

CAPABILITY ASSESSMENT

This section of the Plan discusses the capability of Catawba County and the participating municipal jurisdictions to implement hazard mitigation activities. It consists of the following six subsections:

- What is a Capability Assessment?
- Conducting the Capability Assessment
- Capability Assessment Findings
- Previously Implemented Mitigation Measures
- Conclusions on Local Capability
- Linking the Capability Assessment with the Risk Assessment and the Mitigation Strategy

What is a Capability Assessment?

The purpose of conducting a capability assessment is to determine the ability of a local jurisdiction to implement a comprehensive mitigation strategy, and to identify potential opportunities for establishing or enhancing specific mitigation policies, programs or projects.¹ As in any planning process, it is important to try to establish which goals, objectives and/or actions are feasible, based on an understanding of the organizational capacity of those agencies or departments tasked with their implementation. A capability assessment helps to determine which mitigation actions are practical and likely to be implemented over time given a local government's planning and regulatory framework, level of administrative and technical support, amount of fiscal resources and current political climate.

A capability assessment has two primary components: an inventory of a local jurisdiction's relevant plans, ordinances or programs already in place; and an analysis of its capacity to carry them out. Careful examination of local capabilities will detect any existing gaps, shortfalls or weaknesses with ongoing government activities that could hinder proposed mitigation activities and possibly exacerbate community hazard vulnerability. A capability assessment also highlights the positive mitigation measures already in place or being implemented at the local government level, which should continue to be supported and enhanced if possible through future mitigation efforts.

The capability assessment completed for Catawba County and its municipalities serves as a critical planning step and an integral part of the foundation for designing an effective multi-jurisdictional hazard mitigation strategy. Coupled with the *Risk Assessment*, the *Capability Assessment* helps identify and target meaningful mitigation actions for incorporation in the *Mitigation Strategy* portion of the Hazard Mitigation Plan. It not only helps establish the goals and objectives for Catawba County to pursue under this Plan, but also ensures that those goals and objectives are realistically achievable under given local conditions.

¹ While the Interim Final Rule for implementing the Disaster Mitigation Act of 2000 does not require a local capability assessment to be completed for local hazard mitigation plans, it is a critical step to develop a mitigation strategy that meets the needs of each jurisdiction while taking into account their own unique abilities. The Rule does state that a community's mitigation strategy should be "based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools" (44 CFR, Part 201.6(c)(3)). Further, the State of North Carolina Division of Emergency Management recommends a local capability assessment to be completed for local hazard mitigation plans.

Conducting the Capability Assessment

In order to facilitate the inventory and analysis of local government capabilities throughout Catawba County, a detailed *Capability Assessment Survey*² was distributed to Catawba County's departments and local municipal jurisdictions. The survey questionnaire, which was completed by appropriate local government officials in 2004 and again during the 2009 plan update process, requested information on a variety of "capability indicators" such as existing local plans, policies, programs or ordinances that contribute to and/or hinder the community's ability to implement hazard mitigation actions. Other indicators included information related to each jurisdiction's fiscal, administrative and technical capabilities such as access to local budgetary and personnel resources for mitigation purposes. Survey respondents were also asked to comment on the current political climate in their jurisdiction to implement mitigation actions, an important consideration for any local planning or decision making process.

At a minimum, survey results provide an extensive inventory of existing local plans, ordinances, programs and resources in place or under development in addition to their overall effect on hazard loss reduction. In completing the survey, local officials were also required to conduct a self-assessment of their jurisdiction's specific capabilities. The survey instrument thereby not only helps accurately assess each jurisdiction's degree of local capability, but also serves as a good source of introspection for those jurisdictions wishing to improve their capability as identified gaps, weaknesses or conflicts can be recast as opportunities for specific actions to be proposed as part of the community's mitigation strategy.

The information provided by participating jurisdictions in response to the survey questionnaire was incorporated into a database for further analysis. A general scoring methodology³ was then applied to quantify and rank each jurisdiction's overall capability relative to one another. According to the scoring system, each capability indicator was assigned a point value based on its relevance to hazard mitigation. Additional points were added based on each jurisdiction's self-assessment of their own planning and regulatory capability, administrative and technical capability, fiscal capability and political capability.

A total score and general capability rating of "High," "Moderate" or "Limited" was then determined for each jurisdiction according to the total number of points received. These classifications are designed to provide nothing more than a general assessment of each individual jurisdiction's local capability relative to one another using a consistent methodology. In combination with the narrative responses provided by local officials, the results of this multi-jurisdictional capability assessment lend critical information for developing an effective and meaningful mitigation strategy.

Capability Assessment Findings

The findings of the 2009 capability assessment are summarized in this Plan to provide insight into relevant capacity of Catawba County's jurisdictions to implement hazard mitigation activities. All information is based upon the responses provided by local government officials to the *Capability*

² The *Capability Assessment Survey* instrument used to assess county and municipal capabilities is available through Catawba County upon request.

³ The scoring methodology used to quantify and rank each jurisdiction's capability is fully described in this section of the Plan along with conclusions on local capability. Hard copies of the completed surveys along with the raw data results from survey analysis can be obtained through Catawba County upon request.

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Assessment Survey and during meetings of the Mitigation Advisory Committee. All completed survey questionnaires are available through Catawba County upon request.

Planning and Regulatory Capability

Planning and regulatory capability is based on the implementation of plans, ordinances and programs that demonstrate a local jurisdiction’s commitment to guiding and managing growth, development and redevelopment in a responsible manner while maintaining the general welfare of the community. It includes emergency response and mitigation planning, comprehensive land use planning and transportation planning in addition to the enforcement of zoning or subdivision ordinances and building codes that regulate how land is developed and structures are built, as well as protecting environmental, historic and cultural resources in the community. Although some conflicts can arise, these planning initiatives generally present significant opportunities to integrate hazard mitigation principles and practices into the local decision making process.

This assessment is designed to provide a general overview of the key planning and regulatory tools or programs in place or under development for jurisdictions in Catawba County, along with their potential effect on loss reduction. This information will help identify opportunities to address existing gaps, weaknesses or conflicts with other initiatives in addition to integrating the implementation of this Plan with existing planning mechanisms, where appropriate.

Table 7.1 provides a summary of the relevant local plans, ordinances and programs already in place or under development for Catawba County’s participating local governments. A checkmark (✓) indicates that the given item is currently in place and being implemented by the local jurisdiction (or in some cases by the County on behalf of that jurisdiction), or that it is currently being developed for future implementation.

Table 7.1
Relevant Plans, Ordinances and Programs

| Jurisdiction | Hazard Mitigation Plan | Comprehensive Land Use Plan | Floodplain Management Plan | Open Space Management Plan | Stormwater Management Plan | Emergency Operations Plan | SARA Title III Plan | Radiological Emergency Plan | Continuity of Operations Plan | Evacuation Plan | Disaster Recovery Plan | Capital Improvements Plan | Economic Development Plan | Historic Preservation Plan | Flood Damage Prevention Ordinance | Zoning Ordinance | Subdivision Ordinance | Unified Development Ordinance | Post-disaster Redevelopment / Recovery Ordinance | Building Code | Fire Code | National Flood Insurance Program | NFIP Community Rating System |
|----------------|------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------|-----------------------------|-------------------------------|-----------------|------------------------|---------------------------|---------------------------|----------------------------|-----------------------------------|------------------|-----------------------|-------------------------------|--|---------------|-----------|----------------------------------|------------------------------|
| Catawba County | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| Brookford | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | |
| Catawba | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | |
| Claremont | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | |
| Conover | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | |
| Hickory | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| Long View | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | |
| Maiden | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Newton | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | |

CATAWBA COUNTY, NORTH CAROLINA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

A more detailed discussion on each jurisdiction's planning and regulatory capability follows, along with the incorporation of additional information based on the narrative comments provided by local officials in response to the survey questionnaire. Hard copies of the completed surveys provide more detailed information on local capability can be obtained through Catawba County.

Emergency Management

Hazard mitigation is widely recognized as one of the four primary phases of emergency management. The three other phases include preparedness, response and recovery. In reality, each phase is interconnected with hazard mitigation as **Figure 7.1** suggests. Opportunities to reduce potential losses through mitigation practices are most often implemented before disaster strikes, such as elevation of flood prone structures or through the continuous enforcement of regulatory policies that prevent hazardous construction. However, mitigation opportunities will also be presented during immediate preparedness or response activities (such as installing storm shutters in advance of a hurricane), and certainly during the long-term recovery and redevelopment process following a hazard event.

Figure 7.1
The Four Phases of Emergency Management



Planning for each phase is a critical part of a comprehensive emergency management program and a key to the successful implementation of hazard mitigation actions. As a result, the *Capability Assessment Survey* asked several questions across a range of emergency management plans in order to assess the jurisdiction's willingness to plan and their level of technical planning proficiency.

Hazard Mitigation Plan: A hazard mitigation plan represents a community's blueprint for how it intends to reduce the impact of natural and human-caused hazards on people and the built environment. The essential elements of a hazard mitigation plan include a risk assessment, capability assessment and mitigation strategy.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

- Catawba County and its municipalities developed the initial version of this Multi-jurisdictional Hazard Mitigation Plan in 2004 and will continue to maintain it according to the plan maintenance procedures outlined in Section 10.

All participating jurisdictions, including those with limited overall capability, have indicated that the current hazard mitigation plan strongly supports loss reduction efforts.

- The Catawba Valley chapter of the American Red Cross is preparing a disaster plan that will emphasize community education regarding preparedness and hazard mitigation.

Disaster Recovery Plan: A disaster recovery plan serves to guide the physical, social, environmental and economic recovery and reconstruction process following a disaster. In many instances, hazard mitigation principles and practices are incorporated into local disaster recovery plans with the intent of capitalizing on opportunities to break the cycle of repetitive disaster losses. Disaster recovery plans can also lead to the preparation of disaster redevelopment policies and ordinances to be enacted following a hazard event.

- Disaster recovery for Catawba County is generally covered in the Multi-Hazard Plan maintained by the County's Emergency Services Department. This plan predetermines actions to be taken by the government agencies and private organizations of Catawba County to reduce the vulnerabilities of people and property to disaster and establish capabilities to respond effectively to the actual occurrence of a disaster. While the Multi-Hazard Plan strongly addresses emergency operations that will foster a prompt, efficient and coordinated response to any disaster, it does not fully address long-term recovery and reconstruction following a disaster.
- A number of the municipal jurisdictions have indicated that they have a disaster recovery plan in place or under development; however these plans vary in terms of breadth and depth as it relates to short-term recovery and long-term redevelopment issues.
- If deemed necessary, the preparation of a countywide disaster recovery plan should be considered by the Mitigation Advisory Committee as potential mitigation action to propose in this Plan's *Mitigation Strategy* or through future Plan updates. Catawba County is aware of the pilot disaster recovery planning initiative in Brunswick County and will evaluate the possibility of preparing its own plan following a review of that effort and available tools from the North Carolina Emergency Management.

Emergency Operations Plan: An emergency operations plan outlines responsibilities and the means by which resources are deployed during and following an emergency or disaster.

- Catawba County Emergency Services maintains a countywide Multi-Hazard Plan and manages the County Emergency Operations Center (EOC). The Multi-Hazard Plan addresses emergency operations on behalf of all municipalities in Catawba County, and meets the requirements of FEMA planning guidance CPG 1-8 and CPG 1-8A, and the legal responsibilities identified in North Carolina General Statutes Chapter 166-A. It provides all the necessary elements to ensure that local government can fulfill its legal responsibilities for emergency preparedness. The Multi-Hazard Plan was last amended and adopted in 2004, and it is currently undergoing major revisions to strengthen.
- The Multi-Hazard Plan has been determined to have a moderate effect on loss reduction, as its emphasis focuses on preparedness and response operations versus hazard mitigation activities.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

- All municipal jurisdictions are covered under the County's Multi-Hazard Plan and cooperate accordingly, although some have also prepared their own local emergency operations plans. These include the municipalities of Brookford, Catawba, Claremont, Conover, Hickory, Long View and Newton.

Continuity of Operation Plan: A continuity of operations plan (COOP) establishes a chain of command, line of succession and plans for backup or alternate emergency facilities in case of an extreme emergency or disaster event.

- Survey results indicate that three jurisdictions have continuity of operations plan in place. These include Catawba County, Town of Brookford and the City of Hickory.. The County's COOP was updated in 2007 and is currently being updated by working with departments on implementation strategies. Continuity of operations plans are reportedly under development for the City of Claremont, City of Conover, City of Newton and the Town of Maiden.

Radiological Emergency Plan: A radiological emergency plan delineates roles and responsibilities for assigned personnel and the means to deploy resources in the event of a radiological accident.

- Radiological hazards are addressed in the McGuire Nuclear Power Station Emergency Response Plan (in addition to Catawba County's Multi-Hazard Plan) on behalf of all jurisdictions in Catawba County. The plan prescribes those actions to be taken by Catawba County and threatened municipalities to protect the health and safety of the general public whom may be affected by radiation exposure and environmental contamination resulting from an accident at Duke Energy's Nuclear Power Station at the McGuire Site. A portion of Catawba County lies within the plume exposure pathway (10-mile radius of the site) and the ingestion exposure pathway (50-mile radius of the site).

SARA Title III Emergency Response Plan: A SARA Title III Emergency Response Plan outlines the procedures to be followed in the event of a chemical emergency such as the accidental release of toxic substances. These plans are required by federal law under Title III of the Superfund Amendments and Re-authorization Act (SARA), also known as the Emergency Planning and Community Right-to-Know Act (EPCRA).

- The Catawba County Local Emergency Planning Committee (LEPC) has developed an Emergency Response Plan for chemical emergencies throughout the county in coordination with the North Carolina State Emergency Response Commission (SERC). A variety of local government officials, chemical industry representatives and media outlets participate in the LEPC planning process per EPCRA requirements.
- In October 1995, the Catawba County Board of Commissioners passed a Hazardous Materials Emergencies Ordinance to provide the immediate resources needed to deal with hazardous materials incidents which may be contained and controlled on a local level.

General Planning

The implementation of hazard mitigation activities often involves agencies and individuals beyond the emergency management profession. Other stakeholders may include local planners, public works officials, economic development specialists and others. In many instances, concurrent

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

local planning efforts will help to achieve or complement hazard mitigation goals even though they are not designed as such. Therefore, the *Capability Assessment Survey* also asked questions regarding each jurisdiction's general planning capabilities and to what degree hazard mitigation is integrated into other on-going planning efforts.

Comprehensive Land Use Plan: A comprehensive land use plan establishes the overall vision for what a community wants to be and a guide to future governmental decision making. Typically a comprehensive plan is comprised of demographic conditions, land use, transportation elements and community facilities. Given the broad nature of the plan and its regulatory standing in many communities, the integration of hazard mitigation measures into the comprehensive plan can enhance the likelihood of achieving risk reduction goals, objectives and actions.

- Survey results indicate that eight (8) of the nine (9) jurisdictions have prepared a comprehensive land use plan, with some also maintaining small area plans for specific parts of their jurisdiction. All of these jurisdictions indicated that their land use plans either strongly support or help facilitate hazard loss reduction. Only the Town of Long View indicated that they do not have a current comprehensive land use plan.
- Catawba County's planning documents include a countywide 1999 *Strategic Growth Plan* along with seven (7) more recently completed small area plans. These planning documents include general policies and recommendations adopted by the Board of Commissioners which support land development ordinances and securing grants for hazard mitigation.
- The City of Hickory adopted *Hickory by Choice* in 1999 (Future Land Use and Transportation Plan), which is currently being updated estimated completion date of Winter 2010). The City also has four Neighborhood Plans in place.
- The City of Newton has adopted a master land use plan and has completed three of six small area plans, with a fourth currently under development.

Capital Improvements Plan: A capital improvement plan guides the scheduling of spending on public improvements. A capital improvements plan can serve as an important mechanism to guide future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments.

- Survey results indicate that seven (7) jurisdictions have a capital improvements plan in place or under development. Most of these are 5-year plans that are updated annually, and all survey respondents indicated they either support or facilitate loss reduction efforts in their community.

Historic Preservation Plan: A historic preservation plan is intended to preserve historic structures or districts within a community. An often overlooked aspect of the historic preservation plan is the assessment of buildings and sites located in areas subject to natural hazards to include the identification of the most effective way to reduce future damages.⁴ This may involve retrofitting or relocation techniques that account for the need to protect buildings that do not meet current

⁴ See Protecting the Past from Natural Disasters. 1989. Nelson, Carl. National Trust for Historic Preservation: Washington, D.C.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

building standards or are within a historic district that cannot easily be relocated out of harms way.

- Although historic preservation is addressed through some comprehensive land use plans, designated historic districts and local civic associations, survey results indicate that no jurisdictions in Catawba County have completed a stand-alone historic preservation plan for their communities.
- The City's of Hickory's Land Development Code contains design standards for the City's historic districts, and the City also administers a Historic District Design Manual; but does not have an independent Historic Preservation Plan.

Zoning Ordinances: Zoning represents the primary means by which land use is controlled by local governments. As part of a community's police power, zoning is used to protect the public health, safety and welfare of those in a given jurisdiction that maintains zoning authority. A zoning ordinance is the mechanism through which zoning is typically implemented. Since zoning regulations enable municipal governments to limit the type and density of development, it can serve as a powerful tool when applied in identified hazard areas.

- Survey results indicate that all jurisdictions in Catawba County have adopted and enforce a zoning ordinance. All jurisdictions indicated that their zoning ordinance either strongly supports or helps facilitate hazard loss reduction, with some planning to strengthen their ordinance through proposed mitigation actions as part of this Plan.
- Catawba County adopted a Unified Development Ordinance (UDO) in 2007 for areas outside the municipalities and their extra-territorial jurisdiction (ETJ). The UDO contains all land development codes for the County including zoning, subdivision and floodplain regulations, and provides tools to facilitate mitigation strategies such as open space requirements in floodplain areas, "Firewise" strategies, etc.
- The City of Hickory's development ordinance (Land Development Code) contains standards related to the placement and design of buildings; as well as chapters regulating stormwater and fire prevention standards. The City is in the initial stages of updating its Land Development Code, with an estimated completion date in the spring of 2010.

Subdivision Ordinances: A subdivision ordinance is intended to regulate the development of housing, commercial, industrial or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development.⁵

- Survey results indicate that all jurisdictions in Catawba County have adopted and enforce a subdivision ordinance. All jurisdictions indicated that their ordinance either strongly supports or helps facilitate hazard loss reduction, with some planning to strengthen their ordinance through proposed mitigation actions as part of this Plan.

⁵ For additional information regarding the use of subdivision regulations in reducing flood hazard risk, see *Subdivision Design in Flood Hazard Areas*. 1997. Morris, Marya. Planning Advisory Service Report Number 473. American Planning Association: Washington, D.C.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Building Codes, Permitting and Inspections: Building Codes regulate construction standards. In many communities, permits are issued for, and inspections of work take place on, new construction. Decisions regarding the adoption of building codes (that account for hazard risk), the type of permitting process required both before and after a disaster, and the enforcement of inspection protocols all affect the level of hazard risk faced by a community.

- Per the General Assembly, communities in North Carolina are required to follow a statewide mandatory building code. The 2002 North Carolina Building Code is based on the 2002 International Building Code (IBC), with heavy modifications being made by the North Carolina Building Code Council (although few related to life and safety issues). Local governments may also amend the code pursuant to state approval.
- Catawba County performs building code inspections for all municipal jurisdictions.

The adoption and enforcement of building codes by local jurisdictions is routinely assessed through the Building Code Effectiveness Grading Schedule (BCEGS) program developed by the Insurance Services Office, Inc. (ISO).⁶ Under the BCEGS program, ISO assesses the building codes in effect in a particular community and how the community enforces its building codes, *with special emphasis on mitigation of losses from natural hazards*. The results of BCEGS assessments are routinely provided to ISO's member private insurance companies, which in turn may offer ratings credits for new buildings constructed in communities with strong BCEGS classifications. The concept is that communities with well-enforced, up-to-date codes should demonstrate better loss experience, and insurance rates can reflect that.

In conducting the assessment, ISO collects information related to personnel qualification and continuing education as well as number of inspections performed per day. This type of information, combined with local building codes, is used to determine a grade for that jurisdiction. The grades range from 1 to 10, with the lower grade being more ideal. A BCEGS grade of 1 represents exemplary commitment to building code enforcement, and a grade of 10 indicates less than minimum recognized protection.

- Catawba County enforces the building code on behalf of all municipalities.. The County received a BCEGS Grade of 10 by ISO for personal lines and a Grade of 3 for commercial lines. According to ISO, the Town of Brookford declined participation in the BCEGS program.

Floodplain Management

Flooding represents the greatest natural hazard facing the nation. At the same time, the tools available to reduce the impacts associated with flooding are among the most developed when compared to other hazard-specific mitigation techniques. In addition to approaches that cut across hazards, such as education, outreach, and the training of local officials, the *National Flood Insurance Program (NFIP)* contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. Participation in the NFIP is voluntary for local governments, but the program is promoted by

44 CFR Requirement

44 CFR Part 201.6(c)(3)(ii):
The mitigation strategy must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

⁶ Participation in BCEGS is voluntary and may be declined by local governments if they do not wish to have their local building codes evaluated.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FEMA as a first basic step for implementing and sustaining an effective hazard mitigation program. It is therefore used as a key indicator for measuring local capability as part of this assessment.

In order for a county or municipality to join the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by the base flood (one percent annual chance, also known as the 100-year flood), and that new floodplain development will not exacerbate existing flood problems or increase damage to other properties.

Another key service provided by the NFIP is the mapping of identified flood hazard areas. Once prepared, the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials and the private sector about the likelihood of flooding in their community.

Table 7.2 summarizes current NFIP participation for each of Catawba County's local jurisdictions along with general NFIP policy data.⁷ **Table 7.3** provides some general administrative information for each jurisdiction, including who is responsible for implementation of the NFIP and a brief summary of how it is enforced – including any notable higher regulatory standards.

Table 7.2
NFIP Participation in Catawba County

| Jurisdiction | NFIP Entry Date | Current Effective Map | Number of Policies | Amount of Coverage |
|----------------|-----------------|-----------------------|--------------------|---------------------|
| Catawba County | 1980 | 07/07/09 | 143 | \$33,861,400 |
| Brookford | 1979 | 07/07/09 | 0 | \$0 |
| Catawba | 1980 | 07/07/09 | 4 | \$546,200 |
| Claremont | 2003 | 07/07/09 | 0 | \$0 |
| Conover | 1980 | 07/07/09 | 13 | \$2,439,000 |
| Hickory | 1981 | 07/07/09 | 77 | \$18,443,700 |
| Long View | 1980 | 07/07/09 | 3 | \$315,800 |
| Maiden | 1980 | 07/07/09 | 4 | \$678,600 |
| Newton | 1980 | 07/07/09 | 8 | \$2,176,000 |
| TOTAL | | | 252 | \$58,460,700 |

Source: FEMA

⁷ General NFIP policy data provided by the Federal Emergency Management Agency (as of 4/30/2009).

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

**Table 7.3
Current Administration of the NFIP in Catawba County**

| Jurisdiction | Floodplain Administrator | Current Floodplain Management Regulations / Implementation Mechanisms |
|----------------|--|---|
| Catawba County | Mary K. George, Assistant Planning Director Planning, Parks & Development P.O. Box 389 Newton, NC 28658 Ph: (828) 465-8264 | The Flood Damage Prevention Ordinance is incorporated into Catawba County's Unified Development Ordinance, Sec. 44-429, Floodplain Management Overlay which was adopted February 5, 2007. In addition to the required minimum standards, the County's UDO requires a two foot freeboard for new development and substantial improvements. Also, the County has developed seven Small Area Plans, which serve as the County's comprehensive plan. Each plan has a natural resource component which addresses floodplain development and encourages the preservation of open space in flood prone areas. The County's UDO includes a Watershed Protection Overlay district which requires buffers along perennial streams and limits imperviousness in protected watershed areas. The County also enforces an erosion control ordinance for all jurisdictions in the County, with exception of Newton and Brookford. The ordinance includes provisions for buffers and prohibition of development in the floodplain in the southeast portion of the County, which is a high growth area. |
| Brookford | Marshall Eckard Town Administrator 1700 South Center St Hickory, NC 28602 Ph: 828-322-4903 | The Town of Brookford has adopted all NFIP regulations and all building inspections are handled by the Catawba County Inspections Department. Floodplain provisions are integrated into the town's zoning and planning regulations. The Town has not established any higher regulatory standards than the required NFIP minimums. |
| Catawba | John R. Kinley Planner Town of Catawba Planning Ph: (828) 241-2215 | Flood Damage Prevention Ordinance – Article 24 of the Zoning Ordinance – Aug. 6, 2007. Includes a two foot freeboard requirement. Subdivision Regulations – Article 23 of the Zoning Ordinance – Aug. 4, 2003 most recently amended Jan. 20, 2006. The Town contracts with Catawba County for building inspection service, so their building codes are applicable. Watershed Protection Ordinance – Article 17 – Oct. 1, 1993 most recently amended Jul. 7, 2008. This ordinance requires a 30 foot buffer for low density projects and a 100 foot buffer for high density projects along all perennial waters indicated on the most recent 1:24000 USGS topographic maps. No new development is allowed in the buffer except water dependent structures and public projects where no practical alternative exists. |
| Claremont | Laurie B. LoCicero City Planner City of Claremont Planning Ph: (828) 485-4240 | Flood Damage Prevention Ordinance Adopted August 6, 2007. Includes two foot freeboard requirement. Also Water Supply Watershed Protection Ordinance Adopted Dec. 7, 2004, effective April 5, 2005. City of Claremont contracts with Catawba County for building inspection services. Some of the floodplain areas are designated for "proposed greenways" in the City's Land Development Plan. In the water supply watershed protection ordinance, a 30' buffer is required on all perennial streams. |

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

| | | |
|-------------------------|---|--|
| <p>Conover</p> | <p>Q. Lance Hight Planning Director City of Conover Planning & Economic Development Ph: (828) 464-1191</p> | <p>Flood Damage Prevention Ordinance (Chapter 10 of the Conover Code of Ordinances). Adopted on August 6th, 2007. In addition to the required minimum standards, the City of Conover requires a two foot freeboard for new development and substantial improvements. Some land that is in the flood plain is zoned as Open Space (OS) which greatly reduces the permitted uses.</p> |
| <p>Hickory</p> | <p>Brian Frazier, Planning Director City of Hickory Planning & Development P.O. Box 398 Hickory, NC 28603 Ph: (828) 323-7422</p> | <p>2007 Flood Damage Protection Ordinance, which includes a two foot freeboard requirement. The City's Land Development Code contains two zoning overlay districts that aid in flood protection / prevention: (1) Water Supply Watershed Overlay prescribes maximum impervious areas and requires stormwater control features; and (2) Henry River Conservation Overlay requires the use of Low Impact Design (LID) in all new development. This overlay also requires water management plans and 50 foot buffers along streams. Also, the City's NPDES Phase 2 Stormwater Ordinance requires post development run-off be equal to pre-development run-off.</p> |
| <p>Long View</p> | <p>Charles Mullis, Planning Director, Planning Department 2404 1st Ave. SW Long View, NC 28602 Ph: (828) 322-3921</p> | <p>Flood Damage Prevention Ordinance adopted August 13, 2007, Article 6 Section D. R-2, which is Long View's lowest density residential zoning district, is the only zoning district permitted for floodplain development. Long View's Zoning Ordinance contains floodplain provisions integrated into Article 18 titled "Water Supply Protection District" and Article 14 titled "Planned Developments."</p> |
| <p>Maiden</p> | <p>Sam Schultz, Planning Director Planning Department 113 W. Main St. Maiden, NC 28650 Ph: (828) 428-5034</p> | <p>The Town of Maiden adopted the new 2007 floodplain maps and ordinance with an effective date of September 5, 2007. The floodplain ordinance is an Appendix in the Chapter 17 code of ordinances Planning and Zoning text and requires a two foot freeboard for new development and substantial improvements. NPDES Phase II regulations have been adopted and development of stormwater management plan is underway.</p> |
| <p>Newton</p> | <p>Glenn Pattishall, AICP Planning Director/Asst. City Manager Dept. of Planning & Economic Development PO Box 550 Newton, NC 28658 Ph: (828)695-4305</p> | <p>The City adopted a new Flood Damage Prevention Ordinance in August 2007 that followed NFIP minimum standards; as outlined in the State's model ordinance. In addition to the required minimum standards, the City's ordinance requires a two foot freeboard for all new construction and substantial improvements. The City has also completed three small area plans (out of 6 that are programmed). Each of the adopted plans speaks to minimizing flood hazards through adherence to the flood damage prevention ordinance.</p> |

An additional indicator of floodplain management capability is the active participation of local jurisdictions in the *Community Rating System* (CRS). The CRS is an incentive-based program that encourages counties and municipalities to undertake defined flood mitigation activities that go beyond the minimum requirements of the NFIP, adding extra local measures to provide protection from flooding. All of the 18 creditable CRS mitigation activities are assigned a range of point values. As points are accumulated and reach identified thresholds, communities can apply for an improved CRS class. Class ratings, which run from 10 to 1, are tied to flood insurance premium reductions as shown in **Table 7.4**. As class ratings improve (decrease), the percent reduction in flood insurance premiums for NFIP policy holders in that community increases.

Table 7.4
CRS Premium Discounts, By Class

| CRS Class | Premium Reduction |
|-----------|-------------------|
| 1 | 45% |
| 2 | 40% |
| 3 | 35% |
| 4 | 30% |
| 5 | 25% |
| 6 | 20% |
| 7 | 15% |
| 8 | 10% |
| 9 | 5% |
| 10 | 0 |

Source: Federal Emergency Management Agency

Community participation in the CRS is voluntary. Any community that is in full compliance with the rules and regulations of the NFIP may apply to FEMA for a CRS classification better than class 10. The CRS application process has been greatly simplified over the past several years based on community comments to make the CRS more user friendly as possible, and extensive technical assistance is also available for communities who request it.

- There are currently no CRS communities in Catawba County, but joining the CRS has been discussed by the Mitigation Advisory Committee as a potential mitigation action for some jurisdictions as part of this Plan. As part of the 2009 plan update process (described in *Section 2: Planning Process*), many of the specific mitigation activities recommended under the CRS program were discussed and considered by the Mitigation Advisory Committee for incorporation into each jurisdiction’s revised mitigation action plan.

Floodplain Management Plan: A floodplain management plan (or a flood mitigation plan) provides a framework for action regarding the corrective and preventative measures in place to reduce flood-related impacts.

- Survey results indicate that seven (7) of Catawba County’s jurisdictions have prepared a floodplain management plan that support flood loss reduction efforts. These jurisdictions also cited flood damage prevention ordinances, policies and codes that are in place or under development as part of other community planning and regulatory measures (further described in **Table 7.3**).

Open Space Management Plan: An open space management plan is designed to preserve, protect and restore largely undeveloped lands in their natural state, and to expand or connect areas in the public domain such as parks, greenways and other outdoor recreation areas. In many instances open space management practices are consistent with the goals of reducing hazard losses, such as the preservation of wetlands or other flood-prone areas in their natural state in perpetuity.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

- Survey results indicate that six (6) of Catawba County's jurisdictions have prepared or are in the midst of preparing an open space management plan or similar document such as a parks and recreation plan.
- Catawba County adopted a Parks Master Plan in December 2007 which identifies areas of open space to be preserved for passive recreation opportunities in the County. The County also participated in the development of a regional open space management plan in coordination with the Western Piedmont Council of Governments.
- The City of Hickory's Greenway Plan is part of its Sidewalk, Bikeway, and Trails Master Plan, and was updated in 2004.

Stormwater Management Plan: A stormwater management plan is designed to address flooding associated with stormwater runoff. The stormwater management plan is typically focused on design and construction measures that are intended to reduce the impact of more frequently occurring minor urban flooding.

- Survey results indicate that six (6) jurisdictions have prepared a stormwater management plan, or that one is under development. The cities of Claremont, Conover, Hickory and Newton and the Town of Long View have plans in place, while the Town of Maiden indicated that plans are now being prepared. Catawba County indicated that a stormwater management plan may be developed for their jurisdiction due to the Phase II regulations now being required by the U.S. Environmental Protection Agency, but it has not been prepared to date.

Administrative and Technical Capability

The ability of a local government to develop and implement mitigation projects, policies and programs is directly tied to its ability to direct staff time and resources for that purpose. Administrative capability can be evaluated by determining how mitigation-related activities are assigned to local departments and how adequate the personnel resources are for carrying the activities out. The degree of intergovernmental coordination among departments will also affect administrative capability for the implementation and success of proposed mitigation activities. Technical capability can generally be evaluated by assessing the level of knowledge and technical expertise of local government employees, such as personnel skilled in using Geographic Information Systems (GIS) to analyze and assess community hazard vulnerability.

The *Capability Assessment Survey* was used to capture information on administrative and technical capability through the identification of available staff and personnel resources. **Table 7.5** provides a summary of the results for each jurisdiction in Catawba County. A checkmark (✓) indicates that the given local staff member(s) is maintained through each particular jurisdiction's local government resources. Additional information on administrative and technical capability for Catawba County's jurisdictions is provided in the hard copies completed surveys which can be obtained through Catawba County.

Table 7.5
Relevant Staff / Personnel Resources

| Jurisdiction | Planners with knowledge of land development and land management practices | Engineers or professionals trained in construction practices related to buildings and/or infrastructure | Planners or engineers with an understanding of natural and/or human-caused hazards | Emergency manager | Floodplain manager | Land surveyors | Scientist familiar with the hazards of the community | Staff with education or expertise to assess the community's vulnerability to hazards | Personnel skilled in Geographic Information Systems (GIS) and/or HAZUS | Resource development staff or grant writers |
|----------------|---|---|--|-------------------|--------------------|----------------|--|--|--|---|
| Catawba County | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Brookford | | | | ✓ | ✓ | | | | | |
| Catawba | ✓ | | | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| Claremont | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| Conover | ✓ | ✓ | ✓ | | ✓ | | | | ✓ | ✓ |
| Hickory | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Long View | ✓ | | | | ✓ | | | ✓ | ✓ | ✓ |
| Maiden | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| Newton | ✓ | | ✓ | | ✓ | | | ✓ | ✓ | ✓ |

Fiscal Capability

The ability of a local government to take action is often closely associated with the amount of money available to implement policies and projects.⁸ This may take the form of outside grant funding awards or locally-based revenue and financing. The costs associated with mitigation policy and project implementation vary widely. In some cases, policies are tied primarily to staff time or administrative costs associated with the creation and monitoring of a given program. In other cases, direct expenses are linked to an actual project such as the acquisition of flood-prone homes, which can require a substantial commitment from local, state and federal funding sources.

The *Capability Assessment Survey* was used to capture information on each jurisdiction's fiscal capability through the identification of locally available financial resources. **Table 7.6** provides a summary of the results for each jurisdiction in Catawba County. A checkmark (✓) indicates that the given fiscal resource is locally available for hazard mitigation purposes (including as match

⁸ Gaining access to federal, state or other sources of funding is often an overriding factor driving the development of hazard mitigation plans. However, an important objective of local governments seeking a more sustainable future is the concept of self reliance. Over time, local jurisdictions should seek the means to become less dependent on federal assistance, developing a more diversified approach that assesses the availability of federal, state and locally-generated funding to implement mitigation actions. Additional assistance may be available from the business and corporate sector as well as certain non-profit organizations. This should be coupled with an attempt to identify mitigation measures that cost little or no money, yet may compliment the larger array of actions identified in the plan.

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

funds for state and federal mitigation grant funds). Additional information on fiscal capability for Catawba County’s jurisdictions is provided in the hard copies completed surveys which can be obtained through Catawba County.

**Table 7.6
Relevant Fiscal Resources**

| Jurisdiction | Capital Improvement Programming | Community Development Block Grants | Special Purpose Taxes | Gas / Electric Utility Fees | Water / Sewer Fees | Stormwater Utility Fees | Development Impact Fees | General Obligation Bonds | Revenue Bonds | Special Tax Bonds |
|----------------|---------------------------------|------------------------------------|-----------------------|-----------------------------|--------------------|-------------------------|-------------------------|--------------------------|---------------|-------------------|
| Catawba County | ✓ | ✓ | | | ✓ | | | | | |
| Brookford | | ✓ | | | | | | | | |
| Catawba | ✓ | ✓ | | | ✓ | | | ✓ | ✓ | ✓ |
| Claremont | | ✓ | | | ✓ | | | | | |
| Conover | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | |
| Hickory | ✓ | ✓ | | | ✓ | | | ✓ | | |
| Long View | ✓ | ✓ | | | ✓ | | | ✓ | ✓ | |
| Maiden | ✓ | ✓ | | ✓ | ✓ | | | ✓ | ✓ | |
| Newton | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | |

Political Capability

One of the most difficult capabilities to evaluate involves the political will of a jurisdiction to enact meaningful policies and projects designed to reduce the impact of future hazard events. Hazard mitigation may not be a local priority, may conflict or could mistakenly be seen as an impediment to other goals of the community, such as growth and economic development. Therefore the local political climate must be considered in designing mitigation strategies, as it could be the most difficult hurdle to overcome in accomplishing their adoption or implementation.

The *Capability Assessment Survey* was used to capture information on each jurisdiction’s political capability. Survey respondents were asked to identify some general examples of political capability for their jurisdiction, such as guiding development away from identified hazard areas, restricting public investments or capital improvements within hazard areas, or enforcing local development standards that go beyond minimum state or federal requirements (e.g. building codes, floodplain management, etc.). **Table 7.7** provides a summary of the individual responses for each jurisdiction in Catawba County.

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

**Table 7.7
Political Capability**

| Jurisdiction | Comments |
|----------------|---|
| Catawba County | Catawba County supports ordinances and policies addressing hazard mitigation; however, is fiscally constrained to fund infrastructure without the assistance of federal or state grants. The County's Unified Development Ordinance, adopted in February 2007, contains regulations which address hazard mitigation. Examples include a requirement of 2,500 square feet per lot of open space for conventional subdivisions or a 25% open space requirement for cluster subdivisions. A minimum of 75% of this open space must preserve secondary open space, such as floodplains, steep slopes or other sensitive areas. Also included in the UDO is a mountain protection district which address lot size requirements, removal of vegetation, environmentally sensitive design and Firewise standards. |
| Brookford | No comments provided. |
| Catawba | The Town of Catawba supports hazard mitigation efforts. The Town takes a proactive and progressive stance regarding efforts to protect the public and town government from natural hazards. The Town Council has adopted policies in the past to mitigate the exposure to natural hazards and will continue to do so. |
| Claremont | Each subdivision shall reserve a minimum of 25% of property to be used for open or active open space. Natural features must be retained in their natural state. The following natural and cultural resources shall be accurately portrayed on the preliminary and final plat and shall, as the highest priority areas to be used for open space, be preserved and protected whenever possible; agricultural and forestry soils, floodplains, steep slopes, significant wildlife habitat, and scenic views. |
| Conover | No comments provided. |
| Hickory | Hickory's City Council remains committed to the implementation and administration of policies and regulations designed to minimize exposure to hazardous events. The City of Hickory's Land Development Code, which is essentially a unified development ordinance, establishes regulatory standards with respect to the development of real property located within the City's jurisdictional planning area. The Land Development Code contains items including, but are not limited to, development standards pertaining to zoning, property subdivision and fire prevention. In addition to the Land Development Code, Hickory also has ordinances regulating NPDES Phase II stormwater requirements and a Flood Damage Prevention Ordinance. Collectively, these documents work in conjunction with one another to ensure development / construction is undertaken in a manner consistent with the overarching policy of avoiding potential negative impacts resulting from hazardous events. |
| Long View | Elected officials generally agree on and defend ordinances which protect against uses being placed in identified hazardous areas (floodplain management). They follow state and federal minimum requirements as needed (watershed protection, stormwater). They have and will continue to defend changes which provide for strengthening of existing ordinances as proposed by staff. |
| Maiden | The Town of Maiden supports hazard mitigation both on the staff level and legislative level. The Town has adopted policies in the past to prevent and reduce loss of life and property due to natural hazards. The Town has made and will continue to make substantial investments in planning and public safety services that mitigate damage. The Town implemented zoning, subdivision, and flood damage prevention ordinances many years ago. The Town of Maiden Code of Ordinances contains these development and flood prevention ordinances. In addition, the Town avoids placing new infrastructure in areas prone to natural hazards such as flood areas. |
| Newton | The City of Newton is committed to implementing policies and regulations that reduce potential hazard vulnerabilities. Zoning, Subdivision, Erosion Control, Stormwater, Floodplain, and Wetland regulations are in place. Floodplain regulations require all structural development within the floodplain to be constructed 2 ft. above the base flood elevation (BFE). Several plans have also been created to assist in hazard mitigation efforts, which include: Land Development Plan, Eastside Area Plan, Southeast Area Plan, St. Paul's Area Plan, Multi-Hazard Plan, Parks & Recreation Master Plan, and Greenway plan. In addition, elected officials and key staff have received National Incident Management System (NIMS) certification. |

County and Municipal Self Assessment

In addition to the inventory and analysis of specific local capabilities, the *Capability Assessment Survey* required each local jurisdiction to conduct its own self assessment of its capability to implement hazard mitigation activities. As part of this process, county and municipal officials

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

were encouraged to consider the barriers to implementing proposed mitigation strategies in addition to the mechanisms that could enhance or further such strategies. They were also encouraged to consider their jurisdiction’s ability to expand and improve their existing local tools and capabilities for natural hazard reduction. In response to the survey questionnaire, local officials classified each of the aforementioned capabilities as either “limited,” “moderate” or “high.”

Table 7.8 summarizes the results of the self assessment process for each jurisdiction in Catawba County. An “L” indicates limited capability; an “M” indicated moderate capability; and an “H” indicates high capability.

Table 7.8
Self Assessment of Local Capability

| Jurisdiction | Planning and Regulatory Capability | Administrative and Technical Capability | Fiscal Capability | Political Capability | Overall Capability |
|----------------|------------------------------------|---|-------------------|----------------------|--------------------|
| Catawba County | H | M | M | M | M |
| Brookford | M | L | L | M | M |
| Catawba | H | M | L | M | M |
| Claremont | H | H | H | M | M |
| Conover | H | M | L | M | M |
| Hickory | H | H | M | M | M |
| Long View | M | M | L | H | M |
| Maiden | H | M | L | M | M |
| Newton | H | M | L | H | M |

Conclusions on Local Capability

In order to form meaningful conclusions on the assessment of local capability, a quantitative scoring methodology was designed and applied to results of the *Capability Assessment Survey*. This methodology, further described below, attempts to assess the level of capability for each jurisdiction in Catawba County by determining a general capability rating for each.

Points System for Capability Ranking

Scoring:

| |
|--|
| 0-24 points = Limited overall capability |
| 25-49 points = Moderate overall capability |
| 50-82 points = High overall capability |

I. Planning and Regulatory Capability (Up to 46 points)

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Yes=3 points Under Development or Under County Jurisdiction=1 No=0 points

- Hazard Mitigation Plan
- Comprehensive Land Use Plan
- Floodplain Management Plan
- Participate in CRS Program
- BCEGS Grade of 1 to 5

Yes=2 points Under Development or County Jurisdiction=1 No=0 points

- Open Space Management / Parks & Rec. Plan
- Stormwater Management Plan
- Emergency Operations Plan
- SARA Title III
- Radiological Emergency Plan
- Continuity of Operations Plan
- Evacuation Plan
- Disaster Recovery Plan
- Flood Damage Prevention Ordinance
- BCEGS Grade of 6 to 9

Yes=1 point No=0 points

- Capital Improvements Plan
- Economic Development Plan
- Historic Preservation Plan
- Zoning Ordinance
- Subdivision Ordinance
- Unified Development Ordinance
- Building Code
- Fire Code
- Participate in NFIP Program

II. Administrative and Technical Capability (Up to 15 points)

Yes=2 points No=0 points

- Planners with knowledge of land development and land management practices
- Engineers or professionals trained in construction practices related to buildings and/or infrastructure
- Planners or engineers with an understanding of natural and/or human-caused hazards
- Emergency manager
- Floodplain manager

Yes=1 point No=0 points

- Land surveyors
- Scientist familiar with the hazards of the community
- Staff with education or expertise to assess the community's vulnerability to hazards
- Personnel skilled in Geographic Information Systems (GIS) and/or HAZUS
- Resource development staff or grant writers

III. Fiscal Capability (Up to 11 points)

Yes=1 point No=0 points

- Capital Improvement Programming
- Community Development Block Grants
- Special Purpose Taxes
- Gas / Electric Utility Fees
- Water / Sewer Fees

CAPABILITY ASSESSMENT

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

- Stormwater Utility Fees
- Development Impact Fees
- General Obligation Bonds
- Revenue Bonds
- Special Tax Bonds
- Other

IV. Self-Assessment of Overall Capability (Up to 10 points)

High=2 points Moderate=1 points Low=0 points (Self-ranked by jurisdiction)

- Technical Capability
- Fiscal Capability
- Administrative Capability
- Political Capability
- Overall Capability

Note: This methodology is based on best available information. If a jurisdiction does not provide information on any of the above items, a point value of zero (0) will be assigned for that item.

Table 7.9 shows the results of the capability assessment using the designed scoring methodology in 2004 and again during the 2009 plan update. According to the 2009 assessment, the current average local capability score for all local jurisdictions in Catawba County is 47.00. This is an increase from the countywide average score of 41.89 as determined through the 2004 capability assessment. All jurisdictions remained at the same capability rating as determined in 2004 with the exception of the City of Claremont which went from a “moderate” capability rating to a “high” capability rating.

**Table 7.9
Capability Assessment Results**

| JURISDICTION | CAPABILITY SCORE (2004) | CAPABILITY SCORE (2009) | CAPABILITY RATING (2009) |
|----------------|-------------------------|-------------------------|--------------------------|
| Catawba County | 51 | 57 | HIGH |
| Brookford | 33 | 32 | MODERATE |
| Catawba | 37 | 45 | MODERATE |
| Claremont | 46 | 52 | HIGH |
| Conover | 41 | 49 | MODERATE |
| Hickory | 55 | 53 | HIGH |
| Long View | 33 | 41 | MODERATE |
| Maiden | 44 | 47 | MODERATE |
| Newton | 46 | 48 | MODERATE |

The capability of local governments in Catawba County to implement mitigation actions is determined to be moderate to high, with the City of Claremont, City of Hickory and Catawba County scoring enough points in the assessment to be deemed as having high capability. It is worth noting however that the scoring methodology used to conduct this capability assessment is only meant to provide a general understanding of local capability for each jurisdiction relative to one another. The results are based solely on the information provided by local officials in

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

response to the *Capability Assessment Survey*, an instrument designed to measure local capability based on those indicators determined to be most relevant for mitigation purposes and referenced in FEMA planning guidance.

According to the assessment, local capability certainly varies greatly among the local jurisdictions. While some municipalities have significant “in-house” staff resources, others depend on outside sources such as Catawba County, the Western Piedmont Council of Government or private contractors to perform certain local functions or services such as emergency planning, code enforcement and GIS services. The smaller local governments also typically combine multiple job responsibilities for one particular position, such as a planning director also serving as the floodplain manager, or the town manager also serving as the official emergency manager.

As it relates to emergency management, the local chapters of the American Red Cross and Citizen Corps are also actively involved in emergency planning and community disaster education programs. Both organizations maintain knowledgeable staff and volunteers that have obtained varied training on emergency response operations and disaster management, and are critical partners for Catawba County and its municipalities before and after disaster strikes.

Perhaps one of the most significant findings of the assessment is the widespread existence of several planning initiatives, programs and tools already in place across Catawba County. As a result, jurisdictions know the importance of intergovernmental coordination and how it applies to multi-jurisdictional planning. Catawba County’s local governments coordinate on issues and strategies related to future land use planning and standards for regulating development, in addition to the provision of infrastructure such as sewer and water or public services such as police and fire protection.

An important consideration for Catawba County’s local governments should be to continue working together to apply this coordination to hazard mitigation. This Hazard Mitigation Plan served as the vehicle to begin this process and the intergovernmental coordination demonstrated in 2004 continues to this day, as exemplified through the 2009 plan update process. This coordination will continue throughout the implementation and regular maintenance process of this plan as described in Section 10: Plan Maintenance Procedures.

Linking the Capability Assessment with the Risk Assessment and the Mitigation Strategy

The conclusions of the *Risk Assessment* and *Capability Assessment* serve as the foundation for a meaningful hazard mitigation strategy. During the process of identifying specific mitigation actions to pursue, each jurisdiction must consider not only their level of hazard risk but also their existing capability to minimize or eliminate that risk. **Figure 7.2** shows a *Risk vs. Capability Matrix* that is used to illustrate each jurisdiction’s overall hazard risk⁹ in comparison to their overall capability. This matrix has been completed (marked with a “✓”) for each of Catawba

⁹ Overall hazard risk was determined for each jurisdiction using the results of the risk assessment (estimated losses for all natural hazards) combined with specific information on the following factors: total population, population growth rate, land area, historical disaster declarations, unique hazard risks, NFIP participation and the value of existing Pre-FIRM structures. More information on the methodology used to determine overall hazard risk is available through Catawba County upon request.

CATAWBA COUNTY, NORTH CAROLINA
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

County's participating jurisdictions and is included in each jurisdiction's separate and distinct *Mitigation Action Plan* provided in Section 9 of this Plan.

Figure 7.2
Risk vs. Capability Matrix

| | | HAZARD RISK | | |
|--------------------|----------|-------------|----------|------|
| | | Limited | Moderate | High |
| OVERALL CAPABILITY | High | | | |
| | Moderate | | | |
| | Limited | | | |

In jurisdictions where the overall hazard risk is considered to be HIGH, and local capability is considered LIMITED, then specific mitigation actions that account for these conditions should be considered. This may include less costly actions such as minor ordinance revisions or public awareness activities. Further, if necessary, specific capabilities may need to be improved in order to better address recurring threats. Similarly, in cases where the hazard vulnerability is LIMITED and overall capability is HIGH, more emphasis can be placed on actions that may impact future vulnerability such as guiding development away from known hazard areas.