

URBAN FLOOD AWARENESS ACT

Brian Eber, CFM

IDNR – Office of Water Resources

Report Overview

Report sections:

1. Analyze Past, Current, and Future flooding
2. Effectiveness of Programs and Policies
3. Strategies for Reducing Urban Flood Damages



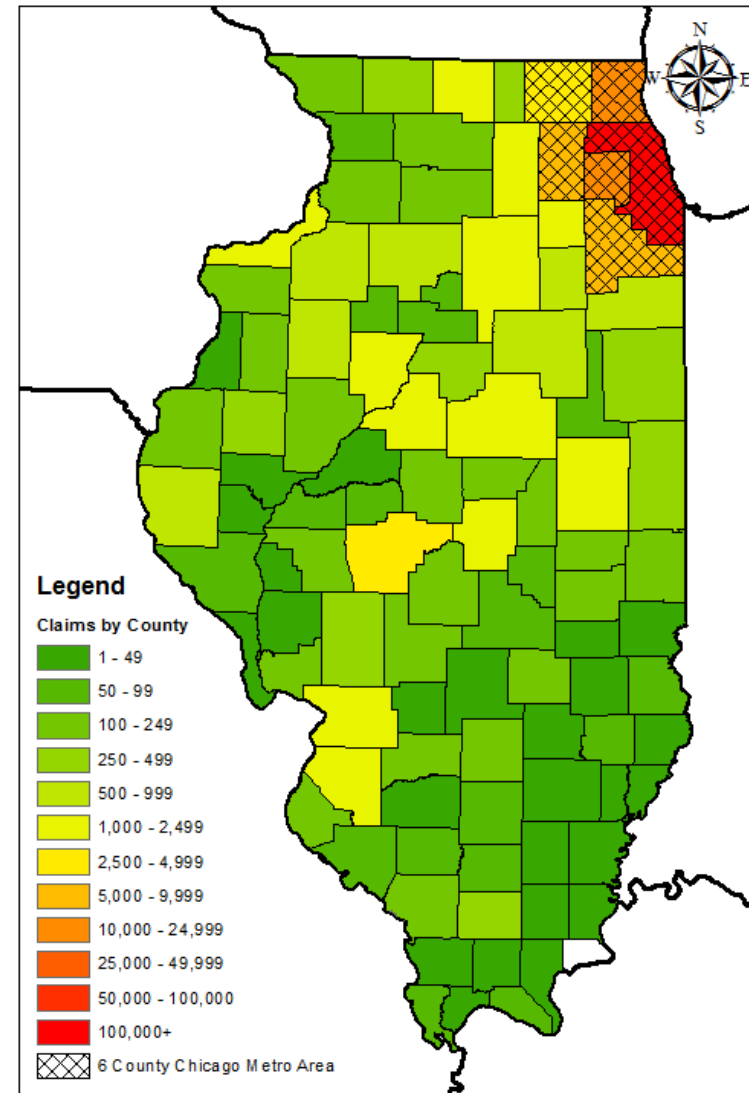
Data Collection

- Illinois Department of Insurance
 - Sewer backup claims
- Federal Emergency Management Agency
 - Disaster Assistance
 - National Flood Insurance claims
- Urban Flooding Survey
 - 120 municipalities responded
- Urban Flooding Symposium
 - Professional judgement
- Other data collection
 - Stakeholder information



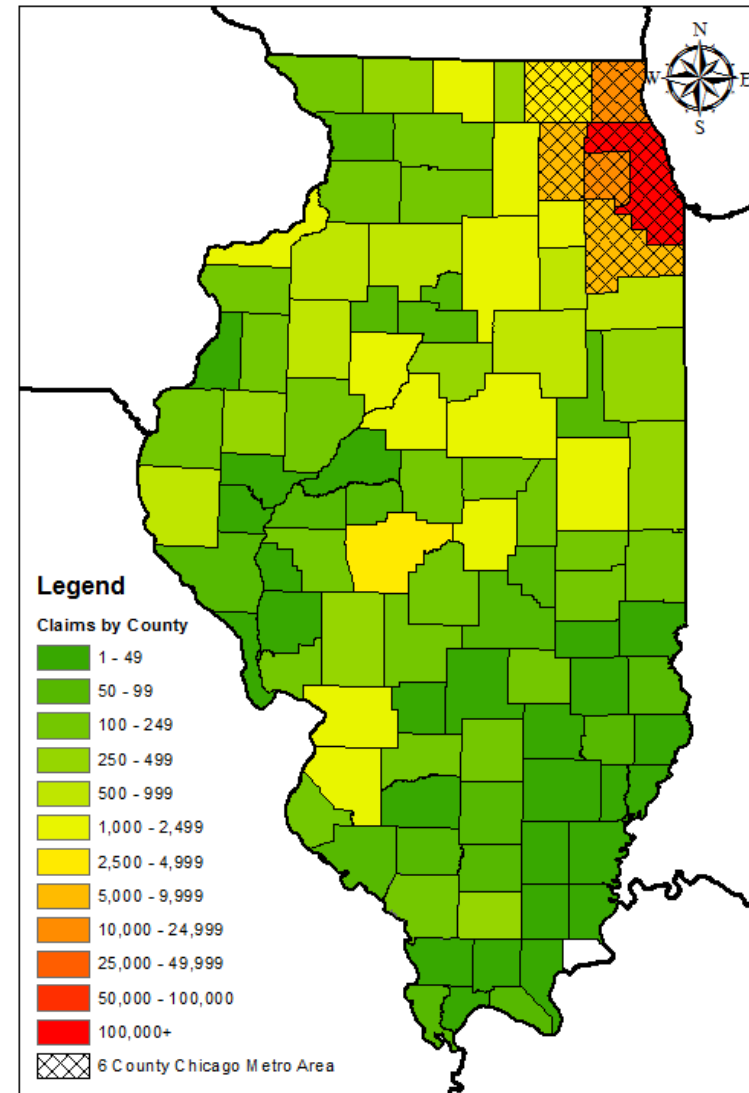
Sections of the Report

- Past, Current, and Future
 - Prevalence, cost, and trends
 - Impacts of climate change
 - Review technology to evaluate risk
- Effectiveness of Programs and Policies
- Strategies for Reducing Urban Flood Damages



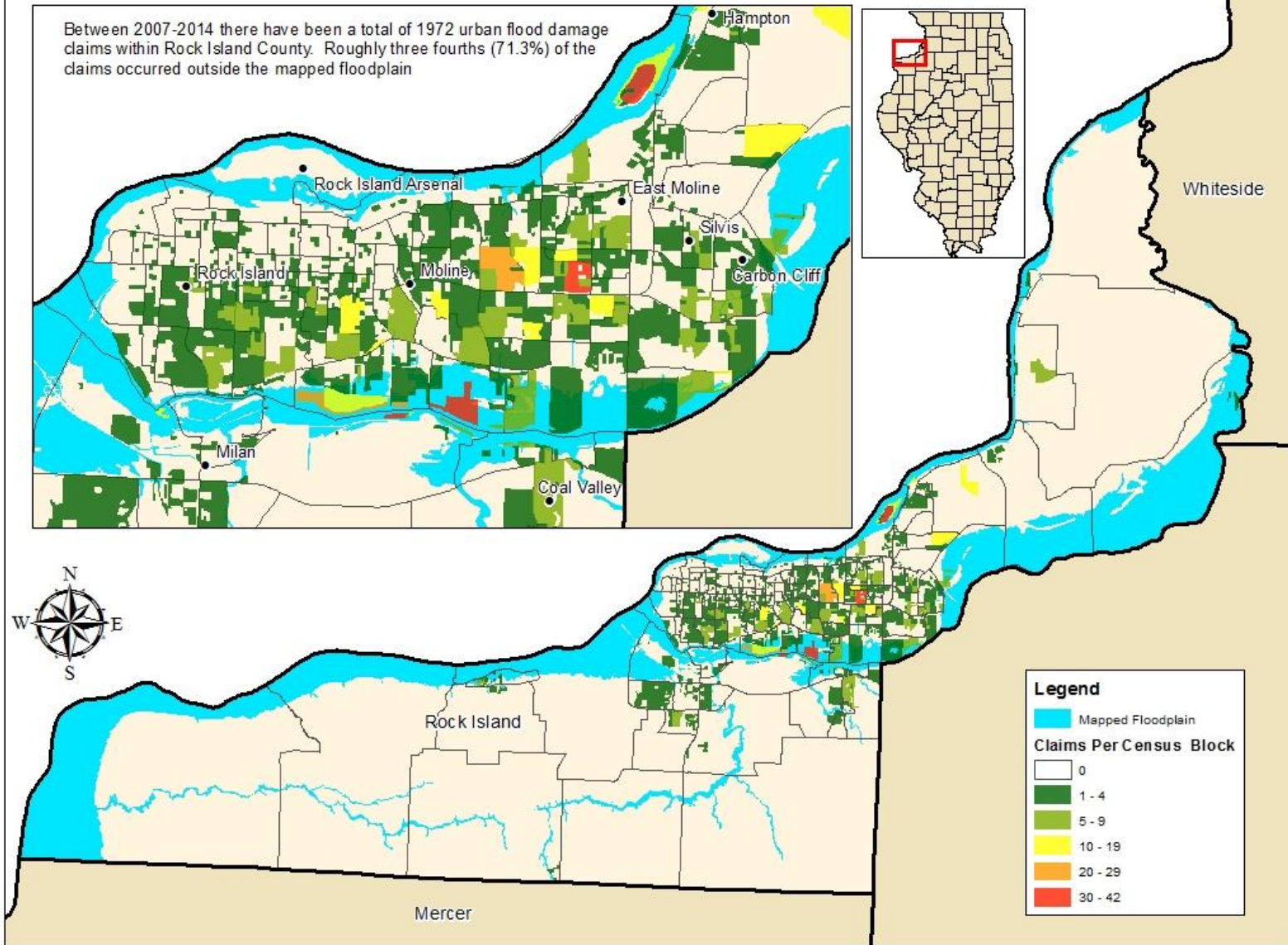
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Rock Island County NFIP & Private Flooding Insurance Claims by Census Block 2007-2014

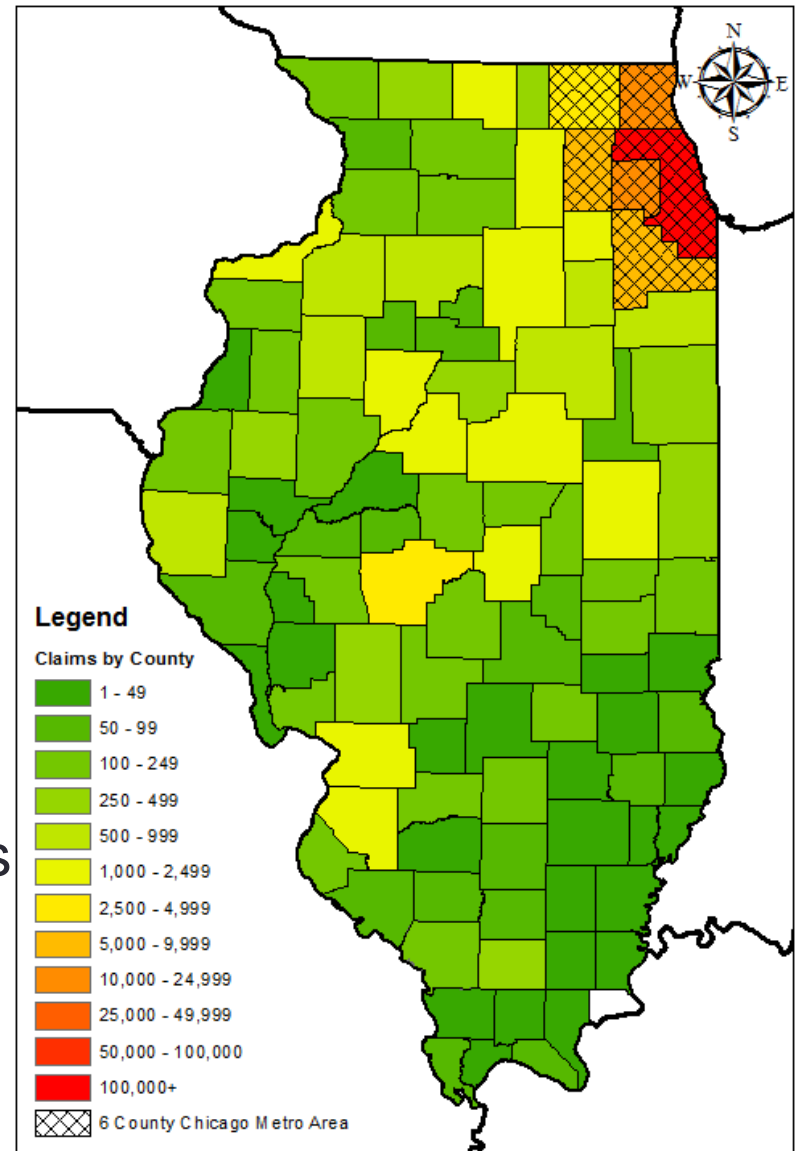
Between 2007-2014 there have been a total of 1972 urban flood damage claims within Rock Island County. Roughly three fourths (71.3%) of the claims occurred outside the mapped floodplain



Recommendations

Chapter 1: Prevalence and Cost

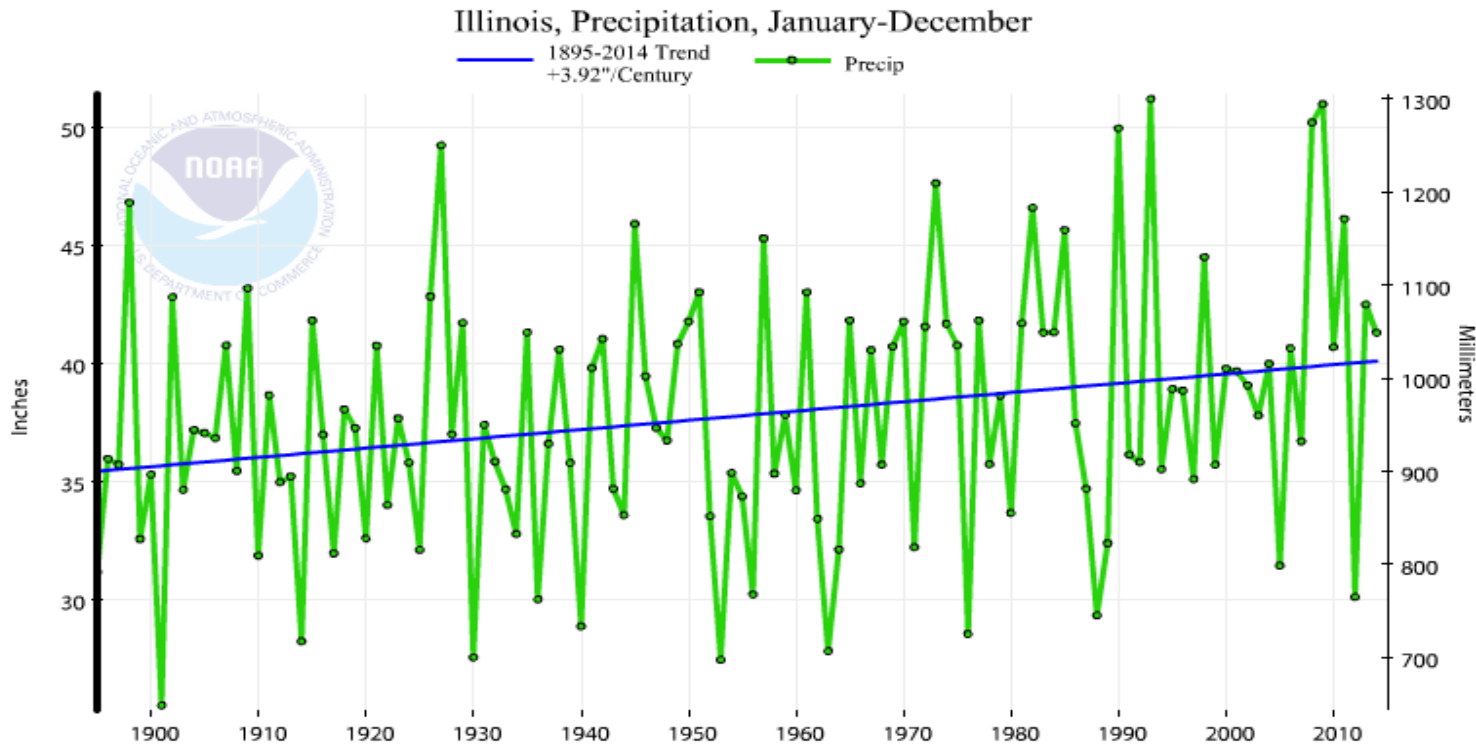
1. Mandate flood insurance continuing education training for insurance agents.
2. Develop a long term insurance database.
3. Research lower income household flood insurance coverage and flood insurance pools.
4. Research flood mitigation pools to fund work on urban flood areas
5. Encourage outreach and education to explain difference between flood insurance and basement backup insurance.



Urban Flooding Private and NFIP Claims by County

Sections of the Report

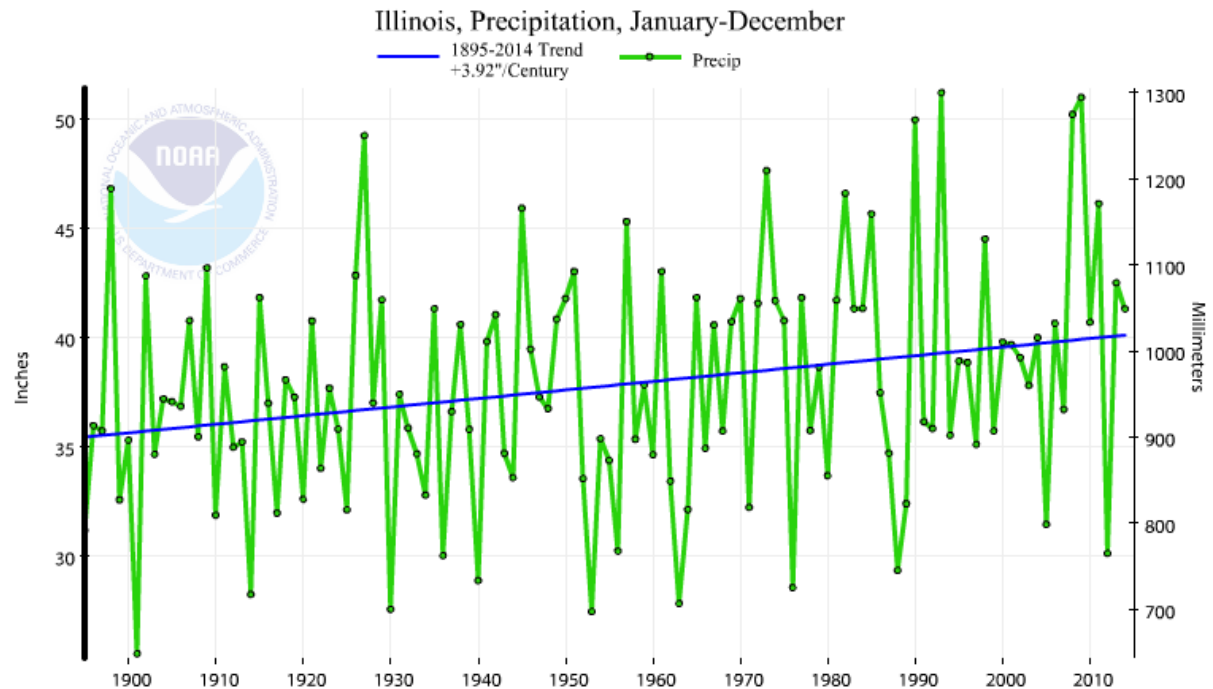
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Recommendations

Chapter 2: Climate Trends and Climate Change

1. Update precipitation frequency data with additional years of rainfall data and future rainfall trend data.
2. Continue funding data collection for monitoring climate and flood data.



Illinois Average Annual Precipitation 1895-2014

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Recommendations

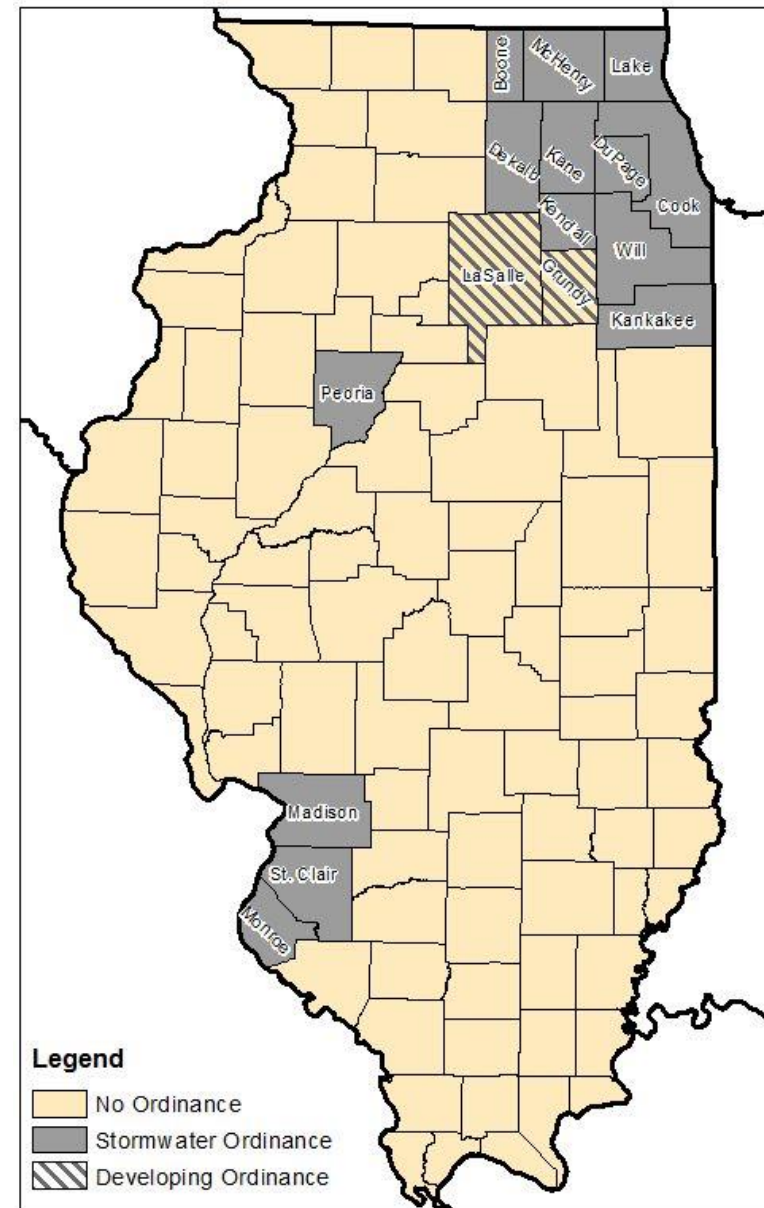
Chapter 3: Technology and Data for Identification of Urban Flooding Potential

1. Topographic wetness indices should be studied further.
2. Communities should consider real time stormwater monitoring.
3. Locally track storm sewer size and design data to determine changes in system capacity with climate change.
4. Communities should consider basement construction ordinances to reduce flooding.



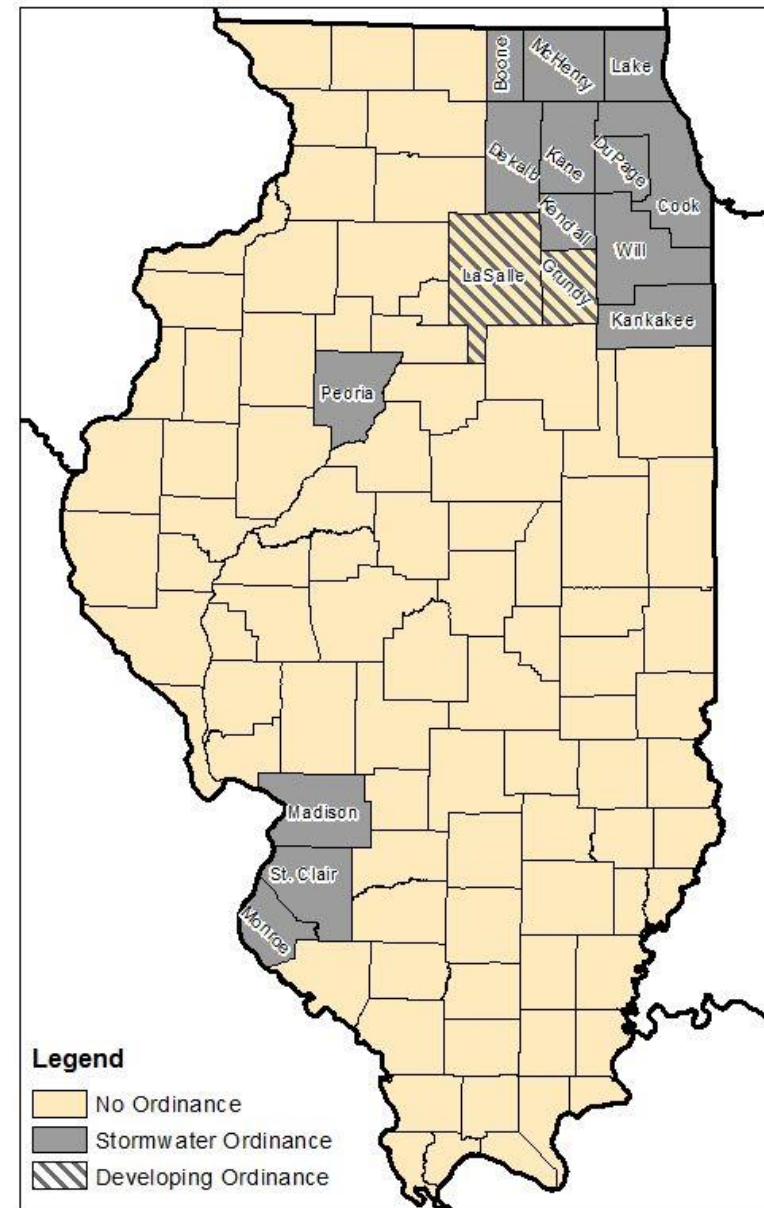
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 - Impact of county stormwater programs
 - Evaluation of stormwater policies
- Strategies for Reducing Urban Flood Damages



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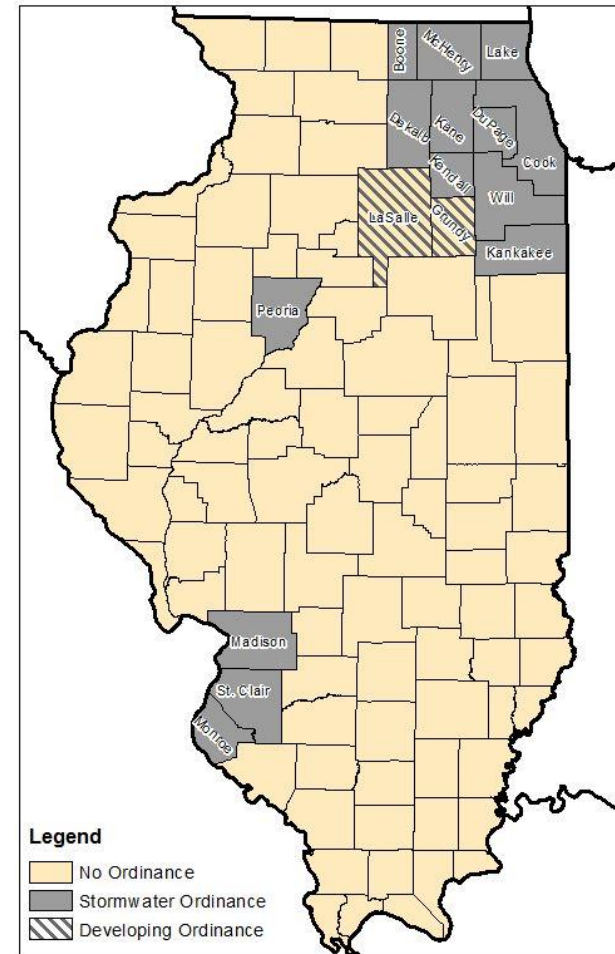
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Recommendations

Chapter 4: The Impact of County Stormwater Programs on Urban Flooding

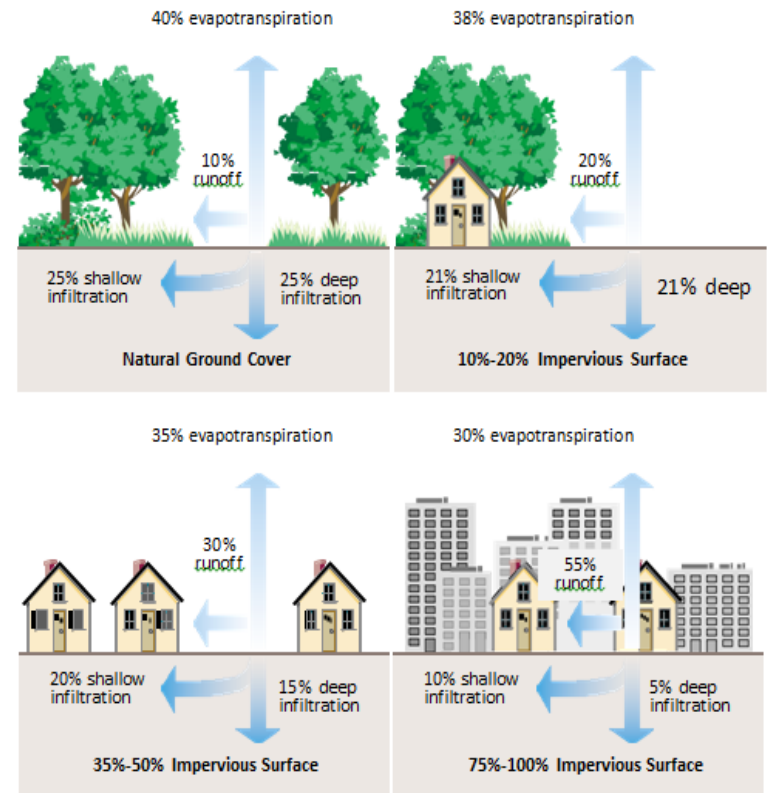
1. Counties and municipalities should have the authority to generate stormwater fees.
2. Stormwater Management Authority should be granted to all counties.
3. Develop a state model stormwater ordinance.



Counties with stormwater ordinances

Sections of the Report

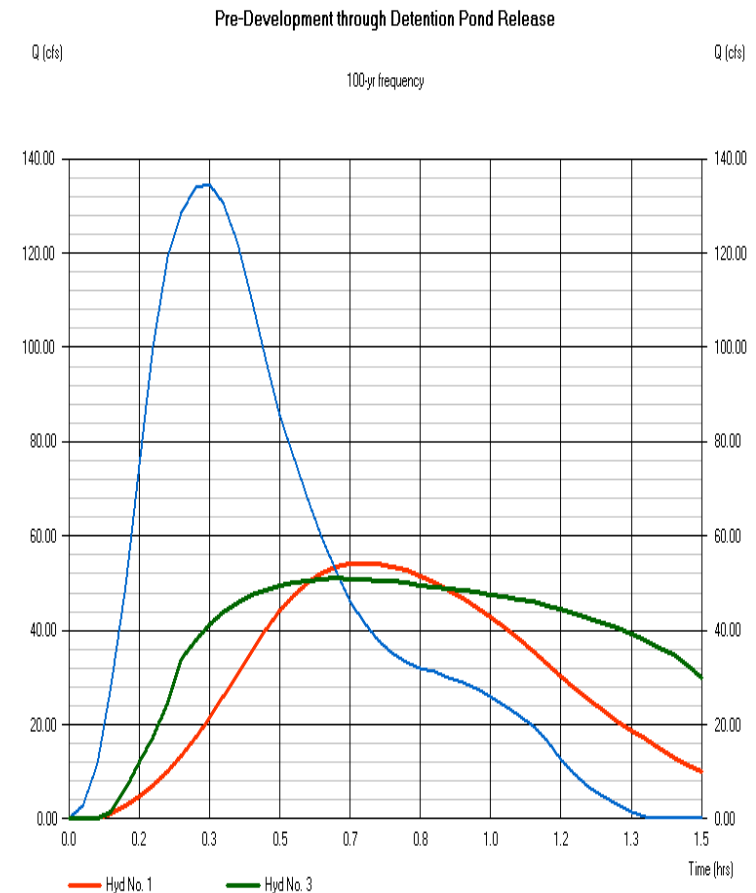
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Recommendations

Chapter 5: Evaluation of Design Standards for Stormwater Infrastructure.

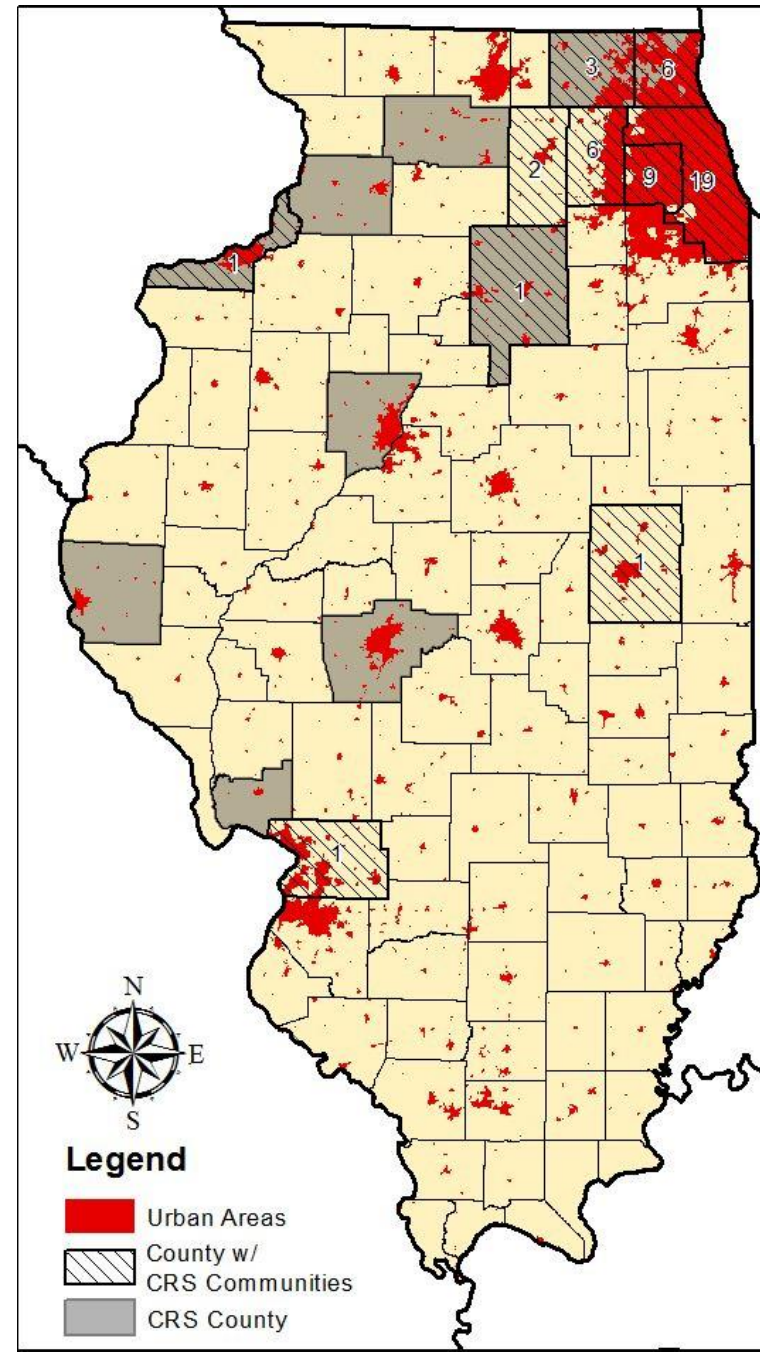
1. Continue funding data collection for monitoring climate and flood data.
2. Communities should establish and maintain stormwater conveyance areas in new development.
3. Communities should incentivize stormwater management practices in redevelopment
4. Communities should consider basement construction ordinances to reduce flooding.



Pre- and Post- development detention pond release

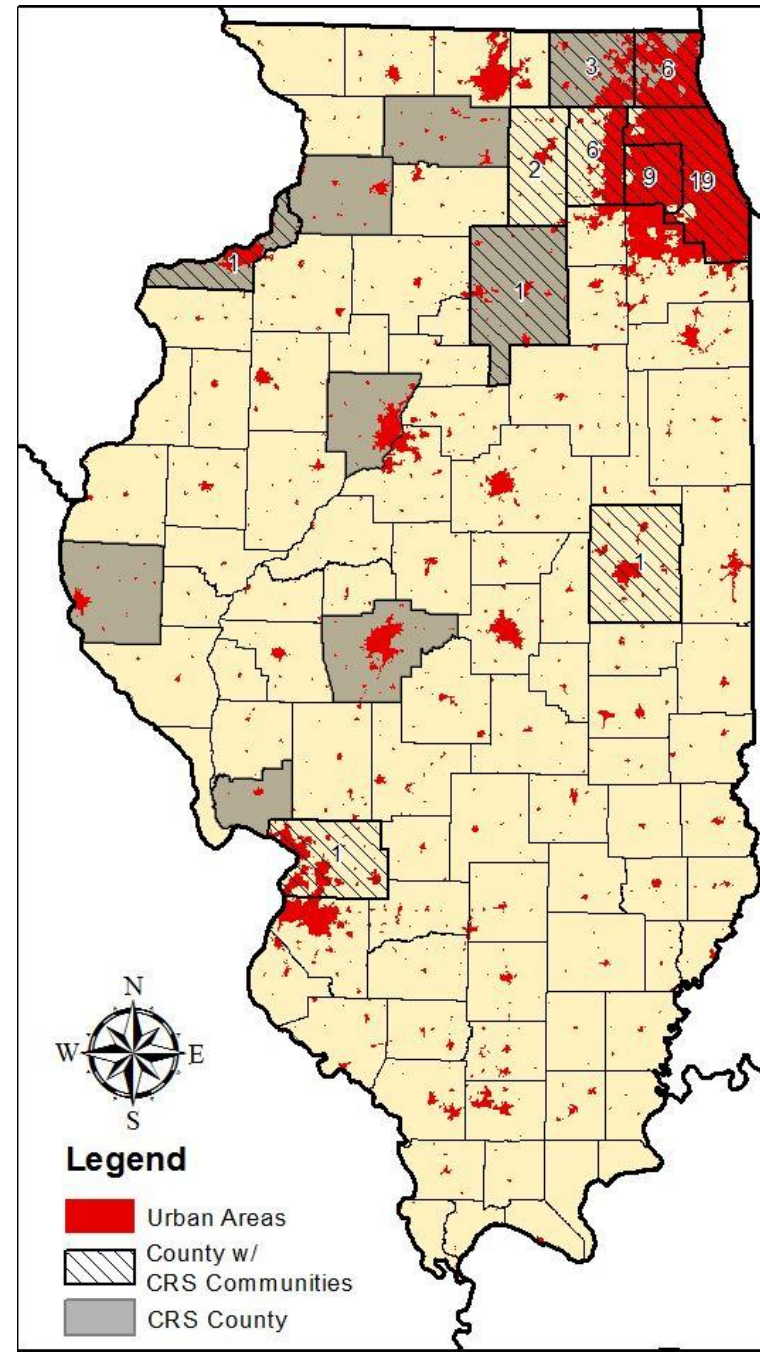
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- Effectiveness of Programs and Policies
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 - Strategies for flood insurance and basement backup insurance
 - Strategies to minimize damages



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Recommendations

Chapter 7: Strategies and Practices to Increase the Availability, Affordability and Effectiveness of Flood Insurance and Basement Back-up Insurance

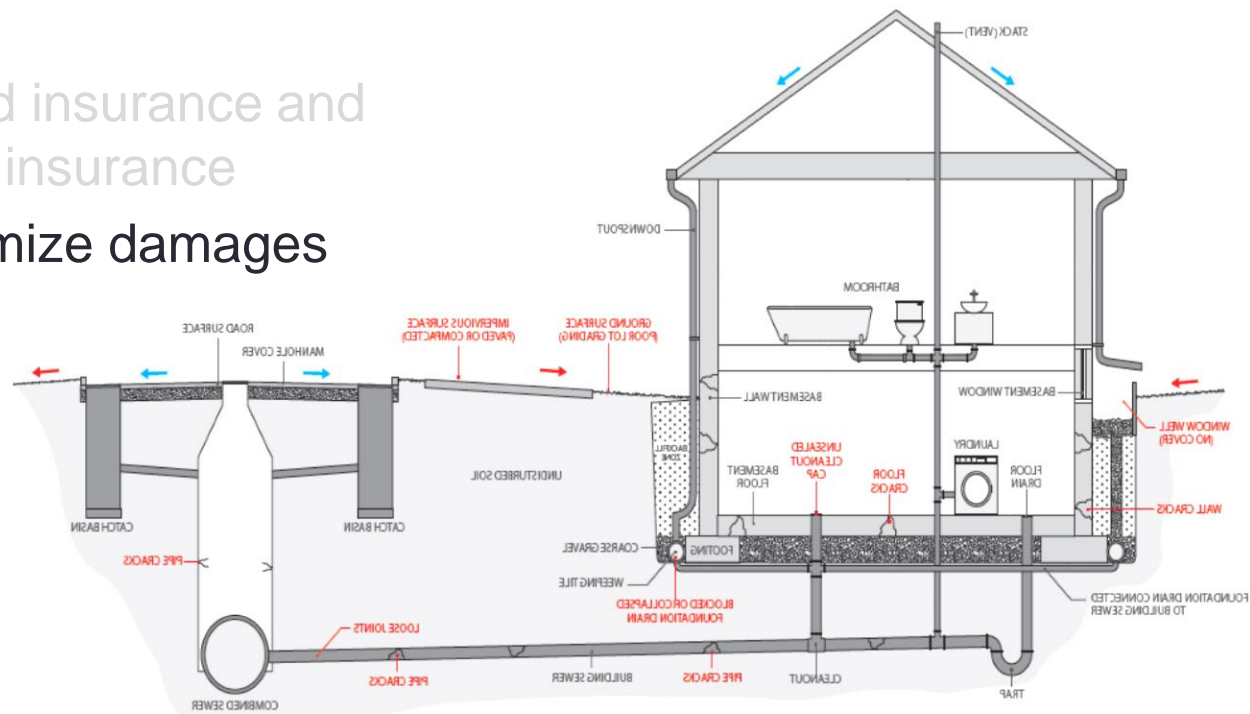
1. Mandate flood insurance continuing education training for insurance agents.
2. Develop an awareness campaign for homeowners and renters.
3. Research lower income household flood insurance coverage.
4. Establish flood insurance premiums based on the flood loss history in Illinois
5. Expand the state revolving fund for implementation of stormwater management issues.



Tercha, M. (2008) Chicago Tribune

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Recommendations

Chapter 9: Strategies for Minimizing Damage to Property from Urban Flooding

1. Counties and municipalities should have the authority to generate stormwater fees.
2. Stormwater Management Authority should be granted to all counties.
3. Fund repetitive loss buyouts inside and outside the floodplain
4. Fund communities for cost sharing mitigation programs
5. Communities should help homeowners analyze their homes.
6. Communities should consider basement construction ordinances to reduce flooding.
7. Adopt a modern model stormwater ordinance.
8. Expand the state revolving fund for implementation of stormwater management issues.
9. The State and communities should incorporate green infrastructure when practical



Report Findings

- Flooding in urban areas is a \$2.3 billion problem in Illinois
- Over 90% of urban flood claims are not in a floodplain
- Urban flooding is expected to increase
- Aging and undersized Storm sewers need to be updated
- CRS, flood insurance and private insurance can be implemented now by communities and homeowners
- The State can provide leadership and look at funding alignment
- The responsibility for urban flooding lies at all levels from government to individual property owners.

Top 10 Recommendations

1. Authority to generate stormwater fees
2. Community storm water planning and management
3. Mandate CEU education of insurance agents
4. Update rainfall frequency distribution information
5. Create a state model local stormwater ordinance
6. Continue funding data collection
7. IDNR/IEPA should expand state revolving fund
8. An awareness campaign about urban flooding for citizens
9. Communities should establish overland flow paths
10. Communities should help homeowners analyze their homes

Coordinating Partners Listed in the Act



Future Tasks

- State Model Ordinance
-DONE! July 2015
- Push legislative changes
- Outreach campaign

The report and appendices are available now on the DNR website (search for: Urban Flooding)

Special Thanks to:

- Illinois State Water Survey
- Molly O'Toole & Associates
- Bender Consulting Services
- A Big THANKS to everyone that contributed data!

Questions?

