

# ***I. EXECUTIVE SUMMARY***

## I. Executive Summary of the *Charleston Regional Hazard Mitigation Plan*

### *Planning Process*

The *Charleston Regional Hazard Mitigation Plan* is the result of a community wide effort to determine appropriate mechanisms to address the various types of hazards facing the Charleston Region. The Charleston Regional Hazard Mitigation Program Committee, which drafted this plan, consisted of members from each of the local government entities within Charleston County, from State agencies with a focus on hazard mitigation, from Federal agencies with a focus on hazard mitigation, and from the non-profit and public sectors. The committees established under the local "Project Impact" initiative also provide input into the projects recommended in the plan. At the initiation of the planning process utilized in drafting this plan, a questionnaire regarding hazard mitigation and project prioritization was distributed through directed mailings as well as through meetings with professional organizations to solicit input into the recommended contents for the plan.

Public meetings were also conducted in three areas throughout the Region to obtain additional input from the citizens of the Region regarding the contents of this plan. In 2003, as a result of changes to Federal law under the Disaster Mitigation Act of 2000, special purpose districts in Charleston County joined the planning process so they would have the opportunity to adopt an approved hazard mitigation plan and meet the new requirements of the Act. All of the original plan signatories have continued to participate in this plan (*none have dropped out*) and all of the Special Purpose District Governments that adopted the plan during 2004 (*see Attachment II-D*) have continued to participate in the planning process through 2009. Two additional government entities have joined the planning process and adopted the plan since 2004: namely the College of Charleston and the Charleston County School District. All of the local government entities within Charleston County are now participating in the plan and have adopted the plan. During 2006-2007, a questionnaire was again distributed to the plan signatories and others with an interest in hazard mitigation to determine if there were any changes to hazard mitigation and project prioritization since 1999 when the original questionnaire was distributed. The results of this second survey are included in this plan, as applicable. The planning process is more thoroughly explained in Section II of this plan. The plan has been drafted in such a manner that the local government entities within Charleston County are able to prepare an action plan for their respective entities and adopt this plan for their use within their government entity. This cooperative approach enables the Region to have a more standardized way of addressing hazards which face all of the government entities, and also avoids a duplication of effort that would occur if all of the government entities individually undertook this type of planning initiative.

### *Hazard Assessment*

The *Charleston Regional Hazard Mitigation Plan* is based upon the results of the questionnaires and the comments received through both committee and public meetings. The plan includes in Section III a ranking of the types of hazards facing the Charleston Region, with hurricanes being the most serious threat, followed by flooding, tornadoes, earthquakes, wildfires, hazardous material incidents, terrorism activities, and other hazards (such as winter storms and drought). Additional hazards for which the possibility of occurrence is much more remote or non-existent, such as tsunamis, dam failure, volcanoes, landslides, avalanches, land subsidence, and expansive soils are also now discussed in the plan to meet Disaster Mitigation Act of 2000 requirements. The hazard description section of the plan provides a brief description of the nature of the hazard for these types of hazards within the Charleston Region. The discussion section of the plan provides a more detailed description of the history of hazard event incidents in the Charleston Region. As this section illuminates, the Charleston Region has had numerous, mostly localized,

hazard events and a few large-scale hazard events (e.g. Hurricane Hugo in 1989, earthquake of 1886) throughout our history.

### ***Problem Assessment***

The *Charleston Regional Hazard Mitigation Plan* also addresses the vulnerability of the Region to each of the major types of hazards facing the region in Section IV, Problem Assessment. Each of the major hazard types are discussed in terms of which types of buildings are most vulnerable to each type of hazard with an estimation of the number of vulnerable buildings within the Region to flood/hurricane damage being provided (e.g. a total of 71,785 buildings are estimated to be vulnerable to flood damage in the Region based upon their location in the Special Flood Hazard Area only, and of these, an estimated 47,169 buildings are estimated to be vulnerable based upon both their date of construction and location within the Special Flood Hazard Area) (Section A).

Estimated potential building and other property losses due to earthquakes and tornadoes are also discussed (Section A). The types of hazards that pose a threat to the infrastructure to the Region and in what manner (Section B), known flood damages (Section C), past flood impacts (Section D), Emergency Warning Needs (Section E), Critical Facilities (Section F), Natural and Beneficial Functions of floodplains (Section G), Development and Population Trends (Section H), and Economic Impact of hazard events (Section I) are also reviewed. The overall determination from this section is that the Charleston Region is potentially vulnerable to loss as a result of a hazard event to a relatively high degree, particularly considering the increasing population of elderly people and increasing number of residents not necessarily familiar with the types of hazards facing the region and how best to prepare and protect themselves from these hazards. Since tourism plays such a predominant role in the local economy and is often negatively affected by large-scale hazard events with national media coverage, the potential economic losses associated with a hazard event are potentially high.

### ***Goals***

The goals of the *Charleston Regional Hazard Mitigation Plan* (Section V) compliment the goals of the Charleston County “Project Impact” initiative and the Community Action for a Renewed Environment program. In general, these goals are intended to minimize future losses of life and property associated with hazard events facing the Charleston Region. Since this plan is a regional plan intended for adoption by the local government entities, the Charleston Regional Hazard Mitigation Program Committee provided flexibility within this plan to enable local government entities with specific goals to include those in this section as they deemed appropriate.

### ***Review of Possible Activities***

The Possible Activities section of the *Charleston Regional Hazard Mitigation Plan* (Section VI) provides prioritization factors to be utilized in selecting projects to be performed as well as a description of the on-going activities currently being performed within the Region. This section also lists suggested other activities that possibly could be performed to enhance the hazard mitigation within the Charleston Region. This section discusses Preventive Activities (e.g. primarily regulatory activities designed to provide improved resistance of development to hazard events) in Section A, Property Protection Activities (e.g. activities designed to improve the ability of the citizens or the existing building stock/infrastructure to withstand hazard events) in Section B, Natural and Beneficial Functions of Floodplains/Resource Preservation Activities (e.g. activities

geared towards the preservation of the natural and historic resources of the Region) in Section C, Emergency Services (e.g. activities geared towards hazard event warning and government response) in Section D, Structural Projects (e.g. activities which are infrastructure improvements designed to enhance the hazard resistance of the Region) in Section E, and Public Information Activities (e.g. activities geared towards educating the citizens of the Region regarding hazard preparation and response) in Section F. The overall view provided within this section is that the Region is already doing many activities for the enhancement of our hazard mitigation, however, there are also additional activities which may be done to further prepare our residents for the hazard events to which the Region is vulnerable. This section has been utilized by the respective government entities to draft their individual action plans regarding which types of activities they intend to pursue in the future to reduce their hazard vulnerability. The prioritization factors within these sections also play a major role in additional project determination under AProject Impact@ as new possible activities are considered under this initiative.

### ***Adopting Resolution***

As each government entity adopts this plan, the adopting resolution is to be included within Section VII. This plan is intended to be a working document which may be subject to revision as the Community Rating System schedule changes or as AProject Impact@ decision making committees request revisions that would enhance their ability to perform their functions. The adopting resolutions for the government entities therefore generally include a section recognizing the Charleston Regional Hazard Mitigation Program Committee as a continuing entity to be charged with maintaining and making revisions to this plan as needed, and making periodic reports regarding this plan to the respective Governing Councils or Commissions for the adopting government entities.

### ***Action Plan***

Each government or other adopting entity has included within the plan for their entity a specific action plan regarding activities that they propose be undertaken or continued during each year. This action plan includes activities from several of all of the types of activities discussed within Section VI of the plan. While it is the intention of the entities to undertake the activities included within the action plan, it is also recognized that circumstances may change and the activities listed may not be able to be accomplished within the time frame indicated, depending upon the circumstances encountered. The Community Rating System (CRS) program recognizes that as circumstances change, action plans may also need to change accordingly, and therefore does not punish communities for not performing activities listed within the action plan as long as in the annual review of the plan includes an explanation as to why the activity was not accomplished. The action plan for each entity is periodically updated to reflect changes and to indicate activities for the time period for each year. Each entity that adopted the plan when it was originally developed has also completed a status report on the action plan for the 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, and 2009-2010 years, indicating the progress towards the activities listed within this plan. Those entities that adopted the plan for the first time during 2004 or in a later year also generated status reports of their action plan items in the year(s) following their initial plan adoption.

### ***CONCLUSION***

The *Charleston Regional Hazard Mitigation Plan* is the result of a cooperative effort of the public and private sectors intended to enhance the ability of all of the local jurisdictions within the

Charleston Region to prepare for and respond to hazard events. The plan is comprehensive and complements other initiatives such as “Project Impact” and “Community Action for a Renewed Environment” currently being undertaken throughout the Charleston Region to help make the Region more resistant to disasters and to reduce environmental pollution within the Region. Additional information regarding this plan is available through the local jurisdictions or Charleston County Building Services.

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