State of North Carolina
Division of Emergency Management
Floodplain Management Branch
Community Assistance Program/State Support Services Element (CAP/SSSE)
National Flood Insurance Program
Five Year Work Plan FFY2005-FFY2009

I. Authority

Authorization and implementation of the National Flood Insurance Program within the state of North Carolina is included in North Carolina General Statutes 166-A, North Carolina Emergency Management Act of 1977, North Carolina General Statutes143-215.51 – 215.61, Floodway Regulation, and by Executive Order of the Governor of the State of North Carolina.

II. Five Year Vision for Floodplain Management

A. Current efforts: The Floodplain Management Branch provides training for community officials and other professionals; maintains FIS/FIRM files for staff and public use; cooperates with NC Floodplain Mapping Program in scoping, review, and adoption of new maps; assists in enrollment of new communities; promotes participation in the CRS; supports activities of the NC Association of Floodplain Managers; supports Mitigation Section in mitigation of flood hazards through HMGP, PDM, FMA, and other mitigation programs; responds to needs of communities impacted by disasters.

B. Strengths: North Carolina has a strong history of community participation in the NFIP and CRS, with a relatively high rate of insured properties in the most floodprone communities found in the eastern part of the state. The Division of Emergency Management has a highly qualified mitigation staff, including floodplain management specialists to assist community officials and the public. Location of Floodplain Management within the Division of Emergency Management facilitates coordination of floodplain management with County emergency management. The NC Department of Insurance requires inclusion of flood insurance notices in property casualty policy renewal notices and flood insurance training for P&C agents. The NC statewide building codes (general construction, residential, and manufactured housing) require elevation of new and substantially improved structures to the BFE and are administered by state certified inspectors at the community level. The NC Floodplain Mapping Program is setting new standards for flood hazard mapping, nearing completion of Phase I, initiation of Phase II, and securing funding for Phase III, to complete remapping of the entire state by 2009. The NCFMP is also assuming maintenance of the flood maps, thereby assuring timely revision of studies and maps. The North Carolina Floodplain Managers is an active professional organization, providing training for community officials, communication with members, sponsoring the Certified Floodplain Managers program, and advocating various floodplain management issues.

C. Weaknesses: Frequent natural hazards impacting large geographic areas of the state impose extra responsibilities on limited state and community staff. Turnover of community officials increases difficulty of maintaining competency at the community level. Low level of insurance coverage in some areas makes recovery more difficult in areas impacted by flooding. Limited state staff resources make assistance to community officials and monitoring of community programs difficult.

III. Improvement Strategy

Improvement strategies are organized in the following 9 categories, and this organization maintained throughout the 5-Year Plan.

1. Identification of flood risk
2. Community participation in the NFIP
3. Community official capability for floodplain management
4. Flood mitigation technical assistance
5. Floodplain management regulatory standards
6. Public and private sector commitment and capability
7. Mitigation of existing structures
8. Flood disaster assistance
9. Community Assistance Program administration

A. Floodplain Management Activities

1.0 Identify flood risk through flood hazard mapping.
1.1 Identify mapping needs through scoping meetings and basin plan review.
1.2 Review preliminary FIS/FIRMs to assure accuracy.
1.3 Present NFIP issues at Preliminary Map meetings.
1.4 Present NFIP issues at Public meetings.
1.5 Assist in maintenance of FIS/FIRM (revisions and amendments) by determining needs.
1.6 Assist community officials with Geographic Information System applications.
1.7 Maintain FIS/FIRM files and archives.

2.0 Assure community participation in NFIP for insurance eligibility and sound floodplain management.
2.1 Assist community enrollment in NFIP by providing technical assistance to newly identified and previously sanctioned communities.
2.2 Obtain and maintain compliant community ordinances by providing technical assistance and reviews, ensuring adoption of new and revised FIS/FIRMs.
2.3 Revise and maintain State model ordinances as required.

3.0 Develop and maintain capability of community officials to administer program
3.1 Conduct CACs/CAVs in accordance with prioritization plan.
3.2 Support Certified Floodplain Manager program.
3.3 Support NCAFPM conference, newsletter/website, and committees.
3.4 Provide training – workshops, online, home study, conferences.

4.0 Provide technical assistance to community officials, professionals, and private sector.
4.1 Prepare guidance papers and reference documents.
4.2 Maintain web site, www.nccrimecontrol.org/nfip.
4.3 Respond to inquiries and requests via telephone, email, mail.
4.4 Review projects processed through the State Clearinghouse.

5.0 Establish and raise State and community flood mitigation standards.
5.1 Develop regulations for manufactured homes in floodplains based on updated FEMA guidance.
5.2 Update Executive Order 123 for State facilities.
5.3 Promote adoption of higher regulatory standards in community ordinances.
5.4 Promote participation in Community Rating System and provide training.

Note that the International Building Code-2000 and the International Residential Code-2000, with amendments, are adopted statewide by the State Building Code Council and enforced by State certified community officials.

6.0 Promote public and private sector commitment to and capability for flood mitigation through training.
6.1 Provide training for surveyors, including Certified Floodplain Surveyor program.
6.2 Provide training for real estate agents.
6.3 Provide training for insurance agents.
6.4 Provide training for community building inspection officials.
6.5 Provide information for individual owners and occupants.
6.6 Provide training for lenders.
6.7 Provide training for architects, engineers, and other design professionals
6.8 Provide training for contractors, manufactured home installers, and others as appropriate.

7.0 Mitigate existing structures at risk of flood (remedial) by assisting with plans and applications
7.1 Assist with Flood Mitigation Assistance program.
7.2 Assist with HMGP and PDM projects.
7.3 Provide training and information on ICC.
7.4 Review and update State Hazard Mitigation Plan – flood hazards.

8.0 Provide flood disaster assistance to communities and individuals.
8.1 Staff State EOC and Branch office as required during response phase of disasters.
8.2 Advise community officials regarding Substantial Damage determination.
8.3 Coordinate mutual aid and volunteer assistance for floodplain management to communities.
8.4 Provide NFIP and flood mitigation technical assistance to community officials and individuals.

9.0 Administer Community Assistance Program.
9.1 Develop and populate State database for floodplain management administration.
9.2 Maintain CIS, including contact information and ordinance status.
9.3 Develop and update annual floodplain management work plan.
9.4 Maintain CAV/CAC prioritization.
9.5 Attend Region IV CAP conference.
9.6 Participate in ASFPM annual conference.
9.7 Review and update 5-year Plan annually.

B. Program milestones

1.0 Flood risk identification
1.1 Scoping and Basin Plan review – Counties scoped and river basin plans reviewed
1.2 Preliminary FIS/FIRMs reviewed
1.3 Preliminary Meetings attended, NFIP presentations made, communities present
1.4 Public Meetings attended, NFIP presentations made, individuals present
1.5 FIS/FIRM maintenance – assistance provided to communities for evaluation of effective FIS/FIRM
1.6 GIS assistance provided, including training
1.7 FIS/FIRM file maintenance – current and archive, panels scanned for digital archive

2.0 Community participation
2.1 Community enrollment by effective date of FIS/FIRM
2.2 Ordinance compliance – compliant by effective date of FIS/FIRM revision
2.3a D & E level model ordinance update
2.3b A level ordinance completion

3.0 Local official capability
3.1 Conduct and close out CACs and CAVs.
3.2 Certification of Floodplain Managers – training provided, exams proctored, and officials certified
3.3 NCAFPM support - conference assistance, newsletter assistance, committee participation, training support
3.4 Training/workshops provided, hours of instruction, attendees, evaluations

4.0 Provide technical assistance to community officials, professionals, and property owners
4.1 Guidance papers and reference documents prepared and distributed
4.2 Web site content and traffic
4.3 Responses to inquiries and requests via telephone, email, mail
4.4 State Clearinghouse projects reviewed

5.0 Establish and raise state and community flood mitigation standards
5.1 Development and adoption of regulations for manufactured homes in floodplains based on updated FEMA guidance
5.2 Update Executive Order 123 for State facilities
5.3 Adoption of higher regulatory standards in community ordinances
5.4 Community entry in Community Rating System program, training provided

6.0 Promote private sector commitment to and capability for flood mitigation through training
6.1 Surveyor and Certified Floodplain Surveyor workshops conducted, hours of instruction, attendees, evaluations
6.2 Real estate agents workshops, hours of instruction, attendees, evaluations
6.3 Insurance agent workshops, hours of instruction, attendees, evaluations
6.4 Building inspectors workshops, hours of instruction, attendees, evaluations

6.5 Owners/occupant workshops, hours of instruction, attendees, evaluations
6.6 Lenders workshops, hours of instruction, attendees, evaluations
6.7 Architect, engineer, and other design professional workshops, hours of instruction, attendees, evaluations
6.8 Contractor, manufactured home installer, and other workshops, hours of instruction, attendees, evaluations

7.0 Mitigate existing structures at risk of flood (remedial) by assisting with plans and applications
7.1 Flood Mitigation Assistance program applications and grants
7.2 HMGP and PDM project structures acquired, elevated or floodproofed
7.3 ICC claims processed
7.4 State Hazard Mitigation Plan – Flood hazard mitigation projects implemented

8.0 Provide flood disaster assistance to communities and individuals
8.1 Substantial Damage determination training and assistance provided
8.2 Mutual aid and volunteer assistance provided to communities

9.0 Administer Community Assistance Program
9.1 Database for floodplain management administration developed and maintained
9.2 CIS updates
9.3 Floodplain management work plan developed and completed
9.4 CAV/CAC prioritization annual update
9.5 CAP conference attendance
9.6 ASFPM conference attendance
9.7 Annual 5-year plan update
9.8 CAP reports submitted on schedule

C. Partnerships

1.0 NCFMP and CTS partners, including FEMA
2.0 FEMA Region IV, Councils of Governments, NC Association of County Commissioners, NC League of Municipalities
3.0 FEMA Region IV, NCAFPM, NFIP Region IV, NCGS
4.0 FEMA Region IV
5.0 ASFPM, NCDOI-OSFM, NCDofA- State Construction Office
6.0 NCGS, IIANC, NC Real Estate Commission, NC Building Inspectors Association, NCDOI, AIANC, PENC, ACSM, NFIP-CSC, FEMA Region IV
7.0 NCEM-Mitigation Section
8.0 NCEM, PENC, AIANC, NC Association of County Commissioners, NC League of Municipalities, FEMA, NFIP-CSC
9.0 FEMA Region IV

Notes:

Scoping – The mapping needs assessment process involving the Mapping Needs Assessment Survey and scoping meetings conducted in each county at which attendance by each jurisdiction is encouraged. The mapping process as well as related regulatory actions is discussed prior to the detailed review of mapping needs within each community jurisdiction.

Preliminary Meeting – The preliminary new/revised countywide Flood Insurance Study and Flood Insurance Rate Maps are presented by the NCFMP to county and municipal officials in each county. This is the NCFMP format for the Final Map Meetings conducted previously by FEMA when new/revised FIS/FIRMs were produced by FEMA. Each Preliminary Meeting includes background of the NCFMP, county specific summary and examples of the revisions, and regulatory and flood insurance impacts of the revisions.

Public Meeting - Communities receiving preliminary FIS/FIRMs are strongly encouraged to publicize the preliminary FIS/FIRMs, organize one or more meetings for the public to view the FIRMs, hear a brief presentation about the maps and insurance impacts, and ask questions.

Certified Floodplain Manager – The North Carolina Association of Floodplain Managers certification program is accredited by the Association of State Floodplain Managers.

Certified Floodplain Surveyor – This pilot program is a joint effort of FEMA, ACSM, NCDEM, NCGS, and FEMA's map coordination contractor(s) to train and certify surveyors to process simple Letters of Map Change (LOMC) on a fast track.

Executive Order 123 – Regulatory floodplain management standards for State facilities established by the governor through an executive order.

NCFMP – North Carolina Floodplain Mapping Program, NCEM

NCGS – North Carolina Geodetic Survey

NCDOI-OFSM – North Carolina Department of Insurance, Office of State Fire Marshall

NCDOA-OSC – North Carolina Department of Administration, Office of State Construction

IIANC – Independent Insurance Agents of North Carolina

PENC – Professional Engineers of North Carolina

AIANC – North Carolina Chapter of the American Institute of Architects

Attachment A. Available Time (Days)

Five-Year Work Plan FFY2005-FFY-2009
North Carolina Division of Emergency Management
Floodplain Management Branch

Staffing - current

- Branch Manager (NFIP State Coordinator)
- NFIP Engineer
- Planners (3)

Available time (work days)

Total work days	52 weeks	x	5 days/week	=	260 days
Leave					
Holidays					12 days
Annual leave	11:10 hours/ month x 12 = 134 hours			=	16.75 days
Sick leave	8.0 hours / month x 12 = 97=6 hours			=	12 days
Service leave			16 hours	=	2 days
Subtotal					42.75 days
Administration – planners & engineer, 1 day/month					12 days
Branch manager, 1 day/week					52 days
Training					10 days
Total overhead time					
Planners and engineer					65 days
Branch manager					155 days
Total work days available					
Planners & engineer	(260 – 65)				195 days
Branch Manager	(260 – 105)				155 days

III. D. Floodplain Management Strategy – Allocation of Time (Percent)

NC CAP WORK PLAN – Allocation of Time by Activity Category
See 2005 Work Plan for activity details.

Activity		Percent of time Allocated to Activity				
		2005	2006	2007	2008	2009
1.0	Identify flood risk through flood hazard mapping	16.0	16.0	16.0	16.0	16.0
2.0	Assure community participation in NFIP for floodplain management & insurance	20.4	20.4	20.4	20.4	20.4
3.0	Develop and maintain capability of community officials to administer program	19.8	19.8	19.8	19.8	19.8
4.0	Provide technical assistance to community officials, professionals, & private sector	18.3	18.3	18.3	18.3	18.3
5.0	Establish and raise state and community flood mitigation standards	7.2	7.2	7.2	7.2	7.2
6.0	Promote private sector mitigation	4.3	4.3	4.3	4.3	4.3
7.0	Mitigate individual structures at risk by assisting with plans and specifications	3.7	3.7	3.7	3.7	3.7
8.0	Provide disaster assistance	3.7	3.7	3.7	3.7	3.7
9.0	Administer Community Assistance Program	6.6	6.6	6.67	6.6	6.6

Allocation of time will be similar for the 5-year period because the NCFMP will continue at the same level through completion of Phase II in 2009. This will be adjusted annually based on NCFMP progress and other factors.

IV. Needs Analysis and Gap Assessment

NC CAP WORK PLAN ESTIMATED TIME REQUIREMENT SUMMARY (Days)						
Activity		Days				
		2005	2006	2007	2008	2009
1.0	Identify flood risk through flood hazard mapping	236.0	236.0	236.0	236.0	236.0
2.0	Assure community participation in NFIP for floodplain management & insurance	301.0	301.0	301.0	301.0	301.0
3.0	Develop and maintain capability of community officials to administer program	292.5	292.5	292.5	292.5	292.5
4.0	Provide technical assistance to community officials, professionals, & private sector	271.0	271.0	271.0	271.0	271.0
5.0	Establish and raise state and community flood mitigation standards	106.5	106.5	106.5	106.5	106.5
6.0	Promote public and private sector mitigation	64.0	64.0	64.0	64.0	64.0
7.0	Mitigate individual structures at risk by assisting with plans and specifications	54.0	54.0	54.0	54.0	54.0
8.0	Provide disaster assistance	55.0	55.0	55.0	55.0	55.0
9.0	Administer Community Assistance Program	97.0	97.0	97.0	97.0	97.0
TOTAL DAYS REQUIRED		1477.0	1307	1477.0	1477.0	1477.0

Estimated work time for projected FFY2005 work activities is 1,477 days.

Equivalent activities are assumed for FFY2006–2009, through completion of Phase III of the NCFMP. Actual program activities will adjusted annually based on progress of the NDFMP, funding available for mapping, and other floodplain management activities.

Current staff available time for CAP activities (See Attachment A.)

Branch manager	155 days			=	155 days
Planners & engineer	195 days	x	4	=	780 days
Total					935 days

Projected annual needs	1,477 days
Available CAP activity time	935 days
Gap	552 days

Current CAP staff includes the Floodplain Management Branch manager, NFIP engineer and 3 NFIP planners.

The gap of 552 days activity time demonstrates a need for 3 additional NFIP planners. Support staff is also needed.

V. Map Modernization Activities

The Floodplain Management Branch works closely with the Floodplain Mapping Section, participating in Scoping, Basin Plan review, preliminary map review, Preliminary Map (Final) Meetings, Public Meetings, and community adoption of new Flood Insurance Studies (FIS) and Flood Insurance rate maps (FIRMs) maps. The Floodplain Management Branch has primary responsibility for technical assistance to communities for adoption and administration of compliant floodplain management regulations. The Branch provides technical assistance to community officials and the public in utilization of the maps. The Floodplain Management Branch also has primary responsibility to assure participation in the NFIP, enrolling new communities with newly identified SFHAs.

By participating in all phases of the mapping program, the Branch is able to introduce potential ordinance requirements at the initial scoping meetings. The process is reinforced at each stage of the mapping process, terminating with the FEMA's issuance of the Letter of Final Determination. Model ordinances other guidance are provided to communities to assist in the map adoption and ordinance amendment process.

The Branch was also instrumental in development of a publication promoting higher standards, ***Safer Development in Floodprone Areas***, available at http://www.ncfloodmaps.com/pubdocs/development.htm. As community officials review their regulations prior to their FIS/FIRMs becoming Effective, Branch staff provide specific recommendations for consideration.

The Floodplain Management Branch is in frequent contact with community officials and local professionals, and the Branch assists in identifying and forwarding to NCFMP community mapping needs.

The CAP work activities associated with Map Modernization are adjusted throughout the year for the current year and annually for the 5-year plan based on the progress of the mapping program as determined by available funding.

VI. Performance Measures

Baseline data will be developed based on FFY 2003 and 2004.

	Activity	Measure/Milestones
1.0	Identify flood risk through flood hazard mapping	
1.1	Identify mapping needs through scoping and basin plan review	Counties & municipalities scoped Basin plans reviewed
1.2	Review Preliminary FIS/FIRMs to assure accuracy	County FIS/FIRMs reviewed
1.3	Present NFIP issues at Preliminary meetings	Preliminary meetings attended
1.4	Present NFIP issues at Public meetings	Public meetings attended
1.5	Maintain FIS/FIRM – update	Requests processed
1.6	Assist community officials with FIS/FIRM applications	Communities assisted, county and municipal workshops conducted
1.7	Maintain FIS/FIRM files and archives – DROC, EBO, WBO	FIS and FIRM panels filed
2.0	Assure community participation in NFIP for floodplain management & insurance	
2.1	Enroll communities in NFIP – newly identified and previously sanctioned	Communities enrolled
2.2	Obtain and maintain compliant community ordinances, including adoption of FIRMs	Community ordinances reviewed and processed 30 days prior to the Effective date
2.3	Revise and maintain model ordinances	Model documents prepared and distributed
3.0	Develop and maintain capacity of community officials to administer program	
3.1	Conduct CAV and CAVs in accordance with prioritization plan	CACs conducted and closed CAVs conducted and closed
3.2	Support Certified Floodplain Manager program	Training sessions provided and exams proctored
3.3	Support NCAFPM Board – attend board meetings	Board meetings attended
3.3.1	Support annual conference – agenda	Assist conference committee, present workshops & awards
3.4	Provide NFIP training	
3.4.1	Home Study Course	Update NC specific HSC and distribute
3.4.2	Online training	Prepare on-line training modules
3.4.3	Provide basic NFIP training	Workshops conducted, hours of training, attendees
3.4.4	Provide community-based floodplain management training	Training conducted, hours of training, attendees
3.4.5	Provide advanced training	Workshops conducted, hours of training, attendees
4.0	Provide technical assistance to community officials, professionals, & private sector	
4.1	Prepare guidance papers and reference documents	Guidance documents prepared and distributed
4.2	Maintain web site	Pages developed, hits on site

VI. Performance Measures

4.3	Respond to inquiries via telephone, email, and mail	Responses to inquires
4.4.	Review State Clearinghouse projects	Projects reviewed
5.0	Establish and raise state and community flood mitigation standards	
5.1	Develop MH regulations for SFHAs	Floodplain regulations drafted
5.2	Update EO123 for State facilities	Model provided to NCDA
5.3	Promote adoption of higher standards	Specific recommendations provided to communities
5.4	Promote participation in CRS and provide training	CRS workshop sponsored, communities participating
5.5	Recognize CRS participation	Plaques presented
6.0	Promote private sector mitigation	
6.1	Provide training for surveyors	Workshops conducted, training hours, attendees
6.2	Provide training for real estate agents	Workshops conducted, training hours, attendees
6.3	Provide training for insurance agents	Workshops coordinated, training hours, attendees
6.4	Provide training for building inspectors	Workshops conducted, training hours, attendees
6.5	Provide information for owners and occupants	Responses to inquiries Hurricane Expos supported
7.0	Mitigate individual structures at risk by assisting with plans and specifications	
7.1	Flood Mitigation Assistance program	Projects assisted
7.2	Hazard Mitigation Grant Program	Projects assisted
7.3	Pre Disaster Mitigation program	Projects assisted
7.4	Increased Cost of Compliance	Workshops provided for officials Post-disaster information provided
7.5	State Hazard Mitigation Plan update	Review and update flood mitigation section
8.0	Provide disaster assistance	
8.1	Operations assistance – EOC, EBO	Days of assistance
8.2	Substantial Damage Determination assistance – community based	Training provided Communities assisted
8.3	Mutual aid and volunteer assistance	Volunteer days worked Structures inspected
8.4	NFIP and flood mitigation assistance	Community meetings attended
9.0	Administer Community Assistance Program	
9.1	Develop state database	Review database format and populate
9.2	Maintain CIS	Update contacts, ordinance, and CAV/CAC information

VI. Performance Measures

9.3	Develop and maintain annual work plan	Annual CAP plan, quarterly reports, and work completion
9.4	Maintain CAV/CAC prioritization	Annual prioritization
9.5	Region IV CAP Conference	Participation in CAP conference
9.6	ASFPM Conference	Participation in ASFPM Conference Papers presented