

# Improving Coordinated Flood Preparedness and Response

## Illinois Silver Jackets

Hank DeHaan

Rock Island and Saint Louis Districts

October 2011



US Army Corps of Engineers  
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# Illinois Silver Jackets Program

## Illinois Silver Jackets Group Development Considerations

- Overarching Goal: Reduce flood damage risk in Illinois
- Minimize redundancy to existing State and Federal groups
- Efficiently organize Silver Jackets efforts



## Four Illinois Silver Jackets Focus Groups

1. Illinois Emergency Response Group – Emergency preparedness and response
2. Illinois Mitigation Advisory Group – Non-structural solutions
3. Illinois Flood Management Group – Structural solutions
4. Illinois Policy Advisory Group – Policy analysis



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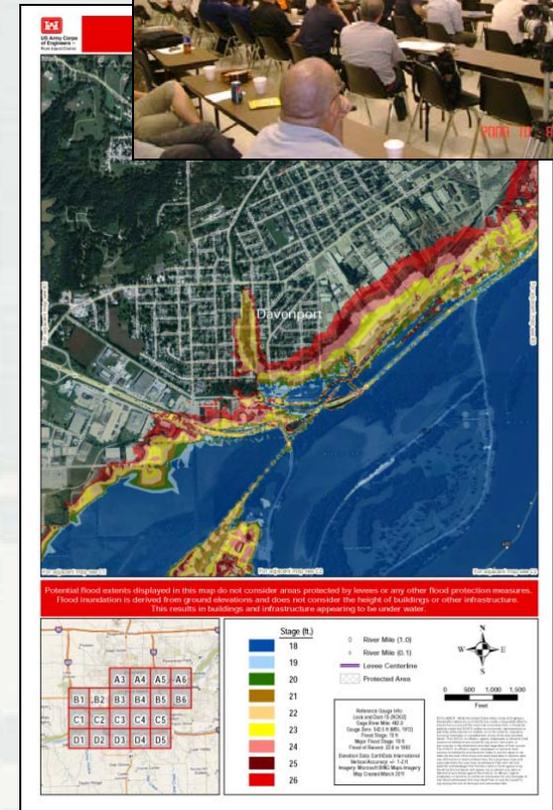
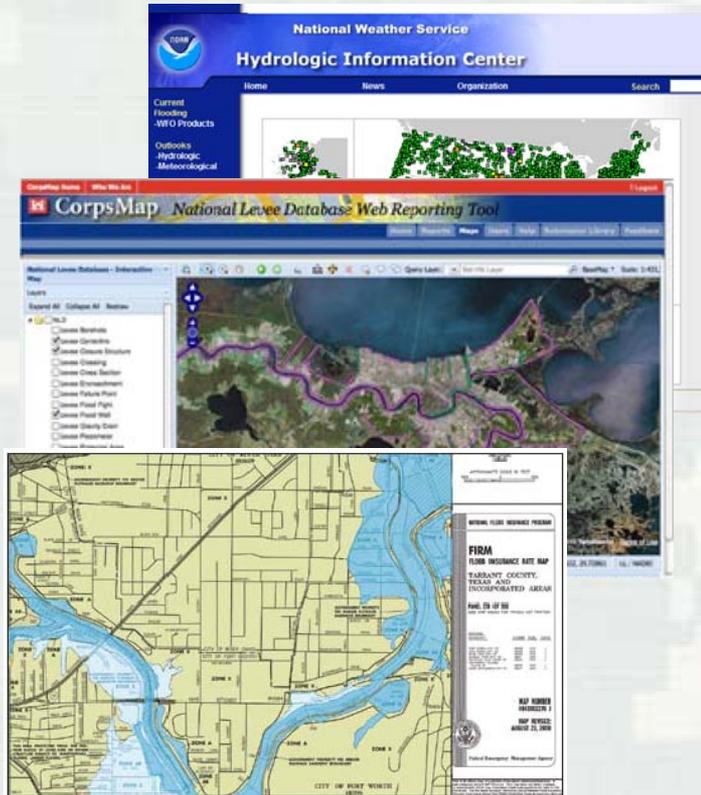
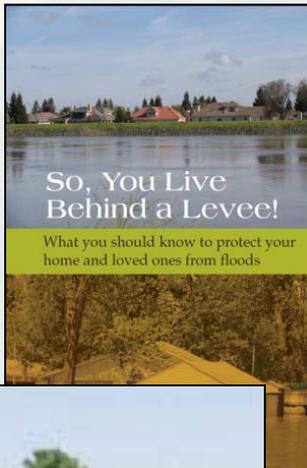
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# Emergency Preparedness & Response

## Improving Coordinated Preparedness and Response

- Enhanced communication
- Jointly developing and sharing information
- Partnered implementation of Silver Jackets efforts



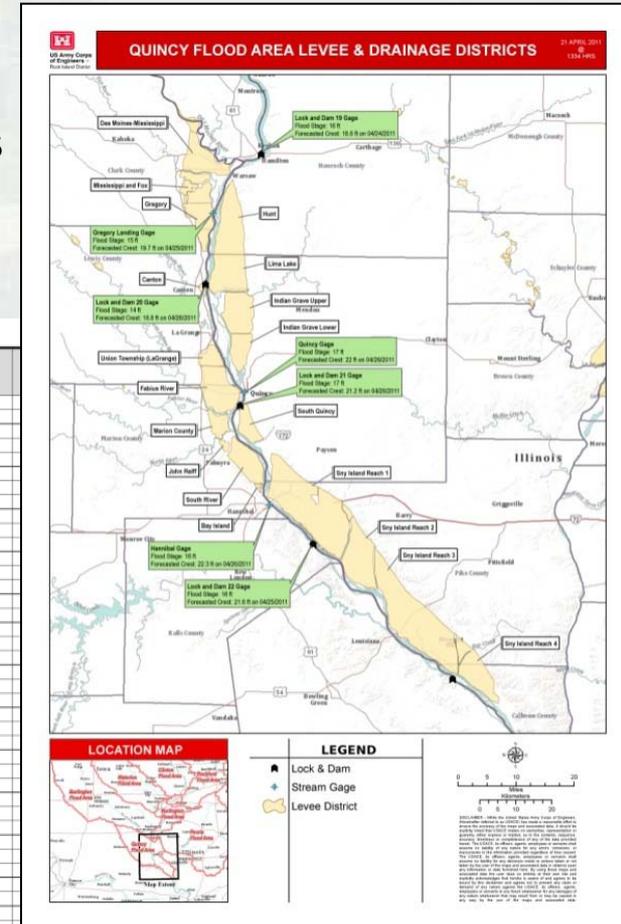
# Emergency Preparedness & Response

## Enhanced Communication

- Communication plan
- Daily and weekly partner communication and updates
- Monthly and quarterly Silver Jackets meetings



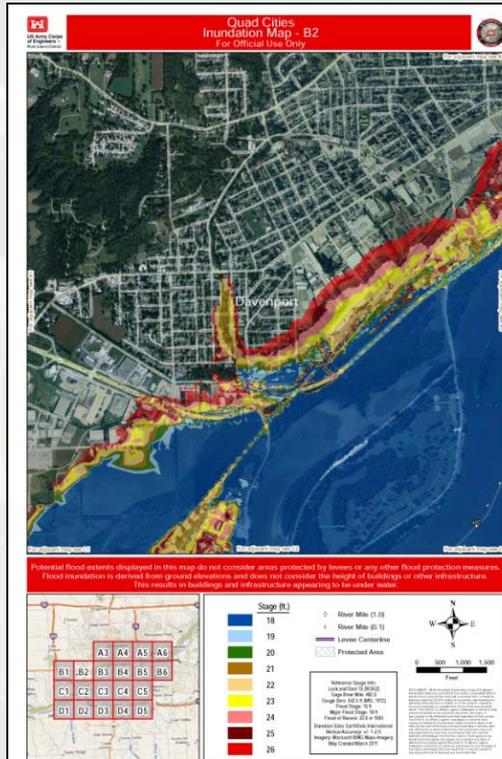
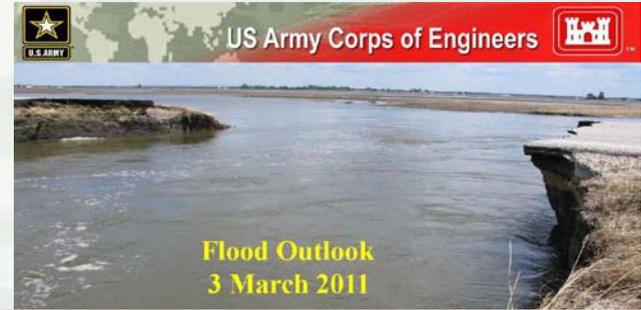
	Levee Type	Date of Inspection		
<b>Rockford Flood Area</b>				
Brad Palmer				
1	Alpine-Dam-out-of-program	Fed		
2	DeKalb LFFP	Fed	1-Jul-2010	
3	Levings Lake Dam	Fed	14-Sep-2009	
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1	Ottawa Township H S Levee	Fed	17-Nov-09	
<b>Clinton Flood Area</b>				
Larry Meias				
1	Fulton LFP	Fed	4/19/2010 PI	
2	Galena LFP	Fed	Periodic	
3	Meredosia D & LD	Fed	25-Nov-2009	
<b>Quad City Flood Area</b>				
Josh Cackley/Bob Riebe				
1	East Moline LFFP	Fed	13-Oct-09	
2	Milan/Sky Island LFP	Fed	10-Nov-09	
3	Rock Island LFP	Fed	3-Nov-09	
4	Rock Island Arsenal (Gov)	Fed		
5	Andalusia	Non-Fed	17-Nov-09	
<b>Burlington Flood Area</b>				
Jon Fleischman				
1	Bay Island D & LD	Fed	2-Dec-2009	
2	Drury DD	Fed	1-Feb-2010	
3	Henderson County DD No 1	Fed	20-Apr-2010	
4	Henderson County DD No 2	Fed	20-Apr-2010	
5	Sub-District No 1 of Drain Unit 1	Fed	2-Dec-2009	
<b>Quincy Flood Area</b>				
Hank DeHaan				
1	Hunt DD & RR, LRR, JCR	Fed	11-Nov-09	Acceptable 29-Apr-10
2	Lima Lake DD	Fed	12-Nov-09	Acceptable 29-Apr-10
3	Indian Grave DD	Fed	10-Nov-09	M. Acceptable 29-Apr-10
4	Sny Island L & DD	Fed	16-Nov-09	M. Acceptable 25-Apr-10
5	South Quincy D & LD	Fed	5-Nov-09	Unacceptable 28-Jun-10



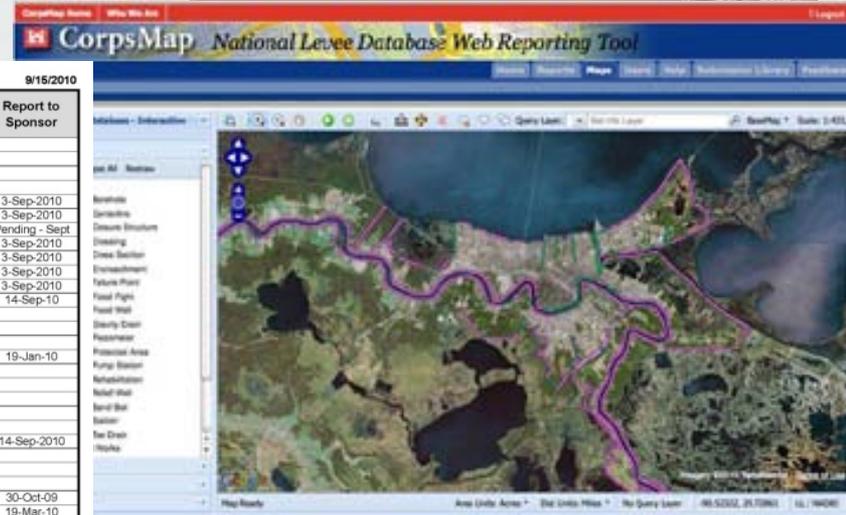
# Emergency Preparedness & Response

## Jointly Developing and Sharing Information

- Enhanced flood forecast info
- USACE National Levee Database access
- Illinois levee system conditions
- Critical levee elevations and freeboard forecasts
- Highly accurate inundation maps
- Overall flood risk



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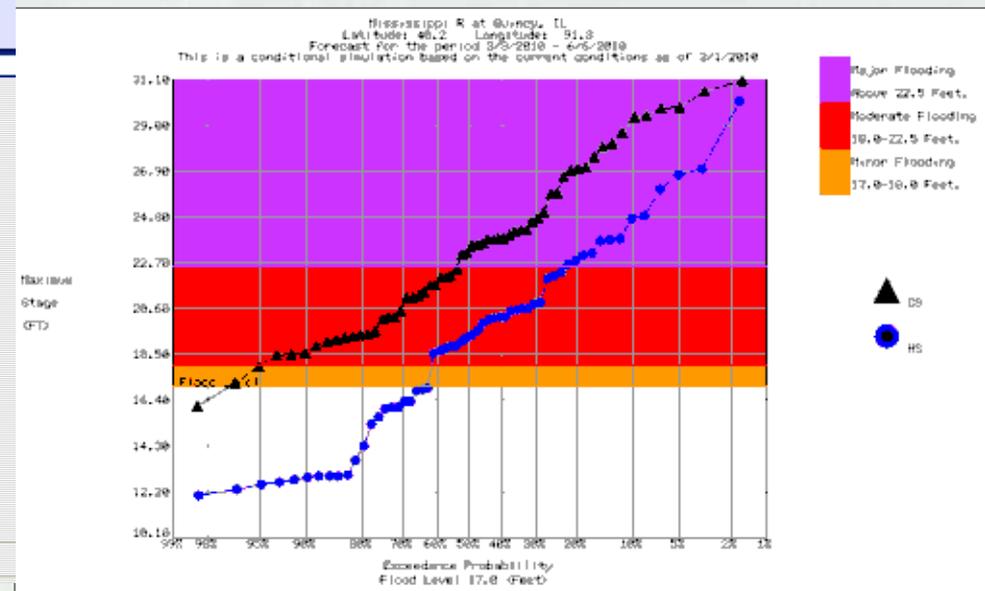
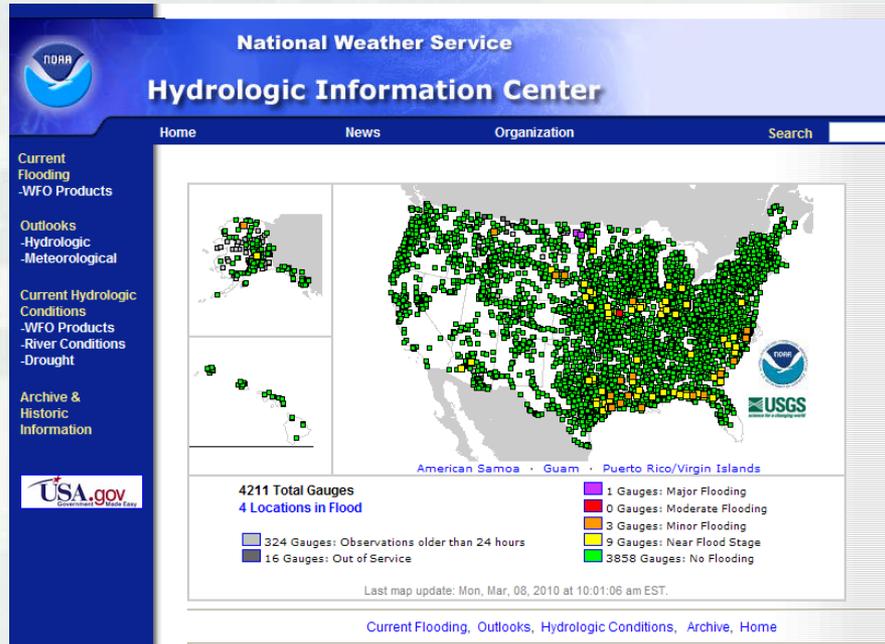
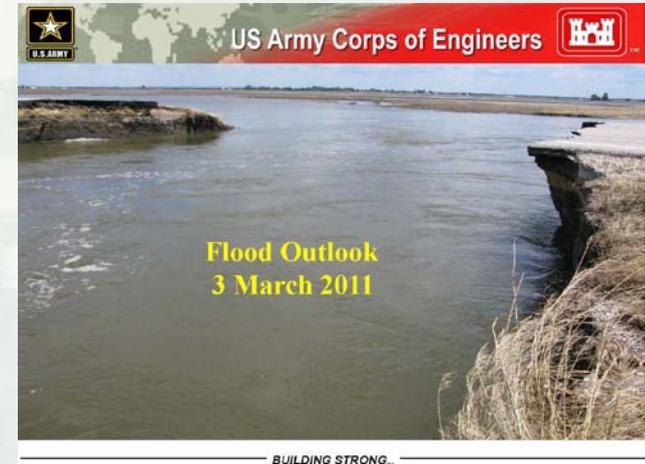


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# Emergency Preparedness & Response

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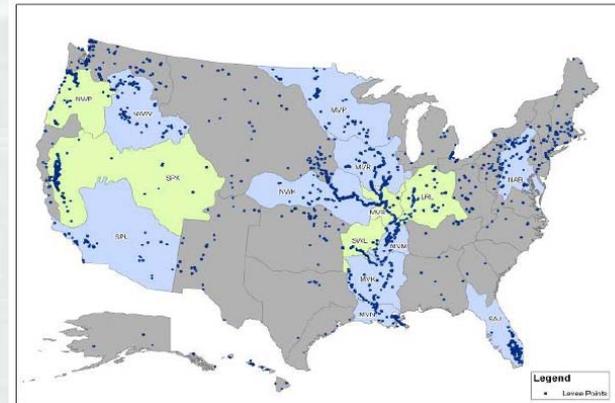
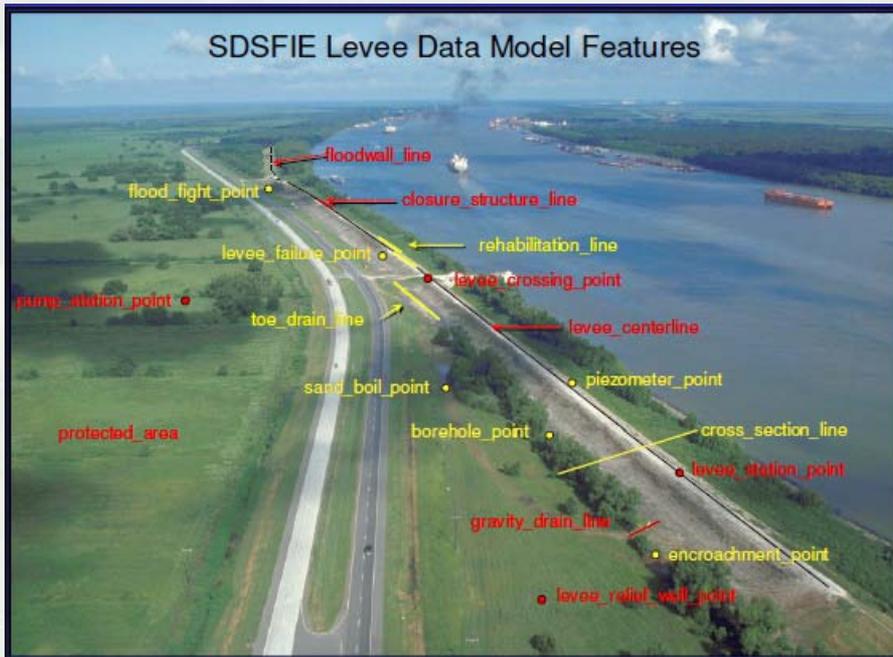
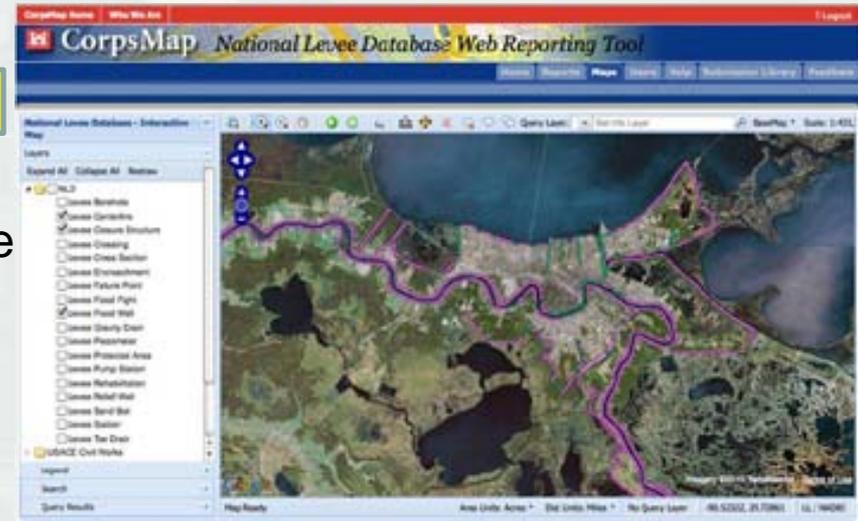
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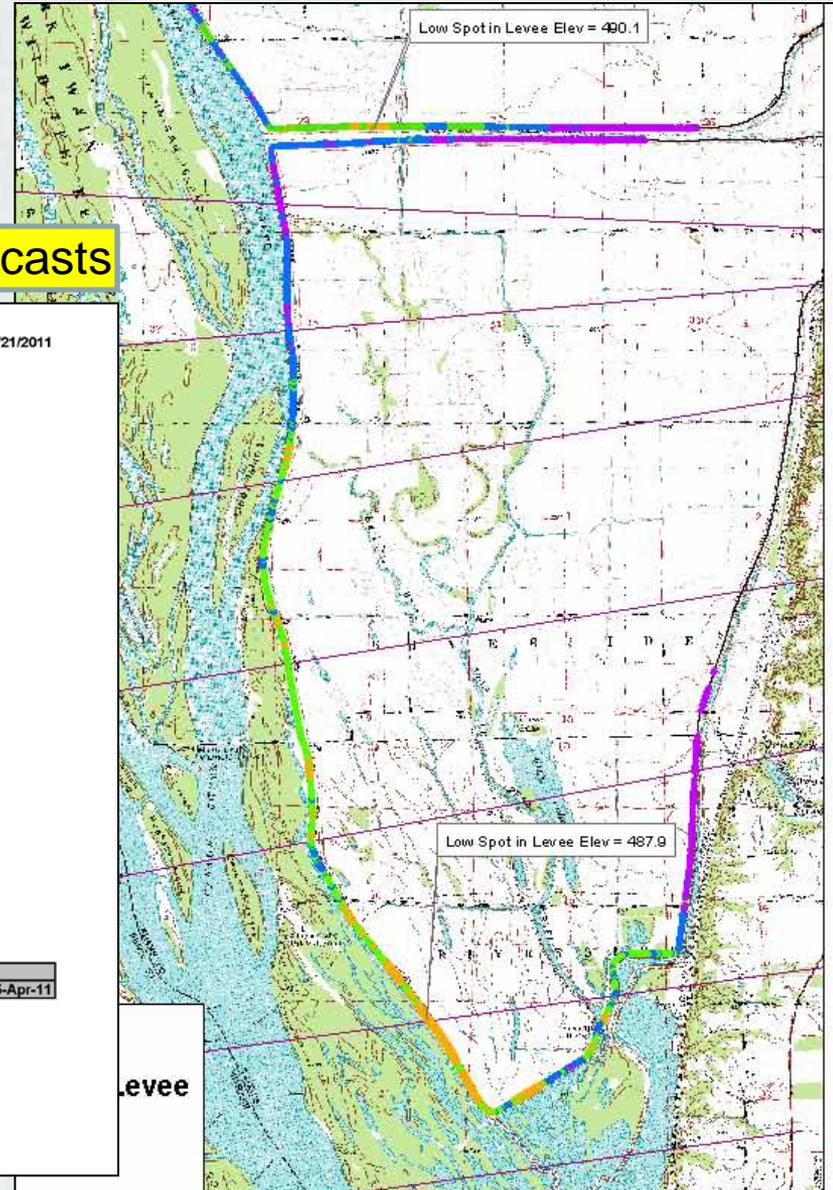
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### Quincy Flood Area Flood and Levee Freeboard Forecast

4/21/2011

Note: The overtopping stages below represent the stage at which the design level of protection is overtopped with no additional flood fight materials in place.

Drainage District	Reference Gage	Stage			Forecasted Crest	Freeboard Estimate	Crest Date
		Flood	Maj. Flood	Overtop			
<b>Iowa</b>							
Keokuk	L&D 19 at Keokuk IA	16	19	29	19	10	24-Apr-11
<b>Missouri</b>							
Des Moines-Mississippi	L&D 19 at Keokuk IA	16	19	26.6	19	7.6	24-Apr-11
Mississippi Fox 1	Gregroy Landing	15	25	26.7	20	6.7	26-Apr-11
Mississippi Fox 2	Gregroy Landing	15	25	24.5	20	4.5	26-Apr-11
Mississippi Fox 3	Gregroy Landing	15	25	24.1	20	4.1	26-Apr-11
Gregroy	Gregroy Landing	15	25	25.2	20	5.2	26-Apr-11
Canton	L&D 20 at Canton, MO	17	22	28	19	9	24-Apr-11
Union Township	Quincy, IL	17	22.5	29.5	22.2	7.3	25-Apr-11
Fabius River	L&D 21 at Quincy, IL	17	22	29.6	21.3	8.3	25-Apr-11
Marion County	L&D 21 at Quincy, IL	17	22	28.3	21.3	7	25-Apr-11
South River	L&D 21 at Quincy, IL	17	22	30.1	21.3	8.8	25-Apr-11
Hannibal	Hannibal	16	24	32.6	22.4	10.2	25-Apr-11
<b>Illinois</b>							
Hunt-Lima Lake	Gregroy Landing	15	25	25.4	20	5.4	26-Apr-11
Indian Grave Upper	Quincy, IL	17	22.5	30.4	22.2	8.2	25-Apr-11
Indian Grave Lower	Quincy, IL	17	22.5	29.1	22.2	6.9	25-Apr-11
South Quincy	Quincy, IL	17	22.5	34	22.2	11.8	25-Apr-11
Sny Island - Reach I	Hannibal, MO	16	24	28.4	22.4	6	25-Apr-11
Sny Island - Reach II	Hannibal, MO	16	24	28.4	22.4	6	25-Apr-11
Sny Island - Reach III	Hannibal, MO	16	24	28.2	22.4	5.8	25-Apr-11
Sny Island - Reach IV	Hannibal, MO	16	24	28.6	22.4	6.2	25-Apr-11

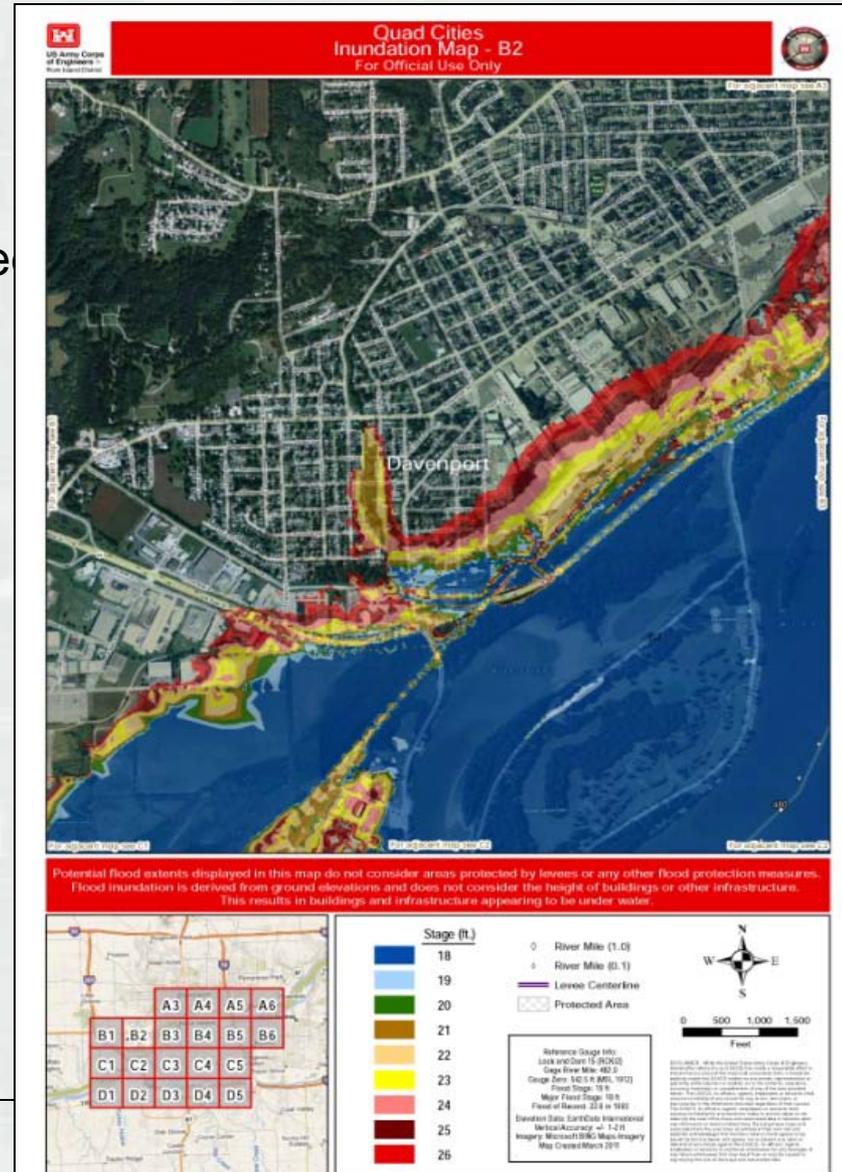
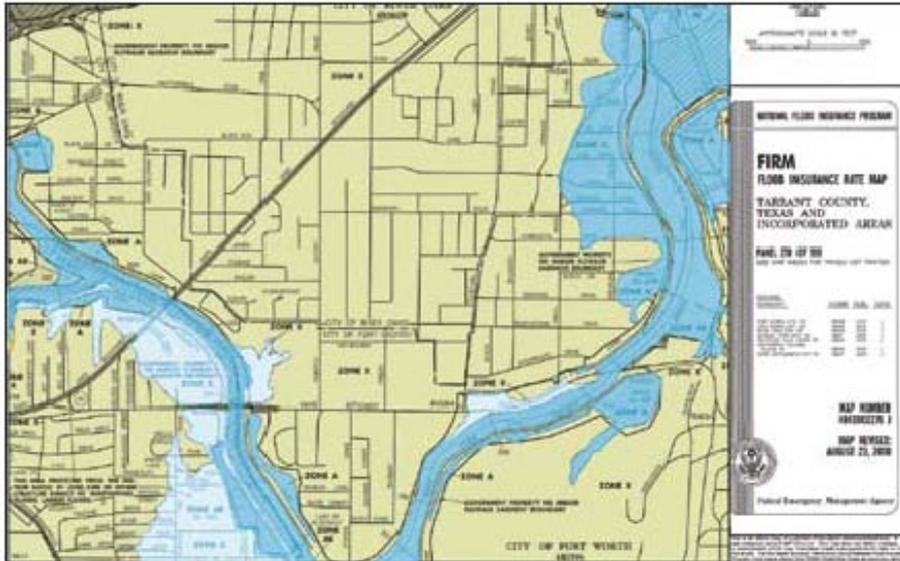
Gage	Current Forecasted Crest	Crest Date
L&D 19 at Keokuk	19	24-Apr-11
Gregroy Landing	20	26-Apr-11
L&D 20 at Canton, MO	19	24-Apr-11
Quincy, IL	22.2	25-Apr-11
L&D 21 at Quincy, IL	21.3	25-Apr-11
Hannibal, MO	22.4	25-Apr-11

Change in Forecasted Crest						
19-Apr-11	20-Apr-11	21-Apr-11	22-Apr-11	23-Apr-11	24-Apr-11	25-Apr-11
20	19.5	19				
21	20.3	20				
20.2	19.8	19				
23.2	22.7	22.2				
22.6	22.1	21.3				
23.6	22.9	22.4				

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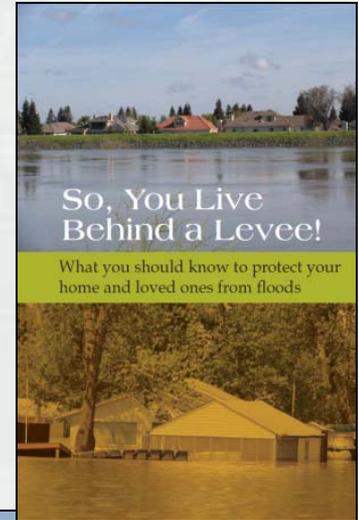


# Emergency Preparedness & Response

## Jointly Developing and Sharing Information

- Overall Flood Risk

- 1. Flooding will happen**
  - 100-year flood = 1% chance of flood occurring each year
- 2. No levee is flood-proof**
  - 100-year levee = 26% chance of flooding over 30 years
- 3. Risks associated with flooding vary**
  - Probability of flooding
  - Levee size and condition
  - Location of residences, businesses, infrastructure
- 4. Actions taken now will save lives and property**
  - Risk communication
  - Community actions
  - Private citizen actions
  - Flood insurance



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# Emergency Preparedness & Response

## Partnered Implementation of Silver Jackets Efforts

- Flood preparedness public workshops
  - ✓ Four regional workshops
  - ✓ Illinois Emergency Management/USACE/FEMA/USACE/NWS
  - ✓ Well attended and supported
- Joint agency presentations at conferences
  - ✓ Illinois Association of Floodplain and Stormwater Managers Annual Conference
  - ✓ IDOT Annual Hydraulic Engineers Meeting
  - ✓ Topics: flood risk, levee inspections, rehabilitation, certification, accreditation
- Silver Jackets representation at State EOC
- Joint agency deployment to impacted areas



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# Emergency Preparedness & Response

## Results of Improved Coordination:

- Well attended conferences and workshops
- Better informed agencies, communities, and public
- Overall improved public's understanding of:
  - ✓ Their flood risk
  - ✓ How to prepare for and respond to flooding
  - ✓ How to work with Local, State, and Federal agencies



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# Questions?

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