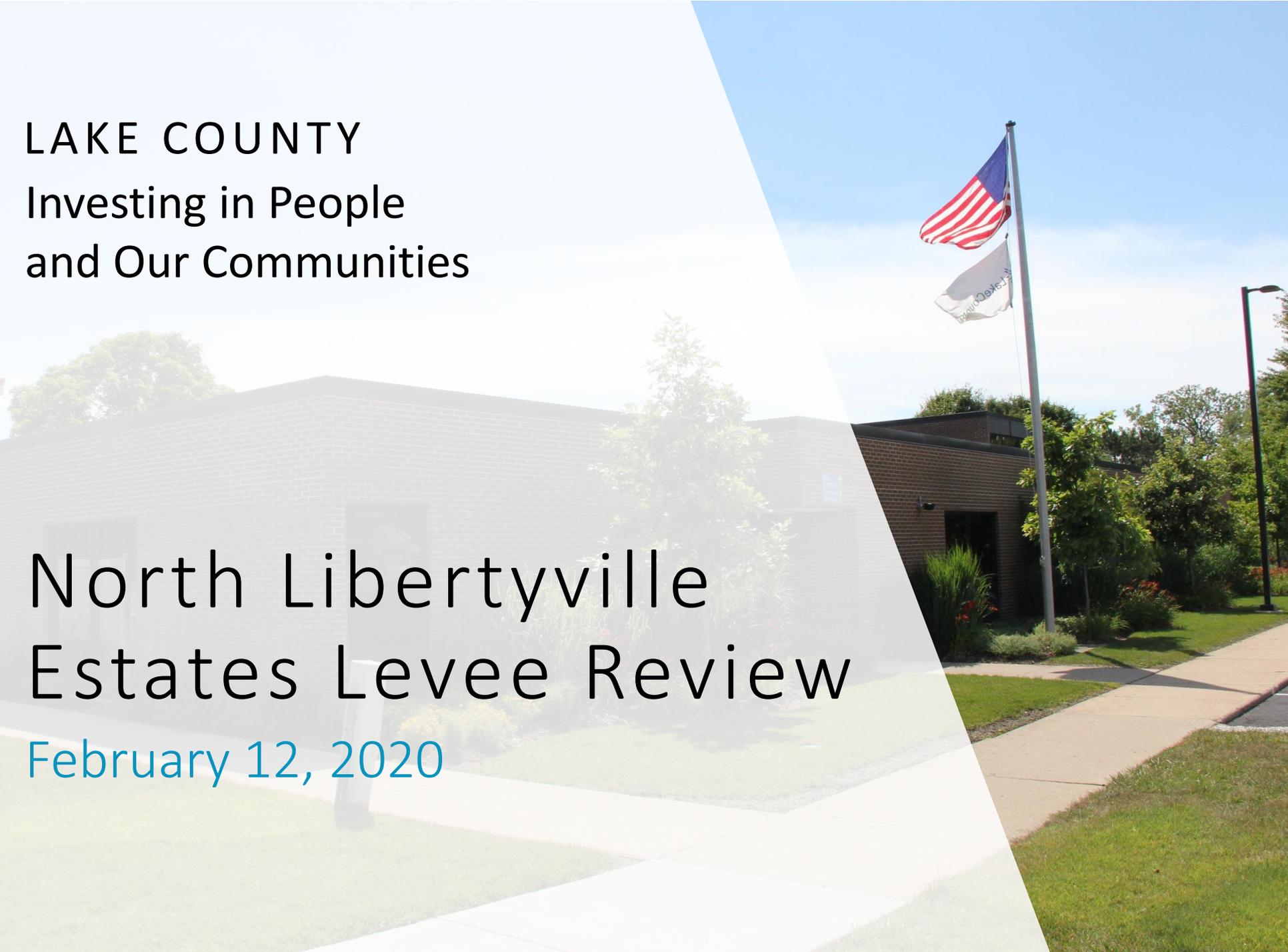


LAKE COUNTY
Investing in People
and Our Communities

North Libertyville Estates Levee Review

February 12, 2020



Agenda

- Welcome
- About the Levee
- Rainfall and Flooding Update
- Levee Protection and Response Plan
- What Lake County is Doing
- Resident Recommended Actions
- Questions and Information

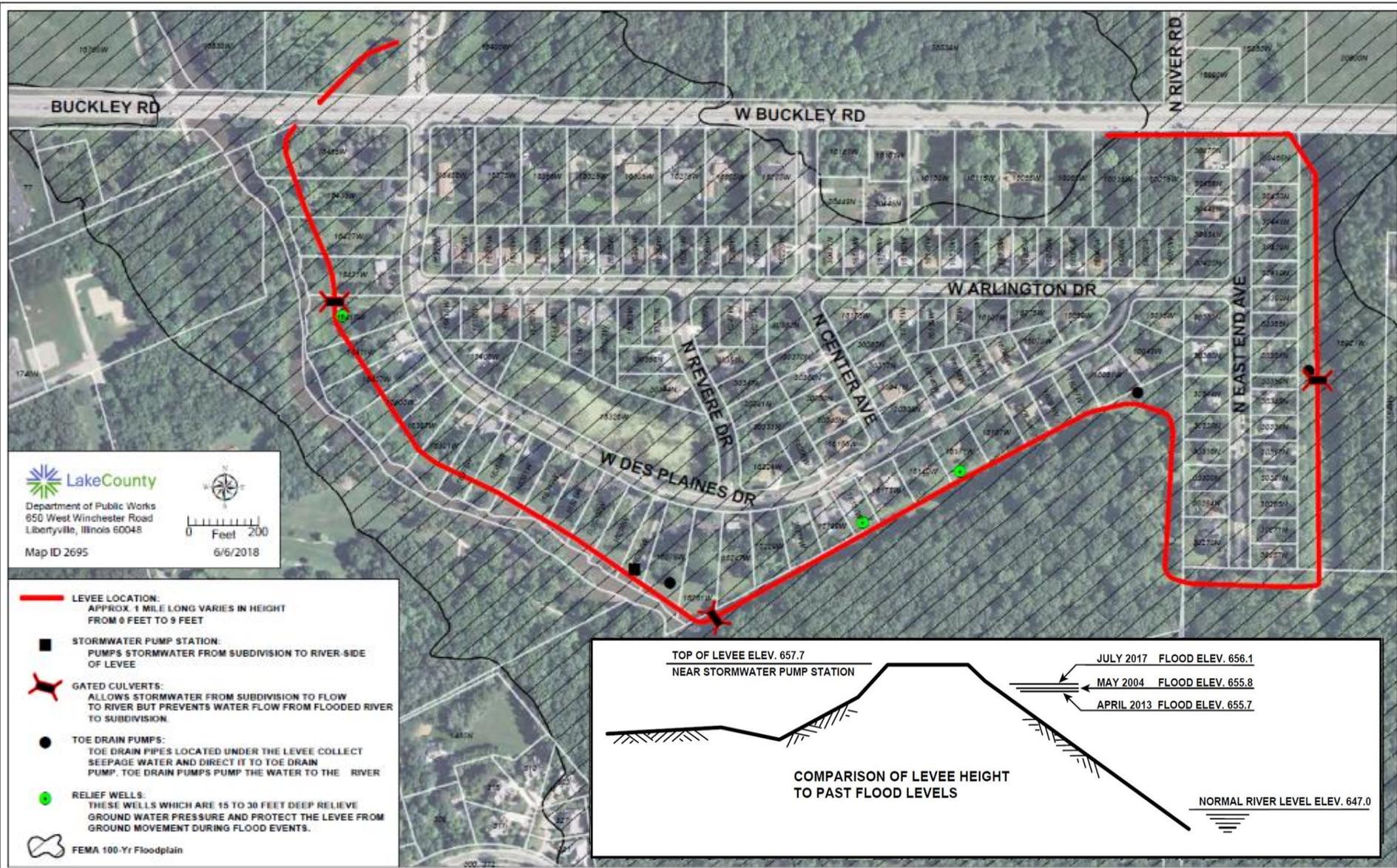
About the Levee

- Constructed by the U.S. Army Corps of Engineers in 1997 to protect the subdivision from Des Plaines River flooding
- Consists of soil-like materials and is about 1 mile long
- 156 homes (all single family) are within the levee area
- Annual Inspection by U.S. Army Corps of Engineers
- The Lake County Public Works Department is responsible for maintaining, operating and repairing the levee



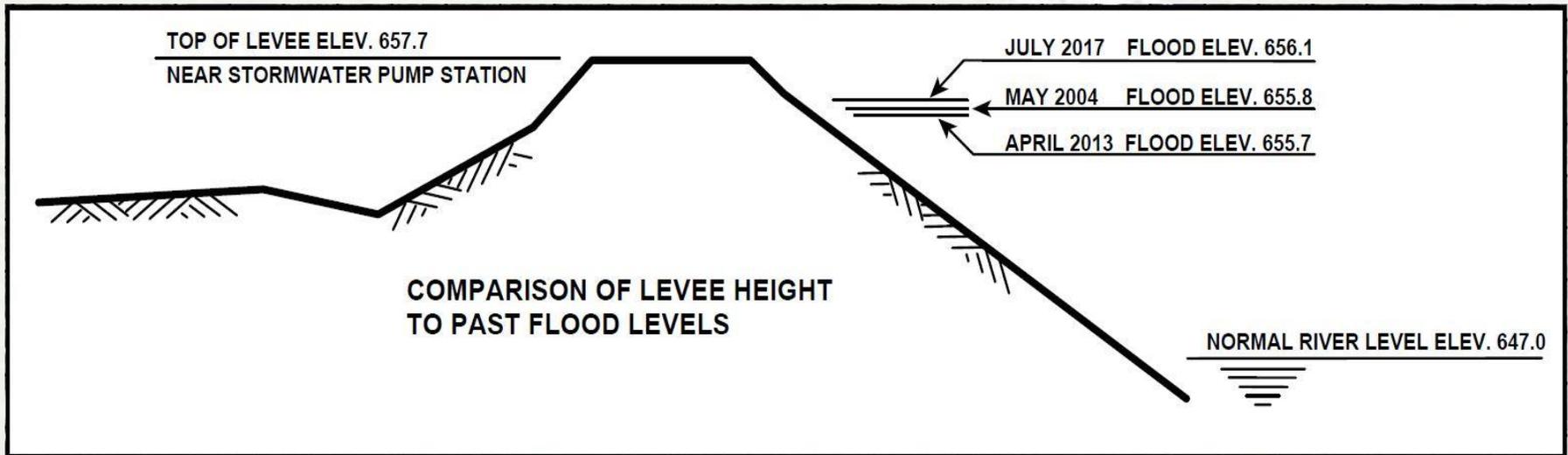
North Libertyville
Estates Levee

Levee Map



Level of Protection

- Original Design met 100-yr flood elevation; however newer Des Plaines river models changed
- The levee now protects against approximately the 33-year flood event (3% chance per year)
- Likelihood of levee overtopping:
 - 53.3 % probability in 25 years
 - 78.2 % probability in 50 years



33-Year Flood FAQs

A 33-year flood happened last year so it won't happen for another 33 years, right?

- **Not Exactly**

Does a 33-year rain fall event cause a 33-year flood?

- **No**

Can the 33-year flood level change?

- **Yes**

Is the term 33-year flood confusing?

- **It sure is!**

33-Year Recurrence Interval

What it means to you: According to historical data about rainfall and stream stage, the probability of the levee overtopping is 3.3% **each and every year.**

- The levee could overtop **multiple times per year.**
- The levee may overtop **once every 10 years.**
- The levee may not overtop **ever.**
- Just remember, there is **always a chance** it could.

Increased Rainfall

Regional – Stronger Storms

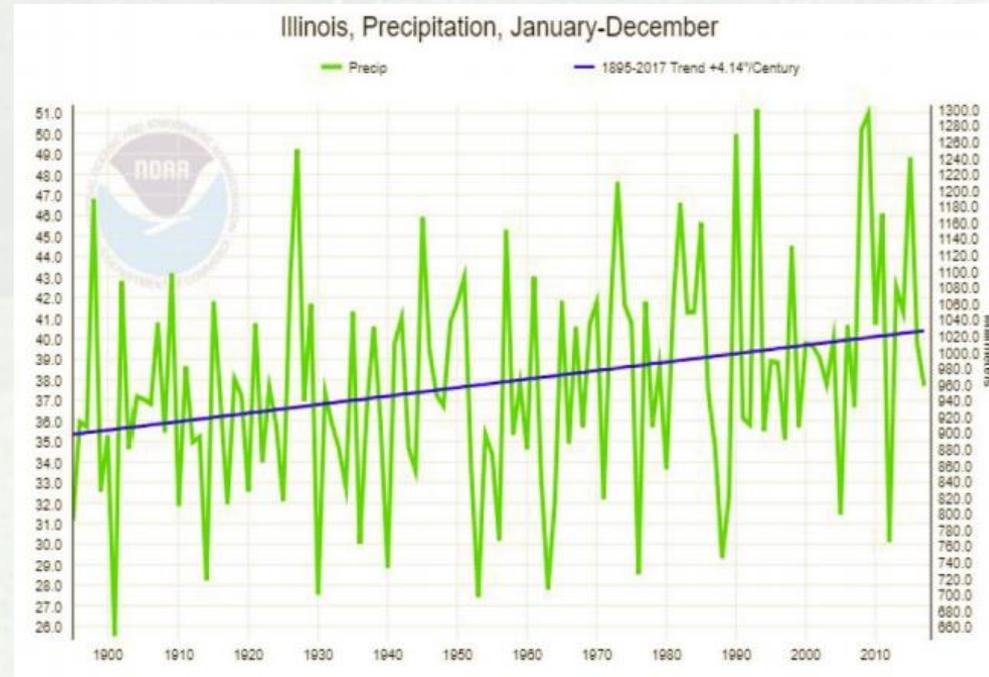
- Storms holding more water

Regional – More Rain

- Total precipitation data shows increasing trend

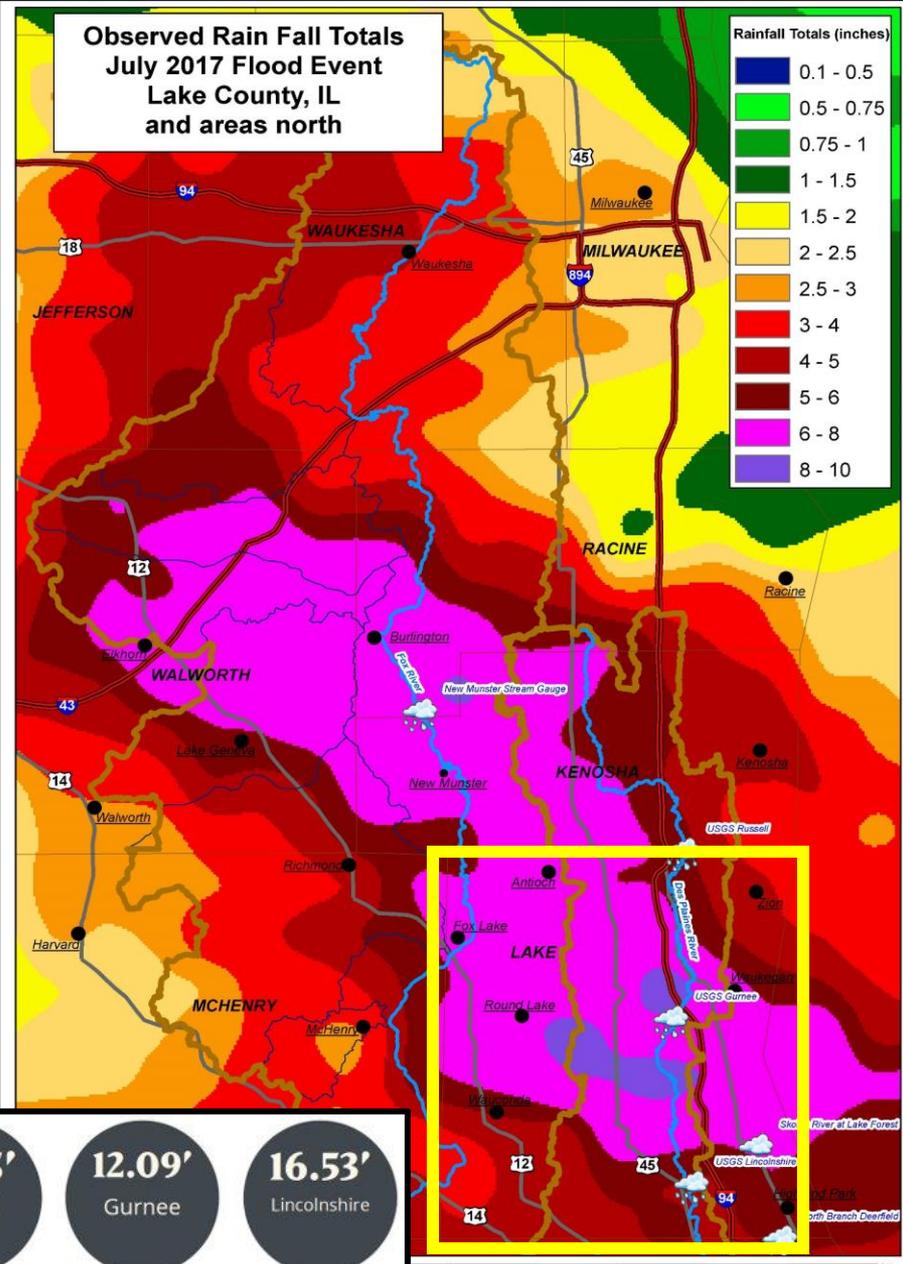
National Climate Assessment

- High confidence of heavier rain with more frequency

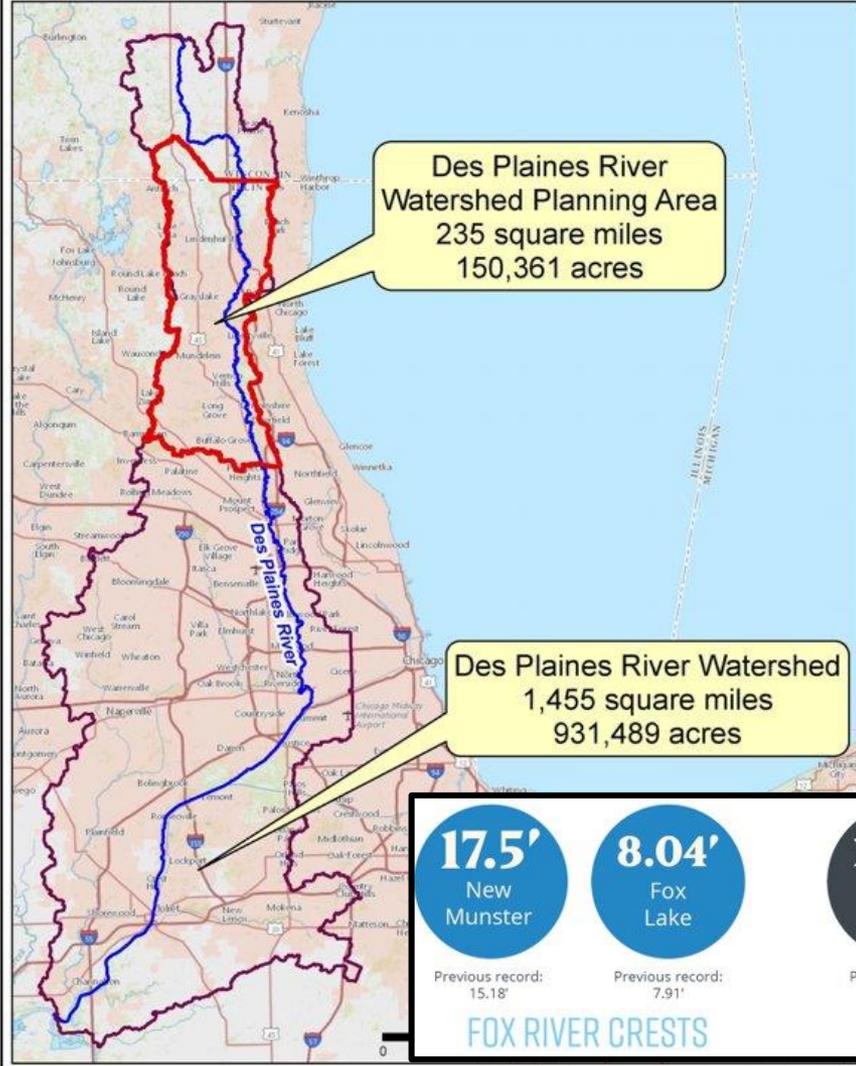


July 2017 Flood

Observed Rain Fall Totals July 2017 Flood Event Lake County, IL and areas north



Des Plaines River Watershed Location



July 2017 Flood - Libertyville



Levee Response Plan Overview

Critical Monitoring Stages for Levee Under Slow Rise Conditions

- **Action/Activity levels**

- *Patrol* – PW Operations
- *Alert* – Partners and First Responders
- *Mobilize* – Customer Notification
- *Evacuate* - Customer Notice

- **Partners**

- Lake County Departments
- Libertyville Township
- Lake County Sheriff
- Libertyville Fire Department
- US Army Corps of Engineers
- Red Cross/United Way
- Utilities

Adler Park Gauge	Action/Activity
Gauge Reading Stage (ft)	
658.0	
657.5	Overtops at 657.7 ft
657.0	
656.5	Evacuate
656.0	
655.5	Mobilize
655.0	
654.5	Alert
654.0	
653.5	
653.0	
652.5	
652.0	Patrol
651.5	

SAFETY IS OUR PRIORITY

Lake County Actions

- Regular maintenance and inspections
- Working with partners to coordinate evacuation plan
- Conducting further analysis of flood impacts and performance of flood protection structures
- Updating our alert system
 - Get alerts from the Lake County Public Works
 - Sign up by texting LCPW650 to 99411, or going to lakecountyiil.gov/publicworks



Resident Recommendations

- Get Flood Insurance
- Review Inundation Map
- Understand the Impact of Overtopping
 - Time for recovery (weeks/months)
 - Utility Outages and Road Closures
 - Home repairs
- Create/Update Your Personal Evacuation Plan
- Sign up for “CodeRED” alerts
- View Lake County Facebook Page during incidents

Review Your Plan

Helpful Information

- Key Links:
 - Lake County Webpage <http://www.lakecountyl.gov/>
 - Lake County Public Works [lakecountyl.gov/PublicWorks](http://www.lakecountyl.gov/PublicWorks)
 - Levee Website <http://www.lakecountyl.gov/levee>
- Flood Insurance
 - <http://www.lakecountyl.gov/DocumentCenter/View/2689/Flood-Insurance-Brochure-PDF>
 - <http://www.lakecountyl.gov/DocumentCenter/View/2697/Flood-Safety-Brochure-PDF>
- CodeRED Sign-Up [lakecountyl.gov/CodeRED](http://www.lakecountyl.gov/CodeRED)
- Call Lake County Public Works at **847-377-7500**

Questions?

