

Illinois Storm Ready – Weather or Not

Collaborating a Culture Shift Toward
Resilient Disaster Recover in Illinois
While “Staying on the Island”

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National
Disaster
Resiliency

Competition

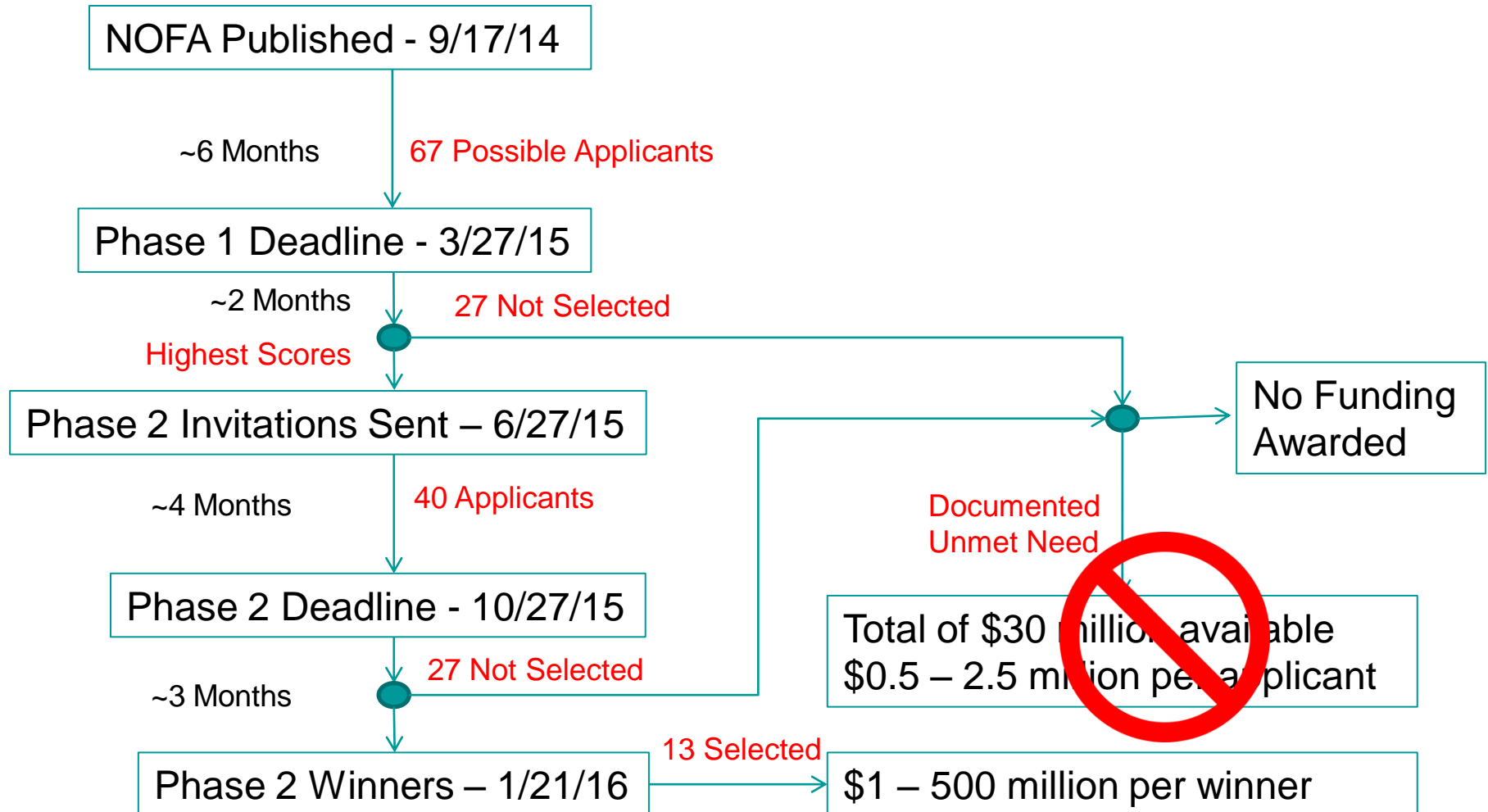
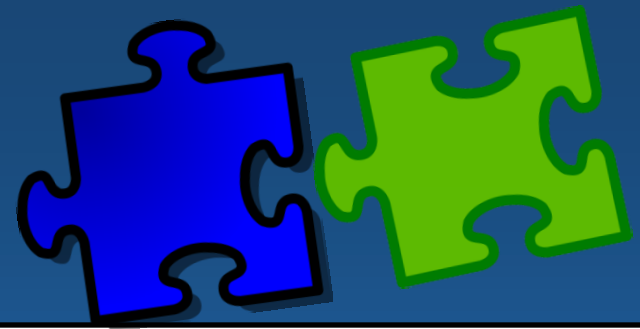


The 200m sprint

Activities of the National Disaster Resiliency
Competition



Two Phases

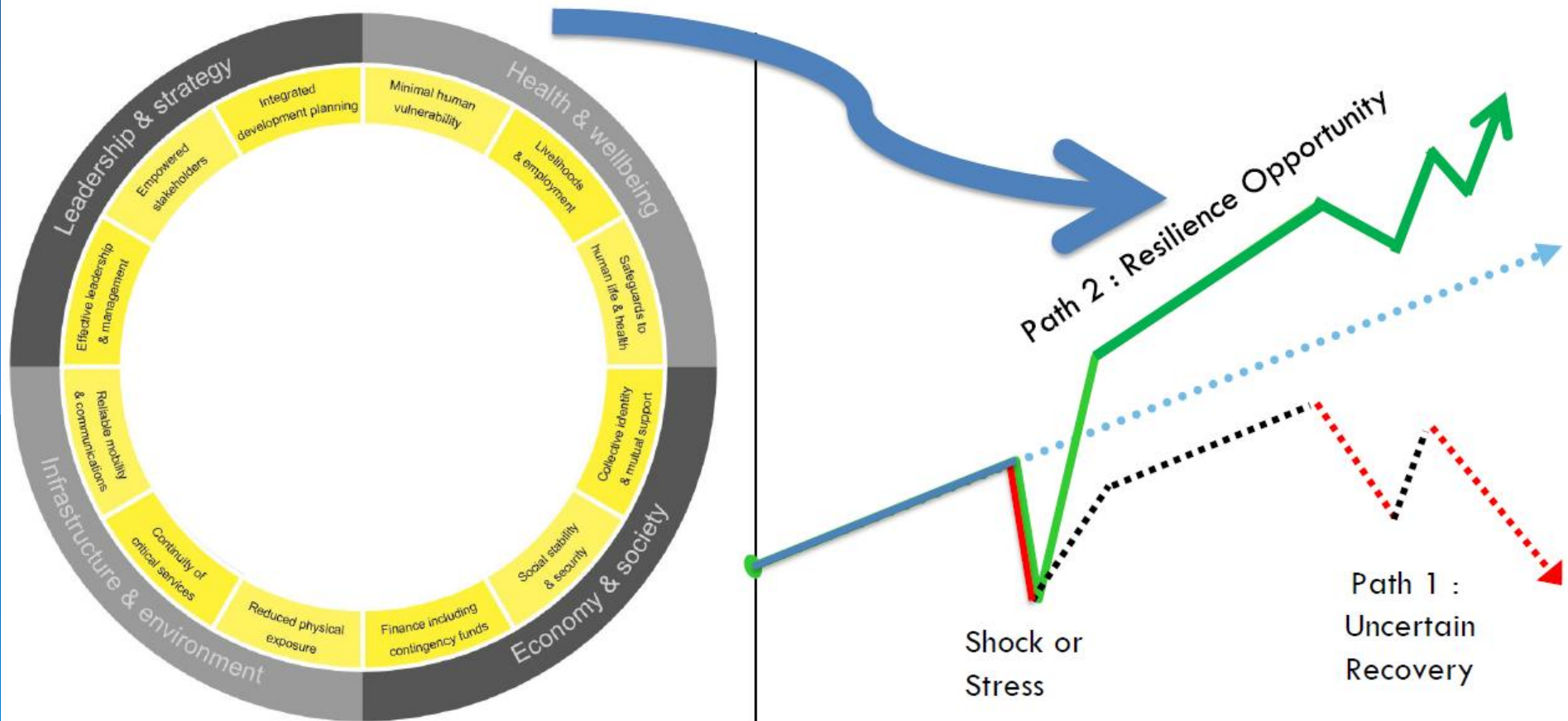


What is a Resilient Place



Ability to function in adverse circumstances and continue to provide support to its citizens and generate inclusive economic prosperity.

The framework can help identify alternative paths.

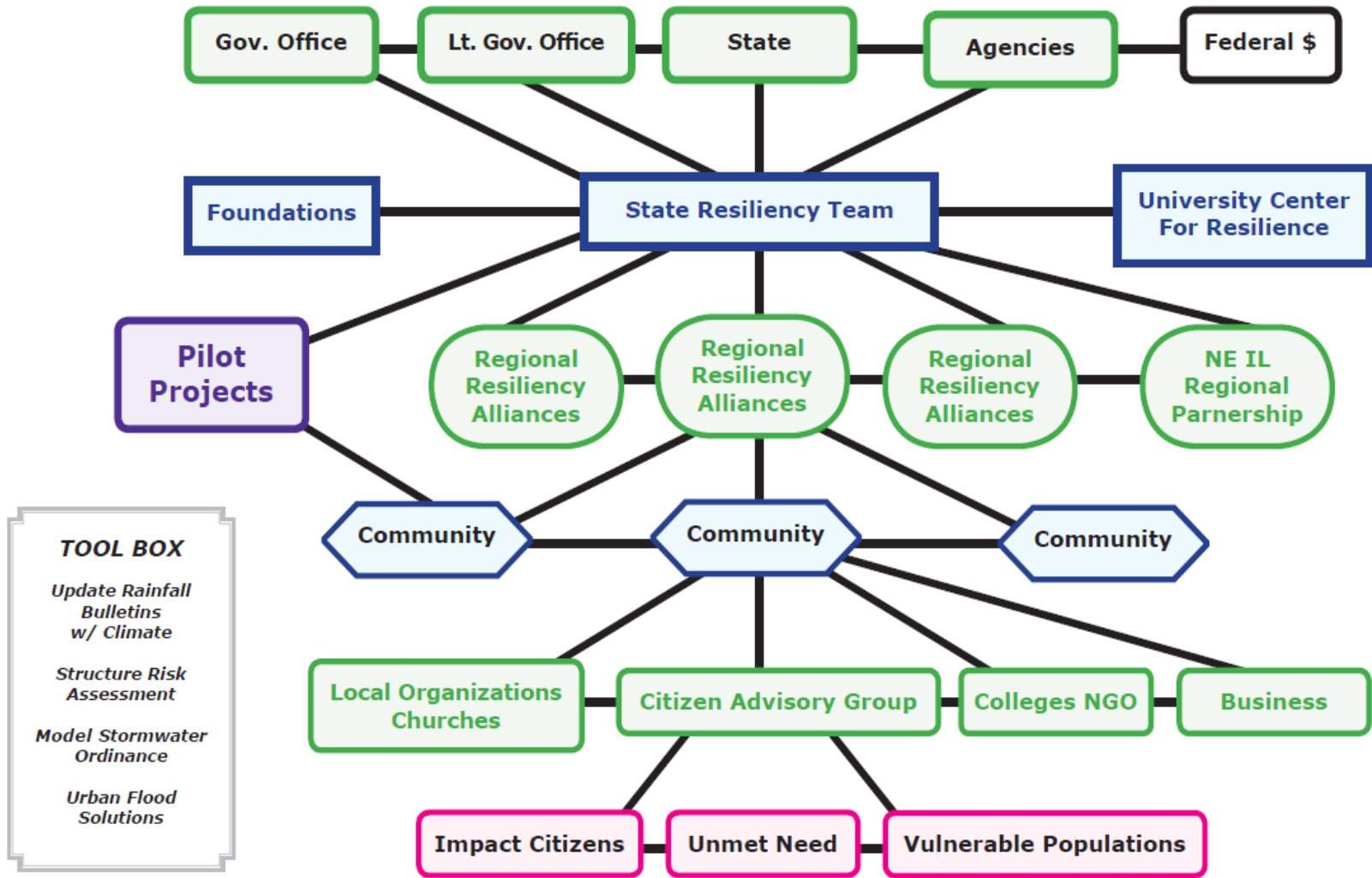


Illinois Resiliency Plan

Utilize a statewide program to foster state agency and regional resilience partnerships and to implement example resilient pilot projects across the state that employ science based and climate ready resilient approaches to reduce flood risks and impacts in Illinois communities while achieving additional social, economic and environmental benefits.



Illinois



Traditional Structure

(We must live in the Midwest)



Resilient Structure

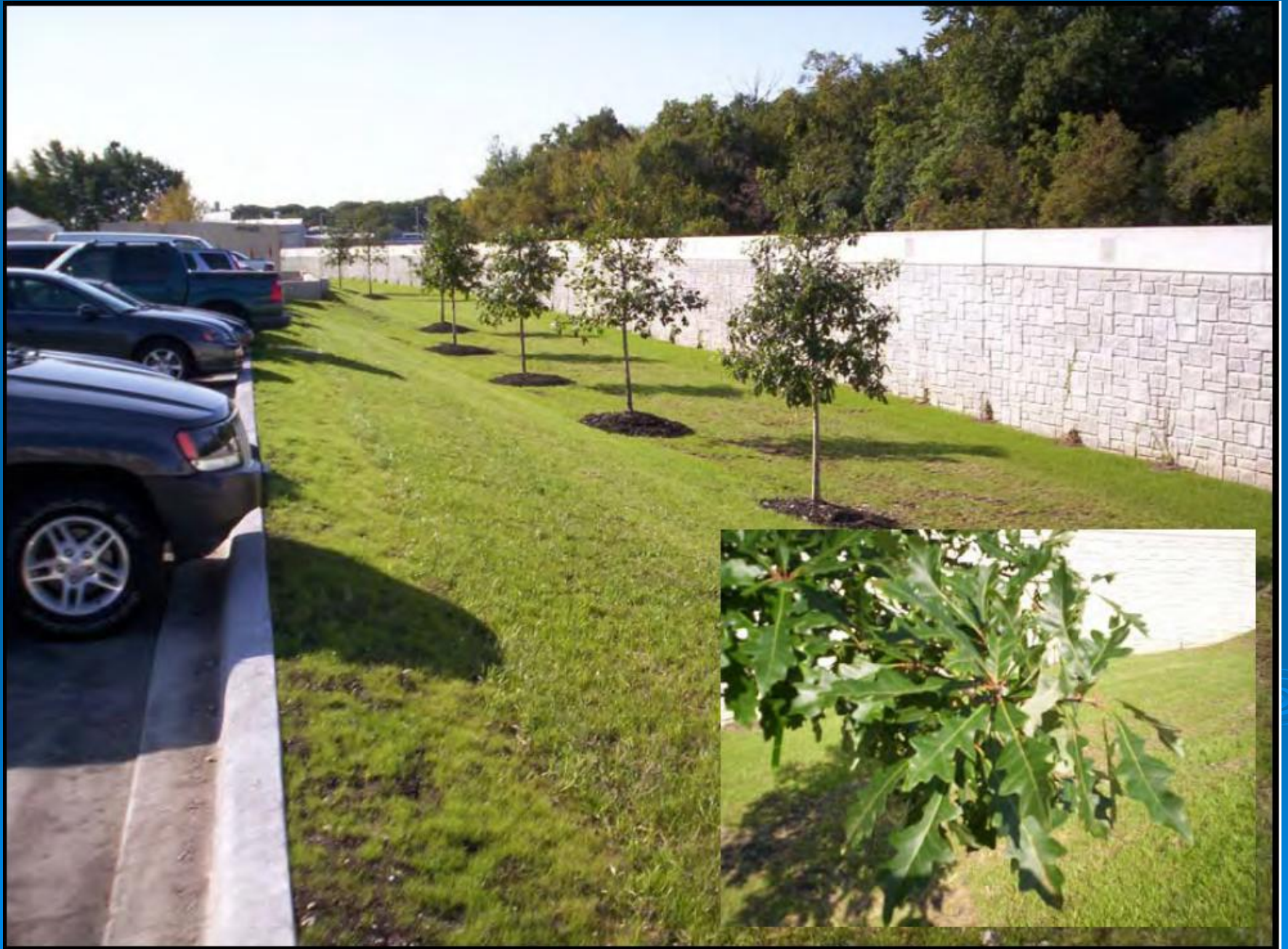


Building Better Resiliency in Illinois



RAND PARK FLOODWALL & LEVEE





No disruption of life this day!
That's Resiliency



Welcome Community Leaders from the 38th District

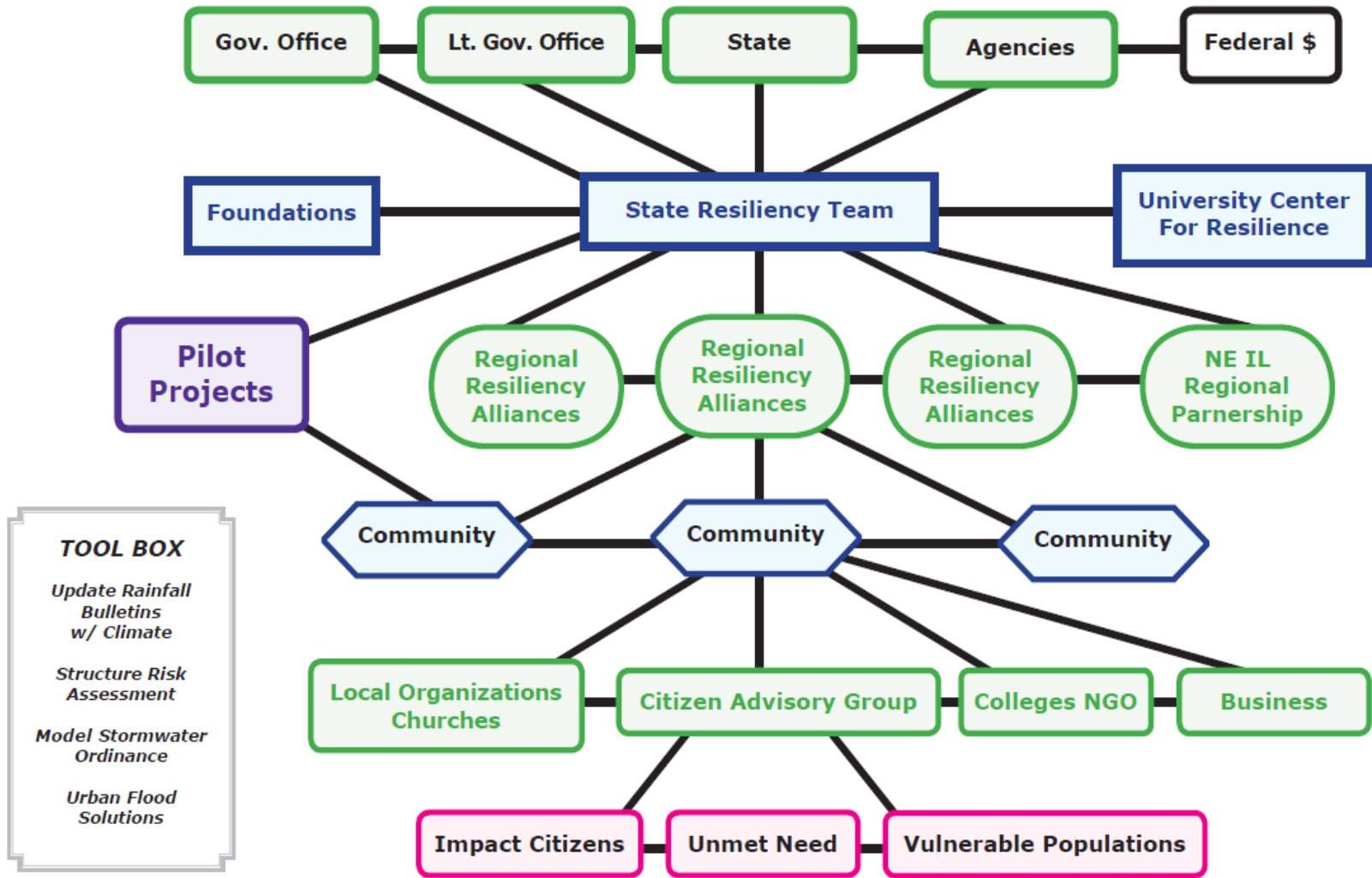
Regional Resiliency Alliances



First Organizational Meeting—February 12, 2014



Illinois

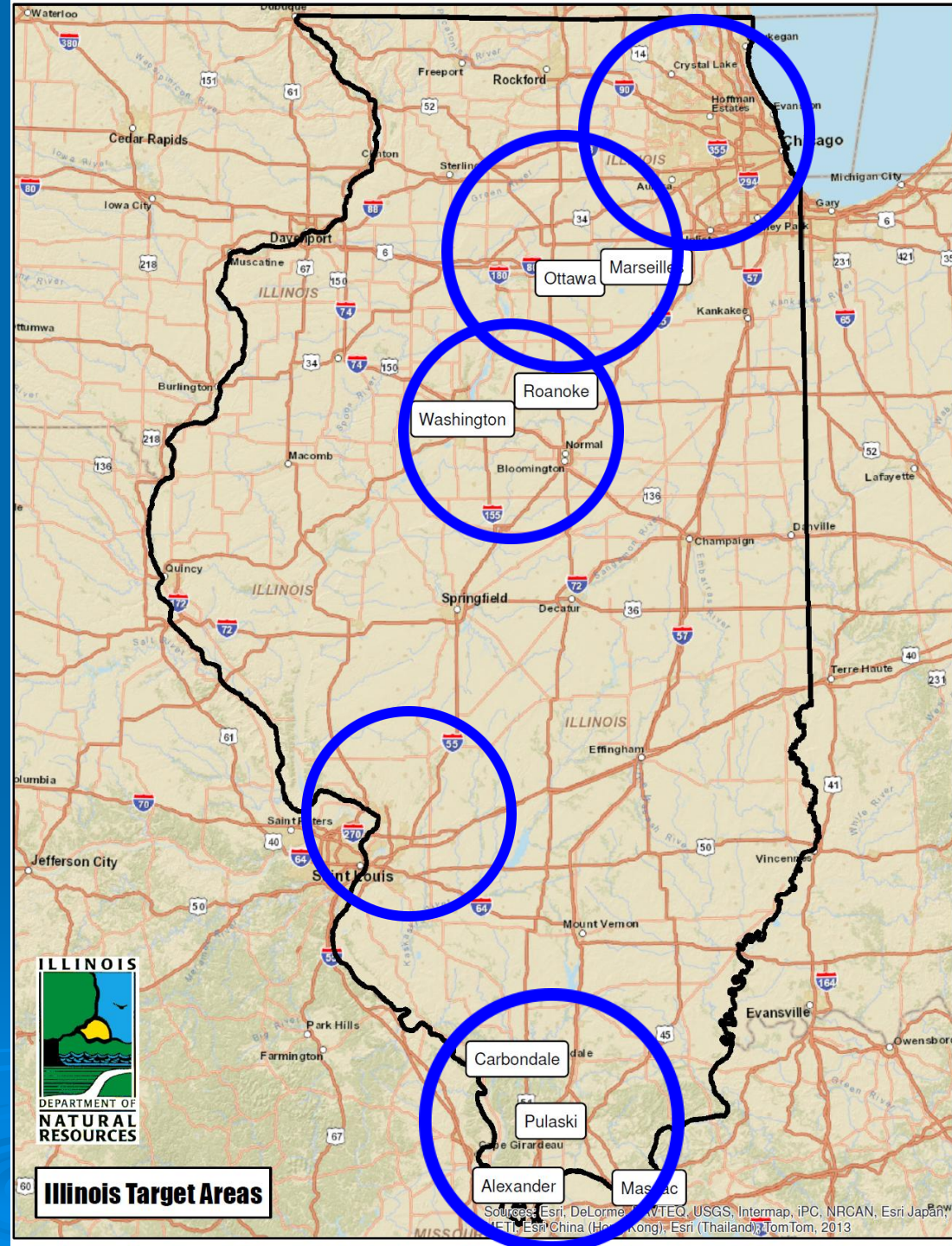


Illinois Resiliency Plan

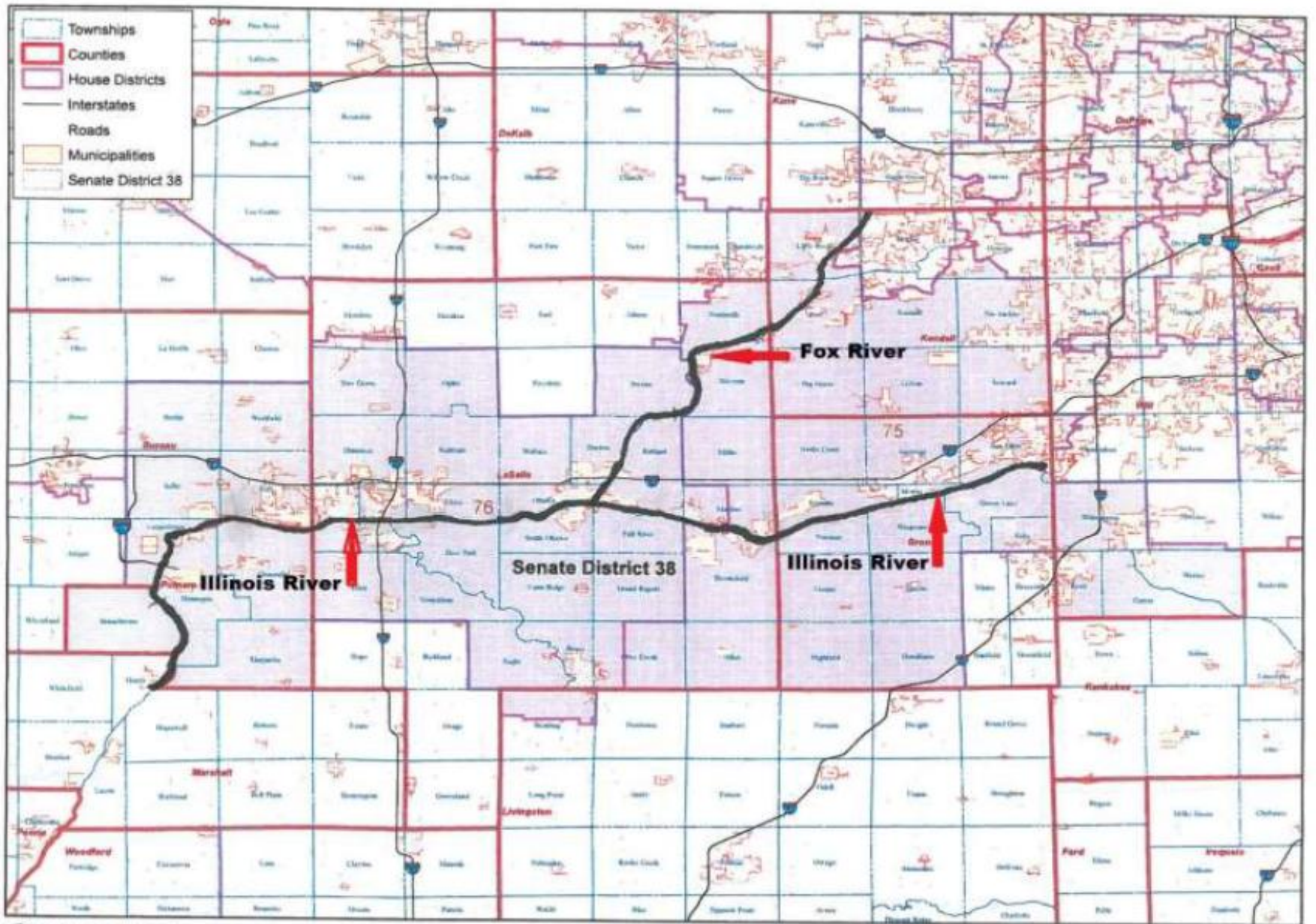
Opportunity to implement resilient pilot projects across the state

Opportunity to influence the way we think about incorporating additional co-benefits into the projects we build together

National recognition of NE Illinois Partnership by the Rockefeller Foundation



Senate District 38

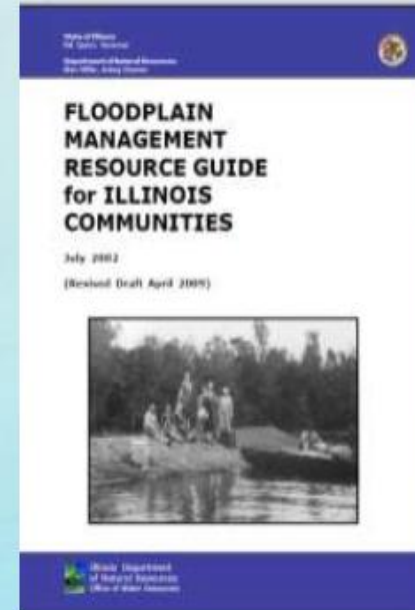


Aligned for Common Goals and Objectives



2. Education and Outreach

- Seek state programs & staff
- Solicit private sector investment
- Find not-for-profits
- Package programs – leverage power!
- Encourage local ownership
- New technologies
- Think outside the box



Going Above and Beyond

- Restrictive floodway.
- Appropriate uses only. No buildings!
- Stormwater regulations (detention/retention).
- Compensatory storage required (1 : 1.5)
- Freeboard
- Cumulative sub dam
- Restrictive zoning.
- Countywide ordinances.



Meanwhile...

Back at The Race

Activities of the National Disaster Resiliency
Competition



Stakeholder Consultation

➤ Outreach & Engagement

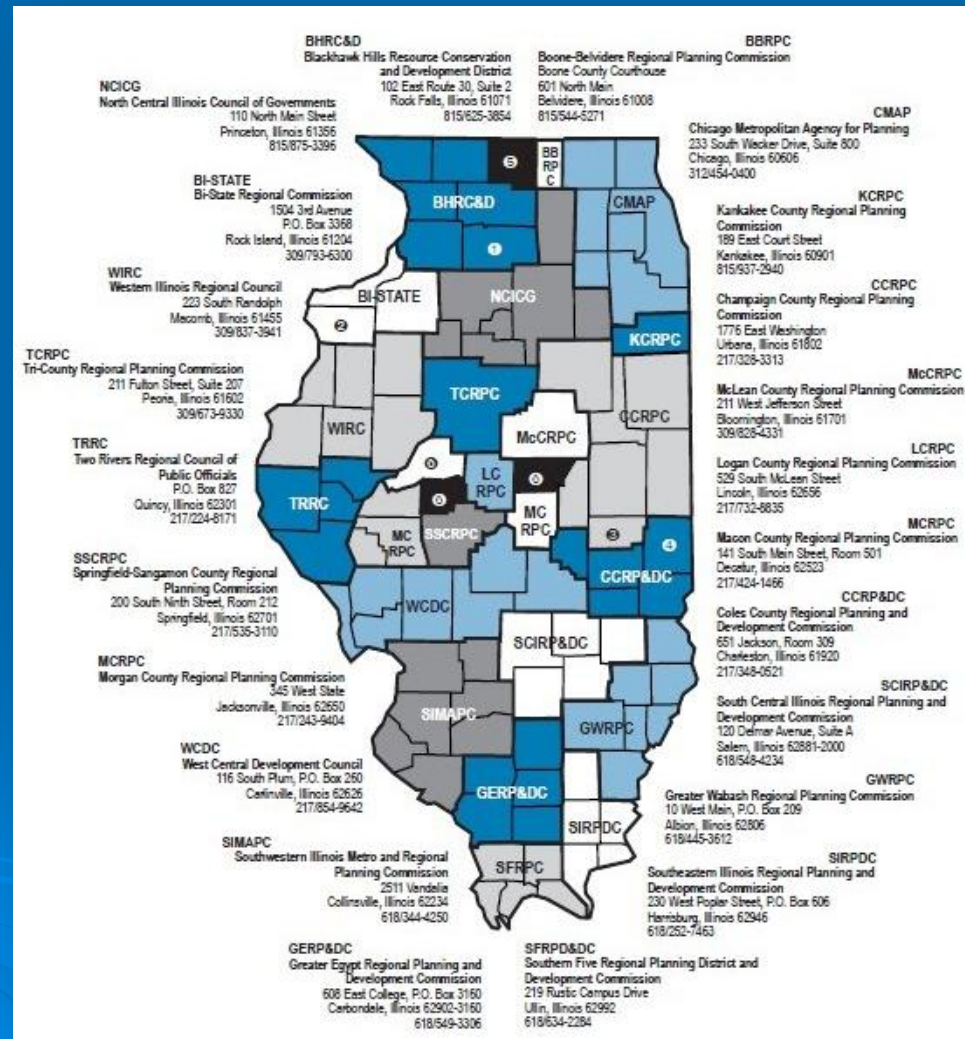
- Government
- Vulnerable Citizens
- Non-Profit
- Research Institutes
- Businesses

➤ Expert Consultation

- Design & Engineering
- Technology & Behavior
- Economic Opportunities
- Multiplying Benefits

➤ Resilience Roundtables

- Rebuild by Design summaries
- Social Resilience



Partnerships!

1.	Illinois Department of Transportation	40.	Illinois-Indiana Sea Grant	77.	Forest Preserve District of Cook County	117.	Perry County Commission	159.	Jefferson County Board
2.	Illinois Emergency Management Agency	41.	IDNR-CERP Program	78.	Geosyntec Consultants	118.	Perry County Board	160.	Mt. Vernon City Manager
3.	Illinois Environmental Protection Agency	42.	North Central Illinois Council of Governments	79.	Metropolitan Mayors Caucus	119.	Williamson County Board	161.	Perry County Board
4.	Illinois State Water Survey	43.	Tri-County Regional Planning Commission	80.	Metropolitan Planning Council	120.	Williamson County Assessor	162.	Perry County Highway Department
5.	Illinois Department of Natural resources	44.	Village of Roanoke	81.	Metropolitan Water Reclamation District of Greater Cook County	121.	City of Carbondale - City Manager	163.	City of Marion- Mayor
6.	Illinois Department of Commerce and Economic Opportunity	45.	Greater Egypt Regional Planning Council	82.	Natural Resource Defense Council	122.	Jefferson County Board	164.	Herrin City Council
7.	Illinois Department of Agriculture	46.	Community of Olive Branch	83.	OAI, Inc.	123.	Mt. Vernon City Manager	165.	Weed Man of Southern Illinois
8.	Illinois Capital Development Board	47.	Southern Five Regional Planning Council	84.	Openlands	124.	Perry County Board	166.	Barnett and Levine, LLP
9.	Illinois Commerce Commission	48.	Southern Illinois University - Carbondale	85.	Pepper Construction Company	125.	Perry County Highway Department	167.	De Nals Hair Salon
10.	Illinois Governor's Office - Intergovernmental Affairs	49.	Village of Utica	86.	Terry Guen Design Associates	126.	City of Marion- Mayor	168.	W right Properties
11.	Illinois Governor's Office - Policy Advisors on Environmental Energy	50.	Grundy County Emergency Management	87.	Skidmore, Owings & Merrill	127.	Herrin City Council	169.	New Beginnings Realty
12.	Illinois Governor's Office - Policy Advisors on Transportation	51.	City of Washington	88.	South Suburban Mayors and Managers Association	128.	City of Carbondale- Planning Department	170.	City of Ottawa Planning Department
13.	Illinois Lt. Governor's Office - Reverse Coordinating Council	52.	Tetra Tech	89.	Stanhope Consulting	129.	City of Carterville	171.	City of Ottawa Planning Department
14.	Illinois Historic Preservation Agency	53.	City of Wilmington	90.	UI Labs	130.	City of Herrin- Public Works	172.	City of Ottawa Building Department
15.	Illinois Housing Development Authority	54.	Illinois-Indiana Sea Grant	91.	Building Resilience Against Climate Effects, University of Illinois at Chicago	131.	City of Marion- Public Works	173.	City of Ottawa Engineering Department
16.	Illinois Department of Insurance	55.	University of Illinois Champaign Urbana	92.	US Army Corps of Engineers	132.	Jackson County Highway dept	174.	City of Ottawa Planning Department
17.	Illinois Department of Public Health	56.	180 Architects	93.	US Environmental Protection Agency – Region 5	133.	Williamson County Highway Department	175.	City of Ottawa Building Department
18.	Illinois Department of Aging	57.	AECOM	94.	US Green Buildings Council – Illinois Chapter	134.	RIDES Mass Transit District	176.	City of Ottawa - Office of the Mayor
19.	American Red Cross	58.	Allstate Insurance	95.	Village of Homewood	135.	Federal Highway Administration	177.	North Central Illinois Council of Governments
20.	Illinois Tollway & Highway Authority	59.	American Red Cross	96.	Village of Midlothian	136.	Jackson County Board	178.	City of Ottawa Planning Department
21.	Illinois Department of Natural Resources	60.	Center for Neighborhood Technology	97.	Village of Park Forest	137.	Jackson County Mass Transit	179.	City of Ottawa Engineering Department
22.	State Senator	61.	City of Chicago Mayors Office	98.	Office of Foundation Relations	138.	Southern Illinois Metropolitan Planning Organization	180.	Hitchcock Design Group
23.	Greater Egypt Regional Planning Council	62.	Chicago Department of Planning & Development	99.	Office of Corporate Relations	139.	City of Carbondale Planning Department	181.	Ottawa Flood Commission
24.	Southern Illinois Metropolitan Planning Organization	63.	Chicago Department of Water Management	100.	Critical Infrastructure Resilience Center of Excellence (CIRCoE)	140.	Jackson County Health Department	182.	City of Ottawa - City Council
25.	Jackson County	64.	Chicago Metropolitan Agency for Planning	101.	Caterpillar	141.	City of Carbondale- City Manager	183.	City of Ottawa Engineering Department
26.	City of Ottawa	65.	Chicago Park District	102.	City of Carbondale Planning Department	142.	John H. Crawford & Associates	184.	City of Ottawa Planning Department
27.	City of Marseilles	66.	Chicago Wilderness	103.	Jackson County Health Department	143.	Williamson County Highway Department	185.	City of Ottawa Building Department
28.	Village of Roanoke	67.	City of Blue Island	104.	City of Carbondale- City Manager	144.	Walker's Bluff	186.	City of Ottawa - Office of the Mayor
29.	City of Washington	68.	Cook County Bureau of Community Development	105.	John H. Crawford & Associates	145.	Southern Illinois Metropolitan Planning Organization	187.	Etscheid Duttlinger & Associates
30.	Alexander County Highway Department	69.	Cook County Department of Environmental Control	106.	Williamson County Highway Department	146.	City of Sesser- Mayor	188.	Renwich & Associates
31.	Southern Five Regional Planning Council	70.	Cook County Department of Planning and Development	107.	Franklin County Board	147.	Franklin County Assessor	189.	Vegrzyn, Sarver and Assoc., Inc.
32.	HR&A Adviors	71.	Cook County Office of Homeland Security & Emergency	108.	Walker's Bluff	148.	City of Benton- Mayor	190.	McClure Engineering Associates, Inc.
33.	The Rockefeller Foundation	72.	Conservation Design Forum	109.	Southern Illinois Metropolitan Planning Organization	149.	West Frankfort Small Business Incubator	191.	Crawford Murphy & Tilly Inc.
34.	Foresight Design	73.	Delta Institute	110.	City of Sesser- Mayor	150.	John A. Logan College Board	192.	Hitchcock Design Group
35.	Metropolitan Planning Council	74.	DuPage County Department of Stormwater Management	111.	Franklin County Assessor	151.	Jackson County Board	193.	Woodford County Road & Bridge Committee
36.	National Resource Defense Council	75.	Farr Associates	112.	Franklin County Board	152.	Jefferson County Commission	194.	Woodford County Highway Superintendent
37.	Center for Neighborhood Technologies	76.	FEMA – Region 5	113.	City of Benton- Mayor	153.	Perry County Commission	195.	Classic Autobody
38.	Illinois State Geologic Survey			114.	West Frankfort Small Business Incubator	154.	Williamson County Board	196.	Lifts of Illinois
39.	Prairie Research Institute			115.	John A. Logan College Board	155.	Williamson County Assessor	197.	Geiser Ford
				116.	Jackson County Board	156.	City of Carbondale - City Manager	198.	Sauder Furniture
					Jefferson County Commission	157.		199.	B. J. Fehr's Welding
						158.		200.	Residents of Roanoke
								201.	Washington Courier
								202.	Peoria Journal Star
								203.	Trees Forever

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Local Coordination & Outreach



Initial Outreach

- Provide Existing Information Only
 - Exhibits to supplement community discussion

- Ask Questions
 - Event Experiences
 - Problem Areas
 - Possible Solutions
 - Other Community Needs

- Listen to their Responses



State Resiliency Academy

- Resilience Experts
- NGO's
- State Agencies
- Elected Officials
- Universities
- Philanthropic



Follow-up Outreach

- Outcomes of community proposed solution and other options
- Provide recommended option highlight of cross discipline benefits
- Get more feedback



**WHAT ABOUT MAKING THE
ENTIRE STATE MORE
RESILIENT?**



TOOL BOX

***Update Rainfall
Bulletins
w/ Climate***

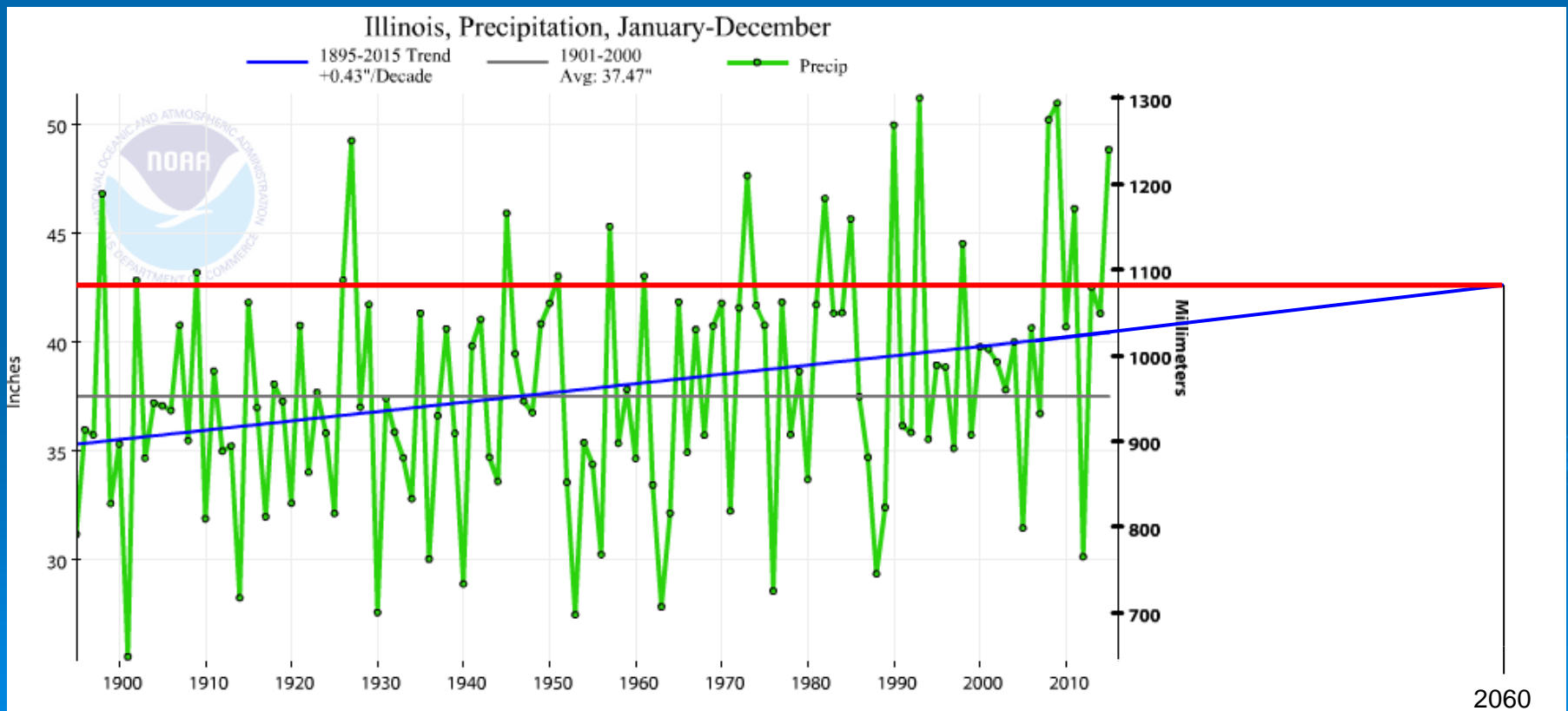
***Structure Risk
Assessment***

***Model Stormwater
Ordinance***

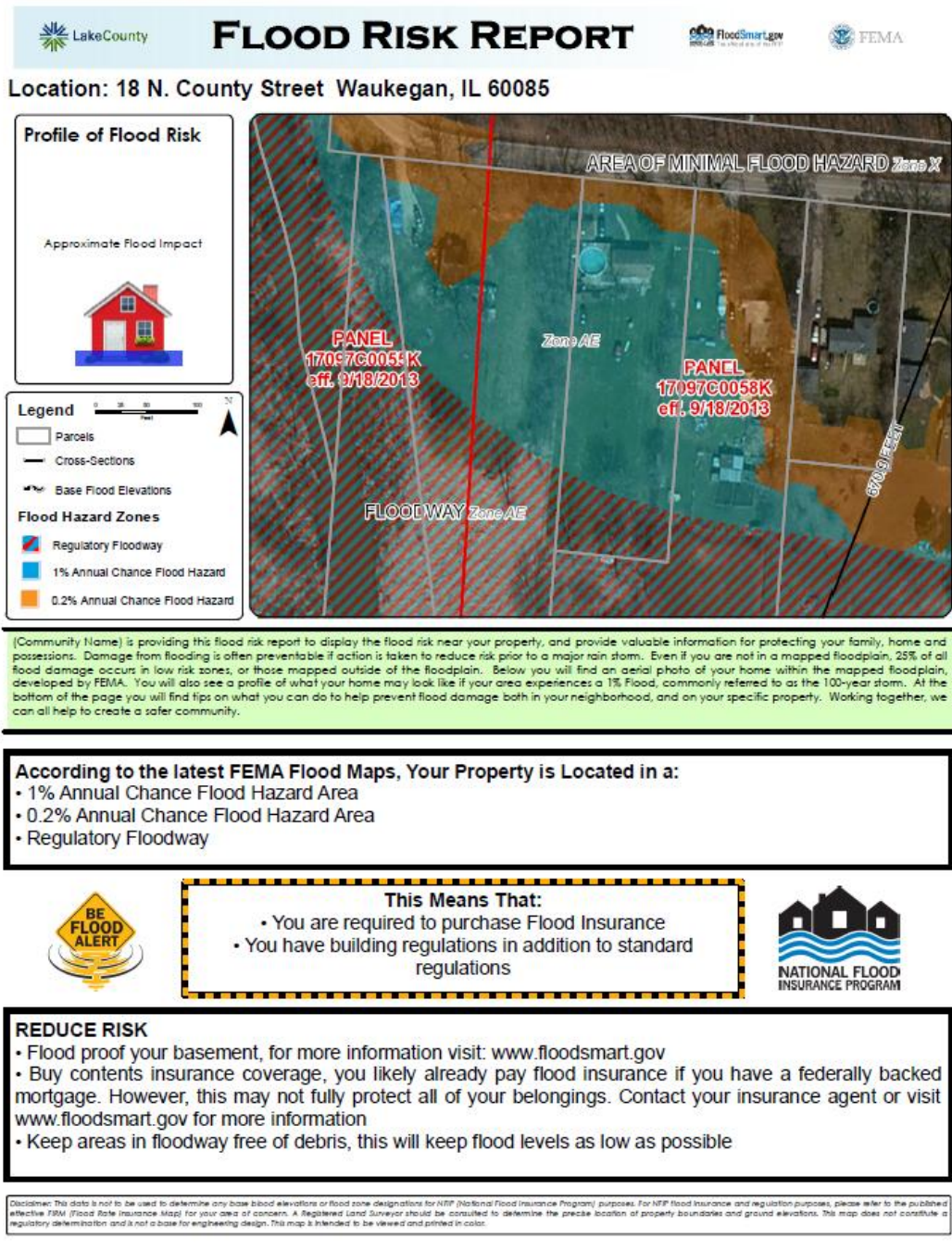
***Urban Flood
Solutions***

Dynamic Rainfall Design

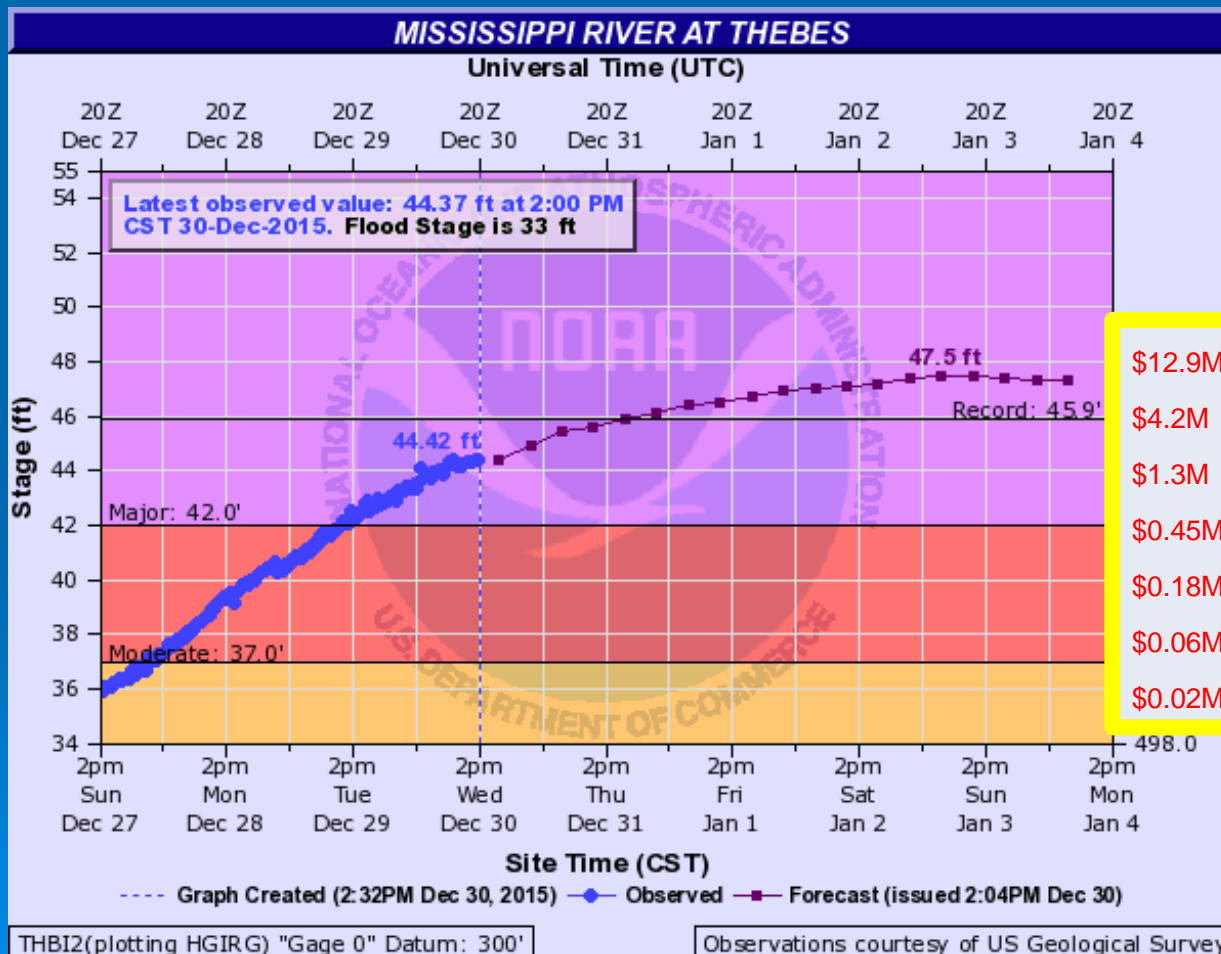
Historic Average: 37.5" 2060 Forecasted Trend: ~42.5" (13% Increase)



Statewide Structure Risk Assessments



Forecasting Flood Damages



Stage (ft)	Damage (\$ Mil)
36	0.02
38	0.06
40	0.18
42	0.45
44	1.3
46	4.2
48	12.9

Urban Flooding Solutions (see Breakout 3D)



Bellwood flooded basement July 2010 (Chuck Berman, Chicago Tribune)

- Stormwater Ordinance
- Raingardens
- Overhead sewer programs
- Overland flow paths
- Stormwater utilities



State of Illinois
Illinois Department of Natural Resources

REPORT FOR THE Urban Flooding Awareness Act



JUNE 2015

Prairie Research Institute's Role

- ◆ PRI can provide communities with social resiliency assessments composed of surveys, focus groups, and interviews to determine their capacity for “bouncing back” after a natural disaster and their current capacity to adapt to changing conditions.
- ◆ PRI has launched a Resilient Watershed Initiative to better connect researchers and communities and to put decision support tools into the hands of community leaders to help them build more resilient communities.
- For more information contact Laura Kammin | lkammin@illinois.edu | 217-333-1115



QUESTIONS?

