

## Final Check-In



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Green Oaks & Woodland Channel Study Areas 2/7/2018

Stormwater Solutions & Stakeholder Engagement

## **Stormwater Solutions & Stakeholder Engagement**

### Final Check-In

- Prioritization of Projects
- Drainage Patterns and Investigations
- Proposed Short-Term & Mid-Term Improvements
- Proposed Down-Stream Improvements Concepts
- Next Steps

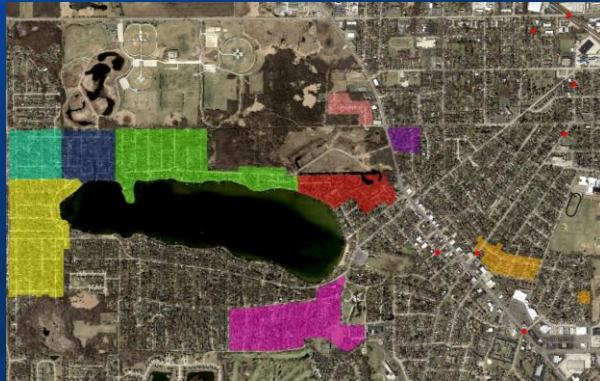


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## Stormwater Solutions & Stakeholder Engagement

### Prioritization of Projects

- Nine Study Areas with a Large Variety of Impacts
- Flooding, regardless of volume, impacts property owners personally



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### Prioritization of Projects

- Staff is prioritizing projects that:
  - Alleviate flooding that impacts structures (homes, garages, crawl spaces, basements)
  - Alleviate significant flooding from roadways that impact properties
  - Provide mechanism for relief of significant flooding on properties (impassible – several feet deep)
  - Some projects must be built first to allow for other projects
  - Regulatory approvals take time (US Army Corps of Engineers, IDNR, EPA, etc.)



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### Types of Projects

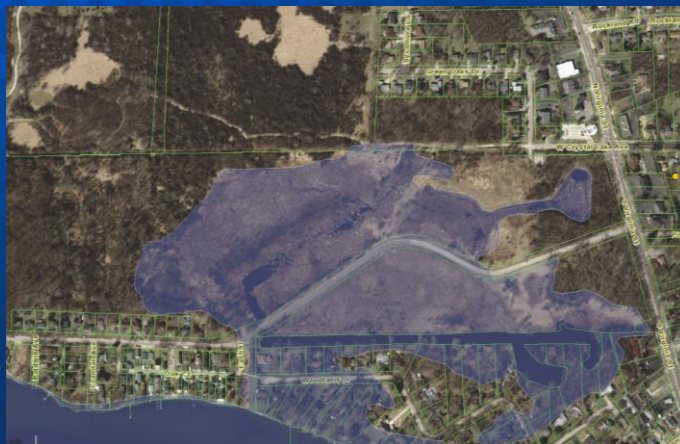
- Public Improvements on Public Property  
(include roadway R.O.W. or easements)
- Connections from private property for private property flooding are the responsibility of the owner
- Short-term, mid-term and long-term projects



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### Drainage Patterns & Investigations: What Drains Where?



- **FEMA FLOODPLAIN**  
100 Yr. Zone AE Floodplain

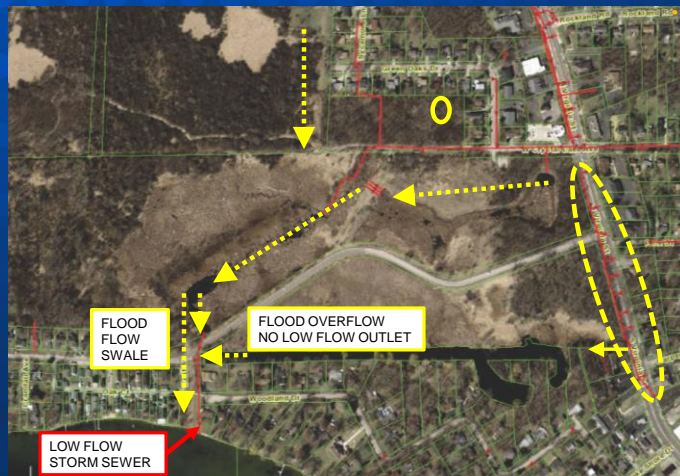


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### Drainage Patterns & Investigations: What Drains Where?



#### Important Elevations:

- Outlet from Lake  
890.80
- 2017 High Lake Level  
Approx. 892.5
- 100 Yr. Zone AE Floodplain  
893
- Cove Pond Outlet Pipe  
887.6
- Cover Pond Overflow  
(box culverts) = 891.3
- Trapped Pocket behind  
Green Oaks = 892.7



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### Proposed Short-Term Improvements

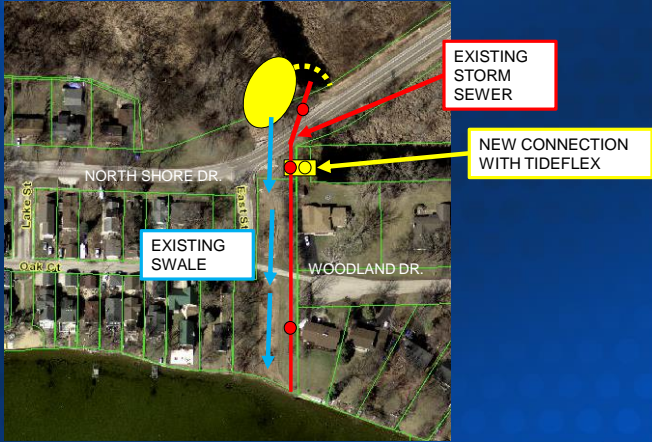
- 1. Re-Establish Woodland Channel Connection**  
(Requires US ACE Permit 2018-2019 construction)
- 2. Grading north end of concrete box culverts**  
(Requires US ACE Permit 2018-2019 construction)
- 3. Cove Pond storm sewer outlet improvements (facilitate maintenance), move gauge** (US ACE Permit 2018-2019 construction)



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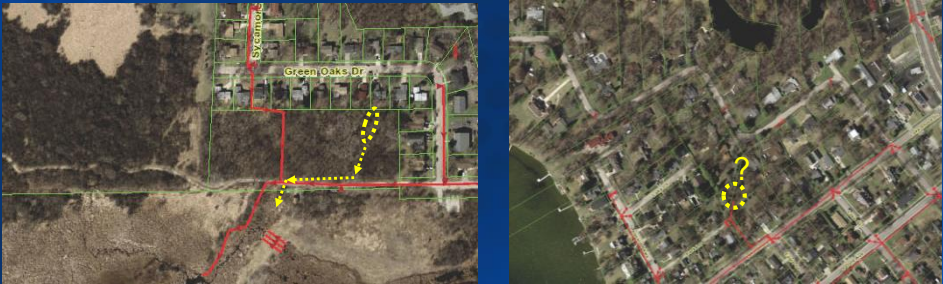
**Proposed Short-Term Improvements**



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**Proposed Short-Term Improvements**

- 3. Grading of City Property south of Green Oaks
- 4. Pipe/Tile Investigation (between Woodland & Lake Shore)



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### Proposed Mid-Term Improvements (next 5 years)

#### 1. North-South Drain Tile Replacement (Design and Permitting)

Engineering, Permitting, Construction



#### 2. Green Oaks Storm Sewer

Engineering, Permitting, Construction



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# CONSENSUS?



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### Proposed Down-Stream Concepts (Multi-Year Effort)

1. Replace and upgrade (100 yr. design) culverts under Broadway, Country Club Rd. Barlina Ave., McHenry Ave., Dartmoor Dr.
2. “Open up” Crystal Creek south of the Country Club and replace and upgrade culverts under St. Andrews.
3. Lake Level Study

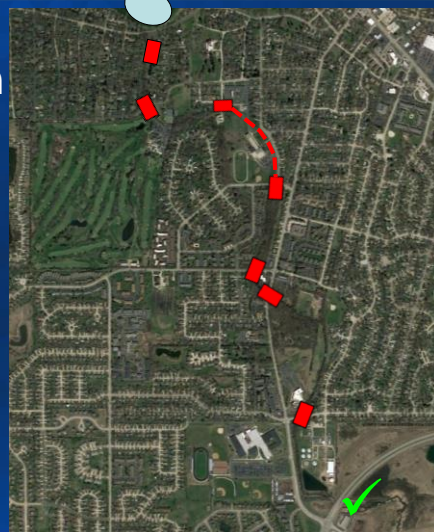


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### Proposed Down-Stream Concepts (Multi-Year Effort)

Lake/Creek Study then seek  
IEPA Section 319 grant for  
“opening” of creek



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### Next Steps

- Prioritize Projects (impacts and implementation schedule)
- Distribute to City Council
- City budget approval (Fiscal Year starts 5/1/2018)
- Enhanced permitting requirements (Spring 2018)



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### Sanitary Sewer Improvements

- Lining and Grouting (multi-year effort)



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**Sanitary Sewer Improvements**

- Overhead Sewer Program (7 left)



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**Sanitary Sewer Improvements**

- Overhead Sewer Program (7 left)



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### Other Efforts

- Enhancements to permit process (Spring 2018)
- Review of historical data & aerials



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