

# 2004 HURRICANE **NAME** POST-STORM ASSESSMENT STATE EMERGENCY MANAGEMENT COMPONENT

Date	Time	State	Conducted by

Participants (and positions)				
First	Last	Title	Phone	Email Address

*This assessment is designed to evaluate the effectiveness of the FEMA/US Army Corps of Engineers Hurricane Evacuation Study (HES) within your jurisdiction as it applied to your experience during the recent hurricane threat. It is also intended to identify any specific needs or recommendations that you may wish to share relating to FEMA's overall Hurricane Program. It is not designed to evaluate you nor your response to the event. Rather it is designed to help FEMA better serve you in the future. **Please complete this assessment prior to your scheduled interview.***

**TECHNOLOGICAL**

1. Please identify which tools/documents assisted you in making State decisions.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> HURREVAC Products | <input type="checkbox"/> Storm Surge Maps        | <input type="checkbox"/> HAZUS                |
| <input type="checkbox"/> ETIS              | <input type="checkbox"/> Wind Swath              | <input type="checkbox"/> SLOSH Display Model  |
| <input type="checkbox"/> Error Cone        | <input type="checkbox"/> QPF Data                | <input type="checkbox"/> Evacuation Zone Maps |
| <input type="checkbox"/> Shelter Locations | <input type="checkbox"/> National Flood Outlook  | <input type="checkbox"/> State Hurricane Plan |
| <input type="checkbox"/> Clearance Times   | <input type="checkbox"/> River Gauge Observation | <input type="checkbox"/> Tides                |
| <input type="checkbox"/> Decision Arcs     |  | <input type="checkbox"/> HES Study            |
| <input type="checkbox"/> 5 Day Forecast    |  | <input type="checkbox"/> Other: _____         |

2. Of the tools utilized, how would you rate their performance?

	Unsatisfactory	-----	Excellent	Did Not Use		
HURREVAC (Overall)	1	2	3	4	5	<input type="checkbox"/>
--ETIS	1	2	3	4	5	<input type="checkbox"/>
--Error Cone	1	2	3	4	5	<input type="checkbox"/>
--Shelter Locations	1	2	3	4	5	<input type="checkbox"/>
--Clearance Times	1	2	3	4	5	<input type="checkbox"/>
--Decision Arcs	1	2	3	4	5	<input type="checkbox"/>
--5 Day Forecast	1	2	3	4	5	<input type="checkbox"/>
--Storm Surge Maps	1	2	3	4	5	<input type="checkbox"/>
--Wind Swath	1	2	3	4	5	<input type="checkbox"/>
--QPF Data	1	2	3	4	5	<input type="checkbox"/>
--National Outlook	1	2	3	4	5	<input type="checkbox"/>
--River Gauge Obs	1	2	3	4	5	<input type="checkbox"/>
HAZUS	1	2	3	4	5	<input type="checkbox"/>
SLOSH Display Model	1	2	3	4	5	<input type="checkbox"/>
Evacuation Zone Maps	1	2	3	4	5	<input type="checkbox"/>
State Hurricane Plan	1	2	3	4	5	<input type="checkbox"/>
Tides	1	2	3	4	5	<input type="checkbox"/>
HES Study	1	2	3	4	5	<input type="checkbox"/>
Other	1	2	3	4	5	<input type="checkbox"/>

3. Of the tools utilized, how would you rate their ease of use?

	Unsatisfactory	-----	-----	-----	-----	Excellent	Did Not Use
HURREVAC (Overall)	1	2	3	4	5		<input type="checkbox"/>
--ETIS	1	2	3	4	5		<input type="checkbox"/>
--Error Cone	1	2	3	4	5		<input type="checkbox"/>
--Shelter Locations	1	2	3	4	5		<input type="checkbox"/>
--Clearance Times	1	2	3	4	5		<input type="checkbox"/>
--Decision Arcs	1	2	3	4	5		<input type="checkbox"/>
--5 Day Forecast	1	2	3	4	5		<input type="checkbox"/>
--Storm Surge Maps	1	2	3	4	5		<input type="checkbox"/>
--Wind Swath	1	2	3	4	5		<input type="checkbox"/>
--QPF Data	1	2	3	4	5		<input type="checkbox"/>
--National Outlook	1	2	3	4	5		<input type="checkbox"/>
--River Gauge Obs	1	2	3	4	5		<input type="checkbox"/>
HAZUS	1	2	3	4	5		<input type="checkbox"/>
SLOSH Display Model	1	2	3	4	5		<input type="checkbox"/>
Evacuation Zone Maps	1	2	3	4	5		<input type="checkbox"/>
State Hurricane Plan	1	2	3	4	5		<input type="checkbox"/>
Tides	1	2	3	4	5		<input type="checkbox"/>
HES Study	1	2	3	4	5		<input type="checkbox"/>
Other	1	2	3	4	5		<input type="checkbox"/>

4. Of the tools utilized, what level of improvement is needed for each product?

	Significant	-----	-----	-----	-----	None	Did Not Use
HURREVAC (Overall)	1	2	3	4	5		<input type="checkbox"/>
--ETIS	1	2	3	4	5		<input type="checkbox"/>
--Error Cone	1	2	3	4	5		<input type="checkbox"/>
--Shelter Locations	1	2	3	4	5		<input type="checkbox"/>
--Clearance Times	1	2	3	4	5		<input type="checkbox"/>
--Decision Arcs	1	2	3	4	5		<input type="checkbox"/>
--5 Day Forecast	1	2	3	4	5		<input type="checkbox"/>
--Storm Surge Maps	1	2	3	4	5		<input type="checkbox"/>
--Wind Swath	1	2	3	4	5		<input type="checkbox"/>
--QPF Data	1	2	3	4	5		<input type="checkbox"/>
--National Outlook	1	2	3	4	5		<input type="checkbox"/>
--River Gauge Obs	1	2	3	4	5		<input type="checkbox"/>
HAZUS	1	2	3	4	5		<input type="checkbox"/>
SLOSH Display Model	1	2	3	4	5		<input type="checkbox"/>
Evacuation Zone Maps	1	2	3	4	5		<input type="checkbox"/>
State Hurricane Plan	1	2	3	4	5		<input type="checkbox"/>
Tides	1	2	3	4	5		<input type="checkbox"/>
HES Study	1	2	3	4	5		<input type="checkbox"/>
Other	1	2	3	4	5		<input type="checkbox"/>

5. Of the tools utilized, please indicate the level of staff training conducted.

	Unsatisfactory	-----	-----	-----	-----	Excellent	Did Not Use
HURREVAC	1	2	3	4	5		<input type="checkbox"/>
HAZUS	1	2	3	4	5		<input type="checkbox"/>
Website(s)	1	2	3	4	5		<input type="checkbox"/>
Evacuation Maps	1	2	3	4	5		<input type="checkbox"/>
State Hurricane Plan	1	2	3	4	5		<input type="checkbox"/>
Tides	1	2	3	4	5		<input type="checkbox"/>
HES Study	1	2	3	4	5		<input type="checkbox"/>
Other	1	2	3	4	5		<input type="checkbox"/>

6. Of the tools utilized, rank the level of importance of each.

	Least Important -----Most Important					Did Not Use
	1	2	3	4	5	
HURREVAC	1	2	3	4	5	<input type="checkbox"/>
--ETIS	1	2	3	4	5	<input type="checkbox"/>
--SLOSH	1	2	3	4	5	<input type="checkbox"/>
--Shelter Locations	1	2	3	4	5	<input type="checkbox"/>
--Clearance Times	1	2	3	4	5	<input type="checkbox"/>
--Decision Arcs	1	2	3	4	5	<input type="checkbox"/>
--5 Day Forecast	1	2	3	4	5	<input type="checkbox"/>
--Storm Surge Maps	1	2	3	4	5	<input type="checkbox"/>
--Wind Swath	1	2	3	4	5	<input type="checkbox"/>
--Error Cone	1	2	3	4	5	<input type="checkbox"/>
HAZUS	1	2	3	4	5	<input type="checkbox"/>
Website(s)	1	2	3	4	5	<input type="checkbox"/>
Evacuation Maps	1	2	3	4	5	<input type="checkbox"/>
State Hurricane Plan	1	2	3	4	5	<input type="checkbox"/>
Tides	1	2	3	4	5	<input type="checkbox"/>
HES Study	1	2	3	4	5	<input type="checkbox"/>
Other	1	2	3	4	5	<input type="checkbox"/>

**EMERGENCY OPERATIONS CENTER**

1. Please indicate the time and level of the State's EOC Activation

Not Activated

Partial Activation

Full Activation

Date \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_

Time \_\_\_\_\_

**MITIGATION**

1. Identify primary mitigation initiatives initiated prior to or during the event and rate the level of success.

Project Name	Unsatisfactory -----Excellent					Undetermined
	1	2	3	4	5	
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>
_____	1	2	3	4	5	<input type="checkbox"/>

**HURRICANE LIAISON TEAM (HLT) & EVACUATION LIAISON TEAM (ELT)**

1. Please indicate the level of satisfaction with FEMA's Hurricane Liaison Team (HLT).

	Unsatisfactory -----Excellent					Did Not Use
	1	2	3	4	5	
Phone Conferencing	1	2	3	4	5	<input type="checkbox"/>
Video Conferencing	1	2	3	4	5	<input type="checkbox"/>
Phone Inquiries	1	2	3	4	5	<input type="checkbox"/>
HLT Website	1	2	3	4	5	<input type="checkbox"/>
Advance Notifications	1	2	3	4	5	<input type="checkbox"/>
HLT Meteorologists	1	2	3	4	5	<input type="checkbox"/>
HLT Hydrologist	1	2	3	4	5	<input type="checkbox"/>
Overall Service	1	2	3	4	5	<input type="checkbox"/>

2. Did the State establish an HLT Point of contact for this event?

Yes (Please Identify): \_\_\_\_\_

No

3. Please indicate your level of satisfaction with FEMA's Evacuation Liaison Team (ELT).  
 Unsatisfactory -----Excellent Did Not Use  
 1 2 3 4 5
4. Did the State establish an ELT Point of contact for this event?  
 Yes (Please Identify): \_\_\_\_\_  No

**EVACUATION AND DECISION MAKING**

1. Define jurisdiction throughout the State who issued evacuation orders? (Use more sheets if needed)

Jurisdiction Name	Voluntary		Recommended		Mandatory	
	Date	Time	Date	Time	Date	Time

2. Do you feel the Hurricane Evacuation Zones for local communities were:  
 Insufficient for the Threat  Sufficient for the Threat  Excessive for the Threat
3. Do you feel the HES Clearance Times for local communities were:  
 Insufficient for the Threat  Sufficient for the Threat  Excessive for the Threat
4. Indicate the level of importance of communicating with these entities when making State decisions.  
 Minimal -----Significant Did Not Use
- |                    |   |   |   |   |   |                          |
|--------------------|---|---|---|---|---|--------------------------|
| State EMA          | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| Neighboring EMAs   | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| FEMA HLT           | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| American Red Cross | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| School Board       | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| Other: _____       | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |

**EVACUATION TRANSPORTATION INFORMATION SYSTEM (ETIS)**

1. How often was ETIS updated during the event?  
 Real Time  Hourly  Every Other Hour  
 Every 5 Hours  Twice a Day  Once a Day  
 Once Every Other Day  Did not Update
2. How would you rate ETIS's accuracy compared to actual traffic volumes?  
 Unsatisfactory -----Excellent Did Not Use  
 1 2 3 4 5
3. Are all recognized evacuation routes included in ETIS?  
 Yes  No
4. Did you experience any software or operational problems with ETIS?  
 Yes (Please Identify): \_\_\_\_\_  No

**TRANSPORTATION**

1. What is the estimated number of people and vehicles evacuating for this event.
- |   |                  |                    |
|---|------------------|--------------------|
|   | Estimated People | Estimated Vehicles |
| Evacuating WITHIN your Community        | _____            | _____              |
| Evacuating THROUGH or TO your Community | _____            | _____              |





5. Were any shelters damaged during this event?

Yes  No

6. For local shelters, how successful were prior mitigation projects?

	Unsatisfactory -----Excellent					Undetermined
Shutters	1	2	3	4	5	<input type="checkbox"/>
Roof Strengthening	1	2	3	4	5	<input type="checkbox"/>
Generators	1	2	3	4	5	<input type="checkbox"/>
Elevation	1	2	3	4	5	<input type="checkbox"/>
Other	1	2	3	4	5	<input type="checkbox"/>

**POST STORM RECOVERY**

1. What significant traffic problems occurred during the re-entry for this event?

<input type="checkbox"/> Unanticipated Volumes	<input type="checkbox"/> Congestion and Traffic Jams	<input type="checkbox"/> Accidents and Stalled Autos
<input type="checkbox"/> Inadequate Traffic Control	<input type="checkbox"/> Uncoordinated Traffic Signals	<input type="checkbox"/> Uncoord Re-entry Timing
<input type="checkbox"/> Diversions from Others	<input type="checkbox"/> Flooded Roads	<input type="checkbox"/> Construction
<input type="checkbox"/> Inadequate Signage	<input type="checkbox"/> Damaged Roads	<input type="checkbox"/> County Roads Blocked
<input type="checkbox"/> Downed Trees	<input type="checkbox"/> Fuel Availability	<input type="checkbox"/> Other: _____

**COMPREHENSIVE HURRICANE PREPAREDNESS STUDY (CHiPs)**

FEMA is broadening the role of the Hurricane Evacuation Study into a more comprehensive approach called the Comprehensive Hurricane Preparedness Study or CHiPS for short. The HES will now become a component of the more comprehensive program.

1. Define what components of the *Hurricane Evacuation Study* need improvement.

	Significant -----None					Did Not Use
Transportation Analysis	1	2	3	4	5	<input type="checkbox"/>
Behavioral Analysis	1	2	3	4	5	<input type="checkbox"/>
Vulnerability Analysis	1	2	3	4	5	<input type="checkbox"/>
Hazards Analysis	1	2	3	4	5	<input type="checkbox"/>
Shelter Analysis	1	2	3	4	5	<input type="checkbox"/>
Decision Making	1	2	3	4	5	<input type="checkbox"/>

2. Define what components of a *Re-entry Analysis* would benefit the State.

	No Benefit -----Significant					Undetermined
Decision Making	1	2	3	4	5	<input type="checkbox"/>
Communication Process	1	2	3	4	5	<input type="checkbox"/>
Storm Damage Impacts	1	2	3	4	5	<input type="checkbox"/>
Roadway Network	1	2	3	4	5	<input type="checkbox"/>
Consideration/Alternatives						

3. Define what components of a *Business Mitigation and Recovery Analysis* would benefit the State.

	No Benefit -----Significant					Undetermined
Mitigation Assessment	1	2	3	4	5	<input type="checkbox"/>
Impact Assessment	1	2	3	4	5	<input type="checkbox"/>
Economic Impact	1	2	3	4	5	<input type="checkbox"/>
Recovery Analysis	1	2	3	4	5	<input type="checkbox"/>
Post Storm Planning	1	2	3	4	5	<input type="checkbox"/>

4. Define what components of a *Community Storm Impact Analysis* would benefit the State.

	No Benefit -----Significant					Undetermined
Coastal Erosion Analysis	1	2	3	4	5	<input type="checkbox"/>
Mitigation Analysis	1	2	3	4	5	<input type="checkbox"/>
Economic Impact	1	2	3	4	5	<input type="checkbox"/>
Inland Flooding Analysis	1	2	3	4	5	<input type="checkbox"/>
Utility Damage Analysis	1	2	3	4	5	<input type="checkbox"/>
Critical Facility Analysis	1	2	3	4	5	<input type="checkbox"/>
Security Assessments	1	2	3	4	5	<input type="checkbox"/>

