



CITY OF  
*Crystal Lake*  
ILLINOIS

# Stormwater Solutions & Stakeholder Engagement

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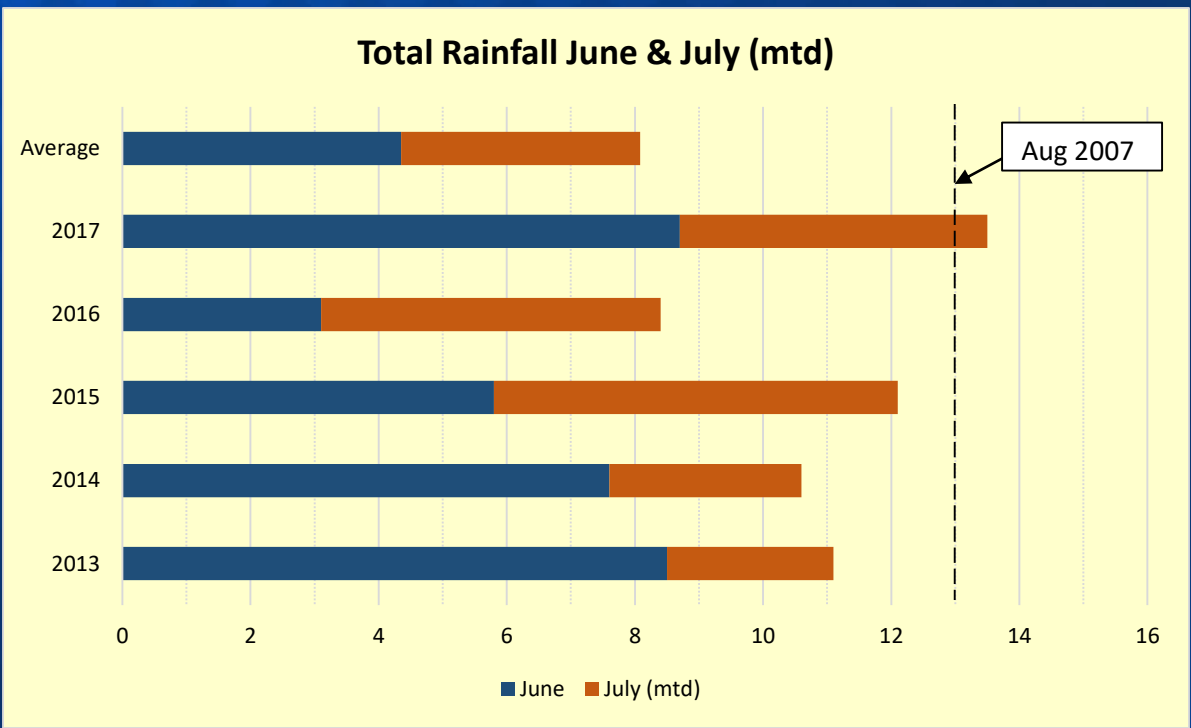
## Outline

- Recent storm events and impacts
- City funded projects and studies
- Stakeholder engagement process
- Product: prioritized list of projects & funding alternatives



# Stormwater Solutions & Stakeholder Engagement

- Recent successive and high rainfall events



- Impacted areas rely on surface drainage (ditches and overland flow). Many of these neighborhoods were built before modern stormwater requirements (detention/retention).



# Stormwater Solutions & Stakeholder Engagement

## Flooding and Ponding Observations

- Roadway and parkway flooding that subsides after the event (includes some yards and parking lots)
- FEMA Floodplains
- Pocketed areas with high groundwater (low spots with no outlets). Duration and extent varies
- Private stormwater facilities

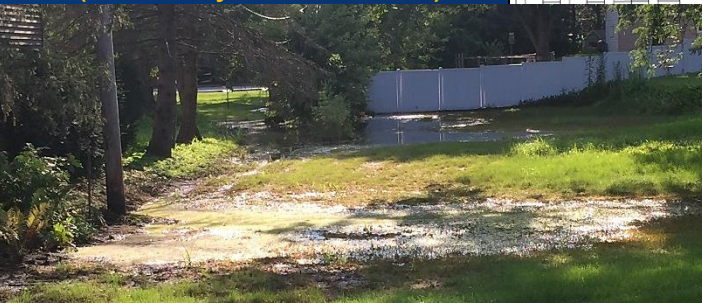
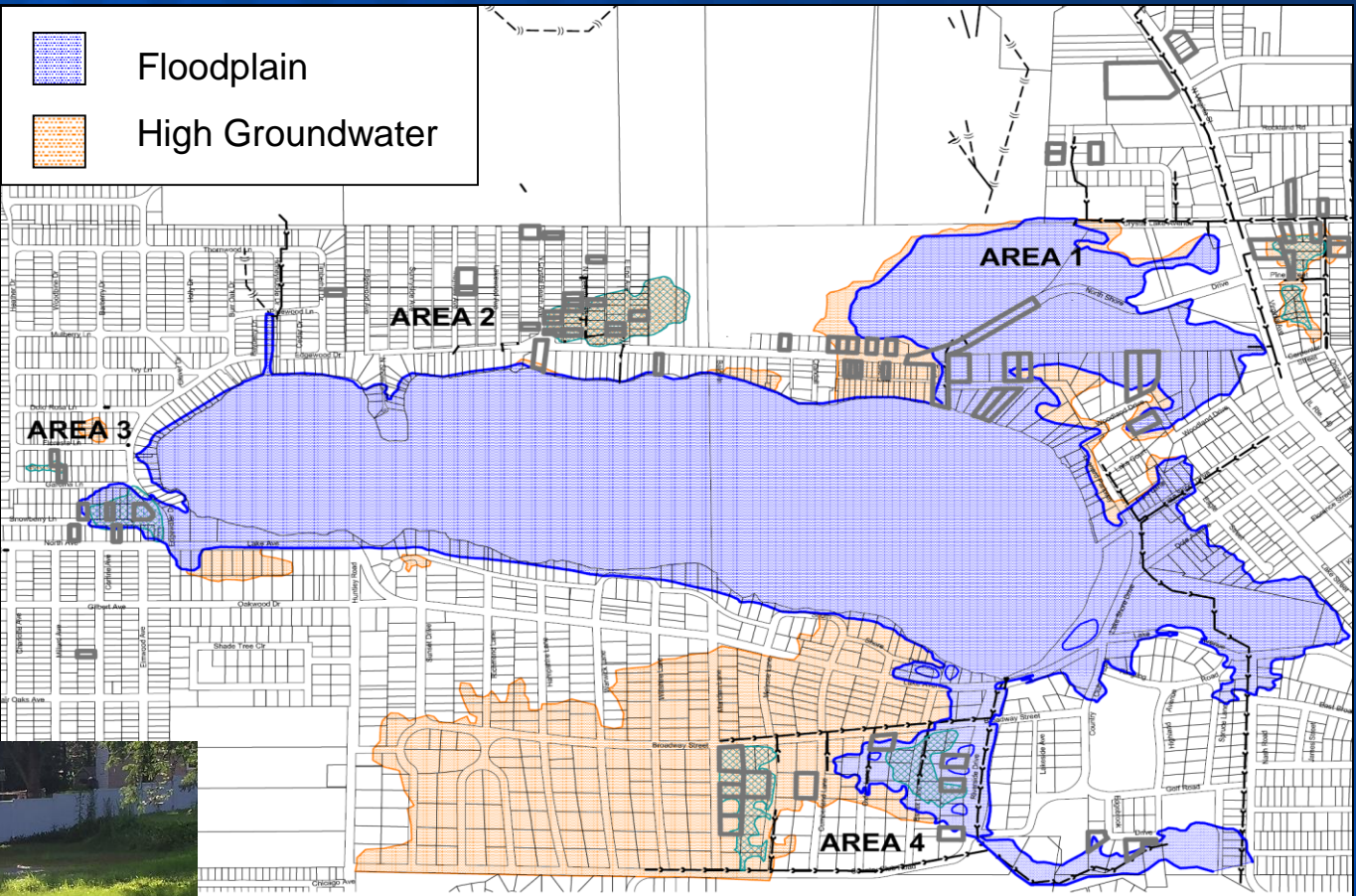




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Many areas with surface flooding (beyond 5 days) are within 2 feet of the Lake surface and have high groundwater.

- North Shore area
- Woodland Dr.
- Pine St./ Oriole Tr.
- West end of Lake
- Crystal Creek (Country Club area)

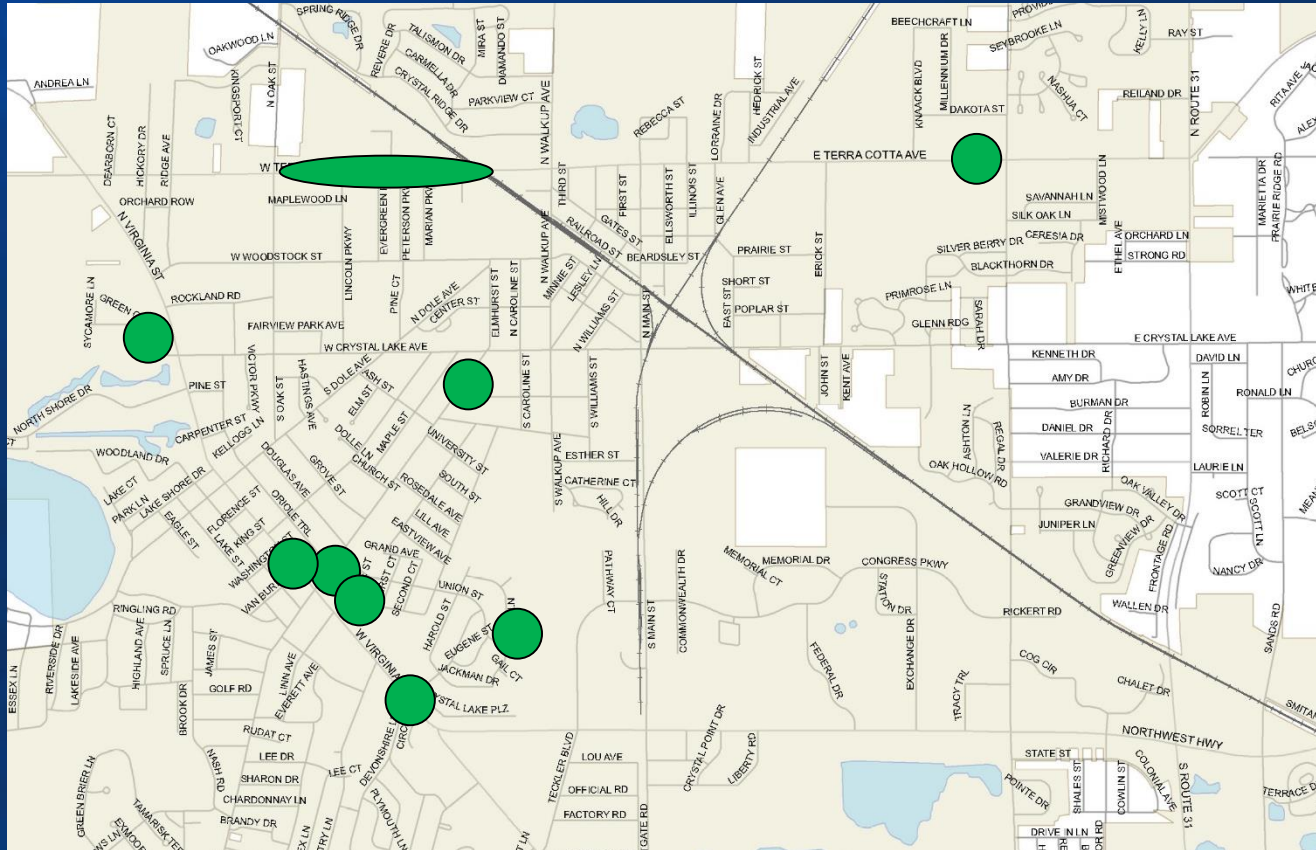


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Areas with repeated flooding (road closures) that subside include:

- Green Oaks Dr.
- US-14/Keith Ave.
- College St./Uteg St.
- Mary Ln./ Union St.
- McHenry Ave./Oriole
- McHenry Ave./Library
- Washington/Pierson-  
Van Buren
- IL 176/Terra Cotta
- IL 176 (Oak to Walkup)





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## City funded drainage investments

<b>Initiative (public health)</b>	<b>Cost</b>
North Shore sanitary sewers and water (failing septics) (City portion of project)	\$518,015

<b>Initiative (emergency access and flooding)</b>	<b>Cost</b>
2009 Flooding Study	\$33,272
Crystal Creek Study	\$35,547
North Shore Culvert Project Study	\$46,958
North Shore Culvert Design	\$110,410
North Shore Construction (Cove Pond overflow, roadway & Oak Ct. area)	\$761,992
Lake Modeling (Crystal Creek)	\$26,798
North Shore Area 2 Design Engineering	\$63,628
<b>TOTAL =</b>	<b>\$1,078,605</b>



# Stormwater Solutions & Stakeholder Engagement

## What are we proposing to accomplish?

- **Stakeholder/ Neighborhood Meetings (area specific)**
  - July – October
  - North Shore Area Advisory Committee (need consensus)
- **Prioritization of Projects & Funding Alternatives**
  - (benefit/cost, impacts, and acceptance)
  - October - November
- **Projects will require a partnership**





# Stormwater Solutions & Stakeholder Engagement

## Project Study Team

Citizens &  
City Council

Mike Magnuson, PE  
Director of Public Works

Abigail Wilgreen, PE, CFM  
City Engineer

Mark Stonikas  
Civil Engineer

Project Support  
Crystal Lake Park District  
City's Stormwater Consultant



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# Stormwater Solutions & Stakeholder Engagement

## Transparent and Open Process

- Dedicated section on the City website (2 weeks)  
(studies, updates, meetings, resources, etc.)
- Neighborhood and Advisory Committee Meetings  
(open to all)
- Regular City Council Updates



# Stormwater Solutions & Stakeholder Engagement

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## Questions?

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Director of Public Works  
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