Appendix A

Adoption and Approval Letters

Appendix B

Planning Process Documentation

State Hazard Mitigation Planning Team (SHMPT)

In 2005 GEMA established a working task force of private, state and federal agency representatives, universities and other interested parties to makeup the SHMPT. The SHMPT is currently still in existence and is made up of many of the initial organizations involved. GEMA has no formalized group set up by charter to develop or review the GHMS; however, there is a core group within the HMD and several state agencies that assist in this task.

All members of SHMPT are continually invited to participate in the planning process and are provided with copies of meeting notes via email for those unable to attend. GEMA also holds individual meetings with state and federal agencies. Members of SHMPT are provided information on GEMA's website of HMD activities. GEMA continues to maintain working relationships with all SHMPT members in regard to planning and mitigation. These efforts take place in the form of quarterly interagency meetings in addition to any post disaster meetings. The role of these meetings in the update process is to allow all state agencies and other members to participate in the update of the State Hazard Mitigation Strategy. Essentially, at every meeting, GEMA staff present progress on the update process as well as seek input from members regarding each section of the plan. The input from the members consists of review and analysis of the 2008 approved strategy as well as suggestions and recommendations for the update.

Also, in an attempt to include as many agencies as possible at every meeting, a call-in option is made available during the update planning process. Therefore, agencies without the means to physically attend the meetings can stay apprised during the planning process by reviewing meeting notes as well as calling into the quarterly meetings via conference call.

SHMPT is currently made up of the following agencies and organizations:

Administrative Office of the Georgia Courts
American Red Cross
AT&T
BellSouth
Board of Regents of the University System of Georgia
Court of Appeals of Georgia
Federal Emergency Management Agency
Georgia Army National Guard
Georgia Board of Pardons and Parole
Georgia Building Authority
Georgia Bureau of Investigation
Georgia Commission on Equal Opportunity
Georgia Courts Automation Commission
Georgia Criminal Justice Coordinating Council
Georgia Department of Administrative Services
Georgia Department of Agriculture

Georgia Department of Audits and Accounts
Georgia Department of Banking and Finance
Georgia Department of Community Affairs
Georgia Department of Corrections
Georgia Department of Defense
Georgia Department of Early Care and Learning
Georgia Department of Economic Development
Georgia Department of Education
Georgia Department of Human Resources
Georgia Department of Juvenile Justice
Georgia Department of Labor
Georgia Department of Law
Georgia Department of Motor Vehicle Safety
Georgia Department of Natural Resources – Historic Preservation Division
Georgia Department of Natural Resources – Safe Dams Program
Georgia Department of Natural Resources – Floodplain Management
Georgia Department of Natural Resources – Coastal Resource Division
Georgia Department of Public Safety
Georgia Department of Revenue
Georgia Department of Technical and Adult Education
Georgia Department of Transportation
Georgia Department of Veterans Service
Georgia Emergency Management Agency
Georgia Employees' Retirement System
Georgia Environmental Facilities Authority
Georgia Forestry Commission
Georgia Housing and Finance Authority
Georgia Legislative Budget Office
Georgia Merit System
Georgia National Fairgrounds
Georgia Office of Homeland Security
Georgia Office of Planning and Budget
Georgia Office of Treasury and Fiscal Services
Georgia Ports Authority
Georgia Professional Standards Commission
Georgia Public Safety Training Center
Georgia Regional Transportation Authority
Georgia Secretary of State / Archives
Georgia Soil and Water Conservation Commission
Georgia State Fire Marshal
Georgia State Patrol
Georgia Student Finance Commission
Georgia Technology Authority
Georgia World Congress Center Authority
Insurance Commissioner's Office of Georgia
Jekyll Island State Park Authority

National Resource Conservation Service
National Weather Service
Peace Officer Standards and Training Council
State Board of Workers' Compensation
State Ethics Commission
State of Georgia Administrative Hearings
Stone Mountain Memorial Association
Subsequent Injury Trust Fund
US Army Corp of Engineers

The quarterly interagency meetings bring together all the agencies that want to assist in the planning process. Prior to each meeting minutes of the previous meeting are sent to all members via email. At the beginning of each meeting all members present and via conference call-in are asked if they have any questions or comments on the previous meeting notes. This way all members are kept abreast of SHMPT proceedings. SHMPT had initially met monthly, however, since the updated plan had been approved in March 2008 the group decided to meet on a quarterly basis. Each meeting is recorded in minutes which are provided to all SHMPT members via email after each meeting. A sign-in sheet is provided at each meeting to determine which members attended in person and a roll-call is taken of the members calling in via conference call.

One of the benefits of having the quarterly meetings is to have the ability to brief each of the state agency representatives on any new federal requirements. Another of the primary functions of these meetings is to reestablish working relations between federal, state and local agencies and to focus on hazard identification and assess each agency's overall ability and data inventory.

While the meetings are now referred to as "State Inter-Agency Meetings", these meetings sometimes include other interested parties such as non-profit organizations and private sector participants. These participants have included the American Red Cross, BellSouth, and AT&T, the Stone Mountain Memorial Association and the Business Executives for National Security Business Force. All agencies that participate in the state plan development and update process are given ample time and opportunities to review, analyze, and update information uncovered during the interagency meetings.

Georgia State Inter-Agency Hazard Mitigation Planning Meeting

July 8, 2010

Minutes of Meeting

Present

Greg Strenkowski, GFC
Frederick Trotter, DOAS
Eric McRae, ITOS
Lawton Brantley, ITOS
Ange Wheeler, ITOS
Terry Lunn, GEMA
Dee Langley, GEMA
Via Conference Call-In:
Alan Giles, DNR
Lee Whitesides, DOA
Chris Anderson, GEFA
Dan Clark, GEFA
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting via GoMeeting and thanked them for their time and participation. The meeting was hosted by ITOS at their offices in Athens, Georgia.

Updates from GEMA

a. **Recent Events**
   - With FEMA approval of Harris County's Hazard Mitigation Plan, every county in the State of Georgia has an initial approved plan. The process started in 2002 and is a monumental accomplishment for the Hazard Mitigation Division. In addition, 25 universities, seventeen state agencies and three federal agencies have submitted annexes also.
   - The HMA application period started in June and will run through December 3rd. Counties, municipalities and state agencies can take advantage of these grants for mitigation projects.
   - A freeze on the disaster relief fund continues due to stalled legislation and affects 70 project and planning applications here in Georgia.

b. FEMA News

- FEMA released the 2011 HMA Grant Guidance in June.

Agency Updates

a. Progress on Template
Dee asked all agencies in attendance and via GoMeeting that have not completed their annexes to call him at (404) 635-7516 for guidance, support and technical assistance. Also, please inform Dee of any changes to your annex so they can be included in the state plan update.

b. Other
GEMA is available to assist any agency with mitigation activities. If your organization is interested in mitigative activities and is not certain what qualifies, contact Dee Langley at (404) 635-7516.

State Hazard Mitigation Plan Update

a. Mitigation Action Status Matrix
Dee asked all agencies that have not completed their Update Mitigation Action Status Matrix to do so and send it to him. These will be included in the State Plan. If anyone has questions on how to complete the matrix, give Dee a call.

b. Timeline
Dee gave a short description of the timeline for the update of both the standard and enhanced plans. GEMA plans to submit the standard portion of the plan update to FEMA by the end of September and the enhanced portion by the end of December.

4/30	Cut-Off for Risk Data by ITOS
6/30	ITOS Information Provided to SHMPT for Comments
9/1	Place Portions of Standard Plan for Review by SHMPT on FTP Site
9/30	Submit Standard Plan Draft to FEMA
12/1	Place Enhanced Plan for Review by SHMPT on FTP Site
12/30	Submit Enhanced Plan Draft to FEMA
3/31	Standard Plan Approval by FEMA
4/15	State Adoption

c. Risk Assessment

Dee next introduced Mr. Lawton Brantley, GIS Production Manager with the Information Technology Outreach Services (ITOS) a Division of The Carl Vinson Institute of Government with The University of Georgia in Athens. Mr. Brantley

gave a description of what services ITOS had completed since our last meeting which can be seen in the following quarterly report:

ITOS activity for GEMA Hazard Mitigation Plan
Quarter Ending June 2010

- Pulled data from dynamic sources (GMIS and BLLIP) on April 30th. This was the cutoff date agreed upon for the plan update. This data was used in creation and or updating of ArcMap projects and the following maps and tables:
  - **Maps**
    - State Owned and Leased Facilities
    - Total Owned Properties
    - Average Composite Hazard Risk for Owned Properties
    - Total Composite Hazard Risk for Owned Properties
    - Total Leased Properties
    - Average Composite Hazard Risk for Leased Properties
    - Total Composite Hazard Risk for Leased Properties
    - Total Other Assets
    - Average Composite Hazard Risk for Other Assets
    - Total Composite Hazard Risk for Other Assets
    - Critical Facilities
    - Critical Facilities Located Within 100 or 500 Year Floodplain by HUC 8
    - Total Critical Facilities by HUC 8
    - Total Value of Critical Facilities by HUC 8
    - Repetitive Loss Properties
    - Highest Total Properties
    - Highest Total Payout
    - Highest Average Payout per Property
    - NFIP
    - Mitigated Properties
  - **Tables**
    - HUC 8 Watershed
      - Critical Facilities broken down by HUC 8 Watershed
      - NFIP broken down by HUC 8 Watershed
      - Mitigated Properties broken down by HUC 8 Watershed
      - Repetitive Loss Properties broken down by HUC 8 Watershed
    - HUC 10 Watershed
      - Critical Facilities broken down by HUC 10 Watershed
      - NFIP broken down by HUC 10 Watershed
      - Mitigated Properties broken down by HUC 10 Watershed
      - Repetitive Loss Properties broken down by HUC 10 Watershed
    - Hazard Scores
      - Updated Hazard Scores for Owned Properties
      - Updated Hazard Scores for Leased Properties
      - Updated Hazard Scores for Other Assets

- Acquired data for Class I and Class II dam locations from Georgia Safe Dams Program and created the following ArcMap projects and maps:
  - Dam Classifications (Location of all Class I and Class II dams in the state)
  - Dams Per County (Total number of Class I and Class II dams per county)
  - Class I Dams Per County
  - Class II Dams Per County
- Created additional Wind Hazard Map
- Made edits to maps that were discussed at June 16th meeting in Atlanta. These edits were primarily for Legend and Titles. The following maps were affected:
  - Tornado Events
  - Significant Changes to Hazard Scores
  - State owned and Leased Facilities
  - Repetitive Loss Properties
  - Highest Total Properties
  - Highest Total Payout
  - Highest Average Payout Per Property
  - Created new map to show Wind Events over 65 Knots from SVRGIS data
- Created table cataloguing changes to the maps and tables from the last Plan to this Plan
- Created table for Average Hazard Score by county
- Created table for Composite Hazard Score by county
- Created tables for Average Hazard score for HUC 8 and HUC 10 watersheds
- Created Tables for Composite Score for HUC 8 and HUC 10 watersheds
- Identified and made changes to Chapter 2 text for maps and tables that ITOS either updated or were new to this plan update.

All maps and tables listed in this document can be downloaded from ITOS's ftp site at this location:
ftp://ftp.itos.uga.edu/mapping/pick_up_files_here/GEMA/Quarter_5/

The meeting went very well and the information provided by ITOS was well received and greatly appreciated. We want to thank ITOS for hosting this meeting and especially the support of Mr. Eric McRae, Lawton Brantley and Ange Wheeler. Their GIS experience in updating the State Hazard Mitigation Plan has proven to be invaluable. We look forward to holding future meetings in Athens.

Next Meeting Schedule

The next quarterly Inter-Agency meeting will be held at GEMA headquarters beginning at 10:00am on October 8th, 2010. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Inter-Agency Hazard Mitigation Planning Meeting

October 21, 2010

Minutes of Meeting

Present

Randy Clayton, DHS
Kelly Keefe, GEMA
D'Arcy Burgess, GEMA
Dee Langley, GEMA
Via Conference Call-In:
Gary McGiboney, DOE
Danny Thompson, GPA
Alan Giles, DNR
Brian Hardeman, DJJ
Terry Lunn, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. The previous meeting notes were approved.

Updates from GEMA

a. Recent Events

- Current Plan Update Status:
  - 5 Updated Plans Approved by FEMA
  - 5 Plans under FEMA review
  - 9 Plans under GEMA review
  - 73 Plans under development
- Currently securing signatures on Grantee/Subgrantee Agreements for the approved grants in DR 1833 and DR 1858
- The application deadline for HMA 2011 (PDM, FMA, RFC & SRL) applications closes today

b. FEMA News

- The freeze on the disaster relief funds by FEMA was removed

State Hazard Mitigation Plan Update

a. Standard Hazard Mitigation Plan Submitted to FEMA

The initial draft of the Standard Hazard Mitigation Plan was submitted by GEMA to FEMA on September 30, 2010 for review and approval. FEMA typically takes 45 days to review the plan and provide either an approval or items needing further discussion.

b. Timeline

Dee gave a short description of the timeline for the update of both the standard and enhanced plans. GEMA plans to submit the enhanced portion of the plan by the end of December.

12/1 Place Enhanced Plan for Review by SHMPT on FTP Site
12/30 Submit Enhanced Plan Draft to FEMA
3/31 Standard Plan Approval by FEMA

c. Risk Assessment

We really appreciated all the hard work the members of ITOS contributed toward the completion of the risk assessment and vulnerability sections of the state plan. The following is a list of items they worked on in the past quarter.

ITOS activity for GEMA Hazard Mitigation Plan
Quarter Ending September 2010

- Finalized text updates for Chapter 2.
- Updated Hazard Map changes spreadsheet to show final updates and new maps that have occurred since the previous plan update.
- Received updated data for Rep Loss properties and produced updated maps:
  - D.7 Repetitive Loss
  - D.8 Highest Total Properties
  - D.9 Highest Total Payout
  - D.10 Highest Average Losses per Property
  - D.11 Highest Average Payout per Property
- Updated HUC 10 and HUC 8 Watershed Spreadsheets with final Repetitive Loss data.
- Received data for Severe Repetitive Loss properties and produced map:
  - D.25 Severe Repetitive Loss Properties
- Received updated data for Mitigated Properties and produced final map:
  - D.24 Mitigated Properties

- Produced map for Local Plan Updates:
  - E.9 Local Plan Update
- Produced map for Technical College System of Georgia annex.
- Received data for Presidential Disaster Declaration Claims and produced maps:
  - A.5 PDD Claims
  - A.6 PDD Claims Average
- Had meetings with GEMA on July 6th and August 13th to review and finalize these deliverables.

Agency Updates

a. Progress on Template

Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance. Also, please inform us of any changes to your annex so they can be included in the state plan update.

b. Other

GEMA is available to assist any agency with mitigation activities. If your organization is interested in mitigative activities and is not certain what qualifies, contact Dee Langley at (404) 635-7516.

Dee mentioned that ITOS supplied hazard risk analysis data on the ftp site which any agency can use to update or create their annex. The ftp site is located at:

ftp://ftp.gema.ga.gov/PublicFTP/pubs/HazMit/

Next Meeting Schedule

The next quarterly Inter-Agency meeting will be held at GEMA headquarters beginning at 10:00am on January 6th, 2011. A call-in feature will be provided for all agencies unable to attend in person. We plan to review any edits to the State Plan from FEMA and discuss any updates FEMA requires concerning state agency annexes.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Inter-Agency Hazard Mitigation Planning Meeting

January 6, 2011

Minutes of Meeting

Present

Brian Hardeman, DJJ
Stephen Kuhn, GA DoD/National Guard
Greg Strenkowski, GFC
Eric Mosley, GFC
Terry Lunn, GEMA
Dee Langley, GEMA
Via Conference Call-In:
Raymond Noel, DCA
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. The previous meeting notes that had been sent to all members via email were approved.

Updates from GEMA

a. Recent Events

- Current Plan Update Status:
  - 10 Updated Plans Approved by FEMA
  - 5 Plans under FEMA review
  - 13 Plans under GEMA review
  - 67 Plans under development
- Currently securing signatures on Grantee/Subgrantee Agreements for the approved grants in HMGP 1833 and 1858
- The application deadline for HMGP 1858 applications closes March 23, 2011
- All (23) HMGP 1833 planning grants have been approved by FEMA
- 29 of the HMGP 1858 planning grants have been approved, with one under GEMA Review
- The remaining 42 planning grant applications under HMGP 1858 are to be sent out in February and submitted to FEMA prior to the March 23rd deadline

- GEMA will also be submitting the grant application to update the standard and enhanced plans in 2014, along with the new contracts for ITOS to update the risk and vulnerability sections of the plan, and maintain and upgrade GMIS

b. FEMA News

FEMA notified GEMA in December via email that the procedures for reviewing the enhanced portion of our plan had been changed. According to FEMA, if any state with enhanced plan status, submitted their enhanced plan update for review after 12/31/2010, the plan would be reviewed by the Regional Staff, not by a National Review Panel. This meant that the FEMA Region IV staff in Atlanta would be reviewing Georgia's enhanced plan update. This was welcome news to GEMA since this is the same staff that just approved the standard plan with no questions.

State Hazard Mitigation Plan Update

a. Standard Hazard Mitigation Plan Approved by FEMA

The Standard Hazard Mitigation Plan was approved by FEMA on January 4, 2011. FEMA had no review items. The Standard Hazard Mitigation Plan will be in effect for three years beginning March 31, 2011. We remain under the 2008 plan until March 31st.

b. Enhanced Plan Submittal

The Enhanced Plan will be submitted to FEMA for review in mid-January.

Agency Updates

a. Progress on Template

Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance. Also, please inform us of any changes to your annex so they can be included in the state plan update.

b. Annex Updates

All state and federal agencies with annexes in the 2008 State Plan were emailed a copy of their annex and any other information about their agency that was included in the plan, for update. As of the time of this meeting several agencies had reviewed and updated their plans. Dee also mentioned that a new mitigation effort support letter signed by each agency head was needed with the annex update.

c. Annex Updates

Dee mentioned that ITOS supplied hazard risk analysis data on the ftp site which any agency can use to update or create their annex. The ftp site is located at:
ftp://ftp.gema.ga.gov/PublicFTP/pubs/HazMit/

Next Meeting Schedule

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on April 7th, 2011.

A call-in feature will be provided for all agencies unable to attend in person. We plan to review any edits to the enhanced portion of the State Plan from FEMA and discuss any updates FEMA requires concerning state agency annexes.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Inter-Agency Hazard Mitigation Planning Meeting

April 7, 2011

Minutes of Meeting

Present

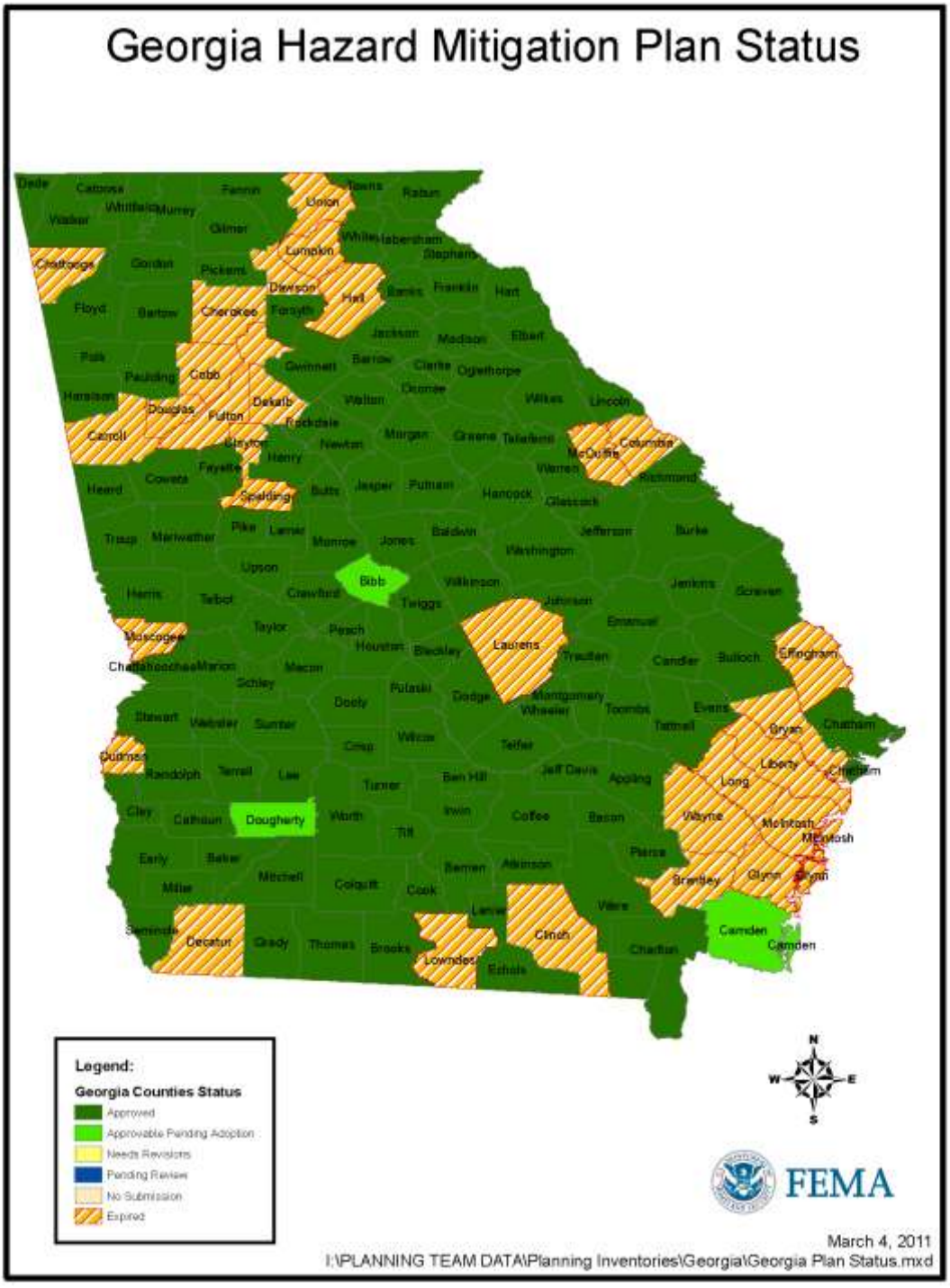
Brian Hardeman, DJJ
Eric Mosley, GFC
Terry Lunn, GEMA
Dee Langley, GEMA
Via Conference Call-In:
Sophi Thigpen, GSP
Raymond Noel, DCA
Mike Perkins, ITOS
Daniel Smith, ITOS
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. The previous meeting notes that had been sent to all members via email were approved.

News from GEMA

a. **Recent Events**
   - Current Plan Update Status:
     - 15 Updated Plans Approved by FEMA
     - 3 Plans Approved Pending Adoption
     - 2 Plans under FEMA review
     - 14 Plans under GEMA review
     - 58 Plans under development
     - 4 Plan closeouts
   - Currently we are securing signatures on Grantee/Subgrantee Agreements for the approved grants in HMGP 1858
   - All (42) HMGP 1858 planning grants have been approved by FEMA


Georgia Hazard Mitigation Plan Status
Legend:
Georgia Counties Status
Approved
Approvable Pending Adoption
Needs Revisions
Pending Review
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In February, the Hazard Mitigation Planning Team proudly accepted the Governor's Commendation for Excellence in Customer Service award, for their efforts in helping all 159 counties in Georgia, develop their initial Hazard Mitigation Plans and the award by FEMA of Enhanced State status. For the Hazard Mitigation Division's efforts in the development and management of its grants management system and the development of the enhanced portion of the State Hazard Mitigation Plan, the State was awarded the status of "Enhanced State" by FEMA. This award enables the state to receive 33% more HMGP funding in the event of presidentially declared disasters. Over 70 counties involved in the spring and fall floods of 2009, received $9.8 million more in HMGP funding because of this award. Georgia is one of only ten states in the nation to hold this status.

Pictured L to R: Charley English, Director, Georgia Emergency Management Agency; Alan Sloan, Planner; Dee Langley, Planning Program Manager; Nathan Deal, Governor, Kelly Keefe, Planner; Terry Lunn, Hazard Mitigation Division Director; Scott Sherman, Planner.

b. FEMA News

Terry Lunn, Alicia Soriano and Alan Sloan attended the 2011 HMA Summit in San Deigo, CA. The Summit covered a number of subjects including the HMA Grant Guidance for FY 2012, available training programs through EMI, mitigation program updates and states best practices. There was also discussion on the new benefit cost analysis training program, how to plan for tsunamis, public assistance & mitigation integration, and the new grant application and review processes.

State Hazard Mitigation Plan Update

a. Standard Plan

The Standard Plan was approved on January 4, 2011 by FEMA

b. Enhanced Plan

The Enhanced Plan was approved by FEMA on March 2, 2011. The Strategy can be viewed online at:
http://www.gema.ga.gov/gemaohsv10.nsf/1c3c181c58c9b3f28525771b0058b098/51af5b14046c28658525787f00558b56?OpenDocument

Agency Updates

a. Progress on Template

Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance. Also, please inform us of any changes to your annex so they can be included in the state plan update.

b. Annex Updates

All state and federal agencies with annexes in the 2008 State Plan were emailed a copy of their annex and any other information about their agency that was included in the plan, for update. Dee also mentioned that a new mitigation effort support letter signed by each agency head was needed with the annex update.

c. Annex Updates

Terry Lunn and Dee Langley met with members of ITOS on 3/29/2011, to discuss the inclusion of BLLIP data into GMIS. We identified the information in BLLIP that can be used to develop critical facilities in GMIS by department and university. This information can be used by the counties to better develop their hazard analysis.

Next Meeting Schedule

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on October 13, 2011.

A call-in feature will be provided for all agencies unable to attend in person. We plan to review any edits to the enhanced portion of the State Plan from FEMA and discuss any updates FEMA requires concerning state agency annexes.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Inter-Agency Post-Disaster Hazard Mitigation Planning Meeting

July 21, 2011

Minutes of Meeting

Present

Brian Hardeman, DJJ
Tom Shillock, DNR
Michael Lankford, DOT
Alan J. Giles, DNR
Peter Adams, DPS
Randy Clayton, GOHS-SHSP
Chris Foley, DPH
Terry Lunn, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Via Conference Call-In:
Jennifer Kline, DNR
Kathy Consuelo,
Windy Stewart, DHR
Raymond Noel, DCA
Bruce Holmes, BOR
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. After reviewing the past meeting minutes, Raymond Noel, mentioned that there were no names under the picture with the Governor and that the section FEMA News had not been completed. The previous meeting notes that had been sent to all members via email were approved. The minutes were corrected and emailed to all members with the corrections.

This meeting was called to adhere to the maintenance guidelines identified in Chapter 5 of the State Hazard Mitigation Plan. Per Section 5.1, Monitoring, Evaluating, and Updating the Plan, on Page 196; "The post-disaster review occurs on the occasion of each state of emergency, state disaster declaration, or federal disaster declaration within the State of Georgia in order to determine any necessary updates to accommodate the impacts of the disaster and the potential new data…the Hazard Mitigation Division, accompanied by supporting state agencies, reviews

the disaster-related strategies within the hazard mitigation plan to determine if any mid-course adjustments are necessary." The severe storms, flooding and tornados we experienced in April resulted in a Presidential Declaration (HMGP 1973), which affected 26 counties. The following are notes from that meeting:

DR 1973 – Information & Activities

a. Overview of Disaster - Recent Events

- Description of Activities (SOC & JFO)
  Dee Langley conveyed GEMA's appreciation to all State and Federal Agencies, private non-profit organizations, and volunteers for their efforts, sacrifice and participation in the events during and after the April tornado event. Without your involvement, the local communities would not have been able to respond to the needs of their citizens. We came together as a state, with a practiced plan of action and the resources to provide timely assistance for numerous counties in northern and central Georgia when they needed us most. The activation went very smoothly.
- Training / Application Briefings
  The Project Section of the Hazard Mitigation Division, in coordination with FEMA, held four Safe Room workshops throughout the affected areas. These training sessions were well received and attendance was high. GEMA is working to get the cost raised for safe room construction in Georgia. Currently, FEMA will only allow $3,800 per residential safe room based on cost-effective requirements. This is much less than what is listed in other states.

  There were questions as to the safety of the doors on FEMA funded safe rooms. Mr. Lunn advised the missile impact test currently involves a fifteen (15) pound 2x4 traveling at approximately 100 miles per hour. Also, safe rooms cannot be placed in flood prone or storm surge areas. Brian Hardeman questioned if safe room can be placed in a lease building. Mr. Lunn advised that it is possible. Every prefabricated safe room has its own serial number to prove certification.

b. Specific Information Concerning HMGP

Terry Lunn presented a PowerPoint presentation describing the events that occurred and the damages resulting from the April storm. Also, he provided information on the HMGP grant program and funding availability. (See Attached PowerPoint Presentation in PDF Format)

State Plan Update

a. **Review State Plan Information on Tornados - Update**
On the last two slides of the PowerPoint presentation, we identified a number of areas within the state plan that could be updated with information from this disaster. Dee Langley and the Planning Team will provide recommended updates for the SHMPT to review and approve at our next meeting.

b. **Mitigation Activities – Local Governments**
The information generated from the above updates will be submitted for inclusion in the next state plan update, so that this information can be used to update risk and vulnerability information for use by the counties in the renewal of their Hazard Mitigation Plans.

c. **Review Status of Individual Agency Annexes**
Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance. Dee also asked that all agencies review their annex to see if any changes or addition of proposed projects are necessary. Also, remember that if you would like to apply for a project, check to make sure it is listed in your annex.

Michael Lankford, with the Department of Transportation confirmed that one of their maintenance facilities in Dade County was damaged in the storms. Brian Hardeman, with the Department of Juvenile Justice stated that one of their leased buildings was destroyed also.

d. **Process for Applying for Disaster Grants - Eligibility**
See attached PowerPoint Presentation

Next Meeting Schedule

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on October 13, 2011, in the Executive Conference Room in Building 2.

A call-in feature will be provided for all agencies unable to attend in person. We plan to review proposed changes and updates to the State Plan as a result of the most recent disaster and comments from our last meeting.

Comments and Questions

Dee introduced our newest Planner and member of the Hazard Mitigation Planning Team, Mr. Brian Laughlin. Brian comes to us from California where he just finished his Masters in City Planning at California Polytechnic State University at San Luis Obispo. We are very happy to have

Brian as a member of our team and we are looking forward to his assistance with our recent wealth of grants.

Dee also introduced Ms. Virginia Dixon, our Administrative Assistant. We have been looking forward to Virginia joining our team. She is replacing Ms. D'Arcy Burgess, who accepted another position within GEMA. We appreciated all the help D'Arcy provided the team and wish her well in her new position.

Jennifer Kline mentioned that funding for post disaster redevelopment plans, small construction, and research for coastal counties was available through October 1, 2011.

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

October 13, 2011

Present

Peter Adams, DPS
Randy Clayton, GOHS-SHSP
Chris Foley, DPH
Alan J. Giles, DNR/EPD
Michael Lankford, DOT
Eric Mosley, GFC
Tom Shillock, DNR
Alice Zimmerman, GOPB
Virginia Dixon, GEMA
Kelly Keefe, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Terry Lunn, GEMA
Shana Slay, GEMA
Via Conference Call-In:
Frank Dillard, Ga DHS
Mike Gilmer, DPS
Terry Jackson, DCA
Jennifer Kline, DNR/CRD
Raymond Noel, DCA
Lee Whiteside, GDOA
Alan Sloan, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the April and July meetings were approved.

News from GEMA

a. **Local Plan Status**

Dee Langley provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have approved plans, plans approvable pending adoption, plans that

need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process. After learning numerous lessons with the 1686 grant, future maps should have a marked reduction in the number of expired plans. In each grant following 1686, the requested grant periods were set at 3 years and the grant was in most cases approved two years prior to the current plans expiration date. This gives the counties time to update their plan while the current plan is still in effect.

b. DR 1973 Application Update

In an effort to use the funding available for local plan updates, the HazMit Planning Team identified ten counties to begin application development. The counties chosen have plans that will expire in 2014. We will be preparing the applications in January and forwarding them to the counties for review and signatures. We anticipate all ten plans being returned and entered into NEMIS by mid or late February. The applications are due to FEMA by mid-April. Per Terry Lunn, there were 42 project pre-applications received and all are under review. The disaster generated approximately five million in federal funds for projects and the State received requests for approximately eight million in applications.

c. HMA 2012 Application Update

The application cycle for non-disaster PDM grant funds ends December 2nd. Six applications were received in this cycle to date.

d. FEMA News

Dee Langley passed out a sheet describing the new Local Mitigation Plan Review Guide and the new Hazard Mitigation - Application Review Tool (ART), and web addresses to each. FEMA is streamlining their plan review process and updating their crosswalk to make it more user-friendly. The new review guide will not be required for use until October 1, 2012, however, GEMA plans to introduce it before the deadline. The following is the information on the handout.

Local Mitigation Plan Review Guide

The Local Mitigation Plan Review Guide provides guidance for Federal and State officials responsible for reviewing Local Mitigation Plans in a fair and consistent manner, and to ensure approved Local Mitigation Plans meet the requirements of the Stafford Act and Title 44 Code of Federal Regulations (CFR) §201.6.1. This Local Mitigation Plan Review Guide is FEMA's official source for defining the requirements of original and updated Local Mitigation Plans.

Location:
http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4859

Hazard Mitigation Assistance (HMA) Application Review Tool (ART)

FEMA Hazard Mitigation Assistance (HMA) has introduced a new document, the HMA Application Review Tool (ART) Version 1.0, which has a two-fold purpose. It is both an instrument to facilitate FEMA's review of HMA sub-applications as well as a transparent reference to guide State Applicants and local communities in developing more complete HMA grant applications. The goal of the HMA ART is to further reduce the uncertainty of Applicants and FEMA reviewers on the level of completeness of an application. The ART is a Microsoft Excel file which allows the user to enter data. For those who do not have Excel, a PDF file is available to download and print.

http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4729

FEMA would like to see more safe room projects. GEMA has received five (5) safe room applications in the current HMA cycle. We expect more to be submitted.

State Hazard Mitigation Plan Update Kick-Off

a. 2014 Kick-Off Presentation

This is the Kick-Off Meeting for the update of the 2014 State Hazard Mitigation Strategy.

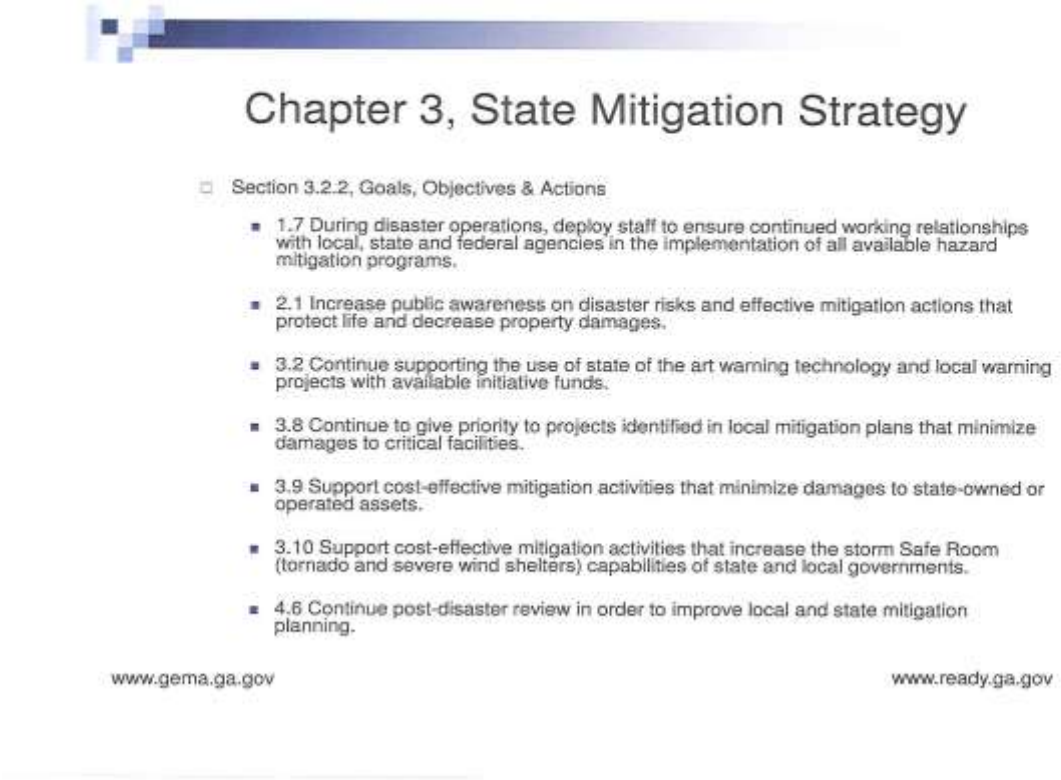
Why are we doing this?

- Current Strategy is in effect from 4/1/2011 thru 3/31/2014
- Federal law requires that the state update their strategy every 3 years
- Awarded HMGP 1858-092 by FEMA on 1/4/2011
- Contracted with ITOS for risk and vulnerability update and maintenance of the GMIS system over next 3 years
- Next update due to FEMA 6 months prior to expiration of plan (10/1/2013)
- 5 Federal mitigation project funding programs GEMA works with:
    - Hazard Mitigation Grant Program (HMGP) = post disaster
    - Pre-Disaster Mitigation Competitive (PDM-C) = annual grant program
    - Flood Mitigation Assistance (FMA) = annual grant program
    - Repetitive Flood Claims (RFC) = annual grant program
    - Severe Repetitive Loss (SRL) = annual grant program
- Disaster Mitigation Act of 2000 (DMA2K) requires an approved state plan to be in place for all funding programs
- Emphasizes a proactive approach to emergency management – prevent damages before the disaster
- There may be other grants that also require a mitigation plan to be in place
- Long term goal is to reduce disaster losses (life, property & economy)

What is my part?

- State Agencies
  - Participate in planning process
  - Prepare and/or update your annexes
    - Review prior hazard history
    - Develop and prioritize mitigation activities
    - Secure updated letter of commitment from your agency head
- Hazard Mitigation Division
  - Oversee update and development of State Strategy
  - Hold Quarterly and Post-Disaster meetings
  - Prepare update for FEMA review
  - Keep all SHMPT members appraised of actions

The following is a list of the areas within the State Plan that are scheduled to be updated following the recent tornado disaster. All members were provided a copy of the suggested changes to the State Plan in each of these areas for their review and approval.



Also, the chart listing the updates to the Objectives and Action Steps in Chapter 3, was given to all members for review.

A Gantt Chart Timeline was given to all members depicting the time it will take to complete each portion of the update process according to the identified tasks.

b. ITOS

i. Update Risk and Vulnerability

A copy of the latest contract with ITOS to update the Risk and Vulnerability sections of the State Plan was provided to the members.

ii. Update and Maintain GMIS

Also, a copy of the description of how ITOS will maintain and update the GMIS system was attached.

The following is a copy of the contract with ITOS for the update of the Risk and Vulnerability information in the State Plan and the update of the GMIS system.

State Hazard Mitigation Plan Update

The activities and estimate provided here covers work from October 2011 thru March 2014.

ITOS will assist in the update of the State Hazard Mitigation Plan using the 2010 plan as a starting point. (The attached document "Layers Used in Hazard Mitigation Maps" lists the maps and projects that were used in the 2011 plan that will be updated in the next plan by ITOS.) Maps, tables, and charts produced for the 2014 plan will be updated with the latest available data sources pertinent to the subject.

ITOS will continue to identify and evaluate in conjunction with GEMA any new Hazard data that may not have been used in previous plans that are deemed to improve upon analysis of previous plans.

ITOS will assist in the review and update of the wording of plan sections in the areas of risk assessment and other areas that have need of a GIS data component.

All GIS data acquired and produced during the plan update will be provided to GEMA at the conclusion of the plan update. This includes providing the original ArcMap documents that were created for all original maps produced in the plan.

ITOS will provide onsite technical assistance when necessary to include attendance of meetings with stakeholders and act as GIS expert for the purposes of this project. This does not include providing onsite assistance during disasters or being on call 24/7.

GMIS Upgrades and Hosting

The activities and estimate provided here covers work from October 2011 thru March 2014.

ITOS will continue to provide maintenance and support for the current GMIS web application while developing a new version of the GMIS web application in parallel. The new version will utilize newer technologies that will allow for greater flexibility in long-term code maintenance and enhancements. The new GMIS will also include a new web mapping component that works with most modern web browsers. The new web mapping technology also allows for greater flexibility in code maintenance and enhancements. All functionality that exists in the current GMIS will be carried over into the new version. Time will also be spent with GEMA staff to determine new functionality that could be added to the GMIS at this time such as expanded reporting and online help. ITOS will continue to provide support and maintenance to the enhancements and modifications made to the BLLIP system that provide BLLIP data feeds to the GMIS.

Hosting services for the GMIS system, both current and new (after it has been deployed), will be provided as a part of this agreement through March 31, 2014.

The inclusion of BLLIP data into GMIS by ITOS has been completed and can be seen in GMIS.

Agency Updates

a. Progress on Templates
Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance.

b. Agency Meetings and Support
We are available for meetings with any interested agencies needing help with the development of their plan.

c. Other

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, January 12, 2012, in the Executive Conference Room in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

January 12, 2012

Present

Tom Shilloch, DNR
Wendy Stewart, DHS
Daniel Esoe, GDAgr
Stephen Kuhn, Ga Nat'l Guard
Michael Lankford, DOT
Tom Shillock, DNR
Eric McRae, ITOS
Lawton Bentley, ITOS
Kelly Keefe, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Terry Lunn, GEMA
Shana Slay, GEMA
Via Conference Call-In:
Bruce Holmes, BOR
Christine Wiseman, SOS/Archives
Alan J. Giles, DNR/EPD
Terry Jackson, DCA
Jennifer Kline, DNR/CRD
Raymond Noel, DCA
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the October 13, 2011 meeting were approved and adopted.

News from GEMA

a. **Local Plan Status**

At the current time, of the 142 grants that were developed to update county hazard mitigation plans, 33 have been approved by FEMA, 9 are under FEMA

review, 6 are under GEMA review, 71 are in the update process, and 20 are setting up their kick off meetings or hiring a consultant. Dee also provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have approved plans, plans approvable pending adoption, plans that need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process.

Brian Laughlin demonstrated his expertise in webpage design by updating the Hazard Mitigation Division's portion of GEMA's webpage to provide a better description of what we do, the tools we have to get the job done, and information that helps counties in the update of their plans. You can check out these updates by going to the GEMA webpage at: www.gema.ga.gov. Once on the page, select the Mitigation tab and follow the links to the planning section. We welcome any comments or suggestions in regard to the information provided and the way the pages are designed.

b. Grant Application Status

i. HMGP 1973

1. Terry Lunn said that there were 42 project pre-applications received and reviewed. Applicants have been notified and applications are under development with a grant deadline of 2/27/2012. The 1973 disaster generated approximately five million in federal funds for projects and the State received requests for approximately eight million in applications.
2. The HazMit Planning Team is preparing ten HMGP 1973 application packages for the next priority group of counties. The counties chosen have plans that will expire in 2014. We began preparing the applications this week and will be forwarding them to the counties for review and signatures next week. We anticipate all ten plans being returned and entered into NEMIS by mid or late February. The applications are due to FEMA by mid-April.

ii. HMA 2012

1. The application cycle for non-disaster PDM grant funds ended December 2nd. Three applications were received and submitted to FEMA for funding consideration.

c. Silver Jackets Pilot Project Activities

i. Terry Lunn informed the group that the Silver Jackets program awarded a grant to Georgia through the Corps of Engineers for $100,000. The objective of the project is to create a library of flood inundation maps along the Chattahoochee River in Fulton and Cobb Counties at the Vining's gauge that can be used with NWS flood forecast and USGS real-time stream flow data to provide, in near time, maps showing detailed predicted areas and depth of flooding in the basin. The maps can also provide emergency managers and the public with detailed estimates of flood inundation over a range of river stages. This can be very valuable information in planning evacuation routs and providing emergency services.

FEMA News

Recently, there has been a delay in the review process at FEMA of local hazard mitigation plans due to funding shortages and budget issues in Congress. The planning section in Region IV sent its entire plan review team of six PSA's home indefinitely last October. Six of our local plans sent up for review were affected by this unfortunate situation. FEMA has a directive to review all plans within 45 days, however, they were unable to meet this due to the lack of plan reviewers. Of the six plans that were affected, 3 have been reviewed.

Mr. Clay Saucier, Branch Chief of the Hazard Mitigation Assistance Branch in Region IV, retired at the end of December after 30 years of federal service with the last 12 years in mitigation. Mr. Ernest E. Hunter is currently the Acting Branch Chief and has a good deal of experience having worked in mitigation since 1992. The Hazard Mitigation Assistance Branch provides technical support on non-planning grant applications and approvals.

In early November FEMA held its Region IV Workshop in Atlanta at the Hyatt Regency Hotel. It was called the Partners in Mitigation Workshop. Tom Shillock and Alan Giles with DNR, each gave their take on the workshop from DNRs perspective. Their primary focus was on the introduction of Risk MAP and the products it planned to provide counties and emergency managers.

Dee Langley informed the group that the Planning Team is discussing the implementation of the new Local Mitigation Plan Review Guide and the new Hazard Mitigation - Application Review Tool (ART), into its plan update process by October 1, 2012. FEMA is streamlining their plan review process and updating their crosswalk to make it more user-friendly. The following is information on each of the documents.

Local Mitigation Plan Review Guide

The Local Mitigation Plan Review Guide provides guidance for Federal and State officials responsible for reviewing Local Mitigation Plans in a fair and consistent manner, and to ensure approved Local Mitigation Plans meet the requirements of the Stafford Act and Title 44 Code of Federal Regulations (CFR) §201.6.1. This Local Mitigation Plan Review Guide is FEMA's official source for defining the requirements of original and updated Local Mitigation Plans.

Location:
http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4859

Hazard Mitigation Assistance (HMA) Application Review Tool (ART)

FEMA Hazard Mitigation Assistance (HMA) has introduced a new document, the HMA Application Review Tool (ART) Version 1.0, which has a two-fold purpose. It is both an instrument to facilitate FEMA's review of HMA sub-applications as well as a transparent reference to guide State Applicants and local communities in developing more complete HMA grant applications. The goal of the HMA ART is to further reduce the uncertainty of Applicants and FEMA reviewers on the level of completeness of an application. The ART is a Microsoft Excel file which allows the user to enter data. For those who do not have Excel, a PDF file is available to download and print.

http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4729

State Hazard Mitigation Plan Update

a. New Contract with ITOS

Dee introduced Eric McRae and Lawton Brantley who gave a brief description of the agreement and their plans for 2012. They each described the items ITOS will perform for the update of the GMIS system to a new platform, and the information they will provided for the state plan update in regards to risk and vulnerability to the state.

State Hazard Mitigation Plan Update

ITOS will assist in the update of the State Hazard Mitigation Plan using the 2010 plan as a starting point. (The attached document "Layers Used in Hazard Mitigation Maps" lists the maps and projects that were used in the 2011 plan that will be updated in the next plan by ITOS.) Maps, tables, and charts produced for the 2014 plan will be updated with the latest available data sources pertinent to the subject. ITOS will continue to identify and evaluate in conjunction with GEMA any new Hazard data that may not have been used in previous plans that are deemed to improve upon

analysis of previous plans. ITOS will assist in the review and update of the wording of plan sections in the areas of risk assessment and other areas that have need of a GIS data component. All GIS data acquired and produced during the plan update will be provided to GEMA at the conclusion of the plan update. This includes providing the original ArcMap documents that were created for all original maps produced in the plan. ITOS will provide onsite technical assistance when necessary to include attendance of meetings with stakeholders and act as GIS expert for the purposes of this project. The activities and estimate provided here covers work from October 2011 thru March 2014.

GMIS Upgrades and Hosting

ITOS will continue to provide maintenance and support for the current GMIS web application while developing a new version of the GMIS web application in parallel. The new version will utilize newer technologies that will allow for greater flexibility in long-term code maintenance and enhancements. The new GMIS will also include a new web mapping component that works with most modern web browsers. The new web mapping technology also allows for greater flexibility in code maintenance and enhancements. All functionality that exists in the current GMIS will be carried over into the new version. Time will also be spent with GEMA staff to determine new functionality that could be added to the GMIS at this time such as expanded reporting and online help. ITOS will continue to provide support and maintenance to the enhancements and modifications made to the BLLIP system that provide BLLIP data feeds to the GMIS. Hosting services for the GMIS system, both current and new (after it has been deployed), will be provided as a part of this agreement through March 31, 2014. The activities and estimate provided here covers work from October 2011 thru March 2014.

Lawton performed a demonstration of the steps each of the state agencies can use to develop a hazard score and map of their critical facilities listed in BLLIP. This information can be included in their agency annex.

b. Program Integration

i. GFC – Kick Off Meetings

Greg Strenkowski and Eric Mosley with the Georgia Forestry Commission (GFC) met with the hazard mitigation planning team at GPSTC in Forsyth to discuss how our two programs are alike and how we could marshal our resources to better serve the counties. GFC is in the process of developing County Wide Preparedness Plans (CWPP) for 140 counties throughout Georgia. The risk and vulnerability sections of these plans are exactly what we are looking for in the

development of county's wildfire sections of their local hazard mitigation plans. We have invited representatives of GFC to join in our local plan update kick-off meetings to inform the counties of their involvement in the plan update process. So far, the counties have looked very favorably on the joint introduction of our programs.

ii. DCA – Plan Integration

Terry Jackson with DCA described how DCA and the Office of Planning and Environmental Management (OPEM) received funding from the US Department of Housing and Urban Development (HUD), through the Disaster Recovery Enhancement Fund (DREF) to supplement Georgia's CDBG Disaster Recovery allocation following the presidentially declared disasters in 2008. These funds were specifically designated for activities in the area of Forward Thinking Land Use and will be used for activities and products to assist local governments in preparing for future disaster mitigation and resilience. Two key components are to increase disaster mitigation education and awareness and to enhance consistency amongst various required planning documents.

Terry also said that he plans to initiate a partnership training program, in cooperation with FEMA and GEMA, to improve the technical qualifications of Regional Commissions (RC) and local government decision makers who craft the local hazard mitigation plans. FEMA's HAZUS training program consists of a minimum of three special HAZUS classes for the "Trained Professional" track, and/or four such classes for the "Practitioner" track. One of our grant goals is to provide during 2012 these classes in Georgia so that we can fully certify all Regional Commission staff likely to be developing critical planning documents. We will also invite local government staff from our study's target communities to participate in this initial training. After the RC staff and these initial communities are trained we would continue the training series and open the training to all local government staff and others.

Terry Lunn has been selected to join a task force developed by DCA and the State Codes Advisory Committee (SCAC), to review the currently adopted state minimum standard codes, including the International Building Code and the International Residential Code and to look for opportunities to improve any provisions relating to disaster resilience. In particular, the task force will review specific provisions relating to hurricane, tornado and flood resistant construction. The expected outcome of this task force is to produce an appendix to the state minimum standard codes. The appendix will contain increased construction

requirements for disaster-resilience and be made available for adoption in all disaster prone areas.

iii. **DNR – Coastal Resources**
Jennifer Kline gave a short introduction of her division's viewpoint of Sea Level Rise and its effects on Georgia and its wetlands. Jennifer and Jill Andrews have a meeting scheduled in February, with Dee and Terry to discuss ways to include this data into the state and local hazard mitigation plans near the coast. Also, we plan to discuss the development of a 5 year post-disaster strategy similar to that of the State of Florida, for Georgia's coastal communities.

Agency Updates

a. Progress on Templates

i. Dee mentioned that the Planning Team has begun a review of state agency template to determine if there are ways to make the development of agency plans a little easier, yet have the necessary information. He mentioned that we don't want the development of an agency plan to become a paperwork exercise. Yet a document each agency can use when disaster strikes. With the new BLLIP data in GMIS, agencies can easily identify their critical facilities and determine their overall vulnerability to various disasters.

ii. Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance.

b. Agency Meetings and Support

All members of the Planning Team are available for meetings with any interested agencies needing help with the development or update of their plan.

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, April 5, 2012, in the Executive Conference Room in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

April 5, 2012

Present

Tom Shillock, DNR
Wendy Stewart, DHS
Michael Lankford, DOT
Dee Langley, GEMA
Brian Laughlin, GEMA
Virginia Dixon, GEMA
Via Conference Call-In:
Bruce Holmes, BOR
Christine Wiseman, SOS/Archives
Alan J. Giles, DNR/EPD
Terry Jackson, DCA
Jennifer Kline, DNR/CRD
Raymond Noel, DCA
Alan Sloan, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the January 12, 2012, meeting were approved and adopted.

News from GEMA

a. **Local Plan Status**
At the current time, of the 142 grants that were developed to update county hazard mitigation plans, 39 have been approved by FEMA, 7 are under FEMA review, 7 are under GEMA review, 67 are in the update process, and 16 are setting up their kick off meetings or hiring a consultant. Dee also provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have approved plans, plans approvable pending adoption, plans that need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process.

Brian Laughlin has updated the Hazard Mitigation Division's portion of GEMA's webpage to provide a better description of what we do, the tools we have to get the job done, and information that helps counties in the update of their plans. You can check out these updates by going to the GEMA webpage at: www.gema.ga.gov. Once on the page, select the Mitigation tab and follow the links to the planning section. We welcome any comments or suggestions in regard to the information provided and the way the pages are designed.

b. Grant Application Status

HMGP 1973

- GEMA submitted to FEMA the first of two grant application extension for 90 days each. The new deadline for submitting applications is now 7/28/2012.
- The HazMit Planning Team preparing ten HMGP 1973 local plan update applications and sent them to the counties for review and signatures. We have received six of the applications back from the counties and will be reviewing them prior to submission to FEMA on their NEMIS system.
- We will be developing and mailing 10 additional applications for the last 10 counties to go through the update process. We expect to mail these applications in late June or early July.
- The Project side of the Hazard Mitigation Division is reviewing applications for safe-rooms and initiative projects like mass alert and warning systems.

HMA 2012

- Out of the $35mm available, Georgia received approval of a large acquisition project in Sandy Springs for approximately $3 million.

c. HAZUS Training

GEMA recently worked with DCA to secure a large grant, of which a portion is being used to put on several statewide Hazus training courses for GEMA employees, Emergency Management leadership throughout the state, and all the Regional Commission offices. Dee presented a list of the training dates and course offered. Currently, classes are being held at DCA's headquarters in Atlanta, in Macon and in Chatham County. DCA's goal is to provide Hazus training to all of the Regional Commission and EMA offices throughout the state, in an effort to provide more accurate and realistic data to support the risk and vulnerability analysis used in

developing local hazard mitigation plans. State agencies are welcome to participate in the courses which are free.

One of the benefits to holding this training in Georgia is that it allows users of hazard-related data in the state to connect with one another. During the first training course, discussions have led to participants to increase their understanding of data sources, existing programs and projects as well as proposed initiatives that exist within other organizations. As the training courses continue, it is expected that collaboration will increase which will benefit the state enormously in the immediate and long-term future.

d. Revised Local Hazard Mitigation Plan Update Template

The Hazard Mitigation Planning Team met in March to go line-by-line through the local plan update template and updated it in accordance with the New FEMA Guidance and Review Tool. The template is nearing completion and we expect a final product in April or early May.

e. Flood Plain Managers Conference

Tom Shillock with DNR Environmental Protection Division gave a brief description of the subjects discussed at recent Flood Plain Managers Conference at Lake Lanier. Per Tom, the conference was well attended and subjects such as floodplain buyouts, reducing runoff, and 3D Flood Modeling demonstrations. Terry Lunn and Alicia Soriano presented information on Flood Mitigation applications and success stories.

f. RiskMAP Discovery Meetings

GEMA recently supported DNR and FEMA in three RiskMAP Discovery Meetings. Tom Shillock gave a brief description of RiskMAP and the purpose of the Discovery Meetings. These meetings have allowed FEMA and DNR to collect a wealth of knowledge about numerous communities within four watersheds throughout the state. This information will help them in developing tools that will aid in risk analysis, evacuation planning, emergency preparations, and more detailed flood maps.

FEMA News

a. National Preparedness Grant Program (NPGP)

- In 2012, the amount of PDM funding available for the entire country was only $35mm.

- We are coordinating with our Homeland Security Division on the development of THIRA and are trying to determine what is needed to take full advantage of this program in FY 2013.
- FEMA will continue to support the PDM program until all funding is used up.
- This is a result of Presidential Policy Directive 8 (PPD-8) and involves the Threat and Hazard Identification and Risk Assessment program known as THIRA.
- The National Preparedness Goal is the cornerstone for the implementation of PPD-8; identified within it are the Nation's core capabilities across five mission areas: Prevention, Protection, Mitigation, Response, and Recovery. The National Preparedness System is the instrument the Nation will employ to build, sustain, and deliver those core capabilities in order to achieve the goal of a secure and resilient Nation. The guidance, programs, processes, and systems that support each component of the National Preparedness System enable a collaborative, whole community approach to national preparedness that engages individuals, families, communities, private and nonprofit sectors, faith-based organizations, and all levels of government.

b. National Disaster Recovery Framework (NDRF)

FEMA is rolling out the National Disaster Recovery Framework at this time. In February, the Georgia Department of Natural Resources Coastal Resources Division approached GEMA about partnering with them on the development of a Coastal Long Term Recovery plan they received funding through NOAA to develop. To support this, GEMA in the process of developing a state strategy that will be consistent with the NDRF and will serve as a framework for all long-term disaster recovery activities in the state. This includes guidance on developing local long-term recovery plans.

The NDRF identifies key recovery positions and their responsibilities to coordinate federal and state resources in support of local communities with long-term recover activities. These positions include a Federal Disaster Recovery Coordinator (when warranted in large-scale or catastrophic disasters), State Disaster Recovery Coordinators and Local Disaster Recovery Managers. Another key concept to the NDRF is the creation of six Recovery Support Functions (RSF) designed to allow for more concentrated focus on core community recovery areas. The six RSFs are Community Planning and Capacity Building, Economic, Health and Social Services, Housing, Infrastructure Systems, and Natural and Cultural Resources.

State Hazard Mitigation Plan Update

a. 2014 State Hazard Mitigation Plan Update Strategy

The Hazard Mitigation Planning Staff, in cooperation with the State Hazard Mitigation Planning Team (SHMPT), has begun the process of updating the Georgia Hazard Mitigation Strategy (GHMS). Our goal is to complete the update of the current plan prior to its expiration at the end of March 2014. Current FEMA regulations require the GHMS be updated every 3 years

During the initial evaluation of the previous plan, one of the objectives identified for this plan update is to develop a process which will allow for increased engagement and collaboration from all participating organizations. With previous updates, the SHMPT met quarterly and received updates on the Planning Team's changes and updates. For the 2014 update, the Planning staff is proposing that, in addition to the quarterly meetings, we invite personnel from key agencies that have a direct correlation to individual sections of the plan, to assist in the review and update of the strategy.

b. Development of Work Groups

The agencies will be compiled into three working groups, who will be responsible for analyzing and developing certain parts of the plan and providing any new information or program integration ideas. The groups will be broken up into the following sections Risk Analysis, Mitigation Strategy, and Cross Sector.

The core elements to any mitigation plan -- state, local or otherwise, are risk analysis and mitigation strategy. The risk analysis and mitigation strategy working groups would focus on these two core elements respectively. These working groups will be able to meet in a more interactive environment, with a defined goal describing what they need to accomplish and how best to accomplish it. The mission of the Risk Analysis working group will be to use the 2011 SHMS as a starting point and identify current trends in hazard risks and vulnerabilities to the State of Georgia. The mission of the Mitigation Strategy working group will be to identify both ongoing and potential new goals and actions to reduce the potential for damages and loss of life resulting from hazard events affecting the State of Georgia, which will be based on the findings of the risk analysis group.

Finally, the cross sector working group will focus on building partnerships in hazard mitigation with organizations outside of state government. This working group will work with the other two working groups to identify agencies and organizations that

could provide valuable information and input into the planning process. Areas that will be targeted include government, non-government, private sector and community based groups. The working group will then engage and work with these agencies and organizations to educate them on the value of hazard mitigation and develop strategies for how they can be involved in the planning process.

c. Timeline

There is substantial work to be done prior to the first meeting of the Risk Analysis workgroup. We hope to hold the first meeting in in the next few months, and to have a product by the end of the year. The Mitigation workgroup will begin meeting in October or November and the Cross Section group will start meeting in November. In preparation for each of these working groups, early-stage activities related to each are currently being developed and implemented.

Agency Updates

a. Progress on Templates

i. The Planning Team continues to review the state agency template to determine if there are ways to make the development of agency plans a little easier, yet have the necessary information.

ii. Dee asked that all agencies in attendance and via conference call, that have not completed their annexes, to call him at (404) 635-7516 for guidance, support and technical assistance.

b. Agency Meetings and Support

All members of the Planning Team are available for meetings with any interested agencies needing help with the development or update of their plan.

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, July 5, 2012, in the Executive Conference Room in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

July 5, 2012

Present

Tom Shillock, DNR
Brian Hardeman, DJJ
Alan Giles, DNR
Terry Lunn, GEMA
Dee Langley, GEMA
Kelly Keefe, GEMA
Via Conference Call-In:
Raymond Noel, DCA
Lee Whitesides, DOA
Lawton Brantley, ITOS
Dee Leclair, DCA
Jennifer Kline, DNR

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the April 5, 2012, meeting were approved and adopted. Greg Strenkowski, GFC; Michael Lankford, DOT; and Wendy Smith, DHS emailed that they would not be able to join the meeting

News from GEMA

a. **Local Plan Status**
At the current time, of the 138 grants that were developed to update county hazard mitigation plans, 49 have been approved by FEMA, 1 is under FEMA review, 4 are under GEMA review, 70 are in the update process, and 10 are setting up their kick off meetings or are hiring a consultant. Dee also provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have approved plans, plans approvable pending adoption, plans that need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process.

b. Grant Application Status

HMGP 1973

- Terry Lunn gave us a brief overview of DR 1973 and the projects the HazMit Division plans to submit to FEMA.
- GEMA submitted to FEMA the second of two grant application extension for 90 days each. The new deadline for submitting applications is 10/29/2012.
- The HazMit Planning Team is preparing the final ten HMGP 1973 local plan update applications to be sent to the counties for review and signatures in early August. We have received eight of the applications back from the counties in the first round of applications and have submitted them to FEMA via their NEMIS system. The counties with the two remaining outstanding applications have been contacted and are in the process of completing and sending them to GEMA.

HMA 2012

- Georgia received notification that the $3 million acquisition project in Sandy Springs has been identified for further review, and they are still working on environmental and documentation issues prior to award.

b. HURREX 2012

GEMA recently held its Bi-Annual State Emergency Preparedness Exercise called HURREX 2012, which simulated the pre-landfall, post landfall and demobilization activities associated with the onset of a major hurricane along the Georgia coast. Approximately 800 local, state, federal and volunteer agency personnel participated throughout Georgia. It was held on Tuesday, May 15 through 1:00 pm, Thursday, May 17.

c. Disaster Updates

Thomas County recently encountered flash flooding on June 6, 2012. Nearly seven inches of rain fell in Thomas County during the afternoon and early evening. The deluge overwhelmed culverts and storm drains, flooded homes and closed several roadways in Thomasville and other parts of the county for hours. This incident did not result in a Governor's State of Emergency or a Presidential Disaster Declaration. It did receive a Small Business Administration Declaration.

d. Revised Local Hazard Mitigation Plan Update Template

Dee Langley mentioned that the members of the Hazard Mitigation Planning Team finalized the updates to the Local Hazard Mitigation Plan Update Template and have placed a copy on GEMA's webpage under Hazard Mitigation/Planning. The revised template incorporates FEMA's new Review Guidance and Review Tool.

FEMA News

a. National Preparedness Grant Program (NPGP)

- FEMA has proposed the consolidation of the PDM Grant Program, with several other grants, into the NPGP.
- We are unclear on how it will be included in the new grant program or how we will take advantage of it. In 2012, PDM for the entire country was only $35 million.
- We are coordinating with our Homeland Security Division on the development of GEMA's Threat and Hazard Identification Risk Assessment (THIRA), which will be prepared annually to qualify for EMPG funding, and are trying to determine what is needed to take full advantage of this program.
- FEMA will continue to support the PDM program until all funding is used up.
- This is a result of Presidential Policy Directive 8 (PPD-8)
- The National Preparedness Goal is the cornerstone for the implementation of PPD-8
- Identified within it are the Nation's core capabilities across five mission areas: Prevention, Protection, Mitigation, Response, and Recovery. The National Preparedness System is the instrument the Nation will employ to build, sustain, and deliver those core capabilities in order to achieve the goal of a secure and resilient Nation. The guidance, programs, processes, and systems that support each component of the National Preparedness System enable a collaborative, whole community approach to national preparedness that engages individuals, families, communities, private and nonprofit sectors, faith-based organizations, and all levels of government.

b. National Disaster Recovery Framework (NDRF)

- Brian Laughlin, Scott Sherman and Dee Langley, will be attending the Long Term Recovery Planning Summit in Jacksonville, Florida, with DNR Coastal Resources and the Governors Alliance of Coastal Communities to discuss "Long Term Recovery Planning"

State Hazard Mitigation Plan Update

a. 2014 State Hazard Mitigation Plan Update Strategy

The overall strategy of the workgroups, as discussed in last quarter's meeting, is to foster more participation on the part of state agencies and private organizations, and get more varied viewpoints of disasters and the ways to address them. We will be looking at each type of disaster and how it will affect each agency and how they should try to protect against it.

Lawton Brantley gave a brief description of the progress ITOS made in the last quarter toward updating the risk analysis portion of the State Plan and upgrading the GMIS System. He also identified items they plan to work on in the future.

b. Development of Work Groups

The agencies will be compiled into three working groups, who will be responsible for analyzing and developing certain parts of the plan and providing any new information or program integration ideas. The groups will be broken up into the following sections Risk Analysis, Mitigation Strategy, and Cross Sector.

The core elements to any mitigation plan -- state, local or otherwise, are risk analysis and mitigation strategy. The risk analysis and mitigation strategy working groups would focus on these two core elements respectively. These working groups will be able to meet in a more interactive environment, with a defined goal describing what they need to accomplish and how best to accomplish it. The mission of the Risk Analysis working group will be to use the 2011 SHMS as a starting point and identify current trends in hazard risks and vulnerabilities to the State of Georgia. The mission of the Mitigation Strategy working group will be to identify both ongoing and potential new goals and actions to reduce the potential for damages and loss of life resulting from hazard events affecting the State of Georgia, which will be based on the findings of the risk analysis group.

Finally, the cross sector working group will focus on building partnerships in hazard mitigation with organizations outside of state government. This working group will work with the other two working groups to identify agencies and organizations that could provide valuable information and input into the planning process. Areas that

will be targeted include government, non-government, private sector and community based groups. The working group will then engage and work with these agencies and organizations to educate them on the value of hazard mitigation and develop strategies for how they can be involved in the planning process.

c. Timeline

There is substantial work to be done prior to the first meeting of the Risk Analysis workgroup. We hope to hold the first meeting in in the next few months, and to have a product by the end of the year. The Mitigation workgroup will begin meeting in October or November and the Cross Section group will start meeting in November. In preparation for each of these working groups, early-stage activities related to each are currently being developed and implemented.

Agency Updates

a. Agency News - DCA

- Terry Lunn, Dee Langley and Brian Laughlin met with Elizabeth Smith and members of AMEC to kick-off the Comprehensive Planning – Disaster Preparedness Program and go over AMEC planned activities in reviewing commonalities between comprehensive and mitigation plans. Also, the Planning Team recommended language modifying the optional Disaster Resilience Element in the Rules at 110-12-1-.03(14) and the language in the table making recommendations for which communities should complete the Disaster resilience Element in the Rules at 110-12-1-.02(1).
- Terry Lunn recommended and Terry Jackson has agreed to attend the next Silver Jackets meeting to introduce the HAZUS training program and solicit funding for additional training elements.
- Dee Leclair with DCA gave us a very informative description of the Disaster Resilient Building Code Appendices Task Force which has been tasked to develop and appendices to Disaster Resilient Building Code Appendices. Terry Lunn was a member of the task force that reviewed both the International Building Code (IBC) and the International Residential Code. The Department of Community Affairs had recently been awarded a grant through the U.S. Department of Housing and Urban Development (HUD) to develop new disaster resilient building codes (DRBC) Appendices for the International Building Code (IBC) and the International Residential Building Code (IRC). The DRBC Appendices will be optional appendices that local governments may adopt through

local ordinance. A task force of stakeholders were be appointed to look for opportunities to improve any provisions relating to hurricane, flood, and tornado disasters. In addition to improving existing provisions in the codes, the task force may also develop new provisions to be included in the appendices that address these issues. After the approval of the recommendations from the task force, the state will develop and conduct a comprehensive training program for code enforcement officials on the importance, implementation and enforcement of disaster-resilient building code appendices.

b. Progress on Template

We are looking at updating the State Agency Plan Template and don't want this to be a paperwork exercise. We hope to make the process easier and quicker to prepare.

c. Agency Meetings and Support

All members of the Hazard Mitigation Planning Team are available to help develop your agency plan. Give us a call or email.

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, October 4, 2012, in the Executive Conference Room in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

October 4, 2012

Present

Tom Shillock, DNR
Randy Clayton, GOHS/SHSP
Eric Mosley, GFC
Alan Giles, DNR
Terry Lunn, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Valencia Miller, GEMA
Natalie Jones, GEMA
Via Conference Call-In:
Raymond Noel, DCA
Terry Jackson, DCA
Greg Strenkowski, GFC
Brian Hardeman, DJJ
Jennifer Kline, DNR/CRD
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the July 5, 2012, meeting were approved and adopted.

News from GEMA

a. **Local Plan Status**
At the current time, of the 148 grants that were developed to update county hazard mitigation plans, 58 have been approved by FEMA, 1 is approved pending adoption, 2 are under FEMA review, 8 are under GEMA review, 65 are in the update process, and 14 are setting up their kick off meetings or are hiring a consultant. Dee also provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have

approved plans, plans approvable pending adoption, plans that need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process.

b. Grant Application Status

HMGP 1973

- Terry Lunn gave us a brief overview of DR 1973 and the projects the HazMit Division plans to submit to FEMA.
- The deadline for submitting applications was 10/29/2012. No further applications will be accepted by FEMA on this grant.
- The final ten HMGP 1973 local plan update applications were sent to FEMA prior to the 19/29/2012 deadline.

HMA 2013

- Terry Lunn provided what information we had at the time of this meeting from FEMA on these funding sources and their probability of being funded.

c. HAZUS

Terry Jackson provided information on the upcoming Hazus Pilot Project that is scheduled to be introduced to statewide Hazus users Wednesday, January 23rd through Friday, January 25th. Using the various data sources collected throughout the state, the group will be attempting to develop a Level 2 data model for Camden County in regards to storm surge, flooding, hurricane and earthquake damages.

The email address for the Hazus User Group (HUG) in Georgia is:
http://www.usehazus.com/gahug

d. THIRA

The Planning Team was involved in developing a prioritization model to be used in determining which hazards have the most impact on the state. Prioritizing hazards is a requirement in the State Plan. This model will be introduced in first Risk Workshop December 6th. The results of this model were also conveyed to the Homeland Security Division to be included in the THIRA.

FEMA News

a. Change in FEMA Liaison

Brenda Hicks has been chosen to replace Ms. Claude Hyacinthe as GEMA's grant management representative. Ms. Hicks comes to us from Florida where she had

extensive experience with disaster related grants. We look forward to working with Ms. Hicks as the torch is passed.

b. New Review Tool Required on Local Plans

The new review tool developed by FEMA to replace the previous crosswalk is now effective for all future plan submissions as of 10/1/2012. The new review tool is much easier to complete and requires less time determining page numbers. It is more streamlined and several plans have been submitted by GEMA using the review tool with good success.

State Hazard Mitigation Plan Update

a. 2014 State Hazard Mitigation Plan Update Strategy

Dee Langley gave a brief description of the timeline in relation to the review and update of the state plan and the enhanced plan. In addition, the three workshops were included. The standard plan will be submitted to FEMA on 9/30/2013, and the enhanced plan will be submitted sometime in November. We expect final approval on the standard plan by January and the enhanced plan by February. Both plans will be adopted by the Governor in March and both plans will have FEMA approval prior to the end of March. The new plan will hopefully be valid for five years if FEMA changes their guidelines.

b. Development of Workshops

Brian Laughlin gave a brief description of the three workshops we have scheduled and what they hoped to accomplish.

Workshop Process:

To support the mission of reducing risk to natural disasters, a series of workshops have been developed to engage a diverse group of organizations and present important information on the risks from natural disasters in Georgia.

Objectives:

1. Reach out to broader group of organizations
2. Disaster education and awareness
3. Create opportunities for interaction
4. Build new partnerships
5. Create mechanism to capture feedback

The foundation to this process is a series of three workshops that will start in December 2012 and will continue over the coming months. A wide range of organizations will be invited to introduce unique perspectives and knowledge on the disasters. Each workshop will include activities for interaction with among the participants to discuss and evaluate information that is presented on the natural disasters. This is a cumulative process with each workshop building on the previous. By the end of the process the participants will have a much greater understanding of disasters and the strategies to reduce them.

c. Risk Profile Ranking

The first of the three workshops "Understanding Risks" will involve presenting information on natural hazards that are currently identified in the 2011 Georgia State Hazard Mitigation Strategy. This information revolves around where the hazards occur, how often they happen and how severe it can be. This workshop includes breakout sessions where participants will have the opportunity to review hazard descriptions, discuss the information with GEMA Hazard Mitigation Planners and rank the hazards based on a scoring method developed by GEMA. Their scores are collected on a Risk Profile Analysis spreadsheet and combined for the entire group.

d. Timeline

The first workshop "Understanding Risk" will be held on December 6th, 2012 in the SOC. The second workshop "Understanding Vulnerability" will be held sometime in April, and the third "Develop Strategies" will be held in June. The information from all three workshops and the statewide risk analysis information provided by ITOS will be used to develop the risk portion of the state plan.

Agency Updates

a. Agency News

Greg Strenkowski with the Georgia Forestry Commission stated that 13 states, including Georgia, will be completing their WCPP and Firewise Plans by February 2013. These plans cover the majority of the state of Georgia and will include more accurate timber maps and fuel loads. This information can be included in GMIS, giving counties and state agencies a better idea of fire hazards to their critical facilities.

a. Agency Meetings and Support

All members of the Hazard Mitigation Planning Team are available to help develop your agency plan. Give us a call or email.

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, January 10, 2013, in the Executive Command Center, downstairs next to the SOC, in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

January 10, 2013

Present

Bradley Allen, GAOC
Randy Clayton, GOHS/SHSP
Alan Giles, DNR
Mike Gilmer, GSP
Bruce Holmes, BOR-USG
Terry Jackson, DCA
Tom Shillock, DNR
Greg Strenkowski, GFC
Lillian Huffman, GEMA
Terry Lunn, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Kelly Keefe, GEMA
Valencia Miller, GEMA
Natalie Jones, GEMA
Via Conference Call-In:
Lawton Brantley, ITOS
Jennifer Kline, DNR/CRD
Garry McGiboney, DOE
Eric Mosley, GFC
Raymond Noel, DCA
Lee Whiteside, DOA
Alice Zimmerman, GOPB
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the October 4, 2012, meeting were approved and adopted with the addition of Brian Laughlin listed as an attendee.

News from GEMA

a. Local Plan Status

At the current time, of the 161 grants that were developed to update county hazard mitigation plans, 61 have been approved by FEMA, 4 is approved pending adoption, 1 is under FEMA review, 11 are under GEMA review, 61 are in the update process, and 23 are setting up their kick off meetings or are hiring a consultant. Dee also provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have approved plans, plans approvable pending adoption, plans that need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process. Due to a current problem with our internet browser, we were unable to provide copies of the map to members not physically at the meeting. Copies will be mailed with these minutes to all members.

b. Grant Application Status

HMGP 1973

- Per Dee, all of the remaining ten HMGP 1973 applications were approved by FEMA and Grantee/Subgrantee Agreements were mailed. Upon receipt of the signed agreements, kick off meetings will be scheduled.
- The deadline for submitting applications was 10/29/2012. No further applications will be accepted by FEMA on this grant.

HMA 2013

- Terry Lunn provided what information we had at the time of this meeting from FEMA on these funding sources and their probability of being funded.

c. EMAP Accreditation

Terry Lunn and Dee Langley are currently updating the information toward the reaccreditation of GEMA for the mitigation component of EMAP. The agency will be meeting with the EMAP accreditation review panel the last week of February.

d. DNR Resilience Workshops

Tom Shillock, with DNR, gave a brief description of Risk MAP Disaster Resilience Workshops. DNR, FEMA, and Dewberry, with the assistance of GEMA, held the first of several Resilience Meetings in Coweta County last month. The information collected in the latest Risk MAP meetings was used to identify vulnerabilities local

communities had with flooding. Also, the contractor, Dewberry provided a large amount of GIS data which identified possible future mitigative actions, due to possible flooding issues. This was the first workshop in the country and Coweta County has the opportunity to be the first county in the country to include this information in their Hazard Mitigation Plan. Coweta County plans to add this information as an appendix to their plan prior to submission to FEMA for approval. The information provided by this program greatly enhances the counties awareness of flooding potential throughout its community. The next Resilience Workshop will be held in Gwinnett County on February 6th.

FEMA News

a. Upcoming Partners in Mitigation Workshop 1/28 thru 2/1 at Georgia Tech

Dee and Terry provided information on the upcoming Partners in Mitigation Workshop to be held at Georgia Tech Research Institute. This workshop is hosted by FEMA Region IV and will include information dialogue and work sessions that will help guide our path forward in 2013 for the mitigation program.

State Hazard Mitigation Plan Update

a. 2014 State Hazard Mitigation Plan Update Strategy

The Hazard Mitigation Planning Team has already begun the review process of the current plan for updates and changes. GEMA will submit the updated standard plan to FEMA on October 1, 2013 for review and approval.

b. Understanding Georgia's Risk to Natural Hazards Workshop

Approximately 70 people attended the first Risk Workshop on December 6, 2012. Roughly 15 state agencies were represented, FEMA and numerous non-profit organizations. We also had several for-profit organizations including Southern Company. This was the first of three workshops that included a wide range of organizations that introduced some very unique perspectives, and information on how recent hazards had affected their agencies and organizations. Nearly half the participants were from organizations outside state government. We had two members of the FEMA Planning Section present. There was a breakout session which fostered interaction among the participants to discuss and evaluate information that was presented on the natural disasters. Each of the five groups determined which hazard posed the most significant threat to their organizations and ranked them accordingly. The workshop series is a cumulative process with each workshop building on the

previous. By the end of the process the participants will have a much greater understanding of disasters and the strategies to reduce them.

i. Risk Profile Ranking

The Hazard Mitigation Planning Team presented information on all the natural hazards currently identified in the 2011 Georgia State Hazard Mitigation Strategy. The information included where the hazards occur, how often they happen and how severe they were. A breakout session was held where participants had the opportunity to review the hazard descriptions, discuss their information with GEMA Hazard Mitigation Planners and rank the hazards based on a scoring method developed by GEMA. Their scores were collected on a Risk Profile Analysis spreadsheet and combined for the entire group. All this information was posted on the GEMA website by Brian Laughlin. The information from all three workshops and the statewide risk analysis information provided by ITOS will be used to develop the risk portion of the state plan.

ii. BLLIP Data Update

Dee asked that all agencies make certain their information in the BLLIP system was up to date and correct. Alice Zimmerman said that they have a method of determining which agencies have updated their information and would provide me with a report.

c. Understanding Georgia's Vulnerability Workshop

The next workshop "Understanding Georgia's Vulnerability to Natural Hazards" will be held on February 6th, from 8:30 am to 12:00 pm, in the SOC. A conference call-in feature will be provided for those agencies unable to attend.

d. State Plan Update Timeline

Dee Langley gave a brief description of the timeline in relation to the review and update of the state plan and the enhanced plan. The standard plan will be submitted to FEMA on 9/30/2013, and the enhanced plan will be submitted sometime in November. We expect final approval on the standard plan by January and the enhanced plan by February. Both plans will be adopted by the Governor in March and both plans will have FEMA approval prior to the end of March.

Agency Updates

a. Agency News

Per Greg Strenkowski with the Georgia Forestry Commission, they are working on their GRITZ program which looks at fire permits, burning fires, and air quality. It will also offer GIS information to the counties on these subjects. They also hope to have the risk assessment data on wildfires by June which can be uploaded into GMIS.

Per Bruce Holmes with the Board of Regents, said that they are working on consolidating their hazard mitigation plans for all Colleges and Universities in Georgia.

Lawton Brantley with ITOS said they are working on the upgrade of GMIS to the new platform and will be meeting with the Hazard Mitigation Planning Team to go over upgrade ideas.

Jennifer Kline with DNR Coastal Resources said that their request for proposals is still open until the end of next week. Several local communities have submitted proposals.

b. DCA – HAZUS Pilot Project Prototype Workshop

Terry Jackson provided information on the upcoming Hazus Pilot Project that is scheduled to be introduced to statewide Hazus users Wednesday, January 23rd through Friday, January 25th. Using the various data sources collected throughout the state including GMIS, the group will be attempting to develop a Level 2 data model for Camden County in regards to storm surge, flooding, hurricane and earthquake damages. With this data counties and the state will hopefully improve the risk portion of their hazard mitigation plans. They are currently working with 20 counties.

Georgia has the largest number of people in the country (20) to attend and complete the six Hazus Loss Estimation classes. The email address for the Hazus User Group (HUG) in Georgia is: http://www.usehazus.com/gahug

Terry also described how DCA obtained a grant titled Forward Looking Land Use, which is headed by Elizabeth Smith, and is looking at comparing local hazard mitigation plans with their comprehensive plans to reduce duplication of effort and resources.

c. Agency Meetings and Support

All members of the Hazard Mitigation Planning Team are available to help develop your agency plan. Give us a call or email.

d. Other

Per Terry Lunn, DCA will begin conducting a comprehensive training program for building officials on the importance, implementation and enforcement of the disaster resilient construction appendices, of which he was a member that helped developed the

revised codes. Training in Atlanta is set for January 22nd, and January 23rd in North Fulton County.

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, April 4th, 2013, in the Executive Conference Room, upstairs in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

April 4, 2013

Present

Terry Lunn, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Via Conference Call-In:
Lawton Brantley, ITOS
Anita Russo, ITOS
Thomas Woosley, DNR/SDP
Lisa Beck, TCSG
Bruce Holmes, BOR-USG
Greg Strenkowski, GFC
Eric Mosley, GFC
Raymond Noel, DCA
Lisa Westin, DCA
Danny Thompson, GPA
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the January 10, 2013, meeting were approved and adopted. Danny Thompson told the group that Chatham and Glynn Counties were teaming up with the Georgia Port Authority and DOAS to develop a maximum loss study in the event of various levels of cyclonic events. We look forward to receiving this information.

News from GEMA

a. **Local Plan Status**
At the current time, of the 161 grants that were developed to update county hazard mitigation plans, 66 have been approved by FEMA, 6 are approved pending adoption, 2 are under FEMA review, 16 are under GEMA review, 54 are in the update process, and 17 are setting up their kick off meetings or are hiring a

consultant. Dee also provided a map produced by FEMA displaying the status of all local plans in Georgia. The map is updated monthly and demonstrates which counties have approved plans, plans approvable pending adoption, plans that need revision, plans pending review by FEMA, and plans that have expired. Dee mentioned that all counties identified as having expired plans, have active update grants and are in some phase of the update process.

b. Grant Application Status

HMGP 1973

- Terry Lunn listed the current applications waiting on FEMA approval.

HMA 2013

- Terry Lunn provided what information we had at the time of this meeting from FEMA on these funding sources and their probability of being funded.

c. GMIS Update Status

Lawton Brantley was on the phone and he provided the following information concerning the upgrade of the GMIS system to the next platform.

GMIS rewrite update:

- Database architecture is complete and in place for Mitigated Properties. Critical facilities will be finalized after meeting with GEMA next week to wrap up needs/requirements for Critical Facilities
- A test run to migrate mitigated property data from the current GMIS to the new database has been done and was successful.
- A map service has been developed for mitigated properties in ESRI ArcGIS Server running against the new database with the trial run import data. This is a key step in our path to moving off of the MapGuide mapping product.
- A quick functional prototype web map has been developed to render the imported mitigated properties on a web map using ESRI's JavaScript mapping API. This is the other key step in our path to move off of MapGuide.
- A functioning prototype has been developed in the .NET programming language to interface with the backend mitigated property data contained within the new database. This prototype currently can only retrieve mitigated properties from the database and return a list of those property ids.
- Next Steps
    - The above tasks outline the underlying core components that have to take place to get everything wired up in the new software system. Now that these prototypes have been developed, work will continue to refine the look and feel of the site and to build out all of the remaining functionality needed.

- The same steps will be taken with Critical Facility data after we wrap up requirements at next week's meeting.

d. EMAP Accreditation

Several members of GEMA and Homeland Security management have been meeting with members of the National Emergency Management Accreditation Program, to renew its accreditation. Reaccreditation signifies that GEMA meets or exceeds standards for emergency management and response preparedness. By meeting all of the stringent national emergency management program standards, Georgia will demonstrate its leadership in emergency preparedness efforts.

EMAP is a voluntary accreditation process for state, territorial and local government programs that coordinate preparedness and response activities for natural and man-made disasters ranging from tornadoes to terrorism. It recognizes the ability of a state or local government to bring together personnel, resources and communications from a variety of agencies and organizations in preparation for and in response to an emergency.

Also, Terry Lunn informed everyone that Georgia's Hazard Mitigation Division was recognized as the top state in the country in regard to getting the most Hazard Mitigation Grant Program dollars based on IA & PA grants, per the GAO report. Dewberry analyzed the report and found that Georgia received 21% of all post disaster funds made available by FEMA for mitigation. The next closest state was several percentage points lower with most states averaging around 5%.

e. Silver Jackets – Hyde Park Project Submittal

Terry Lunn updated everyone on the status of the Hyde Park Project Submittal.

f. Risk MAP – Resilience Meetings

Dee Langley informed the group on the recent Risk MAP – Resilience meetings. Meetings were held in Coweta, Douglas and Forsyth Counties so far and they were well received by all attendees. Dewberry and Atkins teamed up with FEMA and DNR to provide GIS information on the flood risk in their counties within the Upper Chattahoochee watershed. A large number of mitigation ideas were uncovered in each report. It was recommended that the counties include this data in their next update of their hazard mitigation plan. Coweta County had just submitted their first draft of their hazard mitigation plan update to Brian Laughlin. Coweta said they

would go back and include this information in their plan. When they do, they will have one of the first plans in the country to have this data.

g. Flood Risk Symposium

Brian Laughlin and Terry Lunn described some of the highlights of the symposium.

FEMA News

a. Partners in Mitigation Workshop Highlights

Terry Lunn provided information on the Partners in Mitigation Workshop held at Georgia Tech Research Institute. The workshop was hosted by FEMA Region IV and included information and work sessions that provided guidance for all the mitigation programs in 2013.

b. FEMA Requirements – 1 Year Reminder Letter

Dee Langley informed the attendees that FEMA had issued a One Year Reminder letter, notifying GEMA that its current Enhanced Hazard Mitigation Plan will expire on March 31, 2014, and that Georgia needed to submit and obtain approval of the updated plan prior to this date for compliance with the Disaster Mitigation Act of 2000.

State Hazard Mitigation Plan Update

a. 2014 State Hazard Mitigation Plan Update Strategy

The Hazard Mitigation Planning Team began its review of the current plan for updates and changes. GEMA plans to submit the updated standard plan to FEMA on October 1, 2013 for review and approval.

b. Understanding Georgia's Vulnerability Workshop

We had approximately 40 people in attendance at the Vulnerability Workshop on February 6, 2013. 14 state agencies were in attendance, along with two representatives from the Planning Section of FEMA, and numerous profit and non-profit organizations. This was the second of three workshops that included a wide range of organizations that introduced some very unique perspectives, and information on how recent hazards had affected their agencies and organizations. There was a breakout session which fostered interaction among the participants to discuss and evaluate information that was presented on the vulnerabilities facing Georgia. Each of the five groups determined which vulnerability posed the most

significant threat to their organizations and ranked them accordingly. The workshop series is a cumulative process with each workshop building on the previous. By the end of the process the participants will have a much greater understanding of disasters and the strategies to reduce them.

Topics Covered:
- Summary of Hazard Risk Workshop that was held in December
- Information on Vulnerability which will describe what happens when natural disasters occur in GA such as impacts and losses.
- Breakout sessions to discuss vulnerability and score each of the hazards based on vulnerability impacts.
- Continuation of risk ranking based on vulnerability scores and comparing this ranking from Workshop 1 ranking.
- Calculate total score and ranking for each disaster.
- Presentation on how organizations can identify risk and vulnerability to their facilities and buildings.
- Information on the next workshop

c. Developing Georgia's Mitigation Strategies Workshop

The next workshop "Developing Georgia's Strategy to Reduce Natural Disasters" will be held on April 25th, from 8:30 am to 12:00 pm, in the SOC. A conference call-in feature will be provided for those agencies unable to attend.

Topics to be covered:
- Review risk summaries
- Review previous goals
- Develop new goals based on risk
- Share information on stakeholder capabilities
- Identify and prioritize mitigation actions

d. Future Workshops

The Hazard Mitigation Planning Team will be meeting after the next workshop to decide if a fourth workshop will be necessary or if the final information can be collected through conference calls with specific agencies.

e. Timeline

Dee Langley gave a brief description of the timeline in relation to the review and update of the state plan and the enhanced plan. The standard plan will be submitted to FEMA on 9/30/2013, and the enhanced plan will be submitted sometime in November. We expect final approval on the standard plan by January and the

enhanced plan by February. Both plans will be adopted by the Governor in March and both plans will have FEMA approval prior to the end of March.

Agency Updates

a. Agency News

There was no agency news at this time.

b. Agencies Need to Update Their BLLIP Data

Dee Langley reminded everyone that all state agencies need to update their BLLIP data in order to have an accurate review of their critical facilities in relation to several types of natural hazards.

c. Agency Meetings and Support

All members of the Hazard Mitigation Planning Team are available to help develop your agency plan. Give us a call or email.

Next Meeting

The next quarterly Inter-Agency meeting is scheduled to be held at GEMA headquarters beginning at 10:00am on Thursday, July 11th, 2013, in the Executive Conference Room, upstairs in Building 2. A call-in feature will be provided for all agencies unable to attend in person.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

Georgia State Hazard Mitigation Planning Team Meeting - Minutes

July 11, 2013

Present

Tom Shillock, DNR
Eric Mosley, GFC
Terry Lunn, GEMA
Natalie Jones, GEMA
Dee Langley, GEMA
Brian Laughlin, GEMA
Via Conference Call-In:
Angela Wheeler, ITOS
Anita Russo, ITOS
Monica Dodd, USACE
Lisa Beck, TCSG
Raymond Noel, DCA
Alan Sloan, GEMA
Scott Sherman, GEMA

Welcome and Introductions

Dee Langley, Planning Program Manager, opened the meeting with greetings to all attendees and agencies joining the meeting and thanked them for their time and participation. Each participant in the room and on the phone introduced themselves. The meeting minutes for the April 4, 2013, meeting were approved and adopted.

State Hazard Mitigation Plan Update

a. **ITOS Risk Analysis (Chapters 2 and 4) Submission**
Anita Russo and Angela Wheeler with ITOS presented the Risk Analysis products they developed for Chapters 2 and 4 of the 2014 State Hazard Mitigation Plan. Using a GoTo Meeting format they presented the updated tables for Chapter 2, the status and responsibility report, and the associated maps. Angela went into detail on how the tables and maps were created. Anita went over the tables and what was changed.

b. **Workshop Results**

Brian Laughlin and Dee Langley went over the findings from the three Risk and Vulnerability Workshops held in the State Operations Center over a five month period. Brian described charts developed in the first two workshops depicting the 12 hazards common to Georgia and the attendee's impression of which hazard had the

most effect on the state and their individual organizations. The second workshop identified the vulnerability of the state to each hazard and placed the hazards in a prioritized order. Based on the conclusions of this study, the total risk ranking of hazards were in this order: Tornados, Severe Weather and Inland Flooding.

Dee summarized the decisions of the participants in the third workshop in regard to the mitigative actions they would consider to be the most beneficial. Then each participant was given 15 dots to place on a list of proposed mitigative actions by hazard that they felt would most benefit the state and their organization or agency. Based on their selections, the majority of participants felt that the greatest hazards were Tornados, Sever Weather and Tropical Cyclonic Systems. They also felt that improved building codes and enforcement, flood proofing of facilities, and the performance of emergency exercises were the best mitigative actions.

c. 2014 State Hazard Mitigation Plan Update Strategy

The Hazard Mitigation Planning Team have taken a preliminary review of Chapters 1,3,4 and 5. They are individually reviewing each chapter in order. Terry Lunn is preparing Chapter 6, the enhanced chapter. The Planning Team is scheduled to meet twice a month at HazMit Headquarters through the month of September to complete the update.

d. Timeline

On October 1, 2013, the HazMit Division will be submitting our initial draft of the Standard Hazard Mitigation Plan (Chapters 1 thru 5, plus Annexes and Appendices) to FEMA for review and approval. We will then submit the enhanced chapter upon its completion, which is anticipated in November or possibly earlier. Now that we have received the risk analysis portion of the plan from ITOS, we will begin the process of developing our mitigation strategy.

Next Meeting

The next Inter-Agency meeting has not been scheduled at this time. After receiving and reviewing FEMA's comments to the state plan submittal, the HazMit Division will determine when it will be appropriate to schedule the next meeting. We will notify everyone by email.

Comments and Questions

Having no further comments or questions, the meeting was adjourned.

D Langley

From: D Langley
Sent: Thursday, November 15, 2012 2:36 PM
To: dee.langley@gema.state.ga.us
Subject: Understanding Georgia's Risk to Natural Disasters - Workshop
Attachments: Risk Analysis Workshop Agenda.docx

Good afternoon:

Please plan to join us in the first of three steps toward improving our understanding of the Natural Disasters most likely to affect Georgia, and the risk they pose to its citizens, state agencies and other organizations. Our first workshop is titled, Understanding Georgia's Risk to Natural Disasters, and it will include information on what we currently know about each of the natural hazards, their frequency, and the affects they may have on your agency or organization. We will also be seeking input from all participants with an interest in creating a safer Georgia by improving our understanding of the risks.

The first Workshop will be held Thursday, December 6th, 2012, in the State Operations Center (SOC), at GEMA Headquarters, in Building 2 (downstairs), beginning at 8:30 am and lasting until noon. There will not be a call in feature due to the type of presentations and on-hand work sessions, so please plan to attend. A copy of the agenda is attached.

Please take a few minutes to complete the attached questionnaire and bring this information to the Workshop with you. Contact me at the email address or phone number below if you have any questions or comments. If you feel this workshop may be more in-line with another person in your organization, please feel free to pass on this invitation to them.

Thank you in advance for your support, and we look forward to having you join us December 6th.

RSVP Requested

Derwent "Dee" K. Langley
Planning Program Manager
Georgia Emergency Management Agency
Hazard Mitigation Division
P.O. Box 18055
Atlanta, GA 30316
Phone (404) 635-7516
Fax (404) 635-4572
E-Mail: dee.langley@gema.ga.gov

D Langley

To: Dee Langley
Subject: Understanding Georgia's Vulnerability to Natural Disasters Workshop

Hello everyone,

Thank you very much for attending our Risk Workshop and we hope you gained a better understanding of the risks we face from each of the various natural disasters affecting our state. As you were aware, the turnout for this workshop was outstanding. From my viewpoint, there were very few empty seats left in the SOC. Everyone was very enthusiastic in providing information about their organizations and how they have been affected by natural hazards.

Here is the web address we have developed to summarize the risk workshop and our goals for the two remaining workshops:
http://www.gema.ga.gov/gemaohsv10.nsf/4F697EB5F4CBD51D85257729004931F8/9C21689CDAC7CDFF85257ACD00445FBC?OpenDocument

Click on the "Workshop 1: Risk" link on the right hand side of the page to see the Hazard Ranking Activity Results, the PowerPoint presentation, and Hazard Summaries. Information about the second workshop will be included in the Workshop 2: Vulnerabilities link as it becomes available.

We really appreciated the information you provided, especially the information on other hazards and concerns facing the state. We will review each and determine which will be addressed in the next state plan update.

If you would like to enter your critical facility information into the Georgia Mitigation Information System (GMIS), please shoot me an email. I will provide you with your User ID, password, and instructions on how to use the system.

Thank you very much for coming and we look forward to seeing you at our next workshop titled Understanding Georgia's Vulnerability to Natural Disasters, February 6th, in the SOC. We will be sending out an agenda in January. Remember, all state agencies should review and update their BLLIP information prior to this meeting.

Again, thank you for attending our workshop and we want to wish you and yours a Very Merry Christmas and a Happy New Year.

> Derwent "Dee" K. Langley
> Georgia Emergency Management Agency
> Hazard Mitigation Division
> Planning Program Manager
> Post Office Box 18055
> Atlanta, Georgia 30316
> Tel (404) 635-7516
> Cell (404) 558-1412
> Fax (770) 335-1113
> Email dee.langley@gema.ga.gov
>

D Langley

To: Dee Langley
Subject: Understanding Georgia's Vulnerability to Natural Disasters Workshop

> Hello everyone,
>
> Just a reminder, on February 6th, we will be holding our second workshop in our series of three, titled "Understanding Georgia's Vulnerability to Natural Disasters Workshop." We really appreciated your attendance last time. I believe we had over 70 people, and look forward to an even larger group this next time. I think everyone agreed we got a lot out of the first workshop. We look forward to presenting you with further information about Georgia's vulnerability to natural hazards and getting your viewpoints and input on this subject.
>
> Those of you that wanted to enter your critical facility data into GMIS, feel free to give me a call or email. Several organizations have already signed up and are inputting their data. State agencies, remember to check and update your BLLIP data also.
>
> Here is the web address we developed to summarize the Risk Workshop and our goals for the two remaining workshops:
>
http://www.gema.ga.gov/gemaohsv10.nsf/4F697EB5F4CBD51D85257729004931F8/9C21689CDAC7CDFF85257ACD00445FBC?OpenDocument
> Click on the "Workshop 1: Risk" link on the right hand side of the page to see the Hazard Ranking Activity Results, the PowerPoint presentation, and Hazard Summaries. Information about the second workshop will be included in the Workshop 2: Vulnerabilities link as it becomes available.
>
> Mark your calendars, we will be meeting Wednesday morning, February 6th, from 8:30 am to 12:00 pm, in the State Operations Center, on the bottom floor of Building 2. Attached is a map to our facility. Coffee and donuts will be available again.
>
> Thanks again for your attendance at the first workshop, and for those that that missed it, we look forward to meeting you.
>
> Please RSVP.
>
> Derwent "Dee" K. Langley
> Georgia Emergency Management Agency
> Hazard Mitigation Division
> Planning Program Manager
> Post Office Box 18055
> Atlanta, Georgia 30316
> Tel (404) 635-7516
> Cell (404) 558-1412
> Fax (770) 335-1113
> Email dee.langley@gema.ga.gov
>

D Langley

To: Dee Langley
Subject: Developing Georgia's Mitigation Strategy Workshop

Hello everyone,

I want to thank each of you that attended the second workshop "Georgia's Vulnerability to Natural Hazards." We had another great turnout and came one step closer to determining the hazards that could possibly affect our agencies, organizations and the state. We had just under 70 organizations request access to the GMIS system and several have sent in data to be uploaded and analyzed. If you haven't submitted your critical facility data on the spreadsheet, get it to me as soon as possible. I would like to get it in the system and have the results prior to our next meeting on **Thursday, April 25th.** Mark your calendars. The title of the next workshop is **Developing Georgia's Mitigation Strategy** and we plan to review the risk summaries from the first two workshops, develop goals based on these risk, and identify mitigation action steps to avoid or lessen the potential harm from these events. We plan to provide you with valuable risk and vulnerability information about each of your locations and examples of mitigation actions you can take to prepare your organizations for the various hazards affecting Georgia.

Those of you that wanted to get your critical facility data entered into GMIS, feel free to give me a call or email me your spreadsheet data. State agencies, remember to check and update your BLLIP data.

Here is the web address we developed to summarize the Risk and Vulnerability workshops and our goals for the final workshop:
http://www.gema.ga.gov/gemaohsv10.nsf/4F697EB5F4CBD51D85257729004931F8/9C21689CDAC7CDFF85257ACD00445FBC?OpenDocument
Click on the "Workshop 2: Vulnerability" link on the right hand side of the page to see the Hazard Ranking Activity Results, the PowerPoint presentation, and Hazard Summaries. Information about the third workshop will be included in the Workshop 3: Strategies link as it becomes available.

Mark your calendars, we will be meeting **Thursday morning, April 25th, from 8:30 am to 12:00 pm**, in the State Operations Center, on the bottom floor of Building 2. Attached is a map to our facility. Coffee and donuts will be available again.

Please take a moment to review the attached Mitigation Goals for the State of Georgia. We plan to review and update them according to your comments.

Thanks again for your attendance at the first two workshops. We look forward to seeing you in April.

Please RSVP.

Derwent "Dee" K. Langley
Georgia Emergency Management Agency
Hazard Mitigation Division
Planning Program Manager

D Langley

To: Dee Langley
Subject: Developing Georgia's Strategy to Reduce Natural Disasters Workshop

Hello everyone,

I wanted to remind you of our third workshop titled "Developing Georgia's Strategy to Reduce Natural Disasters". I also wanted to thank each of you that attended the second workshop. We had another great turnout and came one step closer to determining the hazards that could possibly affect our state, its agencies, and other organizations. Even if you missed the first two workshops, you are more than welcome to attend this workshop.

We had just over 75 organizations request access to the Georgia Mitigation Information System (GMIS) and several sent in data to be uploaded and analyzed. If you haven't submitted your critical facility data on the spreadsheet, get it to me as soon as possible. I would like to get it in the system and have the results prior to our next meeting.

The meeting is set for **Thursday, April 25th, from 8:30 am to 12:00 pm**, in the State Operations Center, on the bottom floor of Building 2. Attached is the Agenda and a map to our facility. Coffee and donuts will be available again. State agencies remember to make certain your BLLIP data has been updated recently.

We plan to review the risk summaries from the first two workshops, develop goals based on these risk, and identify mitigation action steps to avoid or lessen the potential harm from these events. We also plan to provide you with valuable risk and vulnerability information about each of your locations and examples of mitigation actions you can take to prepare your organizations for the various hazards affecting Georgia.

Here is the web address we developed to summarize the Risk and Vulnerability workshops and our goals for the final workshop:
http://www.gema.ga.gov/gemaohsv10.nsf/4F697EB5F4CBD51D85257729004931F8/9C21689CDAC7CDFF85257ACD00445FBC?OpenDocument

We look forward to taking the information collected in all three workshops and using it to develop the direction of the State's Hazard Mitigation Strategy. We can't thank you enough for your sacrifice and participation in this endeavor.

Please RSVP.

Derwent "Dee" K. Langley
Georgia Emergency Management Agency
Hazard Mitigation Division
Planning Program Manager
Post Office Box 18055
Atlanta, Georgia 30316
Tel (404) 635-7516
Cell (404) 558-1412

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Abbott, Temeka L	Ga 4 MW			ga4mw@aol.com
Allen, Brad	Administrative Office of the Courts		404-657-1770	Brad.Allen@gaaoc.us
Anthony, Dr. David	Family Intervention Specialists, Inc.		770-222-6622	www.fisinc.org
Barnhart, Stephanie	Odyssey Family Counseling Center		404-762-9190 x 209	sbarnhart@odysseycounseling.org
Bell, Julie	Cherokee Briggs & Associates		404-2906857	julie@briggsassociates.org
Bone, Dwight	Oconee Center - CSB		478-445-4817	dbone@oconeecenter.com
Brantley, Lawton	ITOS		706-542-5609	lbrantley@itos.uga.edu
Bryant, Joan	FEMA Mitigation Division - Risk Analysis		770-220-5277	Joan.bryant@fema.dhs.ga
Byers, Linda	FEMA Mitigation Division - Risk Analysis		770-220-5498	linda.byers@fema.dhs.ga
Chan, Dan	Ga Forestry Commission		478-751-3508	dchan@gfc.state.ga.us

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Clute, Jim	Ga Dept of Driver Services		678-413-8755	
Crowe, Sylvia	Advantage Behavioral Health Systems		706 389 6789	scrowe@advantagebhs.org
David, Jeannette	Ga Dept of Behavioral Health & Dev Dis		404-657-2354	Jedavid@dhr.state.ga.us
Deal, Tommy	CBF of Georgia		706-313-5066	tdeal@cbfga.org
Dees, Randy	Georgia Power Company		404-408-0961 c.	BRDEES@southernco.com
Edge, Vicky	Ga Forestry Commission		706-624-1432	vedge@gfc.STATE.GA.US
Fulmer, Bob	Soil & Water Conservation Commission		706-552-4470	bfulmer@gaswcc.org
Giles, Alan	DNR		404-362-2612	alan.giles@dnr.state.ga.us
Gilmer, Mike	Ga State Patrol		478-274-3014	
Gooden, Barry	National Weather Service		770-486-1133	www.weather.gov/Atlanta

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Hill, Chris	DNR		404-362-2615	Chris.hill@dnr.state.ga.us
Huett, Lynn	Volunteers of America, SE		706-638-0766	lhuett@voase.org
Huffman, Lillian	GEMA		404-624-2636	lillian.huffman@gema.ga.gov
Katich, Ed	Georgia Lottery		404-215-5022	amason@galottery.org
Ketchem, Corazon	Noah's Ark		770-634-5341	cketchem@noahsark2010.org
Knighton, Tanya M.	Oconee Center - CSB		478-445-4799	tknighton@oconeeenter.com
Kotz, Dan	Children's Healthcare of Atlanta		404-785-7444	dan.kotz@choa.org
Lang, Debra	ACTS Retirement-Life Communities		770-536-0484	DLANG@actslife.org
Marter, Patty	Lynndale, Inc.		706-738-3395 x 230	pmarter@lynndaleinc.org
McRae, Eric	ITOS			mcrae@itos.uga.edu

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Mecca, Gerald	Georgia Lottery		404-215-5022	amason@galottery.org
Mitchell, Myla	Hope Animal-Assisted Crisis Response (AACR)		770-938-2373	mylamitchell@bellsouth.net
Mohr, Monty	Office of Consumer Protection		404-657-5673	monty.mohr@ocp.ga.gov
Mosley, Eric	Ga Forestry Commission		912-531-7152	emosley@gfc.state.ga.us
Neal, Denise	Ga Community Support & Solutions		404-634-4222 x 283	DeniseNeal@gacommunity.org
Noel, Raymond	Ga Dept of Community Affairs		404-679-0623	Raymond.noel@dca.ga.gov
Perkins, Mike	ITOS		706-542-3436	mike@itos.uga.edu
Pratt, Lisa	DOAS Risk Mgmt Services		404-463-5458	Lisa.pratt@doas.ga.gov
Pudar, Ranko	Pudar Mitigation Consulting, Inc.		404-259-8159	www.pudarconsulting.com
Robinson, Debra	Quality Improvement Director		770-427-0147 x 2326	www.devereux.org

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Rowe, Camille	Meritan, Inc.		770-387-9003 x 211	camillerowe@meritan.org
Russo, Sheri	GEMA			sheri.russo@gema.ga.gov
Rust, Tina	River Valley Regional Commission		706-256-2910	Trust@rivervalleyrc.org
Sanders, Stephanie	Cross Plains Community Partner		706-278-8143 x 102	ssanders@optilink.us
Shillock, Tom	DNR		404-675-1607	tom.shillock@dnr.state.ga.us
Sorrells, Frank	Ga Forestry Commission			
Stapel, James	Ga EPD - Watershed Protection Branch		404-651-5158	james.stapel@dnr.state.ga.us
Stewart, Wendy	DHS			wmstewart@dhr.state.ga.us
Strenkowski, Greg	Ga Forestry Commission		404-463-2143	gstrenke@gfc.state.ga.us
Style, Leanora	GEMA		404-635-7212	leanora.style@gema.ga.gov

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Theus, Andrew	Administrative Office of the Courts		404-232-1857	andrew.theus@gaaoc.us
Tkacs, Thomas	DNR		404-685-1685	thomas.tkacs@dnr.state.ga.us
Trammell, Allison	Behavioral Health Link		404-527-6605	atrammell@ihrcorp.com
Trotter, Frederick	DOAS Risk Mgmt Services		404-463-2143	Frederick.trotter@doas.ga.gov
Wilson, Hank	West Central Health District 7		706-321-6158	fjwilson@dhr.state.ga.us
Yoder, Mike	VOAD		4045972137	Yoderjm@yahoo.com
Yu, Yongqing	DNR		404-362-2613	yongqing.yu@dnr.state.ga.gov
Zubler, Don	United Way 211		404-614-1017	www.unitedwayatlanta.org/211

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
KENT ASHER	Rockdale Co.		-770 278 7080	Kent.asher@rockdalecounty.org
NATHANIEL (NATE) CRAWFORD	FAMILY INTERVENTION SPECIALISTS		-770-222-6622 x.109 Cell (404) 579-0767	nathan.crawford@fisinc.org nate.crawford77@gmail.com (personal)
Autumn Howard	Volunteers of America		425.298-5793	ahoward@voase.org
Jim Smith	Salvation Army		404 550 3707	Jim_Smith@USS.salvationarmy
Terry Jackson	DLA		404 679 4946	Terry.Jackson@dca.ga.gov
BRUCE HOLMES	BOR-USG		404 962-3157	BRUCE.HOLMES@USG.EDU
Sarah Hogan	Oconee CSB		478-456-7848	shogan@oconeecenter.com
Saleem Delaralla	FOCUS USA		(404)-406-0837	saleem.delaralla@gmail.
Sheri Russo	GEMA		470 290 9105	sheri.russo@gema.ga.gov
Elizabeth Wood	Child + Family Guidance		478-451-5205	childandfamilyguidance@yahoo.com

Understanding Georgia's Risk to Natural Disasters – Workshop 12/6/2012

Sign-In Sheet

Name	Organization	Signature	Phone Number	Email Address
Terry Lunn	GEMA		404-635-7016	terry.Lunn@gema.ga.gov
Carolyn Daness	Humane Assoc of GA		4-827-0603	Carolyn.Daness@Turner.com
ALICIA SOLANO	GEMA		4685-3	"
Kelly Keefe	GEMA		4046352125	Kelly.Keefe@gema.ga.gov

SIGN-IN SHEET

Understanding Georgia's Vulnerability to Natural Disasters Workshop ~ February 6, 2013

Participant Name	Title	Organization/Agency	Phone #	Email Address	Signature
Asher, Kent	GIS Specialist/Planner	Rockdale County		kent.asher@rockdalecounty.org	
Beck, Lisa	Emergency Manager	FEMA Reg IV HMD-Risk Analysis	404-679-1666	lbeck@tcsg.edu	
Brantley, Lawton		ITOS			
Bryant, Joan	Planning Specialsist	FEMA Reg IV HMD-Risk Analysis	770-220-5277	joan.bryant@fema.dhs.gov	
Bus, Suzy	Member	Gwinnett Coalition Emergency Preparedness			
Byers, Linda	Lead Planning Specialist	FEMA Reg IV HMD-Risk Analysis	770-220-5498	linda.byers@fema.dhs.gov	
Clayton, Randy		Ga Dept of Highway Safety			
Ellington, Bart	Director - Finance Department	DECAL Bright From The Start	404-656-3925	bart.ellington@decal.ga.gov	
Graham, Rick	Director of Operations	Ga Dept of Veterans Service	404-656-2307	rgraham@vs.state.ga.us	
Harper, Jack	Emergency Preparedness Specialist	Gwinnett, Newton, Rockdale Health Depts	678-442-6915	jack.harper@gnrhealth.com	
Hill, Chris	PE	Ga Environmental Protection Division Watershed	404-362-2615	Christopher.hill@dnr.state.ga.us	
Holmes, Bruce		Board of Regents			
Howard, Autumn		Volunteers of America, SE	706-638-0766	ahoward@voase.org	
Huffman, Lillian	GIS Specialist/Planner	GEMA		lillian.huffman@gema.ga.gov	
Jackson, Terry	GIS Specialist/Planner	DCA		terry.jackson@dca.ga.gov	

SIGN-IN SHEET

Understanding Georgia's Vulnerability to Natural Disasters Workshop ~ February 6, 2013

Participant Name	Title	Organization/Agency	Phone #	Email Address	Signature
Ketchem, Corazon	Executive Director	Noah's Ark	770-634-5341	cketchem@noahsark2010.org	
Marter, Patty	Health & Safety/ Risk Mgmt Social Services Tech	Lynndale, Inc.	706-738-3395 x 230	pmarter@lynndaleinc.org	
McRae, Eric	Director	ITOS			
Mosley, Eric		GFC			
Neal, Denise	QA Director	Ga Community Support & Solutions	404-634-4222 x 283	DeniseNeal@gacommunity.org	
Pudar, Ranko	CEO	Pudar Consulting, Inc.	770-565-6309	www.pudarconsulting.com	
Rust,Tina	GIS Specialist/Planner	River Valley Regional Commission	706-256-2908	Trust@rivervalleyrc.org	
Shillock, Tom		DNR			
Stapel, James		DNR		James.Stapel@dnr.state.ga.us	
Strenkowski, Greg		GFC			
Style, Leanora	GIS Specialist/Planner	GEMA		Leanora.Style@gema.ga.gov	
Wood, Elizabeth		Child and Family Guidance of Georgia	(478)451-5205	childandfamilyguidance@yahoo.com	

SIGN-IN SHEET

Understanding Georgia's Vulnerability to Natural Disasters Workshop ~ February 6, 2013

Participant Name	Title	Organization/Agency	Phone #	Email Address	Signature
Webb, Carol	Dir. of Comm. & Planning	DBF	770-986-1386	webbc@dbf.state.ga.us	Carol Webb
Whitesides, Lee	Director Administration	Dept. of Audits	404-656-0493	whitesid@audits.ga.gov	Lee Whiteside
~~Beck, Lisa~~					
Alicia M. [illegible]	Dept. of Pub. Safety		404-624-7229	[illegible]@gsp.net	[illegible]
Mike Gilmer	Dept of Public Safety		4-624-7860	mgilmer@gsp.net	M. Gilmer
Terry Lunn	Division Director	GEMA	4-635-7012	terry.lunn@gema.ga.gov	[illegible]
Sylvia Crowe	ABHS-	Safety Coord	7062018703	scrowe@advantagebhs.org	Sylvia Crowe
Joe Edenfield	Risk Reduction Specialist	GEMA	912-486-7936	joe.edenfield@gema.ga.gov	Joe Edenfield
Tanya Knighton	DDP, RN, BSN	Oconee Center	478-445-[illegible]	tknighton@oconeecenter.com	Tanya Knighton
Sarah Hogan	Case Manager Supervisor	Oconee Center	478-456-7848	shogan@oconeecenter.com	Sarah Hogan
Quinton Gibbs	DCH Director	DCH	4/657-8979	qgibbs@DCH.GA.GOV	[illegible]
Brad Allen	IT - AOC	AOC	4/844-7808	allenb@gaaoc.us	[illegible]
Natalie Jones	Risk Reduction Specialist	GEMA		natalie.jones@gema.ga.gov	N Jones
Stephanie Sanders	QE/Training Coordinator	Cross Plains Community Partner	706-278-8143	ssanders@optilink.us	Stephanie Sanders
Jeannette David	Disaster MH Coord	DBHDD	4-657-2354	jedavid@dbhdd.ga.gov	[illegible]

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Understanding Georgia's Vulnerability to Natural Disasters Workshop ~ February 6, 2013

Participant Name	Title	Organization/Agency	Phone #	Email Address	Signature
NATE CRAWFORD	OPERATIONS MANAGER & SAFETY OFFICER	FAMILY INTERVENTION SPECIALISTS	404-579-0764 cell 770-222-6622 xt. 109	nathan.crawford@fisiinc.org	
LISA JOSEPH	Accountant	Odyssey Family Counseling Center	404-762-9190	ljoseph@odysseycounseling.org	
PAUL MEWIN	DIR. OF COMMUNICATIONS	STATE PLANNING OFFICE	4.656-3252	PAUL.MEWIN@SPO.GA.GOV	
VALENCIA MILLER	Grants Specialist	GEMA	4-635-7511	valencia.miller@gema.ga.gov	
Raymond Noel	DCA Emergency Coordinator	DCA	4679-0623	raymond.noel@dca.ga.gov	
ALICIA SOLANO	GEMA		4)635-7235		
Debra Wang	Administrator	Village Nursing Care	7-536-0464	dlang@AOSLIFE.org	
Lynn Huett	Program Mgr.	Volunteers of America	706 936 4143	lhuett@voaosc.org	
Randy Dees	Storm Restoration Manager	GA. Power	404-506-7557	bdlees@southernco.com	
Alan Giles	Information Geologist	Georgia DNR/EPD	404 362-2612	alan.giles@dnr.state.ga.us	

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SIGN-IN SHEET - WORKSHOP 3

Developing Georgia's Strategy to Reduce Natural Disasters Workshop - 4/25/2013

Participant Name	#	Title	Organization/Agency	Phone #	Email Address	Signature
Allen, Brad	1	IT/Disaster Recovery	Administrative Office of the Courts	404-657-1770	Brad.Allen@gaaoc.us	
Asher, Kent	B	GIS Specialist/Planner	Rockdale County		kent.asher@rockdalecounty.org	
Barnhart, Stephanie	B		Odyssey Family Counseling Center	404-762-9190 x. 209	sbarnhart@odysseycounseling.org	
Beck, Lisa	20	Emergency Manager	TCSG ~~FEMA Reg IV HMD-Risk Analysis~~	404-679-1666	lbeck@tcsg.edu	
Brantley, Lawton	B		ITOS		lbrantley@itos.uga.edu	
Bryant, Joan	F	Planning Specialsist	FEMA Reg IV HMD-Risk Analysis	770-220-5277	joan.bryant@fema.dhs.gov	
Byers, Linda	F	Lead Planning Specialist	FEMA Reg IV HMD-Risk Analysis	770-220-5498	linda.byers@fema.dhs.gov	
Chan, Dan	2		Georgia Forestry Commission	478-751-3508	dchan@gfc.state.ga.us	
Clayton, Randy	3		Ga Dept of Highway Safety		rcayton@gohs.ga.gov	
Crawford, Nathaniel (Nate)	B	Operations Mgr.	Family Intervention Specialists	770-222-6622 x 109	nathan.crawford@fisinc.org	
Crowe, Sylvia	B		Advantage Behavioral Health Systems	706-389-6789	scrowe@advantagebhs.org	
Danese, Carolyn	B		Humane Association of Georgia	404-827-0603	carolyn.danese@turner.com	
David, Jeannette	4		GA Dept of Behavioral Health & Development Disabilities	404-657-2354	jedavid@dhr.state.ga.us	
Deal, Tommy	B		CBF of Georgia	706-313-5066	tdeal@cbfga.org	
Dees, Randy	B		Georgia Power Company	404-408-0961	BRDEES@southernco.com	
Delauralla, Saleem	B		Focus USA	404-406-0837	saleem.delauralla@gmail.com	

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Developing Georgia's Strategy to Reduce Natural Disasters Workshop - 4/25/2013

Participant Name	#	Title	Organization/Agency	Phone #	Email Address	Signature
Edenfield, Joe	R	Risk Reduction Specialist	GEMA	912-486-7936	joe.edenfield@gema.ga.gov	
Edge, Vicky	2		Georgia Forestry Commission	706-624-1432	vedge@gfc.state.ga.us	
Ellington, Bart	B	Director - Finance Department	DECAL Bright From The Start	404-656-3925	bart.ellington@decal.ga.gov	
Flournoy, Allicia	6		Dept. of Public Safety	404-624-7229	abflournoy@gsp.net	
Fulmer, Bob	7		Soil & Water Conservation Commission	706-552-4470	bfulmer@gaswcc.org	
Garris, Dewayne	5	State Fire Marshall	Insurance Commissioner's Office	404-656-0697	dgarriss@sfm.ga.gov	X Dwayne Garris
Gibbs, Quinton	8	Director	DCH	404-657-8979	ggibbs@dch.ga.gov	
Giles, Alan	9		DNR	404-362-2612	alan.giles@dnr.state.ga.us	
Gilmer, Mike	6		GA State Patrol	478-274-3014	mgilmer@gsp.net	
Gooden, Barry	B		National Weather Service	770-486-1133	Barry.Gooden@noaa.gov	
Graham, Rick	11	Director of Operations	Ga Dept of Veterans Service	404-656-2307	rgraham@vs.state.ga.us	X April F Dodgen
Harper, Jack	B	Emergency Preparedness Specialist	Gwinnett, Newton, Rockdale Health Depts	678-442-6915	jack.harper@gnrhealth.com	
Hill, Chris	9	PE	Ga Environmental Protection Division Watershed	404-362-2615	Christopher.hill@dnr.state.ga.us	
Hogan, Sarah	B	S+C Coordinator Sarah Hogan	Oconee Center - CSB	478-456-7848	shogan@oconeecenter.com	X Sarah Hogan
Holmes, Bruce	10		Board of Regents		Bruce.holmes@usg.edu	
Howard, Autumn	B		Volunteers of America, SE	706-638-0766	ahoward@voase.org	

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Developing Georgia's Strategy to Reduce Natural Disasters Workshop - 4/25/2013

Participant Name	#	Title	Organization/Agency	Phone #	Email Address	Signature
Huett, Lynn	B		Volunteers of America, SE	706-638-0766	lhuett@voase.org	
Huffman, Lillian	R	GIS Specialist/Planner	GEMA		lillian.huffman@gema.ga.gov	
Jackson, Terry	12	GIS Specialist/Planner	DCA		terry.jackson@dca.ga.gov	
Jones, Natalie	R	Risk Reduction Specialist	GEMA	404-635-4573	natalie.jones@gema.ga.gov	
Joseph, Lisa	B	Accountant	Odyssey Family Counseling Center	404-762-9190	ljoseph@odysseycounseling.org	
Katich, Ed	B		Georgia Lottery	404-215-5022	amason@galottery.org	
Ketchem, Corazon	B	Executive Director	Noah's Ark	770-634-5341	cketchem@noahsark2010.org	
Knighton, Tanya M.	B	RN, DOP, BSN	Oconee Center - CSB	478-445-4799	tknighton@oconeecenter.com	
Lang, Debra	B		ACTS Retirement - Life Communities	770-536-0484	DLANG@actslife.org	
Lunn, Terry	R	Hazard Mitigation Director	GEMA	404-635-7016	terry.lunn@gema.ga.gov	
Marter, Patty	B	Health & Safety/ Risk Mgmt Social Services Tech	Lynndale, Inc.	706-738-3395 x 230	pmarter@lynndaleinc.org	
McRae, Eric	B	Director	ITOS		emcrae@itos.uga.edu	
Mecca, Gerald	B		Georgia Lottery	404-215-5022	amason@galottery.org	
Melvin, Paul	13	Communications Director	State Property Office GBA	404-656-3252	paul.melvin@spo.ga.gov	
Miller, Valencia	R	Risk Reduction Specialist	GEMA	404-635-7517	valencia.miller@gema.ga.gov	
Mitchell, Myla	B		Hope Animal - Assisted Crisis Response (AACR)	770-938-2373	mylamitchell@bellsouth.net	

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SIGN-IN SHEET - WORKSHOP 3

Developing Georgia's Strategy to Reduce Natural Disasters Workshop - 4/25/2013

Participant Name	#	Title	Organization/Agency	Phone #	Email Address	Signature
Mosley, Eric	2		GFC		emosley@gfc.state.ga.gov	
Neal, Denise	B	QA Director	Ga Community Support & Solutions	404-634-4222 x 283	DeniseNeal@gacommunity.org	
Noel, Raymond	12	Director	GA Dept of Community Affairs	404-679-0623	Raymond.noel@dca.ga.gov	Raymond Noel
Pudar, Ranko	B	CEO	Pudar Consulting, Inc.	770-565-6309	www.pudarconsulting.com	
Robinson, Debra	B	Quality Improvement Director	Devereux	770-427-0147 x 2326	www.devereux.org	
Rowe, Camille	B		Meritan, Inc.	770-387-9003 x 211	camillerowe@meritan.org	
Russo, Anita	B		ITOS	706-583-8177	arusso@ITOS.uga.edu	
Russo, Sheri	R	Area Coordinator	GEMA	404-290-9105	sheri.russo@gema.ga.gov	
Rust,Tina	B	GIS Specialist/Planner	River Valley Regional Commission	706-256-2908	Trust@rivervalleyrc.org	
Sanders, Stephanie	B		Cross Plains Community Partner	706-278-8143 x 102	ssanders@optilink.us	Stephanie Sanders
X Shillock, Tom	9		DNR		tom_shillock@dnr.state.ga.us	Tom Shillock
Smith, Jim	B		Salvation Army	404-550-3707	jim.smith@uss.salvationarmy	
Soriano, Alicia	R	Risk Reduction Manager	GEMA	404-635-7235	alicia.soriano@gema.ga.gov	
Stapel, James	9		DNR		James.Stapel@dnr.state.ga.us	
Strenkowski, Greg	2		GFC		Gestrenk@gfc.state.ga.us	
Style, Leanora	R	GIS Specialist/Planner	GEMA		Leanora.Style@gema.ga.gov	

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SIGN-IN SHEET - WORKSHOP 3

Developing Georgia's Strategy to Reduce Natural Disasters Workshop - 4/25/2013

Participant Name	#	Title	Organization/Agency	Phone #	Email Address	Signature
Theus, Andrew	1		Administrative Office of the Courts	404-232-1857	andrew.theus@gaaoc.us	
Tkacs, Thomas	9		DNR	404-675-1685	thomas.tkacs@dnr.state.ga.us	
Trammell, Allison	B		Behavioral Health Link	404-527-6605	atrammell@ihrcorp.com	
Trotter, Frederick	14		DOAS Risk Mgmt Services	404-463-2143	Frederick.trotter@doas.ga.gov	
Webb, Carol	15	Comm & Planning Director	DBF	770-986-1386	webbc@dbf.state.ga.us	
Whitesides, Lee	16	Administration Director	Department of Audits	404-656-0493	whitesid@audits.ga.gov	
Wilson, Hank	17		DHR West Central Health District 7	706-321-6158	fjwilson@dhr.state.ga.us	
Wood, Elizabeth	B		Child and Family Guidance of Georgia	(478)451-5205	childandfamilyguidance@yahoo.com	
Yodar, Mike	B		VOAD	404-597-2137	yoderim@yahoo.com	
Zubler, Don	B		United Way 211	404-614-1017	www.unitedwayatlanta.org/211	

Charlie A Sasser Sen. Officer GTA 18 404-463-2350 CHARLIE.SASSER@GTA.GA.GOV

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Understanding Georgia's Workshop ~ 2021

Participant Name	Title	Organization/Agency	Phone #	Email Address	Signature
DaBella, Chad	Accounting Manager	Dept of Audits & Accounts	404-651-6438	dabella@audits.ga.gov	
N J. ~ Clute	Facilities Mgr.	DDS 19	678-492-5028	jclute@dds.ga.gov	

Workshop Attendees List

Participant's Name	Title	Organization/Agency
Allen, Brad	IT Backup	Administrative Office of the Courts
Asher, Kent	Floodplain Manager	Rockdale County
Barnhart, Stephanie L.	UM/QA Manager	Odyssey Family Counseling Center
Brantley, Lawton	GIS Production Coordinator	ITOS
Byers, Linda	R4 Lead Planning Specialist	FEMA Mitigation Division - Risk Analysis
Chan, Dan		Ga Forestry Commission
Crawford, Nathaniel	Operations Manager	Family Intervention Specialists, Inc.
Crowe, Sylvia	Medical Records/Health & Safety	Advantage Behavioral Health Systems
David, Jeannette	Disaster Mental Health Services Coordinator	Ga Dept of Behavioral Health & Dev Dis
Deal, Tommy	Disaster Response Coordinator	CBF of Georgia
Dees, Randy	Storm Center Manager	Georgia Power Company
Delawralla, Saleem	Comm. & MTR Lead	Focus USA
Edge, Vicky	ICT2 (Deputy T)	Georgia Forestry
Fulmer, Bob	Rural Water Program Manager	Soil & Water Conservation Commission
Giles, Alan	Info Geo	DNR
Gilmer, Mike	Budget Officer	Ga State Patrol
Gooden, Barry	Warning Coordination Meteorologist	National Weather Service
Hill, Chris	Engineer	DNR
Hogan, Sarah	Community Liaison	Oconee Center - CSB
Holmes, Bruce	Chief of Police, Director Safety & Security	Board of Regents UGA
Howard, Autumn	Program Assistant	Volunteers of America, SE
Huett, Lynn	Program Manager	Volunteers of America, SE
Huffman, Lillian	GIS Specialist	GEMA
Jackson, Terry	Director - Off of Mapping & Decision Support Syste	Ga Dept of Community Affairs
Katich, Ed	Vice President of Internal Audit & Security	Georgia Lottery
Ketchem, Corazon	Executive Director	Noah's Ark
Knighton, Tanya	DDP, RN, BSN	Oconee Center
Lang, Debra	Corporate Director Home Services	ACTS Retirement-Life Communities
Marter, Patty	Health & Safety/Risk Mgmt Social Services Tech	Lynndale, Inc.
McRae, Eric	Director	ITOS
Mecca, Gerald	Vice President of Administration	Georgia Lottery
Mitchell, Myla		Hope Animal-Assisted Crisis Response (AACR)
Mosley, Eric		Ga Forestry Commission
Neal, Denise	QA Director	Ga Community Support & Solutions
Noel, Raymond	Director of Admin Operations	Ga Dept of Community Affairs
Pudar, Ranko	Principal	Pudar Mitigation Consulting, Inc.
Robinson, Debra	Quality Improvement Director	Devereux GA Treatment Network
Rowe, Camille	State Dir of DD Services GDDD	Meritan, Inc.
Russo, Sheri	Area Coordinator	GEMA
Rust, Tina	GIS Analyst/Planner	River Valley Regional Commission
Sanders, Stephanie	QE/Training Coordinator	Cross Plains Community Partner
Shillock, Tom	GIS Specialist	DNR - Georgia Environmental Protection Division
Smith, Jim		Salvation Army
Stapel, James	SDWIS/GIS Admin	Ga EPD - Watershed Protection Branch
Stewart-Casey, Wendy		DHS
Strenkowski, Greg	Staff Forester	Georgia Forestry Commission
Style, Leanora	GIS Manager	GEMA
Theus, Andrew	Lead	Administrative Office of the Courts
Tkacs, Thomas	Engineer	GA-DNR-EPD-FPM
Trammell, Allison	Director of Clinical Quality	Behavioral Health Link
Trotter, Frederick	State Property Insurance Program Officer	DOAS Risk Mgmt Services Division
Wilson, Hank	CHEC II, Healthcare Liaison	West Central Health District 7
Wood, Elizabeth	LPC/CEO	Child and Family Guidance
Yoder, Mike	VOAD	
Zubler, Don	211 Operations Manager	United Way 211

D Langley

From:	D Langley
Sent:	Thursday, October 03, 2013 1:05 PM
To:	D Langley
Cc:	Terry Lunn; Alicia Soriano; Scott Sherman; Alan Sloan; Kelly Reeves; Brian Laughlin; Joe Edenfield; Valencia Miller; Natalie Jones
Subject:	2014 State of Georgia Standard Hazard Mitigation Plan for Review

Hello,

The Planning Team within the Hazard Mitigation Division of the Georgia Emergency Management Agency is in the process of updating the 2014 State of Georgia Standard Hazard Mitigation Plan and would like to solicit your comments. The plan will be uploaded to the webpage by chapter as they are completed. Here is the link to the website: http://www.gema.ga.gov/gemaohsv10.nsf/1c3c181c58c9b3f28525771b0058b098/c43f004a103bbf0a852577200052d3d2?OpenDocument

Please take a few minutes to look at each chapter and forward any comments or questions to Dee Langley, Planning Program Manager at dee.langley@gema.ga.gov. We appreciate your help and look forward to your ideas. We have attempted to include as many people and organizations into the update process as possible.

The purpose of the Hazard Mitigation Plan is to reduce disaster assistance costs and preserve disaster assistance eligibility for the State and the local governments. The Plan is a comprehensive, statewide mitigation planning effort. It identifies hazards and associated vulnerabilities within the State and provides a comprehensive statewide strategy to reduce future disaster losses through sound mitigation projects.

Thank you again for all your help.

Appendix C

Risk Ranking

Risk Ranking Part 1: Hazard Score

Hazard Score Definitions

Instructions:

Use this scoring to fill in the duration and area impacted columns on the table based on your understanding of the hazard. On the potential categories (green), think of what would be the most severe event for Georgia. When completed, total the scores for each hazard and then fill in the ranking table from highest score to lowest. Then discuss with your group to determine a consensus. In the next workshop, these scores will be combined with vulnerability scores to determine overall risk.

Historical Frequency

The historical frequency is based on data from SHELDUS. The date range of 1992-2011 was used because of the unreliability in older records. The frequency score is average number of events per year. An event is defined as 1 county affected by the hazard type. The appropriate scores have been pre- filled on the scoring table.

Rating	Average Frequency Per Year
1	Less than 10 events
2	10-25
3	25-50
4	50-100
5	100-150
6	More than 150

Duration

Duration is the estimate of how long an event could last for the hazard.

Rating	Number of Days
1	Less than 1
2	1-7
3	More than 7

Area Impacted

The area impacted is an estimate of how many counties could be impacted by a single event.

Rating	Number of Counties
1	1-5
2	6-15
3	15-25
4	25-50
5	50-75
6	More than 75

Risk Ranking Part 1: Hazard Score

	Potential Hazard			
Hazards in 2011 State Plan	Historical Frequency	Duration	Area Impacted	Total Hazard Score
Dam Failure	1			
Drought	2			
Inland Flooding	3			
Seismic Hazards	1			
Severe Weather	6			
Severe Winter Weather	3			
Sinkhole	1			
Storm Surge	1			
Tornadoes	3			
Tropical Cyclonic Events	1			
Wildfire	1			
Wind	3			
Max Possible	6	3	6	15

Hazard Ranking

	Hazard	Score	Threat
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Threat Levels
Very High= 12-15
High= 8-11
Medium= 4-7
Low= 0-3

Workshop 1: Hazard Ranking Activity Results

Breakout Tables

Hazards in 2011 State Plan	1	2	3	4	5	Average Score
Dam Failure	3	4	4.25	5	3	**3.85**
Drought	11	11	9.5	11	9	**10.3**
Inland Flooding	8	8	7.6	8	8	**7.92**
Seismic Hazards	7	2	3.5	5	3	**4.1**
Severe Weather	12	12	10.9	11	12	**11.58**
Severe Winter Weather	10	10	9.1	9	8	**9.22**
Sinkhole	3	3	3.5	3	3	**3.1**
Storm Surge	7	5	4.27	5	4	**5.054**
Tornadoes	7	7	5.8	5	8	**6.56**
Tropical Cyclonic Events	7	7	6	7	5	**6.4**
Wildfire	6	7	5.25	6	6	**6.05**
Wind	9	8	6.5	6	9	**7.7**

Hazard Ranking

	Hazard	Score	Threat
1	Severe Weather	12	VH
2	Drought	10	H
3	Winter Weather	9	H
4	Inland Flooding	8	M
5	Wind	8	M
6	Tornado	7	M
7	Trop. Cyclone	6	M
8	Wildfire	6	M
9	Storm Surge	5	L
10	Seismic	4	L
11	Dam Failure	4	L
12	Sinkhole	3	L

Threat Levels

Very High= 12-15
High= 9-11
Medium= 6-8
Low= 3-5

Historical Impact

Annualized losses

Rating	Adjusted Losses Per Year
1	Up to $100k
2	100-1 million
3	1-5
4	6-15
5	16-25
6	26-35
7	36-45
8	More than 45

Injuries and Deaths per year

Rating	Average Per Year
0	None
1	Less than 10
2	10-25
3	26-50
4	More than 50

Potential Vulnerability

Human Loss

Rating	Description
0	No impact
1	Few injuries and no deaths
2	Multiple injuries and few deaths
3	Multiple deaths and injuries

Property Damage

Rating	Description
0	No impact
1	Some properties with minimal, non-structural damage, no residents displaced, no need for long-term housing
2	Some properties with non-structural damage, residents only displaced short-term, temporary shelters needed, no need for long-term housing
3	Moderate amount of homes substantially damaged or destroyed, some residents displaced long-term, need for some long-term housing assistance
4	Large number of homes destroyed or substantially damaged, many residents displaced, need for comprehensive long-term housing planning and assistance

Critical Facilities Impacted

Rating	Description
0	No impact
1	Brief interruption of essential facilities/services 7 days or less
2	1-4 weeks
3	1-6 months
4	More than 6 months

Economic Disruption

Rating	Description
0	No impact
1	Minimal impact, Brief interruption of some business services up to one week
2	Moderate impact: Some businesses and economic sectors interrupted up to one month, some short term outside assistance may be needed.
3	Major Impact: Multiple locals and some state economic sectors disrupted for 1 month to a year; Long term state and federal assistance required; some local economies permanently changed (people move away and businesses close or relocate)
4	Catastrophic impact to state and multiple locals; more than 1 year to recover; disruption requires substantial long-term recovery and redevelopment planning and assistance; some communities do not recover

Natural and Cultural Resources (Environment)

Rating	Potential degree of impact
0	No impact to important natural and cultural resources
1	Minimal or minor
2	Moderate
3	Substantial

Risk Ranking Part 2: Vulnerability Score

	Historical Impact		Potential Vulnerability Impact					
Hazards in 2011 State Plan	Annualized Losses	Injuries and Deaths Per Year	Human Loss	Property Damage & Effect	Critical Facilities Impacted	Economy Disruption	Natural and Cultural Resources (Environment)	Total Vulnerability Score
Dam Failure	1	0						
Drought	6	0						
Inland Flooding	5	1						
Seismic Hazards	1	0						
Severe Weather	7	3						
Severe Winter Weather	3	1						
Sinkhole	1	0						
Storm Surge	1	1						
Tornado	8	4						
Tropical Cyclone Events	3	0						
Wildfire	2	1						
Wind	4	3						
Max Possible	8	4	3	4	4	4	3	30

	Vulnerability Ranking		
	Hazard	Score	Impact
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Impact Level
Very High= 24-30
High= 16-23
Medium= 8-15
Low= 1-7

Risk Ranking Part 3: Total Score

Hazards in 2011 State Plan	Hazard	Vulnerability	Total Risk Score
Dam Failure	4		
Drought	10		
Inland Flooding	8		
Seismic Hazards	4		
Severe Weather	12		
Severe Winter Weather	9		
Sinkhole	3		
Storm Surge	5		
Tornadoes	7		
Tropical Cyclonic Events	6		
Wildfire	6		
Wind	8		

Max Possible	15	30	45

	Total Risk Ranking		
	Hazard	Score	Risk
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Risk Levels

Very High= 36-45
High= 26-35
Medium= 16-25
Low= up to 15

Workshop 2: Vulnerability Ranking Activity Results

Breakout Tables

Hazards in 2011 State Plan	1	2	3	4	5	Average Score
Dam Failure	12	11	11	9.4	12	11
Drought	12	12	13	11.4	10	12
Inland Flooding	19	16	19	19.1	14	17
Seismic Hazards	4	10	7	5.3	7	7
Severe Weather	16	20	16	16.2	17	17
Severe Winter Weather	14	13	15	11	9	12
Sinkhole	5	2	5	3.8	5	4
Storm Surge	12	13	14	13.8	9	12
Tornadoes	25	23	25	25.7	27	25
Tropical Cyclonic Events	16	15	17	14.2	11	15
Wildfire	12	11	12	12.3	11	12
Wind	11	15	12	13	12	13

Vulnerability Ranking

	Hazard	Score	Impact
1	Tornado	25	VH
2	Inland Flooding	17	H
3	Severe Weather	17	H
4	Trop. Cyclone	15	M
5	Wind	13	M
6	Drought	12	M
7	Winter Weather	12	M
8	Storm Surge	12	M
9	Wildfire	12	M
10	Dam Failure	11	M
11	Seismic Hazards	7	L
12	Sinkhole	4	L

Impact Level
Very High= 24-30
High= 16-23
Medium= 8-15
Low= 1-7

Workshop 2: Total Risk Ranking Results

Breakout Tables

Hazards in 2011 State Plan	1	2	3	4	5	Average Score
Dam Failure	15	15	16	13.4	16	15
Drought	23	22	22	21.4	20	22
Inland Flooding	27	24	28	27.1	22	26
Seismic Hazards	11	14	9	9.3	11	11
Severe Weather	28	32	34	28.2	29	30
Severe Winter Weather	24	22	20	20	18	21
Sinkhole	8	5	6	6.8	8	7
Storm Surge	19	18	21	18.8	14	18
Tornadoes	32	30	32	32.7	34	32
Tropical Cyclonic Events	23	21	26	20.2	17	21
Wildfire	18	17	19	18.3	17	18
Wind	20	23	24	21	20	22

Total Risk Ranking

	Hazard	Score	Risk
1	Tornado	32	H
2	Severe Weather	30	H
3	Inland Flooding	26	H
4	Drought	22	M
5	Wind	22	M
6	Winter Weather	21	M
7	Trop. Cyclone	21	M
8	Wildfire	18	M
9	Storm Surge	18	M
10	Dam Failure	15	L
11	Seismic Hazards	11	L
12	Sinkhole	7	L

Risk Levels

Very High= 36-45
High= 26-35
Medium= 16-25
Low= up to 15

Appendix D

Other Risk Information

Another source utilized in addressing Georgia's hazard event and loss history is the database of Presidential Disaster Declarations (PDDs) and the associated claim amounts. These data are publicly accessible through FEMA. Although similar to the SHELDUS data in that loss data are acquired, the two databases cannot be combined due to the possible overlap of data, which may result in double counting some losses. However, analyzing both sets of data separately still proves useful in understanding Georgia's all-hazard event and loss history. The following table, Table 2.3, details the history of PDDs for Georgia.

Number	Declared	Description
1973	4/29/2011	Severe Storms,Tornadoes,Straight-line Winds and Associated Flooding
1858	09/24/2009	Severe Storms and Flooding
1833	04/23/2009	Severe Storms and Flooding
1761	05/23/2008	Severe Storms and Tornados
1750	03/20/2008	Severe Storms and Tornadoes
2697	05/31/2007	Harveytown Fire
2693	05/09/2007	Bugaboo Scrub Fire
2688	05/05/2007	Roundabout Fire
2686	04/26/2007	Kneeknocker Swamp Fire
2685	04/17/2007	Sweat Farm Road Fire
1686	03/03/2007	Severe Storms and Tornadoes
3218	09/05/2005	Hurricane Katrina Evacuation
1560	09/24/2004	Tropical Storm Frances
1554	09/18/2004	Hurricane Ivan
2362	05/23/2001	Blounts Pasture Fire
1315	02/15/2000	Tornadoes
1311	01/28/2000	Winter Storm
3144	09/14/1999	Hurricane Floyd
1271	04/20/1999	Severe Storms and Tornadoes
1209	03/20/1998	Severe Storms, Tornadoes and Flooding
1076	12/20/1995	Severe Storms, Tornadoes
1071	10/10/1995	Hurricane Opal
1042	10/19/1994	Heavy Rains, Tornadoes, Flooding, High Winds
1033	07/07/1994	Tornadoes, Flooding, Heavy Rain, Tropical Storm Alberto
1020	03/31/1994	Severe Storm, Tornadoes, Flooding
3097	03/15/1993	Severe Snowfall, Winter Storm
980	03/04/1993	Tornadoes, High Winds, Heavy Rain
969	12/01/1992	Heavy Rain, High Winds, Tornadoes

897	03/15/1991	Flooding, Severe Storm
880	10/19/1990	Flooding, Severe Storm
857	02/23/1990	Flooding, Severe Storm, Tornado
3089	05/11/1984	Severe Storms and Tornadoes
541	11/07/1977	Dam Collapse, Flooding
3044	07/20/1977	Drought
536	06/02/1977	Shrimp Loss Due To Cold Weather
507	06/11/1976	SEVERE STORMS, FLOODING
460	03/29/1975	Tornadoes, High Winds, Heavy Rains
3008	03/14/1975	Tornadoes
425	04/05/1974	TORNADOES
391	06/11/1973	SEVERE STORMS, TORNADOES
370	04/04/1973	TORNADOES, FLOODING
214	03/14/1966	FLOODING
180	11/04/1964	FLOODING
177	09/10/1964	HURRICANE DORA
150	03/26/1963	SEVERE STORMS, FLOODING
110	03/02/1961	FLOODS
16	03/17/1954	TORNADO
1	05/02/1953	TORNADO

Table 2.3: Presidential Disaster Declarations for Georgia

As the Table 2.3 demonstrates, even the limited events that obtained a presidential declaration span the wide range of hazards previously listed as having the potential to affect the State of Georgia. Disaster Declarations 1 through 3089 occurred before counties were included in declarations and disasters 2685 through 2697 are fire declarations that are not broken down into county designations.

The first map (Figure D1), “Presidential Disaster Declarations”, illustrates the total PDDs received by each county since 1990. Similar to the SHELDUS map, this map does not illustrate the PDDs by type of hazard event. This map reveals that no obvious spatial pattern exists for the PDD distribution across the State of Georgia. The flooding event of September 2009 has caused Carroll, Cobb, and Fulton counties to join Pike County as the counties with the highest number of PDD’s since 1990.

In addition to discussing all substantial hazard events (SHELDUS) and all federally-recognized hazard events (PDDs), the following hazard-specific assessment section will parse out each hazard’s contribution to all hazard events found within SHELDS and all hazard events that obtained PDD status. Also, each hazard-specific assessment will contain a brief list of the more notable and notorious events that may even span to years before the coverage of SHELDUS data (1960-2005).

The following is a list of presidentially declared disasters and the counties included since 1990:

Severe storms, tornadoes, flooding (DR 857) -- signed February 23, 1990. Thirty-eight (38) counties: Baker, Bibb, Butts, Carroll, Catoosa, Chattooga, Cobb, Dade, Dooly, Douglas, Early, Fannin, Floyd, Fulton, Gilmer, Gordon, Harris, Heard, Henry, Lee, Macon, Marion, Meriwether, Monroe, Murray, Muscogee, Newton, Pike, Polk, Pulaski, Stewart, Talbot, Union, Upson, Walker, Webster, Whitfield, and Wilcox.

Severe storms, flooding (DR 880) -- signed October 19, 1990. Nine (9) counties: Burke, Columbia, Emanuel, Jefferson, Jenkins, Johnson, McDuffie, Richmond, and Screven.

Severe storms, flooding (DR 897) -- signed March 15, 1991. Fifteen (15) counties: Appling, Atkinson, Bacon, Berrien, Brooks, Clinch, Coffee, Jeff Davis, Johnson, Lanier, Laurens, Lowndes, Pierce, Thomas, and Ware.

Tornadoes, high winds, heavy rains (DR 969) -- signed December 1, 1992. Fourteen (14) counties: Carroll, Cherokee, Cobb, Dade, Greene, Jones, Lincoln, Lumpkin, Monroe, Putnam, Spalding, Talbot, Taliaferro, and Wilkes.

Tornadoes, high winds, heavy rains (DR 980) -- signed March 4, 1993. Eight (8) counties: Bartow, Cobb, Hall, Heard, Meriwether, Pike, Polk, and Walton.

Severe Snowfall, winter storm (EM 3097) -- signed March 15, 1993. Ninety-three (93) counties: Appling, Bacon, Baldwin, Banks, Barrow, Bartow, Ben Hill, Berrien, Bibb, Bleckley, Brantley, Brooks, Bryan, Bulloch, Butts, Camden, Candler, Carroll, Catoosa, Charlton, Chatham, Chattooga, Cherokee, Clayton, Cobb, Coffee, Colquitt, Cook, Crawford, Dade, Dawson, DeKalb, Dodge, Douglas, Effingham, Elbert, Emanuel, Evans, Fannin, Fayette, Floyd, Forsyth, Franklin, Fulton, Gilmer, Glynn, Gordon, Grady, Gwinnett, Habersham, Hall, Haralson, Hart, Henry, Houston, Jackson, Jeff Davis, Lanier, Laurens, Liberty, Lowndes, Lumpkin, McDuffie, McIntosh, Monroe, Montgomery, Murray, Newton, Oconee, Paulding, Pickens, Pike, Pierce, Polk, Rabun, Rockdale, Screven, Stephens, Tattnall, Telfair, Thomas, Tift, Toombs, Towns, Union, Upson, Walker, Walton, Ware, Washington, Wayne, White, and Whitfield.

Tornadoes, flooding, severe storms (DR 1020) -- signed March 31, 1994. Twelve (12) counties: Bartow, Catoosa, Cherokee, Floyd, Habersham, Lumpkin, Murray, Pickens, Rabun, Walker, White, and Whitfield.

Tropical Storm Alberto (DR 1033); torrential rain, high winds, tornadoes, major flooding -- signed July 7, 1994. Fifty-five (55) counties: Baker, Bibb, Butts, Calhoun, Carroll, Clay, Clayton, Coweta, Crawford, Crisp, Decatur, Dodge, Dooly, Dougherty, Early, Fayette, Fulton, Henry, Houston, Jasper, Jones, Lamar, Lee, Macon, Marion, Meriwether, Miller, Mitchell, Monroe, Montgomery, Newton, Oglethorpe, Peach, Pike, Pulaski, Quitman, Randolph, Rockdale, Schley, Seminole, Spalding, Stewart, Sumter, Talbot, Taylor,

Telfair, Terrell, Toombs, Troup, Twiggs, Upson, Webster, Wheeler, Wilcox, and Worth.

Tropical Storm Beryl (DR 1042); high winds, heavy rain, tornadoes, flooding -- signed October 19, 1994. Thirteen (13) counties: Brooks, Bryan, Bulloch, Camden, Chatham, Clinch, Colquitt, Decatur, Effingham, Grady, Thomas, Tift, and Worth.

Hurricane Opal (DR 1071); high winds, heavy rain, tornadoes -- signed October 10, 1995. Fifty (50) counties: Banks, Barrow, Bartow, Carroll, Catoosa, Chattooga, Cherokee, Clay, Clayton, Cobb, Coweta, Dade, Dawson, DeKalb, Douglas, Fannin, Fayette, Floyd, Forsyth, Fulton, Gilmer, Gordon, Gwinnett, Habersham, Hall, Haralson, Harris, Heard, Lumpkin, Meriwether, Murray, Muscogee, Paulding, Pickens, Pike, Polk, Quitman, Rabun, Randolph, Rockdale, Spalding, Stewart, Talbot, Towns, Troup, Union, Upson, Walker, White and Whitfield.

Tornadoes, thunderstorms, flooding (DR 1076) -- signed December 20, 1995. One (1) county: Dougherty.

Severe storms, flooding, tornadoes (DR 1209) -- signed March 11, 1998. One hundred nineteen (119) counties: Appling, Atkinson, Bacon, Baker, Baldwin*, Barrow, Bartow*, Ben Hill, Berrien, Bibb, Bleckley, Brantley, Brooks, Bryan, Bulloch*, Burke, Butts*, Calhoun, Candler, Carroll, Charlton, Chatham*, Cherokee*, Clay, Clayton*, Clinch, Cobb, Coffee, Colquitt, Columbia*, Cook, Crawford, Crisp, Dade*, Dawson*, Decatur, DeKalb, Dodge, Dooly, Dougherty, Douglas, Early, Echols, Effingham, Emanuel, Evans, Floyd*, Forsyth*, Fulton, Glynn, Gordon, Grady, Gwinnett, Habersham*, Hall, Haralson, Heard, Henry*, Houston, Irwin, Jeff Davis, Jefferson, Jenkins, Johnson, Jones*, Lamar, Lanier, Laurens, Lee, Liberty, Lincoln, Long, Lowndes*, Lumpkin, Macon, McIntosh, Miller, Mitchell, Monroe, Montgomery, Murray, Muscogee*, Newton*, Paulding*, Peach*, Pickens, Pike, Pulaski, Quitman, Rabun*, Randolph, Richmond*, Rockdale*, Screven, Seminole, Spalding*, Stewart, Sumter, Talbot, Tattnall, Telfair, Terrell, Thomas, Tift, Toombs, Towns, Treutlen, Turner, Twiggs, Union*, Walker*, Ware, Wayne, Webster, Wheeler, White, Wilcox, Wilkinson, and Worth. (*Individual assistance only)

Severe storms and tornadoes (DR 1271) -- signed April 20, 1999. Two (2) counties: Candler and Dooly.

Hurricane Floyd (EM 3144)-- wind damage, massive evacuation of coastal counties -- signed September 14, 1999. Six (6) counties: Bryan, Camden, Chatham, Glynn, Liberty, and McIntosh.

Severe ice storms, freezing rain, damaging wind, severely cold temperatures (DR 1311) -- signed January 28, 2000. Forty-five (45) counties: Banks, Barrow, Bartow, Butts, Carroll, Chattooga, Cherokee, Clarke, Cobb, Dawson, DeKalb, Douglas, Elbert, Fannin, Floyd, Forsyth, Franklin, Fulton, Gilmer, Gordon, Gwinnett, Habersham, Hall, Haralson, Hart, Henry, Jackson, Jasper, Lamar, Lumpkin, Newton, Oconee, Paulding, Pickens, Pike, Rabun, Rockdale, Spalding, Stephens, Taliaferro, Union, Upson, Walker, White and Wilkes.

Severe storms and tornadoes (DR 1315) -- signed February 15, 2000. Six (6) counties: Colquitt, Decatur, Grady, Mitchell, Tift and Turner.

Tropical Storm Ivan (DR 1554) -- signed September 18, 2004. Thirty-one (31) counties: Banks, Carroll, Cherokee, Clay, Clayton, Cobb, Dade, Dawson, DeKalb, Early, Elbert, Fannin, Forsyth, Franklin, Fulton, Gilmer, Habersham, Harris, Heard, Lumpkin, Madison, Miller, Pickens, Pike, Rabun, Stephens, Towns, Union, Upson, White and Wilkes.

Tropical Storm Frances (DR 1560) -- signed September 24, 2004. Eighty (80) counties: Appling, Atikinson, Bacon, Baker, Ben Hill, Berrien, Bibb, Bleckley, Brantley, Brooks, Butts, Calhoun, Camden, Candler, Charlton, Clinch, Coffee, Colquitt, Cook, Crawford, Crisp, Decatur, Dodge, Dooley, Dougherly, Echols, Elbert, Emanuel, Evans, Glynn, Grady, Greene, Hancock, Harris, Hart, Houston, Irwin, Jasper, Jeff Davis, Johnson, Jones, Lamar, Laurens, Long, Lowndes, Macon, McIntosh, Monroe, Montgomery, Peach, Pierce, Pike, Pulaski, Putnam, Rabun, Schley, Spalding, Sumter, Talbot, Taliaferro, Tattnall, Taylor, Telfair, Thomas, Tift, Toombs, Treutlen, Turner, Twiggs, Upson, Ware and Washington.

Hurricane Katrina (EM 3218) -- signed September 5, 2005. 159 counties. Effective August 29, 2005, to cover Category B, emergency protective measures.

Here is a list of the disaster that have hit Georgia since the 2008 update and the counties that were affected:

Sumter Tornado and Severe Storms (DR 1686)
Baker, Clay, Crawford, Dougherty, Hancock, McDuffie, Mitchell, Muscogee, Sumter, Stewart, Taylor, Warren, Webster, Wilkinson, and Worth

Atlanta Tornado and Severe Storms (DR 1750)
Bartow, Burke, DeKalb, Floyd, Fulton, Jefferson, and Polk

Mother's Day Tornado(s) (DR 1761)
Bibb, Carroll, Crawford, Douglas, Emanuel, Glynn, Jefferson , Jenkins, Johnson, Laurens, McIntosh, Treutlen, Twiggs, and Wilkinson

South Georgia Floods and Severe Storms(DR 1833)
Appling, Atkinson, Bacon, Baker, Ben Hill, Berrien, Brantley, Brooks, Camden, Calhoun, Clinch, Coffee, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Jeff Davis, Lanier, Lee, Lowndes, McIntosh, Miller, Mitchell, Monroe, Montgomery, Pierce, Pulaski, Seminole, Tattnall, Telfair, Thomas, Tift, Toombs, Turner, Upson, Ware, Wayne, Wheeler, Wilcox, and Worth

North Georgia Floods and Severe Storms (DR 1858)
Bartow, Catoosa, Carroll, Chattooga, Cherokee, Cobb, Coweta, Crawford, Dawson,

DeKalb, Dooly, Douglas, Fulton, Gwinnett, Heard, Houston, Newton, Paulding, Peach, Rockdale, Stephens, Taylor, and Walker

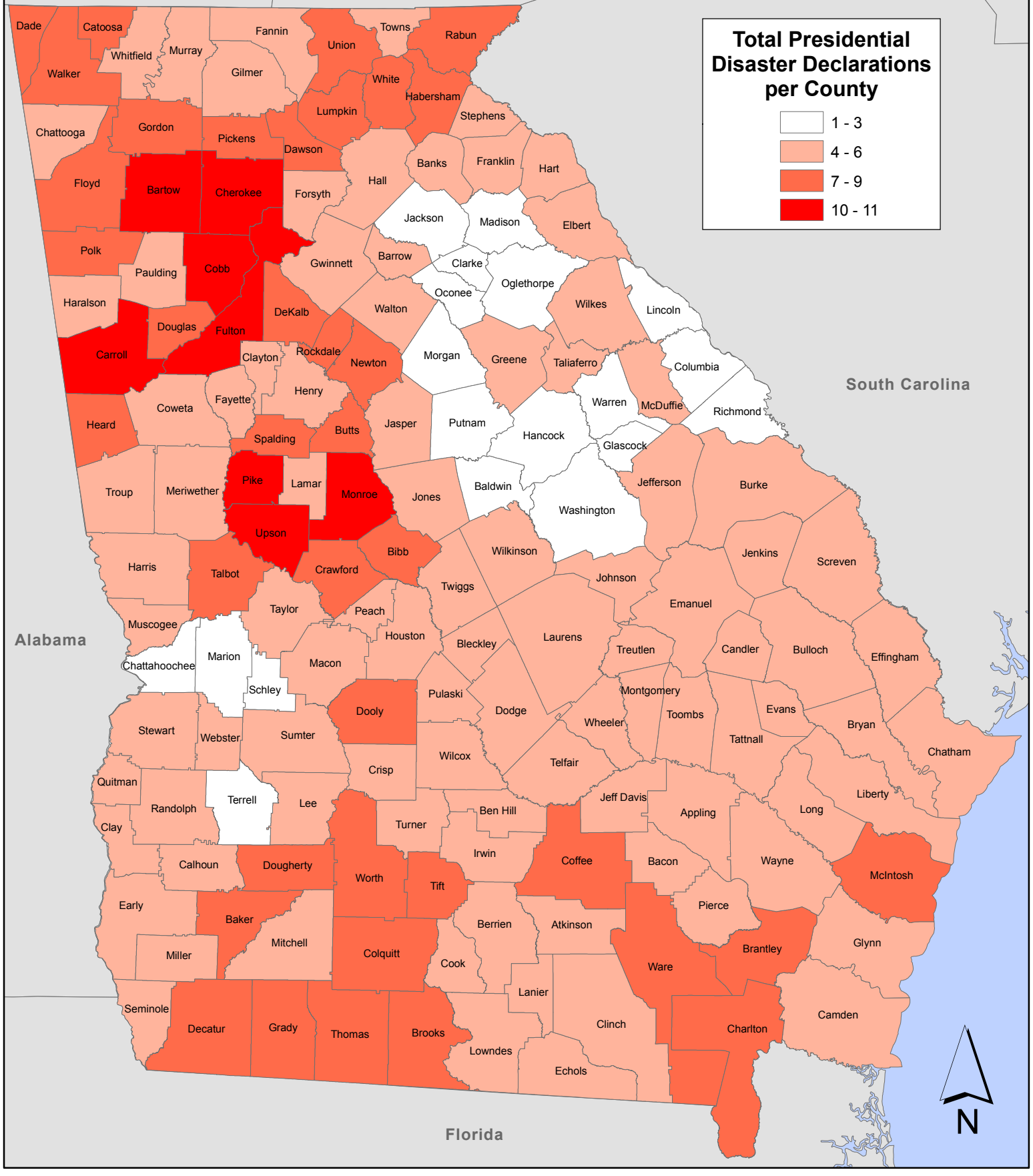
North and Central Georgia Severe Storms,Tornadoes,Straight-line Winds and Associated Flooding (DR 1973)
Bartow County, Catoosa County, Cherokee County, Coweta County, Dade County, Floyd County, Gordon County, Greene County, Habersham County, Harris County, Heard County, Jasper County, Lamar County, Lumpkin County, Meriwether County, Monroe County, Morgan County, Newton County, Pickens County, Polk County, Rabun County, Spalding County, Troup County, Upson County, Walker County and White County.

Presidential Disaster Declarations

1990-2012

FEMA Data

GEMA



Presidential Disaster Declarations

Major Disaster Declarations
1990-2012 - FEMA Data

GEMA

Tennessee

North Carolina

South Carolina

Alabama

Florida

Total Major Disaster Declarations per County

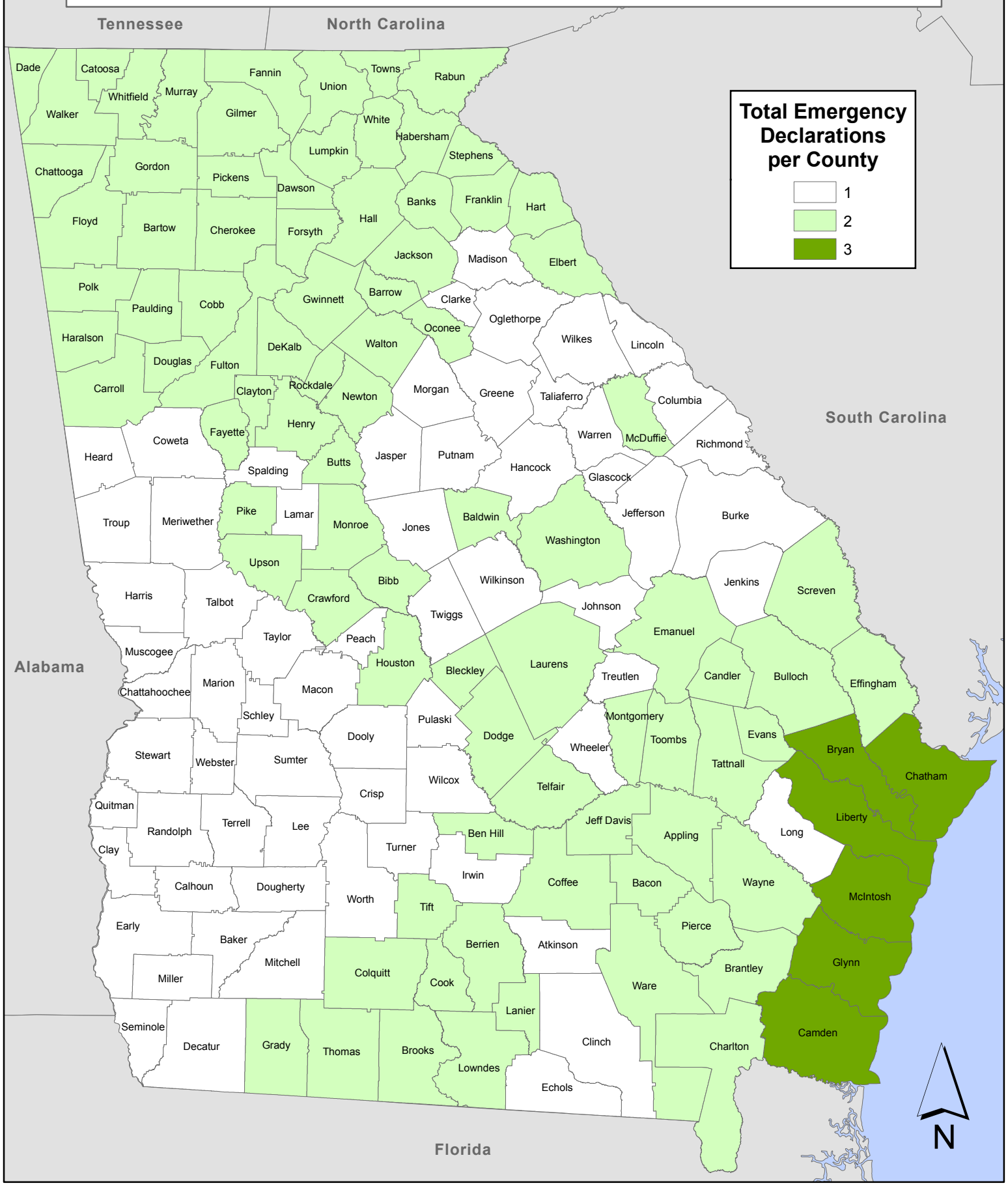
- 0 - 2
- 3 - 4
- 5 - 6
- 7 - 9

Dade, Catoosa, Walker, Whitfield, Murray, Fannin, Gilmer, Union, Towns, Rabun, White, Habersham, Stephens, Lumpkin, Chattooga, Gordon, Pickens, Dawson, Banks, Franklin, Hart, Floyd, Bartow, Cherokee, Forsyth, Hall, Jackson, Madison, Elbert, Polk, Paulding, Cobb, Gwinnett, Barrow, Clarke, Oglethorpe, Haralson, Douglas, Fulton, DeKalb, Walton, Oconee, Wilkes, Lincoln, Carroll, Clayton, Rockdale, Newton, Morgan, Greene, Taliaferro, Columbia, Coweta, Fayette, Henry, Warren, McDuffie, Richmond, Heard, Spalding, Butts, Jasper, Putnam, Hancock, Glascock, Troup, Meriwether, Pike, Lamar, Monroe, Jones, Baldwin, Jefferson, Burke, Upson, Washington, Harris, Talbot, Crawford, Bibb, Wilkinson, Johnson, Jenkins, Screven, Twiggs, Emanuel, Taylor, Peach, Muscogee, Houston, Bleckley, Laurens, Treutlen, Candler, Bulloch, Effingham, Chattahoochee, Marion, Macon, Schley, Pulaski, Dodge, Montgomery, Toombs, Evans, Bryan, Stewart, Webster, Sumter, Dooly, Wheeler, Tattnall, Chatham, Wilcox, Crisp, Telfair, Quitman, Randolph, Terrell, Lee, Jeff Davis, Appling, Long, Liberty, Clay, Turner, Ben Hill, Irwin, Coffee, Bacon, Wayne, McIntosh, Calhoun, Dougherty, Worth, Tift, Pierce, Early, Baker, Berrien, Atkinson, Brantley, Glynn, Miller, Mitchell, Colquitt, Cook, Ware, Seminole, Decatur, Grady, Thomas, Brooks, Lanier, Clinch, Charlton, Camden, Lowndes, Echols

N

Presidential Disaster Declarations

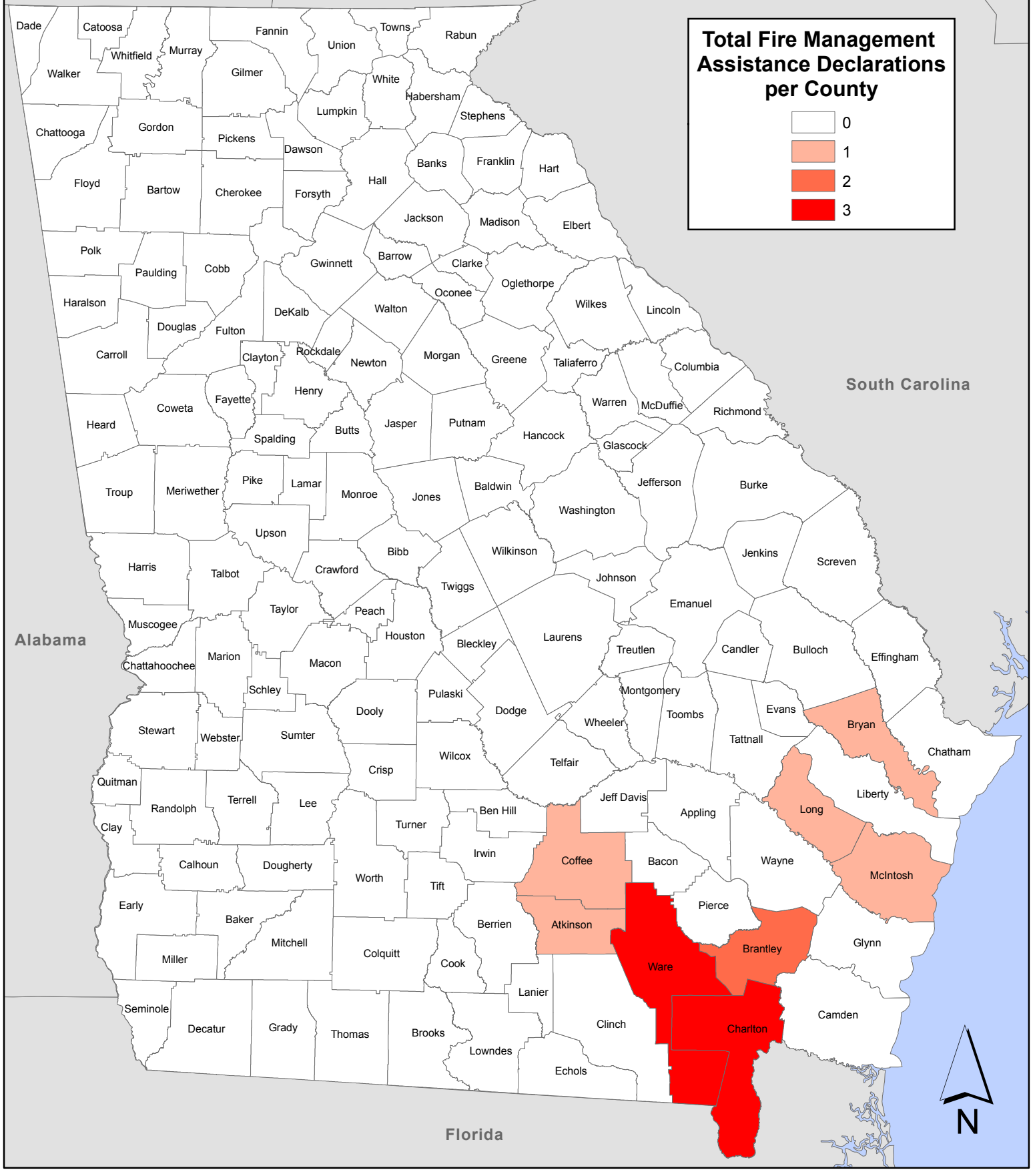
Emergency Declarations
1990-2012 - FEMA Data



Presidential Disaster Declarations

Fire Management Assistance Declarations

1990-2012 - FEMA Data



GEORGIA FOREST FACTS

Forestland and Type

- Total land area is 37 million acres.
- Total forest acreage is 24.5 million.
- 23.9 million acres of forestlands are available for commercial use.
- Commercial forestland in Georgia consists of 39.5% hardwood, 16.5% oak/pine, 44% pine.
- The most prevalent hardwood forest types are oak, maple, yellow poplar and sweet gum.
- The most prevalent pine forest types are loblolly and slash.

Commercial Forestland Ownership

- Government owned forest 8%.
- Forest industry 20%.
- Private non-industrial owners 72%.

Forest Economy

- Forestry directly creates 177,266 jobs statewide and supports a total of 204,065 jobs.
- Georgia's forests create a $30.5 billion value added to the economy each year.
- Forest products include timber, pulp, and paper.

Forest Protection Responsibility

The Georgia Forestry Commission is responsible for protecting 27.2 million acres, of which roughly 24 million is commercial forestland. Agreements with the USDA-Forest Service, U.S. Fish and Wildlife Service, and Department of Defense give the GFC additional partial responsibility on federal lands.

Forest Protection System

Georgia is divided into 12 forest protection districts. State fire suppression resources are located in 131 of Georgia's 159 counties. A fleet of 345 tractor plow units provides forceful response to wildfires and

also supports a presuppression firebreak program of 25,000 miles per year. In addition, the GFC deploys 50 Type VI wildland engines. The GFC aviation section consists of 22 single engine air patrol aircraft and three Type III helicopters. Georgia builds its own fire plows, tractor canopies, engines, and truck beds. The Rural Fire Defense Program fabricates Type I-VI engines for lease to fire departments, which, in turn, agree to assist on wildland fires. Some 750 fire departments with an estimated 15,000 firefighters respond to most wildland fires. This program has resulted in availability of an estimated 1,250 engines. Georgia produces its own fire weather forecasting and uses 80 fire danger weather stations for daily readiness. National Fire Plan funding has resulted in an increased fire prevention program focused on 32 of Georgia's highest fire occurrence counties and implementation of fire prevention teams.

Wildland Fire Activity

Georgia experiences about 8,767 wildland fires each year that damage or destroy approximately 38,183 forest acres. Georgia firefighters have the best wildland fire suppression record in the Southeast: the average wildland fire consumes less than five acres. Careless burning of debris continues to be the leading cause of wildland fires.

GEORGIA FORESTRY COMMISSION

Georgia Wildfires of 2007 Summary of Facts and Costs for Recovery

Overview of The Fires of 2007

The Georgia Forestry Commission led the battle to control Georgia's largest wildfire in recorded history. The Georgia Bay Complex burned 441,705 acres in Georgia and destroyed 9 homes.

An additional 21,000 acres burned in the 21-County Governor Declared Emergency area.

More than 3,300 people from 44 states worked to control the wildfires.

Over $8 million is needed to reforest non-industrial private land; $2.2 million in cost-share assistance has been procured to date.

Funds are needed to rehabilitate over 352 miles of firebreaks surrounding the Okefenokee National Wildlife Refuge.

During fiscal year 2007, over 9,500 fires burned more than 504,000 acres. The largest ever recorded annual GFC expenditures for fire control efforts totaled over $62,000,000.

Now that The Fires have been controlled, we all have the opportunity to leave a lasting legacy by the way we manage Georgia's recovery.

The GFC is working to refine assessments of damage and recovery beyond preliminary figures presented in this document.

7/20/2007

The Bottom Line: Damage, Destruction & Cost of The South Georgia Fires of 2007

Fire Location	Ownership of Burned Land	Acres of Land Burned	Number of Landowners	Value of Lost Timber	Acres to Reforest	Estimated Cost To Reforest
Georgia Bay Complex*	*Georgia only*	*441,705*				
	Corporate Lands	70,529	11	$34,971,981	45,844	$18,337,540
	Non-Industrial Private Farms	19,129	123	$ 9,485,162	12,434	$ 4,973,540
	DOI Easements	6,344		$ 3,145,688	4,124	$ 1,649,440
	State Forests	19,187		$ 6,605,600	4,539	$ 1,268,000
		115,189	134	$54,208,431	66,941	$26,228,520
21 County Emergency Declaration Area	Corporate Lands	9,256	23	$ 4,589,611	6,016	$ 2,406,560
	Non-Industrial Private Farms	11,792	164	$ 5,847,093	7,665	$ 3,065,920
		21,048	187	$ 10,436,704	13,681	$ 5,472,480
Totals of All Non-Industrial Private Farms		30,921	287	$15,332,255	20,099	$ 8,039,460
Totals of All Private Lands		117,050	321	$58,039,535	76,083	$30,433,000

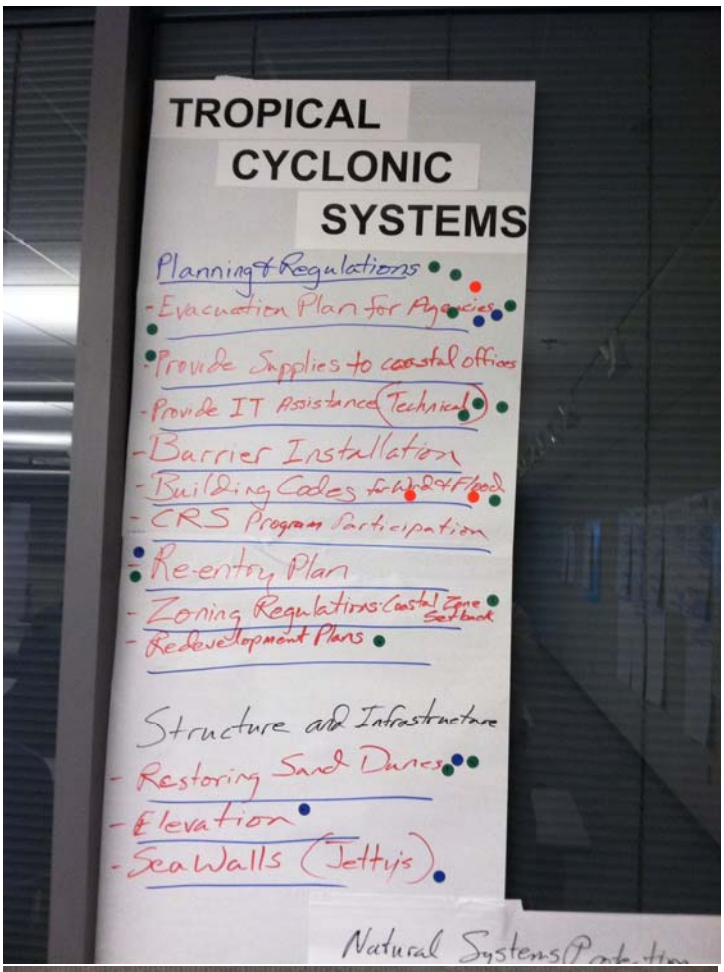
**Georgia Bay Complex – Total acres burned in both Georgia and Florida: 564,450*

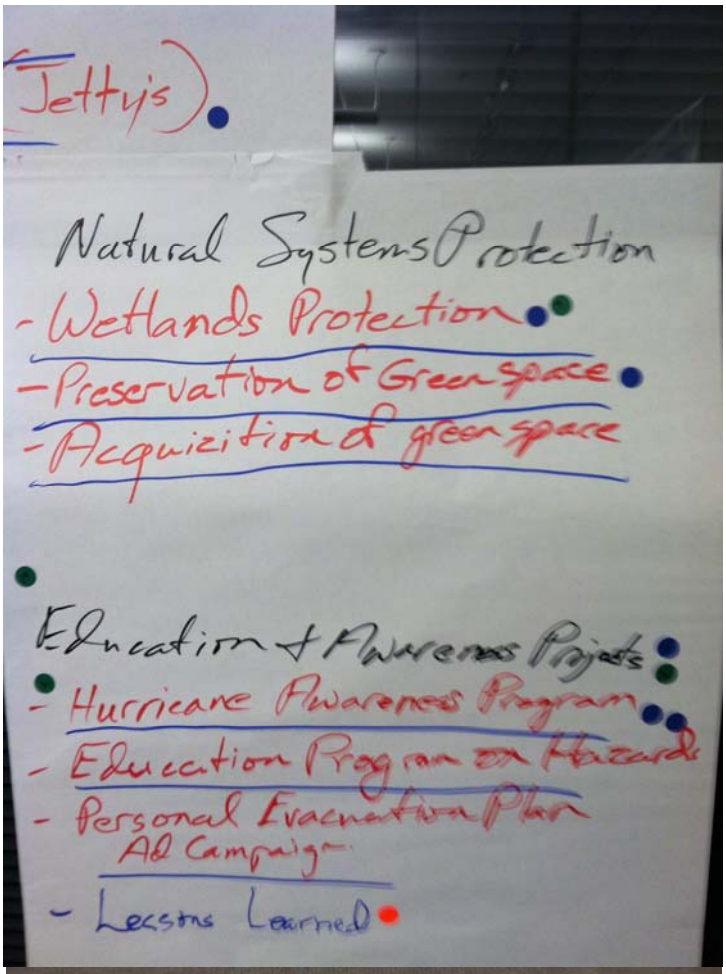
Revised 10-07

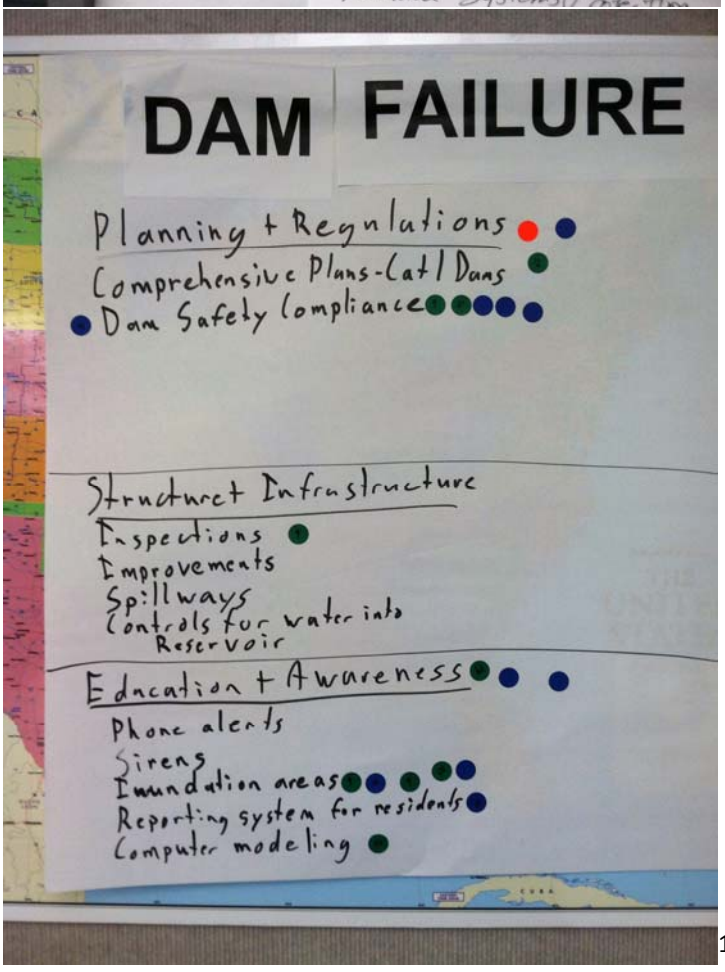
Appendix E

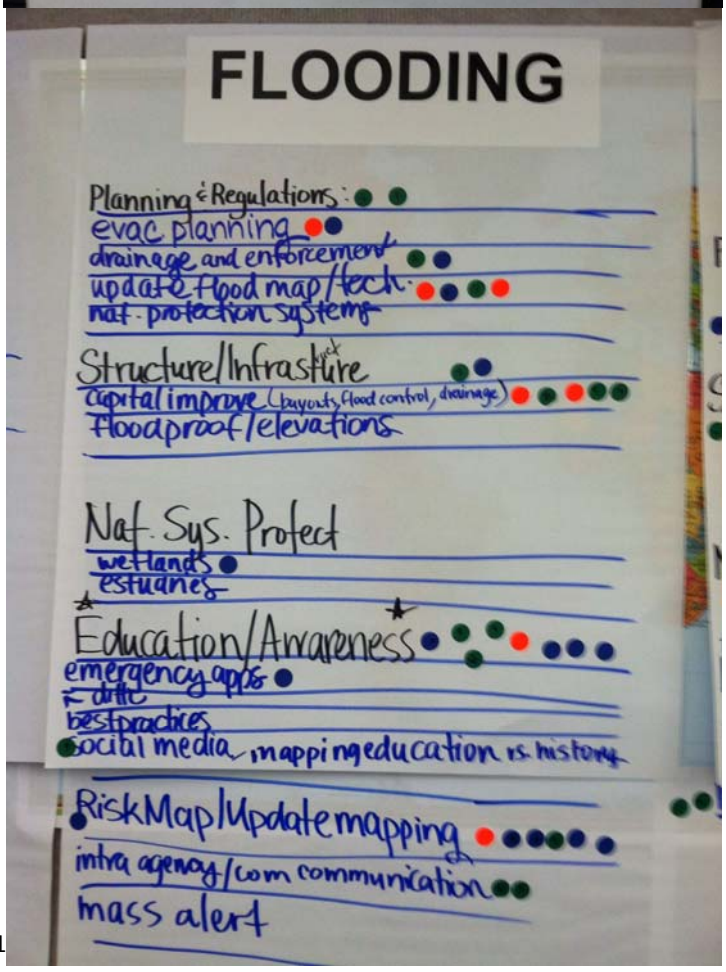
Mitigation Strategy Documentation

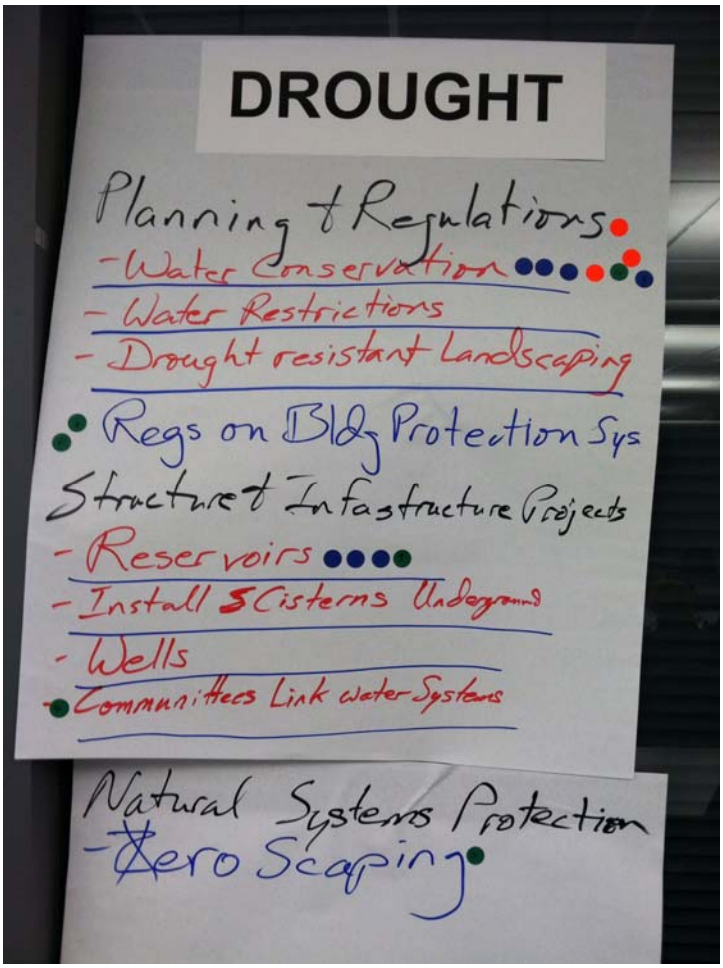
E1. Workshop 3 Photos

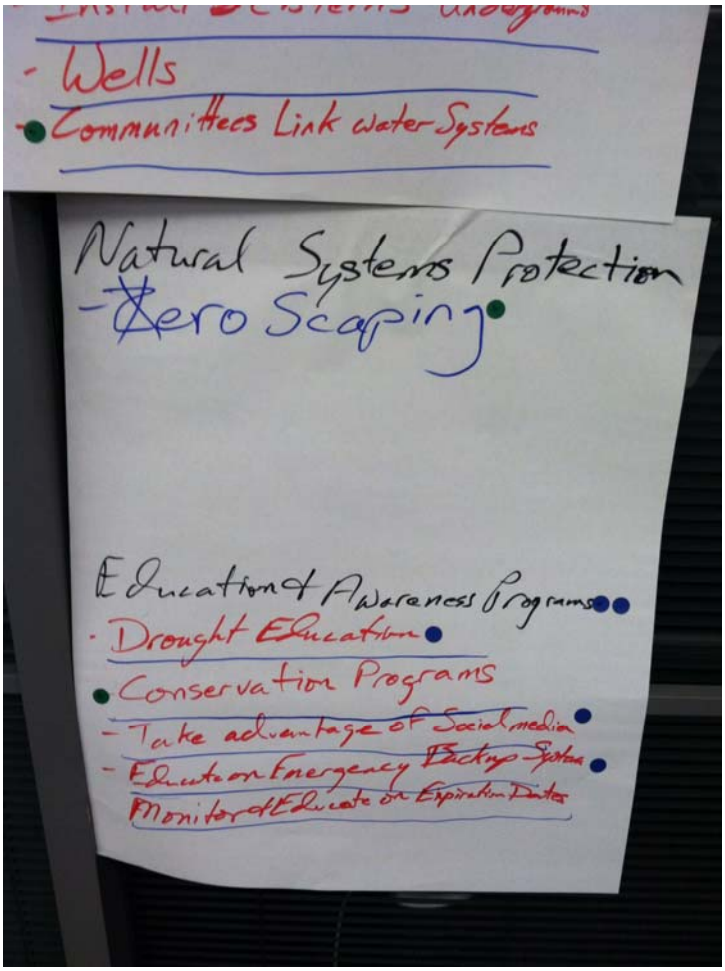


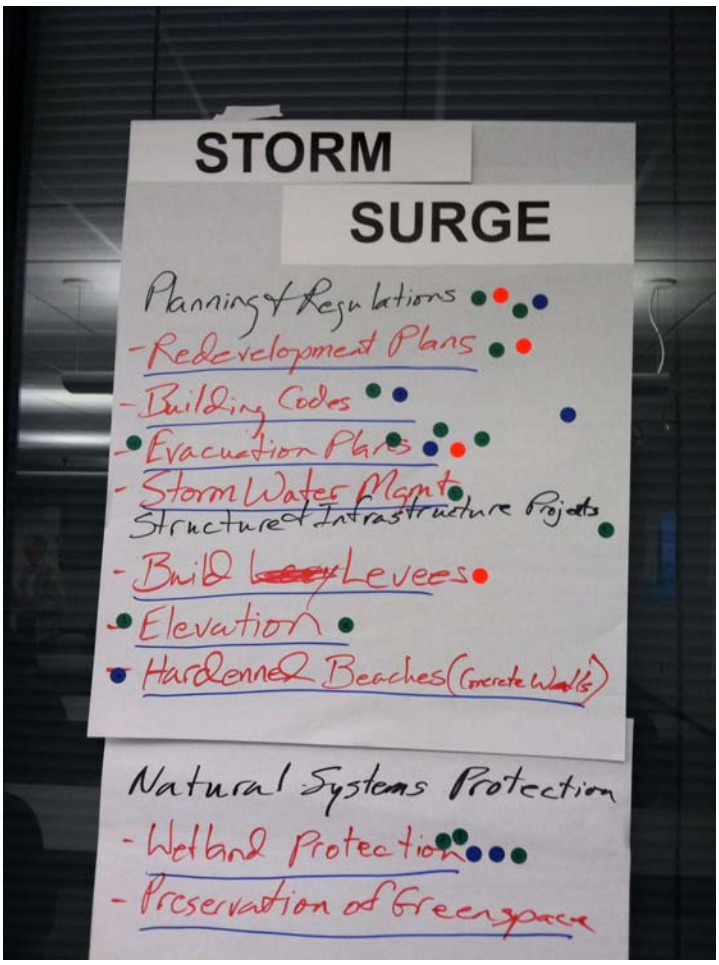


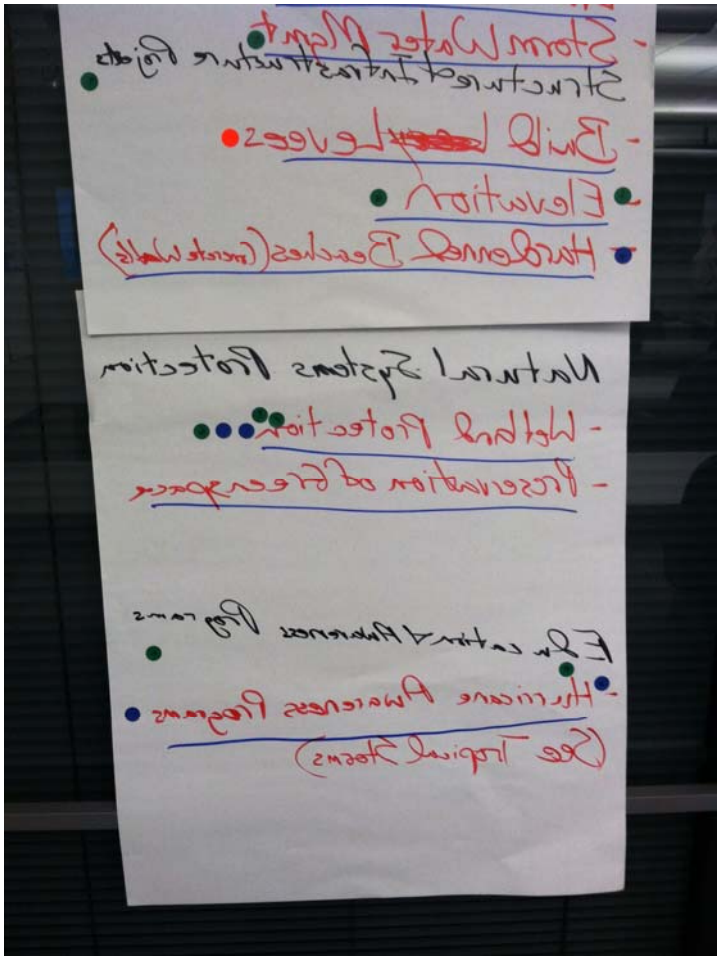


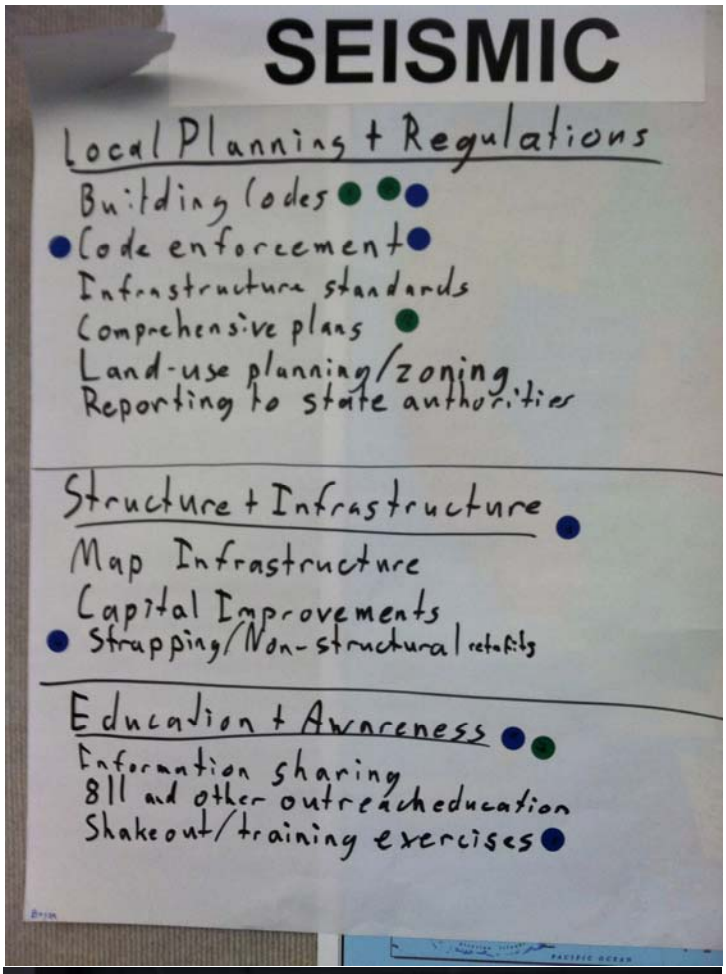


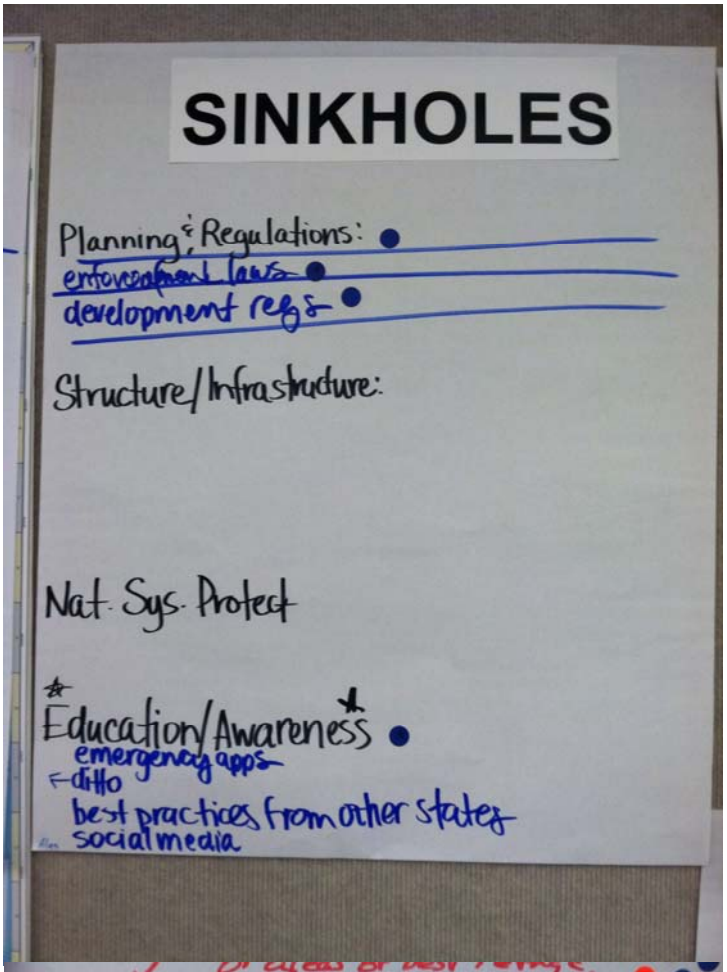

DROUGHT
Planning & Regulations
- Water Conservation
- Water Restrictions
- Drought resistant Landscaping
Regs on Bldg Protection Sys
Structure & Infrastructure Projects
- Reservoirs
- Install 5 Cisterns Underground
- Wells
- Communities Link water Systems
Natural Systems Protection
- Xero Scaping

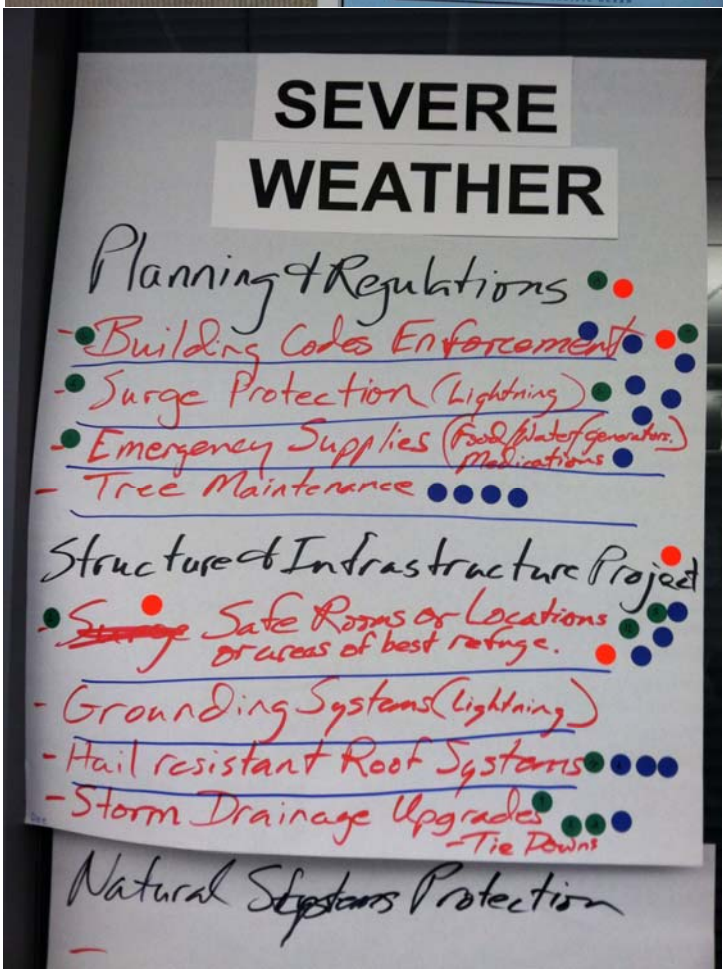

- Wells
- Communities Link water Systems
Natural Systems Protection
- Xero Scaping
Education & Awareness Programs
- Drought Education
- Conservation Programs
- Take advantage of Social media
- Educate on Emergency Backup Systems
Monitor & Educate on Expiration Dates

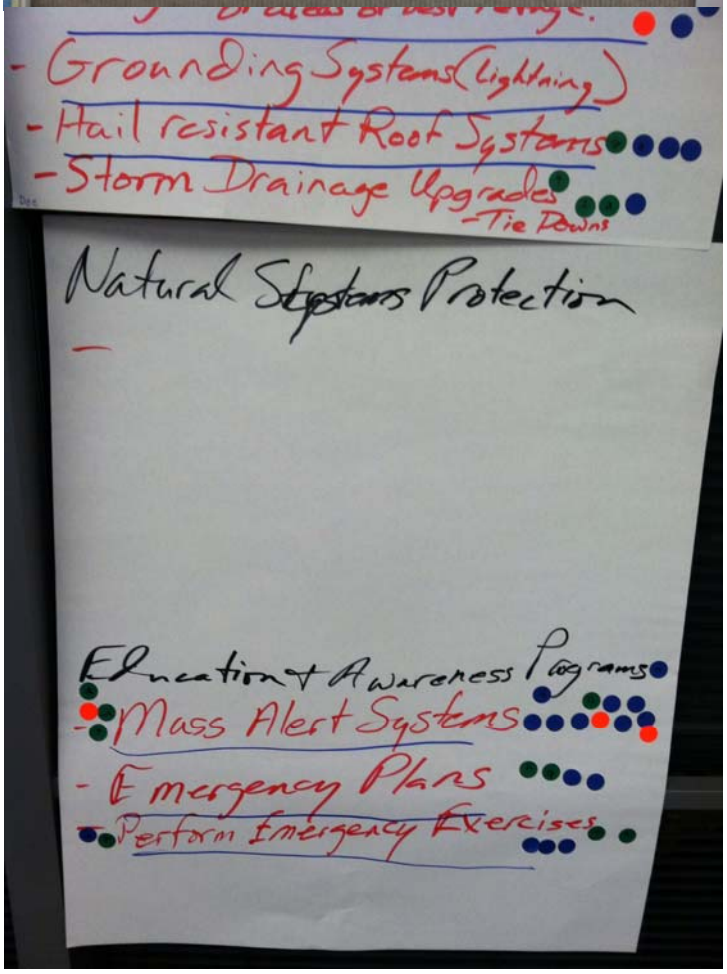

STORM
SURGE
Planning & Regulations
- Redevelopment Plans
- Building Codes
- Evacuation Plans
- Storm Water Mgmt
Structure & Infrastructure Projects
- Build Levees
- Elevation
- Hardened Beaches (Concrete Walls)
Natural Systems Protection
- Wetland Protection
- Preservation of Greenspace

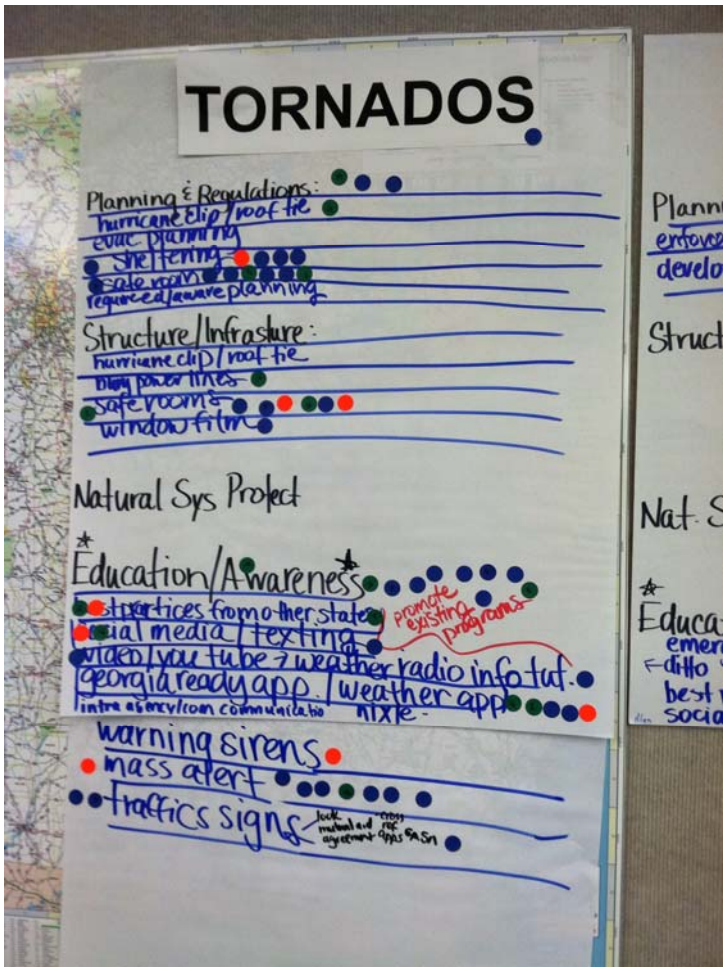


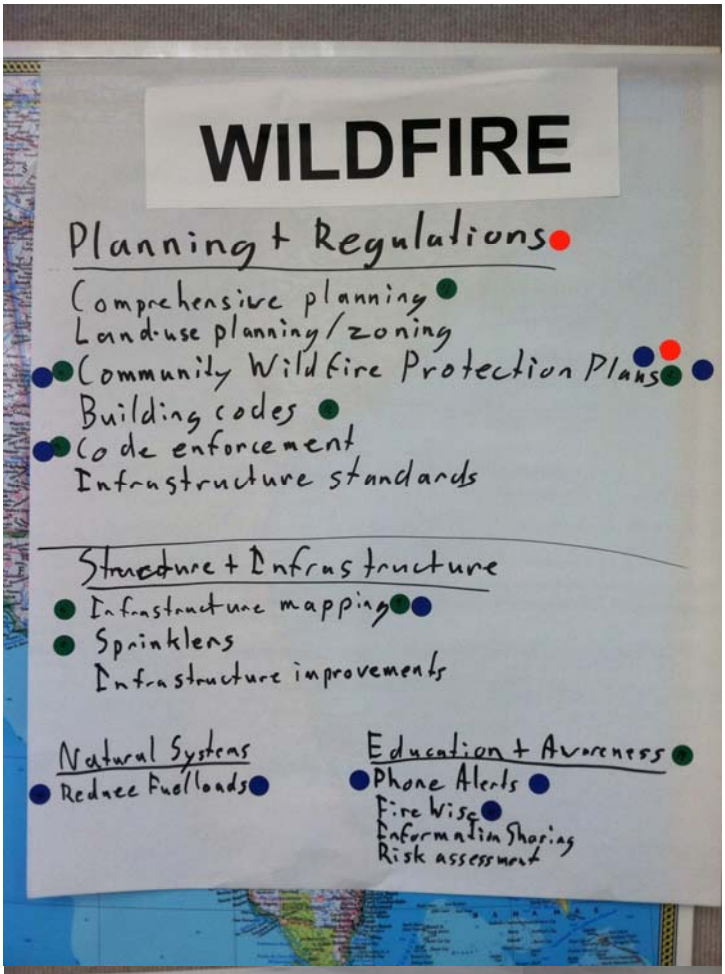

SEISMIC
Local Planning + Regulations
Building Codes
Code enforcement
Infrastructure standards
Comprehensive plans
Land-use planning/zoning
Reporting to state authorities
Structure + Infrastructure
Map Infrastructure
Capital Improvements
Strapping/Non-structural retrofits
Education + Awareness
Information sharing
811 and other outreach education
Shakeout/training exercises

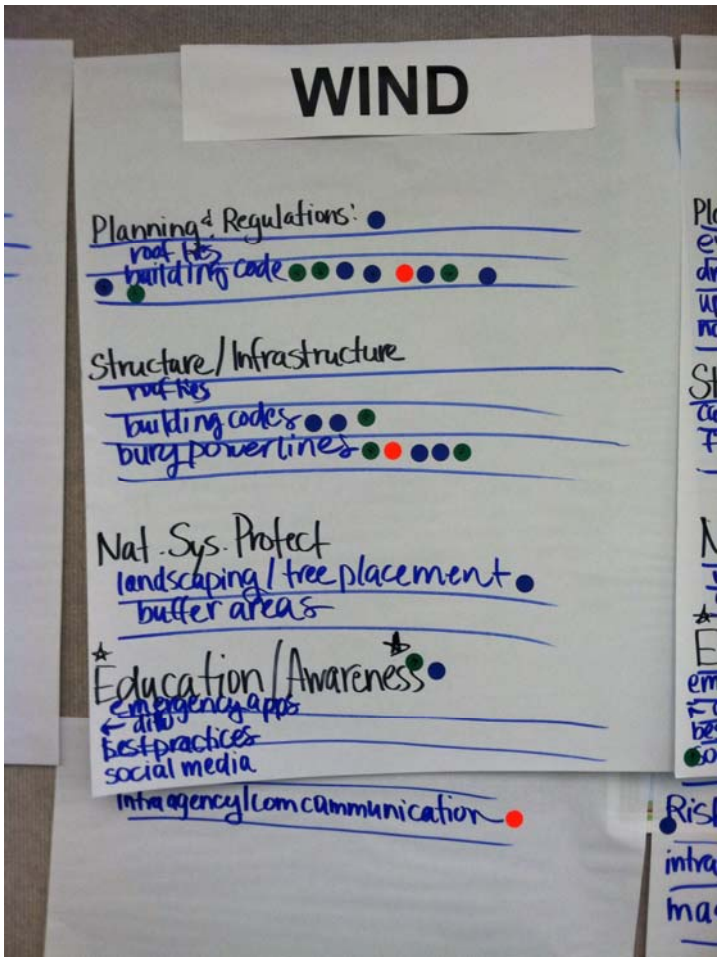

SINKHOLES
Planning & Regulations:
enforcement laws
development regs
Structure/Infrastructure:
Nat. Sys. Protect
Education/Awareness
emergency apps
ditto
best practices from other states
social media

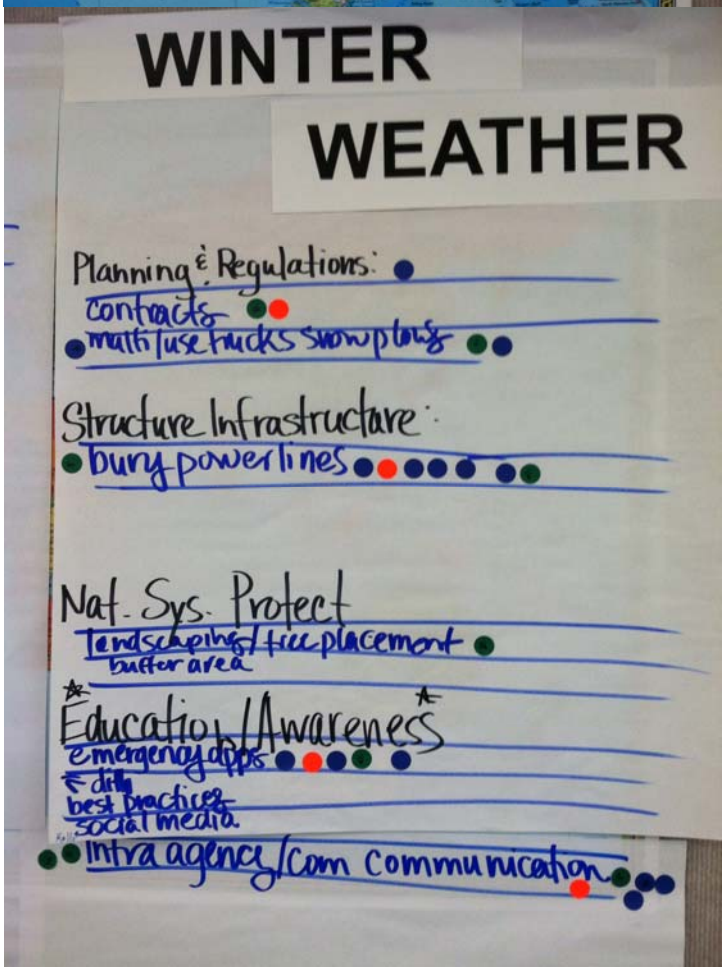

SEVERE WEATHER
Planning & Regulations
- Building Codes Enforcement
- Surge Protection (Lightning)
- Emergency Supplies (Food/Water/generators/Medications)
- Tree Maintenance
Structure & Infrastructure Project
- Safe Rooms or Locations or areas of best refuge.
- Grounding Systems (Lightning)
- Hail resistant Roof Systems
- Storm Drainage Upgrades -Tie Downs
Natural Systems Protection
-


areas of best refuge.
- Grounding Systems (Lightning)
- Hail resistant Roof Systems
- Storm Drainage Upgrades -Tie Downs
Natural Systems Protection
-
Education & Awareness Programs
- Mass Alert Systems
- Emergency Plans
- Perform Emergency Exercises


TORNADOS
Planning & Regulations:
Hurricane clip / roof tie
evac planning
sheltering
safe room
required tornado planning
Structure / Infrastructure:
Hurricane clip / roof tie
bury power lines
safe rooms
window film
Natural Sys Protect
Education / Awareness
practices from other states
social media / texting
video / you tube / weather radio info tut.
georgia ready app / weather app
intra agency / com communication
warning sirens
mass alert
traffics signs


WILDFIRE
Planning + Regulations
Comprehensive planning
Land use planning / zoning
Community Wildfire Protection Plans
Building codes
Code enforcement
Infrastructure standards
Structure + Infrastructure
Infrastructure mapping
Sprinklers
Infrastructure improvements
Natural Systems
Reduce Fuelloads
Education + Awareness
Phone Alerts
Fire Wise
Information Sharing
Risk assessment


WIND
Planning & Regulations:
roof ties
building code
Structure / Infrastructure
roof ties
building codes
bury power lines
Nat. Sys. Protect
landscaping / tree placement
buffer areas
Education / Awareness
emergency apps
best practices
social media
intra agency / com communication


WINTER
WEATHER
Planning & Regulations:
contracts
multi use trucks snow plows
Structure Infrastructure:
bury power lines
Nat. Sys. Protect
landscaping / tree placement
buffer area
Education / Awareness
emergency apps
best practices
social media
intra agency / com communication

Planning Workshop Tally with Matrix Figures

Sub-Topics Totals by Hazard

Sub Topics	Planning & Regulations	Structure & Infrastructure Projects	Natural Systems Protection	Education & Awareness Programs	Total	%
Drought	10	5	1	6	22	7%
Storm Surge	16	4	5	4	29	9%
Severe Weather	18	17	0	24	59	17%
Tornados	17	9	0	35	61	18%
Sinkholes	3	0	0	1	4	1%
Wind	11	8	1	3	23	7%
Flooding	10	7	1	14	32	9%
Winter Weather	6	8	1	7	22	7%
Wildfire	11	4	2	4	21	6%
Dam Failure	9	1	0	10	20	6%
Seismic	6	2	0	3	11	3%
Tropical Cyclonic Systems	19	5	3	7	34	10%
Sub-Total	136	70	14	118	338	
%	40%	21%	4%	35%		

County Matrix

# of County Plans	%
144	91
8	5
101	64
156	98
5	3
126	79
155	97
130	82
127	80
48	30
36	23
95	60

Planning Workshop Tally with Matrix Figures

Action Item Selections

Action Items	Total	%	# of County Plans	%
Building Codes	19	7%	128	81
Building Codes Enforcement	7	2%		
Bury Power Lines	14	5%		
Community Wildfire Protection Plans	6	2%	95	60
Dam Safety Compliance	6	2%	45	28
Emergency Apps	17	6%		
Evacuation Plan for Agencies	8	3%		
Evacuation Plans	7	2%		
Floodproof/Elevations	5	2%	127	80
Georgia Ready app./Weather app	5	2%		
Hurricane Awareness Program	10	3%		
Hurricane Clip/Roof Tie	5	2%		
Innundation Areas	5	2%		
Mass Alert	9	3%		
Mass Alert Systems	15	5%		
Perform Emergency Exercises	7	2%	115	72
Phone Alerts	6	2%		
Redevelopment Plans	7	2%		
Safe Rooms or areas of best refuge	9	3%		
Sheltering	5	2%		
Surge Protection (Lightning)	5	2%		
Water Conservation	8	3%		
Wetland Protection	5	2%	35	22
Sub-Total	190			

	# of County Plans	%
Green Space Preservation	23	14
Public Outreach	148	93
Property Relocation and Elevation	43	27
Property Acquisition	57	36
Structural Retrofit	120	75
Flood Programs	143	90
Drought Management	96	60
Emergency Response/Operations		
Equipment Acquisition	120	75
Warning/Communication	146	92
Preparedness Efforts	136	86
Broad Cooperation	93	58
Additional Analysis	79	50

Planning Workshop Tally with Matrix Figures

Hazards Chosen by Agency or Org

Hazard Totals	FEMA	State Agencies	NGO	GEMA	Totals	
Dam Failure	3	9	7	1	**20**	**6%**
Drought	2	6	11	3	**22**	**7%**
Flooding	2	15	9	6	**32**	**9%**
Seismic	4	4	3	0	**11**	**3%**
Severe Weather	4	20	28	7	**59**	**17%**
Sinkholes	2	0	2	0	**4**	**1%**
Storm Surge	3	16	6	4	**29**	**9%**
Tornados	5	16	32	8	**61**	**18%**
Tropical Cyclonic Systems	3	19	8	4	**34**	**10%**
Wildfire	2	9	8	2	**21**	**6%**
Wind	2	8	10	3	**23**	**7%**
Winter Weather	1	6	12	3	**22**	**7%**
	33	**128**	**136**	**41**	**338**	
	10%	**38%**	**40%**	**12%**		

State Community Development Block Grants (CDBG)

Federal Funding to Georgia State Program: Five Year Overview

2008	2009	2010	2011	2012
$40.1 million	$39.9 million	$43.6 million	$36.6 million	$34.5 million

CDBG Dollars At Work: Building, Strengthening Georgia's Communities

Commercial/Industrial Infrastructure. Since 2008, the State CDBG Program has funded **57** projects where the installation of commercial and industrial infrastructure initiated economic development in Georgia's rural, non-entitlement areas. These projects are benefiting Georgians by creating or retaining **5,850 jobs**, **70.75 percent** of which are available to low– to moderate-income citizens.

Public Buildings (non-governmental). During the past five years, the State's CDBG program has funded the creation, expansion or rehabilitation of **40** public facilities - including youth centers, shelters for the disadvantaged, senior centers, health centers and similar projects. More than **51,272** citizens are being served by these facilities, of which **90.92 percent** are low- to moderate-income.

Infrastructure/Emergency Relief. The State's CDBG program combines local government investments with CDBG funds to finance infrastructure that provides: (1) public water to replace contaminated wells; (2) public sewer to remove sewage from homes, yards and neighborhoods; and (3) drainage and street improvements to prevent neighborhood flooding and provide passable streets. In the past five years, Georgia's State CDBG program has funded **302** public infrastructure projects serving **78,867** persons, **88.33 percent** of whom have low- to moderate-incomes. Since 2008, CDBG funds have also been used to finance **45** disaster assistance projects benefiting **89,892** citizens.

Neighborhood Revitalization. In the past five years**,** the State CDBG Program has financed hundreds of housing activities. CDBG also funds homebuyer assistance through repayment deferrals and forgivable loans. CDBG has funded the removal of **88** blighted units and funded the rehabilitation of over **321** units. CDBG grants are also providing direct homeowner assistance for **28** units. CDBG housing activities provide **100%** benefit to low-to moderate-income citizens.

A Closer Look At The 2012 Fiscal Year's Allocation

By Project Type	Requests	%	Awards	%	Amount Requested	%	Amount Awarded	%
Multi-Activity	5	3.23%	2	2.27%	$3,983,000	5.46%	$1,600,000	3.82%
Econ Dev*	14	9.03%	14	15.91%	$5,540,462	7.59%	$5,540,462	13.24%
Housing	11	7.10%	6	6.82%	$4,775,387	6.54%	$2,495,836	5.97%
Public Facilities **	125	80.65%	66	75.00%	$58,693,007	80.41%	$32,198,669	76.97%
Total	**155**	**100.00%**	**88**	**100.00%**	**$72,991,856**	**100.00%**	**$41,834,967**	**100.00%**

**Figures above for economic development include the economic development and redevelopment set-asides. Since awards are made throughout the year the EIP/Redevelopment information is from the July 1, 2011 to June 30, 2012 period.*

***Public facilities include water, sewer, water/sewer, streets/drainage, recreation centers, multi-infrastructure, workforce development centers, senior centers, adult daycare, youth centers, domestic violence prevention centers, daycare centers, health centers, learning centers, infrastructure/building construction and other related projects.*

Leverage of Other Resources and Construction Jobs

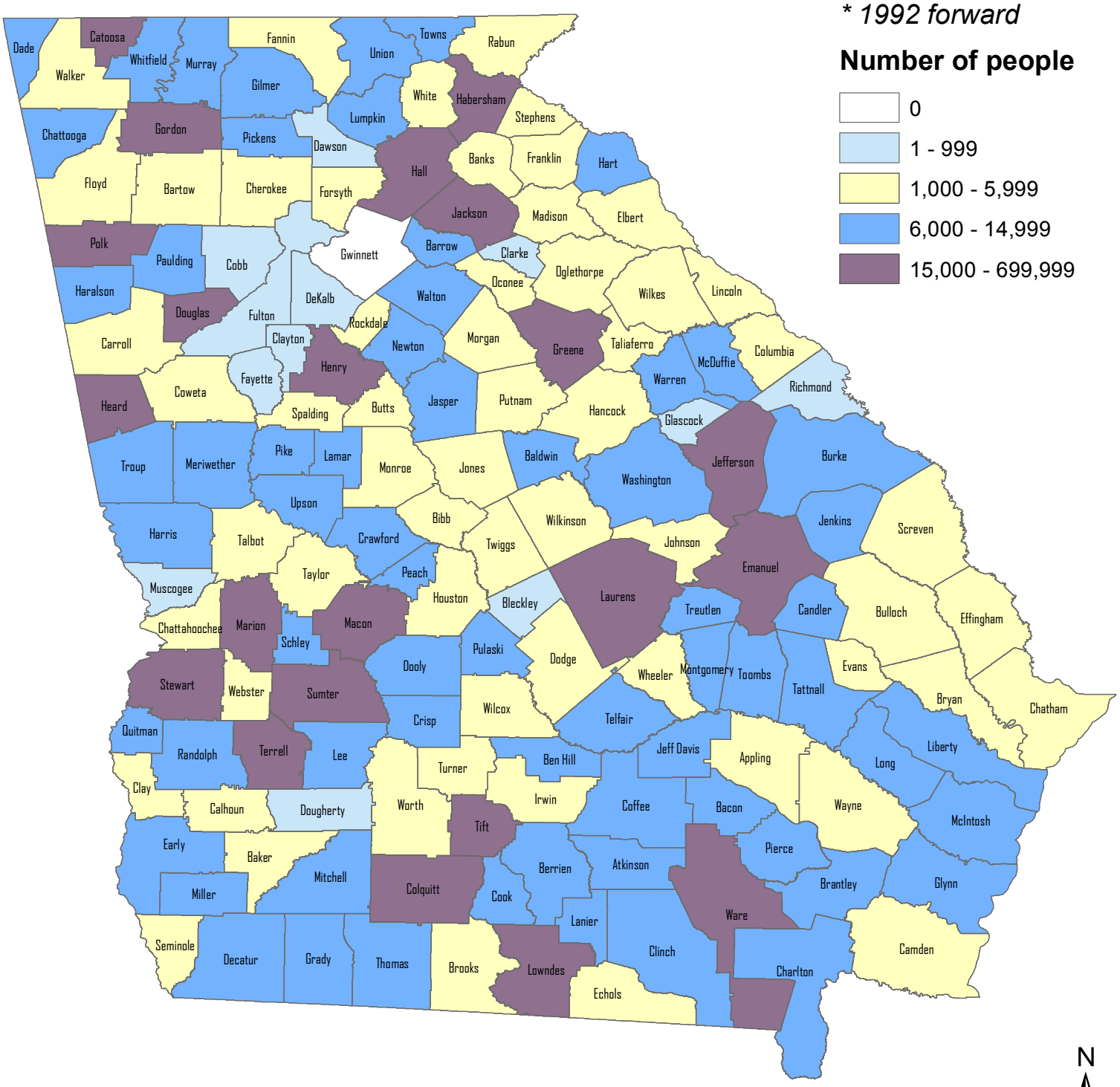
Leverage as of October 2012 and Prior Year EIP	Leverage $ per CDBG $	Construction Jobs Estimate for 2012 Grants***
$303,927,807	$7.26	617

****The Construction Jobs Estimate is based on the approved CDBG-R methodology.*

Summary Statistics

Average Award Amount	Total Awarded	Total Beneficiaries	Total Low-Mod Beneficiaries
$465,077	41,834,967	31,306	28,407

People Benefited Through State CDBG Financed Economic Opportunities, Revitalization, and Public Infrastructure and Services



Map prepared by: Georgia Department of Community Affairs. October 2012

Appendix F

Coordination of Local Planning Documentation

THIS SECTION FOR STATE USE ONLY

FEMA-_____-DR-_____
[ ] Application Complete
[ ] In Declared Area
[ ] Statewide

[ ] HMGP Planning
[ ] Eligible Applicant
[ ] State or Local Government
[ ] Private Non-Profit (Tax ID Received)

Community NFIP Status:
[ ] Participating Community ID #: _____
State Application ID _____

[ ] In Good Standing [ ] Non-Participating [ ] CRS
Date Application Received _____

State Reviewer_____ Signed_____ Date _____

FEMA Application Hardcopy Submittal Date: _____

FEMA Application Completed NEMIS Entry Date: _____

** Please submit two signed and one Microsoft Word copy of the application **

This application is for the Hazard Mitigation Assistance (HMA) program for a plan update proposal administered by the Georgia Emergency Management Agency (GEMA). Please complete all sections and provide all information as requested. **Incomplete applications will not be forwarded to FEMA for their review.** If you require assistance with this application, contact Alan Sloan, Planner at (229) 276-2773.

Applicant Information

1. **Project Title: HAZARD MITIGATION PLAN UPDATE**
2. **Applicant (Organization)** Xyz County
3. **Applicant Type**

   X State or Local Government ☐ Recognized Indian Tribe ☐ Private Non-Profit

   State Legislative District(s) _____ Congressional District(s) _____

   Federal Tax I.D. Number ___ - _____ DUNS Number ___ - ____ - _____

   FIPS Code: _____
4. **National Flood Insurance Program CID #: _ _ _ _ _ _**
5. **NFIP Community Rating System Class Number** _____
6. **Point of Contact** (Individual responsible for the grant)

   ☐Ms. ☐Mr. ☐Mrs. ☐Dr. First Name _____ Last Name_____

   Title _____Telephone _____ Fax_____

   Street Address_____

   City_____State __GA____ Zip Code _____

   E-mail address _____
7. **Application prepared by** (if different from Point of Contact):

   Name _____Telephone _____ E-mail address_____
8. **Authorized Applicant Agent (**An individual authorized to sign financial and legal documents on behalf on the local government (e.g., the Chairperson, Board of County Commissioners or the County Manager, etc.**)**

   ☐Ms. ☐Mr. ☐Mrs. ☐Dr. First Name _____ Last Name_____

   Title _____Telephone _____ Fax_____

   Street Address_____

   City_____State __GA____ Zip Code _____

   E-mail address _____

   Signature:_____Date: _____

I. Project Description – Narrative Statement

A. Mitigation Activity

1. Please describe the strategy for completing this planning activity, including the review process, adoption and FEMA's approval.

The County will form a planning committee comprised of representatives of various county departments, as well as other interested parties, such as outside state and regional agencies, local businesses, residents, the City of 123, public etc. The committee will be lead by the EMA Director and will meet on a regular basis in order to accomplish the items set forth in the Scope of Work below, including addressing any recommended revisions from the original plan's review crosswalk (attached). The EMA Director will coordinate the planning process including the meetings, write the plan based on committee findings and work through the State and Federal review and approval process. The EMA Director will coordinate the process of meeting the objectives outlined in the Scope of Work below with the assistance and input of the appropriate committee members and local staff resources as necessary. Outside interested parties will be invited to participate by direct invitation and by public postings and meeting notices. A minimum of two public hearings will be held in order to provide the public an opportunity to comment during the drafting phase and prior to final adoption.

2. Please describe how the applicant will manage the costs and schedule and how successful performance will be ensured.

A budget will be set according to the budget figures in this application to allow for labor on the part of committee members and other staff members and the purchase of necessary materials. Expenses will be incurred according to the budget items and will not exceed the total grant award. This will be tracked by the county as well as the State's grants management system which tracks expenses to date and remaining grant figures. Also, the county will track each budget allocation as expenses are incurred under those allocations to ensure that expenses remain within the allowed budget.

3. Please describe the staff and resources needed to implement this mitigation activity and the applicant's ability to provide these resources.

This planning process involves a variety of staff and expertise, which will be used as necessary. Specifically, expertise will be needed from the Fire Department, Tax Assessor, Building Inspections, Public Health, etc. XYZ County is able to provide the staff resources to meet these needs.

4. Please explain how this mitigation activity will leverage involvement of partners to enhance its outcome.

The planning process will involve the opportunity for outside agencies and public to be a part. This will be done by a combination of direct invitation, public notice and individual meetings with the various agencies as necessary.

5. Please describe the outreach activities that are planned relative to this mitigation activity (signs, press releases, success stories, etc) and/or how this mitigation activity will serve as a model for other communities.

At the outset of the process, the EMA Director will invite various outside State agencies, local businesses, The City of 123 and others to be a part of the process. In addition, the public will be notified and invited to attend through public notices and a minimum of two public meetings with opportunity for public comment.

6. Please describe how this planning activity will benefit the applicant's constituents.

This activity will benefit the local citizens of XYZ County by providing a current and up to date hazard mitigation plan for XYZ County and the City of 123, thereby ensuring the County and Cities' eligibility to participate in future mitigation grants.

7. Does your County plan to update your Hazard Mitigation Plan In-House or with the assistance of an outside contractor?

[X] In-House [ ] Contractor

(If outside contractor selected please describe the duties they will perform to meet the Scope of Work below)

XYZ County intends to complete the plan update in house with the EMA Director to act as the facilitator of the planning process as well as to develop and write the plan update. The EMA Director will attend GEMA Pre-Disaster Mitigation planning workshops as they are offered.

The EMA Director will meet with GEMA as necessary to discuss the plan development process and construct an invitation list for the larger planning committee.

The County EMA Director will pull together existing data, plans, and EMA capabilities together in a draft report to be discussed by the planning committee. This will include the base HRV analysis provided by GEMA and added to by local data and EMA Director's efforts.

The County EMA Director will Review all hazards to address any newly identified hazards that pose a more significant threat than was apparent when the previously approved plan was prepared and discuss new occurrences of hazard events and update the probability of future occurrences.

The County EMA Director will work with the planning committee to update the current inventory of existing and proposed buildings, infrastructure, and critical facilities in hazard areas.

The County EMA Director will update the loss estimate to reflect any changes to the hazard profile and/or the inventory of structures.

The County EMA Director will analyze, update, and continue development of Goals, Objectives, and Action Steps with the assistance of the planning committee.

The County EMA Director will update the Plan Maintenance and Implementation Section to include an analysis of whether the previously approved plan's method and schedule for monitoring, evaluating, and updating the plan worked, and what elements or processes, if any, were changed; and discuss the method and schedule to be used over the next five years.

The County EMA Director will describe how the community was kept involved during the plan maintenance process over the previous five years, within the planning process section of the plan update and how they will continue public involvement during the planning period.

The County EMA Director will work with the planning committee and GEMA staff throughout the State and Federal plan review process to ensure that, in the end, XYZ County has a Federally approved updated hazard mitigation plan.

B. Scope of Work

Xyz County will update its existing Multi-jurisdictional Pre-disaster Mitigation Plan according to the requirements of the Disaster Mitigation Act of 2000. This Scope of Work was designed in conformance to FEMA Plan Guidance requirements.

Xyz County agrees to have representatives attend and participate in all GEMA and local level mitigation planning meetings and workshops. The county will coordinate as needed with the GEMA representative to utilize the tools necessary and to ensure that the plan meets the most current Federal regulations. Each county will be required to complete the following: Critical Facility Inventory and basic mapping will be established in the Georgia Mitigation Information System, including running reports by jurisdiction for each identified hazard; GEMA Worksheets 3A for each participating jurisdiction for each identified hazard; high level detail for all mitigation action steps as required by FEMA and GEMA; insure all "recommended revisions" from their previous FEMA Plan review are addressed in the plan update.

Additionally, Xyz County will insure the plan update is consistent with the most current requirements from FEMA, including:

- Identify all changes to the plan within each section, including revisions to the planning process, risk assessment, goals and objectives, plan maintenance process, etc.
- Update the Planning Process
  - Identify jurisdictions that didn't participate in planning for the original plan but did participate in the update AND identify jurisdictions that did participate in the planning for the original plan but did not participate in the update.
  - Describe the process used to review and analyze each section of the plan, as well as the process used to determine if a section warranted an update.
- Improve the risk assessment:
  - Address any newly identified hazards that pose a more significant threat than was apparent when the previously approved plan was prepared.
  - Discuss new occurrences of hazard events and update the probability of future occurrences.
  - Incorporate new information where data deficiencies were identified in the original plan, or if the data deficiencies remain unresolved, explain why they remain unresolved and include a schedule to resolve the issue.
  - Include current inventory of existing and proposed buildings, infrastructure, and critical facilities in hazard areas, including existing NFIP repetitive loss structures. The community will determine how far into the future they wish to go in considering proposed buildings and Critical Facilities based on and timed with the data gathering phase of their comprehensive plan or land use plan update.
  - The loss estimate should be updated to reflect any changes to the hazard profile and/or the inventory of structures. Any changes to analysis methodologies must be noted. Any previously noted data deficiencies should be updated or explained.
  - Should include a general overview of land uses and types of development occurring within the community and accent any new information.
  - If there are changes in the risk assessment or the vulnerability of the community to the hazards, the information must be attributed to the appropriate jurisdiction(s) or to the whole planning area, whichever applies.
  - Continue to use all available tool sets and data as the GMIS is enhanced (for example: repetitive losses…)
- Analyze, update, and continue development of Goals, Objectives, and Action Steps.
  - Use this update as an opportunity for jurisdictions to reconsider the goals and objectives. For goals and actions that remain, the plan must document that they were re-evaluated and deemed valid and effective.
  - Goals and objectives shall include the community's strategy for new or continued NFIP participation. Continue to use the "STAPLEE Criteria" (Social, Technical, Administrative, Political, Legal, Economic, and Environmental), or incorporate the STAPLEE Criteria if not previously used to assess the value of and develop an understanding of the cost effectiveness of mitigation action steps. This is the prime time to update Action Items. If actions remain unchanged, the updated plan must indicate why changes are not necessary.
  - Shall include evaluation and prioritization for any new mitigation action steps.
- Update the Plan Maintenance and Implementation
  - Must include an analysis of whether the previously approved plan's method and schedule for monitoring, evaluating, and updating the plan worked, and what elements or processes, if any, were changed; and discuss the method and schedule to be used over the next five years.
  - Describe other planning mechanisms or ordinances that this plan will be incorporated into.
- Information Dissemination
  - Describe how the community was kept involved during the plan maintenance process over the previous five years, within the planning process section of the plan update.
  - The plan maintenance section shall describe how the community will involve the public during the plan maintenance process over the next five years.
- Adoption and Review
  - The plan will be submitted for State review and recommendation prior to adoption.
  - Upon recommendation from GEMA, the county and participating municipalities will adopt the plan.
  - The adopted plan will be submitted for FEMA review and approval.

C. Evaluation Information

1. Current Xyz County Hazard Mitigation Plan Approval Date: _____

2. Current Xyz County Hazard Mitigation Plan Expiration Date: _____

3. Does Xyz County participate in the Community Rating System (CRS)? Yes □ No □ If yes, what is your CRS rating? 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 □

4. Is Xyz County a Cooperating Technical Partner (CTP)? Yes □ No □

5. Has Xyz County adopted building codes consistent with the International Codes? Yes □ No □

6. Have Xyz County's building codes been assessed on the Building Code Effectiveness Grading Schedule (BCEGS)? Yes □ No □ If yes, BCEGS rating? 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 □

7. Has Xyz County adopted the National Fire Protection Association (NFPA) 5000 code? Yes □ No □

D. Project Milestones

List the major milestones in this project:

Milestone	Number of Days to Complete
Issuance of Subgrantee/Grantee Agreement	90 days
Coordinate Kick Off Meeting with GEMA Planner	60 days
Establish and Form Planning Committee	60 days
Gather Critical Facilities Data	90 days
Hazard Identification and Risk Assessment Update	120 days
Analyze, update, and continue development of Goals, Objectives, and Action Steps	90 days
Mitigation Strategy Update	90 days
Update the Planning Process	60 days
Submit Plan for GEMA Review and Approval	30 days
Submit Plan for FEMA Review and Approval	60 days
Plan Adoption and implementation	60 days
Update Plan Maintenance and Implementation	60 days
Financial Reconciliation and Closeout	90 days
Total	960 days

E. Location

Please provide a county map and give a brief description of the county and list the municipalities that will be covered by this plan update along with a description of each. (Example: Date founded, population, major industries, special events, etc.)

F. History of Hazards

Please provide an assessment of the frequency and severity of each of the following hazards that have affected Xyz County in the past.

Coastal Storms:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Earthquake:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Windstorms:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Fire:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Flood:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Freezing:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Hurricane:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Mud/Landslide:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Severe Ice Storms:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Severe Storms:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Snow:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Tornado:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Tsunami:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Typhoon:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

Volcano:
Frequency: Not Applicable □ Very Low □ Low □ Moderate □ High □
Severity: Minor □ Serious □ Extensive □ Catastrophic □

II. Budget

In this section, with regard to the Scope of Work [Section I(B) above], please provide details of all costs in relation to this project. Reasonable cost estimates are essential. **Do not** include contingency costs in the budget. (See example below)

A. Materials

Item	Dimension	Quantity	Cost per Unit	Total Cost	Source
Printing and publication		XX	$XX	$XXXX	Grant
Equipment	XXXXX	XX	XXXX	$XXXXX	Grant

The budget includes $X,XXX for printing and publication of the plan, which, at an average cost of $XX per copy, would provide up to approximately XX copies to be distributed as needed among the various public safety agencies, city and county departments, public locations, etc. The budget also includes $X,XXX for equipment, to be used for research and development of the plan update.

B. Labor

Description	Hours	Rate	Cost	Source
County Staff	XXX	$XX	$XX,XXX	County Budget

The budget includes $X,XXX for county staff to be utilized as part of the non-Federal share. The cost for the county staff was determined based upon an average salary for the staff anticipated to participate in the planning process multiplied by the estimated hours to oversee the process, research hazard histories, inventory building and infrastructure assets, identify goals and objectives and get the updated plan adopted and approved.

Total Estimated Project Cost $___24,000_____

C. Funding Sources (round figures to the nearest dollar) The maximum FEMA share for HMGP projects is 75%. The other 25% can be made up of State and Local funds as well as in-kind services. HMGP funds may be packaged with other Federal funds, but other Federal funds (except for Federal funds which lose their Federal identity at the State level – such as CDBG, ARS, HOME) may not be used for the State or Local match.

Estimated FEMA Share	$ 18,000	75 % of Total
Non-Federal Share		
Estimated Local Share	$ 6,000	25 % of Total (Cash)
Estimated State Share	$	% of Total (Cash)
Total Project Costs	$ 24,000	100 % of Total

GEORGIA EMERGENCY MANAGEMENT AGENCY

OMB Approval No. 0348-0043

APPLICATION FOR XYZ COUNTY FEDERAL ASSISTANCE

HMA Planning Application

2. DATE SUBMITTED	Applicant Identifies
1. TYPE OF SUBMISSION Application ☐ Construction ☒ Non-Construction / Preapplication ☐ Construction ☐ Non-Construction	**3. DATE RECEIVED BYSTATE** / **4. DATE RECEIVED BY FEDERAL AGENCY**	State Application Identifier / Federal identifier

5. APPLICANT INFORMATION

Legal Name: Xyz County

Organization Duns:

Address (give city, county, State, and zip code):

Name and telephone number of person to be contacted on matters involving this application (give area code)

6. EMPLOYER INDENTIFICATION NUMBER (EIN):

7. TYPE OF APPLICANT: (enter appropriate letter in box) B

A. State H. Independent School Dist.
B. County I. State Controlled Institution of Higher Learning
C. Municipal J. Private Uni ersity
D. Township K. Indian Tribe
E. Interstate L. Individual
F. Intermun cipal M. Profit Organization
G. Special District N. Other (Specify) _____

8. TYPE OF APPLICATION:

☒ New ☐ Continuation ☐ Revision

If Revision, enter appropriate letter (s) in box(es)

A. Increase Award B. Decrease Award C. Increase Duration
D. Decrease Duration Other (*specify*):

9. NAME OF FEDERAL AGENCY:

Federal Emergency Management Agency

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER

9 7 — 0 3 9

TITLE: Hazard Mitigation Assistance Program

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

Xyz County Hazard Mitigation Plan Update

12. AREAS AFFECTED BY PROJECT (*Cities, Counties, States, etc.*):

13. PROPOSED PROJECT		14. CONGRESSIONAL DISTRICT OF:	
Start Date	Ending Date	a. Applicant	b. Project
April 1, 2010	April 1, 2013		Xyz County Hazard Mitigation Plan Update

15. ESTIMATED FUNDING:

a. Federal	$ 18,000.00
b. Applicant	$ 6,000.00
c. State	$ .00
d. Local	$ .00
e. Other	$ .00
f. Program Income	$ .00
g. TOTAL	$ 24,000.00

16. IS APPLICATION SUBJECT TO REVIEW BY THE STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES THIS PREAPPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE: _____

b. No ☒ PROGRAM IS NOT COVERED BY E. O. 12372

☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ YES If "Yes," attach an explanation ☐ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Applicant Agent	b. Title	c. Telephone Number
d. Signature of Authorized Applicant Agent		e. Date Signed

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681- 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of

Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED APPLICANT AGENT	TITLE
APPLICANT ORGANIZATION	DATE SUBMITTED

Example: Letter of Availability of Matching Funds

(Please prepare the following letter on county letterhead and after securing the proper signatures, attach the letter to the hardcopy of this application)

Xyz County Letterhead

County Official with signatory authority

January 25, 2008

Mr. Terry K. Lunn, Director
Hazard Mitigation Division
Georgia Emergency Management Agency
P. O. Box 18055
Atlanta, GA 30316

RE: Xyz County Five Year Hazard Mitigation Plan Update Grant Pre-Application for FEMA Grant Funding

Dear Mr. Lunn:

I have been well informed of the County staff's preparation of the Hazard Mitigation Planning Grant (HMGP) Application Worksheet. If accepted, we understand that the county may be eligible for federal grant funding to assist with the update of our Hazard Mitigation Plan.

I am writing to assure you that Xyz County has funding to meet the required 25% Local Match for this project. We appreciate your assistance and the assistance of your staff in the preparation of this application.

Sincerely,

County Official with signatory authority
Official Title

Example: Municipal Letter of Intent to Participate

(Please distribute the following letter to your municipalities and, after securing the proper signatures, attach the letter(s) to the hardcopy of this application)

June 17, 2009

Name
Emergency Management Director
Xyz County Emergency Management Agency
Address
City, Georgia Zip

Dear Mr. Name:

It is our understanding that Xyz County has applied for a grant from the Federal Emergency Management Agency through the Georgia Emergency Management Agency to fund the cost of updating the county's Multi-Jurisdictional Hazard Mitigation Plan. We recognize that participation in this plan update process and adoption of this multi-jurisdictional plan is important, not only to the Xyz County, but to the City of ABC as well, in order to be eligible to future Federal money for mitigation related projects. We also understand that there is a local match requirement which can be met in part by participation of our staff in the plan update process.

With that said, it is our intention to participate fully with the county in this process, providing input into the plan update, providing available staff resources to assist with the local match requirement and adopting the plan in order for the City of ABC to remain eligible for mitigation funding. We look forward to hearing from you on this process soon. If you have any questions, please contact Name at (123) 456-7890.

Sincerely,

Name Here
Title of Local Official Here

Hazard Mitigation Assistance (HMA) Score Sheet
Overall Score _____

Applicant:_____ _____

Project Title/ID #:_____
Overall Priority_____

Natural Hazard Exposure (Average for all Properties) 25 ____

Flood	Wind (Miles from Coast)	Tornado (History)
Floodway (25)	0-10 Miles (25)	1.09/tornado
AE (20)	10-25 Miles (20)	
A (15)	25-50 Miles (15)	
B,X (shaded) (10)	50-100 Miles (10)	
C, X (unshaded) (0)	>100 Miles (0)	

History of Damage in Project Area (Average for all Properties) 25

5 points per event of documented history (up to 5 events) ____

or BC Module Predicts an Average of

<5 year Hazard Return Interval	25
>5 and <10 Hazard Return Interval	20
>10 and <25 Hazard Return Interval	15
>25 and <50 Hazard Return Interval	10
>50 and <100 Hazard Return Interval	5
>100 Hazard Return Interval	0 ____

Type of Mitigation **5**

Non-structural (e.g., floodproofing, retrofitting, elevation, acquisition, development/implementation of codes and standards, etc.) 5

Structural (e.g., flood wall, storm water drainage improvements) 0 _____

Potential Impact on Community **15**

Severe (failure to implement project results in loss of life or essential services) 15

Moderate (failure to implement project results

in economic hardship)	7.5	
None (project has minimal or no impact)	0	___
Estimated Environmental Impacts	**5**	
Insignificant (CATEX)	5	
Moderate (EA required)	2.5	
Major (EIS required)	0	____
Intangible Factors	**10**	
(Community Commitment to mitigation)		
Storm Ready	1	
CRS Rating (6-10) 1 point for each class	5	
Cost Share arrangements (>25%)	2	
History of mitigation projects	2	
		____
Benefits	**15**	
1 point per $500,000 (cap at 15 points)		
		____
TOTAL POINTS	**100**	_____
Bonus Point Section (for top 5 scoring apps)	**10**	
Quality of data in the application	10	
Hazard Data (Zone)	2.5	
Damage History	2.5	
Cost Data	2.5	
Environmental (Completeness)	2.5	

(Confidence in source data to validate application information)

_____

Appendix G

List of Tables and Figures

List of Tables

Chapter 1 Tables

2014 #	Name	Section	2011 #
1.1	Summary of Changes to Chapter 1	1.1	1.1
1.2	State Plan Update Workshops	1.3.1	New
1.3	State Agency Participation in 2014 GHMS Update	1.4	New
1.4	Federal Agency Participation in 2014 GHMS Update	1.4	New
1.5	Other Organizations Participation in the 2014 GHMS Update	1.4	New
1.6	Integration of State Programs into the 2014 GHMS	1.5	New
1.7	Integration of FEMA Mitigation Programs into the 2014 GHMS	1.5	New

Chapter 2 Tables

2014 #	Name	Section	2011 #
2.1	Overview of Updates to Chapter 2: Hazard, Risk, and Vulnerability Assessment	2.1	2.1
2.2	Workshop 1 Hazard Ranking	2.3	New
2.3	Workshop 2 Vulnerability Ranking	2.3	New
2.4	Workshop 2 Total Risk Ranking	2.3	New
2.5	Changes in Hazards from 2011 to 2014 State Plan	2.4	New
2.6	Hazards in Local Plans	2.4	2.2
2.7	Declared Counties in PDD DR1973	2.4	New
2.8	Total Number of Hurricanes that have Tracked Over Georgia, 1851 to Present	2.5.1	New
2.9	Tropical Cyclones that have made Landfall on the Georgia Coast, 1800 to Present	2.5.1	New
2.10	Notable and Historic Tropical Cyclonic Events Affecting Georgia	2.5.1	2.6
2.11	Notable Storm Surge Events in Georgia from Tropical Cyclones	2.5.2	New
2.12	Wind Hazard Scores	2.5.3	2.8
2.13	Enhanced Fujita Scale	2.5.4	2.10
2.14	Notable Tornado Events in Georgia	2.5.4	2.12
2.15	Notable Flood Events	2.5.6	2.14
2.16	RSI Categories	2.5.7	New
2.17	Notable Winter Storm Events	2.5.7	New
2.18	Notable Drought Events	2.5.8	2.18
2.19	SPI Scores and Corresponding Conditions	2.5.8	2.19
2.20	GA Wildfires and Acres (NIFC)	2.5.9	New
2.21	Hazard Score Descriptions for Figure 2.39	2.5.9	New
2.22	Wildland-Urban Interface Areas in Georgia from 1990-2010.	2.5.9	New
2.23	Earthquake Magnitudes	2.5.10	2.22
2.24	Modified Mercalli Scale of Intensity	2.5.10	2.23
2.25	Notable Earthquake Events Affecting Georgia	2.5.10	2.24
2.26	Dam Classification from NDSP	2.5.12	2.26
2.27	Dam Failure Notable Events	2.5.12	2.27
2.28	SoVI variables	2.6	2.28

2.29	Most vulnerable counties	2.6	2.29
2.30	Least vulnerable counties	2.6	2.29 (split)
2.31	Number of Counties by SoVI Score	2.6	New
2.32	Standard Deviation for each SoVI Score	2.6	New
2.33	SLOSH Hazard scores	2.7	2.7
2.34	Wind Hazard Scores	2.7	2.8
2.35	Flood Hazard Scores	2.7	2.15
2.36	Wildfire Hazard Scores	2.7	2.21
2.37	Earthquake Hazard Scores	2.7	2.25
2.38	Counties with Highest Average Hazard Scores	2.7	2.30
2.39	Counties with Highest Composite Score	2.7	2.31
2.40	GMIS Critical Facility Attributes	2.8	New
2.41	Critical Facility Percentages in Hazard Category Zones	2.8	2.34
2.42	Critical Facility Value at Risk According to Hazard Categories	2.8	2.35
2.43	Critical Facility Types: Percentage of Total Reported	2.8	2.36
2.44	Rankings of Potential for Loss by Jurisdiction	2.8	2.37
2.45	Rankings of Total Value of Critical Facilities by jurisdiction	2.8	2.38
2.46	State Asset Totals	2.8	New
2.47	BLLIP Facility Attributes	2.8	New
2.48	State Facility Percentages in Hazard Categories	2.8	2.32
2.49	State Facility Value at Risk According to Hazard Categories	2.8	2.33
2.50	Total Repetitive Loss Properties in Flood Hazard Zones by Year of Data	2.8	2.39
2.51	Validated Severe Repetitive Loss (SRL) Properties by Jurisdiction	2.8	New

Chapter 3 Tables

2014 #	**Name**	**Section**	**2011 #**
3.1	Summary of Changes to Chapter 3	3.1	3.1
3.2	Categories of Mitigation Actions. Source: FEMA Local Mitigation Planning Handbook	3.2.1	New
3.3	Workshop 3 Results	3.2.3	New
3.4	Local Identification by Mitigation Type	3.2.4	3.4
3.5	Mitigation Categories from Local Plans	3.2.4	New
3.6	Mitigation Action Table	3.2.5	3.2
3.7	Combined or Deleted Mitigation Action Table	3.2.5	New
3.8	Completed Mitigation Action Table	3.2.5	New
3.9	Mitigation Related State Programs	3.3.1	3.13
3.10	Georgia Legislation Related to Development	3.3.2	3.11
3.11	Community Rating System and Associated Flood Insurance Reductions	3.4.2	New
3.12	Georgia CRS Communities and Rankings	3.4.2	3.9, 3.10
3.13	Current Funding Sources	3.5	New
3.14	Potential Funding Sources	3.5	New

Chapter 4 Tables

2014 #	Name	Section	2011 #
4.1	Summary of Changes to Chapter 4	4.1	4.1
4.2	Plan Updates Included in Recent Disasters (Current through September 30, 2013)	4.2.1	4.2
4.3	Local Plan Priority Update Schedule by Expiration Date	4.4.1	4.3
4.4	Repetitive and Severe Repetitive Loss Properties by NFIP Community	4.4.3	4.5
4.5	Mitigation Repetitive Loss Properties by Program Year or Disaster From GMIS	4.4.4	4.6

Chapter 5 Tables

2014 #	Name	Section	2011 #
5.1	Summary of Changes to Chapter 5	5	5.1
5.2	2014 Plan Review and Update Schedule	5.1	New
5.3	2017 Plan Review and Update Schedule	5.1	New

Chapter 2 Figures

New	Name	Section	Old
2.1	Risk Factors	2.2	New
2.2	Total Hazard Events by County	2.4	A.1
2.3	Total Hazard Losses by County	2.4	A.2
2.4	Average Loss per Event by County	2.4	A.3
2.5	SHELDUS Hazard Events Percentage 1992-2012	2.4	New
2.6	SHELDUS Adjusted Loss Percentage by Hazard 1992-2012	2.4	New
2.7	SHELDUS Total Injuries and Fatalities Percentage by Hazard 1990-2012.	2.4	New
2.8	Hurricane Wind Events	2.5.1	A.7
2.9	Hurricane Wind Losses	2.5.1	A.8
2.10	Hurricane Wind Intensity Scale	2.5.1	2.4 (modified)
2.11	Illustration of Category 4 Intensity	2.5.1	New
2.12	GA Hurricane Wind Extent	2.5.1	new
2.13	Coastal Flooding Events	2.5.2	A9
2.14	Coastal Flooding Losses	2.5.2	A10
2.15	Model of Potential Storm Surge Inundation by Hurricane Category	2.5.2	New
2.16	Wind Events	2.5.3	A11
2.17	Wind Losses	2.5.3	A12
2.18	Average Hazard Wind Score	2.5.3	B11
2.19	Wind Risk	2.5.3	B2
2.20	Thunderstorm Days per Year	2.5.4	New
2.21	Severe Weather Events	2.5.4	A13
2.22	Severe Weather Losses	2.5.4	A14
2.23	Tornado Characteristics by Strength	2.5.5	New
2.24	Tornado Events	2.5.5	A15
2.25	Tornado Losses	2.5.5	A16
2.26	GA Historical Tornado Tracks	2.5.5	A31
2.27	Flood Events	2.5.6	A17
2.28	Flood Losses	2.5.6	A18
2.29	Alberto rainfall	2.5.6	New
2.30	Floodplains	2.5.6	B3
2.31	1973 winter storm	2.5.7	New
2.32	1993 winter storm	2.5.7	New
2.33	Winter Storm events	2.5.7	A19
2.34	Winter Storm losses	2.5.7	A20
2.35	Drought Events	2.5.8	A21
2.36	Drought Losses	2.5.8	A22
2.37	SPI map	2.5.8	New
2.38	Southern Wildfire Risk Assessment Model	2.5.9	New
2.39	Level of Concern Index	2.5.9	New
2.40	Wildfire Risk Level	2.5.9	New
2.41	WUI Boundary Image	2.5.9	New
2.42	Location of WUI areas in Georgia.	2.5.9	New

2.43	1886 Charleston, SC Earthquake Intensity	2.5.10	New
2.44	Significant Earthquakes	2.5.10	A24
2.45	US Seismic Hazard Map	2.5.10	B6
2.46	GA Seismic Map	2.5.10	B7
2.47	Geology Associated with Sinkhole Potential	2.5.11	A12
2.48	Landslide Potential for Georgia	2.5.11	New
2.49	Dam Events	2.5.12	A25
2.50	Dam Losses	2.5.12	A26
2.51	Category I Dams	2.5.12	B15
2.52	Category I Dams per County	2.5.12	B17
2.53	Dam Impact Potential	2.5.12	B9
2.54	Dam Failure Risk	2.5.12	B10
2.55	Figure 2.55 SoVI Index by County	2.6	C2
2.56	Composite Hazard Scores for Georgia	2.7	D1
2.57	Average Hazard Score by County	2.7	D2
2.58	Composite SoVI + Hazard by County	2.7	D3
2.59	Significant Changes with SoVI	2.7	D4
2.60	Location of State Assets	2.8	D5
2.61	Risk to State-Owned Properties	2.8	D13
2.62	Repetitive Loss Properties	2.8	New
2.63	Number of Losses Per RL Property	2.8	D7
2.64	Top 10 Communities by Total RL Properties	2.8	D8
2.65	Top 10 Communities by Total RLP Losses	2.8	D9
2.66	Communities with SRL Properties	2.8	D25

Chapter 3 Figures

New	Name	Section	Old
3.1	Mitigation Strategy	3.2	New
3.2	Construction Codes in GA	2.4	E1
3.3	Communities with Zoning	2.4	E2

Chapter 4 Figures

New	Name	Section	Old
4.1	Grant Process Flow Chart	4.1	New
4.2	GEMA Mitigation Planner Areas	4.1	New
4.3	Local Hazard Mitigation Planning Process Flow Chart	4.1	E4
4.4	Local Plan Review Tool Element F: State Requirements	4.1	New

Appendix H

Enhanced Plan Information

Process Standardization Report

Please provide the following information, then click on the Search button to retrieve the data that match your criteria.

Search Criteria	
*Grant Program:	PA
*Disaster Number:	1833

Search Go Back

Date: 11-26-2013 19:15

Federal Emergency Management Agency

Process Standardization Report

Disaster: FEMA-1833-DR-GA

Declaration Date: 04-23-2009

Disaster: 1833	Pre-Applications	# SPs	SP Amount	# LPs	LP Amount	# SGs	Total Project Amount 100%
Subgrantee Created External	0					0	
Subgrantee Submitted External							
Grantee Submitted External							
Paper Intake (Grantee)							
Paper Intake (FEMA)	100	935	$12,380,976.30	87	$17,444,073.98	1022	$29,825,050.28
Total Subgrantees Submitted	100	935	$12,380,976.30	87	$17,444,073.98	1022	$29,825,050.28
PWs Awarded		885	$9,202,766.39	87	$12,599,473.46	972	$21,802,239.85

Hazard Mitigation Proposal Subgrant Application Totals

Disaster: 1833	Pre-Applications	# SPs	SP HMP Amount	# LPs	LP HMP Amount	# SGs	Total HMP Amount 100%
Hazard Mitigation Projects	28	177	$315,159.19	4	$141,879.00	181	$457,038.19

Insurance Subgrant Application Totals

Disaster: 1833	Pre-Applications	# SPs	SP Insurance Amount	# LPs	LP Insurance Amount	# SGs	Total Insurance Amount 100%
Insurance	14	16	($1,422,964.74)	0	$0.00	16	($1,422,964.74)

Print Preview Save as TXT

Process Standardization Report

Please provide the following information, then click on the Search button to retrieve the data that match your criteria.

Search Criteria	
*Grant Program:	PA
*Disaster Number:	1858

Search | Go Back

Date: 11-26-2013 19:14

Federal Emergency Management Agency

Process Standardization Report

Disaster: FEMA-1858-DR-GA

Declaration Date: 09-24-2009

Disaster: 1858	Pre-Applications	# SPs	SP Amount	# LPs	LP Amount	# SGs	Total Project Amount 100%
Subgrantee Created External	0					0	
Subgrantee Submitted External							
Grantee Submitted External							
Paper Intake (Grantee)							
Paper Intake (FEMA)	122	2052	$25,029,559.97	280	$76,805,988.35	2332	$101,835,548.32
Total Subgrantees Submitted	122	2052	$25,029,559.97	280	$76,805,988.35	2332	$101,835,548.32
PWs Awarded		1854	$18,714,572.98	264	$45,704,217.37	2118	$64,418,790.35

Hazard Mitigation Proposal Subgrant Application Totals

Disaster: 1858	Pre-Applications	# SPs	SP HMP Amount	# LPs	LP HMP Amount	# SGs	Total HMP Amount 100%
Hazard Mitigation Projects	44	172	$518,369.14	47	$2,419,896.16	219	$2,938,265.30

Insurance Subgrant Application Totals

Disaster: 1858	Pre-Applications	# SPs	SP Insurance Amount	# LPs	LP Insurance Amount	# SGs	Total Insurance Amount 100%
Insurance	37	232	($6,758,896.52)	42	($16,830,531.68)	274	($23,589,428.20)

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FEMA

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Logged in as: TANYA PEDRINI [Session Expires in 19 mins]

[Version: 2.02.01.00 Server: mwegua2]

View Projects

Please enter the following information to search for a project, then click the Generate Report button to retrieve the data that match your criteria.

Note: Field marked with * is required

Search Criteria

* Disaster Number:	1973	Reference Number (Only the last 5 characters):	
Status:	All	Eligibility Review:	Mitigation Review
County:			Eligibility Reviews
Specific Amendment #:		Application Title:	
Preparer Name:		Category:	A B C D
Eligibility Status:	Select eligibility status	Project Size (Small/Large):	Select project size
Applicant Name:		Obligation Date:	(MM-DD-YYYY e.g. 05-17-2010)
Projected Obligation Date After:	(MM-DD-YYYY e.g. 05-17-2010)	Projected Obligation Date Before:	(MM-DD-YYYY e.g. 05-17-2010)

Generate Report | Go Back

Search Results

Report Generated On:	11-26-2013 05:29 PM GMT
Disaster Number:	1973
Status:	All
Eligibility Review:	Mitigation Review
Category:	A B C D E F G H Z

Listed below are the applications based on your search criteria.

10 1

Date: 11/26/2013 17:29

Federal Emergency Management Agency
Project Status Report
Disaster: FEMA-1973-DR-GA

Number of Records: 4

Reference No.	Applicant Name	Applicant ID	Application Title	Project Amount (100%)	Cat	Project Size	Bundle #	Fedshare Approved ($)	Elig	Status	Project Closeout Date	Submission Date	Obligation Date	Proj. Oblig. Date
PA-04-GA-1973-PW-00031(0) P	TROUP (COUNTY)	285-99285-00	TREEB01 - Fire Alarm Control Panels	1,578.32	E	S	PA-04-GA-1973-State-0002(1)	1,183.74	Eligible	Awarded		06-03-2011	06-08-2011	
PA-04-GA-1973-PW-00189(0) P	CATOOSA (COUNTY)	047-99047-00	CAEMR20 - Agriculture Building	314.73	E	S	PA-04-GA-1973-State-0007(6)	236.05	Eligible	Awarded		06-22-2011	07-08-2011	
PA-04-GA-1973-PW-00200(0) P	CATOOSA (COUNTY)	047-99047-00	CAEMR12 - Courthouse Annex	2,125.96	E	S	PA-04-GA-1973-State-0007(6)	1,594.47	Eligible	Awarded		06-23-2011	07-08-2011	
PA-04-GA-1973-PW-00349(0) P	RABUN CNTY BOARD-COMMISSIONERS	241-087F3-00	RACJT04 - Road Culverts	6,763.50	C	S	PA-04-GA-1973-State-	5,072.63	Eligible	Awarded		07-15-2011	07-22-2011	

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Georgia Emergency Management Agency
Application Information
Hazard Mitigation Assistance (HMA) Programs – Fiscal Year 2013
Pre-Disaster Mitigation (PDM) and Flood Mitigation Assistance (FMA)

Introduction
For Fiscal Year 2013 (FY13) Hazard Mitigation Assistance (HMA) grant guidance, the Repetitive Flood Claims and Severe Repetitive Loss programs have been combined with the Flood Mitigation Assistance program and along with the Pre-Disaster Mitigation program are contained within one comprehensive package. Through these grant programs, the Federal Emergency Management Agency (FEMA) provides funds to States and local governments to implement hazard mitigation measures that reduce losses of life and property damage caused by natural disasters. The Georgia Emergency Management Agency (GEMA) administers these federal grant programs in the State of Georgia. This grant guidance is applicable for the FY13 cycle of the PDM and FMA programs.

Eligible Applicants
Public agencies, including State and local governments are eligible to apply for HMA grants.

Applicants must participate and be in good standing in the National Flood Insurance Program (NFIP) if a special flood hazard area has been mapped. Information about the NFIP is available at http://www.fema.gov/about/programs/nfip/index.shtm. To be eligible for the full range of HMA projects, applicants must participate and be in good standing in the National Flood Insurance Program (NFIP).

Planning Criteria
To be considered for HMA project funding, local governments **must** have a FEMA approved mitigation plan or plan update by **October 18, 2013** and at the time of award.

HMA Eligible Project Types by Program

Mitigation Project	PDM	FMA
1. Mitigation Projects		
Property Acquisition and Structure Demolition or Relocation	●	●
Structure Elevation	●	●
Mitigation Reconstruction		●
Dry Floodproofing of Historic Residential Structures	●	●
Dry Floodproofing of Non-residential Structures	●	●
Minor Localized Flood Reduction Projects	●	●
Structural Retrofitting of Existing Buildings	●	
Non-structural Retrofitting of Existing Buildings and	●	●

Facilities		
Safe Room Construction	●	
Wind Retrofit for One- and Two-Family Residences	●	
Infrastructure Retrofit	●	●
Soil Stabilization	●	●
Wildfire Mitigation	●	
Generators	●	
2. Hazard Mitigation Planning		
All Hazard/Flood Mitigation Planning	●	●

Project Funding
HMA grants are awarded on a nationally competitive basis. The Federal share of HMA funding is program and plan dependent and ranges from 75% to 100%. The non-Federal share may be met with cash, contributions, and certain other grants such as Community Development Block Grants, Increased Cost of Compliance (ICC) flood insurance payments, or in-kind services.

Cost Share by Program (Percent of Federal/Non-Federal Share)/Federal Share Project Cap
FMA-Severe Repetitive Loss (SRL) Property (100/0)/ (Must be validated SRL)
FMA-Repetitive Loss (RL) Property (90/10)/ (Must meet **new** RL definition)
FMA (75/25)/100K planning
PDM (75/25)/$3 million project/$250K planning

FEMA Priorities for Funding (FY2013 PDM Program)
State's top ranked application if less than $250K or within the 1% set aside
Planning applications
Indian Tribal Government applications
Non-flood projects from States with no open Hazard Mitigation Grant Program (HMGP) application
Non-flood projects from States with an open HMGP application
Flood Mitigation Projects

FEMA Priorities for Funding (FY2013 FMA Program)
Severe Repetitive Loss Properties

Definitions
A **severe repetitive loss property** is a structure that:

(a) Is covered under a contract for flood insurance made available under the NFIP; and

(b) Has incurred flood related damage –
(i) For which 4 or more separate claims payments have been made under flood insurance coverage with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or

(ii) For which at least 2 separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

A **repetitive loss property** is a structure covered by a contract for flood insurance made available under the NFIP that:

(a) Has incurred flood-related damage on 2 occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and

(b) At the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

Application Process and Schedule

The submittal of pre-applications consisting of either a property or a project worksheet is required for all project grants due to minimum Benefit-Cost requirements for project eligibility. GEMA staff will assist you with the Benefit Cost Analysis. Click here to download pre-applications or call the GEMA Hazard Mitigation Division at 1-800-TRY-GEMA or (404) 635-7522. Completed pre-applications including all supporting documentation must be received by August 30, 2013.

Completed pre-applications should be mailed or emailed to:

Georgia Emergency Management Agency
Post Office Box 18055
Atlanta, Georgia 30316-0855
Attention: Hazard Mitigation Division
GEMA-HazMitPOC@gema.ga.gov

Upon determination that the proposed project meets the minimum federal eligibility criteria for PDM and FMA, GEMA will notify you and activate your eGrants access for application development. Pre-applications that do not demonstrate minimum project federal eligibility will be removed from further consideration.

Applicants must use FEMA's eGrants system to enter their application for PDM and FMA grants. eGrants is an electronic grant system developed by FEMA as part of the Federal Government's eCommerce initiative. Completed applications must be submitted through this system by September 30, 2013 at 3:00:00 p.m. Eastern Standard Time to be considered for funding. Applications submitted after this deadline will not be considered for this funding cycle.

Technical Assistance

GEMA Hazard Mitigation staff will provide technical assistance to local governments for project application preparation.
Additional information about the HMA program is available at http://www.fema.gov/government/grant/hma/index.shtm.

GEMA

THE STATE OF GEORGIA

Georgia Emergency Management Agency

Administrative Plan for the Hazard Mitigation Grant Program

THE STATE OF GEORGIA

Administrative Plan for the Hazard Mitigation Grant Program

May 2011

Georgia Emergency Management Agency
Post Office Box 18055
Atlanta, Georgia 30316-0055
(404) 635-7000
www.gema.ga.gov

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Introduction

Purpose

This plan provides the administrative policies and procedures which will be used by the State of Georgia to request, obtain and administer grants for hazard mitigation measures under the provisions of the Hazard Mitigation Grant Program, Section 203 and Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, referred to as the Stafford Act. This document outlines the basic administrative procedures for all Hazard Mitigation Assistance programs managed by the Georgia Emergency Management Agency.

General

Section 404 of the Stafford Act establishes an independent Hazard Mitigation Program that provides a source of funding for mitigation projects that are cost-effective and are identified in the community's hazard mitigation plan. The program is aimed at mitigating hazards that have repeatedly caused damage in the past. Eligible projects include, but are not limited to:

- Initiative Projects such as the development or improvement of warning systems with mitigation as an essential component;
- Construction of safe rooms (tornado and severe wind shelters) for public and private structures that meet the FEMA construction criteria in FEMA 320, "Taking Shelter from the Storm" and FEMA 361, "Design and Construction Guidance for Community Shelters" 2nd Ed., August 2008;
- Retrofitting methods such as elevation in place, structure relocation, structural reinforcement (wind and seismic), strapping of utilities, installation of storm shutters, tie downs, etc.;
- Acquisition of property and/or relocation of homes, businesses and public facilities from hazard prone areas;
- Wildfire mitigation such as creating defensible space, application of ignition-resistant construction and hazardous fuel reduction;
- Soil stabilization projects that provide protection from erosion and landslides;
- Structural hazard control or protection measures such as floodwalls, detention basins and other storm drainage upgrades; and
- Development of a Local Hazard Mitigation Plan in accordance with 44 CFR 201.6.

The total amount of federal funding for the Section 404 Hazard Mitigation Grant Program is limited and approved projects are funded on a cost-sharing basis.

Authorities and References

The authorities and references for this administrative plan are found in the following citations:

Federal Laws

- Robert T. Stafford Disaster Relief and Emergency Assistance Act(Public Law 93-288 42 USC § 5121-5206 as amended
- Single Audit Act of 1984 (PL 98-502)

- 44 CFR, Part 9: Floodplain Management and Protection of Wetlands
- 44 CFR, Part 10: Environmental Considerations
- 44 CFR, Part 13: Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
- 44 CFR, Part 201: Mitigation Planning
- 44 CFR, Part 206, Subpart N Hazard Mitigation Grant Program
- 44 CFR, Part 207: Management Costs

Office of Management and Budget (OMB) Circulars

- OMB Circular A-21, Cost Principles for Educational Institutions
- OMB Circular A-87, Cost Principles for State and Local Governments
- OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs
- OMB Circular A-102, Grants and Cooperative Agreements with State and Local Governments
- OMB Circular A-110, Uniform Administrative Requirements for Grants and Other Agreements with Institutions of higher Education, Hospitals and Other Non-Profit Organizations
- OMB Circular A-122, Cost Principles for Non-Profit Organizations
- OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations

Executive Orders

- President's Executive Order 11988 on Floodplain Management
- President's Executive Order 11990 on Protection of Wetlands
- President's Executive Order 12699 on Seismic Safety
- President's Executive Order 12898 on Economic Justice

State Laws

- Georgia Emergency Management Act of 1981, as amended (OCGA 33-3)

State Regulation

- Georgia Emergency Operations Plan dated 20010, as amended.

Development and Maintenance

The State Administrative Plan for the Hazard Mitigation Grant Program (the “administrative plan”), a support plan to the Georgia Emergency Operations Plan, was authorized by The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) (Public Law 100-707) and administered through the Federal Emergency Management Agency (FEMA). The plan is maintained by the Hazard Mitigation Division, Georgia Emergency Management Agency (GEMA) and reflects current state and federal statutes or regulations.

The Governor’s request for a disaster declaration will include a submission for Hazard Mitigation Program assistance. Following each major disaster, the plan will be reviewed by GEMA Hazard Mitigation Staff. If no revisions are necessary, FEMA will be notified within 90 business days. Plan revisions will be

forwarded to the FEMA Regional Director for approval within 150 days of the declaration. This plan covers all disasters through the date of submission.

The State Hazard Mitigation Division Director is the individual with overall responsibility for the Hazard Mitigation Grant Program.

Definitions

“Administrative Assistant” is the person responsible for providing administrative and clerical support to the staff of the Hazard Mitigation Division.

"Application" is the formal request for Hazard Mitigation Grant Program funding.

"Applicant" is a state agency, local government or eligible private non-profit organization submitting a request to the grantee for assistance under the Hazard Mitigation Grant Program.

"Authorized Applicant's Agent" is the person authorized by the entity’s governing body to act on behalf of the entity to dedicate matching funds and execute the contract for the purpose of obtaining federal financial assistance.

“Benefit-cost Analysis” means a quantitative procedure that assesses the desirability of a hazard mitigation measure by taking a long-term view of avoided future damages as compared to the cost of a project. The outcome of the analysis is a *benefit-cost ratio*, which demonstrates whether the net present value of benefits exceeds the net present value of costs.

“Enhanced State Mitigation Plan” is the hazard mitigation plan approved under 44 CFR part 201 as a condition of receiving increased funding under the HMGP. An Enhanced State Mitigation Plan must include all elements of the Standard State Mitigation Plan identified in 44 CFR 201.4 as well as those identified in 44 CFR 201.5.

“Environmental Assessment” is the document that is prepared when a project does not qualify as a categorical exclusion and serves to determine whether an Environmental Impact Statement is needed.

"Environmental Impact Statement” is the document that is prepared for all actions significantly affecting the environment.

"Federal Hazard Mitigation Officer" (FHMO) is the FEMA employee responsible for representing the agency in carrying out the overall responsibilities for post-disaster hazard mitigation.

"Governor's Authorized Representative" (GAR) is the person empowered by the Governor to execute, on behalf of the State, all necessary documents for disaster assistance.

"Grant" is an award of financial assistance.

"Grantee" is the government to which a grant is awarded and which is accountable for use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. For this program the state is the grantee.

“Grants Management System,” is a program that allows for the tracking of all HMGP projects and the related aspects of each and is used as an internal agency grants management tool.

“Hazard Mitigation Grant Program” is the Program authorized under section 404 of the Stafford Act, 42 and implemented at 44 CFR Part 206, Subpart N, which authorizes funding for certain mitigation measures identified through the evaluation of natural hazards conducted under section 322 of the Stafford Act.

"Hazard Mitigation Grant Program Projects" are projects proposed under Section 404 of the Stafford Act by eligible applicants to the Hazard Mitigation Division for funding following a Presidential major disaster declaration.

“Hazard Mitigation Grants Coordinator” is the individual responsible for the serving as the lead Risk Reduction Specialists for Flood Mitigation Assistance Projects, Pre-Disaster Mitigation Projects, Repetitive Flood Claims Projects, and Severe Repetitive Loss Projects.

“Hazard Mitigation Plan” is the documentation of a State or local government’s evaluation of natural hazards and the strategy to mitigate such hazards. States and local governments are required by Section 409 of the Stafford Act to undergo the mitigation planning process as a condition of receiving Federal disaster assistance.

“Hazard Mitigation Planner” is the individual responsible for the management of Hazard Mitigation Planning Projects, Flood Mitigation Assistance Planning Projects, and Pre-Disaster Mitigation Planning Projects.

“Hazard Mitigation Planning Program Manager” is the person who serves as the supervisor of the Hazard Mitigation Planners.

“Hazard Mitigation Risk Reduction Program Manager” is the person who serves as the supervisor of the Risk Reduction Specialists.

“Increased Cost of Compliance (ICC)” coverage benefits under the National Flood Insurance Program may be used for elevation and/or acquisition relocation costs. The coverage is included under all regular NFIP policies issued or renewed after June 1, 1997.

“Local Hazard Mitigation Plan” is the hazard mitigation plan required of a local or Indian tribal government acting as a subgrantee as a condition of receiving a project funds under the HMGP as outlined in 44 CFR 201.6.

“Management Costs” are any indirect costs, administrative expenses, and any other expenses not directly chargeable to a specific project that are reasonably incurred by a Grantee or subgrantee in administering and managing a grant or subgrant award. For HMGP, management cost funding is provided outside of Federal assistance limits defined at 44 CFR Part 206.432(b).

"Measure" is any cost effective measure which will reduce the potential for damage to a facility from a disaster event. The term measure is used interchangeably with the term “project” in this program.

“National Flood Insurance Program” provides the availability of flood insurance in exchange for the adoption of a minimum local floodplain management ordinance that regulates new and substantially improved development in identified flood hazard areas.

“Non-Federal Funds” are the financial resources provided by sources other than the Federal Government. The term does not included funds provided to a State or local government through a Federal grant unless the authorizing statute for that grant explicitly allows the funds to be used as cost share for other Federal grants.

"Pre-Application" is the initial request for consideration that indicates interest and assists in evaluating eligibility for Hazard Mitigation Grant Program funding.

"Pre-Award Costs" are the costs incurred after September 24, 2009, but prior to the date of the grant award. Such costs maybe to gather EHP data, for preparing design specifications, or for attending application workshops or meetings related to development and submission of HMGP applications

"Risk Reduction Specialist" is the individual responsible for the management of Hazard Mitigation Grant Projects, Flood Mitigation Assistance Projects, Pre-Disaster Mitigation Projects, Repetitive Flood Claims Projects, and Severe Repetitive Loss Projects.

“Standard Form 424” is the Application for Federal Assistance to be included as part of the State’s overall and local Hazard Mitigation Applications.

“State Administrative Plan for the Hazard Mitigation Grant Program” is the plan developed by the State to describe the procedures for administration of the HMGP.

"State Hazard Mitigation Division Director" is the individual designated by the Governor as the responsible individual for all matters related to the Hazard Mitigation Grant Program, the Hazard Mitigation Planning Program, the Flood Mitigation Assistance Program, the Pre-Disaster Mitigation Program, Repetitive Flood Claims Program and Severe Repetitive Loss Program.

"State Hazard Mitigation Assistant Division Director" is the individual responsible for the providing management support of Hazard Mitigation Grant Projects, Hazard Mitigation Planning, Flood Mitigation Assistance Projects, Pre-Disaster Mitigation Projects, Repetitive Flood Claims Projects, and Severe Repetitive Loss Projects as directed by the State Hazard Mitigation Director.

"State Hazard Mitigation Program" is an ongoing program involving a coordinated effort of state agencies to reduce the threat to people and property from natural hazards. During and following periods of presidentially declared major disasters, this program is the compilation of activities required under 44 CFR, Part 404 and 322, Federal Regulations.

"Standard State Mitigation Plan," referred to the Standard Plan, is the hazard mitigation plan approved under 44 CFR Part 201, as a condition of receiving Stafford Act assistance as outlined in 44 CFR, Part 201.4.

"Subgrant" is an award of financial assistance under a grant to an eligible subgrantee.

"Subgrantee" is the government or other legal entity to which a subgrant is awarded and is accountable to the grantee for the use of the funds provided. Subgrantees may be a state agency, local government or eligible private non-profit organizations as defined in 44 CFR 206.433.

"Substantial Damage Structures" are structures located in the Special Flood Hazard Area (i.e., the 100 year floodplain) and that are determined by the community to be substantially damaged can be acquired through the HMGP without further benefit-cost analysis

Responsibilities

State Government

GEMA's Hazard Mitigation Division, on behalf of the State, has primary responsibility for project management and accountability of funds. The Hazard Mitigation Division is responsible for ensuring that applicants and subgrantees adhere to all program requirements. To address the increase in planning and projects grants, the Division is divided into two sections: the Planning and the Risk Reduction Section. Each section is supervised by a Program Manager. The respective Program Managers review all activities of their staff for program compliance.

Governor's Authorized Representative (GAR) (Director, GEMA)

- Administers and supervises overall state responsibilities in hazard mitigation planning and assistance in accordance with 44 CFR Parts 201 and 206.
- Designates an Assistant State Coordinating Officer/Alternate GAR to provide oversight of the State's Hazard Mitigation Program.
- Designates a permanent, full-time State Hazard Mitigation Officer responsible for hazard mitigation activities under the Stafford Act. The Hazard Mitigation Division Director has the duties of this position and serves as Alternate GAR for hazard mitigation activities.

State Hazard Mitigation Division Director

- Serves as the State's primary point of contact with FEMA, other Federal Agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act.
- May serve as alternate Governor's Authorized Representative. Signs and submits general correspondence for mitigation planning and projects and activities required under the Stafford Act
- Submits to FEMA the State Mitigation Plan following the criteria established for the "Standard Plan" and/or the "Enhanced Plan" in 44 CFR Parts 201.4 and 201.5, respectively.
- Submits to FEMA the State Administrative Plan for implementing the HMGP.
- Ensures that all project applications submitted to FEMA are complete and meet all program eligibility requirements. Ensures that all approved projects are administered in compliance with 44 CFR.

State Hazard Mitigation Assistant Division Director

- Serves as the State's alternate point of contact with FEMA, other Federal Agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act.
- Provides additional management support to Hazard Mitigation Division Director and staff in all areas of the HMGP to ensure programmatic compliance for plans and projects.
- Supervises the State Hazard Mitigation Risk Reduction Program Manager and the State Hazard Mitigation Planning Program Manager.

Hazard Mitigation Risk Reduction Program Manager

- Responsible for project management of Hazard Mitigation Grant Program, Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program, Repetitive Flood Claims Program and Severe Repetitive Loss Program Projects.
- Responsible for the preparation of the State Administrative Plan for implementing the HMGP.
- Supervises Risk Reduction Specialists and Hazard Mitigation Grants Coordinator.
- Reports to the State Hazard Mitigation Assistant Division Director.

- Serves as lead risk reduction specialist in the development of critical, urgent or high-level projects.
- Prepares Section 404 program materials for distribution at briefings and training sessions.
- Disseminates Section 404 program information, initial application forms, and other program material.
- Participates on mitigation team, brief local officials on mitigation; work with County Points-of-Contact, as related to HMGP.
- Ensures that all required reports and correspondence are prepared and distributed.
- Ensures project development and technical assistance is provided to interested communities.
- Ensures proper grant management of HMGP projects approved by FEMA.
- Ensures review of audits for compliance.

Risk Reduction Specialists

- Supports local governments and other qualified applicants in application development and completes project eligibility reviews of submitted applications.
- Supports sub-grantees with their responsibilities in project management and administration of approved Hazard Mitigation Grant Program, Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program, Repetitive Flood Claims Program and Severe Repetitive Loss Program Projects.

Hazard Mitigation Grants Coordinator

- Supports local governments and other qualified applicants in application development and completes project eligibility reviews of submitted pre-disaster mitigation applications.
- Supports sub-grantees with their responsibilities in project management and administration of approved Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program, Repetitive Flood Claims Program and Severe Repetitive Loss Program Projects.
- Supports sub-grantees with their responsibilities in project management and administration of approved Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program, Repetitive Flood Claims Program and Severe Repetitive Loss Program Projects.

Hazard Mitigation Planning Program Manager

- Responsible for project management of Hazard Mitigation Program, Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program and Disaster Resistant Universities Planning Projects.
- Prepares the State Mitigation Plan following the criteria established for the “Standard Plan” and/or the “Enhanced Plan” in 44 CFR Parts 201.4 and 201.5, respectively.
- Supervises Hazard Mitigation Planners.
- Serves as the lead Hazard Mitigation Planner in the development and maintenance of the State Mitigation Plan.
- Supports the development and maintenance of Local Mitigation Planning efforts.
- Reports to the State Hazard Mitigation Assistant Division Director.

Hazard Mitigation Planners

- Supports local governments and other qualified applicants in application development and completes project eligibility reviews of submitted planning applications.
- Supports sub-grantees with their responsibilities in project management and administration of approved Hazard Mitigation Grant Program, Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program, and Disaster Resistant Universities Planning Projects.
- Supports the development and maintenance of Local Mitigation Planning efforts.

Administrative Assistant

- Responsible for providing support to the Hazard Mitigation Division.
- Assists in the general operation and management of the Division.
- Reports to the State Hazard Mitigation Assistant Division Director.

In an effort to assure that adequate staffing and resources are available, following a disaster, the Hazard Mitigation Risk Reduction Program Manager, authorized by the Hazard Mitigation division Director, will identify the minimum number of personnel and positions needed to implement HMGP. Based on the volume of applications for Public Assistance, key positions may be expanded to support the implementation of mitigation activities, to include conducting BCA's and environmental planning. The mitigation team will be augmented, as necessary, to include staff from other State agencies, or temporary staff, or contractors hired to administer HMGP effectively.

Local Government/Private Non-Profits

Each applicant will designate Point of Contact and Authorized Agent in the grant pre application and application that will be the primary contacts on all matters relating to the project application and grant award.

Applicants are responsible for submitting complete, accurate project applications to the State. An applicant becomes a subgrantee if the proposed measure is selected as an approved project by FEMA. The subgrantee is responsible for:

- Managing the implementation of the approved project.
- Complying with HMGP requirements, and grants management procedures in the grantee-subgrantee agreement, and other applicable Federal, State, and local laws and standards.
- Accounting for the appropriate use of grant funds to the grantee.

Funding

Amounts of Assistance

The total of Federal assistance under this subpart shall not exceed either 15 or 20 percent of the total estimated Federal assistance (excluding administrative costs) provided for a major disaster under 42 U.S.C. 5170b, 5172, 5173, 5174, 5177, 5178, 5183, and 5201 as follows:

Fifteen percent. A State with an approved Standard State Mitigation Plan, which meets the requirements outlined in 44 CFR 201.4, shall be eligible for assistance under the HMGP. The Federal Share will be calculated based on eligible expenses (less administrative allowances) from Individual Assistance and Public Assistance at the rate not to exceed 15 percent for amounts not more than $2,000,000,000.00, 10 percent for amounts of more than 2,000,000,000.00 and not more than $10,000,000,000.00, and 7.5 percent of amounts of more than $10,000,000,000.00 and not more than $35,333,000,000.00.

Twenty percent. A State with an approved Enhanced State Mitigation Plan, in effect prior to the disaster declaration, which meets the requirements outlined in 44 CFR 201.5 may be eligible for assistance under the HMGP not to exceed 20 percent of the total estimated Federal assistance. Georgia currently has an approved Enhanced State Mitigation Plan.

Cost-Sharing

The maximum Federal funding for projects is 75 percent of the approved project costs under the Hazard Mitigation Grant Program. The remaining 25 percent share is the local cost share and may come from a combination of other non-federal sources and Community Development Block Grant (CDBG) funds. For communities within the declared counties, the Governor has determined that the state will contribute 10 percent of the overall project match which equates to 40 percent of the local cost share.

Five Percent Set-Aside Priority

For each Presidential Disaster Declaration, GEMA shall set-aside up to 5% of its total HMGP funds available at its discretion for hazard mitigation projects. Projects eligible under this program are those that are often difficult to evaluate against traditional program cost effectiveness and eligibility criteria.

To be eligible, the set-aside project must be identified in the State Hazard Mitigation Plan as a priority and meet the HMGP goal of reducing, or preventing, future damage to property, and to reduce or prevent the loss of life or injury. In lieu of the benefit/cost analysis, the State must include in the application a narrative that identifies the hazard mitigation benefits and indicate that there is a reasonable expectation that future damage or loss of life or injury shall be prevented. These projects are reviewed for National Environmental Policy Act and other applicable federal environmental law compliance. The Five Percent Set-Aside program is designed to provide the State discretion along with the responsibility to provide the rationale for cost effectiveness. In Georgia, the 5 percent set aside priority is for warning and communication projects.

Effective August 18, 1998, FEMA increased the available discretionary Five Percent Set-Aside to 10% for the Hazard Mitigation Grant Program associated with disaster declarations for tornado and other high-wind events. This additional 5 percent set-aside is intended to provide funding for projects to mitigate against tornado and high-wind events.

General

Obligation of project funds will occur when project approval and funds have been received from FEMA. A Grantee-Subgrantee Agreement must be executed prior to the commencement of the approved scope of work activities. This agreement will be amended for any grant modifications.

Applicant Eligibility

Eligible Applicants

State and local governments.

Private non-profit organizations and institutions that own or operate a private nonprofit facility as defined in 44 CFR Part 206.221(e).

Indian tribes or authorized tribal organizations, although Georgia has no federally recognized tribal organizations.

Note

Eligible applicants must be in good standing in the National Flood Insurance Program to be considered for funding. In addition, the project location must be within an NFIP participating community. An exception to this requirement is allowed for planning type projects if a community is unmapped.

Identification and Notification of Potential Applicants

Information on the Hazard Mitigation Grant Program is widely disseminated through multiple sources such as by phone, fax, e-mail, internet and press releases.

Potential applicants will be directed to the GEMA website at www.gema.ga.gov for information on available grant programs and pre-application and application deadlines.

The GEMA Field Coordinators, who are the local points of contact for emergency management activities will also disseminate information on the program. Local EMAs (Directors) will be emailed the details on the program briefings.

Risk Reduction Specialists and Hazard Mitigation Planners attend GEMA area meetings to discuss hazard mitigation issues and new opportunities for funding. In addition, coordination with the Association of County Commissioners of Georgia and the Georgia Municipal Association will serve to notify county and city personnel on the availability of mitigation funds.

The briefings will present detailed information on the application process.

HMGP applicant workshops are held within the disaster declaration areas to identify and notify potential applicants within 90 days of the declaration date by State Hazard Mitigation Staff. The declaration date for HMGP 1973 was April 29, 2011.

Eligible Projects

Projects may be of any nature that will result in protection to public or private property. Specific types of eligible projects include, but are not limited to:

- Initiative Projects such as the development or improvement of warning systems with mitigation as an essential component;
- Construction of safe rooms (tornado and severe wind shelters) for public and private structures that meet the FEMA construction criteria in FEMA 320, "Taking Shelter from the Storm" and FEMA 361, "Design and Construction Guidance for Community Shelters" 2nd Ed., August 2008;
- Retrofitting methods such as elevation in place, structure relocation, structural reinforcement (wind and seismic), strapping of utilities, installation of storm shutters, tie downs, etc.;
- Acquisition of property and/or relocation of homes, businesses and public facilities from hazard prone areas;
- Wildfire mitigation such as creating defensible space, application of ignition-resistant construction and hazardous fuel reduction;
- Soil stabilization projects that provide protection from erosion and landslides;
- Structural hazard control or protection measures such as floodwalls, detention basins and other storm drainage upgrades; and
- Development of a Local Hazard Mitigation Plan in accordance with 44 CFR 201.6.

Identification of Projects

Projects identified in Local Hazard Mitigation plans will be the initial source for identifying potential projects. All mitigation projects must be identified or support goals and objectives in federally approved local mitigation plans. Hazard Mitigation Planners will review all FEMA approved plans to identify mitigation projects.

Information acquired during the Preliminary Damage Assessment (PDA) in response to a disaster event is another source for identification of mitigation issues and potential projects. PDA teams will be briefed as to the availability and requirements of the Hazard Mitigation Grant Program so potential projects can be identified for follow-up by the State Hazard Mitigation Staff.

Submission of Pre-Applications/Applications

Pre-applications will be disseminated within 90 days of the disaster declaration. The deadline for applicants' submission of completed pre-applications will be set by the Hazard Mitigation Division Director. The pre-application will address, at a minimum, the following:

- Name of applicant
- Description of Project, location and the hazard that will be mitigated
- Identify coordination with local Multi Jurisdictional Plan
- Estimated Project Costs
- Discuss the history/frequency of hazard occurrence in the hazard area

The deadline for applicants' submission of completed applications will be set by the Hazard Mitigation Division Director. All HMGP applications will be submitted within the regulatory time frame of 12 months following the disaster date. Under extenuating circumstances, the state may request up to a six month extension to this deadline

The Hazard Mitigation Risk Reduction Program Manager and Hazard Mitigation Planning Program Manager will ensure that potential applicants are aware of assistance available, provide technical assistance to all eligible applicants, and make timely submission of those documents necessary for grant award. Technical assistance will be provided in the development of the HMGP pre-applications and applications by Risk Reduction Specialists and Hazard Mitigation Planners.

Review, Priorities, and Ranking of Pre-Applications/ Applications

Risk Reduction Specialists and Hazard Mitigation Planners will complete an initial review of their respective pre-applications and score the projects. Each respective Program Manager will present the review to the Hazard Mitigation Division Director who will make recommendations to the GAR.

Completed pre-applications received by the deadline will be scored using the Project Selection Scoring Sheet. Pre-applications will be prioritized under two categories- within the declared area and outside of the declared area. Projects in the declared areas are the highest priority for the State of Georgia. Applicants whose pre-applications receive the highest score and meet minimum project criteria will be invited to complete and submit a full grant application. Risk Reduction Specialists and Hazard Mitigation Planners will assist applicants in completing their applications and will conduct an initial review in accordance with the "General Review Criteria," and score the applications when received. The State Hazard Mitigation Division Director will review the results of the staff review and scoring of the projects, prioritize the projects, and make recommendations to the GAR.

Following the HMGP program compliance review, applications will be submitted to FEMA within 90 days following receipt of the completed application.

General Review Criteria

Applications for funding under the Hazard Mitigation Grant Program received by the State Hazard Mitigation Division will be reviewed for the following criteria (from 44 CFR 206.434)

- Be in conformance with the State Mitigation Plan and Local Mitigation Plan approved under 44 CFR part 201;
- Have a beneficial impact upon the designated disaster area, whether or not located in the designated area;
- Be in conformance with 44 CFR part 9, Floodplain Management and Protection of Wetlands, and 44 CFR part 10, Environmental Considerations;
- Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed. Projects that merely identify or analyze hazards or problems are not eligible;
- Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster. The subgrantee must demonstrate this by documenting that the project;
    - Addresses a problem that has been repetitive, or a problem that poses a significant risk to public health and safety if left unsolved,
    - Will not cost more than the anticipated value of the reduction in both direct damages and subsequent negative impacts to the area if future disasters were to occur. Both costs and benefits will be computed on a net present value basis,

  - A formal benefit-cost review is not required for the Seven Percent Planning Projects, Five Percent Initiative Projects, and Five Percent Tornado Initiative Projects

- Has been determined to be the most practical, effective, and environmentally sound alternative after consideration of a range of options,
- Contributes, to the extent practicable, to a long-term solution to the problem it is intended to address,
- Considers long-term changes to the areas and entities it protects and has manageable future maintenance and modification requirements.

Special Consideration

Hazard Mitigation Grant program funds cannot be used as a substitute or replacement to fund projects or programs for which funding is available under other federal authorities.

Hazard Mitigation Grant Program funds may be packaged or used in combination with other federal, state, local or private funding sources, when appropriate, to develop a comprehensive mitigation solution; however, they may not be used as a match for other federal funds.

Submission of Selected Projects to FEMA

The GAR serves as the Grant Administrator for all funds provided by the Hazard Mitigation Grant Program. Within 12 months of the disaster declaration or a mutually agreeable date of up to 18 months, all Hazard Mitigation applications will be submitted that will identify one or more hazard mitigation measures for which funding is requested. The application, will include a Standard Form (SF) 424, Application for Federal Assistance; an SF424D, Assurances; and a narrative statement which will identify the specific mitigation measures for which funding is requested. The following information will be included for each hazard mitigation measure:

- Name of Applicant;
- State or local contact for the measure;
- Location of Project (including decimal latitude and longitude coordinates);
- Maps of Site Location(Street, Plat, flood, topographic) with site clearly marked;
- Narrative Description of the mitigation measure (describe how the measure solves the problem);
- Cost estimate of the measure;
- Analysis of the measure's cost effectiveness and substantial risk reduction;
- Work schedule (milestones, start/completion dates and any other limitations);
- Justification for selection;
- Alternatives considered;
- Environmental information consistent with 44 CFR Part 9, Floodplain Management and Protection of Wetlands, and 44 CFR Part 10, Environmental Considerations; and
- Pictures and building construction date if applicable.

A Benefit-Cost Analysis is run on each project submitted, except for Seven-Percent Planning Projects, Five-Percent Initiative Projects, and Five-Percent Tornado Initiative Projects, to verify that the project being submitted for funding is determined to be cost effective. The State will utilize FEMA approved benefit–cost modules for all analysis.

The GAR may amend the application to the FEMA RD as the State and subgrantees continue to identify or modify measures. Amendments to add or modify measures will be made by submitting supplements to the initial application to the FEMA RD.

The State will utilize NEMIS to supplement the hard copy application. The State will complete the NEMIS entry at the time the project funding is requested of FEMA. The Hazard Mitigation Division Director will submit the application in NEMIS.

Notification of Project Approval

Within two weeks of FEMA's award letter, the State Hazard Mitigation Risk Reduction Specialist or Hazard Mitigation Planner will prepare and send to the applicant an approval package, consisting of an approval letter and two copies of their respective grantee-subgrantee agreement. The subgrantee is instructed to sign and return both copies to GEMA for signature by GAR. Upon receipt of the signed agreements, the State Hazard Mitigation Division Director will obtain the GAR's signature on both copies. The State Hazard Mitigation Risk Reduction Specialist or Hazard Mitigation Planner will retain one copy for the project file and mail the other signed and executed copy to the subgrantee with instructions to start the project.

The State Hazard Mitigation Risk Reduction Program or Hazard Mitigation Planning Program Manager will assist the Public Information Officer in the preparation of a news release to include the following information: Project Description including site location, population affected by the project and total amount of project award. This news release will also be posted on the GEMA web site.

Notification of Project Denial

Within two weeks of FEMA's denial letter, the Risk Reduction Specialist or Hazard Mitigation Planner will prepare a transmittal for the GAR's signature to advise the applicant of grant disapproval. The letter will advise the applicant of its right to appeal and include guidance on the appeal process.

Appeals

Applicants or (appellants) may appeal any FEMA denial related to the application for the provision of federal assistance. The appeal must be received in writing by the GAR within 60 days of the date of the action being appealed.

The GAR will review and forward the appeal with a written recommendation to the FEMA RD within 60 days from the date of the action being appealed by the applicant or subgrantee. (Note: This will bring the total maximum time to respond to a FEMA denial to 120 days).

The FEMA Regional Director will review the appeal and notify the GAR of the decision, in writing, within 90 days from receipt of the appeal. If the appeal is denied by the FEMA RD, the GAR may appeal to the FEMA Associate Director/Executive Director for Mitigation (AD). Such second appeal will be made in writing, through the FEMA RD, and shall be submitted no later than 60 days following receipt of the second denial.

The FEMA AD shall decide on the GAR's appeal within 90 days from receipt of all related information. Action by the Associate Director is final.

The FEMA AD may refer technical appeals to an independent scientific or technical group for review. The GAR must first agree to such review, including designation of a revised time limitation appeal completion and sharing in the cost of the review.

Program Management

Data Management System

A Hazard Mitigation Grant Program file will be established for each approved project that will include the following sections: Project Application, FEMA Correspondence, GEMA Correspondence, Applicant Correspondence, Quarterly Reports, Payments, Environmental Correspondence and Financial Documentation. Also, project information will be tracked in GEMA's Grant Management Information System.

Each Project file will contain the following information:

- Grantee-Subgrantee Agreement
- Trip Reports
- Correspondence between State, Local and FEMA
- Memorandums and Notes to file
- Progress Payments
- Press Releases
- Application and Submittal Information
- Application review and recommendations
- Financial records
- Reimbursement Documentation
- Electronic file records, including proper documentation in the Grants Management System

Reports

Quarterly progress reports will be submitted by the subgrantee to the Risk Reduction Specialist or Hazard Mitigation Planner assigned to the project beginning with the first full quarter after receipt of funding. This report should verify that the scope of work is either on schedule or provide a reason that the project will not meet the projected schedule date.

In the report, the subgrantee should indicate work accomplished and remaining, funds expended, and whether there are any anticipated issues with the project such as cost overruns or scope changes that were not apparent at the beginning of the grant process. Reports are due from the subgrantee within 15 days of the calendar quarter. Once the reports are received by the Risk Reduction Specialist or Hazard Mitigation Planner, the information is then entered into the GMS system which is used to track all approved HMGP projects.

The State Hazard Mitigation Division Director will submit a quarterly progress report for all approved HMGP projects to the FEMA RD beginning the first full quarter of funding. Quarterly reports will be submitted within 30 days of the calendar quarter. Due to the State's fiscal year closeout on June 30 of each year, financial reports may not be available on some projects at the time of the quarterly report submission. This will be noted in the quarterly report submission.

Staffing Requirements

The organization structure of the Hazard Mitigation Division will be flexible and capable of expansion and contraction as the need dictates. The Hazard Mitigation Division Staff consists of the State Hazard Mitigation Division Director, State Hazard Mitigation Assistant Division Director, Hazard Mitigation Risk Reduction Program Manager, Hazard Mitigation Planning Program Manager, Risk Reduction Specialists, Hazard Mitigation Planners, and Administrative Assistant. GEMA's Director of Finance will provide necessary administrative support elements for the HMGP. In addition, a subcontractor will provide finance administration support for the financial management of the grants. This support includes Smartlink management, financial reconciliation, payment processing and financial closeout of grants.

Cost of State personnel (regular time salaries only) for continuing management of the Hazard Mitigation grants may be eligible when approved in advance by Regional Director. The State shall submit a plan for such staffing in advanced of the requirement. The SHMO and project management staff is also available via phone and email to answer any questions that might arise during the application process.

Responsibilities

Subgrantees

- Ensure that projects begin within 90 days of approval and are completed within the approved timeframe or two years of the start date.
- Implement monitoring procedures and submit quarterly reports to the Risk Reduction Specialist assigned to the project as directed at the time of the award.
- Maintain the financial records and receipts necessary to document all expenditures connected with the project.
- Ensure that construction is in accordance with all applicable federal and state laws and regulations with applicable building and utility codes, and construction standards.
- Maintain a project file that includes copies of relevant project related documents such as: the Grantee-Subgrantee Agreement, Meeting Notes, Correspondence, Memorandums and Notes to file, Public Notices, Application and Submittal Information, Financial records, Reimbursement Documentation, and any other important information related to the project.

GAR

- Responsible for overall grants management.
- Provides technical assistance to subgrantees as necessary.
- Notifies subgrantees of actions taken in response to applications.
- Certifies that all claims and costs are eligible and in compliance with provisions of the FEMA-State Agreement and submits claims to FEMA RD for payment.

State Hazard Mitigation Division Director

- Submits reports to FEMA as required.
- Reviews requests for funds and recommends approval or denial to the GAR.
- Coordinates hazard mitigation project actions with the GAR and FEMA, as necessary, and provides assistance as required in administering the program.

- Reviews claims, certification of cost, cost overruns, audits and appeals, and forwards recommendations to the GAR.
- Responsible for reviewing and transmitting all required information to FEMA that has been requested from the applicant in order to complete their application.

State Hazard Mitigation Assistant Division Director

- Serves as the State's alternate point of contact with FEMA, other Federal Agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act.
- Provides additional management support to the State Hazard Mitigation Division Director and staff in all areas of the HMGP to ensure programmatic compliance for plans and projects.
- Assists in preparing financial and other reports.

Hazard Mitigation Planning Program Manager

- Supervises team of Hazard Mitigation Planners.
- Serves as lead Hazard Mitigation Planner in the development of critical, urgent or high-level planning projects.
- Reviews all correspondence, activities and meetings conducted to implement HMGP planning functions.
- Conducts meetings to inform local and state officials about the Hazard Mitigation Planning Programs.

Hazard Mitigation Risk Reduction Program Manager

- Supervises team of Risk Reduction Specialists.
- Serves as lead Risk Reduction Specialist in the development of critical, urgent or high-level projects.
- Reviews all correspondence, activities and meetings conducted to implement HMGP project functions.
- Conducts meetings to inform local and state officials about the Hazard Mitigation Project Programs.

Risk Reduction Specialists and Hazard Mitigation Planners

- Reviews applicants' quarterly progress reports, monitors and evaluates project accomplishment and adherence to work schedule for their respective grants.
- Serves as liaison and primary support for local Emergency Management Agency representatives in designated areas
- Monitors the progress of their respective hazard mitigation grant projects, inspects completed projects, and verifies and recommends grant payments.
- Maintains necessary financial documentation and progress reports to support funds distributed to subgrantee(s).
- Monitors Project Status by quarterly reports, daily phone contact and conducting on-site visits for their respective grants.

Financial Management

General

GEMA is the grantee for project financial management in accordance with 44 CFR Part 13. Subgrantees will be accountable to the grantee for funds that are awarded.

Payments of Claims

All payments under the Hazard Mitigation Grant Program are subject to cost sharing. All processing of HMGP payments is compiled and recorded in GMS. The Risk Reduction Specialist or Hazard Mitigation Planner reviews documentation submitted by the subgrantee and inspections are made to determine eligible costs under federal guidelines. Payment will be based on eligible expenditures that are properly documented. Subgrantees will be reimbursed for the federal share of the total eligible cost for their project. The final ten percent will be withheld until a final inspection has been completed by the Risk Reduction Specialist or Hazard Mitigation Planner. The 10 percent holdback does not apply to acquisition and elevation projects or site specific mitigation activities that are part of a larger overall grant.

The Risk Reduction Specialist or Hazard Mitigation Planner prepares the progress payment request form for the Hazard Mitigation Division Director's review and signature. Upon review and approval, the Hazard Mitigation Division Director will send the payment forward for processing through the Contract Specialist

The Hazard Mitigation Assistant Division Director receives and logs all checks and distributes them to the assigned Risk Reduction Specialist or Hazard Mitigation Planner. The check and copies of the check and progress payment will be given to the Risk Reduction Specialist or Hazard Mitigation Planner to be placed in the subgrantee project file. The Risk Reduction Specialist or Hazard Mitigation Planner is responsible for preparing the payment letter and updating the payment information in the GMS. They will ensure the payment is sent to the applicant via certified mail within 5 business days of receipt.

The Hazard Mitigation Risk Reduction Program Manager or the Hazard Mitigation Planning Program Manager may prepare information for the Public Information Officer that includes the name of the Subgrantee, project description, total project cost, federal share, amount paid and the remaining balance.

Special Consideration for Contract Work

If the State performs a contractual agreement in which the State is the Subgrantee, the following payment procedures will be followed:

Invoices for payment are received by GEMA through the financial division and transmitted to the Risk Reduction Specialist or Hazard Mitigation Planner to verify and track the expenditures for the grant. Payments are handled directly through the Office of Management and Budget (OPB).

Allowable Costs

General policies for determining allowable costs are established in 44 CFR 13 and detailed in OMB Circulars A-21, A-87 and A-122. For declarations after November 13, 2007, it has been determined by the State not to pass-through any management costs to the subgrantee for administering the grant. The State believes that the management costs not directly chargeable to a specific project are minor. Those not directly chargeable expenses include completing the required Quarterly Report, completing requests for payment of funds to the State and completing closeout documentation to the State. All other expenses incurred by the subgrantee in administering the scope of work of the grant should be directly chargeable to

the grant. The State believes that its contribution to the nonfederal share of the total project costs more than makes up for the costs of these un-reimbursable expenses.

In addition, the following categories of Pre-Award Costs are allowed: project development activities; management and administrative activities; first floor elevation surveys; substantial damage determination surveys; technical assistance; benefit-cost analysis development; and benefit-cost analysis expertise. If these costs are requested as pre-award, they should be clearly identified by a pre-award line item in each community's application for HMGP funding. It is understood that pre-award costs may be paid to a community only if the respective HMGP grant is awarded by FEMA.

Documentation Requirements

Hazard Mitigation Program Grants are reimbursements for approved measures, even when advance funds are received. Each subgrantee must maintain full documentation in order to be paid. Projects that receive advance funds are not relieved of this requirement. Required documentation consists of copies of:

- Summaries of documentation.
- Activity reports for labor, equipment and materials.
- Copies of checks or vouchers (for materials purchased and for contract work).
- Contracts awarded.
- Invoices or other billing documents.
- Bid advertisements.
- List of bidders and amounts (for each project).
- Statement of why the low bid was not accepted (if appropriate).
- Progress reports.
- Labor/Equipment Costs

The Administrative Services Division prepares a check. When the check has been issued, it is sent via certified mail by the Administrative Assistant.

Advance of Funds

A subgrantee may request an advance of funds under certain conditions. The subgrantee must submit a written request for an advance of funds and provide supporting documentation. For acquisition projects, the settlement statement(s), copies of checks relative to each property, and a copy of the Deed with Restrictive Covenant for each property must be submitted prior to receiving the next advance payment. Advances will not exceed 90 percent of the total project cost except for acquisition projects.

The Risk Reduction Specialist or Hazard Mitigation Planner will verify that the approved scope of work has been followed and with all supporting documentation provided. The Risk Reduction Specialist or Hazard Mitigation Planner will prepare the advance payment request form and gives the request to their respective manager for review.

The State Hazard Mitigation Assistant Division Director will review and recommend approval or denial of the advance to the GAR for final approval and denial.

If the request is denied, the Hazard Mitigation Division will inform the applicant in writing that additional documentation is required to support the request. If the request is approved, the State Hazard Mitigation Assistant Division Director authorizes payment by the Administrative Services Division.

Subgrantee Performance

If documentation, inspections or other reviews reveal problems in performance of work or documentation, the GAR will direct the applicant's agent to correct the deficiencies. If the Subgrantee violates any of the conditions of disaster relief assistance under the Act, this Agreement, or applicable federal and state regulations; the State shall notify the Subgrantee that additional financial assistance for the project in which the violation occurred will be withheld until such violation has been corrected to the satisfaction of the State.

In addition, the State may also withhold all or any portion of financial assistance which has been or is to be made available to the Subgrantee for other disaster relief projects under the Act, this or other agreements, and applicable federal and state regulations until adequate corrective action is taken. Quarterly reports must be current in order to process progress payment requests.

Grant Modifications

Subgrantees are required to request prior approval for grant modifications.

Grant Modifications include:

- Any revision which would result in the need for additional funding.
- Transfers between budget categories that exceed 10 percent of the grant award.
- Any revision of the scope or objectives of the project (regardless of whether there is an associated budget revision requiring prior approval).
- Need to extend the period of availability of funds. The **maximum** amount of time the State can give to subgrantees to complete projects is three years per FEMA policy guidance.
- Changes in key persons in cases where specified in an application or a grant award. In research projects, a change in the project director or principal investigator shall always require approval.
- Under non-construction projects, contracting out, subgranting (if authorized by law) or otherwise obtaining the services of a third party to perform activities which are central to the purposes of the award. This does not apply to the procurement of equipment, supplies, and general support services.

Cost Overruns

The State will no longer reserve any of the initial disaster allocation to cover cost overruns. If applicants experience cost overruns, they will be met by un-obligated disaster funds not requested within the application period or cost under-runs on other approved grants as a result of project withdrawal or grant modifications or project closeouts where projects were completed under budget and funds were de-obligated.

Actual cost of approved work may exceed approved cost estimates. In such cases, the applicant may request approval of additional costs which result in the need for additional federal funds. To do so, the applicant must submit a request in writing for additional federal funding and include supporting documentation. The GAR evaluates each cost overrun and, when justified, submits a request and a recommendation to the FEMA RD for a final determination.

Audit Requirements

- Audits will be conducted in accordance with the Single Audit Act of 1984, P.L. 98-502 as implemented by OMB Circular A-133.
- Grantee and subgrantees will fully cooperate and participate in audits as required.
- The State Hazard Mitigation Division Director with support from the Director of Finance reviews audits completed for the grantee and subgrantees for the Hazard Mitigation Grant Program. If adverse findings are reported, the GAR must take appropriate action and report that action to FEMA.
- FEMA may elect to conduct a federal audit of Hazard Mitigation Grant Program grants or on any of the subgrants.

Closeout Procedures

Project Closeout

When a project has been completed the Subgrantee must submit a request for closure in writing to the GAR stating that all work is complete and verify the final project cost. Before final payment or reimbursement can be made to the subgrantee, the Risk Reduction Specialist or Hazard Mitigation Planner must be in possession of a written request for reimbursement (marked final), a copy of the settlement statement for each property (where applicable), copies of all checks relative to each project costs, and a copy of the Deed with Restrictive Covenant for each property (where applicable), and for drainage improvements as built drawings (where applicable).

After a Subgrantee has informed the State that a project is ready for a final inspection, the Risk Reduction Specialist or Hazard Mitigation Planner will schedule a meeting to review all the Subgrantee's documentation and perform a site visit to verify the approved scope of work has been completed. The state will collect GPS coordinates and site photographs for each mitigated property.

Once the final inspection is completed and all documentation is satisfactory, the Risk Reduction Specialist or Hazard Mitigation Planner will process the final payment to the Subgrantee for project costs.

When all eligible project funds have been disbursed, the Hazard Mitigation Division will request in writing from FEMA an initial closeout of the project, indicating in the request any overrun or underrun of eligible costs. The request should specify whether the project meets the eligible scope of work.

FEMA will make a determination of any overrun or underrun amounts and obligate or deobligate funds as necessary. FEMA will notify GEMA of the final eligible amount, including subgrantee administrative allowances. Upon the State's concurrence with FEMA's final claim figures, GEMA will disburse any remaining funds to the subgrantee with a closure letter that specifies that records must be maintained by the Subgrantee for a period of three years from the date of project closeout.

Using a mitigated properties database, GEMA will keep an up-to-date listing of all projects that have been mitigated in the state. As property acquisition programs are completed, the properties that have been mitigated are listed in detail under this database.

Project files will be documented to reflect that project closeout has been accomplished and no further disbursements will be made.

Grant Program Closeout

When all projects have been completed and all disbursements made, documentation completed and audits performed, the Hazard Mitigation Division will request, through the alternate GAR that the grant program be closed out. The alternate GAR will conduct necessary reviews of project accomplishment and submit necessary documentation to FEMA to support the request for closeout.

Georgia Emergency Management Agency
Application Information
Hazard Mitigation Grant Program FEMA-1973-DR

Introduction

An estimated **$4-5 million** in federal funds will be available for the Hazard Mitigation Grant Program (HMGP) as a result of the Presidential Disaster Declaration received on April 29, 2011. Through this grant program, the Federal Emergency Management Agency (FEMA) provides funds to States and local governments to implement hazard mitigation measures in the aftermath of a disaster to reduce losses of life and property damage. The Georgia Emergency Management Agency (GEMA) administers this federal grant program.

GEMA is encouraging all local governments in the declared IA/PA counties to take advantage of this opportunity to reduce disaster losses in their communities by applying for these grant funds.

Eligible Applicants

Public agencies, including State and local governments are eligible to apply for HMGP funds. In addition, certain private nonprofit organizations or institutions that provide essential services to the general public are eligible to apply for HMGP funds.

To be eligible for the full range of HMGP projects, applicants must participate and be in good standing in the National Flood Insurance Program (NFIP). In addition, local governments **must** have a FEMA approved hazard mitigation plan and all proposed projects must be identified in the plan.

Eligible Project Types

Examples of HMGP projects include, but are not limited to:

- Initiative Projects such as the development or improvement of warning systems with mitigation as an essential component;
- Construction of safe rooms (tornado and severe wind shelters) for public and private structures that meet the FEMA construction criteria in FEMA 320 "Taking Shelter from the Storm" and FEMA 361 "Design and Construction Guidance for Community Safe Rooms, 2nd Edition, August 2008;
- Retrofitting methods such as elevation in place, structure relocation, structural reinforcement (wind and seismic), strapping of utilities, installation of storm shutters, tie downs, etc.;
- Acquisition of property and/or relocation of homes, businesses, and public facilities from hazard prone areas;
- Wildfire Mitigation such as creating defensible space, application of ignition-resistant construction, and hazardous fuel reduction;
- Soil Stabilization projects that provide protection from erosion and landslides;
- Structural hazard control or protection measures such as flood walls, detention basins and other storm drainage upgrades; and
- Development of a local Hazard Mitigation Plan in accordance with 44 CFR 201.6

HMGP Priority
The State's top priority for the HMGP is to fund projects in the declared IA/PA counties that reduce or eliminate damages to life and property resulting from high winds and tornadoes.

Project Funding
The Federal share of HMGP cannot exceed 75% of the total eligible project cost. For the declared IA/PA counties, the State will provide 10% of the total eligible project cost. The non-Federal share may be met with cash, contributions, certain other grants such as Community Development Block Grants, Increased Cost of Compliance (ICC) flood insurance payments, or in-kind services.

Application Process and Schedule
GEMA has scheduled workshops on June 15-16, 2011 to present detailed information about the application process. Pre-Applications are required for each type of project and will be provided at the workshops, online, or by calling the Hazard Mitigation Division at (404) 635-7522. Completed Pre-Applications must be post-marked or received by October 3, 2011 to be considered for this funding cycle. These should be mailed to:

Georgia Emergency Management Agency
Post Office Box 18055
Atlanta, Georgia 30316-0055
Attention: Hazard Mitigation Division

All applicant's Pre-Application(s) that appear eligible will be requested to submit full application(s). Completed applications must be submitted by February 27, 2012 to be considered for funding. Applications submitted after this deadline will not be considered for this funding cycle.

Applications that appear eligible and within HMGP program funding constraints will be submitted for funding consideration to FEMA prior to April 29, 2012. GEMA's goal is to have all of the HMGP funds awarded by September 30, 2012.

Additional information about the HMGP is available at
http://www.fema.gov/government/grant/hmgp/index.shtm

Hazard Mitigation Assistance (HMA) Score Sheet
Overall Score _72.5___

Applicant:____City of Decatur_____

Project Title/ID #:_Acquisition of SRL Properties/ HFM13-001_____
Overall Priority_____1_____

Natural Hazard Exposure (Average for all Properties) 25 **_25_**

Flood	Wind (Miles from Coast)	Tornado (History)
Floodway (25)	0-10 Miles (25)	1.09/tornado
AE (20)	10-25 Miles (20)	
A (15)	25-50 Miles (15)	
B,X (shaded) (10)	50-100 Miles (10)	
C, X (unshaded) (0)	>100 Miles (0)	

History of Damage in Project Area (Average for all Properties) 25

5 points per event of documented history (up to 5 events) _25_

or BC Module Predicts an Average of

<5 year Hazard Return Interval	25	
>5 and <10 Hazard Return Interval	20	
>10 and <25 Hazard Return Interval	15	
>25 and <50 Hazard Return Interval	10	
>50 and <100 Hazard Return Interval	5	
>100 Hazard Return Interval	0	____

Type of Mitigation **5**

Non-structural (e.g., floodproofing, retrofitting, elevation, acquisition, development/implementation of codes and standards, etc.)	5	
Structural (e.g., flood wall, storm water drainage improvements)	0	__5__

Potential Impact on Community **15**

Severe (failure to implement project results in loss of life or essential services)	15
Moderate (failure to implement project results in economic hardship)	7.5

None (project has minimal or no impact)	0		_0_
Estimated Environmental Impacts	**5**		
Insignificant (CATEX)	5		
Moderate (EA required)	2.5		
Major (EIS required)	0		__2.5_
Intangible Factors	**10**		
(Community Commitment to mitigation)			
Storm Ready	1	=1	
CRS Rating (6-10) 1 point for each class	5	=5	
Cost Share arrangements (>25%)	2	=0	
History of mitigation projects	2	=2	
		8	_8__
Benefits	**15**		
1 point per $500,000 (cap at 15 points)			__7__
TOTAL POINTS	**100**		__72.5
Bonus Point Section (for top 5 scoring apps)	**10**		
Quality of data in the application	10		
Hazard Data (Zone)	2.5		
Damage History	2.5		
Cost Data	2.5		
Environmental (Completeness)	2.5		
		10	
(Confidence in source data to validate application information)			
			__10___

Note

Georgia Silver Jackets

Flood Risk Management Team Charter

Georgia Silver Jackets

Flood Risk Management Team Charter

Charley English, Director
Georgia Emergency Management Agency

Date: 9/24/2010

Georgia Silver Jackets
Flood Risk Management Team Charter

This charter establishes and formalizes the expectations for implementation of the Silver Jackets Flood Risk Management Team for the State of Georgia. The collaborative agreement forged by this charter in no way limits participating agencies from taking actions in accordance with their existing authorities and charges, nor does it encumber them with additional financial commitments to support the team or its recommendations.

This charter will be reviewed annually and may be revised at any time per the consent of the core agencies.

VISION STATEMENT

Establish and strengthen intergovernmental partnerships that result in comprehensive and sustainable solutions to Georgia's flood hazards.

MISSION STATEMENT

Through an intergovernmental team of state and Federal agencies, a collaborative process will:

- Facilitate strategic, integrated life-cycle mitigation actions to reduce the threat, vulnerability and consequences of flooding in the State of Georgia;
- Create or supplement a mechanism to collaboratively solve issues and implement or recommend solutions;
- Identify and implement ways to leverage available resources and information among agencies;
- Increase and improve flood risk communication and outreach;
- Inform the U.S. Army Corps of Engineers District Commander and State-level agency directors during response and recovery activities; and
- Integrate mitigation into recovery actions.

GOALS

- Ensure continuous collaboration for flood mitigation, response, and recovery activities before, during, and after flooding;
- Establish an ongoing, regularly scheduled forum for examining all types of solutions for flood risk management;
- Develop and maintain a common information matrix on State and federal programs which identifies limitations and opportunities;
- Provide a unified set of recommendations on programs that could be combined or amended to create integrated, comprehensive and sustainable solutions;
- Create a multi-agency technical resource gateway for state and local agencies;
- Coordinate team efforts into the updates of the Georgia Hazard Mitigation Plan;
- Provide assistance for implementing high priority actions identified in the Georgia Hazard Mitigation Plan;
- Jointly develop and deliver a unified flood risk outreach message to better educate and advise mutual customers;
- Develop and deliver a plan to inform all audiences about risk concepts, including residual risk;

- Jointly provide specific input to agencies on barriers that their existing programs, policies or processes present to effective flood risk management;
- Catalog and share information on past and future projects and initiatives; and
- Prioritize current and future initiatives individually and collectively.

ROLES AND RESPONSIBILITIES

The Flood Risk Management Team will involve interagency cooperation. Membership will vary based on available resources and team project focus. Representatives may be from the regional and state levels of the organizations. All participating agencies will contribute experience and information to all team efforts.

As this team evolves, other state and Federal agencies may choose to participate in this initiative, however; the core agencies that will be involved at all times are:

- Federal Emergency Management Agency (FEMA)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- Georgia Department of Natural Resources (GA DNR)
- Georgia Emergency Management Agency (GEMA)
- Natural Resources Conservation Service (NRCS)
- United States Geologic Survey (USGS)
- National Weather Service (NWS)
- U.S. Economic Development Administration (EDA)
- Federal Highway Administration (FHWA)

Initially, the lead agency will be the USACE. The Savannah District will serve as the lead Corps of Engineers District. The Savannah District will maintain and distribute a contact sheet. With the support of a team consensus, the leadership role may rotate among the core members. With the support of team members, the agency assuming the leadership role is responsible for organizing, coordinating and facilitating team meetings, as well as recording and maintaining final meeting minutes. The representative of the lead agency may request assistance in performing any of these responsibilities.

MEETINGS

At a minimum, meetings will be conducted on a quarterly basis. Coordination may occur through email and teleconferencing. Agendas for meetings shall go out at least one week prior to meeting. Draft meeting minutes shall be distributed for review and presented for formal approval at the following meeting. The Savannah District will maintain final minutes and post on the Georgia Silver Jackets web site.

DECISIONS

Decisions will be accomplished by the team through consensus after discussion. If a decision cannot be reached through consensus, the secondary method will be by voting. The core agencies that should be involved in all major decisions include: FEMA, USACE, EPA, GA DNR, GEMA, NRCS, USGS, NWS, EDA, and FHWA.

Appendix I

Georgia Disaster Resilient Construction Codes

Georgia State
International Building Code

Appendix N
Disaster Resilient Construction
(2012 Edition)

Georgia Department of Community Affairs
Local Government Assistance Division
60 Executive Park South, N.E.
Atlanta, Georgia 30329-2231
(404) 679-3118
www.dca.ga.gov

January 1, 2013

GEORGIA STATE INTERNATIONAL BUILDING CODE
APPENDIX N
DISASTER RESILIENT CONSTRUCTION

The INTERNATIONAL BUILDING CODE, 2012 Edition, published by the International Code Council, when used in conjunction with the Georgia State Amendments to the INTERNATIONAL BUILDING CODE, 2012 Edition and Appendix N Disaster Resilient Construction, shall constitute the official *Georgia State Minimum Standard Building Code.*

FORWARD

Introduction

The Department of Community Affairs (DCA) was awarded a grant through the U.S. Department of Housing and Urban Development (HUD) to develop Disaster Resilient Building Code (DRBC) Appendices for the International Building Code (IBC) and the International Residential Code (IRC). The DRBC Appendices are optional regulations that local jurisdictions may adopt, in whole or in part, through local ordinance. A task force of stakeholders was appointed to look for opportunities to improve any code provisions relating to damage from hurricane, flood, and tornado disasters. In addition to the approved recommendations from the task force, the state has developed and will conduct a comprehensive training program for code enforcement officials on the importance, implementation and enforcement of the Disaster Resilient Construction Appendices.

The meetings for the Disaster Resilient Building Code Appendices Task Force were open to the public, interested individuals and organizations that desired participation. The technical content of currently published documents on flooding, high-wind construction, and storm shelters, were used and referenced. Those publications included documents of the International Code Council (ICC), American Society of Civil Engineers (ASCE), the Federal Emergency Management Agency (FEMA), Mitigation Assessment Team (MAT) Program, Georgia Emergency Management Agency/Homeland Security (GEMA), APA – The Engineered Wood Association, National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), National Science Foundation (NSF), The State of Florida, American Forest & Paper Association's American Wood Council, Southern Forest Products Association, NAHB Research Center, Insurance Institute for Business & Home Safety, and the Federal Alliance for Safe Homes.

Adoption

Local jurisdictions may adopt this entire appendix with chosen options or specific sections that apply to their communities through a local ordinance. The adopting ordinance must also be filed on record with DCA. A sample ordinance has been included in this document to assist the local jurisdictions with the adoption process. Recommended training is being offered to assist code enforcement officials in the implementation and enforcement of the appendices documents. Contact DCA at (404) 679-3118 or www.dca.ga.gov for more information.

Neither The Disaster Resilient Building Code Appendices Task Force, its members nor those participating in the development of Appendix N Disaster Resilient Construction accept any liability resulting from compliance or noncompliance with the provisions of Appendix N Disaster Resilient Construction.

The 2012 Disaster Resilient Building Code (DRBC) Appendices Task Force was charged with the development of two appendices. One appendix is for the International Residential Code and the other appendix is for the International Building Code. These two appendices look for opportunities to improve any provisions relating to hurricane, flood, and tornado disasters. In addition to improving existing provisions in the codes, the task force also developed new provisions to be included in the appendices that address these issues. These appendices contain increased construction requirements for disaster resilience and are intended to be made available for adoption by local jurisdictions in the State of Georgia.

These appendices have reasonable and substantial connection with the public health, safety, and general welfare. In addition, the financial impact and costs associated with these appendices have been taken into consideration.

Members:
Mr. Gregori Anderson, Chairman, States Codes Advisory Committee (SCAC)
Mr. David L. Adams, , Vice Chairman, States Codes Advisory Committee (SCAC)
Mr. Bill Abballe, AIA, American Institute of Architects (AIA) – Georgia Chapter
Mr. John Hutton, P.E., S.E., American Council of Engineering Companies of Georgia (ACEC/G)
Mr. Ron Anderson, Code Consultant
Mr. Lamar Smith, Home Builders Association of Georgia (HBAG)
Mr. Thomas Harper, Georgia State Inspectors Association (GSIA)
Mr. Tom Buttram, Building Officials Association of Georgia (BOAG)
Capt. Zane Newman, Georgia State Fire Marshal's Office (Local Fire Official)
Mr. Terry Lunn, Georgia Emergency Management Agency (GEMA)
Mr. Alan Giles, , CFM, Georgia Department of Natural Resources (EPD / Floodplain Management Unit)
Mr. Tony Hebert, HUD Georgia State Representative (Region IV Office)
Mr. Jim C. Beck, Sr., Georgia Underwriting Association
Mr. Tim Thornton, Georgia Association of Realtors (GAR)
Mr. Steve Harrison, Building Owners and Managers Association – Georgia (BOMA)
Mr. Tom Aderhold, Georgia Apartment Association (GAA)
Mr. Tim Bromley, Accessibility Consultant – Georgia State ADA Coordinator's Office
Mayor Mark Mathews, Georgia Municipal Association (GMA)
Commissioner Jeff Long, Association of County Commissioners of Georgia (ACCG)

Ad Hoc Subcommittee:
Mr. Tom Buttram, Chairman, DRBC Task Force Liaison (BOAG)
Mr. Ron Anderson, Vice Chairman, Code Consultant
Mr. Stephen V. Skalko, Concrete Industry
Mr. Jeffrey B. Stone, Wood Industry (AWC)
Mr. Robert Wills, Steel Industry (AISC)
Mr. Tom Cunningham, PhD., Residential Building Design
Mr. Duncan J. Hastie, P.E., Disaster Mitigation

DCA Staff:
Mr. Ted Miltiades, Director of Construction Codes & Industrialized Buildings
Mrs. Deirdre "Dee" Leclair, DRBC Grant Project Manager
Mr. Max Rietschier, Lead Codes Consultant
Mr. Bill Towson, 2012 International Residential Code Task Force Liaison, Code Consultant
Mr. Calvin Jordan, 2012 International Building Code Task Force Liaison, Code Consultant

How to Use *Appendix N Disaster Resilient Construction*

The appendix may be adopted in whole or in part by Local Jurisdictions to fit the needs of their community. The following sample ordinance has been provided to aid in the process of indentifying Chapters and Sections of the appendix that may be adopted. The format easily allows for choosing to adopt, revise or delete individual Chapters and Sections. Download the MS Word (.doc) version from the DCA website to take advantage of the dropdown menu choices and edit ability features of the document. Note that in Chapter 3, choose one of three options for flood elevation. Only one option may be chosen and that option must be higher than what has been previously adopted and enforced by the jurisdiction. Also note that in Chapter 4, choose one of three options for increased wind load. Only one option may be chosen and that option must be higher than what has been previously adopted and enforced by the jurisdiction. The Sample Ordinance document takes into account the flood elevation option in Chapter 3 and the wind load option in Chapter 4 of this appendix.

SAMPLE ORDINANCE FOR ADOPTION OF

GEORGIA STATE INTERNATIONAL BUILDING CODE

APPENDIX N
DISASTER RESILIENT CONSTRUCTION

ORDINANCE NO._____

An ordinance of the **[JURISDICTION]** adopting the latest edition as adopted and amended by the Georgia Department of Community Affairs of *Appendix N Disaster Resilient Construction* regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters in the **[JURISDICTION]**; providing for the issuance of permits and collection of fees therefore; repealing Ordinance No. ____ of the **[JURISDICTION]** and all other ordinances or parts of the laws in conflict therewith.

The **[GOVERNING BODY]** of the **[JURISDICTION]** does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the **[TITLE OF JURISDICTION'S KEEPER OF RECORDS]** of **[NAME OF JURISDICTION]**, being marked and designated as *Appendix N Disaster Resilient Construction* to the International Building Code, the latest edition as adopted and amended by the Georgia Department of Community Affairs, be and is adopted as the *Appendix N Disaster Resilient Construction* of the **[JURISDICTION]**, in the State of Georgia for regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said *Appendix N Disaster Resilient Construction* on file in the office of the **[JURISDICTION]** are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any prescribed in Section 2 of this ordinance.

Section 2. [NAME Of JURISDICTION] hereby:

Choose an item. CHAPTER AN1 SCOPE AND ADMINISTRATION Choose an item.

Choose an item. SECTION AN101 ADMINISTRATION Choose an item.

Choose an item. AN101.1 Purpose Choose an item.

Choose an item. AN101.2 Objectives Choose an item.

Choose an item. AN101.3 Scope Choose an item.

AN101.3.1 Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. AN101.4 Violations Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. SECTION AN102 APPLICABILITY Choose an item.

Choose an item. AN102.1 General Choose an item.

Choose an item. AN102.2 Other laws Choose an item.

Choose an item. AN102.3 Referenced codes and standards Choose an item.

Choose an item. SECTION AN103 POST DISASTER EVENT INSPECTIONS GUIDLINES Choose an item.

Choose an item. AN103.1 Inspections Choose an item.

Choose an item. AN103.1.1 Right of entry Choose an item.

Choose an item. AN103.2 Types of inspections Choose an item.

Choose an item. AN103.3 Post disaster building safety evaluation chart Choose an item.

Choose an item. Figure AN103.3 Post Disaster Building Safety Evaluation Chart Choose an item.

Choose an item. AN103.4 Evaluation Forms Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. AN103.5 Placement and remove of placards Choose an item.

Choose an item. CHAPTER AN2 DEFINITIONS Choose an item.

Choose an item. SECTION AN201 GENERAL Choose an item.

Choose an item. AN201.1 Scope Choose an item.

Choose an item. AN201.2 Terms defined in other codes Choose an item.

Choose an item. AN201.3 Terms not defined Choose an item.
Choose an item. SECTION AN202 DEFINITIONS Choose an item.
Choose an item. CHAPTER AN3 FLOOD-RESISTANT CONSTRUCTION Choose an item.
Choose an item. SECTION AN301 HAZARD IDENTIFICATION Choose an item.
Choose an item. AN301.1 Identification of flood hazard areas Choose an item.
Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].
Insert [Date of Issuance] for [DATE OF ISSUANCE].
Choose an item. SECTION AN302 SCOPE Choose an item.
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Choose an item. FLOOD ELEVATION OPTION Choose an item. Choose an item.
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Choose an item. SECTION Choose an item. Choose an item.
Choose an item. CHAPTER AN5 STORM SHELTERS, SAFE ROOMS AND BEST AVAILABLE REFUGE AREAS Choose an item.
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Choose an item. AN501.1 General Choose an item.
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Choose an item. AN502.2 Additional definitions Choose an item.
Choose an item. SECTION AN503 BEST AVAILABLE REFUGE AREAS Choose an item.
Choose an item. AN503.1 General Choose an item.
Choose an item. AN503.2 Occupant Density Choose an item.
Choose an item. AN503.3 Identification of best available refuge areas Choose an item.
Choose an item. SECTION AN504 APPLICABILITY Choose an item.
Choose an item. AN504.1 Required storm shelters or safe rooms Choose an item.

Section 3. That Ordinance No. ____ of **[JURISDICTION]** entitled **[FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION]** and all other ordinances or parts of laws in conflict herewith are hereby repealed.

Section 4. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The **[GOVERNING BODY]** hereby declares that it would have passed this law, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5. That nothing in this ordinance or in *Appendix N Disaster Resilient Construction* hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing under any act or ordinance hereby repealed as cited in Section 3 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 6. That the **[JURISDICTION'S KEEPER OF RECORDS]** is hereby ordered and directed to cause this ordinance to be published. (An additional provision may be required to direct the number of times the ordinance is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

Section 7. That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect **[TIME PERIOD]** from and after the date of its final passage and adoption.

Section 8. Chapter AN6 Resources, of this document is intended to be used by the building officials as a resource guide.

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APPENDIX N
DISASTER RESILIENT CONSTRUCTION

CHAPTER AN1
SCOPE AND ADMINISTRATION

SECTION AN101
ADMINISTRATION

AN101.1 Purpose. The scope of this appendix is to promote enhanced public health, safety and general welfare and to reduce public and private property losses due to hazards and natural disasters associated with flooding, high-winds, and windborne debris above that which is provided in the general provisions of this appendix.

AN101.2 Objectives. The objectives of this appendix are to:

1. Protect human life, to minimize property loss and to minimize the expenditures of public money associated with natural weather related disasters, including flooding, tornadoes and other high-wind events.
2. Establish enhanced design and construction regulations consistent with nationally recognized good practices for the safeguarding of life and property.

AN101.3 Scope.

AN101.3.1 The provisions of this appendix are not mandatory unless specifically referenced in an adopting ordinance of **[NAME OF JURISDICTION]**. If adopted, the provisions shall apply to all new development and to substantial improvements to existing development.

AN101.3.2 The provisions of this appendix supplement the jurisdiction's building and fire codes to provide for enhanced provisions to mitigate the hazard to life and property from natural weather related disasters, including flooding, tornadoes and other high-wind events.

AN101.3.3 The provisions of this appendix establish design and construction standards for storm shelters.

AN101.4 Violations. Any violation of a provision of this appendix or failure to comply with a permit of variance issued pursuant to this appendix or any requirement of this appendix shall be handled in accordance with the ordinances of **[NAME OF JURISDICTION]**.

SECTION AN102
APPLICABILITY

AN102.1 General. This appendix provides enhanced minimum requirements for development of new construction and substantial improvement of existing development above that contained in the *International Building Code (IBC)*.

AN102.1.1 The provisions of this appendix shall apply to all new construction and additions, and shall apply to substantial alterations in flood hazard areas unless it is technically infeasible or otherwise exempted in Section 3403.2 of the *International Building Code*.

AN102.1.2 Regardless of the category of work being performed, the work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this appendix or to any previously approved alternative arrangements than it was before the work was undertaken.

AN102.1.3 Where there is a conflict between a requirement of the *International Building Code* and a requirement of this appendix, the requirement of this appendix shall govern. Where there is a conflict between a general requirement of this appendix and a specific requirement of this appendix, the specific requirement shall govern. Where, in any specific case, different sections of this appendix specify different materials, methods of construction or other requirements, the most restrictive shall govern.

AN102.2 Other laws. The provisions of this appendix shall not be deemed to nullify any provisions of local, state or federal law.

AN102.3 Referenced codes and standards. The codes and standards referenced in this appendix shall be those that are listed in Chapter AN7 and such codes and standards shall be considered as part of the requirements of this appendix to the prescribed extent of each such reference. Where differences occur between provisions

this appendix and referenced codes and standards, the provisions of this appendix shall apply.

SECTION AN103
POST DISASTER EVENT INSPECTIONS GUIDELINES

AN103.1 Inspections. The building official or agents shall inspect buildings and structures to determine the habitability of each with the goal of getting the community back into their residences quickly and safely. Inspections shall always be performed by teams of at least two individuals, also known as disaster assessment teams.

AN103.1.1 Right of entry. Unless permitted under the exigent circumstances provisions or from an order from State or Federal Authorities, disaster assessment teams shall confirm the right of entry requirements with the incident commander. Upon approval, the assessment teams shall be authorized to enter the structure or premises at reasonable times to inspect or perform duties as provided by this code, provided that the structure or premises be occupied, that credentials are presented, that entry is requested, and that entry is granted by the owner or person having charge over the structure or premises.

AN103.2 Types of inspections.

AN103.2.1 Rapid evaluation. Rapid evaluation is performed after a disaster event to determine if a building is apparently safe or obviously unsafe. The evaluation should last 10 to 30 minutes per building and shall be performed by the building official and/or their designated responders. Evaluation shall determine if a detailed evaluation is necessary. Placards are posted on buildings indicating status as one of the following:

1. INSPECTED
2. RESTRICTED USE
3. UNSAFE

See Section AN605 for Placards that may be reproduced for use in the field during evaluations. The jurisdiction shall alter placards to meet the jurisdiction and building department's requirements.

AN103.2.2 Detailed evaluation. Detailed evaluation is a thorough visual examination of a damaged building performed by a team of two, including an inspector and a design professional. Evaluation should last 30 minutes to 4 hours per building. Evaluation shall determine necessary restrictions on a damaged building's use, the need for an engineering evaluation or to evaluate postings.

AN103.2.3 Engineering evaluation. When indicated by the building official as necessary, engineering evaluations shall be completed by a registered design professional hired by the building owner.

AN103.3 Post disaster building safety evaluation chart. See Figure AN103.3 for Post Disaster Building Safety Evaluation Chart.

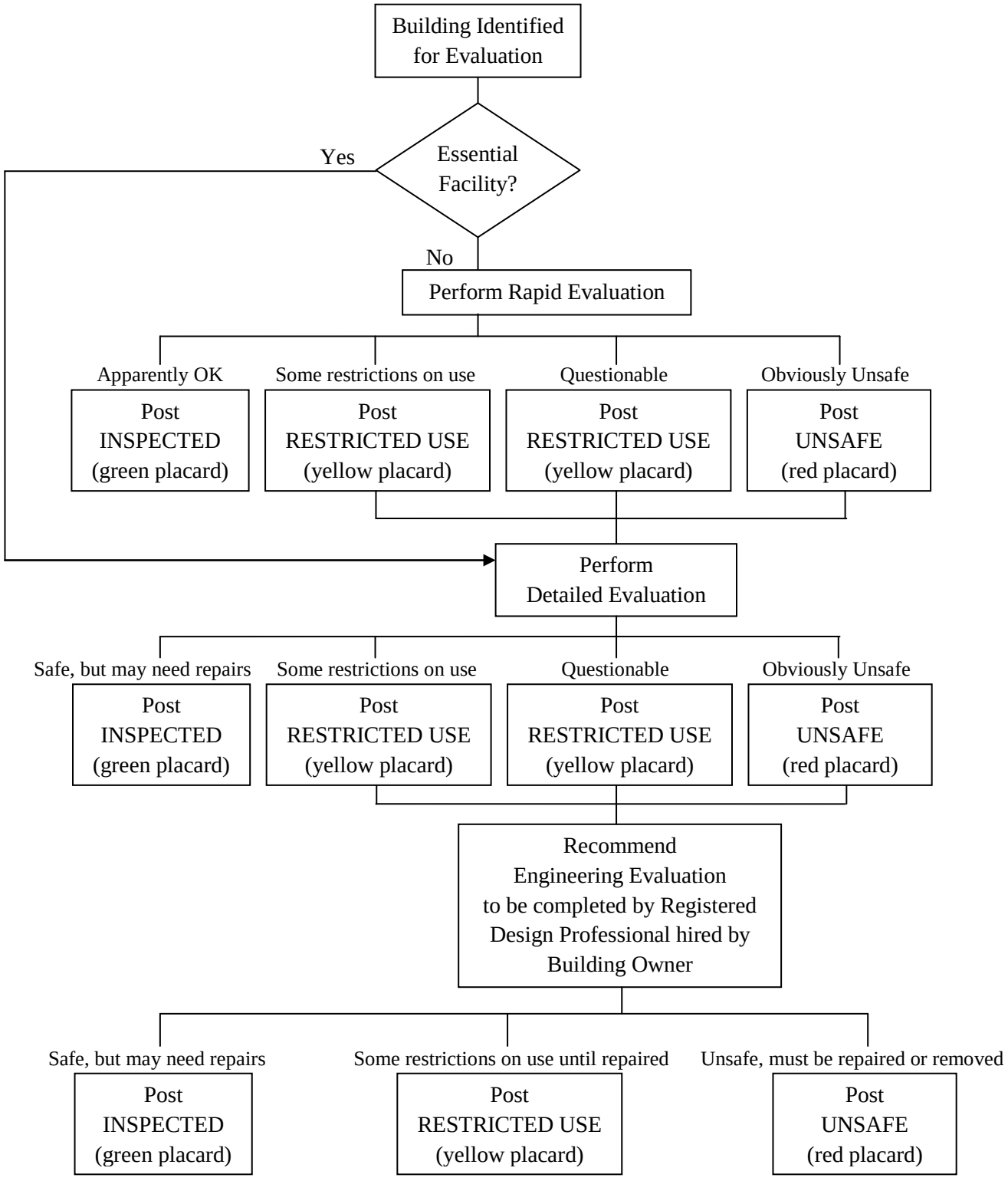
AN103.4 Evaluation Forms. *ATC-45 Rapid Evaluation Safety Assessment Form* and *ATC-45 Detailed Evaluation Safety Assessment Form* shall be used by **[Name of Jurisdiction]'s** Building Official for post disaster inspections. See Section AN605 for copies of the Safety Assessment Forms.

AN103.5 Placement and removal of placards.

AN103.5.1 Placement. Placards are to be posted in a clearly visible location near the main entrance and shall be visible from the public right-of-way. RESTRICTED USE or UNSAFE placards shall be placed at all entrances.

AN103.5.2 Removal. Placards shall not be removed or replaced, except by the authorized representatives of the local jurisdiction.

Figure AN103.3 Post Disaster Building Safety Evaluation Chart [a]



[a] *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

CHAPTER AN2
DEFINITIONS

SECTION AN201
GENERAL

AN201.1 Scope. Unless otherwise expressly stated the following words and terms shall, for the purposes of this appendix, have the meanings shown in this chapter.

AN201.2 Terms defined in other codes. Where terms are not defined in this appendix and are defined in other *International Codes*, such terms shall have the meanings ascribed to them as in those codes.

AN201.3 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have their ordinarily accepted meanings such as the context implies.

SECTION AN202
DEFINITIONS

500-YEAR FLOOD. Flood having a 0.2% annual probability of being equaled or exceeded.

ADVISORY BASE FLOOD ELEVATION (ABFE). An advisory base flood elevation (BFE) issued by the Federal Emergency Management Agency (FEMA) that reflects post-storm conditions and vulnerability to damages from future flooding.

BASE FLOOD. Flood having a 1% chance of being equaled or exceeded in any given year, also referred to as the 100-year flood.

BASE FLOOD ELEVATION (BFE). The elevation of flooding, including wave height, having a 1% chance of being equaled or exceeded in any given year established relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the *Flood Insurance Rate Map* (FIRM).

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of the *International Building Code*, or the building official's duly authorized representative.

DESIGN FLOOD. The greater of the following two flood events:

(1) The *base flood*, affecting those areas identified as *special flood hazard areas* on the community's FIRM;

(2) The flood corresponding to the area designated as a *flood hazard area* on a community's *flood hazard map* or otherwise legally designated.

DESIGN FLOOD ELEVATION (DFE). The elevation of the *design flood*, including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the *design flood elevation* shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map.

FLOOD [DAMAGE]-RESISTANT MATERIAL. Any building product [material, component or system] capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage.

FLOOD HAZARD AREA. The area subject to flooding during the *design flood*.

FLOOD HAZARD MAP. Map delineating *flood hazard areas* adopted by the authority having jurisdiction.

FLOOD INSURANCE RATE MAP (FIRM). An official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the *special flood hazard areas* and the risk premium zones applicable to the community.

FREEBOARD. A factor of safety expressed in feet above a flood level for purposes of floodplain management.

FUTURE-CONDITIONS FLOOD. The flood having a 1% chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

FUTURE-CONDITIONS FLOOD ELEVATION. The flood standard equal to or higher than the Base Flood Elevation. The future-conditions flood elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

CHAPTER AN3
FLOOD-RESISTANT CONSTRUCTION

Forward: This appendix provides three different options for increased freeboard. The jurisdiction may pick only one option that is higher than previously adopted and enforced by the jurisdiction. The National Flood Insurance Program (NFIP) minimum standards reference Base Flood Elevation without any freeboard in high risk flood hazard areas. Due to the flood damage prevention updates performed during the Map Modernization initiative that led to flood risks being digitally identified in all 159 Georgia counties, all Georgia NFIP participating communities have freeboard standards that meet or exceed the 1 foot standard used in the State model ordinances for areas where BFEs have been established.

SECTION AN301
HAZARD IDENTIFICATION

AN301.1 Identification of flood hazard areas. To establish flood hazard areas:

(a) flood hazard map adopted by jurisdiction based on areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study of **[INSERT NAME OF JURISDICTION]**," dated **[INSERT DATE ISSUANCE]**, and amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto.

(b) FIRM maps provided by the Federal Emergency Management Agency.

SECTION AN302
SCOPE

AN302.1 Flood loads. Buildings designed and constructed in flood hazard areas defined in IBC Section 1612.2 shall comply with the following:

AN302.1.1 Flood hazard areas without base flood elevations. In flood hazard areas without base flood or future-conditions flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade to the building foundation.

OPTION A – FLOOD ELEVATION

AN302.1.2 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

(a) Design flood elevation plus one (1) foot, or
(b) Base flood elevation plus one (1) foot, or
(c) Advisory base flood elevation, or
(d) Future-conditions plus one (1) foot, if known or
(e) 500-year flood, if known

OPTION B– FLOOD ELEVATION

AN302.1.3 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

(a) Design flood elevation plus two (2) feet, or
(b) Base flood elevation plus two (2) feet, or
(c) Advisory base flood elevation, or
(d) Future-conditions plus one (1) foot, if known or
(e) 500-year flood, if known

OPTION C – FLOOD ELEVATION

AN302.1.4 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

(a) Design flood elevation plus three (3) feet, or
(b) Base flood elevation plus three (3) feet, or
(c) Advisory base flood elevation, or
(d) Future-conditions plus one (1) foot, if known or
(e) 500-year flood, if known

SECTION AN303
FLOOD DAMAGE-RESISTANT MATERIALS

AN303.1 Flood damage-resistant materials. Flood damage-resistant materials comply with FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials.

AN303.2 Location of flood damage-resistant materials. Building components and materials located below the increase to base flood elevation as determined by the local jurisdiction in accordance with AN302.1 shall be flood damage-resistant as defined by Section AN303.1.

AN303.3 Fasteners and connectors used for flood damage-resistant materials. Fasteners and connectors used for flood damage-resistant materials to be made of stainless steel, hot-dipped zinc-coated galvanized steel, mechanically deposited-zinc coated, silicon bronze or copper. Copper fasteners shall not be permitted for use in conjunction with steel.

CHAPTER AN4
HIGH-WIND RESISTIVE CONSTRUCTION

SECTION AN401
GENERAL

AN401.1 Applications. Buildings, and parts thereof shall be designed to withstand the minimum wind loads and meet the opening protection requirements of IBC Section 1609 as modified in this chapter. **Wind Load Option A, B or C shall be selected. Table AN401.1 may be used to assist in the selection of an appropriate Wind Load Option.**

AN401.2 Limitations. The following limitations shall apply to the design and construction of buildings with respect to winds.

AN401.2.1 Empirical masonry. The empirical masonry provisions in IBC Section 2109 or Chapter 5 of TMS 402/ACI 530/ASCE 5 shall not be permitted to be used for the wind load resisting elements of buildings, or parts of buildings or other structures.

AN401.2.2 Unreinforced (plain) masonry. The unreinforced masonry provisions in IBC Section 2109 or sections 2.2, 3.2 or 8.2 of TMS 402/ACI 530/ASCE 5 shall not be permitted to be used for the wind load resisting elements of buildings, or parts of buildings or other structures.

AN401.2.3 Conventional light-frame construction. The *conventional light-frame constriction* provisions in IBC Section 2308 shall not be permitted to be used for the wind load resisting elements of buildings, or parts of buildings or other structures.

Exception: Compliance with AF&PA WFCM shall be permitted subject to the limitations therein and the limitations of this appendix.

SECTION AN402
DEFINITIONS AND NOTATIONS

AN402.1 General. The following terms are defined in Chapter 2 of the International Building Code:

CONVENTIONAL LIGHT-FRAME CONSTRUCTION.

MASONRY.

Unreinforced (plain) masonry.

WIND-BORNE DEBRIS REGION.

WIND SPEED, V_{ult}.

SECTION AN403
WIND LOADS

AN403.1 Wind Directionality Factor. The directionality factor for Wind Option B and C shall be taken as 1.0.

AN403.2 Exposure. Wind pressures for Wind Option B and C shall be based on exposure category C or D in accordance with IBC Section1609.4 or ASCE 7.

AN403.3 Enclosure classification. The enclosure classification shall be determined in accordance with ASCE 7 with the largest door or window on a wall that receives positive external pressure considered as an opening.

AN403.4 Continuous operation of Risk Category IV buildings. When a building or an internal area within a building in Risk Category IV is required to remain operational during a design wind event (target performance level OB), that building or that internal area shall be designed in accordance with ICC-500 or FEMA-361.

SECTION AN404
WIND LOAD OPTION A

AN404.1 Basic wind speed. The ultimate design wind speed, V_{ult}, for use in the design of buildings and structures shall be obtained from IBC Section 1609.3.

AN404.2 Debris Hazard and Protection of Openings. Buildings shall be designed for impact resistance in accordance with IBC Section 1609.1.2 or ASCE 7.

Exception:

1. For Risk Category III buildings with a Life Safety target performance level for the entire building, the exterior glazing shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996.
2. For Risk Category IV buildings with an Immediate Occupancy target performance level for the entire building, the exterior glazing shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996 for *Enhanced Protection*.

SECTION AN405
WIND LOAD OPTION B

AN405.1 Basic wind speed. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category I buildings and structures shall be obtained from IBC Section 1609.3. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category II buildings and structures shall be obtained from IBC Figure 1609B. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category III and IV buildings and structures shall be obtained from IBC Figure 1609B or 135 mph, whichever is greater.

AN405.2 Debris Hazard and Protection of Openings. Buildings shall be designed for impact resistance in accordance with this Section in addition to IBC Section 1609.1.2 or ASCE 7.

Exception:

1. For Risk Category IV buildings, all components of the exterior envelope shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996 for *Enhanced Protection*.

SECTION AN406
WIND LOAD OPTION C

AN406.1 Basic wind speed. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category I buildings and structures shall be obtained from IBC Section 1609.3. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category II buildings and structures shall be obtained from IBC Figure 1609B. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category III and IV buildings and structures shall be obtained from IBC Figure 1609B or 170 mph, whichever is greater.

AN406.2 Debris Hazard and Protection of Openings. Buildings shall be designed for impact resistance in accordance with this Section in addition to IBC Section 1609.1.2 or ASCE 7.

Exception:

1. For Risk Category IV buildings, all components of the exterior envelope shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996 for *Enhanced Protection*.

Table AN401.1
WIND LOAD OPTIONS:
TARGET PERFORMANCE LEVELS AND DESIGN CRITERIA[4]

OPTION	DESIGN WIND EVENT	Risk Category II[1]			Risk Category III[1]			Risk Category IV[1]		
		Target Performance Level[2]	Min Wind Speed V_{ult}	Wind-Borne Debris	Target Performance Level[2]	Min Wind Speed V_{ult}	Wind-Borne Debris	Target Performance Level[2]	Min Wind Speed V_{ult}	Wind-Borne Debris
A	EF0 & 1 Tornado – IBC level Hurricane	CP[3]	IBC 1609.3	IBC 1609.1.2 or ASCE 7	CP[3]	IBC 1609.3	IBC 1609.1.2 or ASCE 7	CP[3]	IBC 1609.3	IBC 1609.1.2 or ASCE 7
					LS		Glazing	IO[5]		Glazing
B	EF2 Tornado – Cat 3 Hurricane	CP[3] for EF0-EF1-IBC Hurricane for Risk Cat. III/IV	IBC 1609.3 for Risk Cat. III/IV	IBC 1609.1.2 or ASCE 7	LS	145 mph	Req'd for glazing per IBC 1609.1.2 and ASCE 7	IO[5]	145 mph	Exterior Envelope
C	EF3 Tornado – Cat 4 Hurricane	CP[3] for EF0-EF1-IBC Hurricane for Risk Cat. III/IV	IBC 1609.3 for Risk Cat. III/IV	IBC 1609.1.2 or ASCE 7	LS	170 mph	Req'd for glazing per IBC 1609.1.2 and ASCE 7	IO[5]	170 mph	Exterior Envelope

Notes:

1. Risk Category per IBC Section 1604.5
2. Performance Levels:
   CP: Collapse Prevention
   LS: Life Safety
   IO: Immediate Occupancy
   OB: Operational Building
3. LS for occupants away from exterior envelope. IO for storm shelters or safe rooms.
4. See Section AN401 and Section AN403 for additional limitations and criteria.
5. OB for building or an internal area within a building designed to ICC-500 or FEMA 361.

CHAPTER AN5
STORM SHELTERS, SAFE ROOMS AND BEST AVAILABLE REFUGE AREAS

SECTION AN501
GENERAL

AN501.1 General. This section applies to the location and construction of storm shelters and safe rooms when constructed as separate detached buildings or as internal areas within buildings for the purpose of providing safe refuge for storms that produce high winds, such as tornados and hurricanes, and to the selection of best available refuge areas. Storm shelters shall be designed and constructed in accordance with IBC Section 423. Safe rooms shall be designed and constructed in accordance with FEMA 361. Storm shelters, safe rooms, and best available refuge areas shall be located on an accessible route.

Exception: *Residential Safe Rooms* and safe rooms serving a Business Group B Occupancy and having an *occupant load* not exceeding 16 persons may be constructed in accordance with FEMA 320.

AN501.2 Occupant load. The occupant load for storm shelters and safe rooms shall be determined by ICC 500 and FEMA 361 respectively.

AN501.3 Construction documents. Construction documents for buildings containing a storm shelter or safe room shall include the information required in ICC 500 or FEMA 361 respectively. Construction documents for buildings with access to a remote community storm shelter or safe room shall indicate the location of and access to the community storm shelter or safe room. Construction documents for buildings not containing or without access to a remote storm shelter or safe room, shall indicate the best available refuge area.

AN501.4 Signage. The location(s) of storm shelters, safe rooms or the best available refuge area(s) shall be clearly marked with a permanent sign.

SECTION AN502
DEFINITIONS AND NOTATIONS

AN502.1 Definitions. The following terms are defined in Chapter 2 of the International Building Code:

DWELLING UNITS.
OCCUPANT LOAD.
STORM SHELTER.
Community Storm Shelter.
Residential Storm Shelter.

AN502.2 Additional definitions.

BEST AVAILABLE REFUGE AREAS. Areas in a building that have been deemed by a registered design professional to likely offer the greatest safety for building occupants during a tornado or hurricane. Because these areas were not specifically designed as storm shelters or safe rooms, their occupants may be injured or killed during a tornado or hurricane. However, people in the best available refuge areas are less likely to be injured or killed than people in other areas of a building.

SAFE ROOM. A building, structure or portions thereof, constructed in accordance with FEMA 361 and designed for use during a severe wind storm event, such as a hurricane or tornado.

Community Safe Room. A safe room not defined as a "Residential Safe Room"

Residential Safe Room. A safe room serving occupants of *dwelling units* and having an *occupant load* not exceeding 16 persons.

SECTION AN503
BEST AVAILABLE REFUGE AREAS

AN503.1 General. Best available refuge area occupants may be injured or killed during a tornado or hurricane. However, people in the best available refuge areas are less likely to be injured or killed than people in other areas of a building.

AN503.2 Occupant Density. The minimum required floor area per occupant for best available refuge area(s) shall be determined in accordance with ICC 500 Table 501.1.1.

AN503.3 Identification of best available refuge areas. Best available refuge areas shall be identified by a registered design professional in accordance with the Wind Hazard Checklist of FEMA 361, Appendix B and FEMA P-431.

SECTION AN504
APPLICABILITY

AN504.1 Required storm shelters or safe rooms.

1. All new kindergarten through 12th grade schools with 50 or more occupants in total, per school, shall have a storm shelter or safe room.
2. All new 911 call stations, emergency operation centers, and fire, rescue, ambulance, and police stations shall have a storm shelter or safe room.

CHAPTER AN6
RESOURCES

SECTION AN601
CONTACTS

Georgia Department of Community Affairs (DCA)
Construction Codes
Georgia State Amendments to the State Minimum Standard Codes
http://www.dca.ga.gov/development/constructioncodes/programs/codeAmendments.asp
Phone: 404-679-3118

Georgia Department of Natural Resources (DNR)
Floodplain Management
4220 International Parkway, Ste. 101
Atlanta, GA 30354-3902
www.georgiadfirm.com
Phone: 404-675-1757

Federal Emergency Management Agency (FEMA)
www.fema.gov; www.floodsmart.gov
www.fema.gov/rebuild/buildingscience/
FEMA Publications and Technical Bulletins:
www.fema.gov/library/index.jsp
www.fema.gov/plan/prevent/floodplain/techbul.shtm

Georgia Emergency Management Agency (GEMA)
Georgia Office of Homeland Security
P.O. Box 18055
Atlanta, GA 30316-0055
www.gema.ga.gov
www.ready.ga.gov
Phone: 404-635-7000

Georgia Association of Regional Commissions (GARC)
www.garc.ga.gov
http://garc.ga.gov/main.php?Regional-Commissions-2
(for assistance in identifying Flood Hazard Areas)

International Code Council (ICC)
www.iccsafe.org

National Weather Service
www.srh.weather.gov

State Fire Marshal's Office
2 Martin Luther King Jr. Drive
Suite 920 / West Tower
Atlanta, Georgia 30334
www.oci.ga.gov
Phone: 404-656-7087

SECTION AN602
EMERGENCY INSPECTION KIT [b]

- □ **Staff's disaster response management plan**
- □ **Team contact list**
- □ **Area maps**
- □ **Official identification**
- □ **Personal identification**
- □ **Inspection forms and placards**
- □ **Communication equipment**
- □ **Clipboard**
- □ **Hard hat**
- □ **Orange safety vest**
- □ **Dust mask**
- □ **Work gloves**
- □ **Steel toe and waterproof boots**
- □ **Whistle**
- □ **First aid kit**
- □ **Latex gloves**
- □ **Safety glasses**
- □ **Sunglasses**
- □ **Pocket knife**
- □ **Matches**
- □ **Antibacterial hand wipes or alcohol-based hand sanitizer**
- □ **Insect repellant (w/ Deet or Picaridin)**
- □ **Sunscreen (SPF 15 or greater)**
- □ **Camera**
- □ **Black markers**
- □ **Pens & pencils**
- □ **Envelope for expense receipts**
- □ **Compass, GPS unit**
- □ **Backpack, waistpack**
- □ **Flashlight and extra batteries**
- □ **Battery-operated radio**
- □ **Duct tape**
- □ **Staples & stapler**
- □ **Staple gun**
- □ **Calculator**
- □ **Tire repair kit**

Remember to grab:

- □ **Personal identification**
- □ **Rain gear, extra clothing**
- □ **Water bottle**
- □ **Prescription medication**
- □ **Cell phone and charger**
- □ **Cash for personal expenses**
- □ **Toiletries**

(b) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

SECTION AN603
SAFETY TIPS [a]

1. **Always travel in teams of at least two people.**
2. **Always wear a hard hat, gloves, goggles, safety vest, and dust masks.**
3. **Always wear safety shoes capable of protecting the toes and bottom of the foot.**
4. **Survey the building exterior completely before entering.**
5. **Enter building only if authorized and if deemed safe to do so.**
6. **Be alert for falling objects.**
7. **In case of fire, injuries or victims, evacuate the area and alert the fire department immediately.**
8. **Avoid downed power lines and buildings under them or water surrounding them.**
9. **In case of gas leaks, shut off the gas (if possible) and report the leak.**
10. **In a flood situation, have a "walking stick."**

(a)*When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

SECTION AN604
MAJOR DISASTER PROCESS

(from link http://www.fema.gov/hazard/dproc.shtm)

A Major Disaster Declaration usually follows these steps:

- **Incident occurs and local government responds,** supplemented by neighboring communities and volunteer agencies. If overwhelmed, turn to the state for assistance;

Generally the local government will issue a local state of emergency

- **The State responds** with state resources, such as the National Guard and state agencies;

Prior to committing state resources, the Governor will declare a state of emergency in the counties impacted by the event for which assistance is needed.

- **Damage assessment** by local, state, federal, and volunteer organizations determine losses and recovery needs;

Generally the locals will submit a preliminary damage assessment to the state and the state will review and determine if state and/or federal assistance is needed. If federal assistance is needed, the state will request FEMA perform a preliminary joint damage assessment. If the Governor determines that the incident is of such severity and magnitude that effective response is beyond the capabilities of the state and the affected local governments then supplementary Federal assistance is requested (next step).

- **A Major Disaster Declaration** is requested by the Governor, based on the damage assessment, and agreement to commit state funds and resources to the long-term recovery;
- **FEMA evaluates** the request and recommends action to the White House based on the disaster, the local community and the state's ability to recover;
- **The President approves** the request or FEMA informs the Governor it has been denied. This decision process could take a few hours or several weeks depending on the nature of the disaster.

SECTION AN605
SAMPLE EVALUATION FORMS AND INSPECTION PLACARDS [b] (following pages)

Figure AN605.1 [b]

ATC-45 Rapid Evaluation Safety Assessment Form

Inspection

Inspector ID: _____ Inspection date: _____

Affiliation: _____ Inspection time: _____ ☐ AM ☐ PM

Areas inspected: ☐ Exterior only ☐ Exterior and interior

Building Description

Building name: _____

Address: _____

_____

Building contact/phone: _____

Number of stories: _____

"Footprint area" (square feet): _____

Number of residential units: _____

Type of Building

☐ Mid-rise or high-rise ☐ Pre-fabricated

☐ Low-rise multi-family ☐ One- or two-family dwelling

☐ Low-rise commercial

Primary Occupancy

☐ Dwelling ☐ Commercial ☐ Government

☐ Other residential ☐ Offices ☐ Historic

☐ Public assembly ☐ Industrial ☐ School

☐ Emergency services ☐ Other: _____

Evaluation

Investigate the building for the conditions below and check the appropriate column.

Observed Conditions:	Minor/None	Moderate	Severe
Collapse, partial collapse, or building off foundation	☐	☐	☐
Building significantly out of plumb or in danger	☐	☐	☐
Damage to primary structural members, racking of walls	☐	☐	☐
Falling hazard due to nonstructural damage	☐	☐	☐
Geotechnical hazard, scour, erosion, slope failure, etc.	☐	☐	☐
Electrical lines / fixtures submerged / leaning trees	☐	☐	☐
Other (specify) _____	☐	☐	☐

Estimated Building Damage (excluding contents)

☐ None

☐ >0 to <1%

☐ 1 to <10%

☐ 10 to <30%

☐ 30 to <70%

☐ 70 to <100%

☐ 100%

☐ See back of form for further comments.

Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

☐ **INSPECTED** (Green placard) ☐ **RESTRICTED USE** (Yellow placard) ☐ **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

_____

_____

Number of residential units vacated: _____

Further Actions

Check the boxes below only if further actions are needed.

☐ Barricades needed in the following areas: _____

_____

☐ Detailed Evaluation recommended: ☐ Structural ☐ Geotechnical ☐ Other: _____

☐ Substantial Damage determination recommended

☐ Other recommendations: _____

_____

☐ See back of form for further comments.

Figure AN605.2 [b]

ATC-45 Detailed Evaluation Safety Assessment Form

Inspection

Inspector ID: _____ Inspection date: _____

Affiliation: _____ Inspection time: _____ ☐ AM ☐ PM

Final Posting
from page 2

- ☐ Inspected
- ☐ Restricted Use
- ☐ Unsafe

Building Description

Building name: _____

Address: _____

_____

Building contact/phone: _____

Number of stories: _____

"Footprint area" (square feet): _____

Number of residential units: _____

Type of Building

- ☐ Mid-rise or High-rise
- ☐ Low-rise multi-family
- ☐ Low-rise commercial
- ☐ Pre-fabricated
- ☐ One- or two-family dwelling
- ☐ Other: _____

Primary Occupancy

- ☐ Dwelling
- ☐ Other residential
- ☐ Public assembly
- ☐ Emergency services
- ☐ Commercial
- ☐ Offices
- ☐ Industrial
- ☐ Other: _____
- ☐ Government
- ☐ Historic
- ☐ School

Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

	Minor/None	Moderate	Severe	Comments
Overall hazards:				
Collapse or partial collapse	☐	☐	☐	
Building or story lean or drift	☐	☐	☐	
Fractured or displaced foundation	☐	☐	☐	
Structural hazards:				
Failure of significant element/connection	☐	☐	☐	
Column, pier, or bearing wall	☐	☐	☐	
Roof/floor framing or connection	☐	☐	☐	
Superstructure/foundation connection	☐	☐	☐	
Moment frame	☐	☐	☐	
Diaphragm/horizontal bracing	☐	☐	☐	
Vertical bracing	☐	☐	☐	
Shear wall	☐	☐	☐	
Nonstructural hazards:				
Parapets, ornamentation	☐	☐	☐	
Canopy	☐	☐	☐	
Cladding, glazing	☐	☐	☐	
Ceilings, light fixtures	☐	☐	☐	
Stairs, exits, access walkways, gratings	☐	☐	☐	
Interior walls, partitions	☐	☐	☐	
Mechanical & electrical equipment	☐	☐	☐	
Elevators	☐	☐	☐	
Building contents, other _____	☐	☐	☐	
Geotechnical hazards:				
Slope failure, debris impact	☐	☐	☐	
Ground movement, erosion, sedimentation	☐	☐	☐	
Differential settlement	☐	☐	☐	

Continue on page 2

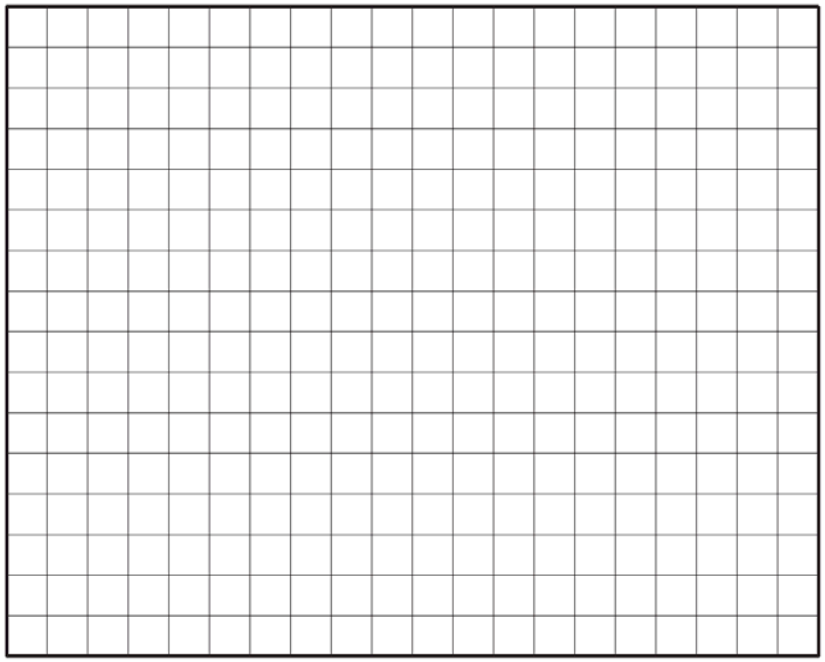
Figure AN605.2 [b] (Continued)

ATC-45 Detailed Evaluation Safety Assessment Form — Page 2

Building name: _____ Inspector ID: _____

Sketch

Make a sketch of the damaged building in the space provided. Indicate damage points.



Estimated Building Damage
(excluding contents)

- ☐ None
- ☐ >0 to <1%
- ☐ 1 to <10%
- ☐ 10 to <30%
- ☐ 30 to <70%
- ☐ 70 to <100%
- ☐ 100%

Posting

If there is an existing posting from a previous evaluation, check the appropriate box.

Previous posting: ☐ INSPECTED ☐ RESTRICTED USE ☐ UNSAFE Inspector ID: _____ Date: _____

If necessary, revise the posting based on the new evaluation and team judgment. *Severe* conditions endangering the overall building are grounds for an Unsafe posting. Local *Severe* and overall *Moderate* conditions may allow a Restricted Use posting. Indicate the current posting below and at the top of page one, whether the posting has been revised or not.

☐ **INSPECTED** (Green placard) ☐ **RESTRICTED USE** (Yellow placard) ☐ **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

Number of residential units vacated: _____

Further Actions Check the boxes below only if further actions are needed.

☐ Barricades needed in the following areas: _____

☐ Engineering Evaluation recommended: ☐ Structural ☐ Geotechnical ☐ Other _____

☐ Substantial Damage determination recommended

☐ Other recommendations: _____

INSPECTED

LAWFUL OCCUPANCY PERMITTED

This structure has been inspected (as indicated below) and no apparent structural hazard has been found.

☐ **Inspected Exterior Only**

☐ **Inspected Exterior and Interior**

Report any unsafe condition to local authorities; reinspection may be required.

Inspector Comments:

_____

_____

_____

_____

Facility Name and Address:

_____

_____

_____

Date _____

Time _____

This facility was inspected under emergency conditions for:

_____

(Jurisdiction)

Inspector ID / Agency

_____

_____

_____

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Figure AN605.3 [b]

RESTRICTED USE

Caution: This structure has been inspected and found to be damaged as described below:

_____

_____

_____

_____

Entry, occupancy, and lawful use are restricted as indicated below:

☐ Do not enter the following areas: _____

_____

☐ Brief entry allowed for access to contents: _____

_____

☐ Other restrictions: _____

_____

Facility name and address:

_____

_____

_____

Date _____

Time _____

This facility was inspected under emergency conditions for:

_____

(Jurisdiction)

Inspector ID / Agency

_____

_____

_____

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Figure AN605.4 [b]

UNSAFE

DO NOT ENTER OR OCCUPY
(THIS PLACARD IS NOT A DEMOLITION ORDER)

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below:

_____
_____
_____
_____
_____
_____

Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.

Facility Name and Address:

_____
_____
_____

Date _____

Time _____

This facility was inspected under emergency conditions for:

_____
(Jurisdiction)

Inspector ID / Agency

_____
_____
_____

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Figure AN605.5 [b]

CHAPTER AN7
REFERENCES

REFERENCED STANDARDS

ASCE Standards ASCE/SEI 24-05 Flood Resistant Design and Construction
FEMA P-320, Third Edition / August 2008 Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business, Includes Construction Plans and Cost Estimates
FEMA 361, Second Edition / August 2008 Design and Construction Guidance for Community Safe Rooms
FEMA P-431, Second Edition/October 2009 Tornado Protection: Selecting Refuge Areas in Buildings
FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials

REFERENCED RESOURCES

(a) *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007
(b) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

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Georgia State
International Residential Code

Appendix R
Disaster Resilient Construction

(2012 Edition)

Georgia Department of Community Affairs
Local Government Assistance Division
60 Executive Park South, N.E.
Atlanta, Georgia 30329-2231
(404) 679-3118
www.dca.ga.gov

January 1, 2013

GEORGIA STATE INTERNATIONAL RESIDENTIAL CODE
APPENDIX R
DISASTER RESILIENT CONSTRUCTION

The INTERNATIONAL RESIDENTIAL CODE, 2012 Edition, published by the International Code Council, when used in conjunction with the Georgia State Amendments to the INTERNATIONAL RESIDENTIAL CODE, 2012 Edition and Appendix R Disaster Resilient Construction , shall constitute the official *Georgia State Minimum Standard Residential Code.*

FORWARD

Introduction

The Department of Community Affairs (DCA) was awarded a grant through the U.S. Department of Housing and Urban Development (HUD) to develop Disaster Resilient Building Code (DRBC) Appendices for the International Building Code (IBC) and the International Residential Code (IRC). The DRBC Appendices are optional regulations that local jurisdictions may adopt, in whole or in part, through local ordinance. A task force of stakeholders was appointed to look for opportunities to improve any code provisions relating to damage from hurricane, flood, and tornado disasters. In addition to the approved recommendations from the task force, the state has developed and will conduct a comprehensive training program for code enforcement officials on the importance, implementation and enforcement of the Disaster Resilient Construction Appendices.

The meetings for the Disaster Resilient Building Code Appendices Task Force were open to the public, interested individuals and organizations that desired participation. The technical content of currently published documents on flooding, high-wind construction, and storm shelters, were used and referenced. Those publications included documents of the International Code Council (ICC), American Society of Civil Engineers (ASCE), the Federal Emergency Management Agency (FEMA), Mitigation Assessment Team (MAT) Program, Georgia Emergency Management Agency/Homeland Security (GEMA), APA – The Engineered Wood Association, National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), National Science Foundation (NSF), The State of Florida, American Forest & Paper Association's American Wood Council, Southern Forest Products Association, NAHB Research Center, Insurance Institute for Business & Home Safety, and the Federal Alliance for Safe Homes.

Adoption

Local jurisdictions may adopt this entire appendix with chosen options or specific sections that apply to their communities through a local ordinance. The adopting ordinance must also be filed on record with DCA. A sample ordinance has been included in this document to assist the local jurisdictions with the adoption process. Recommended training is being offered to assist code enforcement officials in the implementation and enforcement of the appendices documents. Contact DCA at (404) 679-3118 or www.dca.ga.gov for more information.

Neither The Disaster Resilient Building Code Appendices Task Force, its members nor those participating in the development of Appendix R Disaster Resilient Construction accept any liability resulting from compliance or noncompliance with the provisions of Appendix R Disaster Resilient Construction.

The 2012 Disaster Resilient Building Code (DRBC) Appendices Task Force was charged with the development of two appendices. One appendix is for the International Residential Code and the other appendix is for the International Building Code. These two appendices look for opportunities to improve any provisions relating to hurricane, flood, and tornado disasters. In addition to improving existing provisions in the codes, the task force also developed new provisions to be included in the appendices that address these issues. These appendices contain increased construction requirements for disaster resilience and are intended to be made available for adoption by local jurisdictions in the State of Georgia.

These appendices have reasonable and substantial connection with the public health, safety, and general welfare. In addition, the financial impact and costs associated with these appendices have been taken into consideration.

Members:
Mr. Gregori Anderson, Chairman, States Codes Advisory Committee (SCAC)
Mr. David L. Adams, , Vice Chairman, States Codes Advisory Committee (SCAC)
Mr. Bill Abballe, AIA, American Institute of Architects (AIA) – Georgia Chapter
Mr. John Hutton, P.E., S.E., American Council of Engineering Companies of Georgia (ACEC/G)
Mr. Ron Anderson, Code Consultant
Mr. Lamar Smith, Home Builders Association of Georgia (HBAG)
Mr. Thomas Harper, Georgia State Inspectors Association (GSIA)
Mr. Tom Buttram, Building Officials Association of Georgia (BOAG)
Capt. Zane Newman, Georgia State Fire Marshal's Office (Local Fire Official)
Mr. Terry Lunn, Georgia Emergency Management Agency (GEMA)
Mr. Alan Giles, CFM, Georgia Department of Natural Resources (EPD / Floodplain Management Unit)
Mr. Tony Hebert, HUD Georgia State Representative (Region IV Office)
Mr. Jim C. Beck, Sr., Georgia Underwriting Association
Mr. Tim Thornton, Georgia Association of Realtors (GAR)
Mr. Steve Harrison, Building Owners and Managers Association – Georgia (BOMA)
Mr. Tom Aderhold, Georgia Apartment Association (GAA)
Mr. Tim Bromley, Accessibility Consultant – Georgia State ADA Coordinator's Office
Mayor Mark Mathews, Georgia Municipal Association (GMA)
Commissioner Jeff Long, Association of County Commissioners of Georgia (ACCG)

Ad Hoc Subcommittee:
Mr. Tom Buttram, Chairman, DRBC Task Force Liaison (BOAG)
Mr. Ron Anderson, Vice Chairman, Code Consultant
Mr. Stephen V. Skalko, P.E. Concrete Industry
Mr. Jeffrey B. Stone, PhD., Wood Industry (AWC)
Mr. Robert Wills, Steel Industry (AISC)
Mr. Tom Cunningham, PhD., Residential Building Design
Mr. Duncan J. Hastie, P.E., Disaster Mitigation

DCA Staff:
Mr. Ted Miltiades, Director of Construction Codes & Industrialized Buildings
Mrs. Deirdre "Dee" Leclair, DRBC Grant Project Manager
Mr. Max Rietschier, Lead Codes Consultant
Mr. Bill Towson, 2012 International Residential Code Task Force Liaison, Code Consultant
Mr. Calvin Jordan, 2012 International Building Code Task Force Liaison, Code Consultant

How to Use *Appendix R Disaster Resilient Construction*

The appendix may be adopted in whole or in part by Local Jurisdictions to fit the needs of their community. The following sample ordinance has been provided to aid in the process of indentifying Chapters and Sections of the appendix that may be adopted. The format easily allows for choosing to adopt, revise or delete individual Chapters and Sections. Download the MS Word (.doc) version from the DCA website to take advantage of the dropdown menu choices and edit ability features of the document. Note that in Chapter 3, choose one of three options for flood elevation. Only one option may be chosen and that option must be higher than what has been previously adopted and enforced by your jurisdiction. Also note that in Chapter 4, choose one of four options for increased wind speed. Only one option may be chosen and that option must be higher than the mapped wind speed shown in the International Residential Code. The Sample Ordinance document takes into account the flood elevation option in Chapter 3 and the wind speed option in Chapter 4 of this appendix.

SAMPLE ORDINANCE FOR ADOPTION OF

GEORGIA STATE INTERNATIONAL RESIDENTIAL CODE

APPENDIX R

DISASTER RESILIENT CONSTRUCTION

ORDINANCE NO._____

An ordinance of the **[JURISDICTION]** adopting the latest edition as adopted and amended by the Georgia Department of Community Affairs of *Appendix R Disaster Resilient Construction* regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters in the **[JURISDICTION]**; providing for the issuance of permits and collection of fees therefore; repealing Ordinance No. ____ of the **[JURISDICTION]** and all other ordinances or parts of the laws in conflict therewith.

The **[GOVERNING BODY]** of the **[JURISDICTION]** does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the **[TITLE OF JURISDICTION'S KEEPER OF RECORDS]** of **[NAME OF JURISDICTION]**, being marked and designated as *Appendix R Disaster Resilient Construction* to the International Residential Code, the latest edition as adopted and amended by the Georgia Department of Community Affairs, be and is adopted as the *Appendix R Disaster Resilient Construction* of the **[JURISDICTION]**, in the State of Georgia for regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said *Appendix R Disaster Resilient Construction* on file in the office of the **[JURISDICTION]** are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any prescribed in Section 2 of this ordinance.

Section 2. [NAME Of JURISDICTION] hereby:

Choose an item. CHAPTER AR1 SCOPE AND ADMINISTRATION Choose an item.

Choose an item. SECTION AR101 ADMINISTRATION Choose an item.

Choose an item. AR101.1 Purpose Choose an item.

Choose an item. AR101.2 Objectives Choose an item.

Choose an item. AR101.3 Scope Choose an item.

AR101.3.1 Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. AR101.4 Violations Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. SECTION AR102 APPLICABILITY Choose an item.

Choose an item. AR102.1 General Choose an item.

Choose an item. AR102.2 Other laws Choose an item.

Choose an item. AR102.3 Referenced codes and standards Choose an item.

Choose an item. SECTION AR103 POST DISASTER EVENT INSPECTIONS GUIDLINES Choose an item.

Choose an item. AR103.1 Inspections Choose an item.

Choose an item. AR103.1.1 Right of entry Choose an item.

Choose an item. AR103.2 Types of inspections Choose an item.

Choose an item. AR103.3 Post disaster building safety evaluation chart Choose an item.

Choose an item. Figure AR103.3 Post Disaster Building Safety Evaluation Chart Choose an item.

Choose an item. AR103.4 Evaluation forms Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. AR103.5 Placement and remove of placards Choose an item.

Choose an item. CHAPTER AR2 DEFINITIONS Choose an item.

Choose an item. SECTION AR201 GENERAL Choose an item.

Choose an item. AR201.1 Scope Choose an item.

Choose an item. AR201.2 Terms defined in other codes Choose an item.
Choose an item. AR201.3 Terms not defined Choose an item.
Choose an item. SECTION AR202 DEFINITIONS Choose an item.
Choose an item. CHAPTER AR3 FLOOD-RESISTANT CONSTRUCTION Choose an item.
Choose an item. SECTION AR301 HAZARD IDENTIFICATION Choose an item.
Choose an item. AR301.1 Identification of flood hazard areas Choose an item.
Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].
Insert [Date] for [INSERT DATE ISSUANCE].
Choose an item. SECTION AR302 SCOPE Choose an item.
Choose an item. AR302.1 Flood loads Choose an item.
Choose an item. FLOOD ELEVATION OPTION Choose an item. Choose an item.
Choose an item. SECTION AR303 FLOOD DAMAGE-RESISTANT MATERIALS Choose an item.
Choose an item. AR303.1 Flood damage-resistant materials Choose an item.
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Choose an item. CHAPTER AR4 HIGH-WIND RESISTIVE CONSTRUCTION Choose an item.
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Choose an item. AR401.1 Scope Choose an item.
Choose an item. AR401.2 Continuous load path Choose an item.
Choose an item. AR401.3 Adoption of wind speed Choose an item.
[Name Of Jurisdiction] adopts Option Choose an item.
Choose an item. SECTION Choose an item. Choose an item.
Choose an item. SECTION AR406 FASTENERS AND CONNECTIONS FOR CLADDING Choose an item.
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Choose an item. AR407.1 Design pressure Choose an item.
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Choose an item. AR408.1 Secondary water barrier Choose an item.
Choose an item. AR408.2 Fasteners Choose an item.
Choose an item. AR408.3 Attachment Choose an item.
Choose an item. CHAPTER AR5 RESIDENTIAL STORM SHELTERS AND SAFE ROOMS Choose an item.
Choose an item. SECTION AR501 GENERAL Choose an item.
Choose an item. AR501.1 General Choose an item.
Choose an item. SECTION AR502 RESIDENTIAL STORM SHELTERS AND SAFE ROOMS Choose an item.
Choose an item. AR502.1 Residential storm shelters Choose an item.
Choose an item. AR502.2 Residential safe rooms Choose an item.

Section 3. That Ordinance No. ____ of **[JURISDICTION]** entitled **[FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION]** and all other ordinances or parts of laws in conflict herewith are hereby repealed.

Section 4. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The **[GOVERNING BODY]** hereby declares that it would have passed this law, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5. That nothing in this ordinance or in *Appendix R Disaster Resilient Construction* hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of

action acquired or existing under any act or ordinance hereby repealed as cited in Section 3 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 6. That the **[JURISDICTION'S KEEPER OF RECORDS]** is hereby ordered and directed to cause this ordinance to be published. (An additional provision may be required to direct the number of times the ordinance is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

Section 7. That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect **[TIME PERIOD]** from and after the date of its final passage and adoption.

Section 8. Chapter AR6 Resources of this document is intended to be used by the building officials as a resource guide.

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APPENDIX R
DISASTER RESILIENT CONSTRUCTION

CHAPTER AR1
SCOPE AND ADMINISTRATION

SECTION AR101
ADMINISTRATION

AR101.1 Purpose. The scope of this appendix is to promote enhanced public health, safety and general welfare and to reduce public and private property losses due to hazards and natural disasters associated with flooding, high-winds, and windborne debris above that which is provided in the general provisions of this appendix.

AR101.2 Objectives. The objectives of this appendix are to:

1. Protect human life, to minimize property loss and to minimize the expenditures of public money associated with natural weather related disasters, including flooding, tornadoes and other high-wind events.
2. Establish enhanced design and construction regulations consistent with nationally recognized good practices for the safeguarding of life and property.

AR101.3 Scope.

AR101.3.1 The provisions of this appendix are not mandatory unless specifically referenced in an adopting ordinance of **[NAME OF JURISDICTION]**. If adopted, the provisions shall apply to all new development and to substantial improvements to existing development.

AR101.3.2 The provisions of this appendix supplement the jurisdiction's building codes to provide for enhanced provisions to mitigate the hazard to life and property from natural weather related disasters, including flooding, tornadoes and other high-wind events.

AR101.3.3 The provisions of this appendix establish design and construction standards for storm shelters.

AR101.4 Violations. Any violation of a provision of this appendix or failure to comply with a permit of variance issued pursuant to this appendix or any requirement of this appendix shall be handled in accordance with the ordinances of **[NAME OF JURISDICTION]**.

SECTION AR102
APPLICABILITY

AR102.1 General. This appendix provides enhanced minimum requirements for development of new construction and substantial improvement of existing development above that contained in the *International Residential Code* (IRC).

AR102.1.1 Regardless of the category of work being performed, the work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this appendix or to any previously approved alternative arrangements than it was before the work was undertaken.

AR102.1.2 Where there is a conflict between a requirement of the *International Residential Code* and a requirement of this appendix, the requirement of this appendix shall govern. Where there is a conflict between a general requirement of this appendix and a specific requirement of this appendix, the specific requirement shall govern. Where, in any specific case, different sections of this appendix specify different materials, methods of construction or other requirements, the most restrictive shall govern.

AR102.2 Other laws. The provisions of this appendix shall not be deemed to nullify any provisions of local, state or federal law.

AR102.3 Referenced codes and standards. The codes and standards referenced in this appendix shall be those that are listed in Chapter AR7 and such codes and standards shall be considered as part of the requirements of this appendix to the prescribed extent of each such reference. Where differences occur between provisions this appendix and references and standards, the provisions of this appendix shall apply.

SECTION AR103
POST DISASTER EVENT INSPECTIONS GUIDELINES

AR103.1 Inspections. The building official or agents shall inspect residential buildings and structures to determine the habitability of each with the goal of getting the community back into their residences quickly and safely. Inspections shall always be performed by teams of at least two individuals, also known as disaster assessment teams.

AR103.1.1 Right of entry. Unless permitted under the exigent circumstances provisions or from an order from State or Federal Authorities, disaster assessment teams shall confirm the right of entry requirements with the incident commander. Upon approval, the assessment teams shall be authorized to enter the structure or premises at reasonable times to inspect or perform duties as provided by this code, provided that the structure or premises be occupied, that credentials are presented, that entry is requested, and that entry is granted by the owner or person having charge over the structure or premises.

AR103.2 Types of inspections.

AR103.2.1 Rapid evaluation. Rapid evaluation is performed after a disaster event to determine if a building is apparently safe or obviously unsafe. The evaluation should last 10 to 30 minutes per building and shall be performed by the building official and/or their designated responders. Evaluation shall determine if a detailed evaluation is necessary. Placards are posted on buildings indicating status as one of the following:

1. INSPECTED
2. RESTRICTED USE
3. UNSAFE

See Section AR605 for Placards that may be reproduced for use in the field during evaluations. The jurisdiction shall alter placards to meet the jurisdiction and building department's requirements.

AR103.2.2 Detailed evaluation. Detailed evaluation is a thorough visual examination of a damaged building performed by a team of two, including an inspector and a design professional. Evaluation should last 30 minutes to 4 hours per building. Evaluation shall determine necessary restrictions on a damaged building's use, the need for an engineering evaluation or to evaluate postings.

AR103.2.3 Engineering evaluation. When indicated by the building official as necessary, engineering evaluations shall be completed by a registered design professional hired by the building owner.

AR103.3 Post disaster building safety evaluation Chart. See Figure AR103.3 for Post Disaster Building Safety Evaluation Chart.

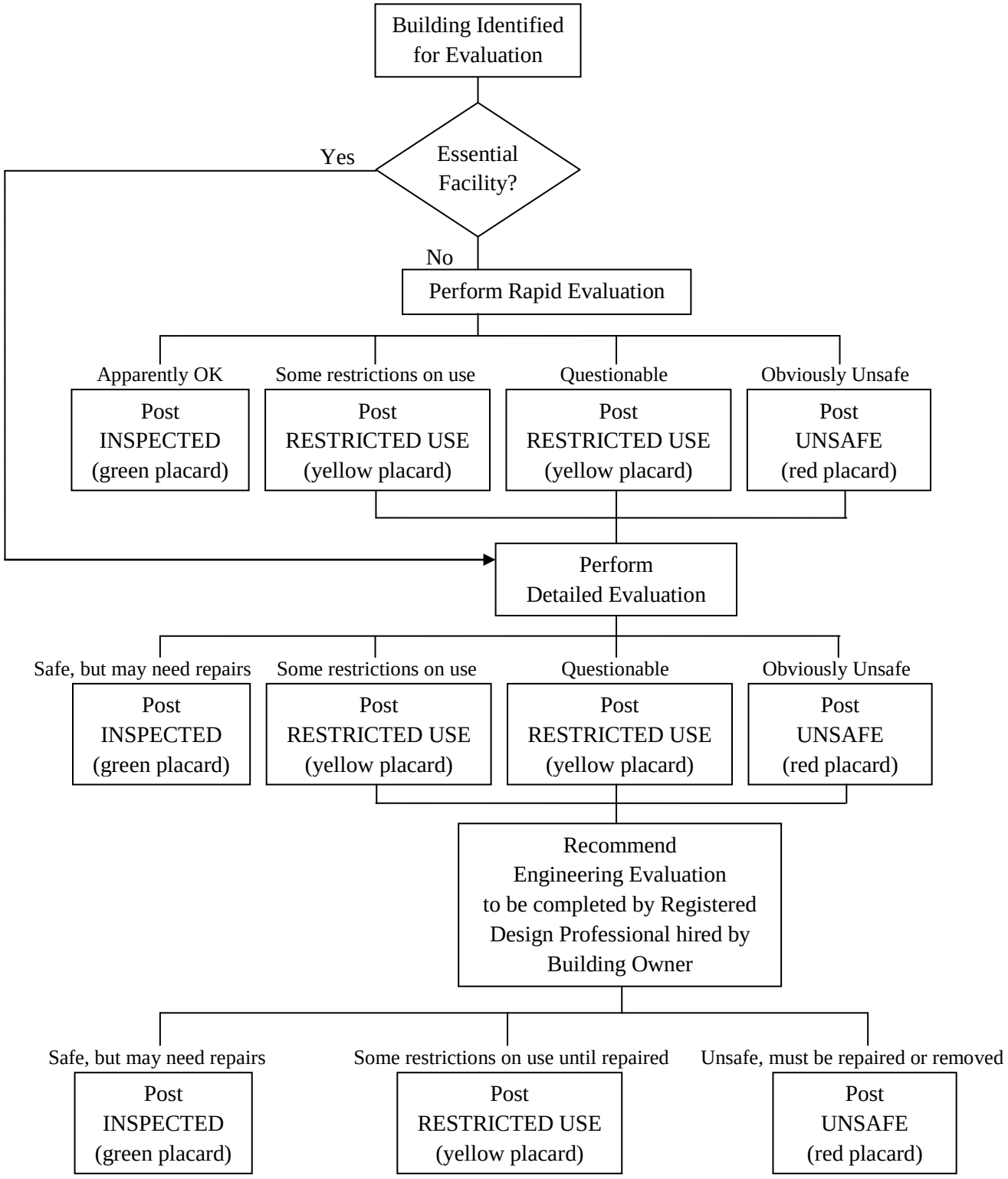
AR103.4 Evaluation forms. *ATC-45 Rapid Evaluation Safety Assessment Form* and *ATC-45 Detailed Evaluation Safety Assessment Form* shall be used by **[NAME OF JURISDICTION]'s** Building Official for post disaster inspections. See Section AR605 for copies of the Safety Assessment Forms.

AR103.5 Placement and removal of placards.

AR103.5.1 Placement. Placards are to be posted in a clearly visible location near the main entrance and shall be visible from the public right-of-way. In addition RESTRICTED USE or UNSAFE placards shall be placed at all entrances.

AR103.5.2 Removal. Placards shall not be removed or replaced, except by the authorized representatives of the local jurisdiction.

Figure AR103.3 Post Disaster Building Safety Evaluation Chart [a]



[(a)] *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

CHAPTER AR2
DEFINITIONS

SECTION AR201
GENERAL

AR201.1 Scope. Unless otherwise expressly stated the following words and terms shall, for the purposes of this appendix, have the meanings shown in this chapter.

AR201.2 Terms defined in other codes. Where terms are not defined in this appendix and are defined in other *International Codes*, such terms shall have the meanings ascribed to them as in those codes.

AR201.3 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have their ordinarily accepted meanings such as the context implies.

SECTION AR202
DEFINITIONS

500-YEAR FLOOD. Flood having a 0.2% annual probability of being equaled or exceeded.

ADVISORY BASE FLOOD ELEVATION (ABFE). An advisory base flood elevation (BFE) issued by the Federal Emergency Management Agency (FEMA) that reflects post-storm conditions and vulnerability to damages from future flooding.

BASE FLOOD. Flood having a 1% chance of being equaled or exceeded in any given year, also referred to as the 100-year flood.

BASE FLOOD ELEVATION (BFE). The elevation of flooding, including wave height, having a 1% chance of being equaled or exceeded in any given year established relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the *Flood Insurance Rate Map* (FIRM).

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of the *International Residential Code*, or the building official's duly authorized representative.

DESIGN FLOOD. The greater of the following two flood events:

(1) The *base flood*, affecting those areas identified as *special flood hazard areas* on the community's FIRM;

(2) The flood corresponding to the area designated as a *flood hazard area* on a community's *flood hazard map* or otherwise legally designated.

DESIGN FLOOD ELEVATION (DFE). The elevation of the *design flood*, including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the *design flood elevation* shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map.

FLOOD [DAMAGE]-RESISTANT MATERIAL. Any building product [material, component or system] capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage.

FLOOD HAZARD AREA. The area subject to flooding during the *design flood*.

FLOOD HAZARD MAP. Map delineating *flood hazard areas* adopted by the authority having jurisdiction.

FLOOD INSURANCE RATE MAP (FIRM). An official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the *special flood hazard areas* and the risk premium zones applicable to the community.

FREEBOARD. A factor of safety expressed in feet above a flood level for purposes of floodplain management.

FUTURE-CONDITIONS FLOOD. The flood having a 1% chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

FUTURE-CONDITIONS FLOOD ELEVATION. The flood standard equal to or higher than the Base Flood Elevation. The future-conditions flood elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

CHAPTER AR3
FLOOD-RESISTANT CONSTRUCTION

Forward: This appendix provides three different options for increased freeboard. The jurisdiction may pick only one option that is higher than previously adopted and enforced by the jurisdiction. The National Flood Insurance Program (NFIP) minimum standards reference Base Flood Elevation without any freeboard in high risk flood hazard areas. Due to the flood damage prevention updates performed during the Map Modernization initiative that led to flood risks being digitally identified in all 159 Georgia counties, all Georgia NFIP participating communities have freeboard standards that meet or exceed the 1 foot standard used in the State model ordinances for areas where BFEs have been established.

SECTION AR301
HAZARD IDENTIFICATION

AR301.1 Identification of flood hazard areas. To establish flood hazard areas:

(a) flood hazard map adopted by jurisdiction based on areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study of **[INSERT NAME OF JURISDICTION]**," dated **[INSERT DATE ISSUANCE]**, and amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto.

(b) FIRM maps provided by the Federal Emergency Management Agency.

SECTION AR302
SCOPE

AR302.1 Flood loads. Buildings designed and constructed in flood hazard areas defined in Table R301.2(1) of the *International Residential Code* shall comply with the following:

AR302.1.1 Flood hazard areas without base flood elevations. In flood hazard areas without base flood or future-conditions flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade to the building foundation.

OPTION A – FLOOD ELEVATION

AR302.1.2 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

(a) Design flood elevation plus one (1) foot, or
(b) Base flood elevation plus one (1) foot, or
(c) Advisory base flood elevation, or
(d) Future-conditions plus one (1) foot, if known or
(e) 500-year flood, if known

OPTION B– FLOOD ELEVATION

AR302.1.3 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

(a) Design flood elevation plus two (2) feet, or
(b) Base flood elevation plus two (2) feet, or
(c) Advisory base flood elevation, or
(d) Future-conditions plus one (1) foot, if known or
(e) 500-year flood, if known

OPTION C – FLOOD ELEVATION

AR302.1.4 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

(a) Design flood elevation plus three (3) feet, or
(b) Base flood elevation plus three (3) feet, or
(c) Advisory base flood elevation, or
(d) Future-conditions plus one (1) foot, if known or
(e) 500-year flood, if known

SECTION AR303
FLOOD DAMAGE-RESISTANT MATERIALS

AR303.1 Flood damage-resistant materials. Flood damage-resistant materials comply with FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials.

AR303.2 Location of flood damage-resistant materials. Building components and materials located below the increase to base flood elevation as determined by the local jurisdiction in accordance with AR302.1 shall be flood damage-resistant as defined by Section AR303.1.

AR303.3 Fasteners and connectors used for flood damage-resistant materials. Fasteners and connectors used for flood damage-resistant materials to be made of stainless steel, hot-dipped zinc-coated galvanized steel, mechanically deposited-zinc coated, silicon bronze or copper. Copper fasteners shall not be permitted for use in conjunction with steel.

CHAPTER AR4
HIGH-WIND RESISTIVE CONSTRUCTION

Forward: This appendix provides four different options for increased wind speed. The jurisdiction may pick only one option that is higher than the mapped wind speed shown in the International Residential Code.

SECTION AR401
GENERAL

AR401.1 Scope. The provisions of this appendix shall govern the structural design of one- and two-family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures. The building or structure shall comply with all aspects of the International Residential Code in addition to the requirements of this appendix.

AR401.2 Continuous load path. A continuous load path shall be provided to transmit the applicable forces from the roof assembly to the foundation.

AR401.3 Adoption of wind speed. [INSERT NAME OF JURISDICTION] adopts Option **[PICK A, B, C, or D]** MINIMUM WIND SPEED **[INSERT WIND SPEED]**.

AR401.4 Alternative materials, design and methods of construction and equipment. The provisions of this appendix are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this appendix, provided such material is listed and tested for such application intended. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this appendix, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this appendix. Compliance with the specific performance-based provisions of the International Codes in lieu of specific requirements of this appendix shall also be permitted as an alternate.

AR401.4.1 Tests. Whenever there is insufficient evidence of compliance with the provisions of this appendix, or evidence that a material or method does not conform to the requirements of this appendix, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made at no expense to the *jurisdiction*. Test methods shall be as specified in this appendix or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

SECTION AR402
OPTION A – MINIMUM WIND SPEED 100 MPH

AR402.1 Wind speed. *Buildings* shall be designed and constructed to comply with minimum wind speed of 100 mph Exposure B in accordance with AR402.1.1 or in accordance with Prescriptive Method AR402.2. Buildings with minimum wind speed of 100 mph Exposure C shall be in accordance with AR402.1.1.

AR402.1.1 Design methods. The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. *AF&PA Wood Frame Construction Manual (WFCM),* or
2. AF&PA *Wood Frame Construction Manual* Guide to Wood Construction in High Wind Areas for One- and Two-Family Dwellings: 100 MPH Exposure B (WFCM); or
3. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600); or
4. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7); or
5. AISI *Standard for Cold-Formed Steel Framing – Prescriptive Method For One- and Two-Family Dwellings* (AISI S230); or
6. *International Building Code*; or
7. *Concrete walls in accordance with R404 and R611of the International Residential Code*; or
8. *Walls of structural insulated panels in accordance with R613 of the International Residential Code*.

AR402.2 Prescriptive wood frame construction method deemed to comply with 100 MPH Exposure B. Prescriptive construction method for wood frame structures shall be in accordance with IRC requirements for 100 mph Exposure B construction as modified in this section. A continuous load path shall be provided to transmit uplift forces from the roof assembly to the ground as follows:

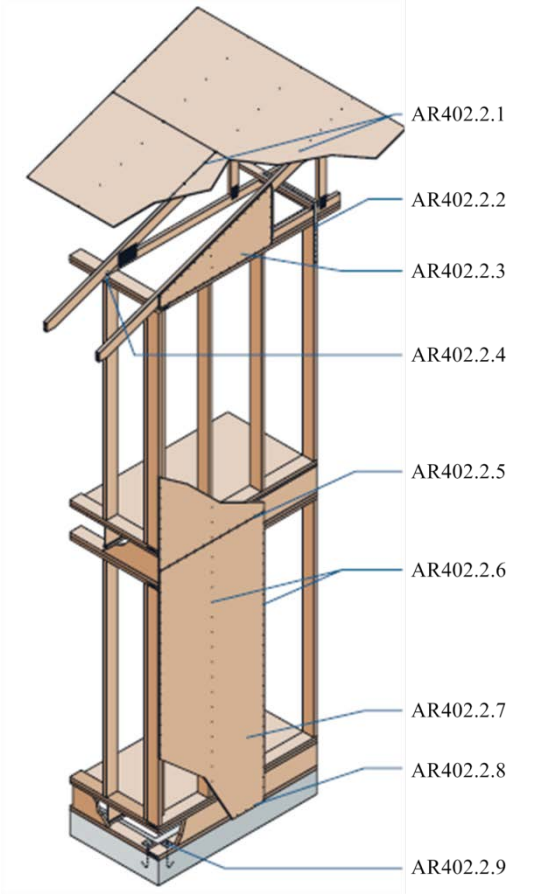


Figure AR402.2[b]

(b) Form No. M310B © 2011 APA – The Engineered Wood Association.

AR402.2.1 Roof sheathing attachment. Nail roof sheathing with 8d ring shank (or deformed shank) (0.131" x 2-1/2") nails at 4 inches on center along the ends of the sheathing and gable end framing 6 inches on center along intermediate framing. See Figure AR402.2.1.

AR402.2.2 Gable end wall connection. Tie gable end walls back to the structure. See Figure AR402.2.2.

AR402.2.3 Gable end wall sheathing. Continuously sheath gable end walls with wood structural panels or equivalent approved material meeting loading requirements. See Figure AR402.2.3.

AR402.2.4 Roof framing to wall connection. Connect roof framing to wall using an approved connector or connectors having allowable loads when attached to Southern Pine or Douglas Fir lumber of 585 pounds in the upward direction, 485 pounds in the direction parallel to the wall and 165 pounds in the direction perpendicular to the wall. Attachment to be on exterior face of the exterior walls. See Figure AR402.2.4.

AR402.2.5 Sheathing attachment at elevated floor level. Nail upper story sheathing and lower story sheathing into common wood structural panel or engineered rim board. See Figure AR402.2.5.

AR402.2.6 Wall sheathing attachment. Attach wall sheathing with 8d common (0.131" x 2-1/2") nails at 4 inches on center at end and edges of wood structural panels and 6 inches on center in the intermediate framing. See Figure AR402.2.6a. Adjacent edges in wood structural panel wall sheathing that do not occur over common framing members shall be attached to flat wise blocking as illustrated in Figure AR402.2.6b.

AR402.2.7 Continuous wall sheathing. Continuously sheath all walls with wood structural panels or equivalent approved material meeting loading requirements. Continuously sheath areas around openings for windows and doors. Minimum wall bracing requirements shall be in accordance with IRC Section R602.10 or R602.12 continuous sheathing methods as modified in Section AR402.2.

AR402.2.8 Wall sheathing to sill plate connection. Extend sheathing material to lap the sill plate. See Figure AR402.2.8.

AR402.2.9 Anchor bolt connection. Space ½" anchor bolts with 7 inches of embedment 48 inches on center with 0.229" x 3" x 3" square plate washers with slotted holes. See Figure AR402.2.9. There shall be a minimum of 2 bolts per plate section with one bolt located not more than 12" or less than 3.5" from each end of the plate section.

AR402.2.10 Top plate intersection detail. Double top plates shall be provided at the top of all exterior stud walls. The double plates shall overlap at corners and at intersections with other exterior or interior load bearing walls. Double top plates shall be lap-spliced with end joints offset in accordance with the minimum requirements given in the *WFCM Guides to Wood Construction in High Wind Areas for One- and Two-Family Dwellings: 100 MPH Exposure B.* See Figure AR402.2.10.

AR402.3 Wall openings. Uplift load path connections at wall openings shall be in accordance with IRC Section R602.3.5.

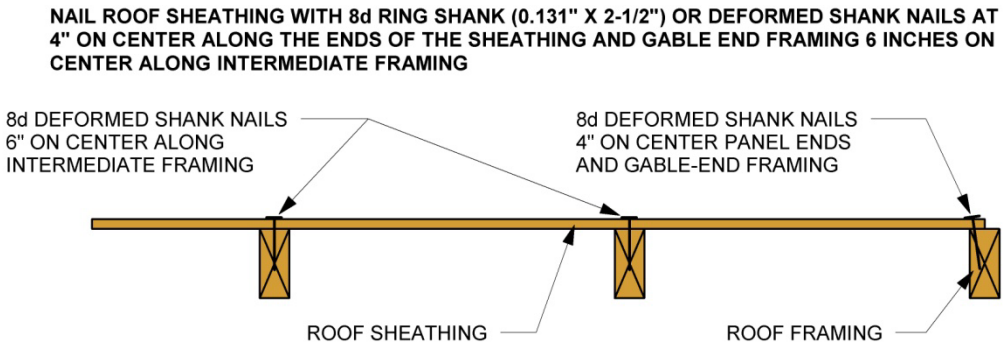


Figure AR402.2.1[b]
Roof Sheathing Attachment Detail

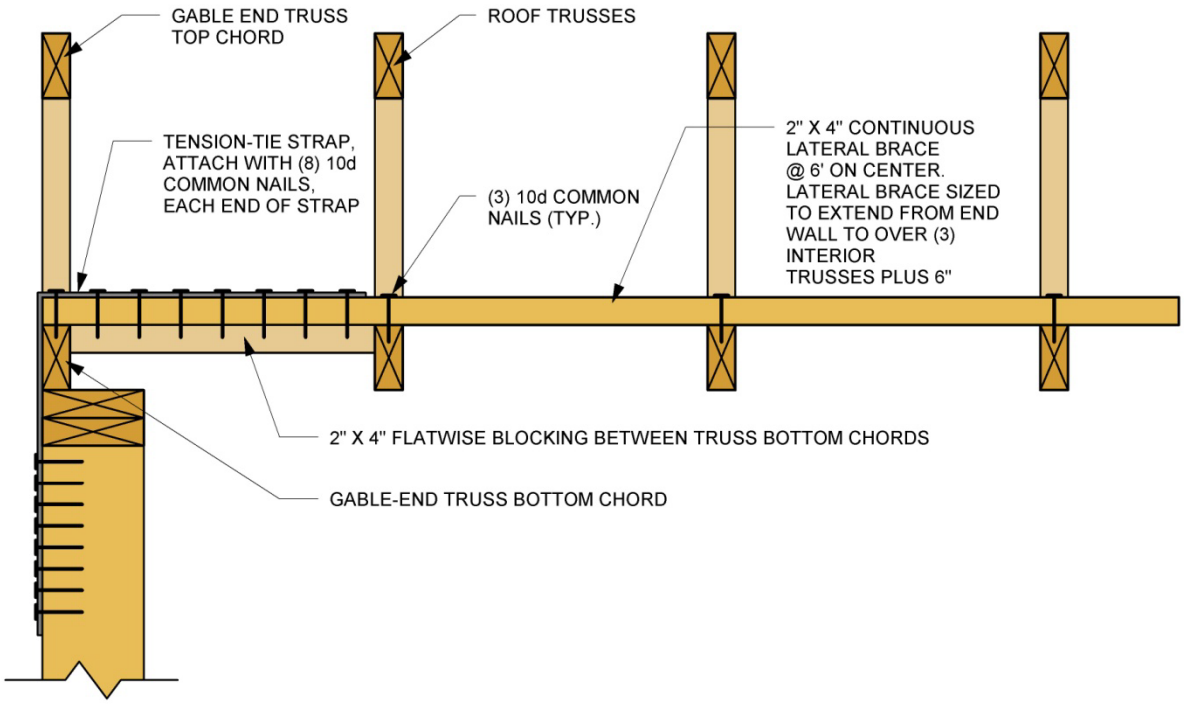


Figure AR402.2.2[b]
Gable End Wall Connection Detail

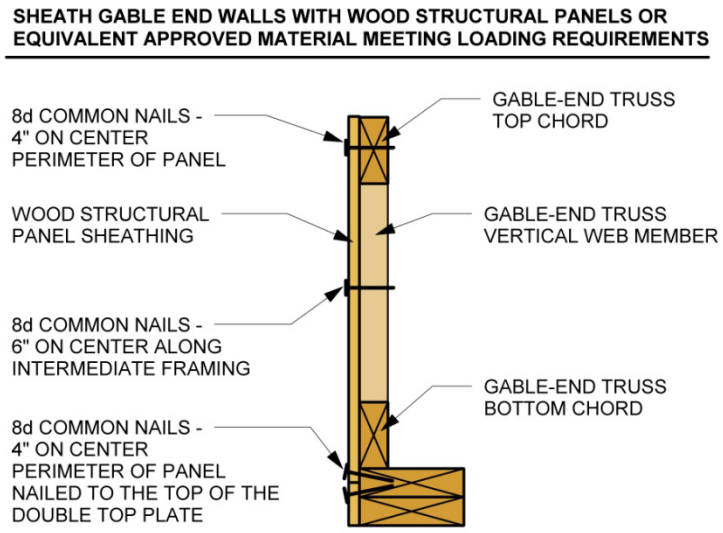


Figure AR402.2.3[b]
Gable End Wall Sheathing Detail

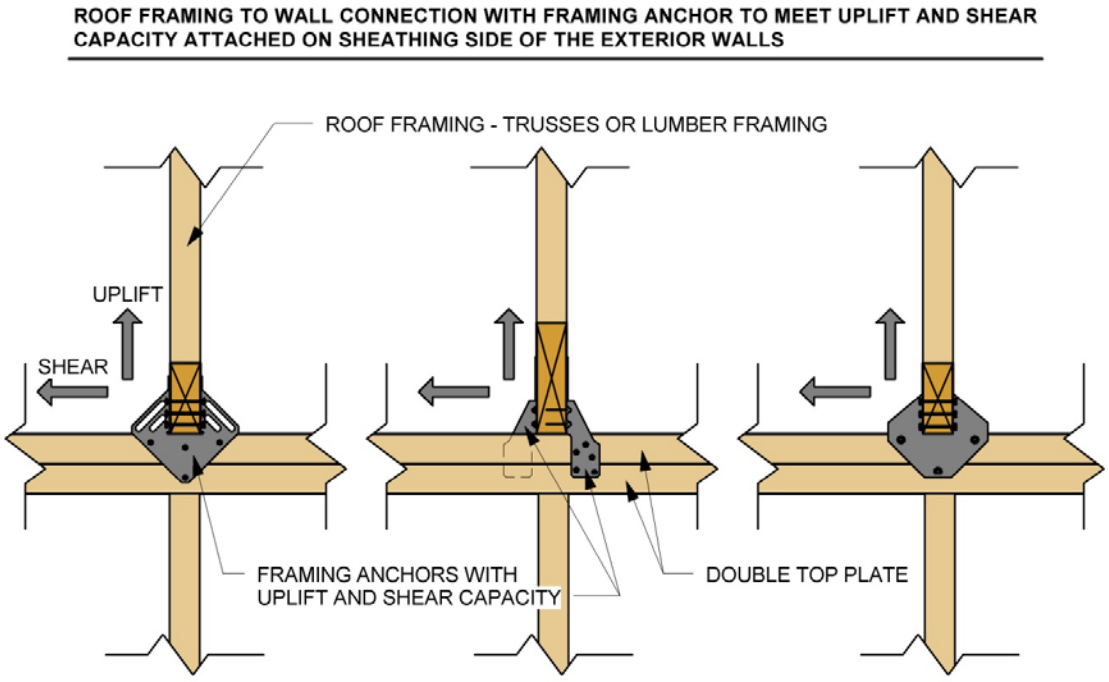


Figure AR402.2.4[b]
Roof Framing to Wall Connection Detail

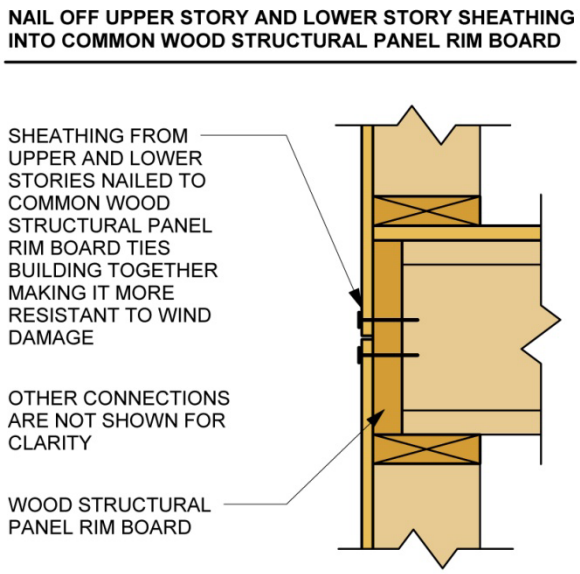


Figure AR402.2.5[b]
Sheathing Attachment at Elevated Floor Level Detail

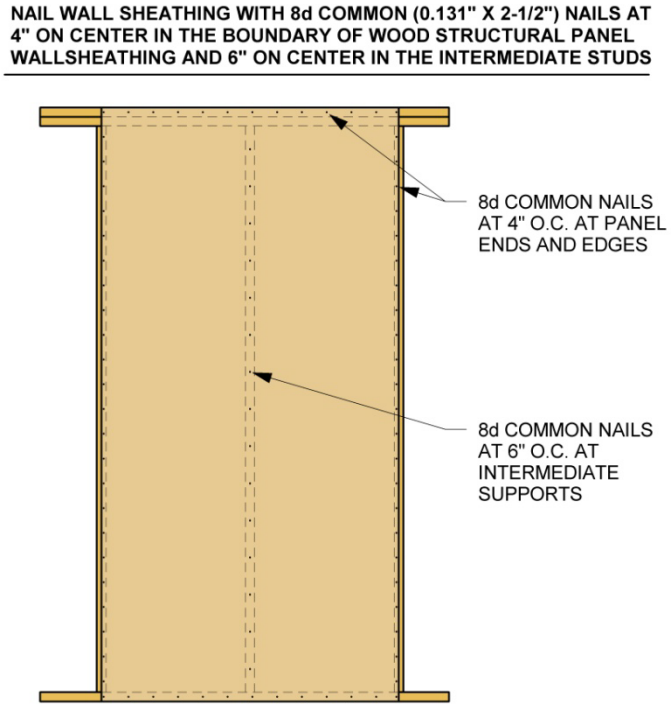


Figure AR402.2.6a[b]
Wall Sheathing Attachment Detail

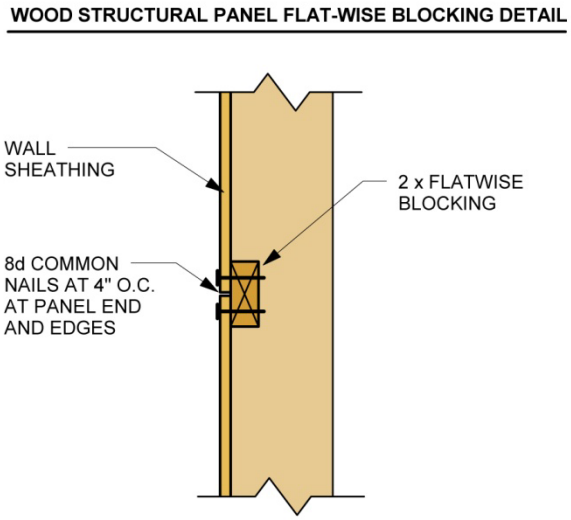


Figure AR402.2.6b
Panel Splice Detail

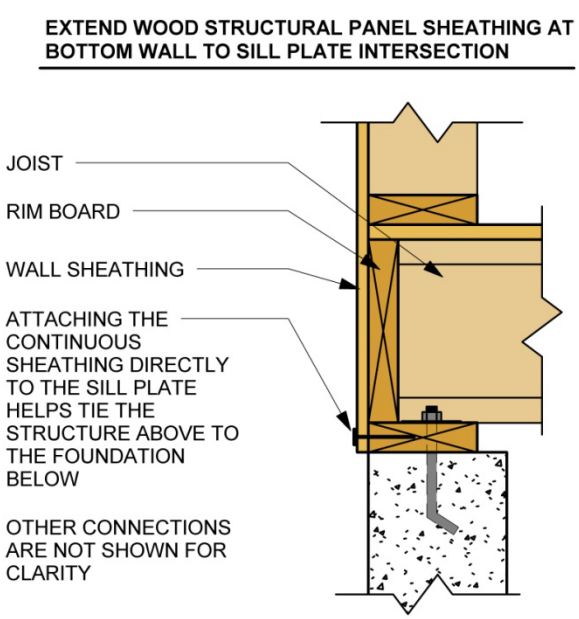


Figure AR402.2.8[b]
Wall Sheathing to Sill Plate Connection Detail

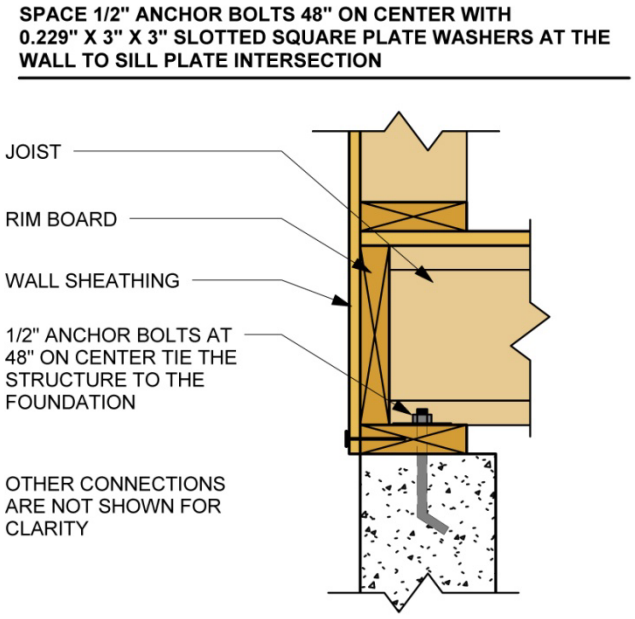


Figure AR402.2.9[b]
Anchor Bolt Connection Detail

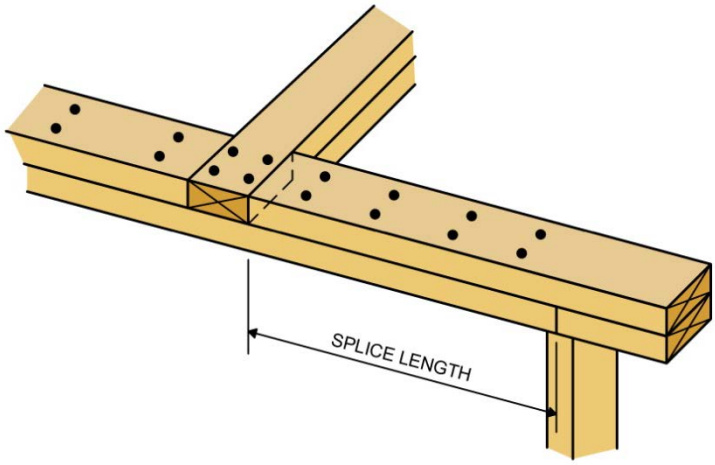


Figure AR402.2.10[c]
Top Plate Intersection Detail

(b) ***Form No. M310B*** **August 2011 APA – The Engineered Wood Association**

(c) ***WFCM Guide to Wood Construction in High Wind Areas for One- and Two-Family*** **Dwellings – American Forest & Paper Association and the American Wood Council**

SECTION AR403
OPTION B –MINIMUM WIND SPEED 110 MPH

AR403.1 Wind speed. *Buildings* shall be designed and constructed to comply with minimum wind speed of 110 mph Exposure B.

AR403.1.1 Design methods. The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. AF&PA *Wood Frame Construction Manual* (WFCM); or
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600); or
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7); or
4. AISI *Standard for Cold-Formed Steel Framing – Prescriptive Method For One- and Two-Family Dwellings* (AISI S230); or
5. *International Building Code*; or
6. *Concrete walls in accordance with R404 and R611of the International Residential Code*; or
7. *Walls of structural insulated panels in accordance with R613 of the International Residential Code*.

SECTION AR404
OPTION C –MINIMUM WIND SPEED 120 MPH

AR404.1 Wind speed. *Buildings* shall be designed and constructed to comply with minimum wind speed of 120 mph Exposure B.

AR404.1.1 Design methods. The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. AF&PA *Wood Frame Construction Manual* (WFCM); or
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600); or
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7); or
4. AISI *Standard for Cold-Formed Steel Framing – Prescriptive Method For One- and Two-Family Dwellings* (AISI S230); or
5. *International Building Code; or*
6. *Concrete walls in accordance with R404 and R611of the International Residential Code; or*
7. *Walls of structural insulated panels in accordance with R613 of the International Residential Code*.

SECTION AR405
OPTION D – MINIMUM WIND SPEED 130 MPH

AR405.1 Wind speed. *Buildings* shall be designed and constructed to comply with minimum wind speed of 130 mph Exposure B.

AR405.1.1 Design methods. The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. AF&PA *Wood Frame Construction Manual* (WFCM); or
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600); or
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7); or
4. AISI *Standard for Cold-Formed Steel Framing – Prescriptive Method For One- and Two-Family Dwellings* (AISI S230); or
5. *International Building Code; or*.
6. *Concrete walls in accordance with R404 and R611of the International Residential Code*.

SECTION AR406
FASTENERS AND CONNECTORS FOR CLADDING

AR406.1 Fasteners and connectors for cladding. Fasteners and connectors to be made of stainless steel, hot-dipped zinc-coated galvanized steel, mechanically deposited-zinc coated, silicon bronze or copper. Copper fasteners shall not be permitted for use in conjunction with steel.

SECTION AR407
FENESTRATION

AR407.1 Design pressure. Exterior windows and doors shall be designed to resist the design wind loads specified in *International Residential Code* Table R301.2(2) adjusted for height and exposure per *International Residential Code* Table R301.2(3) based on the minimum wind speed specified in this appendix by the local jurisdiction.

AR407.2 Anchorage methods. Window and door assembly anchoring systems shall be in accordance with the manufacturer's published recommendations to achieve the design pressure specified per Section AR407.1. Substitute anchoring systems shall provide equal or greater anchoring performance as demonstrated by accepted engineering practice. Anchorage shall not exceed the spacing for the tested rated performance.

SECTION AR408
ROOFING

AR408.1 Secondary water barrier. Underlayment shall be two layers applied in the following manner:

(a) Self-adhering tape as first layer. Install minimum 4 inch wide self-adhering modified bitumen tape over sheathing joints. Seal deck penetrations with self-adhering modified bitumen tape. **ASTM D 226 Type I, ASTM D 4869 Type I or ASTM D 6757** as second layer. Apply a 19-inch strip of underlayment felt parallel to and starting at eaves, secure with low-profile, capped-head nails or thin metal disks attached with roofing nails. Fasten at approximately 6 inches on center along the laps and at approximately 12 inches on center along a row in the field of the sheet between the side laps. All laps shall be a minimum of 4 inches. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches, fasten as before. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.

(b) Two layers of ASTM D 226 Type I, ASTM D 4869 Type I or ASTM D 6757. For each layer, apply a 19-inch strip of underlayment felt parallel to and starting at eaves, secure with low-profile, capped-head nails or thin metal disks attached with roofing nails. Fasten at approximately 6 inches on center along the laps and at approximately 12 inches on center along a row in the field of the sheet between the side laps. All laps shall be a minimum of 4 inches. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches, fasten as before. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

AR408.2 Fasteners.

AR408.2.1 Underlayment fasteners. Underlayment shall be attached using metal or plastic cap corrosion-resistant nails with a head diameter of not less than 1 inch with a thickness of at least 32-gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge with a sufficient length to penetrate through the roof sheathing or a minimum of ¾ inch into the roof sheathing.

AR408.2.2 Asphalt shingles fasteners. Where asphalt shingles shall be applied with corrosion-resistant nails with shanks made of minimum 12 gauge wire and a minimum head diameter of 3/8 inch. Nails shall be long enough to penetrate ¾ inch into the roof deck. Where the deck is less than 3/4 inch thick, the nails shall be long enough to penetrate completely through plywood decking and extend at least 1/8 inch through the roof deck.

AR408.3 Attachment. Where asphalt shingles shall have a minimum number of fasteners required by the manufacturer, but not less than six fasteners per strip shingle or three fasteners per individual shingle. Drive nail head flush with the shingle surface per figure AR408.2.

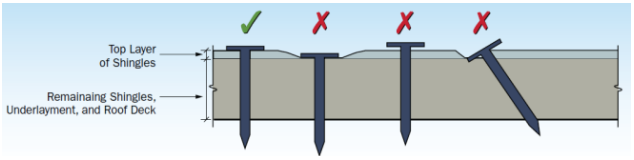


Figure AR408.2[d]

(d) FEMA *Home Builder's Guide to Coastal Construction Technical Fact Sheet No. 7.3 Asphalt Shingle Roofing for High Wind Regions.*

CHAPTER AR5
RESIDENTIAL STORM SHELTERS AND SAFE ROOMS

SECTION AR501
GENERAL

AR501.1 General. This section applies to the construction of residential storm shelters and safe rooms when constructed as separate detached buildings or as internal areas within buildings for the purpose of providing safe refuge for storms that produce high winds, such as tornados and hurricanes. Residential storm shelters or safe rooms shall be offered as an optional package.

SECTION AR502
RESIDENTIAL STORM SHELTERS AND SAFE ROOMS

AR502.1 Residential storm shelters. Residential storm shelters when constructed shall be in compliance with the following:

1. *ICC/NSSA-500* per IRC Section R323.

AR502.2 Residential safe rooms. Residential safe rooms when constructed shall be in compliance with the following:

1. *FEMA 361 Design and Construction Guidance for Community Safe Rooms;* or
2. *FEMA 320 Taking Shelter from the Storm: Building a Safe Room For Your Home and Small Business*

CHAPTER AR6
RESOURCES

SECTION AR601
CONTACTS

Georgia Department of Community Affairs (DCA)
Construction Codes
Georgia State Amendments to the State Minimum Standard Codes
http://www.dca.ga.gov/development/constructioncodes/programs/codeAmendments.asp
Phone: 404-679-3118

Georgia Department of Natural Resources (DNR)
Floodplain Management
4220 International Parkway, Ste. 101
Atlanta, GA 30354-3902
www.georgiadfirm.com
Phone: 404-675-1757

Federal Emergency Management Agency (FEMA)
www.fema.gov; www.floodsmart.gov
www.fema.gov/rebuild/buildingscience/
FEMA Publications and Technical Bulletins:
www.fema.gov/library/index.jsp
www.fema.gov/plan/prevent/floodplain/techbul.shtm

Georgia Emergency Management Agency (GEMA)
Georgia Office of Homeland Security
P.O. Box 18055
Atlanta, GA 30316-0055
www.gema.ga.gov
www.ready.ga.gov
Phone: 404-635-7000

Georgia Association of Regional Commissions (GARC)
www.garc.ga.gov
http://garc.ga.gov/main.php?Regional-Commissions-2
(for assistance in identifying Flood Hazard Areas)

International Code Council (ICC)
www.iccsafe.org

National Weather Service
www.srh.weather.gov

State Fire Marshal's Office
2 Martin Luther King Jr. Drive
Suite 920 / West Tower
Atlanta, Georgia 30334
www.oci.ga.gov
Phone: 404-656-7087

SECTION AR602
EMERGENCY INSPECTION KIT [e]

- □ **Staff's disaster response management plan**
- □ **Team contact list**
- □ **Area maps**
- □ **Official identification**
- □ **Personal identification**
- □ **Inspection forms and placards**
- □ **Communication equipment**
- □ **Clipboard**
- □ **Hard hat**
- □ **Orange safety vest**
- □ **Dust mask**
- □ **Work gloves**
- □ **Steel toe and waterproof boots**
- □ **Whistle**
- □ **First aid kit**
- □ **Latex gloves**
- □ **Safety glasses**
- □ **Sunglasses**
- □ **Pocket knife**
- □ **Matches**
- □ **Antibacterial hand wipes or alcohol-based hand sanitizer**
- □ **Insect repellant (w/ Deet or Picaridin)**
- □ **Sunscreen (SPF 15 or greater)**
- □ **Camera**
- □ **Black markers**
- □ **Pens & pencils**
- □ **Envelope for expense receipts**
- □ **Compass, GPS unit**
- □ **Backpack, waistpack**
- □ **Flashlight and extra batteries**
- □ **Battery-operated radio**
- □ **Duct tape**
- □ **Staples & stapler**
- □ **Staple gun**
- □ **Calculator**
- □ **Tire repair kit**

Remember to grab:

- □ **Personal identification**
- □ **Rain gear, extra clothing**
- □ **Water bottle**
- □ **Prescription medication**
- □ **Cell phone and charger**
- □ **Cash for personal expenses**
- □ **Toiletries**

(e) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

SECTION AR603
SAFETY TIPS [a]

1. **Always travel in teams of at least two people.**
2. **Always wear a hard hat, gloves, goggles, safety vest, and dust masks.**
3. **Always wear safety shoes capable of protecting the toes and bottom of the foot.**
4. **Survey the building exterior completely before entering.**
5. **Enter building only if authorized and if deemed safe to do so.**
6. **Be alert for falling objects.**
7. **In case of fire, injuries or victims, evacuate the area and alert the fire department immediately.**
8. **Avoid downed power lines and buildings under them or water surrounding them.**
9. **In case of gas leaks, shut off the gas (if possible) and report the leak.**
10. **In a flood situation, have a "walking stick."**

(a)*When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

SECTION AR604
MAJOR DISASTER PROCESS

(from link http://www.fema.gov/hazard/dproc.shtm)

A Major Disaster Declaration usually follows these steps:

- **Incident occurs and local government responds,** supplemented by neighboring communities and volunteer agencies. If overwhelmed, turn to the state for assistance;

Generally the local government will issue a local state of emergency

- **The State responds** with state resources, such as the National Guard and state agencies;

Prior to committing state resources, the Governor will declare a state of emergency in the counties impacted by the event for which assistance is needed.

- **Damage assessment** by local, state, federal, and volunteer organizations determine losses and recovery needs;

Generally the locals will submit a preliminary damage assessment to the State and the State will review and determine if state and/or federal assistance is needed. If federal assistance is needed, the state will request FEMA perform a preliminary joint damage assessment. If the Governor determines that the incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments then supplementary Federal assistance is requested (next step).

- **A Major Disaster Declaration** is requested by the Governor, based on the damage assessment, and agreement to commit state funds and resources to the long-term recovery;
- **FEMA evaluates** the request and recommends action to the White House based on the disaster, the local community and the state's ability to recover;
- **The President approves** the request or FEMA informs the Governor it has been denied. This decision process could take a few hours or several weeks depending on the nature of the disaster.

SECTION AR605
SAMPLE EVALUATION FORMS AND INSPECTION PLACARDS [e] (following pages)

Figure AR605.1 [e]

ATC-45 Rapid Evaluation Safety Assessment Form

Inspection

Inspector ID: _____ Inspection date: _____

Affiliation: _____ Inspection time: _____ ☐ AM ☐ PM

Areas inspected: ☐ Exterior only ☐ Exterior and interior

Building Description

Building name: _____

Address: _____

_____

Building contact/phone: _____

Number of stories: _____

"Footprint area" (square feet): _____

Number of residential units: _____

Type of Building

☐ Mid-rise or high-rise ☐ Pre-fabricated

☐ Low-rise multi-family ☐ One- or two-family dwelling

☐ Low-rise commercial

Primary Occupancy

☐ Dwelling ☐ Commercial ☐ Government

☐ Other residential ☐ Offices ☐ Historic

☐ Public assembly ☐ Industrial ☐ School

☐ Emergency services ☐ Other: _____

Evaluation

Investigate the building for the conditions below and check the appropriate column.

Observed Conditions:	Minor/None	Moderate	Severe
Collapse, partial collapse, or building off foundation	☐	☐	☐
Building significantly out of plumb or in danger	☐	☐	☐
Damage to primary structural members, racking of walls	☐	☐	☐
Falling hazard due to nonstructural damage	☐	☐	☐
Geotechnical hazard, scour, erosion, slope failure, etc.	☐	☐	☐
Electrical lines / fixtures submerged / leaning trees	☐	☐	☐
Other (specify) _____	☐	☐	☐

Estimated Building Damage (excluding contents)

☐ None

☐ > 0 to < 1%

☐ 1 to < 10%

☐ 10 to < 30%

☐ 30 to < 70%

☐ 70 to < 100%

☐ 100%

☐ See back of form for further comments.

Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

☐ **INSPECTED** (Green placard) ☐ **RESTRICTED USE** (Yellow placard) ☐ **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

_____

_____

Number of residential units vacated: _____

Further Actions

Check the boxes below only if further actions are needed.

☐ Barricades needed in the following areas: _____

_____

☐ Detailed Evaluation recommended: ☐ Structural ☐ Geotechnical ☐ Other: _____

☐ Substantial Damage determination recommended

☐ Other recommendations: _____

_____

☐ See back of form for further comments.

Figure AR605.2 [e]

ATC-45 Detailed Evaluation Safety Assessment Form

Inspection

Inspector ID: _____ Inspection date: _____

Affiliation: _____ Inspection time: _____ ☐ AM ☐ PM

Final Posting
from page 2

- ☐ Inspected
- ☐ Restricted Use
- ☐ Unsafe

Building Description

Building name: _____

Address: _____

_____

Building contact/phone: _____

Number of stories: _____

"Footprint area" (square feet): _____

Number of residential units: _____

Type of Building

- ☐ Mid-rise or High-rise
- ☐ Low-rise multi-family
- ☐ Low-rise commercial
- ☐ Pre-fabricated
- ☐ One- or two-family dwelling
- ☐ Other: _____

Primary Occupancy

- ☐ Dwelling
- ☐ Other residential
- ☐ Public assembly
- ☐ Emergency services
- ☐ Commercial
- ☐ Offices
- ☐ Industrial
- ☐ Other: _____
- ☐ Government
- ☐ Historic
- ☐ School

Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

	Minor/None	Moderate	Severe	Comments
Overall hazards:				
Collapse or partial collapse	☐	☐	☐	
Building or story lean or drift	☐	☐	☐	
Fractured or displaced foundation	☐	☐	☐	
Structural hazards:				
Failure of significant element/connection	☐	☐	☐	
Column, pier, or bearing wall	☐	☐	☐	
Roof/floor framing or connection	☐	☐	☐	
Superstructure/foundation connection	☐	☐	☐	
Moment frame	☐	☐	☐	
Diaphragm/horizontal bracing	☐	☐	☐	
Vertical bracing	☐	☐	☐	
Shear wall	☐	☐	☐	
Nonstructural hazards:				
Parapets, ornamentation	☐	☐	☐	
Canopy	☐	☐	☐	
Cladding, glazing	☐	☐	☐	
Ceilings, light fixtures	☐	☐	☐	
Stairs, exits, access walkways, gratings	☐	☐	☐	
Interior walls, partitions	☐	☐	☐	
Mechanical & electrical equipment	☐	☐	☐	
Elevators	☐	☐	☐	
Building contents, other _____	☐	☐	☐	
Geotechnical hazards:				
Slope failure, debris impact	☐	☐	☐	
Ground movement, erosion, sedimentation	☐	☐	☐	
Differential settlement	☐	☐	☐	

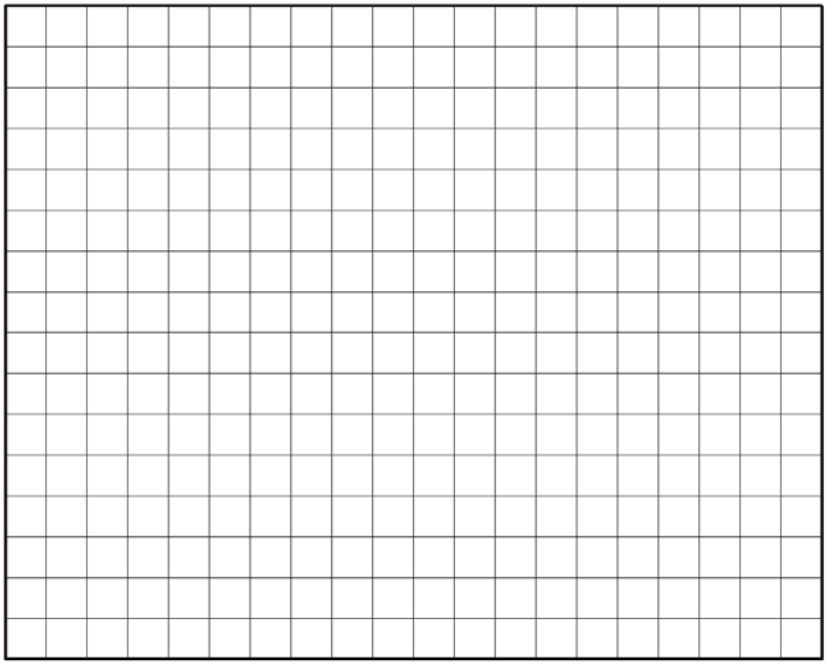
Continue on page 2

Figure AR605.2 [e] (Continued)

ATC-45 Detailed Evaluation Safety Assessment Form — Page 2

Building name: _____ Inspector ID: _____

Sketch
Make a sketch of the damaged building in the space provided. Indicate damage points.



Estimated Building Damage
(excluding contents)

- ☐ None
- ☐ >0 to <1%
- ☐ 1 to <10%
- ☐ 10 to <30%
- ☐ 30 to <70%
- ☐ 70 to <100%
- ☐ 100%

Posting
If there is an existing posting from a previous evaluation, check the appropriate box.

Previous posting: ☐ INSPECTED ☐ RESTRICTED USE ☐ UNSAFE Inspector ID: _____ Date: _____

If necessary, revise the posting based on the new evaluation and team judgment. *Severe* conditions endangering the overall building are grounds for an Unsafe posting. Local *Severe* and overall *Moderate* conditions may allow a Restricted Use posting. Indicate the current posting below and at the top of page one, whether the posting has been revised or not.

☐ **INSPECTED** (Green placard) ☐ **RESTRICTED USE** (Yellow placard) ☐ **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

Number of residential units vacated: _____

Further Actions Check the boxes below only if further actions are needed.

☐ Barricades needed in the following areas: _____

☐ Engineering Evaluation recommended: ☐ Structural ☐ Geotechnical ☐ Other _____

☐ Substantial Damage determination recommended

☐ Other recommendations: _____

INSPECTED

LAWFUL OCCUPANCY PERMITTED

This structure has been inspected (as indicated below) and no apparent structural hazard has been found.

Date _____

Time _____

☐ **Inspected Exterior Only**

☐ **Inspected Exterior and Interior**

Report any unsafe condition to local authorities; reinspection may be required.

Inspector Comments:

_____

_____

_____

_____

Facility Name and Address:

_____

_____

_____

This facility was inspected under emergency conditions for:

_____

(Jurisdiction)

Inspector ID / Agency

_____

_____

_____

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Figure AR605.3 e

RESTRICTED USE

Caution: This structure has been inspected and found to be damaged as described below:

_____

_____

_____

_____

Entry, occupancy, and lawful use are restricted as indicated below:

☐ Do not enter the following areas: _____

_____

☐ Brief entry allowed for access to contents: _____

_____

☐ Other restrictions: _____

_____

Facility name and address:

_____

_____

_____

Date _____

Time _____

This facility was inspected under emergency conditions for:

_____

(Jurisdiction)

Inspector ID / Agency

_____

_____

_____

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Figure AR605.4 [e]

UNSAFE

DO NOT ENTER OR OCCUPY
(THIS PLACARD IS NOT A DEMOLITION ORDER)

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below:

_____
_____
_____
_____
_____
_____

Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.

Facility Name and Address:

_____
_____
_____

Date _____

Time _____

This facility was inspected under emergency conditions for:

_____
(Jurisdiction)

Inspector ID / Agency

_____
_____
_____

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Figure AR605.5 e

CHAPTER AR7
REFERENCES

REFERENCED STANDARDS

ASCE Standards ASCE/SEI 24-05 Flood Resistant Design and Construction
FEMA P-320, Third Edition / August 2008 Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business, Includes Construction Plans and Cost Estimates
FEMA 361, Second Edition / August 2008 Design and Construction Guidance for Community Safe Rooms
FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials

REFERENCED RESOURCES

(a) *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007
(b) *Form No. M310B* August 2011 APA – The Engineered Wood Association; www.apawood.org
(c) *WFCM Guide to Wood Construction in High Wind Areas for One- and Two-Family* Dwellings – American Forest & Paper Association and the American Wood Council; www.awc.org
(d) FEMA *Home Builder's Guide to Coastal Construction Technical Fact Sheet No. 7.3 Asphalt Shingle Roofing for High Wind Regions*.
(e) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

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Georgia Construction Codes

Georgia's uniform construction codes are designed to help protect the life, health, and property of all Georgians from the hazards of faulty design and construction; unsafe, unsound, and unhealthy structures and conditions; and the financial hardship resulting from unnecessarily high construction and operating costs of houses, buildings, and similar structures.

The Uniform Codes Act is codified in Chapter 2 of Title 8 of The Official Code of Georgia Annotated. OCGA Section 8-2-20(9)(B) identifies the ten "state minimum standard codes". Each of these separate codes typically consists of a base code (e.g. The International Building Code as published by the International Code Council) and a set of Georgia amendments to the base code. Georgia law further dictates that eight of these codes are "mandatory" (are applicable to all construction whether or not they are locally enforced) and two are "permissive" (only applicable if a local government chooses to adopt and enforce one or more of these codes). These codes are as follows:

Mandatory Codes:

- Georgia State Minimum Standard Building Code (International Building Code with Georgia State Amendments)
- Georgia State Minimum Standard One and Two Family Dwelling Code (International Residential Code for One- and Two-Family Dwellings with Georgia State Amendments)
- Georgia State Minimum Standard Fire Code (International Fire Code with Georgia State Amendments)
- Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments)
- Georgia State Minimum Standard Mechanical Code (International Mechanical Code with Georgia State Amendments)
- Georgia State Minimum Standard Gas Code (International Fuel Gas Code with Georgia State Amendments)
- Georgia State Minimum Standard Electrical Code (National Electrical Code with Georgia State Amendments)
- Georgia State Minimum Standard Energy Code (International Energy Conservation Code with Georgia State Supplements and Amendments)

Permissive Codes:

- International Property Maintenance Code
- International Existing Building Code
- National Green Building Standard

As noted above, the building, one and two family dwelling, fire, plumbing, mechanical, gas, electrical and energy codes are mandatory codes, meaning that under Georgia law, any structure built in Georgia must comply with these codes, whether or not the local government chooses to locally enforce these codes.

In addition, since Georgia law gives the enumerated codes statewide applicability, local governments should not adopt the mandatory codes themselves. Local governments must, however, adopt administrative procedures in order to enforce them (OCGA Section 8-2-25(a)). However, the local government can choose which of the mandatory codes it wishes to locally enforce.

The remaining codes are referred to as permissive codes. Unlike the mandatory codes, in order for a local government to enforce one or more of these permissive codes, that code or codes must be adopted, either by ordinance or resolution, by the local jurisdiction. A copy of the ordinance or resolution adopted must be forwarded to DCA (OCGA Section 8-2-25 (b)).

Administration and Enforcement of the State Minimum Standard Codes

In order to properly administer and enforce the state minimum standard codes, local governments must adopt reasonable administrative provisions. The power to adopt these administrative procedures is set forth in OCGA Section 8-2-26(a)(1). These provisions include procedural requirements for the enforcement of the codes, provisions for hearings, provisions for appeals from decisions of local inspectors, and any other procedures necessary for the proper local administration and enforcement of the state minimum standard codes. These powers include:

- Inspecting buildings and other structures to ensure compliance with the code;
- Employing inspectors and other personnel necessary for the proper enforcement of codes;
- Requiring permits and to establishment charges for said permits; and
- Contracting with other local governments for code enforcement.

DCA periodically reviews, amends and/or updates the state minimum standard codes. If a local government chooses to locally enforce any of these codes, it must enforce the latest editions and the amendments adopted by DCA. DCA has developed a sample resolution/ordinance that may be used as a guide for local governments in the development of their administrative procedures.

Appendices

It should be noted that The Uniform Codes Act states that the appendices of the codes are not enforceable unless referenced in the body of the code, adopted by DCA, or specifically adopted by a municipality or county. If any appendices have been adopted by DCA, they will be noted in the Georgia amendments to the base code.

Local Amendments

The Uniform Codes Act provides that local governments may, under certain conditions, adopt local amendments to the state minimum standard codes. Please note that DCA does not approve or disapprove any local amendment. The department provides a recommendation only. However, in order to enforce any local amendment, the local government must submit the proposed amendment to DCA for review (OCGA Section 8-2-25(c)).

There are several requirements local governments must meet in order to enact a local code amendment. These requirements are as follows:

- The requirements in the proposed local amendment cannot be less stringent than the requirements in the state minimum standard code;
- The local requirements must be based on local climatic, geologic, topographic, or public safety factors;
- The legislative findings of the local governing body must identify the need for the more stringent requirements; and
- The local government must submit the proposed amendment to DCA 60 days prior to the proposed adoption of such an amendment.

After submittal of the proposed local amendment, DCA has 60 days in which to forward its recommendations to the local government. DCA may respond in three ways: recommend adoption of the amendment, recommend the amendment not be adopted, or have no comment on the proposal. If DCA recommends against the adoption of the proposed amendment, the local governing body must vote specifically to reject DCA's recommendation before the local amendment can be adopted and enforced. If DCA fails to respond within the 60-day timeframe, the local government may adopt the proposed local amendment.

After adoption by the local governing authority, copies of local amendments must be filed with DCA.

The Current State Minimum Standard Codes

The following are the current state minimum standard codes for construction as adopted by the Board of Community Affairs. Please note there are Georgia Amendments to most of the following codes.

Current Codes as Adopted by DCA - Mandatory Codes:

- International Building Code, 2006 Edition, with Georgia Amendments (2007) (2009) (2010)
- International Residential Code, 2006 Edition, with Georgia Amendments (2007) (2008) (2009) (2010) (2011) (2012) (2013)
- International Fire Code, 2006 Edition, with Georgia Amendments (2007) (2010)
- International Plumbing Code, 2006 Edition, with Georgia Amendments (2007) (2008) (2009) (2010) (2011) (2012) (2013)
- International Mechanical Code, 2006 Edition, with Georgia Amendments (2007) (2008) (2010) (2011) (2012) International Fuel Gas Code, 2006 Edition, with Georgia Amendments (2007) (2008) (2009) (2010) (2012)
- National Electrical Code, 2011 Edition, with no Georgia Amendments
- International Energy Conservation Code, 2009 Edition, with Georgia Supplements and Amendments (2011) (2012)

Current Codes as Adopted by DCA - Permissive Codes:

- International Existing Building Code, 2006 Edition, with Georgia Amendments (2009)

- International Property Maintenance Code, 2006 Edition, with Georgia Amendments (2009)
- National Green Building Standard, 2008 Edition, with Georgia Amendments (2011)

Sub-Appendix A provides a 2010 map of the Counties and Cities depicting the current status of construction permits and code enforcement. .

Manufactured Housing

Manufactured homes are built as dwelling units of at least 320 square feet in size with a permanent chassis to assure the initial and continued transportability of the home. All transportable sections of manufactured homes built in the U.S. after June 15, 1976, must contain a red label. The label is the manufacturer's certification that the home section is built in accordance with HUD's construction and safety standards. HUD standards cover Body and Frame Requirements, Thermal Protection, Plumbing, Electrical, Fire Safety and other aspects of the home. They are published in the Code of Federal Regulations at 24 CFR 3280.

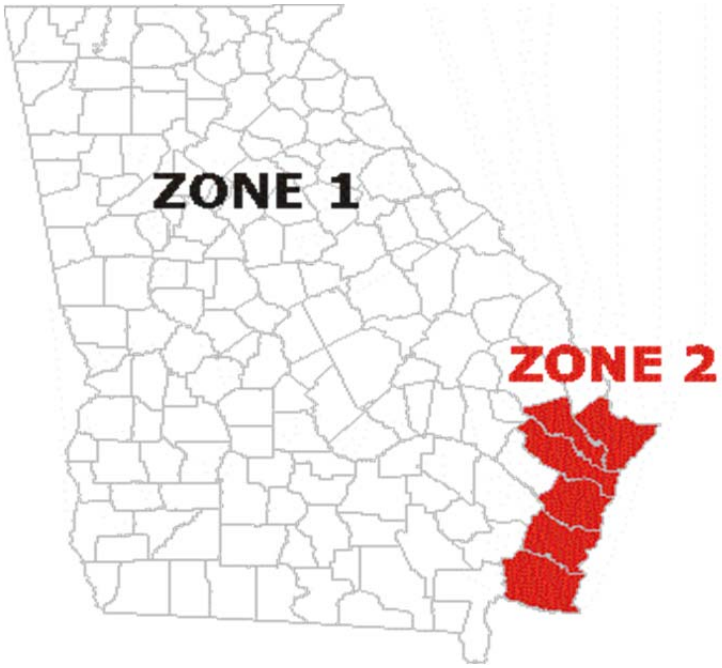
The Manufactured Housing Section of the State Fire Marshal's Office, which is part of the Insurance Commissioner's office, is the licensing agent for all manufacturers and dealers of manufactured homes. Effective January 1, 1993, all manufactured home installers must be state licensed.

All manufactured homes are required to have a Homeowners Manual and a Manufacturer's Installation Manual. The Manufacturers' Installation Manual gives the installers exact installation instructions pertaining to that particular make and model of the home and addresses issues with regard to the site that the homeowner should study before delivery of the home. The Federal Regulations require that all homes have a compliance certificate permanently affixed in the home. This certificate contains all vital information pertaining to the home, such as the serial number of the home, HUD label number, and the serial number of the appliances installed by the manufacturer of the home. This certificate also designates the wind and thermal zone for which the home was manufactured. This information is especially important to the consumer considering a manufactured home located along the eastern coastline, because a home may not be set in a higher zone than that for which it was built.

There are 2 wind zones in Georgia:

- Wind Zone 1 is for winds up to 99 miles per hour.
- Wind Zone 2 is for 100 to 109 miles per hour.

Wind Zone 2 only effects the 6 counties that touch the coast are in Zone 2 are Chatham, Bryan, Liberty, McIntosh, Glynn and Camden. All other Georgia counties are Zone 1. A map depicting this information is shown below.



During the 2004 General Assembly, legislation was passed with changes to the Uniform Standards Code for Manufactured Homes Act. Among other provisions, the new law requires installers to purchase a permit from the Insurance and Safety Fire Commissioner Office for each new or pre-owned manufactured home installed in Georgia. These new requirements became effective October 1, 2004.

During the 2010 legislative session, House Bill 1055 was passed by the Georgia General Assembly and signed into law by Governor Perdue on May 12, 2010. In this legislation, modifications were made to Title 8,Title 25, and Title 43 of the Official Code of Georgia Annotated(O.C.G.A.), regarding licensing and permitting fees.

Since January 1, 2005 the Manufactured Housing Section is responsible for performing random inspections on installations performed by each installer. Violations found during random inspections will require correction. The changes to the law also give the Department additional enforcement provisions regarding violations.

Additional information about manufactured housing can be found at the following web site:
http://www.gainsurance.org/FIREMARSHAL/ManufacturedHousing.aspx

Appendix J

Georgia State Laws Relating to Mitigation

Georgia Laws Relating to Mitigation

Georgia Emergency Management Act of 1981, as amended, O.C.G.A § 38-3-1

Under provision of the Georgia Emergency Management Act of 1981, as amended, subject to the direction and control of the Governor, the GEMA Director shall be responsible for the program of emergency management in the state. The Director shall coordinate emergency management activities of all agencies/organizations within the state and serve as a liaison with other states and the federal government.

Soil and Water Conservation Districts Law, O.C.G.A §§ 2-6-20 to 23 & § 2-6-27

In 1937 the General Assembly of the State of Georgia enacted the Georgia Soil Conservation Districts Law. Act No. 399 stated:

> "It is hereby declared to be the policy of the legislature to provide for the conservation of the soil and soil resources of this State, and for the control and prevention of soil erosion, and thereby to preserve the natural resources, control floods, prevent impairment of dams and reservoirs, assist in maintaining the navigability of rivers and harbors, preserve wildlife, protect health, safety and general welfare of the people of this State."

It also included a provision that supported the establishment of the Georgia Soil and Water Conservation Commission to serve as an administrative and technical assistance provider to local conservation districts.

Coastal Marshlands Protection, O.C.G.A. § 12-5-280

The Coastal Marshlands Protection Act provides the Coastal Resources Division with the authority to protect tidal wetlands. The Coastal Marshlands Protection Act limits certain activities and structures in marsh areas and requires permits for other activities and structures. Erecting structures, dredging, or filling marsh areas requires a Marsh Permit administered through the Coastal Management Program. In cases where the proposed activity involves construction on State-owned tidal water bottoms, a Revocable License issued by the Coastal Resources Division may also be required. Marsh Permits and Revocable Licenses are not issued for activities that are inconsistent with the Georgia Coastal Management Program.

Georgia Safe Dams Act of 1978, O.C.G.A §§ 12-5-370 to 385

The Georgia Safe Dams Act provides for the inspection and permitting of certain dams to protect the health, safety, and welfare of Georgia residents. The Environmental Protection Division of the Georgia Department of Natural Resources is responsible for inspecting and certifying dams.

Erosion and Sedimentation Act, O.C.G.A § 12-7-1

The Georgia Erosion and Sedimentation Act requires that each county or municipality adopt a comprehensive ordinance establishing procedures governing land-disturbing activities based on the minimum requirements established by the Act. The Erosion and Sedimentation Act is administered by the Environmental Protection Division of the Georgia Department of Natural Resources, and by local governments. Permits are required for specified "land-disturbing activities," including the construction or modification of manufacturing facilities, construction activities, certain activities associated with transportation facilities, activities on marsh hammocks, etc. With certain constraints, permitting authority can be delegated to local governments.

Georgia Environmental Policy Act, O.C.G.A § 12-16-1

The Georgia Environmental Policy Act (GEPA) requires that all State agencies and activities prepare an Environmental Impact Report as part of the decision-making process. This is required for all activities that may have an impact on the environment. Alternatives to the proposed project or activity must be considered as part of the report.

Metropolitan North Georgia Water Planning District Act, O.C.G.A § 12-5-570

The Metropolitan North Georgia Water Planning District (Metro Water District) was created by the Georgia General Assembly in 2001 to establish policy, create plans and promote intergovernmental coordination of all water issues in the District from a regional perspective. The Metro Water District includes 15 counties and over 92 cities within the metro Atlanta region.

The primary purpose of the Metro Water District is to develop regional and watershed-specific plans for stormwater management, wastewater treatment and water supply and conservation. Three comprehensive water plans, originally adopted in 2003, were updated in 2009:

- District-wide Watershed Management Plan
- Long-term Wastewater Management Plan
- Water Supply and Water Conservation Management Plan

These plans will protect water quality and public water supplies in and downstream of the region, protect recreational values of the waters in and downstream of the region, and minimize potential adverse impacts of development on waters in and downstream of the region.

Uniform Codes Act, O.C.G.A. § 8-2-20

There are twelve adopted construction codes in Georgia. Each of these separate codes typically consists of a base code (e.g. The International Building Code as published by the International Code Council) and a set of Georgia amendments to the base code. Eight of these codes are "mandatory" (are applicable to all construction whether or not they are locally enforced) and four are "permissive"

(only applicable if a local government chooses to adopt and enforce one or more of these codes).

The Uniform Standards Code for Manufactured Homes Act and Installation of Manufactured and Mobile Homes, O.C.G.A § 8-2-130 and § 8-2-160

Revisions to the Georgia law were necessary to bring Georgia into compliance with the National Manufactured Home Improvement Act of 2000 with respect to manufactured home installation, installation inspections and dispute resolution procedures.

Georgia Planning Act of 1989, O.C.G.A §45-12-200

The Georgia Planning Act is the foundation for community and regional planning in the state. It acknowledges that "Coordinated and comprehensive planning by all levels of government within the State of Georgia is of vital importance to the state and its citizens. The state has an essential public interest in promoting, developing, sustaining, and assisting coordinated and comprehensive planning by all levels of government. This article is intended to provide for the coordination of planning, at the direction of the Governor, by departments, agencies, commissions, and other institutions of the state, and this article shall be liberally construed to achieve that end."

The Georgia Planning Act of 1989 encourages each local government in the state to develop a comprehensive plan to guide its activities over a 20-year planning horizon. In order to provide local governments with guidelines to use in preparing their comprehensive plans, the Act called for the Georgia Departments of Community Affairs and Natural Resources to develop a set of minimum requirements to be met in each local plan. These minimum requirements are known as the “Minimum Planning Standards”.

The environmental planning criteria that follow are the part of the Minimum Planning Standards that deals specifically with the protection of water supply watersheds, groundwater recharge areas, wetlands, river corridors, and mountains. These criteria were developed by the Department of Natural Resources (DNR) as mandated in Part V of the Georgia Planning Act and in the Mountains and River Corridors Protection Act.

Mountain and River Corridor Protection Act, §12-2-8

The statute that is informally known as the Mountain and River Corridor Protection Act (O.C.G.A.12-2-8) authorizes the Department of Natural Resources to develop minimum standards for the protection of river corridors (and mountains, watersheds, and wetlands) that can be adopted by local governments. The Act is administered by the Environmental Protection Division.

Georgia Forest Fire Protection Act, O.C.G.A §12-6-80 to §12-6-93

According to the Georgia Forest Fire Protection Act, all forest fire protection work is under the direction of the Georgia Forestry Commission (GFC). The Act gives

the GFC the authority to go on any land for the purpose of preventing, controlling, or suppressing any fire burning uncontrolled on any forest land. This law also requires a permit issued by GFC for the burning of woods, lands, marshes, or other flammable vegetation.

Georgia Prescribed Burning Act, O.C.G.A §12-6-145

The Georgia General Assembly, recognizing that the forestlands and resources of the state are a natural resource of great economic value to the citizens of the state and that prescribed burning is a resource protection and land management tool which benefits the safety of the public, Georgia's forest resources, the environment and the economy of the state, enacted the Georgia Prescribed Burning Act (Ga. Code Ann. 12-6-145 – 12-6-149).

The purpose of the Act is to authorize and promote the continued use of prescribed burning for community protection, silvicultural, environmental, and wildlife purposes.

The legislature understood that – as the state's population continues to grow – pressures from liability issues and smoke nuisance complaints cause prescribed burn practitioners to limit burn activity and reduce the benefits to the state.

House Bill 169, passed into law in 2010, created the Georgia Geospatial Advisory Council (GGAC)

This law created the Georgia Geospatial Advisory Council and tasked DNR Environmental Protection Division (EPD) with coordinating state executive branch departments and agencies to appoint members of the council, which may consist of representatives from state departments and agencies, local governments, universities, regional commissions, or any other entity the division determines to be a stakeholder active in the development or consumption of reliable geospatial resources. This council will audit the geospatial capabilities at the county, region and state level. The audit shall contain a complete status update and recommendations for utilizing the geospatial capabilities in Georgia to meet Federal Emergency Management Agency notification requirements, recommendations for moving forward to achieve governmental data interoperability and enhanced delivery of services to Georgia citizens through the geospatial approach, and any other information determined by the council to be necessary for the advancement of geospatial technology. This law is to be repealed on June 30, 2012.