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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The 200m sprint

Activities of the National Disaster Resiliency Competition
Two Phases

NOFA Published - 9/17/14

~6 Months
67 Possible Applicants

Phase 1 Deadline - 3/27/15

~2 Months
27 Not Selected
Highest Scores

Phase 2 Invitations Sent – 6/27/15

~4 Months
40 Applicants

Phase 2 Deadline - 10/27/15

~3 Months
27 Not Selected

Phase 2 Winners – 1/21/16

No Funding Awarded

Documented Unmet Need

Total of $30 million available
$0.5 – 2.5 million per applicant

$1 – 500 million per winner

13 Selected
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.
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.
Traditional Structure

(We must live in the Midwest)
Resilient Structure
Building Better Resiliency in Illinois

Resilient Project

State of Illinois Resiliency Team

Transportation
Agriculture
Emergency Management
Public Health
Environmental Protection
Capitol Development Board
Governor’s Office
Natural Resources
Economic Opportunity
Aging
RAND PARK FLOODWALL & LEVEE
No disruption of life this day!
That’s Resiliency
Welcome Community Leaders from the 38th District

State Senator Sue Rezin’s Report
38th District: Serving Putnam, Bureau, LaSalle, Livingston, Grundy, Kendall & Will counties

First Organizational Meeting—February 12, 2014

Regional Resiliency Alliances
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
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!
## Competition Activities

### NDRC | Jurisdiction Timeline for Phase 2

<table>
<thead>
<tr>
<th>Components</th>
<th>Weeks</th>
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### Timeline and Activities

**Competition Activities**

1. **Kickoff and Project Planning**
   - Hold kickoff meeting
   - Produce forms and templates
   - Develop or implement online application platform

2. **Community Engagement**
   - Develop community engagement strategy
   - Perform outreach to explain project
   - Develop online engagement plan

3. **Initial Project Conceptualization**
   - Identify potential project areas
   - Define benefit categories
   - Define benefits
   - Estimate total costs
   - Design potential impact of the project
   - Define key stakeholders
   - Define appropriate recovery strategies

4. **Design**
   - Develop specific project and/or proposal
   - Select partners
   - Develop conceptual designs
   - Perform analysis of project goals and outcomes
   - Develop employment strategy for the project
   - Develop employment strategy

### Application Submission Timeline

<table>
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<th>Application</th>
<th>Submission Date</th>
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### Post-application for 15-day public comment

- State Application Public Hearing
- Prepare final application package
- Submit final application before 10/27

### Additional Notes

- **DCEO due 10/9**
- **Tentatively set for 10/14**
- **DCEO due 10/19**
- **DCEO due 10/25**
- **DCEO due 10/26**

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

### Table: Stage and Damage

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<tr>
<th>Stage (ft)</th>
<th>Damage ($ Mil)</th>
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<tr>
<td>36</td>
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</table>

### Stage vs. Site Time (CST)

- Latest observed value: 44.37 ft at 2:00 PM CST 30-Dec-2015. Flood Stage is 33 ft
- Major: 42.0'
- Moderate: 37.0'
- Graph Created (2:32PM Dec 30, 2015)
- Observed
- Forecast (issued 2:04PM Dec 30)

Observations courtesy of US Geological Survey
Urban Flooding Solutions

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

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

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QUESTIONS?