

Back from the brink



Galveston
County
Office of
Emergency
Management

Oct. 21, 2009



How year-round planning helped Galveston County recover from Hurricane Ike

What is emergency management?

- The process of preparing for, responding to, recovering from, and mitigating against future disasters.



Elements of an effective emergency management program

- Assess hazards, develop plans to address hazards, and exercise and revise plans regularly
- Collaborate with government partners, utility companies, industries, hospitals, volunteer groups on plans & exercises
- Maintain readiness to respond/recover

Four primary components of emergency management:



Texas Military Forces distribute ice in Bayou Vista, Sept. 18, 2008

- Preparedness
- Response
- Recovery
- Mitigation

Components of emergency management

- **1. Preparedness:** Public education; equipment procurement; training; drills and exercises; development and maintenance of plans
- **2. Response:** Application of plans to address disaster situation; coordination of search and rescue; procurement of resources; overall coordination of response efforts

Components of emergency management

- **3. Recovery:** Mass care and sheltering; relief supplies (food-water-ice); restoration of utilities; temporary and permanent housing; grants for unmet needs
- **4. Mitigation:** Take steps to reduce losses in the future (Elevate a road, install a generator, buy out repetitive-loss properties, widen a drainage ditch, purchase more insurance)

Example

- **Preparedness:** Get a driver's license; buy a car with good shocks and handling; wear your seat belt; get car inspected
- **Response:** Slow down, maintain control, swerve to avoid if possible
- **Recovery:** Check your tire, alignment, etc.
- **Mitigation:** Reconstruct road, switch to concrete, etc.



Hurricane Ike: Sept. 12-13, 2008



Hurricane Ike: Sept. 12-13, 2008

- Category 2 storm, with Category 4 storm surge
- Difficult forecast: many didn't leave
- Enormous storm with potential statewide impacts

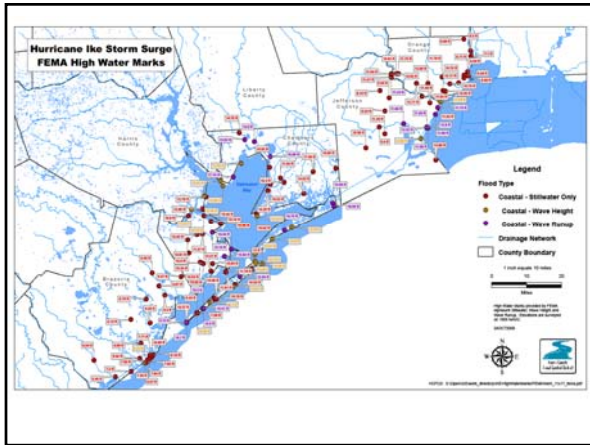


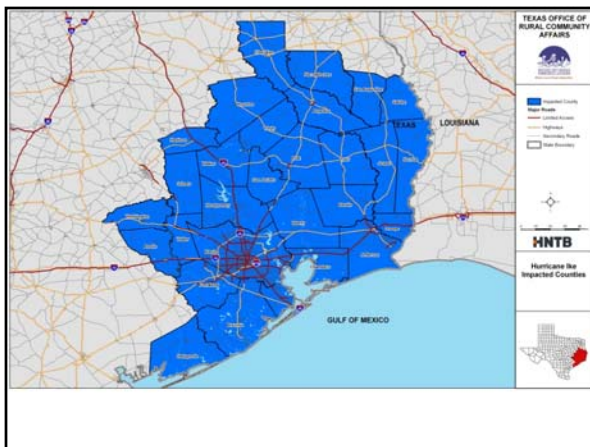
10 PM Thursday, Sept. 11, 2008

Hurricane Ike: Sept. 12-13, 2008

- \$32 billion in damage -- Third costliest of all time, behind Andrew 1992 and Katrina 2005
- A dozen direct deaths in the county, mostly due to drowning; 112 in U.S.
- 75% of island under water
- 3,600 homes destroyed on Bolivar Peninsula
- Three-month search for victims on Bolivar Peninsula
- Thousands forced to relocate to other communities
- 650 still living in FEMA trailers
- Thousands await CDBG funds to repair damaged homes







Galveston County responds

- **Preparedness**

Emergency Management Facility built for a Category 5 storm

Shelter plan with City of Austin for special needs residents

Bus plan with State of Texas

Catering plan to feed 300+ first responders



Galveston County Emergency Management Facility, May 2005

Galveston County responds

- **Preparedness**

2-1-1 list maintained to identify special-needs residents

Shelter volunteer list

800-trunk radio system

Back-up police/fire dispatch system

Mobile operations center

Debris management contract

Damage assessment contracts

Pre-written legal orders

Mop up/clean up contract



Annual statewide hurricane exercise

Amateur radio support

EOC liaison program

Galveston County responds

- **Preparedness**

Galveston County and the 13 incorporated cities participate in a Cooperative Emergency Management Program in which decisions about evacuation and recovery are made jointly, via conference call.

The county hosts twice-monthly meetings with the 13 city emergency coordinators to continue planning efforts year-round.

The cooperative program was launched by County Judge Jim Yarbrough during his first term of office.



Presidents come calling

Galveston County responds

- **Response**



Bus contract activated: Special needs citizens evacuated
Shelter contract activated: Austin opens its doors to 2,500 residents
SFHS shelter opens for first responders
EOC activated: 60+ individuals from local, state and federal agencies work 24 hours/day, 21 days straight
Catering contract initiated
EOC coordinates rescue of 600+ residents before Ike makes landfall

Galveston County responds

- **Response**



Debris contract activated

MOC sent to Bolivar Peninsula for human remains recovery

EOC brings in Red Cross and Salvation Army to provide meals
EOC brings in ice and water countywide
EOC obtains generators, Porta-Potties, cots, heavy equipment, etc. for cities and county
County attorney drafts more than 75 declarations, resolutions and orders, including curfews and burn bans
Seat of government moved to League City for four months
EOC arranges for opening of long-term Disaster Recovery Centers

Galveston County responds

- **Recovery**

County works with TxDOT on emergency replacement of Rollover Pass Bridge

Debris contract results in 2 million cubic yards of debris collected

County gains access to TxDOT ferry to put first responders on Peninsula

County develops and implements 3-month human remains recovery operation on Bolivar Peninsula

County enters MAA with Galveston FD to provide fire service on peninsula



Cadaver dog rides the ferry

County coordinates opening of FEMA Disaster Recovery Centers in Bayou Vista, San Leon and Texas City

Galveston County responds

- **Recovery**



County arranges for removal of hundreds of tons of debris from waterways

County grants waiver to allow placement of FEMA trailers in floodplains

County works with FEMA to establish community trailer parks

County works with FEMA to draft more than 800 "project worksheets" for repairs to infrastructure

Health district provides tetanus shots

Constables man checkpoints for weeks

Community Services Division hands out \$150,000 in emergency aid to families

County road department repairs hundreds of damaged road ends on Bolivar Peninsula

Road department scrapes thousands of yards of sand off Bolivar roads

Galveston County responds

- **Recovery**

County seeks grant to buy out or elevate 700+ homeowners

County serves as pipeline for \$66 million in CDBG infrastructure money for county and 12 cities (Galveston city receives own grant)

County granted \$99 million to develop housing repair program

County seeks and receives 100% reimbursement for debris removal and protective measures



Galveston County responds

- **Mitigation**

Install permanent generators at water and sewer plants

Install backup water supplies

Develop better re-entry plan for Galveston Island

Elevate and relocate Highway 87 away from the beachfront

Buy out properties that will flood again next time; prevent rebuilding in floodplains



Maeslant Barrier near Rotterdam, Netherlands

The Ike Dike???

Your personal emergency plans

• Preparedness



Hurricane Katrina

Know evacuation routes; keep the gas tank full during Hurricane Season

Carry flood and windstorm insurance

Purchase shutters or storm-resistant windows and doors

Prepare a hurricane supply kit

Purchase a generator

Buy a NOAA weather radio

Stay informed throughout Hurricane Season

Participate in National Preparedness Month each September

Your personal emergency plans

• Response

Stay alert to sirens or warning information on local TV-radio

Evacuate when told to do so; do not wait

Pack your hurricane supply kit

Don't forget cash ... ATMs may not work

Establish a rendezvous point for all family members

Don't forget the family pets

Monitor TV/radio to determine when it is safe to return



Your personal emergency plans

• Recovery

Return as soon as it is safe

Protect roof and home from further damage

Exercise caution with generators: CO kills! And generators can lead to electrical fires!

Exercise caution with chain saws (hospital may not be open)

Contact insurance agent as soon as possible

Save receipts for possible reimbursement



Your personal emergency plans

- **Mitigation**



Elevate or move out of the floodplain

Rebuild to better construction standards

Expand insurance coverage

Reduce loss potential by adding storm shutters, garage door bracing, new roof, etc.

Resolve to be prepared by June 1 every year!

Join the Citizen Corps or take CERT classes at Galveston County Office of Emergency Management

Thanks for your attention!

John Simsen

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