agrees to restrict access during overbank flooding events and agrees to accept liability for all *damage* caused by vehicular access during all overbank flooding events.

I. *Regulatory Floodway* re-grading, without fill, to create a positive non-erosive slope toward a *channel*.

J. *Flood-proofing* activities to protect previously existing lawful structures including the construction of water-tight window wells, elevating structures, or the construction of flood walls around residential, commercial, or industrial principal structures where the outside toe of the floodwall shall be no more than ten (10) feet away from the exterior wall of the existing *structure*, and which are not considered to be *substantial improvements* to the structure.

K. The replacement, *reconstruction*, or repair of a damaged *building*, provided that the outside dimensions of the building are not increased and that the activity is not a substantial improvement. An activity that is a substantial improvement shall conform to 706.01B for residential structures or 706.02B for non-residential structures.

L. Modifications to an existing *building*, which are not *substantial improvements*, that would not increase the enclosed floor area of the building below the *base flood elevation*, and which will not block *flood* flows, including, but not limited to, fireplaces, bay windows, decks, patios, and second story additions. No enclosed floor areas may be built on stilts.

M. *Substantial improvements*, provided that the outside dimensions of the building are not increased; the building shall conform to 706.01B for residential structures or 706.02B for non-residential structures.

703.02 Additions to the list of *Appropriate Uses* in 703.01 are not allowed.

703.03 All *Appropriate Uses* shall require a permit from the SMC or *Certified Community* and must be in accordance with all applicable provisions of this Ordinance.

703.04 Construction of an *Appropriate Use* will be considered permissible provided that the proposed project meets the following engineering and *mitigation* criteria and those of §700 Location of Regulatory Floodplain, Base Flood Elevation, and Regulatory Floodway, 701.03 Regulatory Floodplain Performance Standards, §704 Compensatory Storage Performance Standards, §705 Public Health Protection Standards, and §706 Building Protection Requirements and is so stated in writing with supporting plans, calculations, and data prepared by a *Registered Professional Engineer*:

A. All effective *Regulatory Floodway* conveyance lost due to the development of *Appropriate Uses*, other than bridge or culvert crossings or on-stream structures or dams, shall be replaced for all *flood* events up to and including the *base flood*. In calculating effective Regulatory Floodway conveyance, the following factors shall be taken into consideration:

1. *Regulatory Floodway* conveyance,

   $K = (1.486/n)\ AR^{2/3}$

   where “n” is Manning’s roughness coefficient, “A” is the effective area of the cross-section, and “R” is the ratio of the area to the wetted perimeter.

2. The same Manning’s n-value shall be used for both existing and proposed conditions unless a recorded maintenance agreement with a federal, state, or local unit of government can ensure the proposed conditions will be maintained or the land cover is changing from a vegetative to a non-vegetative land cover.

B. Transition sections shall be provided and used in calculations of effective *Regulatory Floodway* conveyance, in the design of excavations in the Regulatory Floodway, between cross-sections with rapid expansions and contractions, and when meeting the Regulatory Floodway delineation on

adjoining properties. The following expansion and contraction ratios shall be used:

1. Water will expand no faster than at a rate of one foot horizontal for every four feet of the flooded *stream's* length.
2. Water will contract no faster than at a rate of one foot horizontal for every one foot of the flooded *stream's* length.
3. Water will not expand or contract faster than one foot vertical for every ten feet of the flooded *stream*'s length.
4. All cross-sections used in the calculations shall be located perpendicular to *flood* flows.
5. In the design of excavations in the *Regulatory Floodway*, *erosion*/scour protection shall be provided on land upstream and downstream of proposed *transition sections*.

C. The development of all *Appropriate Uses* shall not result in an increase in the average *channel* or *Regulatory Floodway* velocities or stage, for all *flood* events up to and including the *base flood* event. However, in the case of bridges or culverts or on-stream structures built for the purpose of backing up water in the *stream* during normal or flood flows, velocities may be increased at the structure site if scour, *erosion*, and *sedimentation* will be avoided by the use of rip-rap or other design measures.

D. In the case of on-stream structures built for the purpose of backing up water, an increase in upstream stage when compared to existing conditions for all *flood* events up to and including the *base flood* event shall be contained within recorded easements. A permit or letter indicating a permit is not required must be obtained from *IDNR/OWR*, Dam Safety Section for a Dam Safety Permit or waiver for any structure built for the purpose of backing up water in the *stream* during normal or flood flow.

E. General criteria for analysis of *flood* elevations

1. The *flood* profiles, flows, and *Regulatory Floodway* data in the Regulatory Floodway study, referenced in §700 Location of Regulatory Floodplain, Base Flood Elevation, and Regulatory Floodway, must be used for analysis of the base conditions. If the study data appears to be in error or conditions have changed, *IDNR/OWR* shall be contacted for approval and concurrence on the appropriate base conditions data to use.
2. If the BFE at the site of the proposed *development* is affected by backwater from a downstream receiving *stream* with a larger *drainage area*, the proposed development shall be shown to meet the requirements of this section for the base elevations of the *Regulatory Floodway* conditions and conditions with the receiving stream at normal water elevations. Additional receiving stream elevations may be considered for design if appropriate and approved by SMC or *IDNR/OWR*.
3. If the *applicant* is informed by *IDNR/OWR*, local governments, or a private owner that a downstream or upstream restrictive bridge or culvert is

scheduled to be removed, reconstructed, modified, or a regional *flood* control project is scheduled to be built, removed, constructed, or modified within the next five (5) years, the proposed *development* shall be analyzed and shown to meet the requirements of this section for both the existing conditions and the expected flood profile conditions when the bridge, culvert, or flood control project is built.

F. If the *Appropriate Use* will result in a change in the *Regulatory Floodway* location or a change in the BFE, the *applicant* shall submit to SMC the information required to be issued a *Conditional Letter of Map Revision* (CLOMR) from *IDNR/OWR* and *FEMA*. A public notice inviting public comment on the proposed change in the BFE or location in the Regulatory Floodway will be issued by IDNR/OWR or its designee before a CLOMR is issued. The application will not be considered complete until the CLOMR is received. No filling, grading, dredging, or excavating shall take place until a Conditional Approval is issued by the *Enforcement Officer*. The construction or placement of *structures* within the currently effective floodway boundary shall not take place until a final *Letter of Map Revision* (LOMR) is issued by IDNR/OWR and *FEMA,* which revises the floodway boundary.

703.05 For those circumstances listed in 703.05A through 703.05E and located in a *Regulatory Floodway*, the following information shall be submitted to *IDNR/OWR* or SMC:

A. Analysis of the flood profile due to a proposed bridge, culvert crossings, and roadway approaches.

B. An engineer's determination that an existing bridge or culvert crossing or approach road is not a source of *flood damage* and the analysis indicating the proposed flood profile.

C. Alternative *transition sections* and hydraulically equivalent storage.

D. *IDNR/OWR* will retain permit authority for any IDNR/OWR projects, dams, etc., all other state, federal, or SMC projects.

E. SMC will issue permits to local units of government for *Regulatory Floodway* development.

§704 Compensatory Storage Performance Standards

Compensatory storage is required for all storage lost or displaced in a *Regulatory Floodplain* due to *development*.

704.01 *Hydraulically equivalent compensatory storage* requirements for development activity in a *riverine Regulatory Floodplain* shall be at least equal to 1.2 times the volume of Regulatory Floodplain storage lost or displaced. Such compensation areas shall be designed to drain freely and openly to the *channel* and located opposite or adjacent to fill areas. A *deed or plat restriction* is required to prohibit any modification to the compensation area.

704.02 *Hydraulically equivalent compensatory storage* requirements for development activity in a *non-riverine Regulatory Floodplain* shall be at least equal to 1.0 times the volume of *Regulatory Floodplain* storage lost or displaced. Compensation areas

shall be designed to access the required volume. A deed or plat restriction is required to prohibit any modification to the compensation area. Upon approval of the Enforcement Officer, hydraulic equivalency for non-riverine compensatory storage may be altered, provided that the storage is replaced at or below the existing elevation at which storage is lost or displaced but not below the proposed normal water level.

704.03 Hydraulically equivalent compensatory storage requirements for development activity in a non-riverine Regulatory Floodplain, that is located partially on-site, with more than 10% of the BFE surface area located on-site, shall be at least equal to 1.2 times the volume of Regulatory Floodplain storage lost or displaced. Such compensation areas shall be designed to access the required volume. A deed or plat restriction is required to prohibit any modification to the compensation area. Upon approval of the Enforcement Officer, hydraulic equivalency for non-riverine compensatory storage may be altered, provided that the storage is replaced at or below the existing elevation at which storage is lost or displaced but not below the proposed normal water level.

704.04 Upon approval of the *Enforcement Officer*, shorelines or streambanks that have experienced *erosion* may be restored to their condition as of the current effective date of the FIRM in that *community* without the need to provide *compensatory storage* or pay a fee-in-lieu of for the fill used to restore the eroded area according to the following criteria:

A. The restoration fill shall meet existing grades and within *riverine* areas the current effective *Regulatory Floodplain* BFE shall not be increased and the *Regulatory Floodway* conveyance shall be maintained.

B. The amount of eroded property being restored shall be documented and submitted by the *applicant* as part of the permit process. Proper documentation shall be either field survey information or photo documentation of the *erosion* that has occurred for the property being restored.

C. For rivers, *lakes*, and streams where no floodway has been designated, no documentation of past shoreline *erosion* is required if the *applicant* does not exceed one (1) cubic yard of fill per lineal foot for a maximum of two hundred (200) feet. In this case, the placing of the fill shall not significantly alter the alignment of the shoreline with adjoining properties as determined by the *Enforcement Officer*. Non-documentable fills are a one-time allowance on a per property basis and all fills exceeding two hundred (200) cubic yards shall be regulated as specified in §509 Fee-In-Lieu of On-Site Stormwater Storage and §704 Compensatory Storage Performance Standards of this Ordinance.

704.05 Top dressing is the placement of not more than four (4) inches of topsoil within the *Regulatory Floodplain* for the purposes of stabilizing an existing *erosion* control problem or establishing vegetative cover. Top dressing shall be allowed by permit on a per-parcel, one-time only allowance, and not damage or alter adjoining property drainage patterns. Upon approval of the *Enforcement Officer*, floodplain *compensatory storage* shall not be required. Top dressing fill shall comply with the Soil Erosion and Sediment Control standards and Wetlands provisions of this Ordinance (Article 6: Soil Erosion and Sediment Control Requirements and Article

10: Wetland Requirements). This provision shall not be applicable to the design process for new *development*.

704.06 Top dressing is the placement of not more than four (4) inches of topsoil within the *Regulatory Floodplain*. For the purposes of restoring pre-subsidence grade to an area that primarily experiences subsidence due to a documented flood event, top dressing shall be allowed by permit on a per-parcel basis and not damage or alter adjoining property drainage patterns. Upon approval of the *Enforcement Officer*, floodplain *compensatory storage* shall not be required. Top dressing fill shall comply with the Soil Erosion and Sediment Control standards and Wetlands provisions of this Ordinance (Article 6: Soil Erosion and Sediment Control Requirements and Article 10: Wetland Requirements). This provision shall not be applicable to the design process for new development. A one-time allowance of this provision shall be in accordance with 704.06A through 704.06C and repeat allowances shall be in accordance with 704.06A through 704.06D:

A. The restoration fill shall meet pre-subsidence elevations, and within riverine areas, the pre-subsidence effective *Regulatory Floodplain* and *Regulatory Floodway* conveyance shall be maintained.

B. The property being considered for top dressing shall be documented and submitted by the applicant as part of the permit process. Proper documentation shall be either topographic information or photographic documentation of the flooding and subsidence that has occurred on the property.

C. Upon completion of top dressing, the applicant shall provide topographic or photographic documentation of completed work.

D. Repeat top dressing applications are limited to documented flood events with topographic or photographic evidence of subsidence.

704.07 Impervious surface rehabilitative maintenance is the placement of not more than four (4) inches of pavement or any other impervious material within the Regulatory Floodplain. For the purposes of restoring pre-subsidence grades to an area that has experienced subsidence, rehabilitative maintenance of such areas shall be allowed by permit on a per-project basis and not damage or alter adjoining property drainage patterns. Upon approval of the Enforcement Officer, floodplain compensatory storage shall not be required. Rehabilitative maintenance fill shall comply with the Soil Erosion and Sediment Control standards and Wetlands provisions of this Ordinance (Article 6: Soil Erosion and Sediment Control Requirements and Article 10: Wetland Requirements). This provision shall not be applicable to the design process for new development. A one-time allowance of this provision shall be in accordance with 704.07A through 704.07C and repeat allowances shall be in accordance with 704.07A through 704.07D:

A. The restoration fill shall meet pre-subsidence elevations, and within riverine areas, the pre-subsidence effective Regulatory Floodplain and Regulatory Floodway conveyance shall be maintained.

B. The project being considered for rehabilitative maintenance shall be documented and submitted by the applicant as part of the permit process.

Proper documentation shall be either topographic information or photographic documentation of the subsidence that has occurred on the project.

C. Upon completion of rehabilitative maintenance, the applicant shall provide topographic or photographic documentation of completed work.

D. Repeat rehabilitative maintenance applications are limited to documented topographic or photographic evidence of subsidence.

§705 Public Health Protection Standards

705.01 For property within the *Regulatory Floodplain* no chemicals, explosives, buoyant materials, animal waste, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials shall be placed or stored below the *Flood Protection Elevation*.

705.02 New and replacement water supply systems, wells, and sanitary sewer lines may be permitted providing all manholes or other above-ground openings located below the FPE are watertight.

705.03 On-site waste disposal systems shall be designed to avoid inundation by the *base flood*.

§706 Building Protection Requirements

706.01 Building protection requirements for residential structures shall follow applicable FEMA regulations and include the following:

A. The *lowest floor*, including *basements,* of all new residential structures, including additions, shall be elevated up to at least the *Flood Protection Elevation* (FPE). The floor of an attached garage for a new *structure* must be elevated up to at least one-half (0.5) foot above the *base flood elevation* (BFE).

1. If placed on compacted fill, the top of the fill for a residential *structure* shall be above the FPE. The top of fill for an attached garage shall be one-half (0.5) foot above the BFE. The fill pad shall be placed at the appropriate elevation and designed to extend a minimum of ten (10) feet out from the building's designed footprint unless the *building* is certified by a Registered Structural Engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill pad shall meet 95% of Standard Proctor Density in order to be demonstrated not to settle below the FPE for the residential structure and not below one-half (0.5) foot above the BFE for an attached garage, and to be adequately protected against *erosion*, scour, and differential settlement. Foundation excavations shall not extend more than five (5) feet beyond the foundation footprint. Backfill for the over excavated area does not need to meet the compaction requirements.

2. If elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to *flood* waters and not subject to *damage* by hydrostatic pressures of the *base flood*. The bottom of the permanent openings shall be no more than one (1) foot above the *lowest adjacent grade*. The total net area shall be provided below the BFE, and consist of a minimum of two (2) openings for each enclosed area with each opening of an enclosed area on a different exterior wall. The

openings must have a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood waters into and out of the enclosed area. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating debris. All areas below the FPE shall be constructed with materials resistant to flood damage. The *lowest floor* (including *basement*) for the residential structure and all electrical, heating, ventilation, plumbing, air conditioning equipment, and utility meters shall be located at or above the FPE. Waterproofed service facilities, including, but not limited to, water and sewer pipes, electrical and telephone lines, and submersible pumps**,** may be located below the FPE. No area less than one (1) foot above the BFE shall be used for storage of items or materials.

B. The *lowest floor*, including *basements*, of an existing residential *structure* with a *substantial improvement* shall be elevated to at least one (1) foot above the BFE.

1. If placed on compacted fill, the top of the fill for a substantially improved residential structure shall be at least one (1) foot above the BFE. The fill pad shall be placed at the appropriate elevation and designed to extend a minimum of ten (10) feet out from the building's designed footprint unless the building is certified by a Registered Structural Engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill pad shall meet 95% of Standard Proctor Density in order to be demonstrated not to settle below one (1) foot above the BFE for the substantially improved residential structure, and to be adequately protected against erosion, scour, and differential settlement. Foundation excavations shall not extend more than five (5) feet beyond the foundation footprint. Backfill for the over excavated area does not need to meet the compaction requirements.

2. If elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to flood waters and not subject to damage by hydrostatic pressures of the base flood. The bottom of the permanent openings shall be no more than one (1) foot above the lowest adjacent grade. The total net area shall be provided below the BFE, and consist of a minimum of two (2) openings for each enclosed area with each opening of an enclosed area on a different exterior wall. The openings must have a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood waters into and out of the enclosed area. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating debris. All areas lower than one (1) foot above the BFE shall be constructed with materials resistant to flood damage. The lowest floor (including basement) for the substantially improved residential structure

and all electrical, heating, ventilation, plumbing, air conditioning equipment, and utility meters shall be elevated to at least one (1) foot above the BFE. Waterproofed service facilities, including, but not limited to, water and sewer pipes, electrical and telephone lines, and submersible pumps, may be located below the BFE-plus-one-foot elevation.

706.02 Building protection requirements for non-residential structures shall follow applicable FEMA regulations and include the following:

A. The *lowest floor*, including *basements,* of all new non-residential *buildings***,** including additions, shall be elevated at least to the FPE or be structurally dry flood-proofed to at least the FPE. A non-residential building may be structurally dry flood-proofed (in lieu of elevation) provided that a *Registered Professional Engineer*, Registered Structural Engineer, or Licensed Architect shall certify that the building has been structurally dry flood-proofed up to the FPE and the *structure* and attendant utility facilities are watertight and capable of resisting the effects of the *base flood*. The building design shall take into account *flood* velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impacts from debris or ice. Flood-proofing measures shall be operable without human intervention and without an outside source of electricity. (Levees, berms, floodwalls, and similar works are not considered *flood-proofing* for the purpose of this subsection.)

1. If a non-residential structure is not dry flood-proofed and is placed on compacted fill, the top of the fill shall be above the FPE. The fill pad shall be placed at the appropriate elevation and designed to extend a minimum of ten (10) feet out from the building's designed footprint unless the building is certified by a Registered Structural Engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill pad shall meet 95% of Standard Proctor Density in order to be demonstrated not to settle below the FPE and to be adequately protected against erosion, scour, and differential settlement. Foundation excavations shall not extend more than five (5) feet beyond the foundation footprint. Backfill for the over excavated area does not need to meet the compaction requirements.

2. If a non-residential structure is not dry flood-proofed and is elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to flood waters and not subject to damage by hydrostatic pressures of the base flood. The bottom of the permanent openings shall be no more than one (1) foot above the lowest adjacent grade. The total net area shall be provided below the BFE, and consist of a minimum of two (2) openings for each enclosed area with each opening of an enclosed area on a different exterior wall. The openings must have a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood waters into and out of the enclosed area. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating

debris. All areas below the FPE shall be constructed with materials resistant to flood damage. The lowest floor (including basement) for the non-residential structure and all electrical, heating, ventilation, plumbing, air conditioning equipment, and utility meters shall be located at or above the FPE. Waterproofed service facilities, including, but not limited to, water and sewer pipes, electrical and telephone lines, and submersible pumps, may be located below the FPE. No area less than one (1) foot above the BFE shall be used for storage of items or materials.

B. The lowest floor, including basements, of all substantially improved non-residential buildings and attendant utility facilities shall be elevated or structurally dry flood-proofed to a minimum of one (1) foot above the BFE. A substantially improved non-residential building may be structurally dry flood-proofed (in lieu of elevation) provided that a Registered Professional Engineer, Registered Structural Engineer, or Licensed Architect shall certify that the building has been structurally dry flood-proofed up to a minimum of one (1) foot above the BFE and the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impacts from debris or ice. Flood-proofing measures shall be operable without human intervention and without an outside source of electricity. (Levees, berms, floodwalls, and similar works are not considered flood-proofing for the purpose of this subsection.)

1. If a substantially improved non-residential structure is not dry flood-proofed and is placed on compacted fill, the top of the fill for a non-residential structure substantial improvement shall be at least one (1) foot above the BFE. The fill pad shall be placed at the appropriate elevation and designed to extend a minimum of ten (10) feet out from the building's designed footprint unless the building is certified by a Registered Structural Engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill pad shall meet 95% of Standard Proctor Density in order to be demonstrated not to settle below one (1) foot above the BFE for the non-residential structure, and to be adequately protected against erosion, scour, and differential settlement. Foundation excavations shall not extend more than five (5) feet beyond the foundation footprint. Backfill for the over excavated area does not need to meet the compaction requirements.

2. If a substantially improved non-residential structure is not dry flood-proofed and is elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to flood waters and not subject to damage by hydrostatic pressures of the base flood. The bottom of the permanent openings shall be no more than one (1) foot above the lowest adjacent grade. The total net area shall be provided below the BFE, and consist of a minimum of two (2) openings for each enclosed area with each opening of an enclosed area on a different exterior wall. The openings must have a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood waters into and out of

the enclosed area. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating debris. All areas lower than one (1) foot above the BFE shall be constructed with materials resistant to flood damage. The lowest floor (including basement) for the substantially improved non-residential structure and all electrical, heating, ventilation, plumbing, air conditioning equipment, and utility meters shall be elevated to at least one (1) foot above the BFE. Waterproofed service facilities, including, but not limited to, water and sewer pipes, electrical and telephone lines, and submersible pumps, may be located below the BFE-plus-one-foot elevation.

706.03 Manufactured homes and recreational vehicles to be installed on-site for more than 180 days shall be elevated to or above the FPE and shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the Rules and Regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code Part 870. The requirements in 706.01A shall apply to this section.

706.04 Tool sheds, detached garages, and attached garages which are not *substantial improvements* on an existing single-family platted lot may be constructed with the *lowest floor* below the FPE in accordance with the following:

A. The *building* shall not be used for human habitation.

B. All areas below the BFE shall be constructed with waterproof material. Structures located in a *Regulatory Floodway* shall be constructed and placed on a development site so as not to block the flow of flood waters and shall also meet the *Appropriate Use* criteria of §703 Regulatory Floodway Performance Standards. In addition, all other requirements of this Ordinance must be met.

C. The *structure* shall be anchored to prevent flotation.

D. Service facilities such as electrical and heating equipment shall be elevated or flood-proofed to the FPE.

E. The *building* shall be used only for the storage of vehicles or tools and may not contain other rooms, workshops, greenhouses, or similar uses.

F. If a residence is elevated appropriately, then the area below the residence can be used as a garage, as long as the garage conforms to 706.04A through 706.04E and includes permanent flow through openings as described in 706.01A.2.

G. The *building* shall be valued at less than $17,250 (2011 costs) and be no greater than 576 square feet in floor size.

706.05 A non-conforming *structure* damaged by any origin may be restored unless the activity meets the definition of substantial improvement, in which case it shall conform to the provisions of 706.01B for residential structures or 706.02B for non-residential structures.

706.06 If *flood-proofing* construction is required beyond the outside dimensions of an existing habitable, residential or commercial *building*, the outside perimeter of the flood-proofing construction shall be placed no further than ten (10) feet from the outside of the building. Compensation of lost storage and conveyance will not be required for flood-proofing activities.

§707 Bridge, Culvert Crossing, and Roadway Approach Performance Standards

707.01 A proposed new structure shall not result in an increase of upstream flood stages greater than one-tenth (0.1) foot when compared to the existing conditions for all *flood* events up to and including the *base flood* event unless contained within the *channel* banks, or recorded easements. The evaluation must be submitted to the SMC for review and concurrence before a permit is issued.

707.02 If the proposed *development* will increase upstream flood stages greater than one-tenth (0.1) foot, the *applicant* must contact *IDNR/OWR,* Dam Safety Section for a Dam Safety Permit or waiver.

707.03 Lost *Regulatory Floodway* and Regulatory Floodplain storage must be compensated for per the *Regulatory Floodplain* performance standards of this Ordinance except that artificially created storage that is lost or displaced due to a reduction in upstream head loss caused by a bridge, culvert, storm sewer, or constructed embankment shall not be required to be replaced, provided no *flood damage* will be incurred downstream.

707.04 Velocity increases must be mitigated per the *Regulatory Floodway* performance section of this Ordinance except that in the case of bridges or culverts or on-*stream* structures built for the purpose of backing up water in the stream during normal or *flood* flows, velocities may be increased at the structure site if scour, *erosion*, and *sedimentation* will be avoided by the use of appropriate measures.

707.05 For modifications or replacement of existing structures, the existing structure must first be evaluated in accordance with 17 Ill. Adm. Code Part 3708 to determine if the existing structure is a source of *flood damage*. If the structure is a source of flood damage, the *applicant's* engineer must evaluate the feasibility of redesigning the structure to reduce the existing backwater, taking into consideration the effects of flood damage to upstream and downstream properties. Modifications or replacement structures shall not increase flood stages compared to the existing or regulatory condition, whichever is greater, for all flood events up to and including the *base flood* event. The evaluation must be submitted to *IDNR/OWR*, or its designee, for review and concurrence before a permit is issued.

707.06 If the crossing is proposed over a public body of water, an *IDNR/OWR* permit must be obtained.

707.07 The hydraulic analysis for the backwater caused by the bridge showing the existing condition and proposed regulatory profile must be submitted to *IDNR/OWR* for concurrence that a *Conditional Letter of Map Revision* (CLOMR) is not required.

Article 8: Flood-Prone Area Requirements

The performance standards of this section apply to *development* located in *flood-prone areas* with *drainage areas* less than 640 acres or in *depressional storage areas*, as specified.

§800 Flood-carrying Capacity

The flood-carrying capacity shall be maintained for *channels* with *flood-prone areas* draining a tributary area of twenty (20) acres or more (§506 Stormwater Conveyance Systems).

§801 Flood-prone Area Conveyance, Velocities, Flood Profiles, and Flood Storage

For development within a *flood-prone area* where the tributary *drainage area* is one hundred (100) acres or more, the *applicant* shall meet the requirements of Article 9: Flood Table Land Requirements of this Ordinance according to the following criteria:

801.01 Submit to SMC an engineering study performed by a *Registered Professional Engineer* which will determine a floodway which meets the definition of a *Regulatory Floodway* and show that the proposed *development* will meet the requirements of Article 7: Regulatory Floodplain and Floodway Requirements of this Ordinance; or

801.02 Submit to SMC an engineering study performed by a *Registered Professional Engineer* which will determine a *base flood elevation* and demonstrate that the proposed *development* will maintain the existing conditions conveyance, will not increase *flood* velocities, will not increase flood profiles, and will provide hydraulically equivalent compensatory storage at a ratio of 1.2:1. Such compensation areas shall be designed to drain freely and openly to the channel and located opposite or adjacent to fill areas; or

801.03 Submit to SMC an engineering study performed by a *Registered Professional Engineer* which will demonstrate that for a range of flood elevations (which would conservatively exceed the expected 100-year flood elevation) that the proposed *development* will maintain the existing conditions conveyance, will not increase *flood* velocities, will not increase flood profiles, and will provide hydraulically equivalent compensatory storage at a ratio of 1.2:1. Such compensation areas shall be designed to drain freely and openly to the channel and located opposite or adjacent to fill areas.

Article 9: Flood Table Land Requirements

The following flood table land requirements apply to new construction only and not to additions or *substantial improvements* to structures within flood table lands built before August 10, 1999.

§900 Public Health Protection Standards

900.01 No chemicals, explosives, buoyant materials, animal waste, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials shall be placed or stored below the *Flood Protection Elevation* (FPE).

900.02 New and replacement water supply systems, wells, and sanitary sewer lines may be permitted providing all manholes or other above-ground openings located below the FPE are watertight.

900.03 On-site waste disposal systems shall be designed to avoid inundation by the base flood.

§901 Building Protection Requirements

901.01 The lowest floor, including basements, of all new residential structures, including additions, shall be elevated or structurally dry flood-proofed up to at least the Flood Protection Elevation (FPE). The floor of an attached garage for a new structure must be elevated up to at least one-half (0.5) foot above the base flood elevation (BFE). If structurally dry flood-proofed, a Licensed Professional Engineer, Licensed Structural Engineer, or Licensed Architect shall certify that the building has been structurally dry flood-proofed up to the FPE and the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impacts from debris or ice. Flood-proofing measures shall be operable without human intervention and without an outside source of electricity. (Levees, berms, floodwalls, and similar works are not considered flood-proofing for the purpose of this subsection.)

A. If the residential structure is not dry flood-proofed and is placed on compacted fill, the top of the fill for a residential structure shall be above the FPE. The top of fill for an attached garage shall be one-half (0.5) foot above the BFE. The fill pad shall be placed at the appropriate elevation and designed to extend a minimum of ten (10) feet out from the building's designed footprint unless the building is certified by a Registered Structural Engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill pad shall meet 95% of Standard Proctor Density in order to be demonstrated not to settle below the FPE for the residential structure and not below one-half (0.5) foot above the BFE for an attached garage, and to be adequately protected against erosion, scour, and differential settlement. Foundation excavations shall not extend more than five (5) feet beyond the foundation footprint. Backfill for the over excavated area does not need to meet the compaction requirements.

B. If the residential structure is not dry flood-proofed and is elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to flood waters and not subject to damage by hydrostatic pressures of the base flood. The bottom of the permanent openings shall be

no more than one (1) foot above the lowest adjacent grade. The total net area shall be provided below the FPE, and consist of a minimum of two (2) openings for each enclosed area with each opening of an enclosed area on a different exterior wall. The openings must have a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the FPE. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood waters into and out of the enclosed area. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating debris. All areas below the FPE shall be constructed with materials resistant to flood damage. The lowest floor (including basement) for the residential structure and all electrical, heating, ventilation, plumbing, air conditioning equipment, and utility meters shall be located at or above the FPE. Waterproofed service facilities, including, but not limited to, water and sewer pipes, electrical and telephone lines, and submersible pumps, may be located below the FPE. No area less than one (1) foot above the BFE shall be used for storage of items or materials.

901.02 The lowest floor, including basements, of all new non-residential buildings, including additions, shall be elevated at least to the FPE or be structurally dry flood-proofed to at least the FPE. A non-residential building may be structurally dry flood-proofed (in lieu of elevation) provided that a Licensed Professional Engineer, Licensed Structural Engineer, or Licensed Architect shall certify that the building has been structurally dry flood-proofed up to the FPE and the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impacts from debris or ice. Flood-proofing measures shall be operable without human intervention and without an outside source of electricity. (Levees, berms, floodwalls, and similar works are not considered flood-proofing for the purposes of this subsection.)

A. If a non-residential structure is not dry flood-proofed and is placed on compacted fill, the top of the fill shall be above the FPE. The fill pad shall be placed at the appropriate elevation and designed to extend a minimum of ten (10) feet out from the building's designed footprint unless the building is certified by a Licensed Structural Engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill pad shall meet 95% of Standard Proctor Density in order to be demonstrated not to settle below the FPE and to be adequately protected against erosion, scour, and differential settlement. Foundation excavations shall not extend more than five (5) feet beyond the foundation footprint. Backfill for the over excavated area does not need to meet the compaction requirements.

B. If a non-residential structure is not dry flood-proofed and is elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to flood waters and not subject to damage by hydrostatic pressures of the base flood. The bottom of the permanent openings shall be no more than one (1) foot above the lowest adjacent grade. The total net area shall be provided below the FPE, and consist of a minimum of two (2) openings

for each enclosed area with each opening of an enclosed area on a different exterior wall. The openings must have a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the FPE. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood waters into and out of the enclosed area. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating debris. All areas below the FPE shall be constructed with materials resistant to flood damage. The lowest floor (including basement) for the non-residential structure and all electrical, heating, ventilation, plumbing, air conditioning equipment, and utility meters shall be located at or above the FPE. Waterproofed service facilities, including, but not limited to, water and sewer pipes, electrical and telephone lines, and submersible pumps, may be located below the FPE. No area less than one (1) foot above the BFE shall be used for storage of items or materials.

901.03 Manufactured homes and recreational vehicles to be installed on-site for more than 180 days shall be elevated to or above the FPE and shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the Rules and Regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code Part 870.

901.04 Accessory structures and attached garages may be constructed with the lowest floor below the FPE in accordance with the following:

A. The building shall not be used for human habitation.

B. The structure shall be anchored to prevent flotation.

C. Service facilities such as electrical and heating equipment shall be elevated or flood-proofed to the FPE.

Article 10: Wetland Requirements

The performance standards of this section apply when Waters of the United States or Isolated Waters of Lake County are located wholly or partially within the development site.

§1000 Wetland Delineation

1000.01 The *applicant* shall identify the boundaries, extent, function, and quality of all *wetland* areas on the *development* site, and prepare a Wetland Determination Report. The presence and extent of wetland areas shall be determined by, or under the supervision of, a *Certified Wetland Specialist* using an on-site wetland procedure within three (3) years of the initial permit application date in accordance with the methodology contained in the 1987 U.S Army Corps of Engineers wetland delineation manual (as amended, including applicable supplements) or as otherwise noted in 1000.02.

1000.02 Wetland Determination Report

The following are minimum requirements for the Wetland Determination Report:

A. A plan showing the location of *wetlands* within the *development* site and the approximate boundaries of off-site wetlands per 1000.02F. The wetland boundary within the development site shall be flagged in the field and surveyed;

B. An aerial photograph delineating the *wetland* and the *development* boundary;

C. A copy of the following maps (most recent) delineating the *development* boundary:

1. U.S.G.S. quadrangle map
2. Lake County Wetland Inventory map (including ADID sites)
3. *FEMA* floodplain map
4. Lake County soil survey
5. Hydrologic Atlas (U.S.G.S. Flood of Record map)

D. U.S. Army Corps of Engineers data sheets (Midwest Region, most recent version) with color photographs provided for representative upland and *wetland* data points;

E. A written description of the *wetland*(s) that includes a Floristic Quality Assessment as determined using the Chicago Region Floristic Quality Assessment Calculator (U.S. Army Corps of Engineers, Chicago District, most recent version). Floristic quality assessments shall generally be conducted between May 15 and October 1, which approximates the growing season. Non-growing season assessments may require additional sampling during the growing season to satisfy this requirement;

F. The approximate location, extent, and relative quality of off-site *wetlands* on properties within the maximum *buffer* requirements adjoining the *development* shall be identified by using the first of the following documents or procedures pertaining at the time of development:

1. Site-specific delineation according to the 1987 Federal *wetland* delineation manual (as amended, including applicable supplements). If such delineation is not available, use 1000.02F.2.
2. *Wetlands* identified in Lake County Wetland Inventory maps (most current LCWI map).

G. A *farmed wetland* determination for *development* sites in accordance with the current U.S. Natural Resources Conservation Service methodology. The farmed wetland boundaries shall be shown on the plan and aerial photograph in 1000.02A and 1000.02B.

§1001 Jurisdictional Determination

The *applicant* shall provide a valid, written jurisdictional determination (JD) from the U.S. Army Corps of Engineers or a Corps-approved agency, as to which wetlands on the *development* site are *Isolated Waters of Lake County* or *Waters of the United States*. A copy of the jurisdictional determination shall be included with the wetland submittal.

§1002 Isolated Waters of Lake County Exclusions

Excluded areas are as specified in Appendix A: Definitions of *Isolated Waters of Lake County*.

§1003 Letter of No Impact

1003.01 For development containing Waters of the United States or Isolated Waters of Lake County, but with no proposed impacts, the following information is required for a Letter of No Impact (LONI):

A. A cover letter describing the proposed activity;

B. Development plan(s) as specified in 1005.01D;

C. A wetland hydrology analysis meeting the requirements of §1006 Wetland Hydrology for Isolated Waters of Lake County where there is a proposed modification of tributary drainage area or surface runoff volume to Isolated Waters of Lake County;

D. A letter from the U.S. Army Corps of Engineers stating that the proposed development will not impact Waters of the United States, if required by SMC or the Isolated Wetland Certified Community.

§1004 Waters of the United States Impacts

1004.01 The following information is required:

A. Wetland delineation and *wetland* determination report as specified in §1000 Wetland Delineation of this Ordinance.

B. A U.S. Army Corps of Engineers permit for the proposed *development* or a letter from the Corps stating that the proposed development does not require Corps authorization.

C. *Buffer* area requirements as specified in §505 Buffer Areas of this Ordinance.

D. All *wetland impacts* occurring in Lake County that exceed the *mitigation* threshold of the Corps regulatory program shall be mitigated for in Lake County at the mitigation ratio specified by the Corps for that *development* impact.

§1005 Isolated Waters of Lake County Impacts

1005.01 The following information is required:

A. A cover letter signed by a *Certified Wetland Specialist* that provides a clear project purpose and need statement, a description of the proposed activity, area (in acres) of *wetland impact*, and a statement on the category to be used as follows:

1. Category I: *Wetland impacts* less than or equal to one (1) acre and does not impact *high-quality aquatic resources*;
2. Category II: *Wetland impacts* greater than one (1) acre and less than two (2) acres and does not impact *high-quality aquatic resources*;
3. Category III: *Wetland impacts* greater than or equal to two (2) acres or impacts *high-quality aquatic resources*; and
4. Category IV: *Wetland impacts* for the restoration, creation, and enhancement of *wetlands* provided that there are net gains in aquatic resource function. Category IV activities include shoreline and streambank *erosion* restoration described in 704.04.

B. A completed *Watershed Development Permit* Application form signed by a *Certified Wetland Specialist*.

C. A delineation of the *wetlands* consistent with the requirements provided in §1000 Wetland Delineation of this Ordinance.

D. Development site plan(s) meeting the requirements of Article 4: Application Requirements of this Ordinance showing the boundaries of all existing wetlands or water bodies on the ownership parcel, including the development site and the areas of proposed wetland impacts.

E. Current documentation on the occurrence of any *high-quality aquatic resources* on or adjoining the *development*.

F. A wetland hydrology assessment per §1006 Wetland Hydrology for Isolated Waters of Lake County, as applicable.

G. Documentation that the *development* is in compliance with the Illinois Department of Natural Resources' Endangered Species Consultation Program and the Illinois Natural Areas Preservation Act [520 ILCS 10/11] and [525 ILCS 30/17].

H. For *developments* involving State of Illinois funding or pass-through funding, documentation that the development is in compliance with the Interagency Wetland Policy Act of 1989 [20 ILCS 830] as administered by the Illinois Department of Natural Resources.

I. Documentation that the *development* is in compliance with the U.S. Fish and Wildlife Service's consultation program under the Endangered Species Act.

J. A *mitigation* plan meeting the requirements of §1007 Mitigation for Isolated Waters of Lake County of this Ordinance.

K. A copy of the Natural Resources Information Report (NRI) for *development* that is required to obtain a NRI performed by the McHenry-Lake County Soil and Water Conservation District pursuant to state statute [70 ILCS 405/22.02a].

L. A narrative of the alternative measures taken to avoid, minimize, or mitigate for *wetland impacts* to *Isolated Waters of Lake County* (Category II requirement only, see 1005.01A.2).

M. Category III Wetland Impacts (1005.01A.3)

1. A narrative of the measures taken, in sequence, to avoid and minimize *wetland impacts* to *Isolated Waters of Lake County* before *mitigation* is considered.

2. Upon concurrence of the *Enforcement Officer* and the SMC or the Isolated Waters of Lake County-Certified Community's *Certified Wetland Specialist* that a *Watershed Development Permit* application meets all other *wetland* submittal requirements of this Ordinance, the SMC or the Isolated Waters of Lake County-Certified Community's Certified Wetland Specialist shall issue a Technical Notification to USACE, IDNR, IEPA, USFWS, and the SMC requesting comments with respect to the proposed *wetland impacts* within fifteen (15) working days. The SMC or the Isolated Waters of Lake County-Certified Community's Certified Wetland Specialist shall receive the comments and copies of the comments shall be forwarded to the *applicant* for response. Full consideration of the comments and applicant's response shall be evaluated by the SMC or the Isolated Waters of Lake County-Certified Community's Certified Wetland Specialist for compliance with 102.10 prior to approval of wetland provisions and permit issuance.

3. The SMC shall review and issue Category III (1005.01A.3) wetland authorizations for *development* sites occurring in more than one local unit of government jurisdiction.

N. Category IV Wetland Impacts (1005.01A.4)

1. A narrative on the benefits to the aquatic environment of the proposed *development*.

2. Shoreline and streambank *erosion* restoration that meet the requirements contained in 704.04 are exempt from the submittal requirements contained in this section.

3. *Isolated Waters of Lake County* that are used for detention and not for *mitigation* credit per §1008 Detention in Isolated Waters of Lake County shall be exempt from the submittal requirements of 1005.01J.

§1006 Wetland Hydrology for Isolated Waters of Lake County

The following hydrology requirement applies to *Isolated Waters of Lake County* located wholly or partially within the ownership parcel, including the *development* site. The runoff volume reduction requirements (503.02) may be modified to satisfy the wetland hydrology requirement for the portion of the development site tributary to the wetland.

1006.01 The *development* design shall maintain between 80% and 150% of the existing condition, 2-year, 24-hour storm event runoff volume from the on-site tributary drainage area to the preserved *Isolated Waters of Lake County*. The following minimum information shall be submitted to address this provision:

A. An exhibit illustrating the existing condition and with-project tributary drainage areas; and

B. Existing condition and with-project runoff volume calculations (including land use and soil type documentation); and

C. Existing condition and with-project runoff volume determination. For proposed *development* that will change the size of an *Isolated Waters of Lake County*, the proposed to existing conditions runoff volume ratio shall be adjusted according to the change in *wetland* size, to determine if the hydrology threshold has been met; and

D. The *development* shall include a design for the *stormwater management system* that maintains or replicates the existing hydrologic condition of the *wetland*, unless changes are proposed to enhance the wetland function.

1006.02 A *wetland impact* to *Isolated Waters of Lake County* shall be assumed and the *mitigation* requirements of §1007 Mitigation for Isolated Waters of Lake County of this Ordinance shall apply if the *development* does not meet provisions of 1006.01. The hydrologic wetland impact shall be in addition to other wetland impacts to Isolated Waters of Lake County (e.g., filling, excavation, drainage, etc.). The amount of wetland impact shall be determined as follows:

A. For *Isolated Waters of Lake County* wholly on-site: The total area of the impacted Isolated Waters of Lake County not meeting the provisions of 1006.01; and

B. For *Isolated Waters of Lake County* located partially on-site: The ratio of on-site tributary *drainage area* to total tributary drainage area multiplied by the with-project area of the impacted Isolated Waters of Lake County.

§1007 Mitigation for Isolated Waters of Lake County

1007.01 *Mitigation* is required within Lake County for:

A. *Wetland impacts* greater than or equal to one-tenth (0.10) acre of *Isolated Waters of Lake County* including those that are *high-quality aquatic resources* (HQAR).

B. For single-lot, single-family residences, provided the activity is a single and complete project: *Wetland impacts* greater than one-quarter (0.25) acre of *Isolated Waters of Lake County* or one-tenth (0.10) acre of *Isolated Waters of Lake County* that are *high-quality aquatic resources*.

1007.02 *Mitigation* shall provide for the replacement of the *wetland* environment lost to development at the following proportional rates (i.e., creation acreage to *wetland impact* acreage):

A. For *wetland impacts* to areas that are not *high-quality aquatic resources* under Categories I, II, and III (1005.01A.1, 1005.01A.2, and 1005.01A.3, respectively), a minimum of 1.5:1 *mitigation* ratio shall be required or a minimum 1:1 mitigation ratio for fully certified wetland mitigation bank credits.

B. A minimum of 3:1 for *wetland impacts* that are *high-quality aquatic resources*.

C. A minimum of 6:1 for *wetland impacts* that are high quality *forested wetlands* as defined in Appendix L: High-Quality Aquatic Resources.

D. For *wetland impacts* to *open waters* that are not *high-quality aquatic resources* under Categories I, II, and III (1005.01A.1, 1005.01A.2, and 1005.01A.3, respectively), a minimum of 1:1 mitigation ratio shall be required.

1007.03 Space intentionally left blank

1007.04 Mitigated *Isolated Waters of Lake County* shall be designed to duplicate or improve the hydrologic and biologic features of the original *wetland impact* area.

1007.05 A Project Mitigation Document (PMD) shall be submitted for all *mitigation* projects in conformance with Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts of this Ordinance. Appendix N: contains requirements for performance standards, monitoring, and completion standards.

1007.06 *Creation* of *wetlands* for the *mitigation* of *wetland impacts* shall not take place within *detention facilities*. Enhancement of *farmed wetlands* meeting the size criterion in 1009.01A of this Ordinance may be used for up to 80% of the mitigation requirement.

1007.07 *Enhancement* of existing non-farmed *wetlands* may be credited at up to 25% of the enhanced wetland acreage completed, provided that the *wetland impact* acreage created is at a minimum 1:1 ratio and the *mitigation* hierarchy in 1009.01 is followed.

1007.08 A five-year *wetland mitigation* surety for 110% of *mitigation* cost shall be submitted prior to obtaining a permit. The mitigation surety shall include the costs for construction, monitoring, and management activities during the 5-year performance period.

1007.09 A *wetland mitigation* management and monitoring plan indicating the legally responsible parties for long-term operation and maintenance and dedicated funding sources shall be submitted.

1007.10 *Mitigation* areas shall have the same *buffer* area requirements and mitigation credit for established buffer areas as described in Appendix M: SMC-Approved Wetland Mitigation Banking Requirements for SMC approved *wetland* mitigation banks.

1007.11 The developer shall provide annual monitoring reports on the status of the constructed *mitigation* measures. The developer shall undertake all necessary remedial action to bring the area into compliance with the *wetland* mitigation plan.

1007.12 *Wetland impacts* occurring prior to issuance of a WDO Permit shall presume the *wetland* disturbed was a *high-quality aquatic resource* requiring *mitigation* at a minimum rate of 3:1, except 6:1 for *wetland impacts* that are *forested wetlands* as defined in Appendix L: High-Quality Aquatic Resources.

1007.13 *Mitigation* areas shall be protected by a *deed or plat restriction* for that purpose.

§1008 Detention in Isolated Waters of Lake County

1008.01 Detention shall only be allowed in the following *Isolated Waters of Lake County* and may not be considered a *wetland impact*, subject to provisions of 1008.02 and 1008.03:

A. *Farmed wetlands*.

B. Non-farmed wetlands that are not high-quality aquatic resources when the existing vegetated wetland acreage (not including open water area) is either:

1. Covered by a minimum of 85% of one (1) or more of the following species:

a. Reed canary grass (*Phalaris arundinacea*)

b. Purple loosestrife (*Lythrum salicaria*)

c. Common reed (*Phragmites australis*)

d. Buckthorn (*Rhamnus* spp.)

2. Has an FQI of seven (7) or less.

C. *Isolated Waters of Lake County* comprised of open water that are not *high-quality aquatic resources* (HQARs).

D. Non-farmed wetlands not meeting 1008.01B that are not high-quality aquatic resources and wholly located within a deed or plat restriction may be utilized for detention greater than the required 2-year, 24-hour volume. The outlet design shall maintain or replicate the existing hydrologic condition of the wetland, unless changes are proposed to enhance the wetland function. Excavation or grading shall be considered an impact under the appropriate impact Category I, II, or III (1005.01A.1, 1005.01A.2, or 1005.01A.3, respectively).

1008.02 The following shall apply when using *Isolated Waters of Lake County* for detention and not for *wetland* enhancement *mitigation* credit:

A. The *applicant* shall use a wetland detention basin, and shall re-establish vegetation within the detention basin using the Native Plant Guide for Streams and Stormwater Facilities in Northeastern Illinois, NRCS, et al., (as amended) as a minimum standard for the re-vegetation plan.

B. Reduction of wetland area within the existing delineated wetland boundary from existing to proposed conditions shall be reviewed as an impact under the appropriate impact Category I, II, or III (1005.01A.1, 1005.01A.2, or 1005.01A.3, respectively).

C. Excavation of existing wetland as part of the proposed wetland detention basin design shall be reviewed under Category IV (1005.01A.4) meeting the criteria of 1008.01A, 1008.01B, and 1008.01C.

D. The wetland hydrology thresholds of §1006 Wetland Hydrology for Isolated Waters of Lake County shall apply for Isolated Waters of Lake County meeting the criteria of 1008.01A and 1008.01D.

E. The requirements for water quality treatment of §504 Water Quality Treatment shall apply upstream of the Isolated Waters of Lake County.

F. The *maintainable outlet* requirements of 502.03 shall apply.

1008.03 The following shall apply when using Isolated Waters of Lake County for detention and for wetland enhancement mitigation credit:

A. Isolated Waters of Lake County meeting the criteria of 1008.01 may be used for wetland enhancement mitigation credit.

B. Wetland enhancement within the proposed detention basin shall be reviewed under Category IV (1005.01A.4) requirements, and the performance standards listed in Appendix N: H: PERFORMANCE STANDARDS, shall apply.

C. Reduction of wetland area within the existing delineated wetland boundary from existing to proposed conditions shall be reviewed as an impact under the appropriate impact Category I, II, or III (1005.01A.1, 1005.01A.2, or 1005.01A.3, respectively).

D. The mitigation requirements of §1007 Mitigation for Isolated Waters of Lake County shall apply.

E. The wetland hydrology thresholds of §1006 Wetland Hydrology for Isolated Waters of Lake County shall apply.

F. The requirements for water quality treatment of §504 Water Quality Treatment shall apply upstream of the Isolated Waters of Lake County.

§1009 Mitigation Hierarchy for Waters of the United States and Isolated Waters of Lake County

1009.01 Mitigation Hierarchy

A. Size Requirements

1. If the required *mitigation* acreage is less than one and one-half (1.5) acres, mitigation requirements shall follow the mitigation hierarchy in 1009.01.B.2 through 1009.01.B.4. If on-site mitigation increases an existing on-site *wetland* size to greater than or equal to one and one-half (1.5) acres, the *applicant* may use the mitigation hierarchy in 1009.01.B.1.

2. If the required *mitigation* acreage is one and one-half (1.5) acres or greater, mitigation requirements shall follow the mitigation hierarchy in 1009.01.B.1 through 1009.01.B.4.

B. Hierarchy

All *mitigation* shall occur in Lake County. Mitigation shall use the following hierarchy. Allowance to the next lower step is permitted only when justified through sequencing specified in 1005.01L and 1005.01M or when the higher step is not available or as specified in 1009.01.B.4:

1. On-site *wetland mitigation* meeting the requirements of the project mitigation document.

2. In the same *watershed* as *wetland impact*: A U.S. Army Corps of Engineers Approved Wetland Mitigation Bank; or a SMC Approved Wetland Mitigation Bank; or off-site *wetland mitigation* meeting the requirements of the project mitigation document.

3. Outside of the *watershed* (at double the required *mitigation* acreage): A U.S. Army Corps of Engineers Approved Wetland Mitigation Bank; or a

SMC Approved Wetland Mitigation Bank; or off-site *wetland* mitigation meeting the requirements of the project mitigation document.

4. *SMC Wetland Restoration Fund*. This *mitigation* option may only be used for *wetland impacts* where there are no available mitigation credits within the *watershed* and the corresponding fees and mitigation ratios shall be charged at the 'in-watershed' rate.

Article 11: Inspections and Access

§1100 Access Authority

Representatives of the SMC and of any federal, state, and local unit of government are authorized to enter upon any land or water to *inspect* *development* activity and to verify the existing conditions of a development site that is currently under permit review.

§1101 Inspections

1101.01 The *Enforcement Officer* may *inspect* site *development* at any stage in the construction process. For major developments, the Enforcement Officer shall conduct site inspections, at a minimum, at the end of the construction stages 1101.02A and 1101.02G. Construction plans approved by the Enforcement Officer shall be maintained at the development site during progress of the work.

1101.02 The *Designated Erosion Control Inspector* (DECI) shall conduct inspections and document as described below, at a minimum, at the intervals in 1101.02A and 1101.02F, for those developments that require a Designated Erosion Control Inspector, until permanent stabilization and Enforcement Officer approval of appropriate as-built documentation and drawings.

A. Upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading.

B. After stripping and clearing.

C. After rough grading.

D. After final grading.

E. After seeding and landscaping deadlines.

F. After every seven (7) calendar days or storm event with greater than one-half (0.5) inch of rainfall or *liquid equivalent precipitation*.

G. After final stabilization and landscaping, prior to removal of sediment and erosion controls.

H. After removal of erosion and sediment controls.

1101.03 Designated Erosion Control Inspector inspections may be performed at a reduced frequency, at the discretion of the Enforcement Officer, for projects with a valid Watershed Development Permit, that are permanently stabilized, have submitted a Notice of Termination to IEPA, and are entering a prolonged period of inactivity. Designated Erosion Control Inspector inspections shall only be required after storm events with greater than one-half (0.5) inch of rainfall or *liquid equivalent precipitation*.

1101.04 If a *wetland* *mitigation* area is constructed as part of the *Watershed Development Permit*, the SMC or Isolated Waters of Lake County-Certified Community's *Certified Wetland Specialist* shall, at a minimum, perform the following inspections:

A. After final grading and before seeding or plant installation.

B. After seeding and plant installation.

C. Annual inspections during the 5-year monitoring and maintenance period.

§1102 Additional Protective Measures

1102.01 If at any stage of the grading of any *development* site the *Enforcement Officer* determines that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, *stream*, *lake*, wetland, or drainage structure, the Enforcement Officer may require, as a condition of allowing the work to be done, that such reasonable additional protective measures be taken as is considered advisable to avoid the likelihood of such peril. Additional protective measures may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, or cribbing, installation of plant materials for *erosion* control, and recommendations of a licensed soils engineer and/or engineering geologist which may be made requirements for further work.

1102.02 Where the *Enforcement Officer* determines that storm *damage* may result or has resulted because the grading on any *development* site is not complete, work may be stopped and the permittee required to install temporary structures or take such other measures as may be required to protect adjoining property or the public safety. On large developments or where unusual site conditions prevail, the Enforcement Officer may require that the operations be conducted in specific stages so as to ensure completion of protective measures or devices prior to the advent of seasonal rains.

§1103 Designated Erosion Control Inspector Responsibilities

The *Designated Erosion Control Inspector* (DECI) shall *inspect* the *development* site as specified in 1101.02 and 1101.03 and, at a minimum, perform the following:

1103.01 Keep a copy of the *Enforcement Officer*-approved soil erosion and sediment control plans at the *development* site at all times.

1103.02 Keep a written log of all inspections that shall contain, at a minimum, conditions of the soil erosion and sediment control measures and any corrective actions that need to be taken. The Designated Erosion Control Inspector log shall be kept at the *development* site at all times and shall be made available for inspection upon request of the *Enforcement Officer*.

1103.03 Notify the *Enforcement Officer* within 24 hours when the *development* site is determined to be not in compliance with this Ordinance or the approved soil erosion and sediment control plans and the proposed corrective measures to be taken.

1103.04 Recommend to the *applicant* additional soil erosion and sediment control prevention measures, if necessary, to reduce sediment leaving a *development*.

1103.05 For *development* requiring conformance with §602 Stormwater Quality Runoff Standards, the Designated Erosion Control Inspector is responsible for site runoff sampling and reporting requirements.

Article 12: Penalties and Legal Actions for Non-Compliance

§1200 Stop Work Order

Whenever an *Enforcement Officer* finds a violation of this Ordinance, or of any permit or order issued pursuant thereto, within their respective jurisdiction, the Enforcement Officer may issue a stop work order on *development* activity on the subject property or on the portion of the activity in direct violation of the Ordinance. In every case, the Enforcement Officer shall issue an order that: (1) describes the violation; (2) specifies the time period for remediation; and (3) requires compliance with this Ordinance prior to the completion of the activity in violation.

§1201 Fines

Failure to comply with any of the requirements of this Ordinance shall constitute a violation. Any violation thereof shall be subject to a fine of not more than one thousand ($1000.00) dollars for each violation. Each day the violation continues shall be considered a separate offense.

§1202 Legal Actions

1202.01 The SMC or *Certified Community* may also take any other legal action necessary to prevent or remedy any violation including appropriate equitable or injunctive relief and, if applicable, an assessment to the violator for the removal, correction, or termination of any adverse effects upon any property resulting from any unauthorized activity for which legal action under this section may have been brought.

1202.02 SMC or the *Certified Community* may record a notice of violation on the title to the property at the Lake County Recorder of Deeds Office.

1202.03 The *Enforcement Officer* shall inform the owner that any such violation is considered a willful act to increase *flood* damages and, therefore, may cause coverage by a Standard Flood Insurance Policy to be suspended.

1202.04 The SMC may enforce violations of this Ordinance in accordance with the Lake County Administrative Adjudication Ordinance.

Article 13: Variances

§1300 Administration

The *Enforcement Officer,* upon application, after hearing, and subject to the process and standards that follow, may grant variances to the provisions of this Ordinance as will not cause detriment to the public good, safety, or welfare nor be contrary to the spirit, purpose, and intent of this Ordinance where, by reason of unique and exceptional physical circumstances or condition of a particular property, the literal enforcement of the provisions of this Ordinance would result in an unreasonable hardship.

1300.01 In *communities* that have received both Standard and Isolated Wetland Certifications, the community's *Enforcement Officer* shall administer the variance provisions.

1300.02 In *communities* that have received only Standard Certification, the community's *Enforcement Officer* shall administer the variance provisions except for the Wetland provisions (Article 10: Wetland Requirements), which will be administered by the *SMC Chief Engineer*.

1300.03 For *development* requiring a *Watershed Development Permit* from the SMC, the *SMC Chief Engineer* shall administer the variance provisions.

1300.04 A public notice will be issued inviting public comment on proposed variances for major *developments*. In a *Certified Community,* a copy of the public notice shall be sent to the *SMC Chief Engineer* a minimum of thirty (30) days before the ruling to allow for SMC comment on the variance being issued. For variances under the administration of the SMC, the SMC shall send a copy of the public notice to the community a minimum of thirty (30) days before the ruling to allow for community comment

1300.05 Written findings shall be made public for variances and shall be on file with the SMC.

§1301 Variance Criteria

1301.01 Variances shall be granted only upon:

A. Showing of good and sufficient cause; and

B. A determination that the variance is the minimum necessary to afford relief, considering the *flood* hazard and water quality; and

C. A finding that failure to grant the variance would result in exceptional hardship to the *applicant*; and

D. A finding that the granting of a variance would not result in increased *flood* heights, additional threats to public safety, or extraordinary public expense, nor create nuisances, cause fraud, or victimization of the public, nor conflict with existing local laws or ordinances and that all *buildings* will be protected by methods that minimize flood *damage* below the *base flood elevation*; and

E. A finding that the *development* activity cannot be located outside the *Regulatory Floodplain*; and

F. A determination that the activity is not in a *Regulatory Floodway*. No variances shall be granted to any *development* located in a Regulatory Floodway. No variance shall be granted pertaining to 701.02 Development in the Regulatory

Floodplain Without Regulatory Floodway, §703 Regulatory Floodway Performance Standards, and §707 Bridge, Culvert Crossing, and Roadway Approach Performance Standards; and

G. The *applicant's* circumstances are unique and do not represent a general problem; and

H. The granting of the variance will not alter the essential character of the area involved including existing *stream* uses.

§1302 Conditions and Special Considerations

1302.01 Upon consideration of the factors noted in §1301 Variance Criteria and the intent of the Ordinance, the *Enforcement Officer* may attach such conditions to the granting of a variance deemed necessary to further the purposes and objectives herein.

1302.02 Variances requested in connection with restoration of a historic site or *building* listed on the National Register of Historical Places or documented as worthy of preservation by the Illinois Historic Preservation Agency may be granted using criteria more permissive than the requirements contained in Article 13: Variances.

1302.03 The *Enforcement Officer* shall notify an *applicant* in writing that a variance from the requirements of §706 Building Protection Requirements that would lessen the degree of protection to a *building* will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage, increase the risks to life and property, and require that the applicant will acknowledge in a signed exception to title the assumption of the risks and liability and will pay upon approval of the variance a recording fee above and beyond the usual permit review fee.

1302.04 In a *Regulatory Floodplain* without a *Regulatory Floodway* where the tributary *drainage area* is 640 acres or more, a variance may not be granted that will result in a loss of the Regulatory Floodplain storage of greater than 10% of the existing Regulatory Floodplain storage on the site.

1302.05 Variances requested in connection with the *redevelopment* of previously developed sites, that will further the public policy goals of downtown redevelopment and neighborhood revitalization, may be granted a variance provided the variance would not result in an increase in the pre-redevelopment runoff rate or volume and there will exist *adequate downstream stormwater capacity*. No variance shall be granted pertaining to Article 7: Regulatory Floodplain and Floodway Requirements.

1302.06 Due to the unique nature of *public road developments* occurring in a narrow right-of-way instead of an expansive tract of land, variances requested in connection with public road developments that will further the public policy of minimizing the condemnation of private or public property may be granted using criteria more permissive than the requirements of §1301 Variance Criteria to the minimum extent necessary to achieve the minimal amount of condemnation. No variances shall be granted pertaining to 701.02 Development in the Regulatory Floodplain Without Regulatory Floodway, §703 Regulatory Floodway Performance Standards, and §707 Bridge, Culvert Crossing, and Roadway Approach Performance Standards.

Article 14: Appeals

§1400 Appeal Process

1400.01 Any permit *applicant* aggrieved by the denial or conditions of a *Watershed Development Permit*, Earth Change Approval, Conditional Approval, or Variance by a *Certified Community's* *Enforcement Officer* may request review thereof by the Certified Community's board of elected officials or the appropriate body within thirty (30) days of the disputed act or actions.

1400.02 Any permit *applicant* aggrieved by a permit decision, the denial or conditions of a *Watershed Development Permit*, Earth Change Approval, Conditional Approval, or Variance by the *SMC Chief Engineer* may request review thereof by the SMC Director within thirty (30) days of the disputed act or actions.

1400.03 Any permit *applicant* aggrieved by a permit decision, the denial or conditions of a *Watershed Development Permit*, Earth Change Approval, Conditional Approval, or Variance by the SMC Director may appeal it to the SMC by written notice filed with the SMC Director within thirty (30) days of the disputed act or actions.

Article 15: Disclaimer of Liability

It is recognized that although the degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations, on occasions greater floods can and will occur, and *flood* heights may be increased by man-made or *natural* causes. These provisions do not imply that land outside the flood-plain areas or that uses permitted within such areas will be free from flooding or flood damages. These provisions shall not create liability on the part of the *Stormwater Management Commission* nor any *Certified Community* nor any officer or employee thereof for any claims, damages, or liabilities that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

Article 16: Separability

The provisions of this Ordinance shall be deemed separable and the invalidity of any portion of this Ordinance shall not affect the validity of the remainder.

Article 17: Abrogation and Greater Restrictions

This Ordinance is not intended to repeal, abrogate, or impair any existing deed or plat restrictions. Where this Ordinance and other ordinance *deed or plat restrictions* conflict or overlap, whichever imposes the more stringent restrictions shall prevail. This Ordinance is intended to repeal the original Ordinance or resolution which was adopted to meet the National Flood Insurance Program regulations, but is not intended to repeal the resolution which the *community* passed in order to establish initial eligibility for the program.

Appendix A: Definitions

adequate downstream stormwater capacity: A *stormwater management system* shall be considered to have adequate downstream stormwater capacity if the system can be shown to store or convey up to and including the 100-year stormwater runoff without increasing *damage* to adjoining properties or to a point downstream known to the *Enforcement Officer* to be a restriction causing significant backwater.

agricultural practices: These practices include: normal farming, silviculture, and ranching activities such as gardening, plowing, seeding, cultivating, harvesting for the production of food, fiber, forest products, nursery stock, and livestock; maintenance of agricultural drain tiles, irrigation and drainage ditches; maintenance of farm roads and other access areas for farm vehicles and equipment use.

applicant: Any person, firm, or governmental agency who owns property or the duly appointed representative that wishes to develop that property and one who executes the necessary forms to procure permit to carry out such *development* from the SMC or Certified Community.

Appropriate Use: Only uses of the *Regulatory Floodway* that are permissible and will be considered for permit issuance. The only uses that will be allowed are as specified in §703 Regulatory Floodway Performance Standards.

as-built drawings: See *record drawings*.

base flood: The *flood* having a one percent (1%) probability of being equaled or exceeded in any given year. The base flood is also known as the 100-year frequency flood event. Application of the *base flood elevation* at any location is as defined in §700 Location of Regulatory Floodplain, Base Flood Elevation, and Regulatory Floodway of this Ordinance.

base flood elevation(BFE): The elevation delineating the level of flooding resulting from the 100-year flood frequency storm event.

basement: Any area of a building having its floor subgrade (below grade level) on all sides.

basin: Sub-*watershed* areas within Lake County that include the Fox River mainstem (including the Chain O' Lakes), Flint Creek, Tower Lake Drain, Slocum Drain, Mutton Creek, Squaw Creek, Fish Lake Drain, Sequoit Creek, the Des Plaines River mainstem, South Mill Creek, North Mill Creek, Newport Drainage Ditch, Bull Creek, Indian Creek, Aptakisic Creek, Buffalo Creek, Skokie River, Middle Fork-North Branch Chicago River, West Fork-North Branch Chicago River, Kellogg Creek, Dead River, Waukegan River, Pettibone Creek, and Lake Michigan Bluff/Ravines.

basin plan: A study and evaluation of an individual drainage basin's stormwater management and flood control needs.

building: A *structure* that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a *manufactured home*, mobile home, or a prefabricated building. This term also includes recreational vehicles and travel trailers to be installed on a site for more than 180 days.

buffer: An area of predominantly vegetated land to be left open, adjacent to drainageways, *wetlands*, *lakes*, ponds, or other surface waters for the purpose of eliminating or minimizing adverse impacts to such areas.

by-pass: To route tributary *drainage area* runoff around and not through a stormwater control structure.

Certified Community: A community which has petitioned the SMC and has been found by the SMC to be capable of enforcing an ordinance (or ordinances) which contain stormwater and *Regulatory Floodplain* management rules and regulations which are consistent with, or at least as stringent as these of, this Lake County Watershed Development Ordinance.

Certified Wetland Specialist: Person meeting the minimum requirements of A., B., C., and D., as follows:

A. Provide a one (1) page statement of qualifications in the areas noted below. The signed statement will be considered as evidence of qualifications.

B. Pass the Certified Wetland Specialist Exam.

C. Completion of a SMC-approved *wetland* delineation course and meet the requirements of one (1) of the following:

   1. Registered Professional Wetland Scientist (PWS) from the Society of Wetland Scientists; or

   2. Minimum of a Bachelor's Degree in an Earth Science or Biologic Science and at least one (1) of the following: Three (3) years (cumulative) full-time experience in the Upper Midwest Region on *wetland*-related projects; or the completion of one hundred (100) wetland delineations in the Upper Midwest; or a minimum of three hundred (300) hours spent in field review of wetlands in the Upper Midwest; or

   3. Six (6) years (cumulative) full-time experience in the Upper Midwest Region on wetland-related projects.

D. Recertification as a Certified Wetland Specialist shall be required every three (3) years through the SMC. A minimum of twenty-four (24) work-related professional development hours including SMC mandatory training for this type of certification shall be obtained within the three-year period in order to qualify for recertification. Documentation shall be self-monitoring and shall be provided to SMC upon application of certification or recertification.

channel: Any river, *stream*, creek, brook, branch, *natural* or artificial depression, ponded area, *lake*, flowage, slough, ditch, conduit, culvert, gully, ravine, *swale*, wash, or natural or man-made drainageway, in or into which surface or groundwater flows, either perennially or intermittently.

channel modification: Alteration of a channel by changing the physical dimensions or materials of its bed or banks. Channel modification includes damming, rip-rapping or other armoring, widening, deepening, straightening, relocating, and lining and significant removal of bottom or woody vegetation of the channel. Channel modification does not include the clearing of dead or dying vegetation, debris, or trash from the channel.

community: Any municipality, as defined in state statute [65 ILCS 5/1-1-2], or the unincorporated county within Lake County acting as a unit of local government.

compensatory storage: A volume of storage created to offset the loss or displacement of flood storage capacity due to a development activity.

conditional approval Regulatory Floodway map change: Pre-construction approval by the *IDNR/OWR* and the Federal Emergency Management Agency of a proposed change to the

Regulatory Floodway map and/or BFE. This pre-construction approval, pursuant to this Part, gives assurance to the property owner that once an *Appropriate Use* is constructed according to permitted plans, the Regulatory Floodway map and/or BFE can be changed, as previously agreed, upon review and acceptance of as-built plans.

Conditional Letter of Map Revision (CLOMR): A letter which indicated that the Federal Emergency Management Agency will revise *base flood elevations*, flood insurance rate zones, flood boundaries, or *Regulatory Floodway* and/or BFE as shown on an effective Flood Hazard Boundary Map or *Flood Insurance Rate Map*, once the as-built plans are submitted and approved.

control structure: A structure designed to control the rate of flow that passes through the structure, given a specific upstream and downstream water surface elevation.

critical duration: The design storm duration for a given frequency storm which produces the greatest peak flow, volume, or stage by analyzing all durations presented in Appendix I: Rainfall Depth Duration Frequency Tables for Lake County.

dam: All obstructions, wall embankments, or barriers, together with their abutments and appurtenant works, if any, constructed for the purpose of storing or diverting water or creating a pool. Underground water storage tanks are not included.

damage: A measurable rise in *flood* heights on property currently subject to flooding, flooding of property currently not subject to flooding unless it is contained within the streambanks or a deed or plat restricted area, or increases in velocity to the point where the rate of land lost to *erosion* and scour is significantly increased.

deed or plat restriction: Permanent easements, covenants, deed restricted open spaces, outlots, reserved plat areas, and conservation easements dedicated to meet the requirements of this Ordinance, or public road rights-of-way that contain any part of the *stormwater management system* of a *development*.

depressional storage areas: Non-riverine depressions where stormwater collects.

design storm: A selected storm event, described in terms of the probability of occurring once within a given number of years, for which stormwater or *flood* control improvements are designed and built.

Designated Erosion Control Inspector: A person responsible for, at a minimum, verifying compliance and on-going maintenance of the approved soil erosion and sediment control plan measures of a *development* and who is recommended to meet the minimum qualification requirements of A., B., C., and D., as follows:

A. Provide a one (1) page statement of qualifications in the areas noted below and a request to be included on the SMC Designated Erosion Control Inspector qualified listing. The signed statement will be considered as evidence of qualifications.

B. Pass the *Designated Erosion Control Inspector Exam* that is administered by the SMC.

C. Complete a SMC-approved soil erosion and sediment control course and meet the requirements of one (1) of the following:

   1. Have an official designation as a Certified Professional in Erosion and Sediment Control (CPESC) or Certified Erosion, Sediment and Stormwater Inspector (CESSWI); or

2. Two (2) years cumulative experience in the Upper Midwest Region on soil erosion and sediment control inspections.

D. The listing of Designated Erosion Control Inspectors shall be officially updated every three (3) years by the SMC. Continuing education requirements shall be as follows:

1. Attendance at each annual DECI training seminars shall be sufficient for the three-year listing period.

2. Alternatively, DECIs must attend twenty-four (24) hours of work-related professional development hours within the three-year period for relisting.

E. Documentation shall be self-monitoring and shall be provided to SMC upon application for listing.

Designated Erosion Control Inspector Exam: An exam that is formally adopted and administered by the Lake County *Stormwater Management Commission* to establish minimum qualifications for an individual to be listed as a *Designated Erosion Control Inspector* by the SMC.

detention facility: A man-made structure for the temporary storage of stormwater runoff with controlled release during or immediately following a storm.

Detention Volume Safety Factor: A multiplication factor applied to a *development's* detention volume when the *detention facility* is constructed on-stream.

development: Completion of a final plat, replat, or man-made change to private or public real estate including:

A. Construction, *reconstruction*, repair, or placement of a building or any addition to a building;

B. Installation of a *manufactured home* on a site, preparation of a site for a manufactured home, or the placement of a recreational vehicle on a site for more than 180 days;

C. Drilling, mining, installation of utilities, construction of roads, bridges, or similar projects;

D. Clearing of land as an adjunct of construction;

E. Construction or erection of levees, walls, fences, *dams*, or culverts; *channel modification*; filling, dredging, grading, excavating, paving, or other alterations of the ground surface; storage of materials; deposit of solid or liquid waste;

F. Any other activity that might change the direction, height, volume, or velocity of *flood* or surface water, including the drainage of *wetlands* and removal of vegetation to the extent such that the wetland would no longer meet the criteria of supporting *hydrophytic vegetation* as defined in this Ordinance except that which would be considered appropriate for management purposes.

Development does not include maintenance of existing buildings and facilities such as resurfacing of roadways when the road elevation is not increased, or gardening, plowing, and similar agriculture practices that do not involve filling, grading, or construction of levees. Nor does development include agriculture practices outside of the *Regulatory Floodplain* involving filling or grading as part of a Natural Resources Conservation Service designed and approved conservation project (i.e., terraces, grass waterways). Additionally, development does not include fence installation, pole placement, drilling, or other minor auxiliary construction activity which does

not affect stormwater runoff rates or volumes as long as the development activity is not located in a Regulatory Floodplain, wetland, or channel.

dominant: For the purpose of this Ordinance, a dominant plant species is one that comprises greater than 50% of the vegetative layer. The vegetative layer is defined as a subunit of a plant community in which all component species exhibit the same growth form (e.g., trees, saplings, shrubs, herbs).

drain tile: A conduit, such as corrugated plastic tubing, clay tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water.

drainage area: The land area above a given point that contributes stormwater to that point.

dry detention facility: A dry detention facility is a *detention facility* designed to drain completely after temporary storage of stormwater flows and to normally be dry over the majority of its bottom area.

elevation certificate: A form published by the Federal Emergency Management Agency that is used to certify the elevation to which a building has been constructed.

emergency overflow: The structure in a *stormwater management system* designed to protect the system in the event of a malfunction of the primary flow structure or a storm event greater than the system design. The emergency overflow capacity initiates at the facility design high water level or *base flood elevation*.

Enforcement Officer: A person meeting the requirements of 201.02K and designated as follows:

A. Within *communities* that have received Standard Certification, the Enforcement Officer shall be a person designated in writing by the community for the purpose of permitting *development*, and administering and enforcing all of the provisions of this Ordinance except as noted in Article 13: Variances.

B. Within *communities* that have not received Standard Certification, the Enforcement Officer shall be the *SMC Chief Engineer*.

C. Recertification as an Enforcement Officer shall be required every three (3) years through the SMC. A minimum of twenty-four (24) work-related professional development hours including SMC mandatory training for this type of certification shall be obtained within the three-year period in order to qualify for recertification. Documentation shall be self-monitoring and shall be provided to SMC upon application of certification or recertification.

erosion: The process whereby soil is removed by precipitation, flowing water, wave action, or wind.

farmed wetland: *Wetlands* that are farmed currently, or have been farmed within five (5) years previous to the permit application date, as defined in 7 CFR Part 12 (61 FR 47025).

fee-in-lieu of on-site stormwater storage: A fee assessed to a permit *applicant* used to contribute to the cost of a basin plan or *floodplain study* components; or other stormwater system improvements, “in-lieu-of” constructing on-site detention or for *compensatory storage* requirements for streambank and shoreline restoration fills of less than two hundred (200) cubic yards.

FEMA: Federal Emergency Management Agency and its regulations codified as 44 CFR 59-79 effective as of October 1, 1986.

flood: A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waves, or the unusual and rapid accumulation of runoff of surface waters from any source.

flood frequency: A period of years, based on a statistical analysis, during which a *flood* of a stated magnitude may be expected to be equaled or exceeded.

Flood Insurance Rate Maps (FIRM): A map prepared by the Federal Emergency Management Agency or HUD that depicts the *Special Flood Hazard Area* (SFHA) within a *community*. This map includes insurance rate zones and *Regulatory Floodplains* and may or may not depict *Regulatory Floodways*.

floodplain (regulatory): See *Regulatory Floodplain*.

floodplain management: An overall program of corrective and preventive measures for avoiding or reducing future *flood damage*.

floodplain study: A study, formally adopted by the SMC, excluding *base flood* determinations performed for a specific *development* site, that examines, analyzes, evaluates, or determines the hydraulic and hydrologic characteristics of *flood* hazards for a *basin* or partial basin area. To be used as a regulatory instrument the study shall, at a minimum, meet the *FEMA* criteria specified in Guidelines and Specifications for Flood Hazard Mapping Partners, most current version.

flood-prone area: Any area inundated by the *base flood*.

Flood Protection Elevation (FPE): The elevation of the *base flood elevation* plus two (2) feet of *freeboard*.

flood-proofing: Any combination of structural and non-structural additions, changes, or adjustments to structures or property which reduce or eliminate *flood damage* to real estate or improved real property, water and sanitary facilities, structures, and their contents.

flood-proofing certificate: A form published by the Federal Emergency Management Agency that is used to certify that a building has been designed and constructed to be structurally dry flood-proofed to the *Flood Protection Elevation*.

flood table land: The land area immediately adjacent to *flood-prone areas* with greater than one hundred (100) acres of tributary *drainage area*, the elevation of which is greater than the *base flood elevation* by two (2) feet or less.

floodway (regulatory): See *Regulatory Floodway*.

forested wetland: A *wetland* area with thirty percent (30%) or greater areal coverage of trees. Trees refer to woody plants that are greater than three (3) inches in diameter at breast height (DBH) and with a height of greater than twenty (20) feet.

freeboard: An increment of height added to the *base flood elevation* to provide a factor of safety for uncertainties in calculations, unknown local conditions, wave actions, and unpredictable effects such as those caused by ice or debris jams.

functional assessment: An assessment of a *wetland's* flood storage, water quality, and other beneficial functions.

green infrastructure: Any stormwater management technique or practice that reduces runoff volume through preserving, restoring, utilizing, or enhancing the processes of infiltration, evapotranspiration, and reuse. Approaches may include green roofs, naturalized detention facilities, trees and tree boxes, rain gardens, vegetated swales, wetlands, infiltration planters, porous and permeable pavements, porous piping systems, dry wells, vegetated median strips, reforestation/revegetation, rain barrels and cisterns, and protection and enhancement of riparian buffers and floodplains.

high-quality aquatic resources (HQAR): *Waters of the United States* or *Isolated Waters of Lake County* that are determined to be critical due to their uniqueness, scarcity, function, and/or value as defined in Appendix L: High-Quality Aquatic Resources of this Ordinance.

historic structure: A "Historic Structure" is any *structure* that is:

A. Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

C. Individually listed on the State inventory of historic places by the Illinois Historic Preservation Agency; or

D. Individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency.

hydraulically equivalent compensatory storage: *Compensatory storage* placed between the proposed normal water elevation and the proposed 100-year flood elevation. All storage lost or displaced below the existing 10-year flood elevation is replaced below the proposed 10-year flood elevation. All storage lost or displaced above the existing 10-year flood elevation is replaced above the proposed 10-year flood elevation. The additional compensatory storage required beyond a 1:1 ratio may be placed at any elevation between normal water level and the base flood elevation.

hydrologic and hydraulic calculations: Engineering analysis which determines expected *flood* flows and flood elevations based on land characteristics and rainfall events.

hydric soil: A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

hydrologically disturbed: An area where the land surface has been cleared, grubbed, compacted, or otherwise modified to alter stormwater runoff, volumes, rates, flow direction, or inundation duration.

hydrophytic vegetation: Plant life growing in water, soil, or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

IDNR/OWR: Illinois Department of Natural Resources, Office of Water Resources, previously known as IDOT/DWR.

illicit discharge: Any discharge or dumping of material into the *stormwater management system* or a flood-prone area that is not composed entirely of stormwater, except for discharges allowed under NPDES Permit No. ILR40 Part I.B.2.

Illinois Urban Manual: The Natural Resources Conservation Service Illinois Urban Manual. A technical manual designed for urban ecosystem protection and enhancement. This manual contains design guidance for a *development* site to meet the Watershed Development Ordinance performance standards for soil *erosion* and sediment control.

impervious surface: Any hard-surfaced, man-made area that does not readily absorb or retain water, including, but not limited to, building roofs, parking and driveway areas, graveled areas, sidewalks, and paved recreation areas.

in-kind replacement (culvert): An in-kind culvert replacement has an equivalent cross-sectional area, shape, roughness coefficient, and inlet and outlet elevations; or the replacement may be shown to have an equivalent hydraulic capacity using appropriate engineering calculations.

inspect: To visit, to review plans, or to oversee a site visit or plan review per generally accepted engineering practices.

Isolated Waters of Lake County: All waters such as *lakes*, ponds, streams, *farmed wetlands*, and wetlands that are not under U.S. Army Corps of Engineers jurisdiction. The limits of the Isolated Waters of Lake County extend to the *ordinary high water mark* or the delineated *wetland* boundary.

A. The following are excluded from Isolated Waters of Lake County, as determined by the Enforcement Officer
    1. Excavations and impoundments that have received a permit from the appropriate jurisdictional authority.
    2. Excavations and impoundments permitted by right, prior to being a regulated activity, within 40% or more non-hydric soils. Areas designated as 'water' as depicted on the Soil Survey of Lake County, SCS, 1970 are determined as either hydric or non-hydric soils by connecting adjoining soil boundaries to create complete polygons of the depicted soil type.
    3. Wetlands created incidental to construction grading on development sites.
    4. *Roadside ditches*.
B. The following shall not be considered as meeting the exclusion criteria in Section A. of this definition:
    1. All areas meeting the definition of *high-quality aquatic resources.*
    2. Wetland *mitigation* areas created to meet the requirements of this Ordinance or Section 404 of the Clean Water Act.
    3. Wetland areas created or restored using public funds.

lake: A *natural* or artificial body of water encompassing an area of two (2) or more acres which retains water throughout the year.

Letter of Map Amendment (LOMA): Official determination by *FEMA* that a specific *structure* is not in a *Special Flood Hazard Area*; amends the effective Flood Hazard Boundary Map (FHBM) or *Flood Insurance Rate Map* (FIRM).

Letter of Map Revision (LOMR): Letter issued by *FEMA* or *IDNR/OWR* that revises *base flood elevations*, flood insurance rate zones, flood boundaries, or *Regulatory Floodways* as shown on an effective FHBM or FIRM.

Letter of No Impact (LONI): Written confirmation from SMC or Isolated Wetland Certified Community that no wetland impacts will occur from a proposed development, based on a review of plans or other applicable information provided by the applicant as specified in this Ordinance.

liquid equivalent precipitation: The amount of precipitation, including any frozen precipitation in its melted state (e.g., snow, sleet, freezing rain). With varying densities of frozen precipitation, the liquid equivalent precipitation indicates the actual amount of water that falls in a storm event, regardless of the type of precipitation.

low opening elevation: The elevation at which water could enter a *structure* through any non-watertight opening such as a doorway threshold, a window sill, or a *basement* window well.

lowest adjacent grade: The lowest finished grade adjacent to a *structure*, not including the bottom of window wells.

lowest floor: Lowest floor of the lowest enclosed area, including *basement*. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, or building access in an area other than a basement area is not considered a building's lowest floor, provided that the requirements of 706.01B.2 are met.

maintainable outlet: A stormwater conveyance system (such as a storm sewer or overland flow path) that provides positive drainage to a *natural* watercourse or *stormwater management system*. The natural watercourse or stormwater management system shall have *adequate downstream stormwater capacity*. Stormwater management systems shall be within a recorded drainage easement or right-of-way.

manufactured home: A *structure*, transportable in one or more sections, which is built on a permanent chassis and is designated for use with or without a permanent foundation when connected to the required utilities. The term manufactured homes also include park trailers, recreational vehicles, and other similar vehicles installed on-site for more than 180 consecutive days.

manufactured home park or subdivision: A parcel (or contiguous parcels) of land divided into two (2) or more *manufactured home* lots for rent or sale.

maximum extent practicable (MEP): For the purposes of this Ordinance, the maximum extent practicable (MEP) is defined as the highest level of runoff volume reduction (RVR) that is achievable for the development as determined by the applicant and approved by the Enforcement Officer (see Appendix O: Runoff Volume Reduction for runoff volume reduction quantities). The MEP RVR quantitative standard for the development shall not be required to exceed the minimum performance standards identified in 503.02. For public road developments, the MEP shall not necessitate the need to acquire right-of-way or deed and plat restricted areas outside of the right-of-way.

In making the determination that the RVR quantitative standard for the development is the MEP, the following objectives should be considered, when applicable, including, but not limited to:

A. Prevention or reduction of existing, adjacent flood-related problems.

B. Examination of adequate downstream capacity from the development.

C. Preservation of existing wetland hydrology.

D. Protection of adjacent streams from degradation due to increased volumes and prolonged bankfull flows.

E. Minimization of off-site water quality impacts.

F. Enhancement of aquifer recharge on-site.

G. Evaluation of geographic features of the site (e.g., topography, soil structure, natural resources).

H. Utilization of best available and feasible technology.

I. Maximization of the performance of the design.

J. Provide for sustainability through maintenance and management of the installed practices.

mitigation: Measures taken to eliminate or minimize *damage* from *development* activities, such as construction in *wetlands* or *Regulatory Floodplain* filling, by replacement of the resource.

NAVD 88: North American Vertical Datum of 1988. Sepersedes NGVD29, effective September 18, 2013.

NGVD: National Geodetic Vertical Datum of 1929. Superseded by NAVD 88, effective September 18, 2013.

natural: When used in reference to streams and channels means those streams and channels formed by the existing surface topography of the earth prior to changes made by man. A modified *stream* and channel which has regained natural characteristics over time as it meanders and reestablishes vegetation may be considered natural.

non-riverine Regulatory Floodplain: *Regulatory Floodplains* not associated with streams, creeks, or rivers, such as isolated *depressional storage areas* or *lakes*.

on-stream detention: Any *detention facility* that has off-site tributary *drainage area*.

open waters: Permanently inundated *Isolated Waters of Lake County* that are greater than three (3) feet in depth below the normal water level or normal pool elevation.

ordinary high water mark: The point on the bank or shore at which the presence and movement of surface waters are continuous so as to leave a distinctive mark, such as by *erosion*, destruction, or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other such recognized characteristics.

overland flow path: An area of land which conveys stormwater for all events up to and including the *base flood* event. The overland flow path can be estimated using readily available topographic information and shall take into account all on-site and off-site tributary areas in accordance with 501.04.

ownership parcel: Any legally described parcel of land. This includes contiguous lots or parcels of land, owned in whole, or in part, by the same property owner.

Parcel Identification Number (PIN): Permanent index number used to identify properties for tax assessment.

pond: A *natural* or artificial body of water of less than two (2) acres which retains water year round.

public body of water: All open public rivers, streams, and *lakes* specifically designated by *IDNR/OWR* in Appendix F: Public Bodies of Water in Lake County of this Ordinance that are capable of being navigated by water craft, in whole or in part, for commercial uses and purposes, or which in their *natural* condition were capable of being improved and made navigable, or that are connected with or discharged their waters into navigable lakes or rivers within, or upon, the borders of the State of Illinois, together with all bayous, sloughs, backwaters, lakes that are open to the main channel or body of water and directly accessible thereto.

public flood control project: A *flood* control project within a deed or plat restricted area, which will be operated and maintained by a public agency to reduce flood damages to existing *buildings* or structures. A land stewardship not-for-profit corporation, or similar entity, may also own, operate, or maintain a public flood control project. In this circumstance, there shall also be an executed agreement with a public agency to take over ownership, operation, or maintenance if the corporation dissolves or fails to meet the operation and maintenance requirements for the project area. The project shall include a hydrologic and hydraulic study of the existing and proposed conditions of the *watershed* area affected by the project. Nothing in this definition shall preclude the design, engineering, construction, or financing, in whole or in part, of a flood control project by persons or parties who are not public agencies.

public road development: Any *development* activities which take place in a public right-of-way or part thereof that is administered and funded, in whole or in part, by a public agency under its respective roadway jurisdiction. *Rehabilitative maintenance* and in-kind replacement are considered to be a public road development if located in a *Regulatory Floodplain*. A public road development located within a *Regulatory Floodway* and which has been approved by the Illinois Department of Transportation, Division of Highways (IDOT/DOH), Bureau of Local Roads and Streets is exempt from the hydraulic analysis requirements of this Ordinance. Individual recreation trail systems being constructed that are not part of another development project and linear railroad development projects shall be considered public road developments with respect to the requirements of this Ordinance.

reconstruction: The act of rebuilding a *structure*.

record drawings: Construction drawings revised to show significant changes made during the construction process, usually based on marked-up prints, drawings, and other data furnished by the contractor to the *Enforcement Officer*.

Registered Professional Engineer: An engineer registered in the State of Illinois, under the Professional Engineer Practice Act of 1989, [225 ILCS 325/1-49].

Regulatory Floodplain: Regulatory Floodplains may be either *riverine* or *non-riverine* depressional areas. Floodplain boundaries shall be delineated by projecting the *base flood elevation* onto the best available topography and by superimposing the Special Flood Hazard Area onto the base map. A *flood-prone area* is a Regulatory Floodplain if it meets any of the following descriptions:

A. Any riverine area inundated by the *base flood* where there is at least 640 acres of tributary *drainage area*.

B. Any non-riverine area with a storage volume of 0.75 acre-foot or more when inundated by the *base flood*.

C. Any area indicated as a *Special Flood Hazard Area* on the *FEMA Flood Insurance Rate Map* or Letter of Map Revision.

Regulatory Floodway: The channel, including on-stream *lakes*, and that portion of the *Regulatory Floodplain* adjacent to a *stream* or channel as designated by the Illinois Department of Natural Resources, Office of Water Resources, which is needed to store and convey the existing and anticipated future 100-year frequency flood discharge with no more than a 0.1 foot increase in stage due to the loss of flood conveyance or storage, and no more than a 10% increase in velocities. The location of the Regulatory Floodway shall be as delineated on the maps listed in Appendix C: FEMA Flood Insurance Study Maps and Profiles. Where interpretation is needed to determine the exact location of the Regulatory Floodway boundary, the *IDNR/OWR* should be contacted for the interpretation.

rehabilitative maintenance (roadway): Rehabilitative maintenance is repair or maintenance that does not increase the traffic lanes and does not involve changes to the roadway elevation.

repair, remodeling, or maintenance: Activities which do not result in any increases in the outside dimensions of a building or any changes to the dimensions of a *structure*.

repetitive loss: *Flood*-related damages sustained by a *structure* on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

retention facilities: A facility designed to completely retain a specified amount of stormwater runoff without release except by means of evaporation, infiltration, or pumping.

riverine: Relating to, formed by, or resembling a *stream* (including creeks and rivers).

roadside ditches: Drainage ditches within twenty-five (25) feet from the edge of the outside travel lane.

sedimentation: The process that deposits soils, debris, and other materials either on other ground surfaces or in bodies of water or watercourses.

SMC-approved wetland bank: A *wetland mitigation* bank approved by the SMC that conforms with Appendix M: SMC-Approved Wetland Mitigation Banking Requirements of this Ordinance.

SMC Chief Engineer: A *Registered Professional Engineer* representing the Lake County Stormwater Management Commission as the *Enforcement Officer* of the Watershed Development Ordinance.

SMC Wetland Restoration Fund: A fund that is administered and implemented for *wetland impact mitigation* that is approved and adopted by the SMC.

Special Flood Hazard Area (SFHA): Any area subject to inundation by the *base flood* from a river, creek, *stream*, or any other identified channel or ponding and shown on the *Regulatory Floodplain* map as listed in Appendix B: SMC Regulatory Floodplain Maps and Profiles and Appendix C: FEMA Flood Insurance Study Maps and Profiles.

stormwater management: A set of actions taken to control stormwater runoff with the objectives of providing controlled surface drainage, *flood* control, and pollutant reduction in runoff.

Stormwater Management Commission (SMC): The Lake County Stormwater Management Commission established and existing under state statute [55 ILCS 5/5-1062] for the purposes of developing, revising, and implementing a countywide *stormwater management* plan.

stormwater management system: The collection of *natural* features and man-made facilities which define the *stormwater management* for a *development*.

stream: A course of running water flowing in a channel (includes creeks and rivers).

structure: The results of a man-made change to the land constructed on or below the ground, including the construction, *reconstruction,* or placement of a building or any addition to a building; installing a *manufactured home* on a site; preparing a site for a manufactured home; or installing a recreational vehicle on a site for more than 180 days.

substantial damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

substantial improvement: Any repair, *reconstruction*, rehabilitation, addition, or improvement of a *structure* which increases the total building floor area by more than 75% of the structure's first floor area or the cost of which equals or exceeds 50% of the market value of the current structure before the start of construction. This term includes structures which have incurred a *repetitive loss* or substantial damage, regardless of the actual repair work performed. For the purposes of this definition, "start of construction" is considered to occur when the first qualifying improvement, as described in FEMA Publication 480 National Flood Insurance Program Flood Management Requirements, commences or when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. This term includes all cumulative improvements within the last ten (10) years. The term does not, however, include either:

A. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or

B. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

swale: A vegetated channel, ditch, or low-lying or depressional tract of land that is periodically inundated by conveying stormwater from one point to another.

transition section: Reaches of the *stream* or *Regulatory Floodway* where water flows from a narrow cross-section to a wide cross-section or vice-versa.

water dependent: Structures or facilities relating to the use of, or requiring access to, the water or shoreline. Examples of water dependent uses include, but are not limited to, pumping facilities, wastewater treatment facilities, facilities and improvements related to recreation boating or commercial shipping.

watershed: The land area above a given point on a channel that contributes stormwater to that point. In Lake County, the four major watersheds are officially defined as: the Lake Michigan Watershed, the North Branch of the Chicago River Watershed, the Des Plaines River Watershed, and the Fox River Watershed.

watershed benefit: A decrease in *flood* damages to structures upstream or downstream of the *development* site created by installation of the *stormwater management system*. The benefit

must be beyond the benefit provided by meeting the minimum Watershed Development Ordinance standards and TRM guidance.

Watershed Development Permit: A permit established by this Ordinance and issued, through the SMC or Certified Communities, prior to the approval of a building permit signifying conformance with provisions of this Ordinance.

Waters of the United States: For the purpose of this Ordinance, the term Waters of the United States refers to those water bodies and *wetland* areas that are under the U.S. Army Corps of Engineers jurisdiction.

wet detention facility: A wet detention facility is designed to maintain a permanent pool of water after the temporary storage of stormwater runoff.

wetland: A wetland is a specific type of *natural* or man-made drainageway as follows: Wetlands are land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, under normal conditions, a prevalence of vegetation adapted for life in saturated soil conditions (known as *hydrophytic vegetation*). A wetland is identified based upon the three attributes: 1) hydrology, 2) soils, and 3) vegetation as mandated by the current Federal wetland determination methodology.

wetland impact: *Isolated Waters of Lake County* or Waters of the U.S. that are *hydrologically disturbed* or otherwise adversely affected by flooding, filling, excavation, or drainage which results from implementation of a *development* activity.

Appendix B: SMC Regulatory Floodplain Maps and Profiles

Community	Waterway	Map Type	Map Date	Description

Appendix C: FEMA Flood Insurance Study Maps and Profiles

COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
ANTIOCH	170358#	September 18, 2013	17097C0010 K	February 17, 2016
		September 18, 2013	17097C0026 K	February 17, 2016
		September 18, 2013	17097C0027 K	February 17, 2016
		September 18, 2013	17097C0028 K	February 17, 2016
		September 18, 2013	17097C0029 K	February 17, 2016
		September 18, 2013	17097C0032 K	February 17, 2016
		September 18, 2013	17097C0034 K	February 17, 2016
		September 18, 2013	17097C0035 K	February 17, 2016
		September 18, 2013	17097C0055 K	February 17, 2016
BANNOCKBURN	170359#	September 18, 2013	17097C0259 K	February 17, 2016
		September 18, 2013	17097C0267 K	February 17, 2016
		September 18, 2013	17097C0278 K	February 17, 2016
		September 18, 2013	17097C0286 K	February 17, 2016
BARRINGTON HILLS	170058#	September 18, 2013	17097C0215 K	February 17, 2016
		September 18, 2013	17097C0216 K	February 17, 2016
		September 18, 2013	17097C0217 K	February 17, 2016
		September 18, 2013	17097C0219 K	February 17, 2016
BARRINGTON	170057#	September 18, 2013	17097C0216 K	February 17, 2016
		September 18, 2013	17097C0217 K	February 17, 2016
		September 18, 2013	17097C0219 K	February 17, 2016
		September 18, 2013	17097C0236 K	February 17, 2016
		September 18, 2013	17097C0238 K	February 17, 2016
BEACH PARK	171022#	September 18, 2013	17097C0059 K	February 17, 2016
		September 18, 2013	17097C0067 K	February 17, 2016
		September 18, 2013	17097C0069 K	February 17, 2016
		September 18, 2013	17097C0078 K	February 17, 2016
		September 18, 2013	17097C0086 K	February 17, 2016
		September 18, 2013	17097C0087 K	February 17, 2016
		September 18, 2013	17097C0088 K	February 17, 2016
		September 18, 2013	17097C0089 K	February 17, 2016
BUFFALO GROVE	170068#	September 18, 2013	17097C0253 K	February 17, 2016
		September 18, 2013	17097C0254 K	February 17, 2016
		September 18, 2013	17097C0261 K	February 17, 2016
		September 18, 2013	17097C0262 K	February 17, 2016
		September 18, 2013	17097C0263 K	February 17, 2016
		September 18, 2013	17097C0264 K	February 17, 2016
		September 18, 2013	17097C0266 K	February 17, 2016
		September 18, 2013	17097C0270 K	February 17, 2016
DEERFIELD	170361#	September 18, 2013	17097C0267 K	February 17, 2016
		September 18, 2013	17097C0270 K	February 17, 2016
		September 18, 2013	17097C0278 K	February 17, 2016
		September 18, 2013	17097C0286 K	February 17, 2016
		September 18, 2013	17097C0287 K	February 17, 2016
		September 18, 2013	17097C0288 K	February 17, 2016
		September 18, 2013	17097C0289 K	February 17, 2016

COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
DEER PARK	171028#	September 18, 2013	17097C0217 K	February 17, 2016
		September 18, 2013	17097C0236 K	February 17, 2016
		September 18, 2013	17097C0237 K	February 17, 2016
		September 18, 2013	17097C0238 K	February 17, 2016
		September 18, 2013	17097C0241 K	February 17, 2016
FOX LAKE	170362#	September 18, 2013	17097C0004 K	February 17, 2016
		September 18, 2013	17097C0010 K	February 17, 2016
		September 18, 2013	17097C0012 K	February 17, 2016
		September 18, 2013	17097C0014 K	February 17, 2016
		September 18, 2013	17097C0019 K	February 17, 2016
		September 18, 2013	17097C0020 K	February 17, 2016
		September 18, 2013	17097C0106 K	February 17, 2016
		February 17, 2016	17097C0107 L	February 17, 2016
FOX RIVER GROVE	170477#	September 18, 2013	10797C0205 K	February 17, 2016
GRAYSLAKE	170363#	September 18, 2013	17097C0043 K	February 17, 2016
		September 18, 2013	17097C0044 K	February 17, 2016
		February 17, 2016	17097C0129 L	February 17, 2016
		February 17, 2016	17097C0131 L	February 17, 2016
		September 18, 2013	17097C0132 K	February 17, 2016
		February 17, 2016	17097C0133 L	February 17, 2016
		September 18, 2013	17097C0134 K	February 17, 2016
		February 17, 2016	17097C0137 L	February 17, 2016
		February 17, 2016	17097C0141 L	February 17, 2016
		September 18, 2013	17097C0142 K	February 17, 2016
		September 18, 2013	17097C0151 K	February 17, 2016
		September 18, 2013	17097C0153 K	February 17, 2016
GREEN OAKS	170364#	September 18, 2013	17097C0158 K	February 17, 2016
		September 18, 2013	17097C0159 K	February 17, 2016
		September 18, 2013	17097C0166 K	February 17, 2016
		September 18, 2013	17097C0167 K	February 17, 2016
		September 18, 2013	17097C0168 K	February 17, 2016
		September 18, 2013	17097C0169 K	February 17, 2016
GURNEE	170365#	September 18, 2013	17097C0044 K	February 17, 2016
		September 18, 2013	17097C0063 K	February 17, 2016
		September 18, 2013	17097C0064 K	February 17, 2016
		September 18, 2013	17097C0068 K	February 17, 2016
		September 18, 2013	17097C0069 K	February 17, 2016
		September 18, 2013	17097C0132 K	February 17, 2016
		September 18, 2013	17097C0151 K	February 17, 2016
		September 18, 2013	17097C0152 K	February 17, 2016
		September 18, 2013	17097C0153 K	February 17, 2016
		September 18, 2013	17097C0154 K	February 17, 2016
		September 18, 2013	17097C0156 K	February 17, 2016
		September 18, 2013	17097C0157 K	February 17, 2016
HAINESVILLE	171005#	February 17, 2016	17097C0127 L	February 17, 2016
		February 17, 2016	17097C0129 L	February 17, 2016
		February 17, 2016	17097C0131 L	February 17, 2016
		February 17, 2016	17097C0133 L	February 17, 2016

HAWTHORN WOODS	170366#	February 17, 2016	17097C0139 L	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
HAWTHORN WOODS	170366#	February 17, 2016	17097C0143 L	February 17, 2016
		September 18, 2013	17097C0226 K	February 17, 2016
		February 17, 2016	17097C0227 L	February 17, 2016
		September 18, 2013	17097C0228 K	February 17, 2016
		September 18, 2013	17097C0229 K	February 17, 2016
		September 18, 2013	17097C0231 K	February 17, 2016
		September 18, 2013	17097C0232 K	February 17, 2016
		September 18, 2013	17097C0233 K	February 17, 2016
		September 18, 2013	17097C0234 K	February 17, 2016
HIGHLAND PARK	170367#	September 18, 2013	17097C0277 K	February 17, 2016
		September 18, 2013	17097C0278 K	February 17, 2016
		September 18, 2013	17097C0279 K	February 17, 2016
		September 18, 2013	17097C0283 K	February 17, 2016
		September 18, 2013	17097C0285 K	February 17, 2016
		September 18, 2013	17097C0286 K	February 17, 2016
		September 18, 2013	17097C0287 K	February 17, 2016
		September 18, 2013	17097C0289 K	February 17, 2016
		September 18, 2013	17097C0291 K	February 17, 2016
		September 18, 2013	17097C0293 K	February 17, 2016
		September 18, 2013	17097C0295 K	February 17, 2016
HIGHWOOD	171033#	September 18, 2013	17097C0279 K	February 17, 2016
		September 18, 2013	17097C0283 K	February 17, 2016
INDIAN CREEK	170369#	September 18, 2013	17097C0251 K	February 17, 2016
ISLAND LAKE	170370#	September 18, 2013	17097C0112 K	February 17, 2016
		September 18, 2013	17097C0114 K	February 17, 2016
		September 18, 2013	17097C0116 K	February 17, 2016
		September 18, 2013	17097C0118 K	February 17, 2016
KILDEER	170371#	September 18, 2013	17097C0233 K	February 17, 2016
		September 18, 2013	17097C0234 K	February 17, 2016
		September 18, 2013	17097C0237 K	February 17, 2016
		September 18, 2013	17097C0241 K	February 17, 2016
LAKE BARRINGTON	170372#	September 18, 2013	17097C0118 K	February 17, 2016
		September 18, 2013	17097C0205 K	February 17, 2016
		September 18, 2013	17097C0206 K	February 17, 2016
		September 18, 2013	17097C0207 K	February 17, 2016
		September 18, 2013	17097C0208 K	February 17, 2016
		September 18, 2013	17097C0209 K	February 17, 2016
		September 18, 2013	17097C0215 K	February 17, 2016
		September 18, 2013	17097C0216 K	February 17, 2016
LAKE BLUFF	170373#	September 18, 2013	17097C0167 K	February 17, 2016
		September 18, 2013	17097C0169 K	February 17, 2016
		September 18, 2013	17097C0186 K	February 17, 2016
		September 18, 2013	17097C0188 K	February 17, 2016
		September 18, 2013	17097C0190 K	February 17, 2016
LAKE COUNTY UNINCORPORATED AREAS	170357#	DFIRM PANEL NUMBERS LISTED SEPARATELY AT END OF APPENDIX		
LAKE FOREST	170374#	September 18, 2013	17097C0169 K	February 17, 2016
		September 18, 2013	17097C0188 K	February 17, 2016

		September 18, 2013	17097C0190 K	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LAKE FOREST	170374#	September 18, 2013	17097C0257 K	February 17, 2016
		September 18, 2013	17097C0259 K	February 17, 2016
		September 18, 2013	17097C0276 K	February 17, 2016
		September 18, 2013	17097C0277 K	February 17, 2016
		September 18, 2013	17097C0278 K	February 17, 2016
		September 18, 2013	17097C0279 K	February 17, 2016
		September 18, 2013	17097C0285 K	February 17, 2016
LAKE VILLA	170375#	September 18, 2013	17097C0028 K	February 17, 2016
		September 18, 2013	17097C0029 K	February 17, 2016
		September 18, 2013	17097C0035 K	February 17, 2016
		September 18, 2013	17097C0036 K	February 17, 2016
		September 18, 2013	17097C0037 K	February 17, 2016
		September 18, 2013	17097C0038 K	February 17, 2016
		September 18, 2013	17097C0039 K	February 17, 2016
		September 18, 2013	17097C0041 K	February 17, 2016
		September 18, 2013	17097C0043 K	February 17, 2016
LAKE ZURICH	170376#	February 17, 2016	17097C0227 L	February 17, 2016
		September 18, 2013	17097C0228 K	February 17, 2016
		September 18, 2013	17097C0229 K	February 17, 2016
		September 18, 2013	17097C0233 K	February 17, 2016
		September 18, 2013	17097C0236 K	February 17, 2016
		September 18, 2013	17097C0237 K	February 17, 2016
		September 18, 2013	17097C0241 K	February 17, 2016
LAKEMOOR	170915#	September 18, 2013	17097C0102 K	February 17, 2016
		September 18, 2013	17097C0104 K	February 17, 2016
		September 18, 2013	17097C0106 K	February 17, 2016
		September 18, 2013	17097C0108 K	February 17, 2016
LIBERTYVILLE	170377#	September 18, 2013	17097C0134 K	February 17, 2016
		September 18, 2013	17097C0142 K	February 17, 2016
		September 18, 2013	17097C0161 K	February 17, 2016
		September 18, 2013	17097C0162 K	February 17, 2016
		September 18, 2013	17097C0163 K	February 17, 2016
		September 18, 2013	17097C0164 K	February 17, 2016
		September 18, 2013	17097C0166 K	February 17, 2016
		September 18, 2013	17097C0168 K	February 17, 2016
		September 18, 2013	17097C0252 K	February 17, 2016
LINCOLNSHIRE	170378#	September 18, 2013	17097C0254 K	February 17, 2016
		September 18, 2013	17097C0257 K	February 17, 2016
		September 18, 2013	17097C0258 K	February 17, 2016
		September 18, 2013	17097C0259 K	February 17, 2016
		September 18, 2013	17097C0262 K	February 17, 2016
		September 18, 2013	17097C0266 K	February 17, 2016
		September 18, 2013	17097C0267 K	February 17, 2016
LINDENHURST	170379#	September 18, 2013	17097C0035 K	February 17, 2016
		September 18, 2013	17097C0041 K	February 17, 2016
		September 18, 2013	17097C0042 K	February 17, 2016
		September 18, 2013	17097C0044 K	February 17, 2016
LONG GROVE	170380#	September 18, 2013	17097C0144 K	February 17, 2016

		September 18, 2013	17097C0231 K	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LONG GROVE	170380#	September 18, 2013	17097C0232 K	February 17, 2016
		September 18, 2013	17097C0233 K	February 17, 2016
		September 18, 2013	17097C0234 K	February 17, 2016
		September 18, 2013	17097C0241 K	February 17, 2016
		September 18, 2013	17097C0242 K	February 17, 2016
		September 18, 2013	17097C0251 K	February 17, 2016
		September 18, 2013	17097C0253 K	February 17, 2016
		September 18, 2013	17097C0254 K	February 17, 2016
		September 18, 2013	17097C0261 K	February 17, 2016
		September 18, 2013	17097C0263 K	February 17, 2016
METTAWA	170381#	September 18, 2013	17097C0164 K	February 17, 2016
		September 18, 2013	17097C0168 K	February 17, 2016
		September 18, 2013	17097C0169 K	February 17, 2016
		September 18, 2013	17097C0252 K	February 17, 2016
		September 18, 2013	17097C0256 K	February 17, 2016
		September 18, 2013	17097C0257 K	February 17, 2016
MUNDELEIN	170382#	February 17, 2016	17097C0139 L	February 17, 2016
		February 17, 2016	17097C0141 L	February 17, 2016
		September 18, 2013	17097C0142 K	February 17, 2016
		February 17, 2016	17097C0143 L	February 17, 2016
		September 18, 2013	17097C0144 K	February 17, 2016
		September 18, 2013	17097C0161 K	February 17, 2016
		September 18, 2013	17097C0163 K	February 17, 2016
		September 18, 2013	17097C0164 K	February 17, 2016
		September 18, 2013	17097C0232 K	February 17, 2016
		September 18, 2013	17097C0251 K	February 17, 2016
NORTH BARRINGTON	170383#	September 18, 2013	17097C0207 K	February 17, 2016
		September 18, 2013	17097C0208 K	February 17, 2016
		September 18, 2013	17097C0209 K	February 17, 2016
		September 18, 2013	17097C0217 K	February 17, 2016
		September 18, 2013	17097C0226 K	February 17, 2016
		September 18, 2013	17097C0228 K	February 17, 2016
		September 18, 2013	17097C0236 K	February 17, 2016
NORTH CHICAGO	170384#	September 18, 2013	17097C0159 K	February 17, 2016
		September 18, 2013	17097C0167 K	February 17, 2016
		September 18, 2013	17097C0180 K	February 17, 2016
		September 18, 2013	17097C0186 K	February 17, 2016
		September 18, 2013	17097C0190 K	February 17, 2016
OLD MILL CREEK	170385#	September 18, 2013	17097C0034 K	February 17, 2016
		September 18, 2013	17097C0042 K	February 17, 2016
		September 18, 2013	17097C0044 K	February 17, 2016
		September 18, 2013	17097C0055 K	February 17, 2016
		September 18, 2013	17097C0061 K	February 17, 2016
		September 18, 2013	17097C0062 K	February 17, 2016
		September 18, 2013	17097C0063 K	February 17, 2016
		September 18, 2013	17097C0064 K	February 17, 2016
PARK CITY	170386#	September 18, 2013	17097C0156 K	February 17, 2016
		September 18, 2013	17097C0157 K	February 17, 2016

		September 18, 2013	17097C0159 K	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
PORT BARRINGTON	170478#	September 18, 2013	17097C0114 K	February 17, 2016
		September 18, 2013	17097C0118 K	February 17, 2016
		September 18, 2013	17097C0205 K	February 17, 2016
		September 18, 2013	17097C0206 K	February 17, 2016
RIVERWOODS	170387#	September 18, 2013	17097C0259 K	February 17, 2016
		September 18, 2013	17097C0266 K	February 17, 2016
		September 18, 2013	17097C0267 K	February 17, 2016
		September 18, 2013	17097C0270 K	February 17, 2016
		September 18, 2013	17097C0286 K	February 17, 2016
ROUND LAKE BEACH	170389#	September 18, 2013	17097C0038 K	February 17, 2016
		September 18, 2013	17097C0039 K	February 17, 2016
		September 18, 2013	17097C0043 K	February 17, 2016
		February 17, 2016	17097C0126 L	February 17, 2016
		February 17, 2016	17097C0127 L	February 17, 2016
		February 17, 2016	17097C0131 L	February 17, 2016
ROUND LAKE HEIGHTS	170390#	September 18, 2013	17097C0038 K	February 17, 2016
ROUND LAKE PARK	170391#	February 17, 2016	17097C0127 L	February 17, 2016
		February 17, 2016	17097C0129 L	February 17, 2016
		February 17, 2016	17097C0133 L	February 17, 2016
		February 17, 2016	17097C0137 L	February 17, 2016
		February 17, 2016	17097C0141 L	February 17, 2016
ROUND LAKE	170388#	February 17, 2016	17097C0107 L	February 17, 2016
		February 17, 2016	17097C0109 L	February 17, 2016
		February 17, 2016	17097C0126 L	February 17, 2016
		February 17, 2016	17097C0127 L	February 17, 2016
		February 17, 2016	17097C0128 L	February 17, 2016
		February 17, 2016	17097C0129 L	February 17, 2016
		February 17, 2016	17097C0136 L	February 17, 2016
		February 17, 2016	17097C0137 L	February 17, 2016
THIRD LAKE	170392#	September 18, 2013	17097C0043 K	February 17, 2016
		September 18, 2013	17097C0044 K	February 17, 2016
		September 18, 2013	17097C0132 K	February 17, 2016
		September 18, 2013	17097C0151 K	February 17, 2016
TOWER LAKES	170393#	September 18, 2013	17097C0206 K	February 17, 2016
		September 18, 2013	17097C0207 K	February 17, 2016
VERNON HILLS	170394#	September 18, 2013	17097C0163 K	February 17, 2016
		September 18, 2013	17097C0164 K	February 17, 2016
		September 18, 2013	17097C0251 K	February 17, 2016
		September 18, 2013	17097C0252 K	February 17, 2016
		September 18, 2013	17097C0253 K	February 17, 2016
		September 18, 2013	17097C0254 K	February 17, 2016
		September 18, 2013	17097C0256 K	February 17, 2016
		September 18, 2013	17097C0258 K	February 17, 2016
VOLO	171042#	September 18, 2013	17097C0106 K	February 17, 2016
		February 17, 2016	17097C0107 L	February 17, 2016
		September 18, 2013	17097C0108 K	February 17, 2016
		February 17, 2016	17097C0109 L	February 17, 2016
		September 18, 2013	17097C0116 K	February 17, 2016

		February 17, 2016	17097C0117 L	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
WADSWORTH	170395#	September 18, 2013	17097C0055 K	February 17, 2016
		September 18, 2013	17097C0056 K	February 17, 2016
		September 18, 2013	17097C0057 K	February 17, 2016
		September 18, 2013	17097C0058 K	February 17, 2016
		September 18, 2013	17097C0059 K	February 17, 2016
		September 18, 2013	17097C0062 K	February 17, 2016
		September 18, 2013	17097C0064 K	February 17, 2016
		September 18, 2013	17097C0066 K	February 17, 2016
		September 18, 2013	17097C0067 K	February 17, 2016
		September 18, 2013	17097C0068 K	February 17, 2016
WAUCONDA	170396#	September 18, 2013	17097C0116 K	February 17, 2016
		February 17, 2016	17097C0117 L	February 17, 2016
		September 18, 2013	17097C0118 K	February 17, 2016
		September 18, 2013	17097C0119 K	February 17, 2016
		February 17, 2016	17097C0136 L	February 17, 2016
		February 17, 2016	17097C0138 L	February 17, 2016
		September 18, 2013	17097C0206 K	February 17, 2016
		September 18, 2013	17097C0207 K	February 17, 2016
WAUKEGAN	170397#	September 18, 2013	17097C0066 K	February 17, 2016
		September 18, 2013	17097C0067 K	February 17, 2016
		September 18, 2013	17097C0068 K	February 17, 2016
		September 18, 2013	17097C0069 K	February 17, 2016
		September 18, 2013	17097C0086 K	February 17, 2016
		September 18, 2013	17097C0087 K	February 17, 2016
		September 18, 2013	17097C0088 K	February 17, 2016
		September 18, 2013	17097C0089 K	February 17, 2016
		September 18, 2013	17097C0095 K	February 17, 2016
		September 18, 2013	17097C0154 K	February 17, 2016
		September 18, 2013	17097C0156 K	February 17, 2016
		September 18, 2013	17097C0157 K	February 17, 2016
		September 18, 2013	17097C0158 K	February 17, 2016
		September 18, 2013	17097C0159 K	February 17, 2016
		September 18, 2013	17097C0166 K	February 17, 2016
		September 18, 2013	17097C0177 K	February 17, 2016
		September 18, 2013	17097C0180 K	February 17, 2016
		September 18, 2013	17097C0185 K	February 17, 2016
WHEELING	170173#	September 18, 2013	17097C0264 K	February 17, 2016
		September 18, 2013	17097C0270 K	February 17, 2016
WINTHROP HARBOR	170398#	September 18, 2013	17097C0076 K	February 17, 2016
		September 18, 2013	17097C0077 K	February 17, 2016
		September 18, 2013	17097C0078 K	February 17, 2016
		September 18, 2013	17097C0079 K	February 17, 2016
		September 18, 2013	17097C0081 K	February 17, 2016
ZION	170399#	September 18, 2013	17097C0057 K	February 17, 2016
		September 18, 2013	17097C0059 K	February 17, 2016
		September 18, 2013	17097C0076 K	February 17, 2016
		September 18, 2013	17097C0077 K	February 17, 2016
		September 18, 2013	17097C0078 K	February 17, 2016

		September 18, 2013	17097C0079 K	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
ZION	170399#	September 18, 2013	17097C0081 K	February 17, 2016
		September 18, 2013	17097C0085 K	February 17, 2016
		September 18, 2013	17097C0086 K	February 17, 2016
		September 18, 2013	17097C0087 K	February 17, 2016
LAKE COUNTY UNINCORPORATED AREAS	170357#	September 18, 2013	17097C0004 K	February 17, 2016
		September 18, 2013	17097C0010 K	February 17, 2016
		September 18, 2013	17097C0012 K	February 17, 2016
		September 18, 2013	17097C0014 K	February 17, 2016
		September 18, 2013	17097C0019 K	February 17, 2016
		September 18, 2013	17097C0020 K	February 17, 2016
		September 18, 2013	17097C0026 K	February 17, 2016
		September 18, 2013	17097C0027 K	February 17, 2016
		September 18, 2013	17097C0028 K	February 17, 2016
		September 18, 2013	17097C0029 K	February 17, 2016
		September 18, 2013	17097C0032 K	February 17, 2016
		September 18, 2013	17097C0034 K	February 17, 2016
		September 18, 2013	17097C0035 K	February 17, 2016
		September 18, 2013	17097C0036 K	February 17, 2016
		September 18, 2013	17097C0037 K	February 17, 2016
		September 18, 2013	17097C0038 K	February 17, 2016
		September 18, 2013	17097C0039 K	February 17, 2016
		September 18, 2013	17097C0041 K	February 17, 2016
		September 18, 2013	17097C0042 K	February 17, 2016
		September 18, 2013	17097C0043 K	February 17, 2016
		September 18, 2013	17097C0044 K	February 17, 2016
		September 18, 2013	17097C0055 K	February 17, 2016
		September 18, 2013	17097C0056 K	February 17, 2016
		September 18, 2013	17097C0057 K	February 17, 2016
		September 18, 2013	17097C0058 K	February 17, 2016
		September 18, 2013	17097C0059 K	February 17, 2016
		September 18, 2013	17097C0061 K	February 17, 2016
		September 18, 2013	17097C0062 K	February 17, 2016
		September 18, 2013	17097C0063 K	February 17, 2016
		September 18, 2013	17097C0064 K	February 17, 2016
		September 18, 2013	17097C0066 K	February 17, 2016
		September 18, 2013	17097C0067 K	February 17, 2016
		September 18, 2013	17097C0068 K	February 17, 2016
		September 18, 2013	17097C0069 K	February 17, 2016
		September 18, 2013	17097C0076 K	February 17, 2016
		September 18, 2013	17097C0077 K	February 17, 2016
		September 18, 2013	17097C0078 K	February 17, 2016
		September 18, 2013	17097C0079 K	February 17, 2016
		September 18, 2013	17097C0081 K	February 17, 2016
		September 18, 2013	17097C0085 K	February 17, 2016
		September 18, 2013	17097C0086 K	February 17, 2016
		September 18, 2013	17097C0087 K	February 17, 2016
		September 18, 2013	17097C0088 K	February 17, 2016
		September 18, 2013	17097C0089 K	February 17, 2016

		September 18, 2013	17097C0095 K	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LAKE COUNTY UNINCORPORATED AREAS	170357#	September 18, 2013	17097C0102 K	February 17, 2016
		September 18, 2013	17097C0104 K	February 17, 2016
		September 18, 2013	17097C0106 K	February 17, 2016
		February 17, 2016	17097C0107 L	February 17, 2016
		September 18, 2013	17097C0108 K	February 17, 2016
		February 17, 2016	17097C0109 L	February 17, 2016
		September 18, 2013	17097C0112 K	February 17, 2016
		September 18, 2013	17097C0114 K	February 17, 2016
		September 18, 2013	17097C0116 K	February 17, 2016
		February 17, 2016	17097C0117 L	February 17, 2016
		September 18, 2013	17097C0118 K	February 17, 2016
		September 18, 2013	17097C0119 K	February 17, 2016
		February 17, 2016	17097C0126 L	February 17, 2016
		February 17, 2016	17097C0127 L	February 17, 2016
		February 17, 2016	17097C0128 L	February 17, 2016
		February 17, 2016	17097C0129 L	February 17, 2016
		February 17, 2016	17097C0131 L	February 17, 2016
		September 18, 2013	17097C0132 K	February 17, 2016
		February 17, 2016	17097C0133 L	February 17, 2016
		September 18, 2013	17097C0134 K	February 17, 2016
		February 17, 2016	17097C0136 L	February 17, 2016
		February 17, 2016	17097C0137 L	February 17, 2016
		February 17, 2016	17097C0138 L	February 17, 2016
		February 17, 2016	17097C0139 L	February 17, 2016
		February 17, 2016	17097C0141 L	February 17, 2016
		September 18, 2013	17097C0142 K	February 17, 2016
		February 17, 2016	17097C0143 L	February 17, 2016
		September 18, 2013	17097C0144 K	February 17, 2016
		September 18, 2013	17097C0151 K	February 17, 2016
		September 18, 2013	17097C0152 K	February 17, 2016
		September 18, 2013	17097C0153 K	February 17, 2016
		September 18, 2013	17097C0154 K	February 17, 2016
		September 18, 2013	17097C0156 K	February 17, 2016
		September 18, 2013	17097C0157 K	February 17, 2016
		September 18, 2013	17097C0158 K	February 17, 2016
		September 18, 2013	17097C0159 K	February 17, 2016
		September 18, 2013	17097C0161 K	February 17, 2016
		September 18, 2013	17097C0162 K	February 17, 2016
		September 18, 2013	17097C0163 K	February 17, 2016
		September 18, 2013	17097C0164 K	February 17, 2016
		September 18, 2013	17097C0166 K	February 17, 2016
		September 18, 2013	17097C0167 K	February 17, 2016
		September 18, 2013	17097C0168 K	February 17, 2016
		September 18, 2013	17097C0169 K	February 17, 2016
		September 18, 2013	17097C0177 K	February 17, 2016
		September 18, 2013	17097C0180 K	February 17, 2016
		September 18, 2013	17097C0185 K	February 17, 2016
		September 18, 2013	17097C0186 K	February 17, 2016

		September 18, 2013	17097C0188 K	February 17, 2016
COMMUNITY NAME	COMMUNITY MEMBER	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)	LAKE COUNTY DFIRM PANEL NUMBERS	EFFECTIVE FIS STUDY DATE
LAKE COUNTY UNINCORPORATED AREAS	170357#	September 18, 2013	17097C0190 K	February 17, 2016
		September 18, 2013	17097C0205 K	February 17, 2016
		September 18, 2013	17097C0206 K	February 17, 2016
		September 18, 2013	17097C0207 K	February 17, 2016
		September 18, 2013	17097C0208 K	February 17, 2016
		September 18, 2013	17097C0209 K	February 17, 2016
		September 18, 2013	17097C0215 K	February 17, 2016
		September 18, 2013	17097C0216 K	February 17, 2016
		September 18, 2013	17097C0217 K	February 17, 2016
		September 18, 2013	17097C0226 K	February 17, 2016
		February 17, 2016	17097C0227 L	February 17, 2016
		September 18, 2013	17097C0228 K	February 17, 2016
		September 18, 2013	17097C0229 K	February 17, 2016
		September 18, 2013	17097C0231 K	February 17, 2016
		September 18, 2013	17097C0232 K	February 17, 2016
		September 18, 2013	17097C0233 K	February 17, 2016
		September 18, 2013	17097C0234 K	February 17, 2016
		September 18, 2013	17097C0236 K	February 17, 2016
		September 18, 2013	17097C0237 K	February 17, 2016
		September 18, 2013	17097C0241 K	February 17, 2016
		September 18, 2013	17097C0242 K	February 17, 2016
		September 18, 2013	17097C0251 K	February 17, 2016
		September 18, 2013	17097C0252 K	February 17, 2016
		September 18, 2013	17097C0253 K	February 17, 2016
		September 18, 2013	17097C0254 K	February 17, 2016
		September 18, 2013	17097C0256 K	February 17, 2016

Appendix D: Total Suspended Solids Background Levels for Lake County Water Bodies

Lake County, Illinois Lakes Total Suspended Solids Concentrations (TSS in mg/L)

All data collected by the Lake County Health Department Lakes Management Unit (2000-2004)

All samples collected at a lake depth less than or equal to 3 feet

	SAMPLE	AVERAGE	MINIMUM	MAXIMUM
LAKE NAME	YEAR	TSS mg/L	TSS mg/L	TSS mg/L
ADID 127	2004	74.8	31.8	111.0
ADID 182	2004	111.0	111.0	111.0
ADID 203	2004	4.1	1.1	8.7
Albert Lake (Site 1 and Site 2)	2001	62.9	20.4	124.0
Ames Pit	2000	3.3	1.3	4.8
Antioch Lake	2001	15.2	8.0	21.0
Bangs Lake	2002	3.4	1.3	5.4
Big Bear Lake	2002	14.1	9.3	18.0
Bishop Lake	2004	14.3	2.6	30.7
Bittersweet Golf Course #13	2004	17.0	5.4	24.0
Bluff Lake	2002	10.2	5.0	18.0
Bresen Lake	2000	11.2	4.9	16.0
Broberg Marsh	2000	9.6	5.4	11.0
Buffalo Creek Reservoir	2001	34.7	21.0	58.6
Butler Lake	2001	2.1	1.9	2.5
Cedar Lake	2003	2.2	1.0	4.0
Channel Lake (Site 1 and Site 3)	2002	6.0	<1.0	9.0
College Trail Lake	2004	12.4	9.3	16.3
Columbus Park Lake	2000	19.0	7.9	26.0
Countryside Glen Lake	2004	6.7	4.3	7.9
Countryside Lake	2000	9.9	1.4	22.0
Cranberry Lake	2000	1.2	0.6	2.0
Crooked Lake	2001	13.7	9.4	17.0
Cross Lake	2003	2.2	1.3	3.3
Davis Lake	2000	2.1	1.0	3.2
Deep Lake	2003	2.4	<1.0	3.3
Deer Lake	2000	2.5	0.9	6.6
Deer Lake Meadow Lake	2004	23.2	16.0	35.0
Diamond Lake	2002	5.9	4.1	9.5
Dog Bone Lake	2004	39.4	26.2	66.0
Dog Pond	2001	1.4	<1.0	1.7
Druce Lake	2001	2.2	1.6	3.6
Drummond Lake	2002	52.1	27.0	93.1
Duck Lake	2001	20.6	6.1	31.0
Dugdale Lake	2003	2.2	1.2	4.0
Dunns Lake	2002	27.5	16.0	40.4
Eagle Lake (Site 1 and Site 2)	2002	11.5	<1.0	22.0

	SAMPLE	AVERAGE	MINIMUM	MAXIMUM
LAKE NAME	YEAR	TSS mg/L	TSS mg/L	TSS mg/L
East Loon Lake	2003	4.1	3.1	5.6
East Meadow Lake	2004	11.4	9.2	17.0
Echo Lake	2000	9.7	6.0	18.0
Fairfield Marsh	2003	81.6	19.0	165.0
Fischer Lake	2001	15.4	8.9	19.6
Fish Lake	2002	11.3	3.1	19.0
Flint Lake (Site 1 and Site 2)	2003	31.8	10.0	69.6
Forest Lake	2000, 03, 04	14.3	5.0	27.7
Fourth Lake	2000	1.8	0.6	3.0
Fox Lake (Site 1 and Site 3)	2002	30.8	21.0	43.0
Gages Lake	2003	7.0	4.2	11.0
Grand Avenue Marsh	2004	13.2	7.8	22.0
Grandwood Park Lake (Site 1 and Site 2)	2000	13.2	5.0	27.0
Grass Lake (Site 1 and Site 2)	2002	43.1	27.0	73.0
Grassy Lake	2000	27.1	16.0	43.2
Gray's Lake	2002	2.9	<1.0	3.5
Half Day Pit	2003	21.3	14.0	26.0
Harvey Lake	2000	19.8	14.0	28.0
Hastings Lake	2001	7.6	6.0	12.0
Hendrick Lake	2000, 04	3.4	2.0	5.4
Heron Pond	2004	1.8	1.5	2.3
Hidden Lake	2002	74.0	52.0	106.0
Highland Lake	2001	3.3	2.4	4.9
Honey Lake	2001	1.8	1.1	2.5
Hook Lake	2004	5.1	2.9	8.5
Independence Grove Lake	2000	3.5	2.5	4.2
International Mine and Chemical Lake	2003	4.4	1.8	8.1
Island Lake	2003	14.9	5.7	29.4
Lake Barrington	2001	9.6	0.2	18.0
Lake Carina	2001	3.4	2.2	4.7
Lake Catherine (Site 1 and Site 3)	2002	6.0	<1.0	16.0
Lake Charles	2000	16.3	9.0	27.2
Lake Christa	2004	8.2	2.2	18.0
Lake Eleanor (Site 1 and Site 2)	2001	32.4	12.0	54.0
Lake Fairfield	2000	5.1	2.0	8.8
Lake Fairview	2000	4.9	1.6	8.4
Lake Farmington	2004	21.2	11.0	34.0
Lake Forest Pond	2003	54.1	17.7	73.8
Lake Holloway	2002	14.6	1.6	31.0
Lake Kathyrn	2004	2.1	1.1	3.9
Lake Lakeland Estates	2000	8.2	1.4	14.0
Lake Leo	2001	2.3	1.0	4.8

	SAMPLE	AVERAGE	MINIMUM	MAXIMUM
LAKE NAME	YEAR	TSS mg/L	TSS mg/L	TSS mg/L
Lake Linden	2002	2.3	1.1	3.7
Lake Louise (Site 1 and Site 2)	2003	22.6	8.8	49.1
Lake Marie (Site 1 and Site 3)	2002	15.1	7.0	20.0
Lake Matthews	2002	21.2	9.9	31.0
Lake Miltmore	2003	4.7	2.4	6.4
Lake Minear	2002	1.6	1.1	2.2
Lake Naomi	2001	5.0	2.9	7.1
Lake Napa Suwe (Site 1 and Site 2)	2002	51.9	25.0	122.0
Lake of the Hollow	2000	1.8	1.2	2.4
Lake Tranquility (Site 1 and Site 2)	2002	10.8	1.2	24.0
Lake Zurich	2002	4.9	2.7	7.5
Lakewood Marsh	2004	4.3	1.6	8.5
Lambs Farm Lake	2003	5.1	2.9	9.4
Leisure Lake	2000	11.5	3.5	17.0
Liberty Lake	2001	8.3	6.0	11.0
Little Bear Lake	2002	8.3	3.7	11.0
Little Silver Lake	2003	1.8	1.3	2.5
Loch Lomond Lake	2004	13.2	4.3	21.8
Lochanora Lake	2004	2.8	<1.0	4.4
Long Lake	2001	9.7	6.3	11.9
Longview Meadow Lake	2004	25.1	20.2	31.6
Lucky Lake	2001	8.1	4.3	15.5
Lucy Lake	2004	12.4	7.6	18.0
Mary Lee Lake	2004	3.5	2.3	5.4
McDonald Lake 1	2003	13.7	3.3	29.3
McDonald Lake 2	2003	70.1	58.8	84.0
McGreal Lake	2002	3.9	1.2	6.3
Nielsen Pond	2001	4.0	1.9	8.2
Nippersink Lake (Site 1 and Site 2)	2002	40.1	25.0	59.0
North Churchill Lake	2003	77.2	54.5	134.0
North Tower Lake	2001	2.8	0.7	6.1
Oak Hills Lake	2004	64.1	42.0	88.3
Old Oak Lake	2003	3.6	2.7	3.9
Old School Lake	2003	1.7	1.0	2.8
Owens Lake	2000	11.0	2.0	31.0
Patski Pond (Site 1 and Site 2)	2004	46.3	13.9	98.5
Peterson Pond	2001	3.8	1.7	8.5
Petite Lake	2002	12.8	9.0	15.0
Pistakee Lake (Site 1 and Site 3)	2002	33.9	10.0	57.0
Pond-a-Rudy	2001	26.0	1.1	50.2
Potomac Lake	2000	3.9	1.0	6.4
Pulaski Pond	2003	1.9	1.1	3.2

	SAMPLE	AVERAGE	MINIMUM	MAXIMUM
LAKE NAME	YEAR	TSS mg/L	TSS mg/L	TSS mg/L
Rasmussen Lake	2001	22.8	9.6	54.9
Redhead Lake	2002	36.8	18.0	68.0
Redwing Marsh	2003	28.2	11.0	50.0
Redwing Slough (Site 1 and Site 2)	2000	4.4	0.5	7.3
Rivershire Pond 2	2004	14.9	8.5	21.6
Round Lake	2003	3.5	2.6	4.5
Round Lake Marsh North	2004	20.2	<1.0	54.3
Salem Lake	2000	16.5	3.4	28.0
Sand Lake	2004	3.3	1.7	5.2
Sand Pond	2000	1.6	0.6	2.8
Schreiber Lake	2003	3.1	<1.0	4.5
Seven Acre Lake	2003	6.3	3.4	12.0
Slocum Lake	2001	39.2	24.6	48.0
Slough Lake	2000	33.8	16.0	61.0
South Churchill Lake	2003	43.6	29.0	51.7
Spring Lake	2002	12.8	8.0	18.0
St. Mary's Lake	2002	11.8	8.5	15.7
Sterling Lake	2003	3.0	2.3	3.7
Stockholm Lake	2004	10.6	2.2	29.5
Stone Quarry Lake	2004	3.5	1.7	6.8
Sullivan Lake	2002	5.2	2.9	9.7
Summerhill Estates Lake	2004	6.1	2.7	10.0
Sun Lake	2001	2.4	1.3	4.3
Sylvan Lake	2001	15.1	6.6	27.7
Taylor Lake	2003	8.4	5.9	12.0
Third Lake	2000	7.9	2.2	13.0
Timber Lake	2001	4.1	2.1	9.9
Timber Lake S	2000	15.0	5.7	27.6
Tower Lake	2001	15.0	5.6	26.2
Turner Lake	2002	6.0	3.0	8.7
Valley Lake	2000	12.2	5.7	17.0
Waterford Lake	2000	2.7	1.0	5.8
Werhane Lake	2001	13.7	7.0	20.9
West Loon Lake	2003	1.8	1.3	2.5
West Meadow Lake	2004	17.7	8.9	31.7
White Lake	2000	3.6	1.9	7.8
Willow Lake	2003	19.4	13.4	27.8
Windward Lake	2001	1.2	<0.1	1.3
Woodland Lake	2004	21.2	17.0	25.0
Wooster Lake	2003	3.4	1.3	6.9

Total Lake County Lakes Sampled **161**

Appendix E: Enforcement Officer Duties

This Appendix, as a part of this duly adopted Ordinance, delineates requirements or duties required of and accepted by a *community* and its designated *Enforcement Officer*. Certain requirements or duties specified by *FEMA* or *IDNR/OWR* are for the purposes of that community obtaining or maintaining eligibility for participation in the National Flood Insurance Program and delegation of state permit authority. These certain requirements or duties relate only to the intergovernmental relationship between a community and FEMA or IDNR/OWR, and they do not and are not intended to create any third party beneficial rights in or for *applicants*, property owners, or others.

A. In Certified Communities, the appropriate development regulations officer shall be the *Enforcement Officer* for this Ordinance. In all other areas of Lake County, the *SMC Chief Engineer* shall be this Enforcement Officer. One of the primary duties of the Enforcement Officer shall be to review all Watershed Development Applications and issue permits for those projects that are in compliance with the provisions of the Ordinance. The Enforcement Officer shall be responsible for the administration and enforcement of this Ordinance. If the Enforcement Officer is contracted by a *Certified Community*, then the contract scope shall be comprehensive enough to cover all specified duties herein or the duties shall be shared with a Co-Enforcement Officer who is an Employee of the Certified Community.

B. The *Enforcement Officer* shall determine for each *development* if it is in a *Special Flood Hazard Area* (SFHA) using the criteria specified in §700 Location of Regulatory Floodplain, Base Flood Elevation, and Regulatory Floodway of this Ordinance. If a site is in a SFHA, a determination is required as to whether it is in a *Regulatory Floodway*, or a *Regulatory Floodplain* on which a detailed study has not been conducted, or a *flood-prone area* with a tributary *drainage area* equal to or greater than 640 acres, greater than 100 acres, or greater than 20 acres.

C. The *Enforcement Officer* shall ensure that an *IDNR/OWR* Dam Safety Permit is obtained or a letter stating that no Dam Safety Permit is required if the *development* includes a *dam* before the issuance of a *Watershed Development Permit*. Reference Appendix G: IDNR/OWR Dam Safety Permitting Guidelines.

D. Adopted *basin plans* and floodplain studies may be the basis for more specific regulations. These additional or more specific regulations will apply only in the specific study area of the basin plan or *floodplain study* and supersede those of this Ordinance only upon amendment to the Watershed Development Ordinance and formal adoption of the basin plan or floodplain study by SMC.

E. To assure projects are built and maintained according to permitted plans, the *Enforcement Officer* shall determine applicable deed restrictions, performance guarantees, *as-built drawings*, and maintenance guarantees for projects that affect stormwater runoff characteristics, impact wetlands or buffers, or impact floodplains. If such performance guarantees or other such adequate security as the Enforcement Officer may approve is required, the amount shall be at least 110% of the estimated cost to complete construction of the *stormwater management system* and soil erosion and sediment control measures required

by the *Watershed Development Permit*, which the estimated probable cost shall be approved by the Enforcement Officer. The performance guarantee may be reduced upon verification of construction milestones or after approval of the as-built drawings and calculations. The performance guarantee shall be valid for a minimum of one (1) year beyond the date of project completion or two (2) years from the start of construction, whichever is greater. The performance guarantee shall not be reduced below ten percent (10%) of the original value until project as-built drawings are accepted. The performance guarantee may not be further reduced before the completion of a minimum two-year maintenance period.

F. A *Registered Professional Engineer* in the employ or under contract with SMC or *Certified Community* shall review any plans, calculations, or analyses submitted by a Registered Professional Engineer pursuant to the requirements of this Ordinance.

G. Proposed amendments to this Ordinance and appendices must be done in accordance with applicable state or federal law and approved by *IDNR/OWR* and *FEMA*.

H. Prior to the issuance of a *Watershed Development Permit*, and based on the reliance that the application requirements of §400 Minor Developments, §401 Major Developments, §402 Public Road Developments, §403 IDNR/OWR Dam Safety Permit,and §701 Application Requirements have been met, the *Enforcement Officer* shall further ensure that the *applicant* has obtained and provided copies of any and all required federal, state, and local permits for *development* in the *Regulatory Floodplain*. Reference Appendix H: Partial List of Permits Required (When Applicable) for Development in Lake County for a partial list of permits that may be applicable.

I. The *Enforcement Officer* shall *inspect* (as defined in Appendix A: Definitions of this Ordinance) *development* projects before, during, and upon completion of construction to ensure proper elevation of the *structure* and to ensure compliance with the provisions of this Ordinance. The Enforcement Officer may require a pre-construction meeting as a condition of issuing a permit.

J. Enforcement Officer Duties

1. *IDNR/OWR* has retained permit review and approval authority over the following:

   a. Illinois Department of Natural Resources projects, *dams*, or impoundment structures as defined in Appendix A: Definitions and that meet the ‘permit required’ criteria for dams in Appendix G: IDNR/OWR Dam Safety Permitting Guidelines.

   b. All other state, federal, and SMC *development* located in the *Regulatory Floodplain*.

   c. Permit issuance for development within or over Public Waters.

2. For the following types of regulatory approvals or permit authority, SMC has jurisdiction within depressional flood-prone areas with greater than 20 acres of tributary area and *riverine* flood-prone areas with greater than 100 acres

of tributary area. *IDNR/OWR* has jurisdiction within Regulatory Floodways or Floodplains with greater than 640 acres (one square mile) of tributary area.

a. *Base flood elevation* determinations where none now exist.

b. Any changes in the base flood elevation.

c. Changes to the Regulatory Floodway boundaries.

d. Determination that the development is a *public flood control project*.

3. SMC has regulatory approval or permit authority for the following types of *development*:

a. Non-certified community development.

b. *Public road development.*

c. Determination that an existing bridge or culvert crossing proposed to be modified is not a source of flood damage and the analysis indicating the proposed flood profile, per §707 Bridge, Culvert Crossing, and Roadway Approach Performance Standards.

d. Alternative transition sections and hydraulically equivalent compensatory storage as indicated in 703.04.

e. Lake County Forest Preserve District development.

f. Community and local unit of government development in the *Regulatory Floodplain*.

g. Other development as specified within intergovernmental agreements with the SMC.

K. The *Enforcement Officer* shall submit the data required to SMC, *IDNR/OWR*, and the Federal Emergency Management Agency (*FEMA*) for proposed revisions to the *base flood elevation* of a *Regulatory Floodplain* study or a relocation of a *Regulatory Floodway* boundary.

The *Enforcement Officer* shall submit reports as required for the National Flood Insurance Program.

L. The adopted Lake County Comprehensive Stormwater Management Plan states the SMC should “maintain a repository of stormwater management data for the county”. Toward that end, the *Enforcement Officer* shall:

1. Maintain records of every *Watershed Development Permit* application, permit, variance, hydrologic and hydraulic data, and enforcement action and shall allow periodic inspections of the records by SMC, *FEMA*, or *IDNR/OWR* personnel.

2. Maintain an *elevation certificate* and flood-proofing certificate file, to certify the elevation of the *lowest floor* (including *basement*) of a residential or non-residential building or the elevation to which a non-residential *building* has been flood-proofed, for buildings constructed in the *Regulatory Floodplain*.

3. Maintain for public inspection and provide copies upon request of: *base flood* data and maps, variance documentation, Conditional Letters of Map Revision, Letters of Map Revision, Letters of Map Amendment, elevation and *flood-proofing certificate*, other *Watershed Development Permit* related materials, elevation and flood-proofing *record drawings* for *buildings* requiring *flood-proofing* or constructed subject to the elevation criteria provisions of this Ordinance, and record drawings of the *stormwater management system* required by this Ordinance for each *development*.
4. Copy to the SMC, at agreed-upon intervals, but no later than a 5-year period, specified portions of the *Watershed Development Permit* records.

M. The *Enforcement Officer* shall notify adjacent upstream and downstream communities, the SMC, and *IDNR/OWR* in writing thirty (30) days prior to the issuance of a permit for the alteration or relocation of a *channel* in a *Regulatory Floodplain*.

N. The Enforcement Officer of a community with FIL50 Certification shall provide SMC an annual report summarizing FIL50 fees received, project expenditures and status, categorized by watershed.

Appendix F: Public Bodies of Water in Lake County

The following public bodies of water were navigable in their *natural* condition or were improved for navigation and opened to public use. The entire length and surface area in Illinois, including all backwater *lakes* and sloughs open to the main *channel* or body of water at normal flows or stages, are open to the public.

1) Lake Michigan

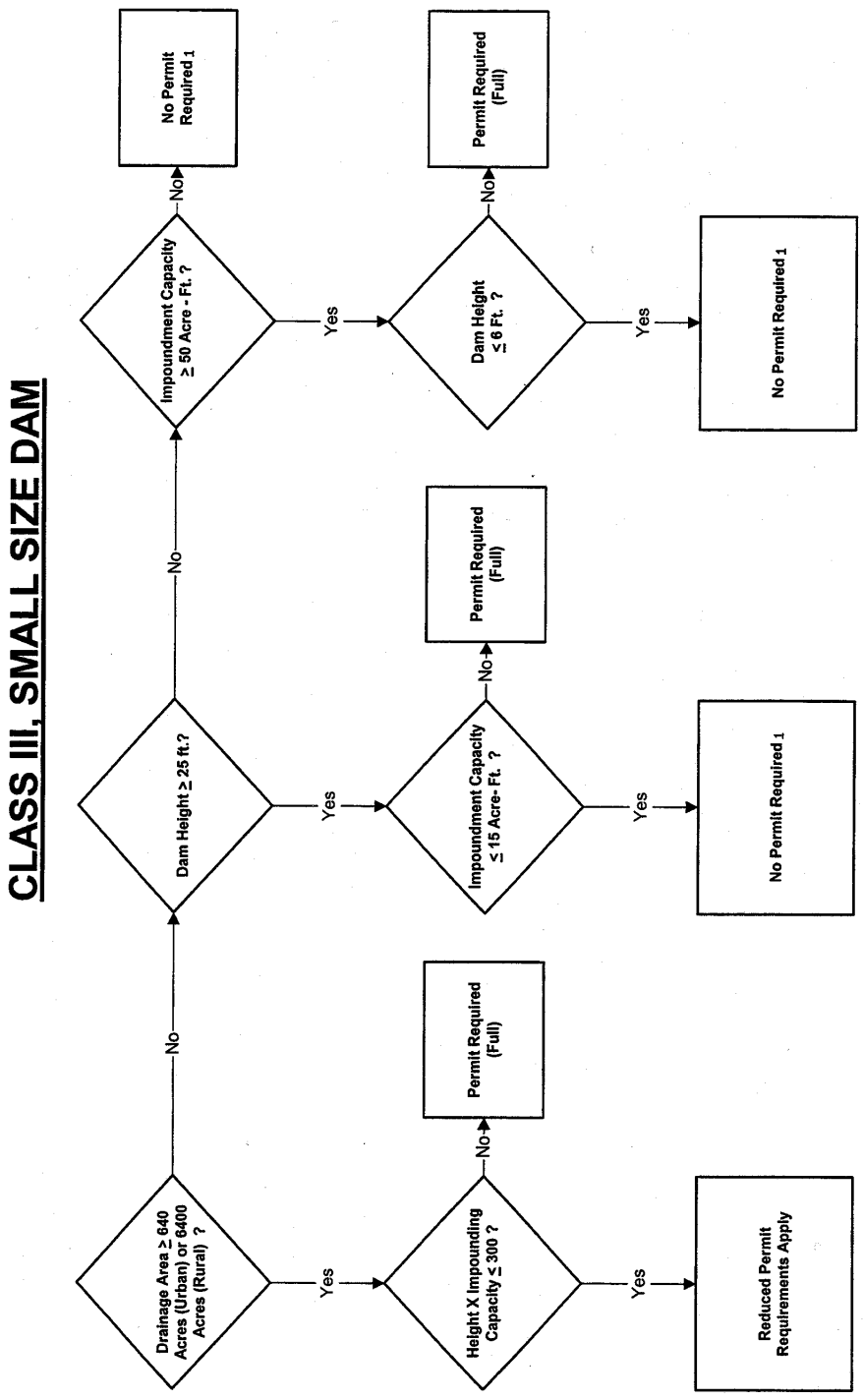
2) Fox River (Illinois River Basin)

3) Fox Chain-O-Lakes (Lake and McHenry Counties): Bluff Lake, Lake Catherine, Channel Lake, Fox Lake, Grass Lake, Lake Marie, Nippersink Lake, Dunns Lake, Pistakee Lake, Lake Jerilyn, Lac Louette, Redhead Lake

The following public bodies of water are navigable waters that were dedicated to public use. This list is incomplete. It is believed there are numerous channels and slips in subdivisions on the margins of public bodies of water which have been dedicated by plat. Additional channels and slips have been dedicated by common law.

1) Petite Lake, Spring Lake, and connecting channels between Bluff Lake and Fox Lake in Lake County

Appendix G: IDNR/OWR Dam Safety Permitting Guidelines



REDUCED PERMIT REQUIREMENTS

a) a completed "Application for Permit form,
b) construction plans and documents that are sealed, signed and dated by an engineer or qualified personnel
c) information describing the downstream floodplain for a distance of two miles,
d) calculations for the reservoir's 100-year flood pool elevation,
e) proof of flooding rights (fee simple ownership or flood easement) of all lands within the reservoir's flood pool.
f) right of access authorization for the State to inspect the dam site and immediate vicinity before, during and after construction for the life of the dam and its appurtenances, and
g) agreement to submit record ("as-built") plans and specifications upon completion of the project.

1 Unless known potential exists for downstream for flood related structural damage which would result from dam failure.

Appendix H: Partial List of Permits Required (When Applicable) for Development in Lake County

United States Army Corps of Engineers

Illinois Department of Natural Resources, Office of Water Resources

Illinois Department of Natural Resources, Department of Natural Heritage

Illinois Department of Transportation, Division of Highways, District 1

Illinois Environmental Protection Agency

McHenry-Lake County Soil and Water Conservation District

Lake County Health Department

Lake County Division of Transportation

Community / County Building Permits

Illinois Historical Preservation Agency

United States Fish and Wildlife Service

Fox Waterway Agency

Appendix I: Rainfall Depth Duration Frequency Tables for Lake County

Rainfall Depth Duration Frequency Tables for Lake County
Rainfall is in Inches

Storm Duration	2-month	3-month	4-month	6-month	9-month	1-year	2-year	5-year	10-year	25-year	50-year	100-year	500-year
5 minutes	0.19	0.22	0.24	0.27	0.31	0.33	0.40	0.52	0.62	0.77	0.90	1.03	1.35
10 minutes	0.35	0.40	0.43	0.49	0.56	0.61	0.73	0.95	1.13	1.42	1.65	1.89	2.47
15 minutes	0.42	0.49	0.53	0.61	0.69	0.75	0.90	1.16	1.39	1.74	2.03	2.32	3.04
30 minutes	0.58	0.66	0.73	0.83	0.94	1.03	1.24	1.59	1.91	2.39	2.78	3.17	4.16
1 hour	0.74	0.84	0.93	1.05	1.20	1.30	1.57	2.02	2.42	3.03	3.53	4.03	5.28
2 hours	0.91	1.04	1.14	1.30	1.48	1.61	1.94	2.49	2.99	3.74	4.35	4.97	6.52
3 hours	1.00	1.15	1.26	1.44	1.63	1.77	2.14	2.75	3.30	4.13	4.80	5.49	7.20
6 hours	1.18	1.35	1.48	1.68	1.91	2.08	2.51	3.23	3.86	4.84	5.63	6.43	8.43
12 hours	1.37	1.56	1.71	1.95	2.21	2.41	2.91	3.74	4.48	5.61	6.53	7.46	9.78
18 hours	1.48	1.69	1.85	2.11	2.39	2.61	3.14	4.04	4.84	6.06	7.05	8.06	10.57
24 hours	1.57	1.80	1.97	2.24	2.55	2.77	3.34	4.30	5.15	6.45	7.50	8.57	11.24
48 hours	1.72	1.97	2.16	2.46	2.79	3.04	3.66	4.71	5.62	6.99	8.13	9.28	12.10
72 hours	1.87	2.14	2.34	2.67	3.03	3.30	3.97	5.08	6.05	7.49	8.64	9.85	12.81
120 hours	2.08	2.38	2.61	2.97	3.37	3.67	4.42	5.63	6.68	8.16	9.39	10.66	13.81
240 hours	2.63	3.01	3.30	3.76	4.27	4.65	5.60	7.09	8.25	9.90	11.26	12.65	16.00

References: ISWS Bulletin 75 Precipitation Frequency Study for Illinois
James R. Angel and Momcilo Markus
Illinois State Water Survey, March 2020

HUFF RAINFALL DISTRIBUTIONS

The Huff quartiles represent the typical rainfall distribution for 4 different storm duration ranges. The First quartile applies to storms less than or equal to 6 hours long. Second is for storms greater than 6 hours and less than or equal to 12 while the third is Huff quartile is for storms greater than 12 hours and less than or equal to 24 hours. Fourth quartile storms apply to storm durations greater than 24 hours.

	AREA < 10 SM				AREA > 10 & AREA < 50				AREA > 50 & AREA < 400			
Portion of the Storm	First Quartile	Second Quartile	Third Quartile	Fourth Quartile	First Quartile	Second Quartile	Third Quartile	Fourth Quartile	First Quartile	Second Quartile	Third Quartile	Fourth Quartile
0/24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/24	8.36	2.29	2.05	2.31	6.41	1.48	1.33	1.48	4.59	0.88	0.72	0.90
2/24	17.73	4.82	4.31	4.79	15.69	3.57	3.02	3.34	13.49	2.38	1.85	2.29
3/24	28.11	7.78	6.67	7.12	27.45	6.39	5.13	5.72	25.94	4.93	3.47	4.36
4/24	38.33	11.33	9.12	9.78	38.91	10.02	7.53	8.56	39.17	8.52	5.57	7.10
5/24	47.45	15.79	11.71	12.53	49.34	14.71	10.01	11.69	51.04	13.19	8.28	9.93
6/24	55.50	21.39	14.36	15.23	58.55	20.89	12.65	14.19	60.79	19.59	10.96	12.84
7/24	62.25	28.41	16.91	17.91	65.88	28.91	15.24	17.19	69.26	27.46	13.79	15.46
8/24	67.22	36.44	19.64	20.33	71.10	37.55	18.17	19.69	74.80	37.17	16.35	17.83
9/24	70.82	45.29	22.78	22.83	74.92	46.86	21.46	22.27	78.74	47.77	19.66	20.12
10/24	74.17	54.35	26.33	25.41	78.30	56.25	25.36	24.81	82.20	58.18	23.46	23.12
11/24	76.97	62.38	30.93	28.35	81.16	64.84	29.90	27.46	85.13	67.64	28.07	25.76
12/24	79.81	69.76	36.35	31.25	83.75	72.90	35.60	30.33	87.38	75.86	34.06	28.26
13/24	82.55	75.48	43.92	33.90	86.20	79.07	43.42	32.42	89.58	82.04	42.30	30.99
14/24	85.18	80.38	52.11	36.33	88.64	83.97	52.18	34.28	91.45	86.92	52.02	33.68
15/24	87.40	84.70	61.02	38.61	90.81	87.58	61.88	36.89	93.35	90.33	62.76	36.12
16/24	89.47	87.81	69.89	41.24	92.58	90.67	71.81	39.73	94.80	93.09	72.80	39.07
17/24	91.17	90.22	78.19	45.08	93.99	92.76	80.43	43.85	95.99	94.82	82.27	42.93
18/24	92.70	92.17	84.92	51.29	95.19	94.59	87.25	49.87	96.94	96.25	89.19	48.98
19/24	94.03	93.81	89.74	59.31	96.35	95.97	92.01	58.93	97.70	97.34	93.60	59.22
20/24	95.36	95.29	93.11	69.19	97.27	97.10	95.04	69.85	98.35	98.21	96.33	71.66
21/24	96.56	96.57	95.34	80.05	98.03	97.99	96.90	82.36	98.86	98.83	97.97	85.18
22/24	97.74	97.74	97.06	89.71	98.74	98.72	98.22	92.59	99.28	99.30	98.98	94.64
23/24	98.85	98.84	98.56	96.04	99.37	99.39	99.21	97.96	99.66	99.67	99.58	98.77
24/24	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

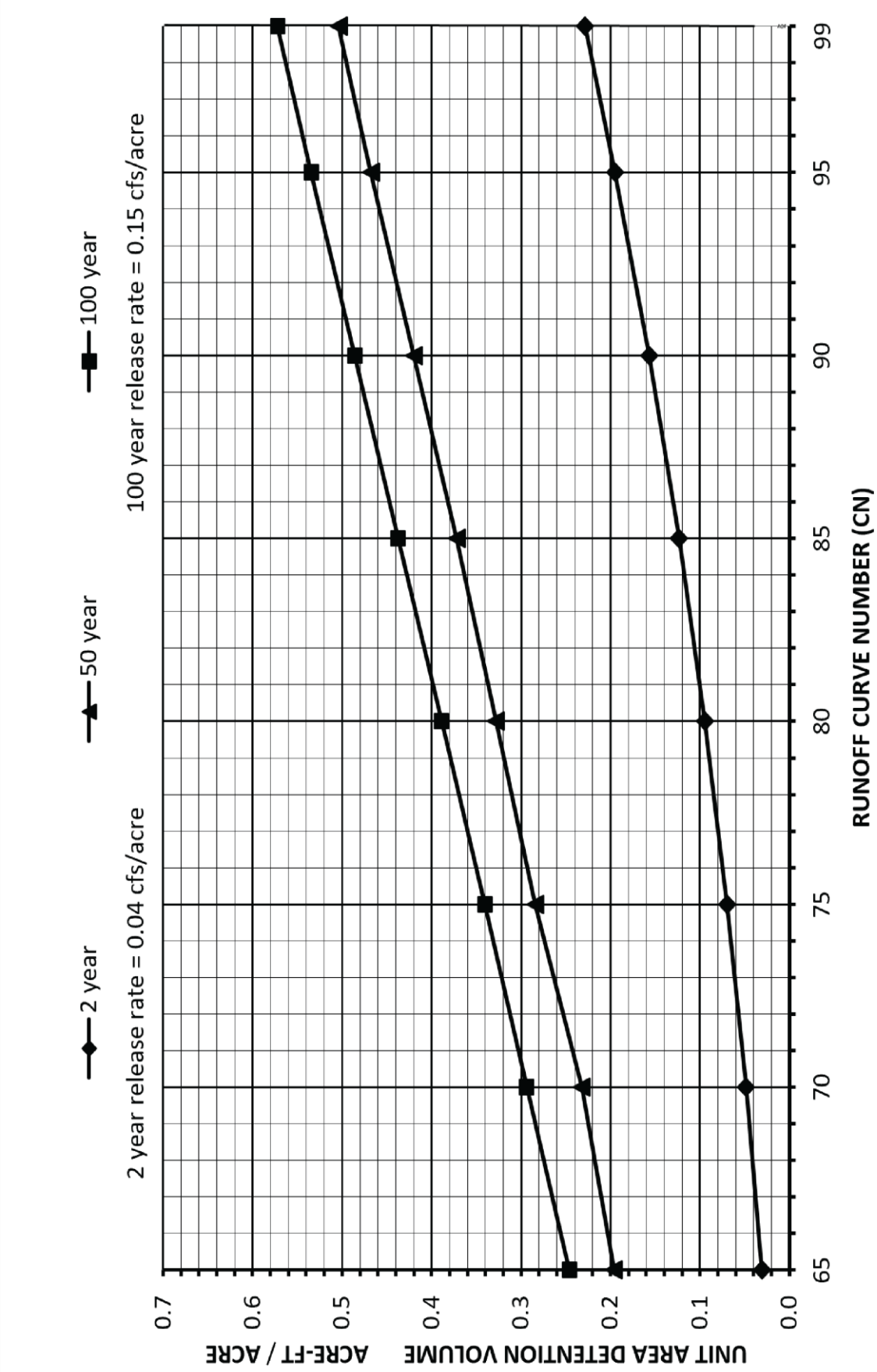
References: ISWS Bulletin 75 Precipitation Frequency Study for Illinois
James R. Angel and Momcilo Markus
Illinois State Water Survey, March 2020

Appendix J: Watershed Specific Release Rates

WATERSHED	Release Rates (cfs/acre)		
MAJOR TRIBUTARIES	100 Year	2 Year	
MINOR TRIBUTARIES	Storm Event	Storm Event	Comments [1/]
FOX RIVER			
Fox River Mainstem	0.150	0.040	WDO Maximum Allowable
Flint Creek	0.150	0.040	WDO Maximum Allowable
Honey Lake Drain	0.150	0.040	WDO Maximum Allowable
Mutton Creek	0.150	0.040	WDO Maximum Allowable
Sequoit Creek	0.150	0.040	WDO Maximum Allowable
Slocum Lake Drain	0.150	0.040	WDO Maximum Allowable
Bang's Lake Drain	0.150	0.040	WDO Maximum Allowable
Squaw Creek Mainstem	0.090	0.020	Watershed Average Rate Based on 8/1/96 SMC adoption of the 11/3/82 FIS flow rate analysis.
Fish Lake Drain	0.090	0.020	Watershed Average Rate Based on 8/1/96 SMC adoption of the 11/3/82 FIS flow rate analysis.
Round Lake Drain	0.090	0.020	Watershed Average Rate Based on 8/1/96 SMC adoption of the 11/3/82 FIS flow rate analysis.
Eagle Creek	0.090	0.020	Watershed Average Rate Based on 8/1/96 SMC adoption of the 11/3/82 FIS flow rate analysis.
Tower Lake Drain	0.150	0.040	WDO Maximum Allowable
DES PLAINES RIVER			
Des Plaines River Mainstem	0.150	0.040	WDO Maximum Allowable
Aptakisic Creek	0.150	0.040	WDO Maximum Allowable
Buffalo Creek Mainstem	0.150	0.040	WDO Maximum Allowable
Tributary B to Buffalo Creek	0.150	0.040	WDO Maximum Allowable
Bull Creek Mainstem	0.150	0.040	WDO Maximum Allowable
Bull Creek Tributary	0.150	0.040	WDO Maximum Allowable
Gurnee Tributary	0.150	0.040	WDO Maximum Allowable
Indian Creek Mainstem	0.150	0.040	WDO Maximum Allowable
South Branch Indian Creek	0.150	0.040	WDO Maximum Allowable
West Branch Indian Creek	0.150	0.040	WDO Maximum Allowable
Forest Lake Drain	0.150	0.040	WDO Maximum Allowable
Seavey Creek	0.150	0.040	WDO Maximum Allowable
Diamond Lake Drain	0.150	0.040	WDO Maximum Allowable
Mill Creek Mainstem	0.150	0.040	WDO Maximum Allowable
North Mill Creek	0.150	0.040	WDO Maximum Allowable
Hastings Creek	0.150	0.040	WDO Maximum Allowable
Newport Drainage Ditch	0.150	0.040	WDO Maximum Allowable
Suburban Country Club Tributary	0.150	0.040	WDO Maximum Allowable
LAKE MICHIGAN			
Bluff/Ravine	0.150	0.040	WDO Maximum Allowable
Dead River	0.150	0.040	WDO Maximum Allowable
Bull Creek	0.150	0.040	WDO Maximum Allowable
Kellogg Creek	0.150	0.040	WDO Maximum Allowable
Pettibone Creek	0.150	0.040	WDO Maximum Allowable
Waukegan River	0.150	0.040	WDO Maximum Allowable
NORTH BRANCH CHICAGO RIVER			
Middle Fork	0.150	0.040	WDO Maximum Allowable
Skokie River	0.150	0.040	WDO Maximum Allowable
West Fork	0.150	0.040	WDO Maximum Allowable

1/ Individual Communities within these watershed boundaries may have more restrictive release rates.

Appendix K: Detention Volume Versus Curve Number



Appendix L: High-Quality Aquatic Resources

The following are descriptions of *high-quality aquatic resources*:

A. Advanced Identification (ADID) sites: Aquatic sites that have been determined to provide Biological Values by the U.S. Army Corps of Engineers, Chicago District and U.S. Environmental Protection Agency (U.S. Environmental Protection Agency. 1992. Advanced Identification (ADID) Study, Lake County, Illinois. Chicago, Illinois) or latest ADID study.

B. Bog: A low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus *Sphagnum*.

C. Ephemeral pool: A seasonally inundated depression within a *forested wetland* or upland community, usually located on a moraine, glacial outwash plain, or in an area shallow to bedrock; also known locally as a "vernal pool." These areas may not be permanently vegetated.

D. Fen: A peatland, herbaceous (including calcareous floating mats) or wooded, with calcareous groundwater flow.

E. High Quality Forested wetland: A *forested wetland* *dominated* by native woody vegetation by at least one of the following species or genera: *Carya* spp., *Cephalanthus occidentalis*, *Cornus alternifolia*, *Fraxinus nigra*, *Juglans cinerea*, and *Quercus* spp.

F. Sedge meadow: A *wetland* *dominated* by at least one of the following genera: *Carex* (except *Carex blanda, Carex grisea*, and *Carex vulpinodea*), *Calamagrostis*, *Cladium*, *Deschampsia*, *Rhynchospora*, *Scleria*, or *Eriophorum*.

G. Seep: A *wetland*, herbaceous or wooded, with saturated soil or inundation resulting from the diffuse flow of groundwater to the surface stratum.

H. Streams shown on the most recent USGS quadrangle map as a perennial (solid blue line) or intermittent (dashed blue line) that are not determined to be a Waters of the U.S. If a site specific Index of Biological Integrity (IBI) assessment is lower than 35, this *stream* reach shall not be considered a *high-quality aquatic resource*.

I. Streamside marsh: An *Isolated Waters of Lake County* *wetland* that is within a 10-year *riverine* floodplain and dominated by herbaceous species.

J. Wet prairie: A *wetland* *dominated* by native graminoid species with a diverse indigenous forb component that is seasonally saturated and/or temporarily inundated.

K. *Wetlands* supporting Federal or Illinois endangered or threatened species: For current state-listed species, reference Illinois Endangered Species Protection Board's "Checklist of Endangered and Threatened Animals and Plants of Illinois" and/or contact the Illinois Department of Natural Resources. For Federally-listed species, reference the U.S. Fish and Wildlife Service's "Endangered and Threatened Wildlife and Plants" list (latest edition) and/or contact the U.S. Fish and Wildlife Service.

L. *Wetlands* with a native mean coefficient of conservatism value (native mean C value) of greater than or equal to 3.5 or a native floristic quality index value (FQI) of greater than or equal to 20 as determined using the Chicago Region Floristic Quality Assessment Calculator (U.S. Army Corps of Engineers, Chicago District, most recent version).

M. *Wetlands* that are within a designated Illinois Natural Areas Inventory Site (INAI).

Appendix M: SMC-Approved Wetland Mitigation Banking Requirements

A. PURPOSE

This appendix includes the criteria for establishing, owning, and operating *wetland* *mitigation* banks. It further sets out the criteria for authorizing *applicants* (e.g., individuals, corporations, units of government) to withdraw credits from a mitigation bank to offset unavoidable *wetland impacts* that would result from the applicant's proposed activity.

B. GOALS

Mitigation banks are a form of regional *mitigation*, which encourage the development of large-scale *wetland* complexes that can be professionally managed and maintained in perpetuity for the benefit of the general public. The consolidation of multiple small mitigation projects allows for economies of scale in planning, implementation, and maintenance, and can produce wetlands of greater value because of their size and a high level of commitment to long-term management. The expected benefits include water quality management, wildlife habitat restoration and creation, flood control, conservation of biological diversity, education, recreation, and aesthetics. Further, this action will reduce administrative costs and delays in issuing permits for proposed activities that qualify for use of a mitigation bank.

Mitigation banking is intended to be a means of creating or restoring wetlands and generating bank credits in advance of the filling of wetlands for specific projects. As an interim measure, and as a way to encourage the initial development and implementation of banks, the sale of bank credits and the issuance of permits prior to the generation of bank credits at the bank site shall be allowed under conditions described elsewhere in this document.

C. DEFINITIONS

1. Creation: Conversion of a non-wetland site into a *wetland* site by excavation, diking and flooding, or conversion of a deepwater site by filling.
2. Credit Certification: A formal determination by the SMC that *mitigation* bank credits have been generated. Certified credits result from fully meeting all certification standards (see Appendix M: O: CREDIT CERTIFICATION). Conditionally certified credits are those credits that are based on reasonable progress towards becoming certified credits. Uncertified credits are those credits that are based on full approval of the bank charter, and initial construction of the bank, including demonstration of *wetland* hydrology and planting. A maximum of 30% of the total potential credits may be sold upon approval of bank charter alone. An additional 20% of the total credits may be sold upon the demonstration of wetland hydrology. Upon completion of the approved planting plan, an additional 20% of the total credits may be sold. Using this formula, 70% of the total credits available from the bank may be sold as uncertified credits.
3. Designated Service Area: The designated service area of an SMC-approved *mitigation* bank is Lake County.

4. Enhancement: Altering the physical characteristics of an existing *wetland* such that it permanently improves one or more specific wetland functions and values. Because impacts associated with individual projects that propose to use bank credits will, in virtually all cases, be permanent, only enhancement that results in permanent improvement of a wetland's functions and values will generate credits.

5. Growing Season: The period between May 1 and October 10. This growing season definition is for the purposes of Appendix M alone, and is used to establish performance periods for determining compliance with revegetation standards. It does not establish the growing season for purposes of *wetland* delineation.

6. Ledger: Document to be used in the accounting of credits and debits. The ledger will be maintained by the bank sponsor and reviewed by the SMC.

7. Management: Actions taken within *mitigation* bank *wetlands* to establish and maintain desired habitat conditions. Representative management actions include water level manipulations, herbiciding, mechanical plant removal, and prescribed burning.

8. Mitigation Bank: A system of accounting for *wetland* loss and compensation, which can include one or more wetland *mitigation* sites. The minimum acreage requirements in this Ordinance shall apply to each site.

9. Mitigation Bank Charter: A written document which contains specifications pertaining to establishment, operation, and maintenance of a *wetland mitigation* bank, codification of the goals, objectives, procedures of the bank, and incorporating the relevant terms and conditions of this Ordinance. Principal types of banking charters are a legally binding agreement or a *Watershed Development Permit*.

10. Mitigation Bank Credits: The unit of measure of bank credit will be acres by *wetland* type.

11. Mitigation Bank Site: The geographic location of created, restored, and enhanced *wetlands*, which serve as the physical resource used to generate bank credits.

12. Monitoring: A specific program of data collection which documents the physical, chemical, and biological characteristics of the *mitigation* bank *wetlands*, for the purpose of determining compliance with performance standards contained in the mitigation bank charter.

13. Phased Mitigation Bank: The construction of a *mitigation* bank in discrete steps, as authorized or agreed to in advance by the SMC. The bank prospectus must clearly describe each phase of the bank, and list the order in which the phases would be constructed.

14. Prospectus: A preliminary plan for a *wetland mitigation* bank prepared by a prospective sponsor and submitted for consideration to SMC.

15. Restoration: Re-establishing *wetland* conditions in areas that were wetland in historical times, but which have been modified such that they are now

considered non-wetland. Restoration converts previous wetland sites back to functional wetlands.

16. Site Development Plan: A plan for each bank site that identifies all actions that will be undertaken to generate bank credits. Representative elements of the site development plan include plans for site grading, revegetation, *erosion* control, structures, management, and monitoring.

17. Sponsor: The legally responsible individual or entity, proposing establishment of a *wetland mitigation* bank.

18. Wetland Mitigation: Replacement of *wetlands*, and wetlands functions and values, for the purposes of compensating for *wetland impacts*. The replacement of the wetland functions and values is generally accomplished through wetland restoration, creation, and enhancement.

D. RESERVED

E. CONSIDERATIONS IN ESTABLISHMENT AND USE OF MITIGATION BANKS

Charters of *mitigation* banks, mitigation sites, and associated *wetland* credits shall be subject to approval by the SMC. Every mitigation bank shall have as its primary purpose the creation, restoration, enhancement, and long-term protection and maintenance of wetland resources. All existing property rights remain in effect.

In all cases of a proposed bank, the SMC will issue a public notice describing the project. The public comment period for submittal of relevant comments on the bank prospectus will be a minimum of thirty (30) days. The *Watershed Development Permit* that is needed in order to construct, restore, or enhance *wetlands* on the bank site will follow normal permit processing procedures.

Operation and maintenance procedures approved by the SMC shall be employed to maintain the wetland resources in the bank in as high a qualitative state as is technically practicable. Management of the mitigation bank shall be based on a monitoring plan approved by the SMC. Monitoring shall include, but shall not necessarily be limited to, monitoring of the water, soil, and plants comprising the wetland assets of the bank. The bank sponsor shall strive to manage the assets to provide multiple wetland benefits such as water quality management, flood control, biological conservation, and educational and recreational opportunities. In general, mitigation banks should be planned and designed such that little or no management or maintenance other than prescribed burning is necessary once the plant communities are established.

F. GENERAL GUIDELINES

Using normal review procedures prescribed by this Ordinance, the SMC will conduct project evaluations and will determine the level of *mitigation* required, and whether a project is eligible to use a mitigation bank.

1. Ideally, *mitigation* banks should be a way of restoring and creating *wetlands* in advance of *development* projects that result in wetland losses. However, to promote the establishment of mitigation banks, this Ordinance provides for limited, incremental sales of uncertified credits, and for the issuance of *Watershed Development Permits* based on uncertified credits according to

the guidelines found in Appendix M: P: MITIGATION BANK CREDIT SALES. This provision is considered necessary to increase the economic viability of mitigation banks. Because the development plan for any given bank site may require the sale of a minimum number of credits before wetlands may be restored or constructed, it is recognized that a temporary deficit of wetlands may result. To address this possibility, the SMC will require a higher mitigation ratio for the use of uncertified and conditionally certified credit, and for funds to be maintained in an appropriate financial security to ensure construction of the bank's wetlands. This Ordinance also limits the number of credits that can be sold prior to construction, and prior to conditional certification. It also establishes a maximum amount of time that may elapse before pre-construction credit sales are converted to conditionally certified or fully certified credits.

2. Emphasis will be on the replacement of *wetland* acreage and type. Therefore, the preferred method of generating wetland bank credits will be the restoration of former wetlands or the creation of new wetlands, which will result in a net gain in wetland acreage on the bank site. Permanent wetland enhancement as a means of generating bank credits can be performed as specified in Appendix M: N: ESTABLISHING MITIGATION BANK CREDITS. Appropriate functional value assessment methodologies and credit ratios will be determined for each site by the SMC.

3. Mitigation banks generally shall be held to a higher standard of performance than conventional *wetland mitigation* sites. These standards are detailed in Appendix M: S: PERFORMANCE STANDARDS.

4. Permit applications for *wetland impacts* to *high-quality aquatic resources* generally will not be considered for *mitigation* banking, until the *applicant* has shown compliance with the avoidance and minimization requirements of this Ordinance.

5. The *mitigation* bank, once established, must be dedicated to maintaining the *wetland* functions and values to the exclusion of other conflicting uses, as determined by the SMC.

G. SITE SELECTION CRITERIA

The bank site will be reviewed with respect to the following site selection criteria. Failure to meet any of these criteria may be, depending on circumstances, grounds for rejection of a bank site. The site shall:

1. Be owned and/or under the full control of the bank.

2. Contain a majority of drained or hydrologically modified *hydric soils*, recognizing that restoration of former *wetlands* is a preferred form of *mitigation*.

3. Have no *high-quality aquatic resources* that would be adversely affected by the construction or restoration work.

4. Contain adequate perimeter upland areas to buffer the *wetlands* from potentially incompatible land uses on adjoining parcels and meet the *buffer* requirements of this Ordinance.

5. Be so situated that adequate hydrology can be ensured (e.g., be located on a *floodplain* or possess a high groundwater table).
6. Be proximate or adjacent to public land holdings so as to create contiguous, large-scale habitat areas.
7. Be part of an adopted or accepted open space plan, *watershed* plan, conservancy district, protected riparian corridor, or other local or regional conservation land use plan. This criterion has been established in order to help implement local and regional conservation plans, and to ensure maximum consistency and compatibility with future surrounding land uses.
8. Contain no known hazardous waste, which must be confirmed by an environmental assessment conducted by a qualified person or firm.
9. Have a minimum size of ten (10) acres or five (5) acres if within the Lake Michigan Watershed.

H. BANK OWNERSHIP

A *mitigation* bank may be either publicly or privately owned. The bank may be incorporated as for-profit or not-for-profit. If the bank is incorporated, it must be incorporated in the State of Illinois. Publicly owned refers to ownership of the bank site by any federal, state, regional, or local unit of government.

All land, including associated uplands, which are part of the mitigation bank shall be protected in perpetuity from future *development* by an appropriate *deed or plat restriction*. This deed or plat restriction must be recorded with the Lake County Recorder of Deeds Office, attached to the abstract of title, with a certified copy of the registration provided to the SMC prior to the SMC authorizing the bank. The mitigation bank charter should also identify the entity responsible for the ownership and long-term management of the site. In addition, the bank sponsor is responsible for securing adequate funds for the operation and maintenance of the bank during its operational life, as well as for long-term management of the site. Bank sponsors are strongly encouraged to establish agreements for long-term management with public or private conservation organizations.

Transfer or sale of the mitigation bank may occur to a party willing and financially able to abide by the terms and conditions of the Mitigation Bank Charter entered into by the SMC and the bank owner. Any such transfer must be approved by the SMC.

I. INITIAL PLANNING

The individual or entity proposing to sponsor establishment of a *mitigation* bank will initially hold informal discussions with the SMC. The purpose of these discussions will be to acquaint the sponsor with the legal, regulatory, and ecological background relevant to banking and to provide procedural guidance to the prospective *applicant*.

During this discussion the prospective bank sponsor will be informed that a formal request for the establishment of a bank must be made to the SMC. The formal request will include a prospectus and a *Watershed Development Permit* application, if required. The bank sponsor and the SMC shall develop an

authorizing document for the bank that shall be signed by all parties. The authorizing document should outline the responsibilities of the bank sponsor, and contain the necessary information outlined in this Ordinance governing the operation of the bank.

J. PROSPECTUS DEVELOPMENT

The purpose of the prospectus is to provide sufficient information to allow the SMC to determine if the general considerations and site evaluation criteria outlined in this Ordinance are likely to be met if the proposed bank is established. It is understood that the prospectus will become the basis of the mitigation bank charter. The prospectus should contain:

1. The bank location and size;
2. A delineation of any *wetlands* or other jurisdictional areas that may exist at the proposed bank location;
3. The type of real estate interest in bank property;
4. A legal description of the property;
5. The type of bank (i.e., single client, general use, market oriented, etc.);
6. The method of credit production (i.e., restoration, creation, enhancement), the number of proposed credits by each method, and the rationale for crediting;
7. A statement as to compliance with this document;
8. A general site plan showing the location of all existing and proposed *wetland* and upland habitats, roads, trails, structures, utilities, and any other existing or proposed site improvements;
9. An outline of management and maintenance responsibilities;
10. A preliminary construction plan and schedule of completion, preliminary planting plan, and preliminary administrative, management, monitoring, and financial plans; and
11. A charter of incorporation for the *mitigation* bank, if appropriate.

K. FINANCIAL ASSURANCES

The bank sponsor is responsible for securing sufficient funds or other financial assurances to cover contingency actions in the event of bank default or failure. In addition, the bank sponsor is responsible for securing adequate funding to monitor and maintain the bank throughout its operational life, and to make provision for long-term management through financial assurances or through agreements with land management organizations or agencies. Total funding requirements should reflect realistic cost estimates for monitoring, long-term maintenance, contingency, and remedial actions. Financial assurances may be in the form of performance bonds, irrevocable letters of credit, irrevocable trusts, escrow accounts, casualty insurance, or other approved sureties. Such assurances may be phased out or reduced once it has been demonstrated that the bank is functionally mature and/or self-sustaining in accordance with the approved performance standards. The financial plan must demonstrate that

the bank and its *wetlands* can be maintained in perpetuity whether through continual ownership or by conveyance to a public or private agency that will assume the responsibilities of the bank.

L. MITIGATION BANK APPLICATION PROCESS

The sponsor must submit a *Watershed Development Permit* application and a prospectus for the initial development of the bank. Upon receipt of these items the SMC shall begin a public interest review on the prospectus with input from government agencies and the general public. The public will be notified of all proposed banks by a public notice issued by the SMC for a 30-day comment period. Copies of all comments received during the public notice comment period will be given to the bank sponsor. Full consideration will be given to all comments received in evaluating the bank proposal. The bank sponsor and the SMC shall develop an authorizing document for the bank. The authorizing document should outline the responsibilities of the bank sponsor and contain the necessary information outlined in this Ordinance governing the operation of the bank. Additionally, the details of the bank sponsor's responsibilities shall be noted in any Watershed Development Permit in which the permittee's *mitigation* responsibilities are met through the use of the mitigation bank.

SMC shall make a site inspection of the bank area. A written response to the banking prospectus indicating the prospective bank's feasibility would then be prepared by the SMC based upon observations made during the site visit. An indication of feasibility in the letter should be interpreted as general acceptability of conceptual bank plans and either probable issuance of a Watershed Development Permit, or probable signatory approval of a Mitigation Bank Charter upon completion of detailed plans.

The formal request to the SMC for establishment of a bank shall include:

1. A *Watershed Development Permit* application to conduct the proposed work that is necessary to establish the bank;
2. A copy of the previously described prospectus; and
3. A plan that details the goals, objectives, and success criteria for creating *wetlands*, including wetland types and their respective acreages.

M. DETAILED PLANNING STAGE

This is the final planning stage leading to issuance of a *Watershed Development Permit* for authorization, implementation, and operation of a bank. The preparation of detailed plans should be closely coordinated with the SMC and other local authorities as appropriate.

Each *mitigation* bank shall have a site development plan that must be approved by the SMC. This plan shall identify and incorporate the following, to the extent practicable and appropriate:

1. Diverse aquatic and supporting landscapes (e.g., shallow open water, riparian *wetlands*, deep and shallow marshes, floodplain forests, wet meadows and prairies, upland buffers, etc.), which are interrelated, one to the other, so as to maximize wetland functions and values;

2. Diverse wildlife habitats and associated edge conditions;
3. Associated upland *buffer* areas contiguous to the *wetlands* to protect the wetlands from potential adverse effects of adjacent land uses, specifying the width and area of all such zones;
4. *Wetland* functions which will be created or enhanced by maximizing vegetative diversity and abundance, structuring specific wildlife habitats, optimizing wetland hydrology, and providing public access;
5. Species native to the area;
6. The use of native soils on the site;
7. The means for establishing the appropriate hydrology; and
8. The *mitigation* bank shall be designed to be as self-sufficient as possible and minimize maintenance.

N. ESTABLISHING MITIGATION BANK CREDITS

The units of *wetland* credit shall be acres of wetland. Mitigation bank credits shall be generated as wetlands are created, restored, or enhanced on the bank site, resulting in an increase in wetland acreage and/or quality on the bank site. Banking credits may be generated as follows: Full credit will be given for wetland *creation* from upland and for *restoration* of former wetlands. Partial credit (25% of the enhanced wetland acreage) can be given for permanent enhancement (e.g., re-establishment of hydrology) of degraded wetlands. A maximum of 30% of the total potential credits generated by the bank may consist of enhanced wetlands or enhanced uplands.

O. CREDIT CERTIFICATION

Mitigation bank credits shall be certifiable by the SMC when the bank credits conform to the criteria outlined in Appendix M: S: PERFORMANCE STANDARDS. Credits may be certifiable at any time, but the standards for certification shall be met no later than five (5) years from the date of planting unless otherwise specified in the bank charter and approved by the SMC. After the second full growing season following creation or restoration of *wetlands*, the SMC may conditionally certify the credits of the bank based on reasonable progress toward achieving the performance standards. Conditional certification shall be based on degree of conformance with the standards for conditional certification in Appendix M: S: PERFORMANCE STANDARDS, and on any interim corrective measures recommended by the SMC.

At the end of five (5) years, if any of the above conditions are not met, the authorized agent of the bank shall submit a plan to the SMC outlining corrective measures to be taken based on the ecological conditions of the site. Management activities shall continue until the standards are met, as verified by the SMC.

Certain types of enhancement of existing wetland can be an acceptable way of generating credits if the enhancement actions are scientifically sound and result in a substantial, measurable, and permanent increase in the level of

wetland function. The types of enhancement that will be acceptable include the following:

1. Restoration of *wetland* hydrology at sites that have been significantly modified through tile drainage or ditch drainage.
2. Restoration of diverse native plant communities where the original plant community has been totally destroyed, and the site is currently farmed or has revegetated with aggressive and/or exotic species such as reed canarygrass, cattails, purple loosestrife, phragmites, buckthorn, or other species. Restoration goals would include the removal of the exotic or aggressive species, and the introduction and establishment of a diverse assemblage of native species appropriate for the site considering geographic location, soils, hydrology, and other factors. Selective removal of exotic species in otherwise healthy native plant communities will normally not be considered eligible for credit.
3. Restoration of deep marsh habitat through shallow impoundment, where the purpose is to create hemimarsh conditions suitable for nesting by target *wetland* bird species of concern. This approach is appropriate at sites that have been significantly altered through partial drainage, and consist largely of dense monotypic stands of cattails or other aggressive species. It is not appropriate for sites that have existing biodiversity or habitat values that would be adversely affected by the proposed actions or where the level of benefit would be minimal.

The prospectus must specifically state which aspects of wetland function would be increased as a result of the enhancement actions, the level to which they would be increased, and the scientific basis for expecting the increase. It must also include a narrative description of how the enhancement would be accomplished, a schedule of completion, explicit performance standards, and performance milestones for enhancement actions to be carried out over an extended period of time.

Performance standards for enhancement work will be approved as part of the *Watershed Development Permit*. Actions such as the restoration of hydrology can be implemented in a very short time and can be measured through immediate water level responses. Plant community restoration is a lengthier process, requiring sustained effort over a period of time. In such cases, interim performance milestones may be established, and credits resulting from such work would be included in the final 30% increment of credit released from the bank.

Credit ratios will be determined based on specific circumstances for each bank. Restoration of a historic wetland area or creation of a wetland from an upland area would receive a credit ratio of 100%. Actions that restore a very degraded wetland to a high degree of function, such as restoring normal hydrology to a drained wetland or restoring a high level of species diversity to a monotypic plant community, shall receive credit at a maximum ratio of 25% of the credit values awarded to restored or created wetlands.

All created, restored, or enhanced wetland areas on the mitigation bank site shall, at a minimum, meet the buffer width requirements of 505.01 of this Ordinance. All existing *high-quality aquatic resources* on the *mitigation* bank site shall, at a minimum, meet the *buffer* width requirements of 505.02 of this Ordinance.

The inclusion of upland and deepwater environments within a wetland mitigation bank may be inadvertent (i.e., due to topographic reasons and real estate considerations) or planned (i.e., to realize or enhance certain wetland functions). In the latter case, upland areas may be either naturally occurring or be artificially created and, depending on their basic purpose, may occur along the periphery of the bank or be dispersed throughout. Enhanced upland areas or enhanced wetland edges used to meet the buffer requirements of this Ordinance for the mitigation bank shall be credited at 25% of the enhanced acreage completed. Created or restored wetland edges used to meet the buffer requirements of this Ordinance for the mitigation bank shall be credited at 75% of the acreage created or restored.

Conditional certification will allow for a reduction of the posted financial security to a level sufficient to assure full certification. Corrective measures will be approved by the SMC prior to implementation. These measures should ensure that the mitigation standard is met at the end of the five-year management period from the day the planting is completed.

During construction of the mitigation wetlands, qualified personnel must make periodic inspections of the site to ensure that soil *erosion* control measures are employed and functioning properly. Inspection reports shall be submitted to the SMC on a monthly basis.

P. MITIGATION BANK CREDIT SALES

Upon authorization of the *mitigation* bank, through a *Watershed Development Permit*, the sale of *wetland* credits and the *creation* or *restoration* of wetlands and *buffers* may commence. The mitigation bank credits may be sold for mitigation purposes in accordance with the following conditions:

1. Certified credits and conditionally certified credits may be sold provided that adequate funds, as approved by the SMC, are established through an escrow account, performance bond, irrevocable letter of credit, or other financial surety for the generation of certified credits and long-term maintenance of the bank site.
2. If an approved bank has only uncertified credits, then those uncertified credits may be sold for *mitigation* purposes, provided that adequate funds, as approved by the SMC, are established through an escrow account, performance bond, irrevocable letter of credit, or other financial surety for the generation of credits and long-term maintenance of the required bank site.
3. The SMC has sole authority to determine the number of credits available for withdrawal from the *mitigation* bank.

4. All *mitigation* bank credit sales shall require prior approval by the SMC to confirm credit availability and compliance with all other applicable provisions of this Ordinance.

In every event, the mitigation bank sponsor shall establish in a performance bond, escrow account, irrevocable letter of credit, or other financial surety, adequate funds to ensure the construction, planting, and long-term monitoring, management, and maintenance of the mitigation bank *wetlands* and associated uplands. The amount of the financial surety shall be based upon the calculated per acre cost of completing the approved plan, including grading and planting of the site. Cost estimates for the construction and/or planting and maintenance for all restored, created, or enhanced wetlands in the bank must be presented. A proposed schedule of release of the financial surety following completion of specific tasks associated with the establishment of the bank must also be submitted for approval. Construction estimates shall include an estimate of the cubic yards of earth to be moved during the grading of the site, as well as an estimated cost per cubic yard for the earthwork.

The interest on all such escrow accounts may be used by the bank sponsor for monitoring, management, and maintenance purposes only. The financial sureties must be maintained until all credits have been certified and sold or the SMC has determined the mitigation bank is self-sustaining. The amount of the financial surety will be reviewed annually based on the results of the monitoring report.

For all mitigation banks, credit sales may commence upon approval of the bank's charter. A maximum of 30% of the total potential credits may be sold prior to construction, based on approval of the bank's charter and the posting of adequate financial surety. Upon acceptance by the SMC that appropriate wetland hydrology has been demonstrated throughout all proposed wetlands at the site, an additional 20% of the total credits may be sold. Upon acceptance by the SMC that the site has been planted according to the approved plan, and after wetland hydrology has been demonstrated, another 20% of the total credits may be sold. The final 30% of the total credits may be sold upon full certification.

Incremental demonstration of wetland hydrology and incremental planting of the site may also be awarded credit. For example, peizometer data from a 50-acre wetland restoration area shows that 37 acres of the planned wetland meets the wetland hydrology criterion of the 1987 Federal Wetland Delineation manual (as amended, including applicable supplements).

These 37 acres represent 74% of the proposed wetland area. By applying this 74% factor to the allowable 20% increment of credits awarded for demonstrating wetland hydrology, the allowable increment of new credits for the bank would equal 14.8% of the proposed wetland on the site (0.74 X .20 = 0.148, or 14.8%). The same method would be used for calculating credits due to incremental planting. In the event that the bank sponsor sells more than the number of credits approved by the SMC, the SMC reserves the right to deduct the amount of the oversale from the total potential credits available from the

bank. These credits will not be restored, even if future development of the bank results in the certification of additional credit sales.

No Watershed Development Permits will be granted to *applicants* proposing to use a mitigation bank unless credits are available in the bank, as specified in this Ordinance.

The initial physical and biological improvements at the bank site (including, but not limited to, grading, planting, and restoration of wetland hydrology) must be completed no later than the end of the third full growing season following the sale of the first mitigation bank credit.

The bank sponsor shall keep a ledger of all available credits, whether purchased or unpurchased, and of all credits sold or otherwise debited including individual sale prices. This ledger shall be made available to the SMC upon request. In addition, the bank sponsor must provide the SMC an updated ledger containing a list of all transactions, including sale prices at a given bank to date at the conclusion of every credit sale.

Q. MONITORING, MANAGEMENT, AND REPORTING

Monitoring shall occur for a period of five (5) years from the date of the completion of the approved planting plan. Management shall proceed on a continuing basis from the completion of planting through the end of the monitoring period. Management shall proceed as needed to reconcile current conditions with functional goals. Any required remedial measures will be based on information contained in monitoring reports and/or from SMC site inspections.

The monitoring results of the *mitigation* bank shall be provided to the SMC on an annual basis during the monitoring period. Following this, no report shall be required, but the SMC shall retain the right to *inspect* the mitigation bank as deemed appropriate. The SMC shall hold on file copies of any reports. The SMC will establish an annual compliance monitoring schedule that assures that all mitigation bank sites are inspected for compliance with the approved bank plan.

The mitigation bank sponsor shall be responsible for all monitoring, management, and reporting. However, the work may be done by bank employees, subcontractors, or public or private organizations.

The operational life of a bank shall consist of the period during which the terms and conditions of the mitigation bank charter are in effect. With the exception of arrangements for the long-term management and protection in perpetuity of the *wetlands* and/or other aquatic resources and associated uplands, the operational life of a mitigation bank terminates at the point when:

1. Wetland mitigation credits have been exhausted or banking activity is voluntarily terminated with written notice from the bank sponsor to the SMC; or
2. The SMC has determined that the debited bank is functionally mature and/or self-sustaining to the degree specified in the mitigation bank charter

and associated documents, including the performance standards outlined in this Ordinance.

R. LOSS OF BANK CHARTER

Should a bank not meet the terms of its charter, for whatever reason, the SMC shall inform the bank sponsor and shall specify a reasonable period of time in which to comply. Should any modifications to the charter be required, recommended changes shall be approved by the SMC. Continued non-performance of the bank shall result in revocation of the charter and forfeiture of financial securities.

S. PERFORMANCE STANDARDS

The following performance standards are established to ensure that *mitigation* banks create *wetlands*, which compare favorably with moderate to high quality *natural* wetlands with respect to diversity, abundance, and distribution of plant species, and also to ensure that the created wetlands exhibit the hydrologic regimes of natural wetlands. These standards will be used to measure the performance of mitigation banks unless otherwise stated in the mitigation bank charter. The bank sponsor may propose other standards if native plant restoration is not the primary goal of the mitigation bank. For example, wildlife habitat enhancement goals may require the development of alternative standards based on habitat structure such as the interspersion of open water and cattails, or the seasonal establishment of mud flats. Justification for alternative standards must be provided in the bank prospectus. The SMC retains approval authority for any performance standards proposed which are different from those contained in this Ordinance.

Species Composition: Species selected for the planting shall be native to Lake County (ref. Wilhelm, G. and L. Rericha's Flora of the Chicago Region, 2017, Indianapolis: Indiana Academy of Science), and shall be appropriate for the hydrologic zone to be planted. A minimum number of native perennial species proposed for establishment must be present within each plant community to meet certification standards, as follows:

Marsh - minimum of 15 native perennial species

Sedge meadow/wet prairie - minimum of 35 native perennial species

Mesic prairie (buffer) - minimum of 25 native perennial species

In addition, at least 50% of the required minimum number of species must occur at a 10% frequency or greater.

Species Dominance: The following dominance standards are for wetland mitigation banking purposes only. Dominance shall be determined by calculating importance values, with at least two parameters, frequency and cover, used to calculate species importance. Cattails (*Typha* spp.), reed canary grass (*Phalaris arundinacea*), and non-native species shall cumulatively comprise not more than 5% of the total dominance measure for each community for which credit is granted.

The native perennial species within each wetland plant community shall represent at least 80% of the total dominance measure.

Wetland Hydrology: Wetland hydrology must be independently demonstrated within each wetland for which credit is sought from data gathered from peizometers placed throughout the bank site. Peizometer placement must be approved by the SMC prior to approval of the bank.

Conditional Certification: Credits shall be conditionally certified not sooner than the second full growing season after planting, based upon achieving the following standards:

75% of the minimum number of native perennial species required for full certification shall be present in each plant community.

The total of native perennial species within each plant community shall represent at least 15% of the total dominance measure.

Appendix N: WDO Mitigation Requirements and Guidelines for Isolated Waters of Lake County Impacts

INTRODUCTION

This Appendix contains the minimum requirements and guidelines for preparation of a Project Mitigation Document (PMD) related to the creation or enhancement of *wetlands* on a *development* site, or on an off-site property, to meet the *mitigation* provisions in §1007 Mitigation for Isolated Waters of Lake County of this Ordinance. These provisions do not apply for Category IV (1005.01A.4) impacts to *Isolated Waters of Lake County*. The PMD shall provide, at a minimum, information needed by SMC or an Isolated Wetland Certified Community (IWCC) to evaluate the appropriateness and enforceability of a proposed mitigation plan. Additional requirements may apply for impacts to *Waters of the United States*, as determined by the U.S. Army Corps of Engineers. For the purposes of Appendix N, the term *mitigation site* refers to the ownership parcel where the mitigation is to occur. *Mitigation area* refers to the location within the mitigation site where the actual mitigation will occur.

Each PMD shall include specific information in a standard format as outlined in Table 1 and described in Appendix N, Sections A-K.

Table 1 – Standard Format for PMD

Section	Topic
A	Mitigation Goals
B	Mitigation Site Information
C	Mitigation Design
D	Deed or Plat Restriction
E	Construction Schedule
F	Financial Assurance
G	As-Built Plans
H	Performance Standards
I	Monitoring and Management
J	Reports
K	Compliance and Completion

A. MITIGATION GOALS

1. Discuss how the *wetland mitigation* shall duplicate or improve the hydrologic and biologic features of the impacted wetlands. Describe the specific functions of the wetlands to be created or enhanced versus the functions of the wetlands to be impacted.

2. Describe the acreage and vegetative community type of wetlands and wetland *buffers* to be created or enhanced to meet the minimum mitigation ratios required in 1007.02 of this Ordinance. Mitigation acreage shall be credited on the following basis:

   a. 100% for each acre of wetland created or restored. For the purposes of Appendix N, wetland creation includes restoration of historic wetlands which have been filled, drained, or otherwise manipulated to the extent the areas no longer exhibit wetland characteristics. Open water creation shall be credited at 100% for in-kind mitigation (e.g., one (1) acre of open water created for one

(1) acre of open water impacted). No mitigation credit shall be given for open water creation to compensate for non-open water impacts.

b. 25% for each acre of non-*farmed wetland* enhanced after a minimum ratio of 1:1 for wetland creation to *wetland impact* is achieved.

c. Enhancement of farmed wetlands meeting the size criterion 1009.01A of this Ordinance may be used for up to 80% of the total mitigation requirement (e.g., if 2.0 acres of mitigation are required, up to 1.6 acres may be credited for farmed wetland enhancement, as long as the size criterion above is met).

d. Enhanced upland areas or enhanced wetland edges used to meet the buffer requirements in §505 Buffer Areas of this Ordinance shall be credited at 25% for each acre enhanced. Created or restored wetland edges used to meet the buffer requirements of this Ordinance shall be credited at 75% for each acre created or restored. All high-quality aquatic resources existing on the mitigation site shall, at a minimum, meet the buffer requirements for high quality aquatic resources; all other existing enhanced, created, or restored wetland areas shall, at a minimum, meet the non-high-quality aquatic resource buffer requirements of this Ordinance.

B. MITIGATION SITE INFORMATION

1. Site Location

Identify the mitigation site on a general location map (USGS quadrangle map preferred), plat of survey, and major *watershed* map (e.g., Fox River Watershed).

2. Physical Description

Describe the physical characteristics of the mitigation area. Provide information to support the mitigation site selection, including, but not limited to: wetland determination report meeting the requirements in §1000 Wetland Delineation of this Ordinance, NRCS-certified wetland determination (for agricultural land), topographic map with a minimum of 2-foot contour lines, recent and historic aerial photographs, current site photographs, *drain tile* information, USGS hydrologic atlas, *FEMA* flood insurance rate map and *base flood elevations* as required by this Ordinance, and SCS soil survey map and soil unit descriptions.

3. Land Use

Describe the past and current land use(s) of the mitigation site parcel. Submit a plan at a minimum scale of 1 in.=100 ft. showing the existing land use(s) and pertinent features, such as *buildings*, roads, utility lines, drain tiles, culverts, landscaping, lot lines, etc. Include on the plan or provide a narrative of any adjacent land uses that could conflict with the mitigation proposal and any zoning restrictions. Discuss potential adverse impacts to the mitigation site, including stormwater runoff from adjacent properties or nearby *development* in the watershed. Include a copy of the current zoning map and comprehensive land plan showing proposed land use(s), roads, and trail systems.

4. Ownership

   Identify the current owner(s) of the mitigation site property. If the owner is different from the permittee, provide the SMC or IWCC with a copy of an executed agreement between the owner(s) and permittee that grants permission by the owner(s) for the permittee to use the property for mitigation and specifies the responsibilities of each party for establishment of the mitigation site. Once mitigation is in place, the permittee shall notify the SMC or IWCC of any change in ownership. The new owner(s) shall provide written assurance to the issuer of the Watershed Development Permit of the transfer of the permit and intent to comply with the terms and conditions of the permit, specifically the mitigation plan.

5. Significant Biological Resources

   The permittee shall consult with the Illinois Department of Natural Resources (IDNR) and the U.S. Fish & Wildlife Service (USFWS) regarding the possible presence of threatened or endangered species or critical habitat on the mitigation site. The SMC or IWCC shall not approve the mitigation area until documentation is provided confirming the proposed mitigation area is in compliance with the IDNR's Endangered Species Consultation Program and the Illinois Natural Areas Preservation Act [520 ILCS 10/11] and [525 ILCS 30/17] and the USFWS' consultation program under the federal Endangered Species Act.

C. MITIGATION DESIGN

1. Topography

   If grading is proposed, submit a grading plan at a minimum scale of 1 in.=100 ft. showing existing and proposed grades with a minimum of 1-foot contour lines. Identify elevation and location of reference benchmarks. Include cross-sections for the mitigation wetlands with normal water level (NWL) and high water level (HWL) depicted, if applicable.

2. Hydrology

   Identify the source(s) of water for the mitigation wetlands, both surface and subsurface. Describe any water control structures to be used and identify these structures on the grading plan, with invert elevations. Control structures with adjustable inverts are recommended to facilitate management of desired water levels in the mitigation wetlands. Describe the expected hydrologic regime of the mitigation wetlands. Provide hydrologic modeling results in both summary table and hydrograph form for the 2-year and 100-year, 24-hour storm events, at a minimum, to support the expected hydrologic regime of the mitigation wetlands. Verify that the mitigation design will not adversely impact the hydrology of existing on-site or nearby wetlands.

   Discuss factors influencing the quality of stormwater runoff from on-site and off-site sources (e.g., roads, lawns, parking lots, etc.) and incorporate best management practices (BMPs) into the design to treat runoff before it discharges into the wetlands. Identify the BMPs on the grading plan.

Stormwater detention basins shall not be used for creation of wetlands to meet the wetland mitigation requirements of this Ordinance in §1007 Mitigation for Isolated Waters of Lake County.

3. Soils

A minimum of twelve (12) inches of suitable rooting medium shall be provided on the mitigation wetlands and wetland buffer areas. Use low ground pressure equipment to minimize soil compaction. Include information about whether topsoil will be imported from off-site.

If the mitigation site contains a drained hydric soil, include the SCS soil map unit description and describe the drainage system (e.g., *drain tile*, ditches, channels, etc.). The drainage system shall be shown on the grading plan. Verify the hydric soil map unit by digging a 30-inch deep soil pit in a representative location of the map unit and write a detailed profile description of the soil, including horizons, soil colors using Munsell color charts, and soil texture and structure. Examine the soil profile for the presence of redoximorphic features such as iron/manganese accumulations, oxidized rhizospheres, mottles, and depleted zones. Record the type, relative abundance, location, and color of these features. Record other evidence of soil wetness such as the accumulation of partially decomposed organic matter at the soil surface.

4. Planting Plan

Submit a plan at a minimum scale of 1 in.=100 ft. depicting the location and acreage of each wetland and wetland buffer community type to be established. This plan shall also be used as the base map to show the locations of the vegetation monitoring transects and hydrology sampling points discussed in Appendix N: I: MONITORING AND MANAGEMENT. Provide the list of plants to be established in community by common and scientific name, along with the seeding or planting rate for each species. Seed and plant stock source(s) shall originate from within 150 miles of the mitigation site to maintain local genotypes.

D. DEED OR PLAT RESTRICTION

All mitigation wetlands, as well as other preserved wetlands or waters and wetland buffers on the mitigation site, shall be protected in perpetuity by a *deed or plat restriction*. The permittee shall provide the SMC or IWCC with a draft copy of the proposed deed or plat restriction document and associated exhibit(s) showing the restricted areas for approval. Contact the SMC for example wetland and wetland buffer restrictive language.

E. CONSTRUCTION SCHEDULE

Provide a schedule with anticipated start date and duration for each phase of the mitigation site construction, including installation of soil *erosion* and sediment control measures, earthwork, and planting.

F. FINANCIAL ASSURANCE

The permittee shall provide the SMC or IWCC with a financial surety for 110% of the total estimated cost for construction, monitoring, and management of the mitigation wetlands and wetland buffers. The amount of the financial surety shall be based upon

the wetland consultant's detailed cost estimate for completing the approved mitigation plan, including earthwork, planting, and monitoring and management for a minimum of five (5) full growing seasons after planting is completed. The cost estimate shall be provided to the SMC or IWCC for approval prior to obtaining the financial surety. The financial surety may be in the form of a performance bond, irrevocable letter of credit, irrevocable trust, escrow account, casualty insurance, or other approved surety.

The financial surety shall be held by the SMC or IWCC until the mitigation site meets the performance standards in PERFORMANCE STANDARDS. Such surety may be phased out or reduced by the SMC or IWCC once it has been demonstrated that the mitigation site is functionally mature and/or self-sustaining in accordance with the performance standards in Appendix N: H: PERFORMANCE STANDARDS.

G. AS-BUILT PLANS

1. Upon the completion of earthwork, but prior to planting, the permittee shall provide an as-built topographic map to the SMC or IWCC for approval. The as-built map shall depict the constructed grades at a minimum of 2-foot contour intervals, along with spot elevations, and the invert elevations of all water control structures. The benchmark(s) used to establish the grades shall also be indicated on the plan. If the constructed grades and invert elevations are not in conformance with the approved grading and utility plan, the permittee shall be responsible for regrading or reinstalling the water control structures at the designed elevations to comply with the approved plan. If the as-built plan and site inspection are determined to be in conformance with the approved design, the SMC or IWCC shall issue a written approval of the as-built plan and planting activities may commence.
2. Upon the completion of planting activities, the permittee shall provide the SMC or IWCC with lists of the species actually planted in the mitigation wetlands and wetland buffers, including the common and scientific name of each species, the quantity of each species planted (e.g., weight of seeds/acre, number of plugged plants/acre), the source of the seeds/plants, the planting method(s) used, and the date(s) seeding or planting occurred.

H. PERFORMANCE STANDARDS

Performance standards are predetermined criteria for guiding and measuring mitigation success.

1. Performance Period

The performance period shall consist of a minimum five (5) years at which time the vegetation performance standards are met, unless the vegetation performance standards can be met earlier for two (2) consecutive growing seasons, at which time the performance period shall be considered complete. Conversely, the performance period may be required to be longer than five (5) years in order to meet the vegetation performance standards if they haven't been met after the standard five-year time frame.

2. Wetland Vegetation Performance Standards

The performance standards below apply to emergent, wet prairie, and sedge meadow communities. If other community types are proposed (e.g., aquatic,

forest, etc.), the permittee shall submit proposed performance standards for each community to the SMC or IWCC for approval.

a. Floristic Quality: By the end of the performance period, a native mean coefficient of conservatism value (native mean C value) of greater than or equal to 3.5 and a native floristic quality index value (FQI) of greater than or equal to 20 shall be achieved for each wetland community as determined using the Chicago Region Floristic Quality Assessment Calculator (U.S. Army Corps of Engineers, Chicago District, most recent version).

b. Mean Wetness Coefficient: By the end of the performance period, the mean wetness coefficient (mean W) shall be less than or equal to 0 in each wetland community. Wetness coefficients are listed below, based on the category of each plant species designated in the National Wetland Plant List - Midwest Regional Plant List (U.S. Army Corps of Engineers, most recent version). The mean W for each wetland community is calculated by the following equation: Sum of wetness coefficients for all species/number of species.

Wetness Coefficients

National Wetland Category	*Wetness Coefficient*
Obligate (OBL)	2
Facultative Wetland (FACW)	1
Facultative (FAC)	0
Facultative Upland (FACU)	1
Upland (UPL)	2

c. Vegetative Cover: By the end of the performance period, no area greater than one hundred (100) square feet within the created or enhanced wetlands shall be devoid of vegetation, as measured by percent areal coverage. Areas not meeting this standard shall be re-planted.

d. Invasive Species Dominance: By the end of the performance period, none of the three

e. dominant plant species in the emergent, wet prairie, or sedge meadow communities shall be non-native or weedy species, including, but not limited to, the following species: *Typha* spp., *Phragmites australis, Poa compressa, Poa pratensis, Lythrum salicaria, Salix interior, Echinochloa crusgalli,* or *Phalaris arundinacea*. Dominance shall be based on the relative importance value (RIV) of each species, which is calculated by the following equation:

RIVs = [RFs + RCs] / 2 x 100, where:

RIVs is the relative importance value of the individual species in the community,

RFs is the frequency of the individual species occurring in all quadrats/the total frequency of all species (adventive and native) occurring in all quadrats, and

RCs is the coverage of the individual species occurring in all quadrats/the total coverage of all species (adventive and native) occurring in all quadrats.

3. Wetland Buffer Vegetation Performance Standards

   The performance standards below apply to the prairie community to achieve mitigation credit. If other community types are proposed for the wetland buffers (e.g., forest, savanna, etc.), the permittee shall submit proposed performance standards for each community to the SMC or IWCC for approval.

   a. Floristic Quality: By the end of the performance period, a native mean coefficient of conservatism value (native mean C value) of greater than or equal to 2.5 and a native floristic quality index value (FQI) of greater than or equal to 15 shall be achieved for the buffer as determined using the Chicago Region Floristic Quality Assessment Calculator (U.S. Army Corps of Engineers, Chicago District, most recent version).

   b. Vegetative Cover: By the end of the performance period, no area greater than one hundred (100) square feet within the created or enhanced mesic prairie buffers shall be devoid of vegetation, as measured by percent areal coverage. Areas not meeting this standard shall be re-planted.

   c. Invasive Species Dominance: By the end of the performance period, none of the three dominant plant species in the mesic prairie buffer community shall be non-native or weedy species, including, but not limited to, the following species: *Cirsium arvense, Melilotus* spp., *Alliaria petiolata, Poa compressa, Poa pratensis, Ambrosia artemisiifolia,* or *Rhamnus cathartica* and *R. frangula*. Dominance shall be based on the relative importance value (RIV) of each species, which is calculated using the equation in Appendix N: H.2.d.

I. MONITORING AND MANAGEMENT

1. Monitoring

   a. Monitoring Plan: The PMD shall contain a proposed five-year monitoring plan. Such plan shall include, at a minimum, a description of the sampling methodologies to be followed for evaluating hydrology in the mitigation wetlands and assessing vegetation in the mitigation wetlands and buffers, the frequency of sampling, and the report(s) to be generated.

   b. Vegetation Monitoring: A sufficient number of straight-line sampling transects shall be established in the mitigation wetlands and wetland buffers to achieve a representative amount of plant frequency and coverage data. The beginning and end points of each transect shall be monumented in the field with a metal stake. The location of each transect and the number of proposed quadrats per transect shall be accurately identified on the Planting Plan (Appendix N: C.4), which shall be included in the annual monitoring reports. Each transect shall consist of a series of sample quadrats either 0.25 or 1.0 square meter in size. Vegetation sampling shall be conducted by, or under the supervision of, a Certified Wetland Specialist twice during the growing season with at least one month between sampling dates (e.g., May/June and August/September). Vegetation sampling shall include the following, at a minimum:

      1. Record the number and estimated percent areal coverage of each vascular plant species in each quadrat, including all non-native (adventive) taxa and

native taxa. Use this data to perform the calculations in Appendix N, Section I.1.b.(2) through (4). Photograph each end of the transect at the time of sampling.

2. Calculate the native mean C value, FQI, and mean wetness coefficient for each quadrat.
3. Calculate the native mean C value, native FQI, and mean wetness coefficient for each transect.
4. Calculate the RIVn of total native species by the following equation:

RIVn = [RFn + RCn] / 2 x 100, where:

RIVn is the relative importance value of the total native species in the community,

RFn is the total frequency of the native species occurring in all quadrats/the total frequency of all species (adventive and native) occurring in all quadrats, and

RCn is the total coverage of the native species occurring in all quadrats/the total coverage of all species (adventive and native) occurring in all quadrats.

c. Hydrology Monitoring: A sufficient number of representative sample points shall be established in each mitigation wetland to assess the hydrologic conditions. The sample points shall be monumented in the field with a metal stake. The location of each sample point shall be accurately identified on the Planting Plan (Appendix N: C.4), which shall be included in the annual monitoring reports. At a minimum, hydrology monitoring shall be conducted on a bi-weekly basis during the first growing season and on a monthly basis during each succeeding growing season of the monitoring period. Hydrology sampling shall include the following, at a minimum:

1. Depth of inundation (in. or cm.) based on NAVD 88 datum, which supersedes the NGVD29 datum used prior to September 18, 2013, and
2. Soil moisture condition to a minimum depth of 12 in. (e.g., saturated, moist, dry).

2. Management

a. Management Plan: The PMD shall contain a proposed five-year management plan. Such plan shall include a description of the anticipated management practices to be employed each year to meet the performance standards in Appendix N: H: PERFORMANCE STANDARDS, and a schedule of all proposed management practices (i.e., a calendar indicating month and year of activity). In addition, the plan shall identify the entity to assume responsibility for long-term management of the mitigation wetlands and wetland buffers after the performance period and the dedicated source of funding for long-term

management. At completion of the performance period, the SMC or IWCC shall require a written agreement between the permittee and the entity identified for long-term management.

b. Management Practices: Describe the methods and equipment to be used for each proposed management practice (e.g., prescribed burning, control of invasive plant species by herbicide application or hand removal, mow management, etc.). List all permits or certifications/licenses required for the proposed management practices (e.g., IEPA open burn permit, local fire department permits, IDOA herbicide applicators license, etc.). Personnel who perform the management activities shall have appropriate licenses and qualifications.

J. REPORTS

At a minimum, an annual report prepared by, or under the supervision of, a Certified Wetland Specialist summarizing the results of the previous year's monitoring data shall be submitted to the SMC or IWCC by January 31st of the following year. The annual reports shall contain, at a minimum:

1. A narrative summary of the vegetation and hydrology monitoring data;
2. A discussion of the progress of native vegetation establishment relative to the performance standards in Appendix N: H: PERFORMANCE STANDARDS;
3. An appendix containing the monitoring data;
4. Photographs of the sample transects and panoramic views of the mitigation wetlands and buffers;
5. A narrative summary of the management practices employed during the previous year and photographs documenting these activities;
6. Recommendations for proposed management practices to be employed during the following year(s), based on the monitoring results to date; and
7. The proposed schedule for management practices in the following year(s).

K. COMPLIANCE AND COMPLETION

1. Responsible Parties

The permittee shall be responsible for establishment of the mitigation wetlands and wetland buffers and all associated monitoring and management activities for the performance period. The permittee shall take corrective measures as necessary to meet the performance standards in Appendix N: H: PERFORMANCE STANDARDS, within the performance period.

After the performance period, the entity identified for long term management shall assume long-term management for the mitigation wetlands and wetland buffers. The permittee's responsibility for the mitigation wetlands and wetland buffers shall be released in writing by the SMC or IWCC.

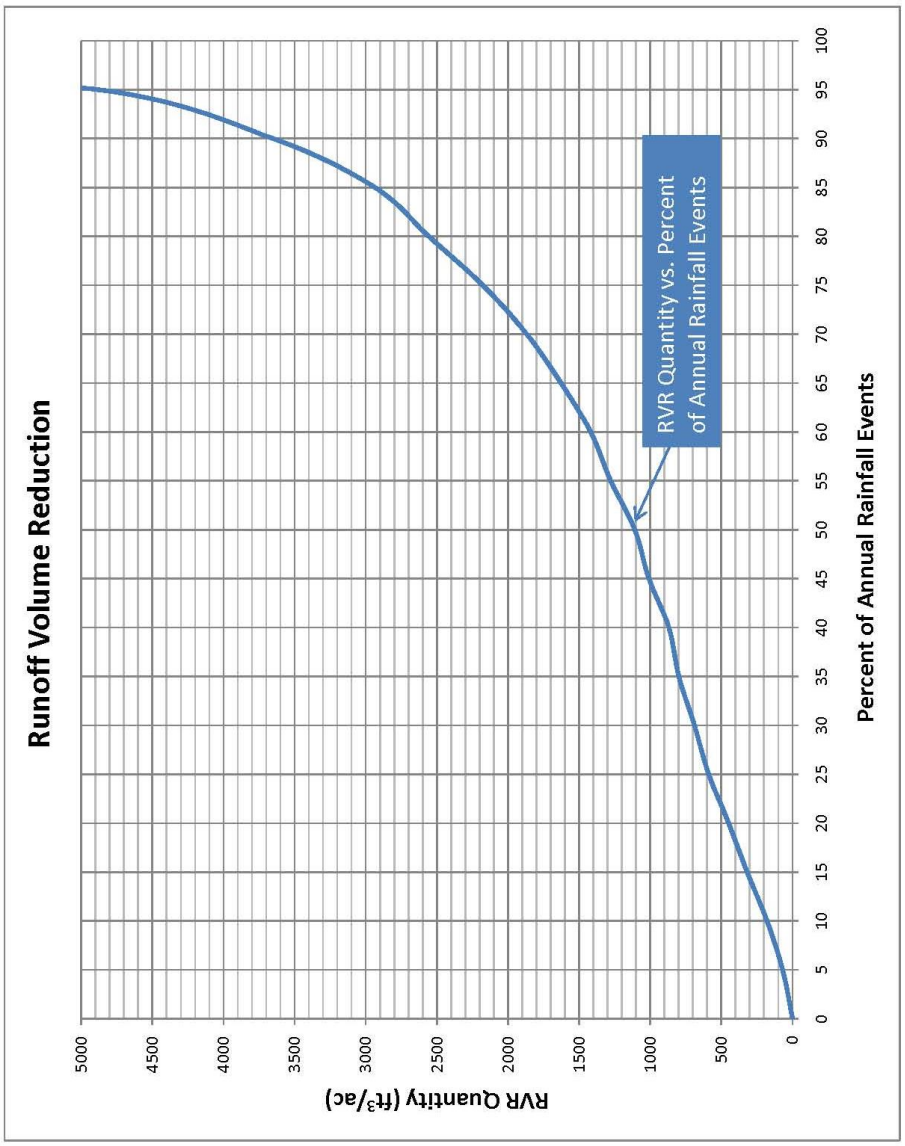
2. Notification

After the performance period, the permittee shall provide written notification to the SMC or IWCC, along with following information: 1) a scaled plan (min. 1 in. = 100

ft.) showing the delineated boundaries and actual acreages of the mitigation wetlands and wetland buffers; and 2) a summary of how the performance standards have been met for each wetland and buffer. Upon notification, the SMC or IWCC shall review the submitted information and perform a site inspection to evaluate the success of the mitigation site. If the mitigation goals and performance standards have been met, the SMC or IWCC shall notify the permittee in writing that the permittee's responsibility for the mitigation site is released. A copy of the written release shall be provided to the entity designated for long-term management of the mitigation site.

If the SMC or IWCC determine that the mitigation goals or performance standards have not been met based on the information submitted and site inspection, the SMC or IWCC shall notify the permittee in writing of the specific shortfalls. The permittee shall be granted a specified time limit to respond to the identified shortfalls. Failure to fully respond to the identified shortfalls within the specified time limit may result in SMC or IWCC use of the mitigation surety to correct the shortfalls.

Appendix O: Runoff Volume Reduction



Percent of Annual Rainfall Events	100% impervious values	
	Runoff Depth (in)	RVR Quantity ft^3/ac new impervious
0	0	0
5	0.02	70
10	0.05	180
15	0.09	320
20	0.12	450
25	0.16	590
30	0.19	690
35	0.22	800
40	0.24	870
45	0.28	1010
50	0.30	1110
55	0.35	1280
60	0.39	1420
65	0.45	1630
70	0.51	1870
75	0.60	2180
80	0.70	2560
85	0.81	2940
90	1.01	3660
95	1.35	4900
99	2.41	8760

Runoff Depth based on Figure 3 of the Center For Watershed Protection Report.

Runoff Depth = P*R where:

P = Rainfall Depth (inches)

R=Volumetric Runoff Coefficient = 0.95 for 100% impervious cover [0.05+.009(I), where I is 100% (impervious cover)]

RVR Quantity = Runoff Depth (in) / 12 (in/ft) * 43560 (ft^2/ac)

Activity 450 (Stormwater Management) Documentation Checklist:

1. Stormwater Management Regulation (SMR):

The Village building code requires new developments to not increase the offsite runoff post development. This is within municipal codes:

> Code 6-63 *(i) No off site increase in runoff values will be acceptable except as approved by the village engineer*, and
>
> Code 6-64 *(f)Runoff volumes and rates may not increase or change direction except as approved by the village engineer.*

2. Size of Development (SZ) documentation:

Per the municipal code, all improvements, including single lot developments, that increase runoff are required to detain the excess stormwater. This includes new houses, pools, additions, sport courts, large patios, etc.

> Code 6-63 *(b) Stormwater drainage plans shall be required for all work on any site requiring a building permit except the following:*
>
> *(a) Interior work;*
>
> *(b) Roof maintenance or repair (as long as the volume, rate and direction of runoff are not altered);*
>
> *(c) Any other work that does not make, or propose to make, any change to the exterior dimensions at grade level of the structures on the site; increase impervious area on the site or change the volume, rate and direction of runoff.*

These requirements are more stringent than the below Lake County ordinance as they pertain any increase in impervious. However, given some improvements are very small (patios, walkways, etc.), the Village does grant waivers for this requirement.

3. Design Storm (DS) documentation:

The following code requires design calculations for 2, 10, and 100 yr storms.

> Code 6-63 *(e) The plan shall identify and quantify any runoff changes (volume, rate or direction) for existing conditions and postconstruction. Calculations to include a 2-, 10- and 100-year design storm.*

4. Low Impact Development (LID) documentation

The Lake County WDO, which the Village most recently adopted in 2021, has requirements to incorporate stormwater infiltration, evapotranspiration, reuse and other green infrastructure techniques within Article 5 of the Watershed Development Ordinance.

5. Public Maintenance (PUB) documentation

Under sec 6-68,

> *(b) It shall be the duty of the owner of any site required to be improved and maintained in conformance with an approved stormwater drainage plan to bring such site into compliance with said engineering plans within fourteen (14) days following written notice from the director of community development that said site does not conform to the approved stormwater drainage plans for such property*.

For subdivisions properties, it is typical to grant the Village easement along these areas for future maintenance should the Village have to intervene.

6. Impact Adjustment for SMR

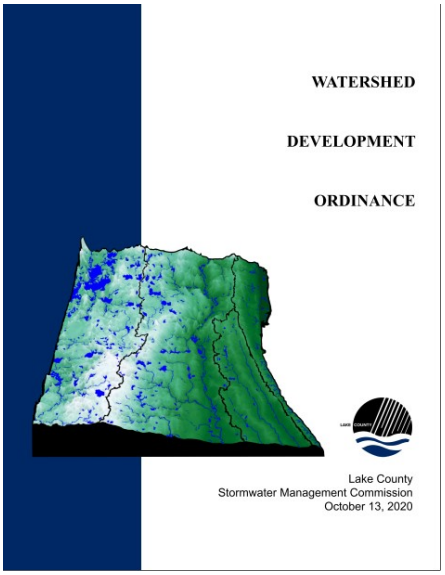
Maps for the West Fork of the North Branch of the Chicago River (NBCR) and Middle Fork of the NBCR attached.

ADDITIONAL INFORMATION - Activity 450: Provide a copy of STORM WATER ORDINANCES

Drainage Compliance

Adoption of Lake County Watershed Development Ordinance

On October 13, 2020 the Lake County Board adopted amendments to the County-wide Watershed Development Ordinance (WDO). The amendment is currently effective and includes the minimum County-wide standards for regulated development. The amendments address new regulations including, but not limited to: updated storm water modeling (rainfall data and Bulletin 75), detention requirements, native planting requirements, earth stabilization for construction projects, water quality as related to WDO regulated development, and wetland determination among other things.



All communities in Lake County are required to adopt the revised ordinance by October, 8, 2012 as a requirement of the National Flood Insurance Program (NFIP) and to maintain community certification status. The Village of Deerfield is designated a “Certified Community” by the Lake County Stormwater Management Commission (SMC). Certified Communities are those communities that have been delegated authority by the SMC under the WDO to administer all, or portions of, the WDO within their community limits.

The original WDO was revised in 2020 and the Village of Deerfield adopted this revised WDO on 3/15/2021. A copy of the Lake County Watershed Development Ordinance (WDO) can be found on the Village website or on Lake County’s website.

Site Grading and Drainage Ordinance

The Village of Deerfield has developed a user guide to assist in the uniform interpretation of the subject ordinance. These requirements and procedures establish a basis for the Village to utilize in the administration of the ordinances of the Village of Deerfield. A copy of this manual can be found on the Village’s website at http://il-deerfield.civicplus.com/186/Drainage-Compliance.

COMPLETE MUNICIPAL CODE FOLLOWS:

CHAPTER 6. BUILDING.

Article 10. Site Grading and Drainage

Sec. 6-60. Definitions:

For purposes of this article, the following words and phrases shall have the following meanings:

(a)*As Built Grading Survey:* A survey by a licensed surveyor of actual grades at critical areas of the site, made following the completion of work and grading activities at the site, which is sufficient in the opinion of the village engineer to demonstrate drainage of stormwater runoff from the site in accordance with the approved stormwater drainage plan for the site.

(b)*Engineer's Certificate Of Completion:* A certificate by a licensed engineer, following the completion of work and grading activities at the site, that the engineer has inspected the site following completion of the work and that future stormwater runoff from the site will be contained, routed and released in accordance with the approved stormwater drainage plan for the site.

(c)*Grading:* Any excavation, clearing, filling or grading of a site that results in a change in elevation or a change in the volume, rate or direction of stormwater runoff.

(d)*Grading Survey:* A survey by a licensed surveyor of actual grades at critical areas of the site sufficient in the opinion of the village engineer to demonstrate drainage of stormwater runoff from the site. A grading survey shall also show the top of foundation elevation of structures adjacent to the site and the actual grades at critical areas on property abutting the site as necessary in the opinion of the village engineer to establish existing drainage patterns that may be affected by the work.

(e)*Impervious Surface Improvements:* A driveway, sidewalk, patio or other surface improvement that is constructed with materials rendering the same practically impervious to surface waters.

(f)*Site:* Any lot, block, tract or parcel of land in the R-1, R-2, R-3, R-4 or R-5 residential zoning district, or in a residential planned unit development, where work or grading is proposed or performed.

(g)*Stormwater Drainage Plan:* A plan for containing, routing and releasing stormwater runoff from a site approved by the village engineer. A stormwater drainage plan shall be consistent with the final engineering plans and drainage system, if any, approved for the subdivision in which the site is located and shall conform with all applicable laws and best engineering practices. A stormwater drainage plan shall address all portions of the site affected by grading activities, or by the construction of impervious surface improvements or any change which affects the rate, volume or direction of runoff.

(h)*Stormwater Runoff:* Water that results from precipitation that is not absorbed by soil or plant material before draining from a site.

(i)*Work:* Any work on an existing or proposed residential building, structure or site which changes, or proposes to change, the exterior dimensions at grade level of the building or structures on the site, or the volume, rate or direction of runoff. (Ord. 0-09-09, 4-20-2009)

Sec. 6-61. Drainage Plans Required With Building Permit Applications:

No building permit shall be issued for a site until the owner of the site or his authorized agent has submitted a stormwater drainage plan, together with all other submissions required under village ordinances. Required stormwater drainage plans shall be submitted for review and approved prior to the start of construction work or grading activities. Stormwater drainage plans shall be required for all work on any site requiring a building permit except the following:

(a) Interior work;

(b) Roof maintenance or repair (as long as the volume, rate and direction of runoff are not altered);

(c) Any other work that does not make, or propose to make, any change to the exterior dimensions at grade level of the structures on the site; increase impervious area on the site or change the volume, rate and direction of runoff.

All stormwater plans must reflect conformance with all applicable laws and best engineering practices. Such plans must be approved by the village engineer before any demolition or construction work may commence.

The appropriate unit of the building permit application must be completed and approved as provided in section 6-62 of this chapter for any recontouring or grading work to be done even if no demolition or construction work is contemplated.

All plans must be prepared and sealed by a licensed engineer. (Ord. 0-09-09, 4-20-2009)

Sec. 6-62. Permits Required For Grading:

(a)No grading of a site shall be performed until the owner of the site has completed the appropriate unit of the building permit application, submitted supporting documentation and been issued a permit approving a stormwater drainage plan for the site. A stormwater drainage plan is required for the issuance of a permit.

(b)A permit shall not be required for routine and ordinary landscape activities, provided that such grading or landscape activities do not result in a material change in the volume, rate and pattern of stormwater runoff onto or off of the site.

(c)A separate permit is not required when a stormwater drainage plan is approved with a building permit issued for a site. The stormwater drainage plan must be submitted to and approved by the village engineer, prior to building permit issuance. (Ord. 0-09-09, 4-20-2009)

Sec. 6-63. Stormwater Drainage Plan Components:

Required stormwater drainage plans must address both existing and proposed stormwater drainage conditions and drainage channels on the site and the location on the site of excavated soil to be

stockpiled during construction. In particular, surface drainage patterns on the site during and after construction must be shown. The following is required at a minimum:

(a) A grading survey which shows the existing stormwater runoff patterns and the location of any special flood hazard areas prior to demolition of any habitable building and before any grading of the site.

(b) An engineered stormwater drainage plan that shows the proposed drainage patterns during and after construction. Site drainage conditions during and after construction may not be any worse than before construction, or impose a greater burden on downstream or upstream property owners than existed before construction. Site runoff volume, rate and direction must be included in the drainage plan for existing and postconstruction conditions. Any increase must be diverted or detained. Easements must be identified. A stormwater drainage plan shall include maintenance provisions.

(c) Sufficient information to substantiate the stormwater drainage patterns proposed, including spot elevations or topographic lines as necessary indicating:

(1) The slope of the property;

(2) The location of any dry wells or storm sewer intakes;

(3) The grades at the top of, and adjacent to, the foundation;

(4) The property lines;

(5) The location of all downspouts (and sump discharges) and their connection to the storm sewer serving the property;

(6) Downspout discharges and overland flow routes as applicable;

(7) Overland flow path(s) and emergency overflow route(s); and

(8) Base flood elevation and floodplain/floodway information (if applicable).

(d) An excavated materials plan showing where the stockpiling will occur, how stormwater runoff will be accommodated and the facilities to be provided to prevent soil erosion or silting of downstream areas.

(e) The plan shall identify and quantify any runoff changes (volume, rate or direction) for existing conditions and postconstruction. Calculations to include a 2-, 10- and 100-year design storm.

(f) Calculate capacity of downstream storm sewers (not necessary if 0 net discharge).

(g) Existing and/or proposed easements for overland flow path(s) and for emergency access.

(h) Maintenance instructions to describe expectations for maintenance of stormwater features including overland flow route(s).

(i) No off site increase in runoff values will be acceptable except as approved by the village engineer.

(j) During construction, spot surveys shall be provided immediately after the foundation pour, including top of foundation (T/F), brick ledge(s) as well as the location of the foundation relative to the building lines.

(k) One set of architectural drawings (with updates as needed) to be provided to the village engineer with the engineering submittal(s). (Ord. 0-09-09, 4-20-2009)

Sec. 6-64. Downspouts And Sump Discharges:

(a)All new and existing residential buildings whose additions increase the amount of property covered by buildings or modify downspouts and sump discharges must connect all downspouts and sump discharges to the available storm sewer system, unless the village engineer determines that downstream sewer capacity is insufficient, or that a direct connection of downspouts and sump discharges to the available storm sewer system is not necessary to prevent an increased burden upon adjoining property by reason of stormwater runoff in accordance with applicable laws and best engineering practices.

(b)Prepare downstream sewer capacity analysis for existing and proposed conditions prior to connecting to the public storm sewer.

(c)Demonstrate and quantify the existing and proposed runoff volume, rate and direction. Any increase must be diverted or detained.

(d)Direct connection of downspouts to the storm sewer system is not required if the public storm sewer system is more than two hundred feet (200') from the site, is not within easements or street right of way, or if applicable laws prohibit the direct inflow of stormwater.

(e)Discharges shall be directed away from adjacent properties and at a minimum setback from the property line (not less than 1/2 the building setback lines).

(f)Runoff volumes and rates may not increase or change direction except as approved by the village engineer.

(g)Direct downspout and sump discharges shall be released onto the site in a manner that provides positive drainage without adversely affecting adjacent property. (Ord. 0-09-09, 4-20-2009)

Sec. 6-65. Stockpiled Materials:

(a)Material stockpiles may not be located in areas where they might erode onto adjacent properties, public streets, or sidewalks. Stockpiles and excavated materials may not be placed in areas where potential damage to trees may occur or may cause root suffocation.

(b)Excavated material stockpiles must meet the requirements of the Lake County watershed development ordinance including erosion and sediment control. (Ord. 0-09-09, 4-20-2009)

Sec. 6-66. As Built Grading Survey; Certificate Of Completion:

(a)An "as built" grading survey shall be provided after completion of the following construction work and grading activities for which a stormwater drainage plan was required, and subject to the further requirements set forth in subsections (b) through (j) of this section:

(1) The construction of a new single-family residential building;

(2) Any work or grading activity which increases the runoff volume or rate, or changes the runoff pattern;

(3) Any work or grading activity within a drainage easement or swale.

(b)An approved licensed design professional shall provide certified calculations for runoff volume, rate and sewer capacity. Postconstruction as built survey is to be prepared and certified by the original design professional for the project and is to include elevations for top of foundation (T/F), brick ledge(s), and adjacent grades at foundation, rim and inverts for all drainage structures, downspout and sump discharges and drainage swales, at a minimum.

(c)All work within the flood prone zones shall be documented.

(d)Datum for surveys shall be NAVD 88 or the latest datum used by the village.

(e)All as built drawings are to be submitted on paper and electronically in the latest format compatible with the village's geographical information system (GIS).

(f)After original plan approval, all subsequent changes must be submitted in writing with supporting calculations. Submittals will also be required for building additions and any work necessitating a stormwater drainage plan.

(g)As a condition of approval of an as built grading plan, written maintenance instructions are to be submitted for review and approval. The owner must provide a maintenance commitment to the village.

(h)The owner of the site shall provide a certificate of completion by owner's contractor, or by a surveyor, after completion of all construction work and grading activities not described in subsection (a) of this section for which a stormwater drainage plan was required. A certificate of completion from owner's contractor or from a surveyor is acceptable only with prior approval of the village engineer. Otherwise, only an "engineer's certificate of completion", as defined in section 6-60 of this chapter, shall be acceptable.

(i)The village engineer shall approve the "as built" grading survey or certificate of completion if the village engineer determines that the approved stormwater drainage plan for the site has been implemented as required by this article. No occupancy permit of any kind shall be issued until such survey or certificate has been approved by the village engineer and is on file with the director of community development.

(j)All "as built" grading surveys shall include public record easement information for the site. "As built" grading surveys shall be provided to the village in paper and electronic formats. (Ord. 0-09-09, 4-20-2009)

Sec. 6-67. Waiver Of Grading Survey Requirement:

The village engineer, upon a written appeal by the property owner, may, for good cause shown, waive or modify the requirement for a grading survey prior to construction or grading activities, and/or the requirement for an "as built" grading survey after the completion of construction and/or grading activities. For purposes of this article, "good cause" shall be deemed to be evidence satisfactory to the village engineer that compliance with the requirements and intent of an approved stormwater drainage plan can be determined without the full topographic survey information otherwise required by this article. (Ord. 0-09-09, 4-20-2009)

Sec. 6-68. Duty Of Property Owner:

(a)It shall be unlawful for the owner of any site that has been improved or graded in accordance with a stormwater drainage plan approved pursuant to this article to alter or change any structure, grade, contour line, drainage channel or stormwater storage area in contravention of such approved drainage plan, or to allow the site to remain in a condition which does not conform to such approved stormwater drainage plan.

(b)It shall be the duty of the owner of any site required to be improved and maintained in conformance with an approved stormwater drainage plan to bring such site into compliance with said engineering plans within fourteen (14) days following written notice from the director of community development that said site does not conform to the approved stormwater drainage plans for such property. (Ord. 0-09-09, 4-20-2009)

MUNICIPAL CODE

CHAPTER 20. SUBDIVISIONS AND STORM WATER

The subdivision ordinance of the village is saved from repeal and printed separately by the village which is filed in the office of the village clerk or in the office of the director of community development. (Subdivision Ord.)

There is hereby adopted by the president and board of trustees for the purpose of establishing storm water management standards, that certain code attached to ordinance 0-92-38 available for inspection in the office of the village manager to be known as the *VILLAGE OF DEERFIELD STORM WATER MANAGEMENT CODE,* of which not less than three (3) copies have been and are now filed in the office of the village manager and the same are hereby adopted and incorporated as fully as if set out in length herein, and from the date on which this ordinance shall take effect, the provisions hereof shall be controlling within the corporate limits of the village. (Ord. 0-92-38, 8-17-1992)

There is hereby adopted by the president and the board of trustees for the purpose of assuring the proper installation of private utilities, streets and other improvements in planned unit developments as provided for by the zoning ordinance of the village, a village of Deerfield development code of which not less than three (3) copies have been and are now filed in the office of the village manager and the same are hereby adopted and incorporated as fully as if set out in length herein and from the date in which this ordinance shall take effect the provisions thereof shall be controlling within the corporate limits of the village. (Ord. 0-93-54, 10-4-1993)

There is hereby adopted by the president and board of trustees for the purpose of establishing storm water management standards, the Lake County comprehensive storm water management plan adopted

by ordinance of the Lake County board on July 12, 1994, which plan shall be known as the *AMENDED AND RESTATED VILLAGE OF DEERFIELD STORM WATER MANAGEMENT CODE,* of which not less than three (3) copies have been and are now filed in the office of the village manager and the same are hereby adopted and incorporated as fully as if set out in length herein, and from the date on which this ordinance shall take effect, the provisions hereof shall be controlling within the corporate limits of the village. (Ord. 0-94-47, 12-5-1994)

There is hereby adopted by the president and board of trustees for the purpose of establishing storm water management standards, that certain code attached to ordinance 0-00-35 available for inspection in the office of the village manager to be known as the *AMENDED AND RESTATED VILLAGE OF DEERFIELD STORM WATER MANAGEMENT CODE* , of which not less than three (3) copies have been and are now filed in the office of the village manager and the same are hereby adopted and incorporated as fully as if set out in length herein, and from the date on which the ordinance codified herein shall take effect, the provisions hereof shall be controlling within the corporate limits of the village of Deerfield. (Ord. 0-00-35, 10-16-2000)

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

RE: Activity 502 – Repetitive Loss Properties

Dear Mr. Arkens:

Since our last cycle visit on September 24, 2019, the Village has been informed that there are only nine unmitigated repetitive loss properties within the Village. For those existing properties within our limits, the main reason for flooding is due to overland flow and/or proximity to existing creeks. However, due to a lack of historical information, some of the reasons for specific properties remain unknown. Attached you will find the maps, letters, and an address list of each of the areas where repetitive loss letter have been mailed.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

Area 1A

905 North Ave
885 North Ave
865 North Ave
880 Northwoods Dr
850 Northwoods Dr
840 Northwoods Dr
834 Northwoods Dr
832 Northwoods Dr

8

Area 1B

930 Summit Dr
920 Summit Dr
900 Summit Dr
890 Summit Dr
935 Summit Dr
925 Summit Dr
1750 East Summit Ct

7

Area 2

1674 Cranshire Ct
1670 Cranshire Ct
1668 Cranshire Ct
1664 Cranshire Ct
1654 Cranshire Ct
1653 Cranshire Ct
1657 Cranshire Ct
1661 Cranshire Ct
1665 Cranshire Ct
1671 Cranshire Ct
1675 Cranshire Ct
1676 Garand Dr
1674 Garand Dr
1668 Garand Dr
1664 Garand Dr
1660 Garand Dr
1656 Garand Dr
1663 Garand Dr
1659 Garand Dr
1653 Garand Dr
1651 Garand Dr
1040 Hampton Ct
1114 Hampton Ct
1118 Hampton Ct

24

39

Area 3

972 Maple Ct
964 Maple Ct
956 Maple Ct
937 Holmes Ave
931 Holmes Ave
925 Holmes Ave
919 Holmes Ave
913 Holmes Ave
1384 Arbor Vitae
940 Cedar St
936 Cedar St
930 Cedar St

12

Area 4

1228 Holly Ln
1224 Holly Ln
920 Holly Ln
918 Stratford Rd
911 Stratford Rd
901 Stratford Rd
900 Wayne Ave
910 Wayne Ave
914 Wayne Ave

9

Area 5

385 We Go Ct
380 We Go Ct
390 We Go Ct
375 We Go Ct
380 Castlewood Ln
390 Castlewood Ln
412 Castlewood Ln

7

Area 6

238 Willow Ave
244 Willow Ave
232 Willow Ave
226 Willow Ave
259 Burr Oak Ave
245 Burr Oak Ave
237 Burr Oak Ave
233 Burr Oak Ave

8

36

Area 7A

790 Smoke Tree Rd
780 Smoke Tree Rd
760 Smoke Tree Rd
750 Smoke Tree Rd
740 Smoke Tree Rd
730 Smoke Tree Rd

6

Area 7B

680 Bent Creek Ridge
670 Bent Creek Ridge
660 Bent Creek Ridge
650 Bent Creek Ridge
630 Bent Creek Ridge
620 Bent Creek Ridge
637 Wicklow Rd
635 Wicklow Rd
625 Wicklow Rd
615 Wicklow Rd

10

Area 8

1121 Central
1131 Central
1115 Central
1109 Central
526 Princeton Ln
530 Princeton Ln
1106 Brookside Ln

7

Area 9

241 Forestway Dr
237 Forestway Dr
231 Forestway Dr
225 Forestway Dr
219 Forestway Dr
234 Forestway Dr
228 Forestway Dr
222 Forestway Dr
216 Forestway Dr

9

32

THE VILLAGE OF
DEERFIELD

Resident
Area 1A; Area 1B; Area 5; Area 7A
Deerfield, IL 60015

Dear Resident:

You have received this letter because your property is in an area that has flooded several times between 1981 and 1991 due to heavy rain, snow melts in the area, or sump pump malfunctions.

Here are some things you can do to protect yourself and your neighborhood from flood damage:

1. Prepare for flooding by doing the following:

   - Know the flood safety guidance on the last page of this letter.
   - Know how to shut off the electricity and gas to your house when a flood comes.
   - Make a list of emergency numbers and identify a safe place to go to.
   - Make a household inventory, especially of basement contents.
   - Put insurance policies, valuable papers, medicine, etc. in a safe place.
   - Collect and put cleaning supplies, camera, waterproof boots, etc. in a handy place.
   - Develop a disaster response plan – See the Red Cross' website for a copy of the brochure "Your Family Disaster Plan": http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Flood.pdf
   - Get a copy of *Returning Home after a Hurricane or Flood* from the Red Cross' website.

2. Consider some permanent flood protection measures.

   - Mark your fuse or breaker box to show the circuits to the floodable areas. Turning off the power to the basement can reduce property damage and save lives.
   - Consider elevating your house above flood levels.
   - Check your building for water entry points. These can be basement windows, the basement stairwell, doors, and dryer vents. These can be protected with low walls or temporary shields.
   - Install a floor drain plug, standpipe, overhead sewer, or sewer backup valve to prevent sewer backup flooding.

- More information can be found in *Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding* at http://www.fema.gov/rebuild/mat/fema312.shtm
- Note that some flood protection measures may need a building permit and others may not be safe for your type of building, so be sure to talk to the Building Department, 847-719-7484.

3. Talk to the Engineering Department for information on financial assistance.

   - Get a flood insurance policy – it will help pay for repairs after a flood and, in some cases, it will help pay the costs of elevating a substantially damaged building.

4. Get a flood insurance policy.

   - Homeowner's insurance policies do not cover damage from floods. However, because the Village participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy. This insurance is backed by the Federal government and is available to everyone, even properties that have been flooded. Because the Village participates in the Community Rating System, you will receive a reduction in the insurance premium.
   - Some people have purchased flood insurance because it was required by the bank when they got a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. There is often more damage to the furniture and contents than there is to the structure. Be sure you have contents coverage.
   - Don't wait for the next flood to buy insurance protection. In most cases, there is a 30-day waiting period before National Flood Insurance Program coverage takes effect.
   - Contact your insurance agent for more information on rates and coverage.

If you have any questions regarding this letter or the National Flood Insurance Program please contact the Village of Deerfield Engineering Department at 847-317-2490 or via email at engineering@deerfield.il.us.

Sincerely,

The Village of Deerfield Engineering Department

Flood Safety

Outdoors

Do not walk through flowing water. Drowning is the number-one cause of flood deaths. Currents can be deceptive; six inches of moving water can knock you off your feet. Use a pole or stick to ensure that the ground is still there before you go through an area where the water is not flowing.

Do not drive through a flooded area. More people drown in their cars than anywhere else. Do not drive around road barriers; the road or bridge may be washed out. A car can float in as little as two feet of water.

Stay away from power lines and electrical wires. The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to ComEd at 1-800-edison1.

Indoors

Turn off your electricity if your building is flooded. If you don't feel safe doing this, call an electrician. Some appliances, such as television sets, can shock you even after they have been unplugged. Don't use appliances or motors that have gotten wet unless they have been taken apart, cleaned, dried and inspected by a professional.

Watch for animals. Small animals like rats and snakes that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn items over and scare away small animals.

Look before you step. After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

Be alert for gas leaks. Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area has been thoroughly aired out. If you have questions on gas, call North Shore Gas. If it is an emergency call 866-556-6005 or if you just have questions call 866-556-6004.

Carbon monoxide exhaust kills. Use a generator or other gasoline-powered machine outdoors. The same goes for camping stoves. Fumes from charcoal are especially deadly — cook with charcoal outdoors.

Clean everything that got wet. Flood waters have picked up sewage and chemicals from roads, farms, factories, and storage buildings. Spoiled food and flooded cosmetics and medicines are health hazards. **When in doubt, throw them out.**

Take good care of yourself. Wear gloves and boots. Wash your hands frequently during clean up. Recovering from a flood is a big job. It is tough on both the body and spirit and the effects a disaster has on you and your family may last a long time. Keep your eyes open for signs of anxiety, stress, and fatigue in you and your family.

Help Burst those Flood Insurance Myths

An important component of promoting flood insurance is dispelling the myths that persist about it. Below are a few of the most salient misunderstandings about flood insurance and some straightforward explanations of what is really true.

MYTH My homeowner's insurance covers flooding.

This may be the most prevalent misinformation of all. In fact, almost no homeowner's insurance policies cover flood damage. That is why the federal government created the National Flood Insurance Program (NFIP). Flood insurance is sold as a separate policy, so even if a person's regular agent doesn't handle flood insurance, it can be obtained from another agent who serves that area. To find one, people can contact the NFIP call center at 800-427-4661 or www.FloodSmart.gov.

MYTH I don't need flood insurance, because I'm not in a high-risk zone.

The reality is that it can flood almost anywhere, and it doesn't take much water to cause expensive damage. In fact, about 1/3 of all flood disaster assistance and 1/3 of all flood insurance claims payments go to people who have been flooded even though they were outside of the mapped high-risk zone (Special Flood Hazard Area). With a changing climate, scientists say that extreme weather events—like the tremendous rain that accompanied hurricanes last summer and caused localized flooding—will be more likely in the future. So living in a location that so far has been thought to be at low risk does not mean that is safe now.

MYTH I can't get flood insurance, because I'm not in a high-risk zone.

Virtually anyone who lives in or owns property in an NFIP-participating community can buy flood insurance for a residential building, business, condo, or apartment, and the contents can be insured as well (or instead). Flood insurance through the NFIP has never been restricted to people located in the high-risk zone (Special Flood Hazard Area). In fact, for people outside the high-risk zone, flood insurance is an even better deal, because the premiums are lower. An overview of the availability, coverage, and costs of flood insurance - in clear language and with sources of more information - can be found on the FloodSmart website.

MYTH Even if my house did flood, it wouldn't be by much.

There may not be very much water, but that doesn't mean there won't be much damage. Only one inch of water in an average home can cause more than $25,000 in damage.

MYTH I don't need flood insurance because FEMA gives disaster assistance.

The truth is that FEMA can only provide disaster assistance when the president issues a disaster declaration—this happens for less than half of all floods. Even if there is a disaster declaration, FEMA can only provide small grants, not enough to cover all losses and certainly not enough to rebuild. For example, in Hurricane Harvey the average individual grant FEMA distributed was only $7,000. Most other federal disaster assistance comes in the form of loans, which much be repaid. By contrast, in Hurricane Harvey, the average NFIP claim payment was over $100,000—that's a payment from the insurance policy and of course never has to be repaid. And, a flood insurance policy pays for any covered damage, even if it results from a small (not disastrous) flood.

Prospective Buyers & Realtors

FLOOD HAZARD: CHECK BEFORE YOU BUY

Flooding and other surface drainage problems can occur well away from a river,lake, or ocean. If you're looking at a property, it's a good idea to check out the possible flood hazard before you buy. Here's why:

- The force of moving water or waves can destroy a building.
- Slow moving floodwaters can knock people off their feet or float a car.
- Even standing water can float a building, collapse basement walls, or bucklea concrete floor.
- Water-soaked contents, such as carpeting, clothing, upholstered furniture, and mattresses may have to be thrown away after a flood. Some items, suchas photographs and heirlooms, may never be restored to their original condition.
- Floodwaters are not clean: floods carry mud, farm chemicals, road oil, andother noxious substances that cause health hazards.
- The impact of a flood, cleaning up, making repairs, and the personal losses cancause great stress to you, your family, and your finances.

Floodplain Regulations: Your community regulates construction and development in the floodplain to ensure that buildings will be protected from flood damage. Fillingand similar projects are prohibited in certain areas. Houses that are substantially damaged by fire, flood, or any other cause must be elevated above the flood level when they are repaired.

Check for the Flood Hazard: Before you commit yourself to buying property, dothe following:

- Ask the real estate agent if the property is in a floodplain, if it has ever beenflooded, and if it is subject to any other hazards, such as sewer backup or subsidence.
- Ask the seller and the neighbors if the property is in a floodplain, how long they have lived there, if the property has ever been flooded, and if it is subject to any other hazards.
- Ask the local building, zoning, or engineering department if the property is in a floodplain, if it has ever been flooded, what is the flood depth, velocity, and warningtime, if it is subject to any other hazards, and what building or zoning regulations are in effect.

Flood Protection: A building can be protected from most flood hazards, sometimes at a relatively low cost. New buildings and additions can be elevatedabove flood levels. Existing buildings can be protected from shallow floodwaters by regrading, berms, or floodwalls. There are other retrofitting techniques that can protect a building from surface or subsurface water.

Flood Insurance: One of the best protection measures for a building with a floodproblem is National Flood Insurance, which is purchased through any property insurance agent. If the building is located in a floodplain, flood insurance will berequired by most mortgage lenders. Ask an insurance agent how much a flood insurance policy would cost.

THE VILLAGE OF
DEERFIELD

Resident
Area 2; Area 3; Area 4; Area 8; Area 9
Deerfield, IL 60015

Dear Resident:

You have received this letter because your property is in an area that has flooded several times. Between 1982 and 1992, substantial flooding was caused by overflow of the West Fork of the North Branch of the Chicago River and/or Lake Eleanor. Flooding may be due to heavy rain or snow melts in the area.

Here are some things you can do to protect yourself and your neighborhood from flood damage:

1. Prepare for flooding by doing the following:

   - Know the flood safety guidance on the last page of this letter.
   - Know how to shut off the electricity and gas to your house when a flood comes.
   - Make a list of emergency numbers and identify a safe place to go to.
   - Make a household inventory, especially of basement contents.
   - Put insurance policies, valuable papers, medicine, etc. in a safe place.
   - Collect and put cleaning supplies, camera, waterproof boots, etc. in a handy place.
   - Develop a disaster response plan – See the Red Cross' website for a copy of the brochure "Your Family Disaster Plan": http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Flood.pdf
   - Get a copy of *Returning Home after a Hurricane or Flood* from the Red Cross' website.

2. Consider some permanent flood protection measures.

   - Mark your fuse or breaker box to show the circuits to the floodable areas. Turning off the power to the basement can reduce property damage and save lives.
   - Consider elevating your house above flood levels.
   - Check your building for water entry points. These can be basement windows, the basement stairwell, doors, and dryer vents. These can be protected with low walls or temporary shields.
   - Install a floor drain plug, standpipe, overhead sewer, or sewer backup valve to prevent sewer backup flooding.

- More information can be found in *Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding* at http://www.fema.gov/rebuild/mat/fema312.shtm
- Note that some flood protection measures may need a building permit and others may not be safe for your type of building, so be sure to talk to the Building Department, 847-719-7484.

3. Talk to the Engineering Department for information on financial assistance.

   - Get a flood insurance policy – it will help pay for repairs after a flood and, in some cases, it will help pay the costs of elevating a substantially damaged building.

4. Get a flood insurance policy.

   - Homeowner's insurance policies do not cover damage from floods. However, because the Village participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy. This insurance is backed by the Federal government and is available to everyone, even properties that have been flooded. Because the Village participates in the Community Rating System, you will receive a reduction in the insurance premium.
   - Some people have purchased flood insurance because it was required by the bank when they got a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. There is often more damage to the furniture and contents than there is to the structure. Be sure you have contents coverage.
   - Don't wait for the next flood to buy insurance protection. In most cases, there is a 30-day waiting period before National Flood Insurance Program coverage takes effect.
   - Contact your insurance agent for more information on rates and coverage.

If you have any questions regarding this letter or the National Flood Insurance Program please contact the Village of Deerfield Engineering Department at 847-317-2490 or via email at engineering@deerfield.il.us.

Sincerely,

The Village of Deerfield Engineering Department

Flood Safety

Outdoor

Do not walk through flowing water. Drowning is the number-one cause of flood deaths. Currents can be deceptive; six inches of moving water can knock you off your feet. Use a pole or stick to ensure that the ground is still there before you go through an area where the water is not flowing.

Do not drive through a flooded area. More people drown in their cars than anywhere else. Do not drive around road barriers; the road or bridge may be washed out. A car can float in as little as two feet of water.

Stay away from power lines and electrical wires. The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to ComEd at 1-800-edison1.

Indoors

Turn off your electricity if your building is flooded. If you don't feel safe doing this, call an electrician. Some appliances, such as television sets, can shock you even after they have been unplugged. Don't use appliances or motors that have gotten wet unless they have been taken apart, cleaned, dried and inspected by a professional.

Watch for animals. Small animals like rats and snakes that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn items over and scare away small animals.

Look before you step. After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

Be alert for gas leaks. Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area has been thoroughly aired out. If you have questions on gas, call North Shore Gas. If it is an emergency call 866-556-6005 or if you just have questions call 866-556-6004.

Carbon monoxide exhaust kills. Use a generator or other gasoline-powered machine outdoors. The same goes for camping stoves. Fumes from charcoal are especially deadly — cook with charcoal outdoors.

Clean everything that got wet. Flood waters have picked up sewage and chemicals from roads, farms, factories, and storage buildings. Spoiled food and flooded cosmetics and medicines are health hazards. **When in doubt, throw them out.**

Take good care of yourself. Wear gloves and boots. Wash your hands frequently during clean up. Recovering from a flood is a big job. It is tough on both the body and spirit and the effects a disaster has on you and your family may last a long time. Keep your eyes open for signs of anxiety, stress, and fatigue in you and your family.

Help Burst those Flood Insurance Myths

An important component of promoting flood insurance is dispelling the myths that persist about it. Below are a few of the most salient misunderstandings about flood insurance and some straightforward explanations of what is really true.

MYTH My homeowner's insurance covers flooding.

This may be the most prevalent misinformation of all. In fact, almost no homeowner's insurance policies cover flood damage. That is why the federal government created the National Flood Insurance Program (NFIP). Flood insurance is sold as a separate policy, so even if a person's regular agent doesn't handle flood insurance, it can be obtained from another agent who serves that area. To find one, people can contact the NFIP call center at 800-427-4661 or www.FloodSmart.gov.

MYTH I don't need flood insurance, because I'm not in a high-risk zone.

The reality is that it can flood almost anywhere, and it doesn't take much water to cause expensive damage. In fact, about 1/3 of all flood disaster assistance and 1/3 of all flood insurance claims payments go to people who have been flooded even though they were outside of the mapped high-risk zone (Special Flood Hazard Area). With a changing climate, scientists say that extreme weather events—like the tremendous rain that accompanied hurricanes last summer and caused localized flooding—will be more likely in the future. So living in a location that so far has been thought to be at low risk does not mean that is safe now.

MYTH I can't get flood insurance, because I'm not in a high-risk zone.

Virtually anyone who lives in or owns property in an NFIP-participating community can buy flood insurance for a residential building, business, condo, or apartment, and the contents can be insured as well (or instead). Flood insurance through the NFIP has never been restricted to people located in the high-risk zone (Special Flood Hazard Area). In fact, for people outside the high-risk zone, flood insurance is an even better deal, because the premiums are lower. An overview of the availability, coverage, and costs of flood insurance - in clear language and with sources of more information - can be found on the FloodSmart website.

MYTH Even if my house did flood, it wouldn't be by much.

There may not be very much water, but that doesn't mean there won't be much damage. Only one inch of water in an average home can cause more than $25,000 in damage.

MYTH I don't need flood insurance because FEMA gives disaster assistance.

The truth is that FEMA can only provide disaster assistance when the president issues a disaster declaration—this happens for less than half of all floods. Even if there is a disaster declaration, FEMA can only provide small grants, not enough to cover all losses and certainly not enough to rebuild. For example, in Hurricane Harvey the average individual grant FEMA distributed was only $7,000. Most other federal disaster assistance comes in the form of loans, which much be repaid. By contrast, in Hurricane Harvey, the average NFIP claim payment was over $100,000—that's a payment from the insurance policy and of course never has to be repaid. And, a flood insurance policy pays for any covered damage, even if it results from a small (not disastrous) flood.

Prospective Buyers & Realtors

FLOOD HAZARD: CHECK BEFORE YOU BUY

Flooding and other surface drainage problems can occur well away from a river,lake, or ocean. If you're looking at a property, it's a good idea to check out the possible flood hazard before you buy. Here's why:

- The force of moving water or waves can destroy a building.
- Slow moving floodwaters can knock people off their feet or float a car.
- Even standing water can float a building, collapse basement walls, or bucklea concrete floor.
- Water-soaked contents, such as carpeting, clothing, upholstered furniture, and mattresses may have to be thrown away after a flood. Some items, suchas photographs and heirlooms, may never be restored to their original condition.
- Floodwaters are not clean: floods carry mud, farm chemicals, road oil, andother noxious substances that cause health hazards.
- The impact of a flood, cleaning up, making repairs, and the personal losses cancause great stress to you, your family, and your finances.

Floodplain Regulations: Your community regulates construction and development in the floodplain to ensure that buildings will be protected from flood damage. Fillingand similar projects are prohibited in certain areas. Houses that are substantially damaged by fire, flood, or any other cause must be elevated above the flood level when they are repaired.

Check for the Flood Hazard: Before you commit yourself to buying property, dothe following:

- Ask the real estate agent if the property is in a floodplain, if it has ever beenflooded, and if it is subject to any other hazards, such as sewer backup or subsidence.
- Ask the seller and the neighbors if the property is in a floodplain, how long they have lived there, if the property has ever been flooded, and if it is subject to any other hazards.
- Ask the local building, zoning, or engineering department if the property is in a floodplain, if it has ever been flooded, what is the flood depth, velocity, and warningtime, if it is subject to any other hazards, and what building or zoning regulations are in effect.

Flood Protection: A building can be protected from most flood hazards, sometimes at a relatively low cost. New buildings and additions can be elevatedabove flood levels. Existing buildings can be protected from shallow floodwaters by regrading, berms, or floodwalls. There are other retrofitting techniques that can protect a building from surface or subsurface water.

Flood Insurance: One of the best protection measures for a building with a floodproblem is National Flood Insurance, which is purchased through any property insurance agent. If the building is located in a floodplain, flood insurance will berequired by most mortgage lenders. Ask an insurance agent how much a flood insurance policy would cost.

THE VILLAGE OF
DEERFIELD

Resident
Area 6
Deerfield, IL 60015

Dear Resident:

You have received this letter because your property is in an area that has flooded several times between 1996 and 2007. Flooding may have been due to heavy rain, snow melts, or sump pump malfunctions.

Here are some things you can do to protect yourself and your neighborhood from flood damage:

1. Prepare for flooding by doing the following:

   - Know the flood safety guidance on the last page of this letter.
   - Know how to shut off the electricity and gas to your house when a flood comes.
   - Make a list of emergency numbers and identify a safe place to go to.
   - Make a household inventory, especially of basement contents.
   - Put insurance policies, valuable papers, medicine, etc. in a safe place.
   - Collect and put cleaning supplies, camera, waterproof boots, etc. in a handy place.
   - Develop a disaster response plan – See the Red Cross' website for a copy of the brochure "Your Family Disaster Plan": http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Flood.pdf
   - Get a copy of *Returning Home after a Hurricane or Flood* from the Red Cross' website.

2. Consider some permanent flood protection measures.

   - Mark your fuse or breaker box to show the circuits to the floodable areas. Turning off the power to the basement can reduce property damage and save lives.
   - Consider elevating your house above flood levels.
   - Check your building for water entry points. These can be basement windows, the basement stairwell, doors, and dryer vents. These can be protected with low walls or temporary shields.
   - Install a floor drain plug, standpipe, overhead sewer, or sewer backup valve to prevent sewer backup flooding.

- More information can be found in *Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding* at http://www.fema.gov/rebuild/mat/fema312.shtm
- Note that some flood protection measures may need a building permit and others may not be safe for your type of building, so be sure to talk to the Building Department, 847-719-7484.

3. Talk to the Engineering Department for information on financial assistance.

   - Get a flood insurance policy – it will help pay for repairs after a flood and, in some cases, it will help pay the costs of elevating a substantially damaged building.

4. Get a flood insurance policy.

   - Homeowner's insurance policies do not cover damage from floods. However, because the Village participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy. This insurance is backed by the Federal government and is available to everyone, even properties that have been flooded. Because the Village participates in the Community Rating System, you will receive a reduction in the insurance premium.
   - Some people have purchased flood insurance because it was required by the bank when they got a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. There is often more damage to the furniture and contents than there is to the structure. Be sure you have contents coverage.
   - Don't wait for the next flood to buy insurance protection. In most cases, there is a 30-day waiting period before National Flood Insurance Program coverage takes effect.
   - Contact your insurance agent for more information on rates and coverage.

If you have any questions regarding this letter or the National Flood Insurance Program please contact the Village of Deerfield Engineering Department at 847-317-2490 or via email at engineering@deerfield.il.us.

Sincerely,

The Village of Deerfield Engineering Department

Flood Safety

Outdoors

Do not walk through flowing water. Drowning is the number-one cause of flood deaths. Currents can be deceptive; six inches of moving water can knock you off your feet. Use a pole or stick to ensure that the ground is still there before you go through an area where the water is not flowing.

Do not drive through a flooded area. More people drown in their cars than anywhere else. Do not drive around road barriers; the road or bridge may be washed out. A car can float in as little as two feet of water.

Stay away from power lines and electrical wires. The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to ComEd at 1-800-edison1.

Indoors

Turn off your electricity if your building is flooded. If you don't feel safe doing this, call an electrician. Some appliances, such as television sets, can shock you even after they have been unplugged. Don't use appliances or motors that have gotten wet unless they have been taken apart, cleaned, dried and inspected by a professional.

Watch for animals. Small animals like rats and snakes that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn items over and scare away small animals.

Look before you step. After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

Be alert for gas leaks. Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area has been thoroughly aired out. If you have questions on gas, call North Shore Gas. If it is an emergency call 866-556-6005 or if you just have questions call 866-556-6004.

Carbon monoxide exhaust kills. Use a generator or other gasoline-powered machine outdoors. The same goes for camping stoves. Fumes from charcoal are especially deadly — cook with charcoal outdoors.

Clean everything that got wet. Flood waters have picked up sewage and chemicals from roads, farms, factories, and storage buildings. Spoiled food and flooded cosmetics and medicines are health hazards. **When in doubt, throw them out.**

Take good care of yourself. Wear gloves and boots. Wash your hands frequently during clean up. Recovering from a flood is a big job. It is tough on both the body and spirit and the effects a disaster has on you and your family may last a long time. Keep your eyes open for signs of anxiety, stress, and fatigue in you and your family.

Help Burst those Flood Insurance Myths

An important component of promoting flood insurance is dispelling the myths that persist about it. Below are a few of the most salient misunderstandings about flood insurance and some straightforward explanations of what is really true.

MYTH My homeowner's insurance covers flooding.

This may be the most prevalent misinformation of all. In fact, almost no homeowner's insurance policies cover flood damage. That is why the federal government created the National Flood Insurance Program (NFIP). Flood insurance is sold as a separate policy, so even if a person's regular agent doesn't handle flood insurance, it can be obtained from another agent who serves that area. To find one, people can contact the NFIP call center at 800-427-4661 or www.FloodSmart.gov.

MYTH I don't need flood insurance, because I'm not in a high-risk zone.

The reality is that it can flood almost anywhere, and it doesn't take much water to cause expensive damage. In fact, about 1/3 of all flood disaster assistance and 1/3 of all flood insurance claims payments go to people who have been flooded even though they were outside of the mapped high-risk zone (Special Flood Hazard Area). With a changing climate, scientists say that extreme weather events—like the tremendous rain that accompanied hurricanes last summer and caused localized flooding—will be more likely in the future. So living in a location that so far has been thought to be at low risk does not mean that is safe now.

MYTH I can't get flood insurance, because I'm not in a high-risk zone.

Virtually anyone who lives in or owns property in an NFIP-participating community can buy flood insurance for a residential building, business, condo, or apartment, and the contents can be insured as well (or instead). Flood insurance through the NFIP has never been restricted to people located in the high-risk zone (Special Flood Hazard Area). In fact, for people outside the high-risk zone, flood insurance is an even better deal, because the premiums are lower. An overview of the availability, coverage, and costs of flood insurance - in clear language and with sources of more information - can be found on the FloodSmart website.

MYTH Even if my house did flood, it wouldn't be by much.

There may not be very much water, but that doesn't mean there won't be much damage. Only one inch of water in an average home can cause more than $25,000 in damage.

MYTH I don't need flood insurance because FEMA gives disaster assistance.

The truth is that FEMA can only provide disaster assistance when the president issues a disaster declaration—this happens for less than half of all floods. Even if there is a disaster declaration, FEMA can only provide small grants, not enough to cover all losses and certainly not enough to rebuild. For example, in Hurricane Harvey the average individual grant FEMA distributed was only $7,000. Most other federal disaster assistance comes in the form of loans, which much be repaid. By contrast, in Hurricane Harvey, the average NFIP claim payment was over $100,000—that's a payment from the insurance policy and of course never has to be repaid. And, a flood insurance policy pays for any covered damage, even if it results from a small (not disastrous) flood.

Prospective Buyers & Realtors

FLOOD HAZARD: CHECK BEFORE YOU BUY

Flooding and other surface drainage problems can occur well away from a river,lake, or ocean. If you're looking at a property, it's a good idea to check out the possible flood hazard before you buy. Here's why:

- The force of moving water or waves can destroy a building.
- Slow moving floodwaters can knock people off their feet or float a car.
- Even standing water can float a building, collapse basement walls, or bucklea concrete floor.
- Water-soaked contents, such as carpeting, clothing, upholstered furniture, and mattresses may have to be thrown away after a flood. Some items, suchas photographs and heirlooms, may never be restored to their original condition.
- Floodwaters are not clean: floods carry mud, farm chemicals, road oil, andother noxious substances that cause health hazards.
- The impact of a flood, cleaning up, making repairs, and the personal losses cancause great stress to you, your family, and your finances.

Floodplain Regulations: Your community regulates construction and development in the floodplain to ensure that buildings will be protected from flood damage. Fillingand similar projects are prohibited in certain areas. Houses that are substantially damaged by fire, flood, or any other cause must be elevated above the flood level when they are repaired.

Check for the Flood Hazard: Before you commit yourself to buying property, dothe following:

- Ask the real estate agent if the property is in a floodplain, if it has ever beenflooded, and if it is subject to any other hazards, such as sewer backup or subsidence.
- Ask the seller and the neighbors if the property is in a floodplain, how long they have lived there, if the property has ever been flooded, and if it is subject to any other hazards.
- Ask the local building, zoning, or engineering department if the property is in a floodplain, if it has ever been flooded, what is the flood depth, velocity, and warningtime, if it is subject to any other hazards, and what building or zoning regulations are in effect.

Flood Protection: A building can be protected from most flood hazards, sometimes at a relatively low cost. New buildings and additions can be elevatedabove flood levels. Existing buildings can be protected from shallow floodwaters by regrading, berms, or floodwalls. There are other retrofitting techniques that can protect a building from surface or subsurface water.

Flood Insurance: One of the best protection measures for a building with a floodproblem is National Flood Insurance, which is purchased through any property insurance agent. If the building is located in a floodplain, flood insurance will berequired by most mortgage lenders. Ask an insurance agent how much a flood insurance policy would cost.

THE VILLAGE OF
DEERFIELD

Resident
Area 7B
Deerfield, IL 60015

Dear Resident:

You have received this letter because your property is in an area that has flooded several times between 2000 and 2018 due to overflow of the Middle Fork of the North Branch of the Chicago River in the event of a heavy rain or a big snow melt.

Here are some things you can do to protect yourself and your neighborhood from flood damage:

1. Prepare for flooding by doing the following:

   - Know the flood safety guidance on the last page of this letter.
   - Know how to shut off the electricity and gas to your house when a flood comes.
   - Make a list of emergency numbers and identify a safe place to go to.
   - Make a household inventory, especially of basement contents.
   - Put insurance policies, valuable papers, medicine, etc. in a safe place.
   - Collect and put cleaning supplies, camera, waterproof boots, etc. in a handy place.
   - Develop a disaster response plan – See the Red Cross' website for a copy of the brochure "Your Family Disaster Plan": http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Flood.pdf
   - Get a copy of *Returning Home after a Hurricane or Flood* from the Red Cross' website.

2. Consider some permanent flood protection measures.

   - Mark your fuse or breaker box to show the circuits to the floodable areas. Turning off the power to the basement can reduce property damage and save lives.
   - Consider elevating your house above flood levels.
   - Check your building for water entry points. These can be basement windows, the basement stairwell, doors, and dryer vents. These can be protected with low walls or temporary shields.
   - Install a floor drain plug, standpipe, overhead sewer, or sewer backup valve to prevent sewer backup flooding.

- More information can be found in *Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding* at http://www.fema.gov/rebuild/mat/fema312.shtm
- Note that some flood protection measures may need a building permit and others may not be safe for your type of building, so be sure to talk to the Building Department, 847-719-7484

3. Talk to the Engineering Department for information on financial assistance.

   - Get a flood insurance policy – it will help pay for repairs after a flood and, in some cases, it will help pay the costs of elevating a substantially damaged building.

4. Get a flood insurance policy.

   - Homeowner's insurance policies do not cover damage from floods. However, because the Village participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy. This insurance is backed by the Federal government and is available to everyone, even properties that have been flooded. Because the Village participates in the Community Rating System, you will receive a reduction in the insurance premium.
   - Some people have purchased flood insurance because it was required by the bank when they got a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. There is often more damage to the furniture and contents than there is to the structure. Be sure you have contents coverage.
   - Don't wait for the next flood to buy insurance protection. In most cases, there is a 30-day waiting period before National Flood Insurance Program coverage takes effect.
   - Contact your insurance agent for more information on rates and coverage.

If you have any questions regarding this letter or the National Flood Insurance Program please contact the Village of Deerfield Engineering Department at 847-317-2490 or via email at engineering@deerfield.il.us.

Sincerely,

The Village of Deerfield Engineering Department

Flood Safety

Outdoors

Do not walk through flowing water. Drowning is the number-one cause of flood deaths. Currents can be deceptive; six inches of moving water can knock you off your feet. Use a pole or stick to ensure that the ground is still there before you go through an area where the water is not flowing.

Do not drive through a flooded area. More people drown in their cars than anywhere else. Do not drive around road barriers; the road or bridge may be washed out. A car can float in as little as two feet of water.

Stay away from power lines and electrical wires. The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to ComEd at 1-800-edison1.

Indoors

Turn off your electricity if your building is flooded. If you don't feel safe doing this, call an electrician. Some appliances, such as television sets, can shock you even after they have been unplugged. Don't use appliances or motors that have gotten wet unless they have been taken apart, cleaned, dried and inspected by a professional.

Watch for animals. Small animals like rats and snakes that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn items over and scare away small animals.

Look before you step. After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

Be alert for gas leaks. Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area has been thoroughly aired out. If you have questions on gas, call North Shore Gas. If it is an emergency call 866-556-6005 or if you just have questions call 866-556-6004.

Carbon monoxide exhaust kills. Use a generator or other gasoline-powered machine outdoors. The same goes for camping stoves. Fumes from charcoal are especially deadly — cook with charcoal outdoors.

Clean everything that got wet. Flood waters have picked up sewage and chemicals from roads, farms, factories, and storage buildings. Spoiled food and flooded cosmetics and medicines are health hazards. **When in doubt, throw them out.**

Take good care of yourself. Wear gloves and boots. Wash your hands frequently during clean up. Recovering from a flood is a big job. It is tough on both the body and spirit and the effects a disaster has on you and your family may last a long time. Keep your eyes open for signs of anxiety, stress, and fatigue in you and your family.

Help Burst those Flood Insurance Myths

An important component of promoting flood insurance is dispelling the myths that persist about it. Below are a few of the most salient misunderstandings about flood insurance and some straightforward explanations of what is really true.

MYTH My homeowner's insurance covers flooding.

This may be the most prevalent misinformation of all. In fact, almost no homeowner's insurance policies cover flood damage. That is why the federal government created the National Flood Insurance Program (NFIP). Flood insurance is sold as a separate policy, so even if a person's regular agent doesn't handle flood insurance, it can be obtained from another agent who serves that area. To find one, people can contact the NFIP call center at 800-427-4661 or www.FloodSmart.gov.

MYTH I don't need flood insurance, because I'm not in a high-risk zone.

The reality is that it can flood almost anywhere, and it doesn't take much water to cause expensive damage. In fact, about 1/3 of all flood disaster assistance and 1/3 of all flood insurance claims payments go to people who have been flooded even though they were outside of the mapped high-risk zone (Special Flood Hazard Area). With a changing climate, scientists say that extreme weather events—like the tremendous rain that accompanied hurricanes last summer and caused localized flooding—will be more likely in the future. So living in a location that so far has been thought to be at low risk does not mean that is safe now.

MYTH I can't get flood insurance, because I'm not in a high-risk zone.

Virtually anyone who lives in or owns property in an NFIP-participating community can buy flood insurance for a residential building, business, condo, or apartment, and the contents can be insured as well (or instead). Flood insurance through the NFIP has never been restricted to people located in the high-risk zone (Special Flood Hazard Area). In fact, for people outside the high-risk zone, flood insurance is an even better deal, because the premiums are lower. An overview of the availability, coverage, and costs of flood insurance - in clear language and with sources of more information - can be found on the FloodSmart website.

MYTH Even if my house did flood, it wouldn't be by much.

There may not be very much water, but that doesn't mean there won't be much damage. Only one inch of water in an average home can cause more than $25,000 in damage.

MYTH I don't need flood insurance because FEMA gives disaster assistance.

The truth is that FEMA can only provide disaster assistance when the president issues a disaster declaration—this happens for less than half of all floods. Even if there is a disaster declaration, FEMA can only provide small grants, not enough to cover all losses and certainly not enough to rebuild. For example, in Hurricane Harvey the average individual grant FEMA distributed was only $7,000. Most other federal disaster assistance comes in the form of loans, which much be repaid. By contrast, in Hurricane Harvey, the average NFIP claim payment was over $100,000—that's a payment from the insurance policy and of course never has to be repaid. And, a flood insurance policy pays for any covered damage, even if it results from a small (not disastrous) flood.

Prospective Buyers & Realtors

FLOOD HAZARD: CHECK BEFORE YOU BUY

Flooding and other surface drainage problems can occur well away from a river,lake, or ocean. If you're looking at a property, it's a good idea to check out the possible flood hazard before you buy. Here's why:

- The force of moving water or waves can destroy a building.
- Slow moving floodwaters can knock people off their feet or float a car.
- Even standing water can float a building, collapse basement walls, or bucklea concrete floor.
- Water-soaked contents, such as carpeting, clothing, upholstered furniture, and mattresses may have to be thrown away after a flood. Some items, suchas photographs and heirlooms, may never be restored to their original condition.
- Floodwaters are not clean: floods carry mud, farm chemicals, road oil, andother noxious substances that cause health hazards.
- The impact of a flood, cleaning up, making repairs, and the personal losses cancause great stress to you, your family, and your finances.

Floodplain Regulations: Your community regulates construction and development in the floodplain to ensure that buildings will be protected from flood damage. Fillingand similar projects are prohibited in certain areas. Houses that are substantially damaged by fire, flood, or any other cause must be elevated above the flood level when they are repaired.

Check for the Flood Hazard: Before you commit yourself to buying property, dothe following:

- Ask the real estate agent if the property is in a floodplain, if it has ever beenflooded, and if it is subject to any other hazards, such as sewer backup or subsidence.
- Ask the seller and the neighbors if the property is in a floodplain, how long they have lived there, if the property has ever been flooded, and if it is subject to any other hazards.
- Ask the local building, zoning, or engineering department if the property is in a floodplain, if it has ever been flooded, what is the flood depth, velocity, and warningtime, if it is subject to any other hazards, and what building or zoning regulations are in effect.

Flood Protection: A building can be protected from most flood hazards, sometimes at a relatively low cost. New buildings and additions can be elevatedabove flood levels. Existing buildings can be protected from shallow floodwaters by regrading, berms, or floodwalls. There are other retrofitting techniques that can protect a building from surface or subsurface water.

Flood Insurance: One of the best protection measures for a building with a floodproblem is National Flood Insurance, which is purchased through any property insurance agent. If the building is located in a floodplain, flood insurance will berequired by most mortgage lenders. Ask an insurance agent how much a flood insurance policy would cost.

VILLAGE OF DEERFIELD

January 22, 2024

Brad Arkens, CFM
CRS Resource Specialist
ISO, Community Hazard Mitigation

Subject: Activity 510 – Flood Plain Management Planning

Dear Mr. Arkens:

On May 15, 2023, the Village of Deerfield held a public hearing and approved the resolution to adopt the revised 2022 Lake County All-Natural Hazards Mitigation Plan (ANHMP). This plan was developed by the Lake County Local Planning Committee of which Village of Deerfield are members. Department staff (Justin Keenan, Robert Phillips, & Tyler Dickinson) also provided input via the community questionnaire during the annual ANHMP plan update process. The agenda for the most recent annual meeting held on November 15, 2023 is attached which was attended by Village staff. Also attached is the Village Board Agenda announcing that the resolution was to be presented to the Village Board for adoption, the executed Village Resolution, the ANHMP community questionnaire, and finally, the 2020 annual progress report. The full plan, which is nearly 300 pages long, may be obtained through the Lake County and Deerfield websites.

If you have any questions or need additional information please feel free to contact me.

Sincerely,

Tyler K. Dickinson, P.E.
Assistant Director of Public Works & Engineering
Village of Deerfield

STORMWATER MANAGEMENT COMMISSION

Joint Meeting of the
Municipal Advisory Committee (General Meeting)
and the
All Natural Hazards Mitigation Planning Committee (Annual Meeting)
November 15, 2023
9:00-11:00 AM
Meeting held at the Central Permit Facility at 500 W. Winchester Road, Libertyville
2nd Floor Conference Room

AGENDA

I. Introductions

II. Public Comment

III. Approval of Minutes

a) Consensus Approval of April 12, 2023, Meeting Minutes

IV. Ordinance Administrative Issues

a) SMC Regulatory and V-Zone Updates [5]
Brian Frank/Kelcey Traynoff, SMC

V. SMC/Community Working Relationships and ANHMP Annual Updates

a) All Natural Hazards Mitigation Plan Adoption Status [5]
Sharon Østerby, SMC

b) Flood Mitigation Projects Update [15-20]
Sharon Østerby and Ernesto Huaracha, SMC

c) Watershed-Based Plan Updates [5]
Mike Prusila, SMC

d) Natural Hazards and Emergency Management Activities 2023 [10-15]
Dan Eder, EMA

e) Review of the Yearly Report Requirements and Action Plan Items [10-15]
Sharon Østerby, SMC

f) Q&A Discussion Open for comment from communities

VI. NPDES Municipal Stormwater Program

a) Expected Climate Change Influences in the Upper Midwest [30-40]
Vince Mosca

b) Brief update on Sackett Decision [10-15]
Joe Hmieleski

c) ILR40 Permit Update; Approximate Release Date: TBD [5]
Ernesto Huaracha/Anna Niedzinski, SMC

VII. Inter-jurisdictional Programs, Projects, and Grants Forum

VIII. Upcoming Training Opportunities, Meetings, Events

a) Excal Training Resources (ongoing)- available for pickup and checkout

b) Excal Community Resources (ongoing)- URL available for linking on SMC NPDES Phase II website

c) Upcoming release of October MS4 Workshop video

IX. Other Topics for Discussion

a) If your MS4 community has any NPDES related topics to present to the Lake County community, please email aniedzinski@lakecountyil.gov to schedule a presentation.

b) If you are not receiving email notifications regarding MAC, please contact SMC to be added.

X. Next MAC Meeting

a) Tuesday, April 2nd, 2024 Public Works Training Room

XI. Adjourn

***PDHs are self-reporting. If you want to apply MAC meetings towards your professional license keep the agenda and minutes w/sign in sheets.

DRAFT

AGENDA FOR THE BOARD OF TRUSTEES

Monday, May 15, 2023, 7:30 P.M.

Livestream available at Channel 10 and Village website

Call to Order
Roll Call
Pledge of Allegiance – Rochelle Zell Jewish High School Model UN Team
Presentation from the City of Highland Park
Proclamation – Jewish American Heritage Month
Proclamation – 2023 National Public Works Week
Proclamation – 2023 National Police Week
Minutes of Previous Meeting
Bills and Payroll
Public Comment

REPORTS

23-33 Consideration and Action on Report and Recommendation of Staff re: Request for Funding Under the Business Facade Rebate Program – 728 Waukegan Road (Former Barnes and Noble)

CONSENT AGENDA

23-34 Resolution Adopting the All Natural Hazards Mitigation Plan

23-38 Ordinance Amending the Village of Deerfield Wage and Salary Plan

OLD BUSINESS

NEW BUSINESS

23-35 Resolution to Reject All Bids for 2023 Street Rehabilitation Program

23-36 Resolution to Award Family Days Fireworks Contract

23-37 Resolution Approving High School Dist. 113 SRO Agreement

Items for discussion by Mayor and Board of Trustees
Reports of the Village Manager
Adjournment

REQUEST FOR BOARD ACTION

Agenda Item: 23-34

Subject: Resolution to Adopt the 2022 All Natural Hazards Mitigation Plan

Action Requested: Adoption of Resolution

Originated By: Department of Public Works and Engineering

Referred To: Mayor and Board of Trustees

Summary of Background and Reason for Request:

The Lake County All Natural Hazards Mitigation Plan (ANHMP) was last adopted by Lake County and participating municipalities in 2017. Adoption of the ANHMP is required as part of our involvement in the FEMA Community Rating System (CRS), and allows the Village to be eligible for hazard mitigation grants through FEMA. The Village of Deerfield has participated in the Hazard Mitigation Planning Committee (HMPC) since it began in 2006 and have attended regular meetings regarding the program.

Participation in ANHMP allows communities to earn credit towards discounts in flood insurance premiums. The Village is currently rated as a Level 6 within the FEMA CRS, which provides a 20% discount on flood insurance to floodplain residents and a 10% discount on flood insurance premiums to non-floodplain residents.

To continue in good standing within the FEMA CRS the Village, along with all CRS communities, must participate through regular meetings and adoption of the updated ANHMP. The Director of Public Works and Engineering requests Board approval and the Mayor's signature on the Resolution-Adoption of the 2022 Lake County All Natural Hazards Mitigation Plan.

Reports and Documents Attached:

- Resolution-Adoption of the 2022 Lake County All Natural Hazards Mitigation Plan

Date Referred to Board: May 15, 2023

Action Taken: _____

VILLAGE OF DEERFIELD

RESOLUTION NO. 2023-_R-23-22___

ADOPTION OF THE 2023 LAKE COUNTY ALL NATURAL HAZARDS MITIGATION PLAN

WHEREAS, Lake County is subject to flooding, tornadoes, severe summer and winter storms, and other natural hazards that can damage property, close businesses, disrupt traffic, and present a public health and safety hazard; and

WHEREAS, the Lake County Hazard Mitigation Planning Committee has prepared and recommended the 2022 update of *Lake County All Natural Hazards Mitigation Plan* that reviews the County's options to protect people and reduce damage from hazards; and

Whereas, the Lake County and Lake County municipalities prepared and adopted the previous *Lake County All Natural Hazards Mitigation Plan* and the 2022 *Lake County All Natural Hazards Mitigation Plan* is an update required by the Federal Emergency Management Agency; and

WHEREAS, the 2022 *Lake County All Natural Hazards Mitigation Plan* was developed as a multi-jurisdictional plan and has been submitted and approved by Illinois Emergency Management Agency and the Federal Emergency Management Agency; and

WHEREAS, the recommended *2022 Lake County All Natural Hazards Mitigation Plan* has been widely circulated for review by residents and federal, state, and regional agencies and has been supported by those reviewers; and

WHEREAS, the preparation and adoption of a community mitigation plan is a requirement of the Federal Emergency Management Agency in order for Lake County to be eligible for federal mitigation funds under Section 104 of the Disaster Mitigation Act of 2000 (42 USC 5165), and under 44 CFR (Code of Federal Regulations) Part 201.

NOW, THEREFORE BE IT RESOLVED, that the *2022 Lake County All Natural Hazards Mitigation Plan,* is hereby adopted as an official plan of the Village of Deerfield, and;

BE IT FURTHER RESOLVED, that Robert Phillips, or designee, is hereby appointed as the Village's representative on the Lake County Hazard Mitigation Planning Committee and he will keep the Village appraised of the mitigation action items undertaken by or reported to the Lake County Hazard Mitigation Planning Committee, and

And;

BE IT FURTHER RESOLVED, that the Village Clerk is hereby requested to distribute a certified copy of this Resolution to the Lake County Stormwater Management Commission.

AYES: Benton, Berg, Jacoby, Metts-Childers, Oppenheim, Seiden

NAYS: None

ABSTAIN: None

ABSENT: None

PASSED: May 15, 2023

APPROVED: May 15, 2023

RESOLUTION NO: R-23-22

Daniel C. Shapiro, Mayor

ATTEST:

Kent S. Street, Village Clerk

LakeCounty

STORMWATER MANAGEMENT COMMISSION

Lake County All Natural Hazards Mitigation Plan – 2022 Update
Frequently Asked Questions

What is the Lake County All Natural Hazards Mitigation Plan (ANHMP)?
The ANHMP addresses natural hazards that may impact Lake County and identifies activities to prevent, prepare for, and respond to, potential hazards (e.g., earthquakes, tornados, floods, snow, wind, hail, ice).

Why was the ANHMP developed?
The adoption of an ANHMP and the update of it every 5 years allows Lake County and participating Lake County municipalities to be eligible for federal disaster mitigation grants. The ANHMP also provides credit for communities that participate in FEMA's Community Rating System (CRS), which reduces flood insurance costs in those communities.

Who developed the ANHMP?
The ANHMP was developed by Lake County and participating Lake County municipalities.

What is the update "process"?
Our update process included three (3) meetings with participating municipalities in January, February, March, and April, 2022 to review the ANHMP's goals and action items, and to draft an updated plan. Updates on mitigation activities over the last 5 years are included in the plan. Public input and comments were also solicited. A draft of the updated ANHMP was made available for public review and sent to Illinois Emergency Management Agency (IEMA) and FEMA for review and approval. Once approved, plan adoption will be recommended to the County and participating municipalities.

The ANHMP is considered multi-jurisdictional.
Each government agency must adopt the ANHMP to maintain federal eligibility. The County Board adoption of the ANHMP is for unincorporated areas of the County. Each municipality must adopt the ANHMP covering their corporate boundaries.

How do we adopt the ANHMP?
By resolution. Communities have been provided with a sample adoption resolution and instructions on where to send a copy of the resolution for IEMA and FEMA's records.

If we don't adopt the 2022 ANHMP, is our community eligible for federal disaster assistance?
Yes, the ANHMP is not tied to disaster assistance. The ANHMP is required for mitigation project grants from the Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), Building Resilient Infrastructure, and Communities (BRIC), and the Rehabilitation of High Hazard Potential Dam (HHPD) Grant program. It is prudent to have an adopted hazard mitigation plan.

Who will implement the Hazard Mitigation Plan?
Municipalities and Lake County upon plan adoption, and with other local government partners, will implement the ANHMP, *as resources (staff time and funding) are available*. An example of a joint effort may be the development of common public information materials.

Who do we contact about the ANHMP update?
Feel free to contact Sharon Østerby of the SMC at sosterby@lakecountyil.gov or 847-377-7706.

ANHMP Community Specific Action Item Update 2023

Community: Deerfield

Representative & Title: Ryan Oates, Public Works Analyst

Action Item	Description	Update (if any)
1	Adoption	Adopted the 2023 Lake County ANHMP on May 15, 2023
2	Participation on the Hazard Mitigation Planning Committee and Plan Monitoring and Maintenance	Yes attended meetings
3	Incorporate ANHMP into Other County and Municipal Plans	No new progress
4	Continued Implementation of the WDO and NFIP Requirements	Adopted the WDO ordinance.
5	Improve Natural Hazards Public Information Efforts with focus on the Promotion of Flood Insurance and How People Can Protect Themselves and Their Property	The Village provides information to residents on the Village website, bi-monthly newsletters, direct mailing to flooding areas, and at some of our Village events.
6	Identify Needs and Obtain Alternate Power Sources for Critical Facilities and Shelters	Completed
7	Review of Critical Facilities and Implement of Appropriate Mitigation Measures	Yes part of operational planning
8	Improve Capacity of Drainage Systems and/or Provide Additional Storage of Flood Waters	Stormwater master plan was completed in 2020. No new progress since then.
9	Implement Maintenance Programs for Drainage Systems, Including Streambank and Ravine Stabilization Efforts	N/A
10	Implement Property Protection Projects for Flood Mitigation	No progress
11	Reduce Inflow and Infiltration	The Village of Deerfield is continuing its progress in reducing Inflow and Infiltration through our annual sewer lining program. Each year the Village spends over $425,000
12	Identify Wind Mitigation Opportunities for the Protection of Buildings, and to Provide Safe Rooms and Sheltering	No progress
13	Continue Participation or Consider Participation in Tree City USA (Urban Forestry)	The Village was recognized for its 12th year as a Tree City USA recognized community and received its 3rd growth award. The Village is applying to receive recognition for the 13th year.
15	Improve Building Codes and Building Code Enforcement	No progress
16	Seek Mitigation Grant Funding for Additional Mitigation Planning and Cost Beneficial Projects	N/A
19	Response & Recovery Information	No progress
20	Continue Participation or Consider Participation in the NFIP's Community Rating System	Yes we are participating. Currently at level 6
26	Sump Pump Disconnects	Yes, Deerfield offers an 80/20 cost share where the Village will reimburse 20% of the total cost to residents for disconnecting their sump pumps.
27	Conduct Local Drainage Studies	Yes part of operational budget and capital planning.

ANHMP Community Specific Action Item Update 2023

Action Item	Description	Update (if any)

CRS Activity 510
Annual Progress Report on Implementation of Credited Plan

Which Plan is this for (use separate templates for each credited Plan):

- ☒ **Floodplain Management Plan (Hazard Mitigation Plan)**
- ☐ **Repetitive Loss Area Analysis**
- ☐ **Floodplain Species Plan**
- ☐ **Substantial Damage Plan**

Name of Community: Village of Deerfield

Date this Annual Progress Report was prepared (not the date of adoption of the credited Plan): January 19, 2024

Name of Plan: Lake County All Natural Hazards Mitigation Plan

Date of Adoption of Plan: May 15, 2023

5 Year CRS Expiration Date: January 2025

1. How can a copy of the credited Plan be obtained:

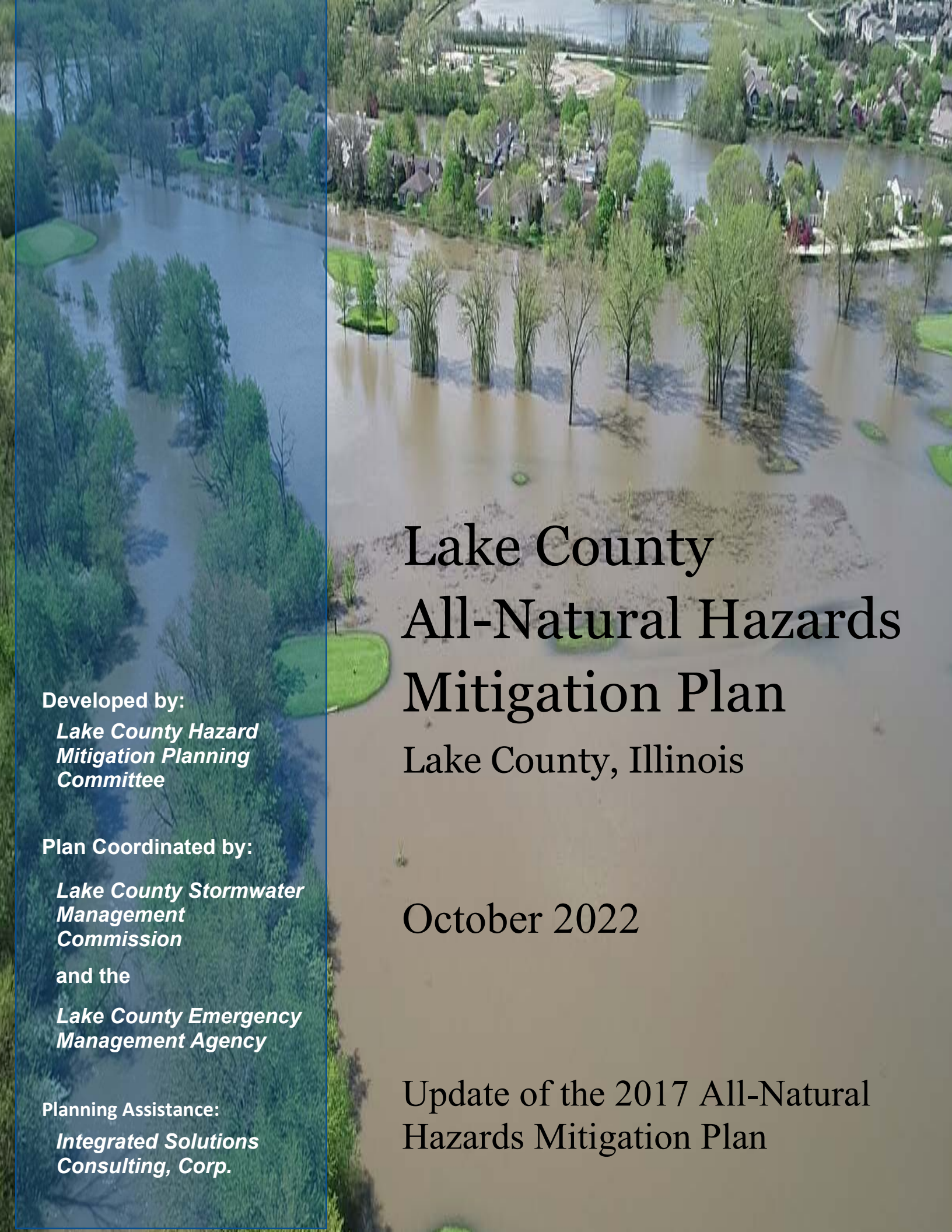
   The entire plan can be found on the Lake County and Village website.

2. Describe how ***this annual progress report*** (not the credited Plan) was prepared and how it was submitted to the governing body, released to the media, and made available to the public:
   The report was developed with the Village of Deerfield's input and was made available to the Village Board, local media, and the public via the Village website.

3. Provide a description of the implementation of each recommendation or action item in the action plan or area analysis report, including a statement on how the project was implemented or not implemented during the previous year:
   See attached for the latest Lake County's 2022 ANHMP.

4. Discuss why any objectives were not reached or why implementation is behind schedule:
   N/A

5. What are the recommendations for new projects or revised recommendations?
   N/A



Lake County All-Natural Hazards Mitigation Plan

Lake County, Illinois

October 2022

Update of the 2017 All-Natural Hazards Mitigation Plan

Developed by:

Lake County Hazard Mitigation Planning Committee

Plan Coordinated by:

Lake County Stormwater Management Commission

and the

Lake County Emergency Management Agency

Planning Assistance:

Integrated Solutions Consulting, Corp.

Contents

Table of Exhibits **TOC-5**

Table of Figures **TOC-6**

Table of Tables **TOC-6**

Executive Summary **ES-1**

Planning Process ES-2

Natural Hazard Risk Assessment ES-2

Hazard Mitigation Goals and Guidelines ES-3

Hazard Mitigation Strategies ES-3

Mitigation Action Plan ES-4

Plan Adoption ES-4

Summary ES-4

Chapter 1: Introduction **1-1**

1.1 Purpose of the Plan 1-1

1.2 Organization of the Plan 1-2

1.3 Lake County Overview 1-3

1.4 Lake County Land Use and Development 1-11

1.5 Lake County Critical Facilities 1-18

Chapter 2: Planning Process **2-1**

2.1 Planning Approach 2-1

2.2 Update Process – Organization and Coordination 2-2

2.3 Plan Adoption and Implementation 2-2

Chapter 3: Risk Assessment **3-1**

3.1 Natural Hazards in Lake County 3-1

3.2 Summary of Lake County Assets 3-4

3.3 Flood 3-4

3.3.1 Lake County Watersheds 3-7

3.3.2 Flood Hazard Profile 3-14

3.3.3 Repetitive Flood Loss Properties 3-20

3.3.4 Past Floods and Future Flood Frequency 3-23

3.3.5 Vulnerability - Impacts of Flooding 3-25

3.4 Tornado 3-28
3.4.1 Tornado Hazard Profile 3-32
3.4.2 Vulnerability – Tornado Impact 3-35
3.5 Severe Summer Storms 3-38
3.5.1 Severe Storm Hazard Profile 3-39
3.5.2 Vulnerability–Severe Summer Storms Impact 3-48
3.6 Severe Winter Storms 3-50
3.6.1 Severe Winter Storm Hazard Profile 3-50
3.6.2 Vulnerability - Winter Storm Impact 3-53
3.7 Drought 3-55
3.7.1 Drought Hazard Profile 3-56
3.7.2 Vulnerability – Drought Impacts 3-59
3.8 Earthquake 3-60
3.8.2 Vulnerability – Earthquake Impact 3-63
3.9 Dam Failure 3-65
3.9.1 Dam Hazard Profile 3-66
3.9.2 Vulnerability – Dam Failure Impact 3-72
3.10 Temperature Extremes 3-3
3.10.1 Extreme Temperature Hazard Profile 3-7
3.10.2 Vulnerability – Extreme Temperature Impact 3-9
3.11 Soil Erosion - Shoreline, Coastal and Ravine 3-10
3.11.1 Shoreline Erosion Hazard Profile 3-11
3.11.2 Coastal Erosion Hazard Profile 3-11
3.11.3 Ravine Erosion Hazard Profile 3-12
3.11.4 Vulnerability - Erosion Hazard Impact 3-13
3.12 Power Outage 3-15
3.13 Summary of Natural Hazards Risk Assessment 3-17
3.13.1 Impact of the Hazards 3-17
3.13.2 Comparison to State of Illinois 2018 Natural Hazard Mitigation 3-20

Chapter 4: Mitigation Goals 4-1

4.1 Community Priorities and Plan Direction 4-1
4.2 Goals and Guidelines 4-2
4.3 Consistent with Other Plans 4-3

Chapter 5: Mitigation Strategies and Capability Assessment 5-1
5.1 Preventive Measures 5-3
5.1.1 Planning and Zoning 5-4
5.1.2 Watershed Development Regulations 5-5
5.1.3 Best Management Practices 5-9
5.1.4 Building Codes 5-9
5.1.5 Standards for Manufactured Homes 5-11
5.1.6 Critical Facility Construction 5-11
5.1.7 Other Preventive Measures 5-12
5.1.8 Preventive Measure Recommendations 5-13
5.2 Property Protection 5-13
5.2.1 Building Acquisition/Relocation 5-14
5.2.2 Building Elevation, Floodproofing or Barriers 5-16
5.2.3 Building Structural Retrofitting 5-19
5.2.4 Insurance 5-21
5.2.5 Repetitive Flood Loss Properties 5-25
5.2.6 Property Protection Recommendations 5-26
5.3 Resource Protection 5-27
5.3.1 Open Space Preservation 5-28
5.3.2 Wetland Protection Regulations & Soil Erosion and Sediment Control 5-29
5.3.3 Stream Restoration 5-32
5.3.4 Erosion Protection 5-33
5.3.5 Groundwater Protection 5-34
5.3.6 Urban Forestry 5-34
5.3.7 Historic and Natural Area Protection 5-35
5.3.8 Resource Protection Recommendations 5-36
5.4 Emergency Services 5-37
5.4.1 Emergency Planning 5-37
5.4.2 Threat Recognition 5-38
5.4.3 Warning 5-39
5.4.4 Response 5-41
5.4.5 Critical Facility Protection 5-43
5.4.6 Recovery and Mitigation 5-44
5.4.7 Emergency Services Recommendations 5-45

5.5 Structural Measures 5-46
5.5.1 Watershed Planning 5-46
5.5.2 Regional Flood Control 5-47
5.5.3 Management of Existing Dams 5-48
5.5.4 Improving Crossings and Roadways 5-49
5.5.5 Drainage System Maintenance 5-49
5.5.6 Structural Measure Recommendations 5-50
5.6 Public Information 5-50
5.6.1 Library and Website Resources 5-51
5.6.2 Outreach Projects 5-52
5.6.3 Technical Assistance 5-52
5.6.4 Public Information Recommendations 5-53
5.7 Capability Assessment Summary 5-54

Chapter 6: Action Plan 6-1

6.1 Development of Current Action Plan 6-1
6.2 Lake County ANHMP Priority Action Items 6-4
6.3 Action Items by Community 6-35
Lake County 6-35
Village of Antioch 6-37
Village of Bannockburn 6-38
Village of Barrington 6-39
Village of Barrington Hills 6-40
Village of Beach Park 6-41
Village of Buffalo Grove 6-42
Village of Deer Park 6-43
Village of Deerfield 6-44
Village of Fox Lake 6-45
Village of Fox River Grove 6-46
Village of Grayslake 6-47
Village of Green Oaks 6-48
Village of Gurnee 6-49
Village of Hainesville 6-50
Village of Hawthorn Woods 6-51
City of Highland Park 6-52

Village of Highwood 6-53
Village of Indian Creek 6-54
Village of Island Lake 6-55
Village of Kildeer 6-56
Village of Lake Barrington 6-57
Village of Lake Bluff 6-58
City of Lake Forest 6-59
Village of Lake Villa 6-60
Village of Lake Zurich 6-61
Village of Lakemoor 6-62
Village of Libertyville 6-63
Village of Lincolnshire 6-64
Village of Lindenhurst 6-65
Village of Long Grove 6-66
Village of Mettawa 6-67
Village of Mundelein 6-68
Village of North Barrington 6-69
City of North Chicago 6-70
Village of Old Mill Creek 6-71
City of Park City 6-72
Village of Port Barrington 6-73
Village of Riverwoods 6-74
Village of Round Lake 6-75
Village of Round Lake Beach 6-76
Village of Round Lake Heights 6-77
Village of Round Lake Park 6-78
Village of Third Lake 6-79
Village of Tower Lakes 6-80
Village of Vernon Hills 6-81
Village of Volo 6-82
Village of Wadsworth 6-83
Village of Wauconda 6-84
City of Waukegan 6-85
Village of Winthrop Harbor 6-86

City of Zion 6-87
Naval Station Great Lakes 6-88
6.4 Implementation Strategy 6-89

Chapter 7: Plan Maintenance 7-1

7.1 Plan Adoption 7-1
7.2 Maintenance and Monitoring 7-1
7.3 Continued Public Participation 7-2
7.4 Evaluating the Plan's Success 7-2
Appendix A: Hazards Mitigation Planning Committee Hazard Exercise Ranking by Jurisdiction A-1
Appendix B: Critical Assets Within Hazard Area B-1
Appendix C: HMPC Participation and Documentation C-1
Appendix D: Public Information Activities D-1
Appendix E: Progress on 2017 Action Plan & Comparison to Current Action Plan E-1
Appendix F: 2022 Unincorporated Lake County New Actions F-1
Appendix G: HAZUS MH Flood Report G-1
Appendix H: Resolutions and FEMA Approval H-1

Table of Exhibits

Exhibit 1: Lake County Municipalities 1-4
Exhibit 2: Lake County Townships 1-5
Exhibit 3: Lake County Elementary School Districts 1-9
Exhibit 4: Lake County High School Districts 1-10
Exhibit 5: Lake County Current Land Use 1-16
Exhibit 6: Lake County Environmental Resources Inventory 1-17
Exhibit 7: Lake County Critical Facilities 1-21
Exhibit 8: Lake County Watersheds and Subwatersheds 3-10
Exhibit 9: Lake County 100 Year Floodplain and Floodway 3-15
Exhibit 10: Lake County "Flood Problem Areas" 3-18
Exhibit 11: Lake County Tornado Touch Downs 3-33
Exhibit 12: Critical Asset Tornado Scenario Map (1974 F4 Shifted Track) 3-33
Exhibit 13: Lake County Hail over 0.75" 3-46
Exhibit 14: Lake County Lightning Events 3-50
Exhibit 15: Lake County Seismic Hazard Ground Acceleration Map 3-67
Exhibit 16: High and Significant Dam Hazard Locations 3-83
Exhibit 17: Lake County SMC Flood Audit and Floodplain Buyout Locations 5-15
Exhibit 18: Lake County Wetlands 5-30

Table of Figures

Figure 1: Lake County Employment 1-8
Figure 2: Lake County Current Land Use 1-13
Figure 3: Lake County Future Land Use Percentiles 1-14
Figure 4: Mitigation Planning Process Steps Comparison 2-1
Figure 5: Description of a Floodplain 2-5
Figure 6: Plan View of Stratton Lock and Dam 2-9
Figure 7: Operational Constraints at Stratton Lock and Dam 3-10
Figure 8: Building-related Economic Loss Estimates (Millions of Dollars) 3-27
Figure 9: Upper Midwest Wind Zones 3-43
Figure 10: Flash Density Associated with Lightning Strike 3-44
Figure 11: July 2011 Northern Illinois Derecho 3-47
Figure 12: 1954 Lake Michigan Seiche 3-48
Figure 13: Percentage of Change in Precipitation by Season 3-55
Figure 14: "Did You Feel It" Reports for April 18, 2008, Earthquake 3-64
Figure 15 NOAA's National Weather Service Heat Index 3-5
Figure 16: Wind Chill Chart 3-6
Figure 17: Ravine and Tableland Preservation 3-13
Figure 18: BMP Example for Stormwater Runoff 5-9
Figure 19: Erosion Resistant Garden 5-33
Figure 20: Flood Forecast and Rain and Stream Gage Links 5-39

Table of Tables

Table 1: Lake County Township Population Data 1-7
Table 2: Current Land Use 1-14
Table 3: Planned Future Land Uses 1-15
Table 4: Lake County Critical Facilities 1-18
Table 5: Lake County Critical Facilities Located in the 100-year Floodplain 1-20
Table 6: Defined Risk Assessment Terms 3-1
Table 7: Hazard Risk Ranking Summary 3-2
Table 8: Presidential Disaster (DR) & Emergency Declarations (EM) in Lake County 3-2
Table 9: Evaluation of Hazards for Inclusion in 2022 Risk Assessment 3-4
Table 10: Fox River Watershed in Lake County 3-11
Table 11: Des Plaines River Watershed in Lake County 3-12
Table 12: North Branch of the Chicago River Watershed in Lake County 3-13
Table 13: Lake Michigan Watersheds in Lake County 3-14
Table 14: Lake County Floodplain Land Use 3-16
Table 15: Lake County Estimate of Flood Prone Land 3-16
Table 16: Lake County Flood Problem Area Inventory Summary - 2022 3-17
Table 17: Lake County NFIP Flood Insurance Active Policies & Claims (9/30/2021) 3-19

Table 18: Lake County Repetitive Loss Structures (2022) 3-21
Table 19: Lake County Repetitive Flood Loss Area Numbers and Names 3-22
Table 20: "Flood Audited" Repetitive Loss Properties in Lake County 3-23
Table 21: Des Plaines River Flooding in Lake County 3-24
Table 22: Past Occurring Flood Events with Property Damage in Lake County 3-25
Table 23: Enhanced Fujita Scale and Associated Damage 3-29
Table 24: Institutional Buildings 3-30
Table 25: Educational Institutions (Elementary Schools, High Schools) 3-30
Table 26: Metal Building Systems 3-31
Table 27: Electric Transmission Lines 3-31
Table 28: Lake County Tornado History (1957-2022) (NCEI) 3-34
Table 29: Hail Size Reference 3-39
Table 30: High Wind Events in Lake County (2011-2022) 3-41
Table 33: Lightning Strikes in Lake County (1995-2022) (NCEI) 3-45
Table 34: Severe Winter Storms in Lake County (1994-2022) (NCEI) 3-52
Table 35: Drought Severity Classification 3-57
Table 36: Modified Mercalli Intensity 3-60
Table 37: Recent Earthquakes in Illinois 3-63
Table 38: State Dam Hazard Classifications for Lake County 3-69
Table 39: Name of Dam and National Inventory of Dam (NID) ID # 3-70
Table 40: Relationship between Heat Index & Heat Disorders 3-3
Table 41: Cold Weather Threat Levels 3-7
Table 42: Extreme Heat Events in Lake County (1995-2022) 3-8
Table 43: Extreme Cold Events in Lake County (1996-2022) 3-9
Table 44: IEMA Hazard Ratings for Lake County 3-20
Table 45: Natural Hazard Mitigation Activities 5-3
Table 46: Lake County Plans and Ordinances 5-5
Table 47: Lake County WDO Certified Communities 5-8
Table 48: Lake County Flood Insurance Status 5-24
Table 49: Historic Bridges in Lake County 5-36
Table 50: NWS Flood Forecast Points 5-39
Table 51: Lake County Flood Response Assignments 5-42
Table 52: Summary of 2022 ANHMP Hazard Mitigation Action Items 6-31
Table 53: Summary of 2022 Action Items and ANHMP Goals 6-33

Executive Summary

In 2006, Lake County and participating Lake County municipalities developed and adopted the first *Lake County Countywide All-Natural Hazards Mitigation Plan (ANHMP)*. The Federal Emergency Management Agency (FEMA), through the Disaster Mitigation Act of 2000 (DMA 2000) and the Stafford Act require that a community develop and adopt a FEMA-approved natural hazard mitigation ANHMP to be eligible for hazard mitigation grant funds. DMA 2000 and the Stafford Act require that the mitigation ANHMP be updated and re-adopted every five years to maintain grant eligibility. This 2022 ANHMP is the third update of the 2006 ANHMP. The ANHMP is multi-jurisdictional, meaning the county and its participating municipalities must adopt the ANHMP.

This ANHMP meets all FEMA planning requirements including those of the FEMA National Flood Insurance Program (NFIP) and Community Rating System (CRS). The ANHMP allows Lake County and its participating communities to receive Hazard Mitigation Assistance Program (HMA) grant funding from FEMA to fund mitigation projects. CRS allows participating communities to earn credit towards discounts in flood insurance premiums. More can be learned about these programs at: http://www.fema.gov/hazard-mitigation-grant-program.

> "Hazard mitigation is defined as any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event."
>
> *FEMA*

While this ANHMP meets federal planning requirements, it has also been prepared to address protection of life, health, and safety, and to reduce damage to property and infrastructure from natural hazards. This ANHMP assesses the natural hazards that affect Lake County, sets mitigation goals, considers mitigation efforts currently being implemented, evaluates additional mitigation strategies, and recommends mitigation actions to be implemented over the next five years. The mitigation actions are designed to protect the people and assets of Lake County and are intended to be implemented by the public and the private sectors.

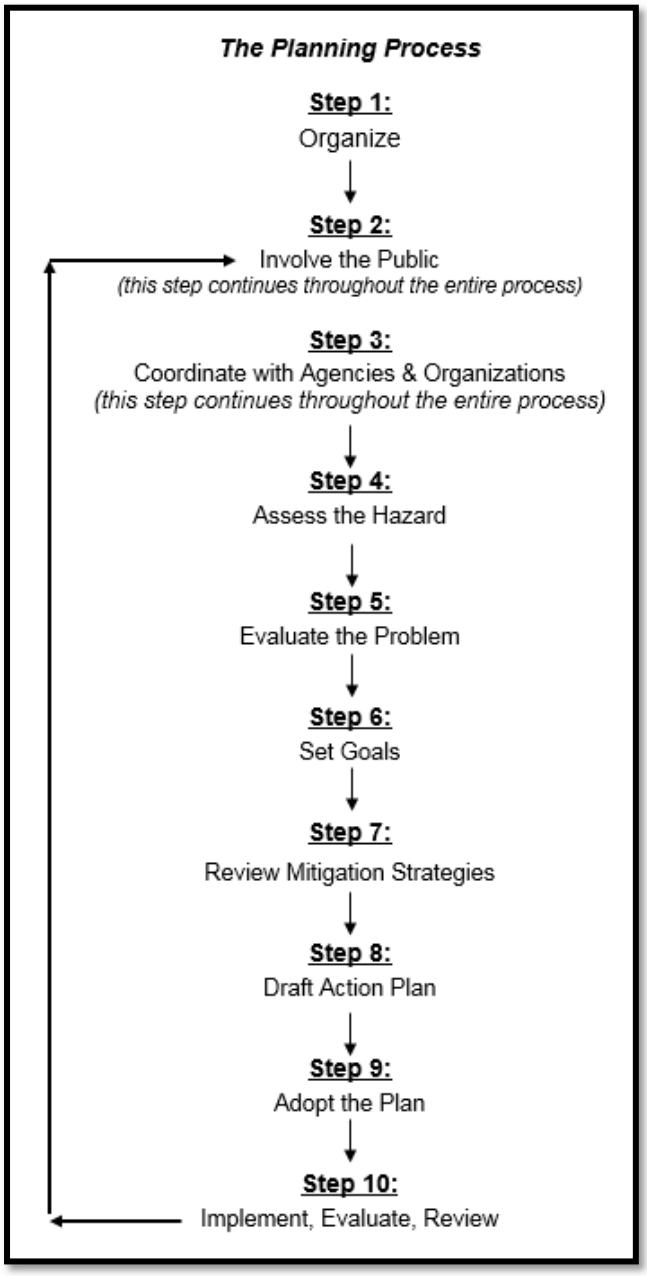
ANHMP Development

The ANHMP update was conducted with the input of the Lake County Hazard Mitigation Planning Committee (HMPC), which includes Lake County departments and agencies, Lake County municipalities and other stakeholders. The HMPC has been in place since the development of the 2006 ANHMP and has been meeting annually. The efforts of the HMPC were coordinated by the Lake County Stormwater Management Commission (SMC) and Lake County Emergency Management Agency (LCEMA).

The update of the ANHMP was based on discussion and data provided by the participating municipalities as they followed the recommended 10-step planning process. An ANHMP introduction and a description of the planning process are presented in Chapters 1 and 2. Natural hazards that can impact Lake County have been assessed in Chapter 3. Goals and guidelines established by the HMPC are presented in Chapter 4. Six mitigation strategies and a capabilities assessment of Lake County are examined in Chapter 5. The ANHMP action plan is detailed in Chapter 6, and procedures for monitoring and maintaining this ANHMP are included in Chapter 7.

Chapter Summary:
Planning Process

The HMPC followed a 10-step planning process to update the ANHMP. The HMPC met five times from January to April 2022. The HMPC reviewed the hazards and their effects on people and property, considered a variety of ways to reduce and prevent damage, and recommended the most appropriate and feasible measures for implementation. Existing plans and programs were reviewed during the planning process. It should be underscored that this ANHMP does not replace other planning efforts, such as community comprehensive plans, or the Lake County Comprehensive Stormwater Management Plan. This ANHMP complements those efforts.



The public was invited to participate through several concurrent means, including HMPC meetings, online surveys, paper surveys, press releases, newsletter articles, and the Lake County website. A public meeting was held on April 19, 2022, at the Central Permit Facility in Libertyville, Illinois. The public comment period opened on February 17, 2023.

Natural Hazard Risk Assessment

The HMPC reviewed all potential natural hazards that could impact Lake County, and evaluated them based on their causes, their likelihood of occurring, and their impact on people, property, critical facilities, and the local economy. The information was based on available technical studies and reports by the participating agencies and communities and on their past experiences.

The final approved plan will be available on the SMC website at:
https://www.lakecountyil.gov/553/Stormwater-Management-Commission

Hazard Mitigation Goals and Guidelines

The goals of the ANHMP were reviewed and reaffirmed by the HMPC.
The ANHMP goals are to:

Goal 1. Protect the lives, health, and safety of the people of Lake County from the impacts and effects of natural hazards.

Goal 2. Protect public services, utilities, and critical facilities from potential damage from natural hazard events.

Goal 3. Mitigate existing buildings to protect against damage from natural hazard events.

Goal 4. Ensure that new developments do not create new exposures of people and property to damage from natural hazards.

Goal 5. Mitigate to protect against economic and transportation losses due to natural hazards.

Chapter 4 presents guidelines developed by the HMPC to achieving the above goals and to facilitate the development of hazard mitigation action items.

Hazard Mitigation Strategies

The HMPC considered mitigation strategies for the natural hazards shown on page ES-2. The HMPC reviewed current preventive mitigation measures being implemented by the county and municipalities. Preventive measures include activities such as building codes and the enforcement of the Lake County Watershed Development Ordinance. Lake County is strong in preventive measures through floodplain regulations and sustainable projects.

Property protection mitigation measures are used to modify buildings or property subject to existing damage. The HMPC agreed that special attention should be given to floodplain areas and designated repetitively flooded areas. SMC should continue with their voluntary floodplain acquisition program. Many measures can be implemented by the property owners, such as dry and wet floodproofing. Appropriate government activities include public information, technical assistance, and financial support. Emphasis has also been placed on critical facilities, particularly on understanding their vulnerability to wind and severe storm hazards.



Natural resource protection activities are aimed at preserving (or in some cases restoring) natural areas. These activities include preserving wetlands, control of erosion and sedimentation, stream restoration, and urban forestry management. Urban forestry programs are encouraged to protect utility lines from damage caused by trees during wind and ice storms.

The HMPC called for a better understanding of flood and other hazards to improve emergency management – preparedness, response, and recovery.

Structural mitigation projects such as the regional detention basins are still important components of the county's comprehensive watershed management program. Additional watershed studies are still needed. The HMPC also recommended that each community establish a formal and regular program of drainage system maintenance and examine drainage improvements.

The HMPC identified numerous subject areas that would benefit from a coordinated public information program to focus on residents and property owners obtaining proper insurance and ways for people to protect themselves and their property from natural hazards.

Mitigation Action Plan

The action plan outlines the recommended activities and initiatives to be implemented over the next five years. It is understood that implementation is contingent on the availability of resources (staff and funding). The action plan identifies those responsible for implementing the action items, and when they are to be completed.

Mitigation actions are not limited to those listed in the action plan. Other recommendations in this ANHMP (Chapter 5) should be implemented as opportunities arise.

Plan Adoption

This ANHMP serves to recommend mitigation measures for Lake County. Adoption is also a requirement for recognition of the ANHMP by FEMA for mitigation funding programs.

The adoption of this *Lake County All-Natural Hazards Mitigation Plan* will be done by resolution of the county board, the city councils, and boards of trustees of each participating municipality. The municipal resolutions will adopt each action item that is pertinent to the community and a person responsible for it will be assigned. With adoption, the county and each municipality are individually eligible to apply for FEMA mitigation grant funding.

Summary

This 2022 update to the ANHMP was developed by the Lake County HMPC as a multi-jurisdictional ANHMP to meet federal mitigation planning requirements. This ANHMP updated the examination of natural hazards facing Lake County, establishes mitigation goals, evaluates, and highlights the existing mitigation activities underway in Lake County, and recommends a mitigation action plan for the county and participating jurisdictions to undertake in the next five years. The mitigation efforts included in this ANHMP are for protecting people, property, and other assets of Lake County. Some action items are ongoing efforts while others are new. Implementation of all action items is contingent on the availability of staff and funding.

This ANHMP will be adopted by resolution by the Lake County Board and each participating jurisdiction. This ANHMP will be implemented and maintained through both countywide and individual initiatives as funding and resources become available.

Website: https://www.deerfield.il.us/190/Additional-Flood-Information-Village-Ser

Additional Flood Information & Village Services

Flood Hazard Areas

Special Flood Hazard Areas (100-year floodplain) in the Village of Deerfield are located near the Middle Fork and West Fork of the North Branch of the Chicago River. The eastern portion of Deerfield is in the Middle Fork floodplain, while the western part of town is in the West Fork floodplain. For a detailed map visit the Village of Deerfield website www.deerfield.il.us under maps and information.

Guidance on whether your property is in the 100-year floodplain can be obtained by visiting the Engineering Department and having a staff member help you. However, staff cannot make an official determination but can advice residents on the process with FEMA. Maps are available to look at as well as other flood-related information. Contact the Engineering Department at 847-317-2490 for further assistance.

Flood Safety

The following common sense guidelines can help protect you from the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else.
- Do not drive around barriers.
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet.

Village of Deerfield Flood Recommendations

- Stay away from power lines and electrical wires. If your house is about to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the 2nd leading cause of death during floods.

Website: https://www.deerfield.il.us/190/Additional-Flood-Information-Village-Ser

- Be alert to gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to a Village official or your gas company. Do not use candles, lanterns or open flames if you smell gas or are unsure if your gas has been shut off.
- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry unimaginable items that have dislodged themselves. Culverts may suck smaller people into them rendering them helpless.
- Clean everything that has been wet. Flood water will be contaminated with sewage and other chemicals which pose severe health threats.
- Look out for animals, especially snakes. Small animals that have been flooded out of their home may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

Property Protection Measures

If your property is susceptible to flooding, there are many flood damage reduction measures you can employ:

- Watertight seals can be applied to brick and block walls to protect against low-level flooding.
- Utilities such as heating and air conditioning systems, water heaters and other major appliances can be elevated to higher floors in the structure or on raised platforms.
- Temporary measures such as moving furniture and other valuables to higher floors or sandbagging exterior openings will also help.
- Elevating or relocating the entire structure may also be a feasible option.

Historical Flooding & Natural Floodplain Functions

In addition to floodplain mapping assistance the Village of Deerfield Engineering Department provides the following services:

- Historical flooding information.
- Natural flood plain function information.
- Information on soil types when available.
- Flood protection assistance recommendations.

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess

Website: https://www.deerfield.il.us/190/Additional-Flood-Information-Village-Ser

the problem and may be able to offer solutions. Also, guidance on whether your property is in the 100-year floodplain, floodway, wetland or historical flooding area, can be obtained by contacting the Engineering Department and having a staff member help you. Maps are available to look at as well as other flood-related information. With questions please contact the Engineering Department at 847-317-2490.

Additional Information

If you should require further or more detailed information regarding flood-related issues in Deerfield, here are some additional sources:

- FEMA.gov website
- Physical Address of Village of Deerfield Engineering Department
  465 Elm Street
  Deerfield, IL 60015
- Engineering Phone Number: 847-317-2490
- Flood FAQs
- Deerfield Public Library
- Lake County Flood Information, Programs and All Natural Hazards Mitigation Plan (ANHMP)
- Deerfield 2020 Annual Progress Report

Storm System Maintenance

Public Works - March 31 - April 4, 2023 Storm (4")

Location	Date Inspected	Work Done
River		
Middle Fork	4/4/2023	Visual Monitoring
West Fork	4/4/2023	Visual Monitoring
Reservoir		
Reservoir 27	4/5/2023	Maintenance as needed
Reservoir 29A	4/5/2023	Spring and Fall inspections with MWRD & maintenance as needed
Bridges		
Carlisle/Carriage Way Bridge	4/5/2023	Debris Rem on 2/14, 3/3, 4/5, 7/27
Pfingsten Rd Bridge	None	None
Lake Cook Rd Bridge	None	None
Ped Walk at Hackberry	None	None
Central Ave Bridge	None	None
Deerfield Rd Bridge - WF	None	None
Juniper Ct Bridge	None	None
Hazel Ave Bridge	None	None
Wilmot Rd Bridge	None	None
Open Ditch		
Somerset from Prairie to Cherry	None	None
Broadmoor from Hazel to Greenwood	None	None
Cherry from Hazel to Greenwood	None	None
Woodvale Ditchline	4/5/2023	Visual inspections and Vegetation maintenance

Carriage Way Bridge Cleared

Before photo 3/2/2023



After photo 3/3/2023



VILLAGE OF DEERFIELD

D-Tales

JULY/AUGUST 2023 VOLUME 45, NO. 4

INSIDE

Village News	2
Board Report	3
Community Calendar	3
Public Works Update	4
Annual Drinking Water Quality Report	5
Police Department News	9
Our Community	10
Meeting Schedule	12



4,600+
feet of distance along July 4th parade route

12
Family Days carnival rides

60
years of annual Deerfield Fourth of July festivities

Deerfield Family Days Back in Person

Deerfield Family Days will kick off another two days of fun July 3rd and 4th. Join family and friends for a holiday filled with fun and entertainment!

The spectacular fireworks show will be held Monday, July 3rd, at Shepard Park with live entertainment and kids' activities. The gates will open at 5 p.m. and food and drink concessions will be available for purchase.

On Tuesday, July 4th, head on over to the festivities at Jewett Park including breakfast in the park, the dog show, and a variety of games. Join the bike parade at 8:30 a.m. at the Rosemary Terrace parking lot. *New Parade Route:* The parade starts at noon on Monday and will travel from Deerspring Pool, west on Deerfield Road and north on Park Avenue where it will end at Jewett Park.

This year's Parade Marshals are Mayor Emeritus Harriet Rosenthal and the League of Women Voters of Deerfield/Lincolnshire. Rosenthal served 12 years as Mayor and 24 years as a Village Trustee. The League of Women Voters was founded in Chicago on February 14, 1920. Since then, the League has worked to register voters, sponsor candidate forums, provide non-partisan election materials about candidates, and study issues on the local, state and national levels in order to create a better-informed electorate.

For more information please visit deerfield.il.us/familydays





Business Facade Rebate Program Update

Village staff is working with the third applicant for the Village's Business Facade Rebate Program since the program started 18 months ago. The first applicant received a grant to update the building and site at 827 and 829 Waukegan Road (theCoderSchool and Top Issue). The second applicant received approval from the Board of Trustees for a complete facade renovation at 728 Waukegan Road (former Barnes and Noble tenant space). The existing space will be divided into five (5) retail shops with office space above. The entire facade was removed and will be replaced with sleek, contemporary materials. A new outdoor patio will be part of the project. The third applicant is located at 806-808 Waukegan Road (Walter Tailor and Cherry Pit Cafe). They plan to replace all of the outdated windows, signage and awnings to give the building a fresh appearance, while maintaining its historical character. The program is set to run until the end of the year.

Interested businesses should contact Planning & Design Specialist Liz Delevitt at edelevitt@deerfield.il.us or 847.719.7483 for more information.

Harvest Fest

DEERFIELD HARVEST FEST

Deerfield's Harvest Fest is back September 9 with fun community events for everyone.

Start the day with your neighbors at the Deerfield Farmers Market between 7 a.m. and 12:30 p.m. with special kids' activities and the popular touch-a-truck.

Gates open at the intersection of Deerfield Road and Park Avenue at 4:30 p.m. We'll have live concerts from West End 40 and 7th Heaven, food, a beer tent and more. Register in advance for our bags tournament to receive a one-of-a-kind trophy.

Harvest Fest is hosted by the Village of Deerfield and the DBR Chamber of Commerce. Watch for an event mailer with more details and a list of sponsors in late August.



VILLAGE SPOTLIGHT

In May, Highland Park Mayor Nancy Rotering, City Manager Ghida S. Neukirch and Police Chief Lou Jogmen presented a Highland Park flag and certificate to Mayor Shapiro for the Village's assistance on and following the July 4th shooting. Both are now proudly on prominent display in the Village Hall lobby.

"It serves as a reminder that in times of adversity, neighboring communities can rely on each other for support, comfort and solace."

DANIEL C. SHAPIRO, MAYOR

Board Report



For complete sets of minutes for Village Board meetings or to watch meetings on demand, please visit deerfield.il.us.

VILLAGE BOARD ACTION

Approved an Ordinance amending Chapter 3 of the Municipal Code to create a new Class L Liquor License to allow for product sampling and regulations related thereto

Approved a Resolution granting an extension to a development schedule for 8 Parkway North in the Parkway North Center Planned Unit Development (Quadrangle Development Corporation)

Approved a Resolution authorizing an economic incentive agreement with 2300 Carlson, LLC (Shake Shack - 560 Waukegan Road)

Approved a Resolution adopting the All Natural Hazards Mitigation Plan

Approved an Ordinance amending the Village of Deerfield Wage and Salary Plan

Approved a Resolution to reject all bids for 2023 Street Rehabilitation Program

Approved a Resolution to award Family Days fireworks contract

Approved a Resolution approving High School Dist. 113 school resource officer agreement

HONORS AND RECOGNITIONS

Recognized National First Place Rochelle Zell Jewish High School Model UN Team

Proclaimed May Asian American and Pacific Islander Heritage Month

Proclaimed May Jewish American Heritage Month

Proclaimed May 21 - May 27, 2023, as National Public Works Week

Proclaimed May 15 - May 21, 2023, as National Police Week

Proclaimed April 28, 2023, as Arbor Day

Proclaimed June as LGBTQ Pride Month

Appointed Rai Copeland-Keefe to Fine Arts Commission

Community Calendar

Deerfield Park District
For more information or to register for Park District programs, call 847.945.0650 or visit deerfieldparks.org.

Enjoy Summer Concerts at Floral Park from 5-6:30 p.m. in July and August. Join your friends and neighbors, bring a picnic dinner, chair or blanket while different artists perform each week. Dates and artist bios can be found at deerfieldparks.org/events.

Our summer celebration of music continues as we proudly welcome the return of John Maxson and the North Shore Line to the Patty Turner Center for Elmstock II: The Summer Celebration for our 50+ adult audience on August 16 from 5:30-7:30 p.m. Call 847.940.4010 to register.

Open Pickleball at Sachs Recreation Center for all players no matter their age or ability level. Drop in and play on one of our seven courts. The spring/summer Open Play schedule runs April 3-August 11. Open play is rack format M/W/F 8 a.m.-12 p.m. $7R/9NR/Free for SRC Members.

Eat to the Beat Concerts for our young audiences and their caregivers at Jewett Park Pavilion from 11:30 a.m.-12:15 p.m. on July 5, 12, 19 & 26. Bring a picnic lunch, listen to music and play in the park!

Deerfield Family Theater Auditions for Beauty and the Beast will be held in August. Visit deerfieldfamilytheater.com to select an audition slot!

Deerfield Library
All Library programs are free and open to the public. Register in advance by phone at 847.945.3311, online at deerfieldlibrary.org, or in person at 920 Waukegan Rd. Online program description notes program platform (online, in-person, or hybrid).

Memory Cafe
July 5 and August 2, 10-11:15 a.m.
A place for persons experiencing memory changes and their care partners to gather for connection and conversation while enjoying themed activities. To register, contact Judy Hoffman at 847.580.8954 or jhoffman@deerfieldlibrary.org.

Professor Moptop Presents: Grateful Dead
July 18, 7-8:30 p.m.
The program will focus on the roots of the Grateful Dead and many of the songs composed by them and others, including Johnny Cash, Chuck Berry, and Bobby "Blue" Bland.

It's Juggle Time! Become the Pro!
July 22, 10-11 a.m., Youth-All Ages
Enjoy a comedy juggling and variety show, and an interactive workshop to learn juggling and balancing skills.

Balloon Creation Station
July 26, 4:30-5:30 p.m., Ages 8-12
Learn how to make balloon creations and leave with an armful of colorful balloons.

Jigglejams Concert
August 5, 10-11 a.m., Youth-All Ages
Wiggle, jiggle, and giggle to Jodi Koplin's interactive songs in this fun family-friendly concert.

Lunch & Listen: Appalachia Music & Culture
August 18, 12-1:15 p.m.
Explore the music of the mountains with L.J. Slavin and his banjo, harmonica, penny whistle and musical saw. Bring your lunch; dessert will be provided.

PUBLIC WORKS BY THE NUMBERS

66 lane miles
of roadway

107 miles
of water main

110 linear miles
of storm sewers



Waukegan Road Water Main Project

The Waukegan Road Water Main Project began in early April and is expected to be completed by early September. The contract includes the full replacement of all water main items within Waukegan Road from Deerfield Road to North Avenue and requires traffic to be reduced to one lane in each direction. Construction is sequenced in a way to reduce impacts to the downtown area as well as the high school. Most of the work near Deerfield Road will be done overnight to not disrupt businesses in the area, but work in residential areas will take place during the day. Public meetings were held in advance of the project for residents and local businesses.

Updates on the project are being shared via the Village website and interested parties can sign up to receive email and/or text message updates on the project at www.deerfeld.il.us under "Notify Me."

For more information, contact the Engineering Department at 847.317.2490.



Residents learned about water main breaks at the Public Works Open House in May.

Lawn Irrigation RPZ Regulations

All irrigation systems are required to have a backflow prevention device called a Reduced Pressure Zone Backflow Preventer (RPZ). This must be certified annually by a licensed Cross Connection Device Inspector. This testing and certification must be completed every year prior to the system going into service.

The Village has contracted with Backflow Solutions, Inc. (BSI) to administer the backflow prevention tracking program. The annual backflow assembly test report must be submitted electronically by your inspector at BsiOnline.com

For more information, contact the Public Works Department at 847.317.7245.

Flood Information

Natural & Beneficial Functions

Floodplains provide a lot of benefits and play a role in providing natural and beneficial functions to the Deerfield area. Parts of both the Middle and West Forks of the North Branch of the Chicago River floodplain help filter chemical run-off so these areas can maintain bio-diversity and ecosystem sustainability. They enhance waterfowl, fish and other wildlife habitats and provide open space and natural erosion control to reduce further flood damage.

Drainage System Maintenance

Keeping smaller ditches and streams free of debris can dramatically improve the run-off capacity of low-lying areas, as well as greatly reduce incidental blockage that significantly contributes to flooding. Please alert the Deerfield Engineering Department of any illegal dumping of materials into a regulated waterway as violators may be fined.

Additional Information

The Village of Deerfield Engineering Department also provides assistance with flooding or drainage concerns. Village staff can visit your property, if required, and help to assess the problem and may be able to offer solutions. The localized flood protection service is provided by the Engineering Department. Anyone with questions, please contact the Engineering Department at 847.317.2490.

If you need more detailed information regarding flood-related issues in Deerfield, please visit the Additional Flood Information page on the Village website.

Reminder: Sprinkling Restrictions in Effect

The Illinois Division of Water Resources requires that municipalities using Lake Michigan water restrict lawn sprinkling between May 15th and September 15th. Accordingly, Deerfield's restrictions during this period are as follows:

Even numbered addresses may sprinkle on even numbered days from midnight to noon and from 6:00 p.m. to midnight.

Odd numbered addresses may sprinkle on odd numbered days from midnight to noon and from 6:00 p.m. to midnight.

VILLAGE OF DEERFIELD

Annual Drinking Water Quality Report Village of Deerfield 2022

This information is being published in accordance with the 1996 Safe Water Drinking Act as directed by the U.S. Environmental Protection Agency.

We are once again pleased and proud to present to you the Annual Drinking Water Quality Report. This Consumer Confidence Report (CCR) is designed to inform you about the water we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. The Village is committed to ensuring the quality and delivery of your water. We hope you find this information useful.

The drinking water provided by the Village meets or exceeds all State of Illinois and United States Environmental Protection Agency (EPA) regulations and we are not operating under any variance or exemption from the established drinking water regulations or standards. Opportunities for participation in the decision making processes that affect drinking water quality are also available at the monthly Village of Deerfield Board meetings on the first and third Mondays of every month. If you have questions about this report or water quality, please contact Tyler Dickinson, Responsible Operator in Charge, at 847.317.7245, or e-mail pw@deerfield.il.us.

Source of Drinking Water

The Village of Deerfield purchases all water from the City of Highland Park. The City of Highland Park draws its raw water from a 54-inch intake pipe located a mile off shore in Lake Michigan at a depth of approximately 30 feet. In addition, there are two smaller pipes used as secondary intakes, which are 16 and 20 inches in diameter.

Susceptibility to Contamination

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those elements may be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Susceptibility is defined as the likelihood for the source water of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA (IEPA) considers all surface sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution. Hence, the reason for mandatory treatment for all surface water supplies in Illinois.

As mentioned above, Highland Park has three intake lines. The 54-inch intake pipe is normally used alone, with the two smaller intakes used to augment high demand or during maintenance of the 54-inch pipe. As these are closer to the shore, they have a greater susceptibility to be influenced by potential sources of contaminants. Regardless of which lines are used, the finished water leaving the Highland Park Water Plant always meets or exceeds all IEPA and EPA regulations.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791. To access the Highland Park Water Assessment Summary, visit rb.gy/k8epg.

Contaminants Monitoring Results

The Village of Deerfield and City of Highland Park routinely monitor for contaminants in your drinking water according to Federal and State Laws.

General

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

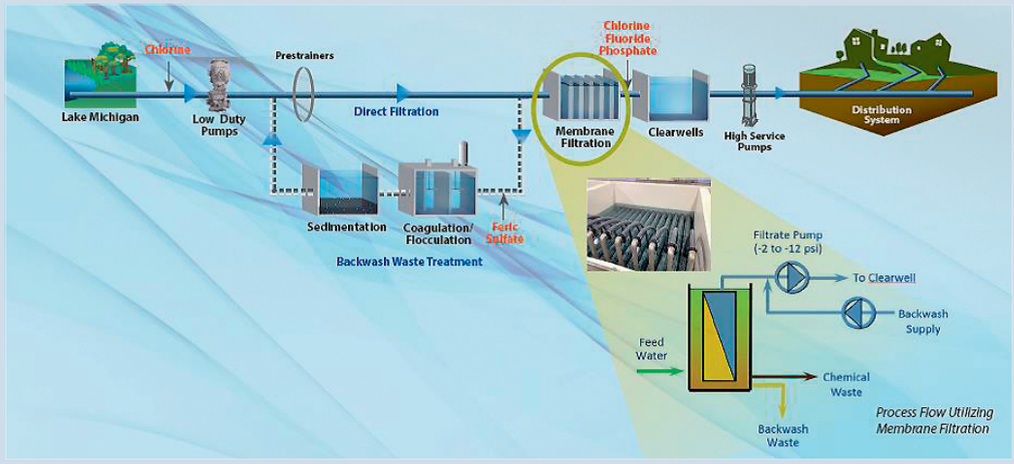
Radioactive contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

2022 Water Quality Data – January 1, 2022 to December 31, 2022

Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Microbial Contaminants							
Turbidity (%<0.3 NTU)*	n/a	0.3 NTU	100%	n/a	NO	2022	Soil runoff
Turbidity (1.0 NTU)* Highest Single Measurement	n/a	1 NTU	0.166 NTU	n/a	NO	2022	Soil runoff
Disinfection / Disinfection Byproducts							
Chlorine (ppm)	4	4	1.55	0.50-2.13	NO	2022	Water additive used to control microbes
Total Haloacetic Acids [HAAS] (ppb)	n/a	60	21.6	7.8.-35.3	NO	2022	By product of drinking water chlorination
TTHM [Total Trihalomethanes] (ppb)	n/a	80	59.2	17.0-66.4	NO	2022	By product of drinking water chlorination
Inorganic Contaminants							
Barium (ppm)	2	2	0.019	.019-.019	NO	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.708	0.708-0.708	NO	2022	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Coliform	0	0	0	0 Plus	NO	2022	Naturally present in the environment

This schematic drawing details the water purification process that Highland Park utilizes to provide clean water to all of its customers, including Deerfield.



Contaminant (units)	EPA MCLG	EPA MCL	High Level Found	Range of Detection	Violation	Date of Sample	Typical Source of Contamination
Unregulated Contaminants reported by the City of Highland Park							
Sulfate (ppm)	n/a	n/a	23.0	23.0-23.0	NO	2022	This contaminate is not currently regulated by the USEPA. However the state regulates. Naturally occurring; discharge from metal factories.
Chloride	n/a	n/a	20.0	20.0-20.0	NO	2022	This contaminant is not currently regulated by the USEPA. However the state regulates. Naturally occurring; run-off from road salts.
Calcium	n/a	n/a	35	35.0-35.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Magnesium	n/a	n/a	13	13.0-13.0	NO	2022	This contaminant is not currently regulated by the USEPA or the state. Erosion from naturally occurring deposits.
Sodium	n/a	n/a	13	13.0-13.0	NO	2022	Erosion from naturally occurring deposits. Used in water softener regeneration.
Hardness Total (ppm as CaCo3)	n/a	n/a	140	140-140	NO	2022	Erosion from naturally occurring deposits.
Alkalinity	n/a	n/a	98	98-98	NO	2022	Erosion from naturally occurring deposits.
Total Dissolved Solids	n/a	n/a	170	170-170	NO	2022	Erosion from naturally occurring deposits.

Lead and Copper

The IEPA lead and copper testing program began in 1992. Due to consistent low concentration levels of lead and copper, the Village has been placed on a reduced testing cycle by the Illinois Environmental Protection Agency (IEPA) and is only required to test every three years. Currently, a round of testing consists of 30 samples. Our most recent round of lead and copper testing took place in 2021 with all samples reporting below the action levels for lead and copper. Copies of the lead sampling results are available on the Village website at deerfield.il.us. Our next round of testing will occur in 2024.

The Village of Deerfield is in full compliance with all State and Federal regulations governing the control of lead and copper within public drinking water supplies. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Deerfield is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at epa.gov/safewater/lead.

Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. The following table shows the results of our lead and copper monitoring for the period of January 1 to December 31, 2021.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	#Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	#Sites Over Copper AL	Likely Source of Contamination
0	15ppb	0 ppb	0	1.3ppm	1.3 ppm	0.19 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

In the previous tables you will find many terms and abbreviations you may not be familiar with. To help you better understand these terms we have provided the following definitions:

ppm - parts per million or milligrams per liter (mg/l) or one ounce per 7,350 gallons of water.

ppb - parts per billion or micrograms per liter (mcg/l) or one ounce per 7,350,000 gallons of water.

ppt - parts per trillion or nanograms per liter (nanograms/l) or one ounce per 7,350,000,000 gallons of water.

NTU - Nephelometric Turbidity Unit, used to measure of the cloudiness in drinking water.

% < 0.3 NTU - percent samples less than 0.3 NTU.

Mrem/yr - millirems per year, used to measure radiation absorbed by the body.

pCi/l - picocuries per liter, used to measure radioactivity.

 # pos/mo - number of positives per month.

AL - Action Level or the concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

MCL - Maximum Contaminant Level or the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

n/a - not applicable.

About The Data

Organic Carbon - The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Turbidity (NTU) - Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration and disinfectants.

Sodium - There is not a state or federal MCL for sodium. Monitoring is performed to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Lead & Copper - The Village of Deerfield has been in compliance with regulations for lead and copper control. (See Lead and Copper Explanation on page 7.)

Unregulated Contaminants - A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

In addition to the above mentioned tests, Deerfield continuously monitors and tests your water through our water control system as well as weekly physical samples. These samples are submitted to the IEPA certified Central Lake County Joint Action Water Agency for analysis. This ensures a rapid response should there ever be a problem.

Special Information Available

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791.

Top Ways to Conserve Water

Conserving water is easy if you follow these helpful tips:

- Test for a leaking toilet by adding food coloring to the tank.
- If any color appears in the bowl after 30 minutes, your toilet is leaking. Leaking toilets can waste thousands of gallons of water. Flush as soon as the test is done, since food coloring may stain the tank.
- Use water-conserving plumbing fixtures and water-flow restrictors on sinks and showers. Bathroom facilities typically constitute 75% of the water used in homes.
- Run your dishwasher and washing machine when you have a full load.
- Take a short shower instead of a bath. A bath uses 30 to 50 gallons of water. Showers use about a gallon of water per minute.
- Store drinking water in the refrigerator instead of letting the tap run every time you want a glass of cool water.
- Never put water down the drain when there may be another use for it such as watering a plant or garden, or doing housework.
- Be conscientious of the amount of water you use when running your garbage disposal. Have your food scraps cut into small pieces so they can be disposed of quickly, minimizing the amount of time you need to run the faucet.
- For landscaping and gardens, choose plants that are native to the area in which you live or plants that are drought resistant. Native plants are accustomed to the natural amount of precipitation that occurs in the area where they are found and normally do not require any additional watering. Group plants together based on similar watering needs.
- Water your lawn and/or garden during the coolest part of the day to minimize evaporation. Apply water slowly, exactly where it is needed. Position sprinklers so that water lands on the lawn and shrubs, not on paved areas. Keep in mind that sprinkling restrictions are in place from May 15 - September 15.

For More Information

If you have any questions about this report, your water quality in general, or simply want more information, please contact the Village of Deerfield Water Department at 847.317.7245 or pw@deerfield.il.us or visit our website at deerfield.il.us.

Police Department News

Fireworks Safety Tips

The Fourth of July should be a fun time with great memories. The optimal way to enjoy fireworks will be at the Deerfield Family Days professional display at dusk on July 3rd, 2023, at Shepard Park. The use of fireworks in Deerfield is significantly restricted by Village Ordinance.

Each July 4th, thousands of people nationwide, most often children and teens, are injured while using consumer fireworks. Also, unsanctioned fireworks can have unintended consequences for combat veterans with post-traumatic stress disorder; while veterans anticipate the sound of fireworks on the 4th of July, civilians who shoot them off on random days before and after the holiday can be a source of real anxiety.

Curfew

Our curfew ordinance was created for the safety of minors as well as to maintain the quality of life throughout Deerfield. It is applicable to those 17 and Under:

Sunday - Thursday: 11 p.m. - 6 a.m.
Friday - Saturday: 12:00 a.m. - 6 a.m.

Drivers under the age of 18 may not operate a motor vehicle between the hours of 10 p.m. and 6 a.m., Sunday through Thursday, and between 11 p.m. and 6 a.m., Friday and Saturday. During allowed driving times, the number of passengers is limited to one person under the age of 20, unless the additional passenger is a sibling, step-sibling, child, or step-child of the driver.

Exemptions in the law allow new drivers to drive to and from employment or school-sanctioned activities outside the restricted times. Underage drivers convicted of violating the new driving curfews may have their driver's license suspended.

2023 Cop on a Rooftop

Members of the Police Department, in cooperation with Dunkin' of Deerfield, participated in the annual Cop on a Rooftop event on May 19 to benefit the Special Olympics Illinois Law Enforcement Torch Run. Department members called down to customers from the roof of Dunkin' while others collected donations on the ground with Special Olympics Gold Medal Winning Athlete and Global Messenger Ella Stoklosa. Lutheran Church Charities K-9 Ministry were also in attendance with Comfort Dogs. More than $4,200 was raised at the Deerfield location for Special Olympics Illinois.



Overnight Parking

By Village Ordinance, vehicles are not allowed to park on the street between the hours of 2 a.m. and 6 a.m. This ordinance helps to reduce crime and improve the overall safety and appearance of our community. If you require an exception, call the Deerfield Police non-emergency number 847.945.8636, before 2 a.m., and be prepared to provide the license plates of the effected vehicles.

Police Department Lobby Closure

The Police Department's Communications Center is getting an upgrade and expanding. During construction there may be times the Police Department lobby will be closed to the public as a safety precaution. If you need police service, please call 847.945.8636. For the records department, please contact 847.945.5007.

The Communications Center was last remodeled more than twenty years ago. The dispatch consoles were later replaced in 2004. The Center was originally designed to accommodate dispatching personnel to provide service for two communities, Deerfield and Bannockburn. Since that time, the Center has seen modest growth with the addition of Riverwoods and Lincolnshire, resulting in significant use of the center and equipment which is staffed and operational 24 hours a day, seven days a week.

STAY CONNECTED

Instagram: deerfieldpolice
Nextdoor.com: Deerfield Police Department

In 2022, the Deerfield Police Communications Center managed a total of 59,051 calls for service.

15,483
Deerfield calls for service

8,091
Bannockburn Police calls for service

5,476
Riverwoods Police calls for service

19,139
Lincolnshire Police calls for service

10,862
Communications Center calls for administrative issues



VILLAGE HISTORY

The Historic Village consists of five buildings dating from 1837 to 1905 that offer you a look at a typical prairie community.

George Luther House, c. 1847
This is a well preserved example of the larger "three room log cabin" built before the arrival of the first sawmill in 1850. After the Civil War, the house was modernized by the addition of Greek Revival white siding and green trim. The building houses a visitor center and exhibits.

Bartle Sacker Farmhouse, c. 1854
Nicknamed "The Little House on the Prairie," this two-story frame house is furnished with artifacts used in the daily life of an active farm family. View photos of the farmhouse being moved to the Historic Village from its original site at 1428 Waukegan Road at digitalpast.org.

Little Red Schoolhouse, c. 1890
Is a replica of a 19th century One-room school furnished with period school items. Every child in District 109 attends class for one day at the schoolhouse as part of their local history program.

Carriage House, c. 1905
Antique carriages and farm equipment are housed in this replica. The Carriage House was built with materials salvaged from four area buildings, and the first four carriages were put on display in 1984.



Caspar Ott Log House, c. 1837
The one-room log home where journeyman tailor Caspar Ott (1814-1876) and his wife, Catherine Trier (1816-1891), raised their seven children is the oldest standing building in Lake County. In 1970, just one week before it was to be demolished, the log house was discovered under the plaster walls of the dining room in the Siljerstrom farmhouse, located on the east side of Sanders Road. In 1971, the log house was moved to the Deerfield Historic Village.

A Look Back in Time

"The roots of a community are in its history and Deerfield is fortunate to have our early beginnings preserved at the Deerfield Historic Village."

JEAN SPAGNOLI
PRESIDENT,
DEERIELD AREA
HISTORICAL SOCIETY

Deerfield Area Historical Society

Tour the Deerfield Historic Village
The Deerfield Area Historical Society hosts free tours of the Deerfield Historic Village, located at the corner of Deerfield Road and Kipling Place, on Sundays from 2 to 4 p.m. from June through September. Visit historic buildings ranging from Lake County's oldest log cabin to a one-room schoolhouse that has been a favorite of children for many years. The Historical Society, a donor-supported, nonprofit organization, maintains the Historic Village.

Save the Date:
DAHS Annual Fall Festival
Sunday, October 1
Noon to 4 p.m.
Deerfield Historic Village
Enjoy the afternoon with fun for the whole family! Step into Deerfield's past with activities, exhibits, food, craft show and historic building tours.

Attention Crafters
The Historical Society is looking for traditional crafters who would like to join the Fall Festival. Show off your talent: knitting, weaving, woodworking, etc. Demonstrate your craft (if possible) and sell your wares. If interested, email deerfieldhistory@gmail.com and ask for an application.



Farmer's Market - Food, Friends and Fun



The Farmers Market season is underway with lots of food, friends and fun! Come join us at our new permanent location on Park Avenue between Jewett Park Drive and Hazel Avenue every Saturday morning through October 14 from 7 a.m. to 12:30 p.m. We have a lot of fun activities, entertainment and events planned to make this our best season yet! Please note that to ensure the safety of visitors, no bikes are allowed inside the market and dogs are to be leashed on a 6-foot lead or less. We are excited to celebrate this season with our dedicated market vendors and patrons and welcome any newcomers interested in joining us! We hope to see you at the market on Saturday mornings.

For more information, visit deerfield.il.us/ Farmers-Market.

District 109 Updates

Although it's summer, there's still a lot happening at District 109! Follow us on Facebook and Twitter at DPS109.

The first day of the 2023-2024 school year is Monday, August 21. We look forward to seeing all of our students and staff back at school!

As the school year draws closer, we are always in need of substitute teachers. You can set your schedule of how often you work! Fill out an application today at dps109.org/jobs.



Come visit us at the Deerfield Farmers Market on Saturday, August 26th! Our superintendent and Board of Education members will be there to say hi, answer questions, and hand out some District 109 swag!

Congratulations to the Class of 2023 from Caruso and Shepard Middle Schools! We wish you well as you head off to Deerfield High School!

DID YOU KNOW?

Wilmot School recently celebrated its demisemi-septcentennial! (That's 175 years!) The school held a day-long party in early June full of activities. Students and staff also recently opened a time capsule from 1997 that showcased what elementary students used at the time. Among the items: a Tamagotchi, Beanie Babies, Hot Wheels, a Michael Jordan poster, and more! This year's group put items inside a new time capsule that will be opened 25 years from now!

VILLAGE OF DEERFIELD

850 Waukegan Road
Deerfield, Illinois 60015
847.945.5000 | deerfield.il.us

PRESORTED
STANDARD U.S.
POSTAGE
PAID
PERMIT NO. 1
DEERFIELD, ILLINOIS

Postal Customer
Deerfield, Illinois 60015

VILLAGE OFFICIALS

Mayor
Daniel C. Shapiro
847.719.7402
dshapiro@deerfield.il.us

Trustees
Robert "Bob" L. Benton
847.945.1570
rbenton@deerfield.il.us

Larry Berg
847.612.0777
lberg@deerfield.il.us

Elaine Jacoby
847.644.3354
ejacoby@deerfield.il.us

Rebekah Metts-Childers
847.899.1449
rmettschilders@deerfield.il.us

Mary M. Oppenheim
847.948.9423
moppenheim@deerfield.il.us

William S. Seiden
847.945.2442
wseiden@deerfield.il.us

Village Manager
Kent S. Street - 847.719.7400
kstreet@deerfield.il.us

Village Hall/Police Department
850 Waukegan Road
Deerfield, Illinois 60015

Switchboard and Finance
847.945.5000

Community Development
847.719.7484

Police non-emergency
847.945.8636

Public Works and Engineering
465 Elm Street
847.317.7245
847.317.2490 (Engineering)



May 17, June 21, July 19, Aug. 16, Sept. 20

4:30 p.m. to 8 p.m. at Jewett Park Hazel Avenue Parking Lot

Live Music | Kids Activities

Sponsored by: The Village of Deerfield

MEETING SCHEDULE

For a complete list of meetings, please visit deerfield.il.us. *Times/dates subject to change.*

July

Board of Trustees
July 5 & 17, 7:30 p.m.

Community Relations Commission
July 11, 6:30 p.m.

Plan Commission
July 13 & 27, 7:30 p.m.

Appearance Review Commission
July 24, 7:30 p.m.

August

Board of Trustees
August 7 & 21, 7:30 p.m.

Community Relations Commission
August 8, 6:30 p.m.

Plan Commission
August 10 & 24, 7:30 p.m.

Appearance Review Commission
August 21, 7:30 p.m.

Sec. 17-7. Unauthorized Discharge:

No person shall discharge any wastes or sewage into any watercourse, or tributary thereof, or into the ground by percolation of injection without a permit from the village engineer subject to prior approval of the president and board of trustees. (1963 Code)

VILLAGE OF DEERFIELD

"**NO DUMPING ALLOWED**" SIGN AT THE END OF OSTERMAN AVENUE

