Session: Discussion – Hazard Resilient Communities

What is a hazard resilient community?
- In a hazard resilient community, people are safe, people are informed about risk, and natural lines of defense are protected
- Community needs leadership that is right for the time: before, during, immediately after, long-term
- A community is more than a town/parish; it includes wetlands and natural communities
- It is the "sense" of a community that makes people want to go back
- A resilient community is socially cohesive
- A resilient community has strong social capital, and is able to move on
- Cohort returning to its habitat (?)
- A resilient community needs to be able to deal with rescue and response, and be able to back-up to the first responders
- There needs to be trained first responders in a community, and backups
- The emergency plan is practiced and drills are run
- Need to be informed about risks and appropriate responses
- Communications networks have to work and have backups (e.g. satellite?)
- Communities need to coordinate with Emergency Operation Centers
- Safe and an adequate number of shelters need to be available for evacuees
- Necessary infrastructure needs to be in place (shelters, communication)
- Within the community, the economic base needs to be diverse enough to get back to business soon
- Government needs to be flexible in chaos
- Communities need leadership that is adaptable
- Staff need to know what they should do in an emergency situation - who is responsible as a first responder, where infrastructure is buried where possible (power, phone)
- Communities will need to be prepared to make tough decision made on land use

What makes a hazard resistant community?
- Hazard Mitigation Plans (pre and post disaster)
- Accurate maps, storm surge info, etc.
- Training of local officials
- StormReady Community
- Enhanced Bldg codes, etc.
- Smart and Safe Growth
- Coastal No Adverse Impact
- Relationships (partnerships) among local, state, and federal governments
- Preservation of Natural Protective Features
- Identification of risky areas
- Good leadership, in both the public and private sector

- Good coordination with emergency operation centers before, during and after a hurricane
- Communities with FEMA and OCRM coordination meetings with emergency managers
- Communities that offer charettes in every community that is small enough
- Communities where coastal program staff suspend daily routines to go work with other agencies and organizations (FEMA, NERRs) to provide information
- Communities need major updates (regularly/annually/daily) on maps, GPS coordinates, photos of homes, etc. GPS could be inputted into a permitting database for local governments (self contained) (COHIS?)
- Help communities know how to preserve trees or remaining natural features (e.g. live oaks)

What is the role of Coastal Management Programs in promoting hazard resiliency?

- Keep a coast wide focus; hazard issues go beyond a single locality
- Manage the natural protective features
- Need to communicate risk and vulnerability, and help others understand the implications of development decisions
- Conduct education and outreach, especially the benefits of mitigation
- Provide technical and planning assistance to local governments
- Participate in local hazard mitigation plans – fulfill coordination requirement by offering assistance ($)
- Participate in/Lead post-disaster redevelopment planning in communities
- See what tools the Coastal Service Center has, and understand what local communities need
- Develop a visualization of the effects of a storm like Katrina in local communities
- Develop a real-time modeling tool of storm effects
- Be present shortly after the event to help answer questions and coordination in communities
- Great leadership is huge (e.g. the governor of MS)
- Market a common message about protecting natural features without taking it to the extreme and incorporating hard engineered structures (e.g. levee construction)
- Use objective information to inform your message
- Keep in touch with the Corps of Engineers on emergency permitting procedures
- Have a message ready - communicate in media about repairs that are okay (MS-DMR docks)
- Work with and support other federal agencies that may need help
- Have good back up systems
- Produce technical tools
- Have a non-technical plan in advance, to be able to operate without technology
- Need knowledge from a historical perspective to know why and how things are done to recover (??)
- Try to get structures out of hazard prone areas
- Mentor/Educate staff to not repeat mistakes of the past
- Practice adaptive management, always using evaluation

What can NOAA do to support hazard resilient communities?
- NOAA can help organize interagency meetings at the state, regional, GOG (??) level to communicate what resources are available
- NOAA can encourage other federal agencies to coordinate more with state programs
- It would be useful if NOAA could provide hard copies of aerial photos just flown (since often affected areas don't have power or internet access to view them online)
- NOAA can help work with other feds (e.g. The National Guard) working at local level to get resources in the field right away
- Before hurricane season begins, NOAA can coordinate with the coastal states, CSO, USGS, and the civil air patrol to determine what areas to fly and how to best deliver the information (e.g. resolution, FTP/hardcopy, link to emergency management)
- Some photography could have a map overlay for hard copy, non-georeferenced data, somewhat like what Google Earth did with the imagery
- NOAA can assist with a national dialogue on the restoration of beaches as protective measures
- Make sure CZMA funds are still available for existing activities (permitting, etc.)
- Convene FEMA meeting to understand more about long term recovery
- Compile information on research and practices for post-disaster redevelopment (not recovery, but actually redevelopment)
- Continue to hone skills on communication of messages, and how to bend political will
- NOAA could host a discussion group on hazards on the CZM intranet web portal
- OCRM could try to identify additional resources to focus on resiliency
- NOAA could develop a searchable database for literature on resource management issues
- The Corps of Engineers is the federal agency responsible for reconstruction – NOAA/OCRM may not have a major role, like the states.