State of Connecticut
Five-Year Strategic Floodplain Management Plan

September 2004

I. Purpose of the Plan

Within the FY2004 Community Assistance Program – State Support Services Element (CAP-SSSE) tasks, states are required to develop a five-year strategic floodplain management plan. This plan conveys a vision and direction for Connecticut's National Flood Insurance Program (NFIP) floodplain management program and describes the activities necessary to accomplish this vision from FY2005-2009. The plan identifies and assesses the total workload necessary to increase the effectiveness of floodplain management and includes measurable goals that will achieve greater program compliance and continuity. This plan is closely linked to the Map Modernization (MAP MOD) business plan to maximize the effectiveness of both plans.

II. Connecticut State Authority

The Connecticut Department of Environmental Protection (CTDEP) is the designated state NFIP coordinating agency, as authorized by the Connecticut General Statutes (CGS) Sections 25-68b through 25-68h. Within the CTDEP Inland Water Resources Division (IWRD), the Flood Management Program (FMP) manages the CAP-SSSE, MAP MOD, Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), and Pre-Disaster Mitigation (PDM) grant programs.

In addition to the NFIP, CTDEP IWRD also administers the Stream Channel Encroachment Line (SCEL) Program and State Floodplain Management Certification Program. The SCEL Program, authorized under CGS 22a-342 through 22a-349a, predates the NFIP and is a state program that regulates the placement of encroachments and obstructions on certain watercourses. The Flood Management Certification Program, authorized under CGS Sections 25-68b through 25-68h, regulates all State actions in or affecting floodplains or stormwater drainage. Any State project (or project that utilizes State funds) located in a mapped 100-year floodplain must certify to the CTDEP that certain statutory and regulatory requirements have been met. These requirements generally exceed NFIP minimum standards (e.g., critical facilities must be elevated above the 500-year floodplain elevation, no increase in "intensity of use" in the floodplain without an alternatives analysis, etc.).

The CTDEP Office of Long Island Sound Programs (OLISP) implements Connecticut's coastal zone management (CZM) program pursuant to the federal Coastal Zone Management Act. The substance of this comprehensive land and water use program is contained primarily within the Connecticut Coastal Management Act (CCMA), authorized under CGS Sections 22a-90 through 22a-112, which sets forth specific policies that must be applied to changes in structures and uses within the coastal zone. The CCMA policies regarding activities within the coastal hazard area require that each proposal be designated to minimize risks to life and property. These policies

apply to decisions made by any land or water use agency with regulatory authority (either the local municipality or the CTDEP) and to State and Federal agencies proposing actions within the coastal zone.

The Connecticut Office of Emergency Management (OEM) is the lead emergency management, civil preparedness, and disaster response agency as authorized under CGS Title 28. The OEM has several responsibilities, including maintaining the local branch of the National Warning System (NAWAS); administering several State-Federal programs designed to assist communities in developing and improving their civil preparedness capabilities; conducting emergency operations drills and exercises; developing and maintaining various types of emergency operations plans for State government; providing technical planning assistance to communities as requested or as needed; providing training programs for State and local agencies in civil preparedness; and working with the CTDEP to administer the FEMA natural hazard mitigation grant programs. In times of disaster or emergency, OEM alerts key state, federal and local response organizations and acts as a central coordination point for all state agencies at the emergency operations center in Hartford.

In May 2004, Public Act 04-144, "An Act Concerning Floodplain Management and Hazard Mitigation", was passed. This new legislation covers many different aspects of floodplain management. It requires municipalities to revise their current floodplain zoning regulations or ordinances to include new standards for compensatory storage and equal conveyance of floodwater. The CTDEP will assist towns by developing model regulation language. Municipalities will not have to make such revisions until they revise their regulations for another purpose. The legislation requires the State to incorporate natural hazards into the next revision of its Plan of Conservation and Development. It also enables municipalities to use local capital improvement (LoCIP) funds from the State to conduct floodplain management and hazard mitigation activities. The legislation requires a disclosure of flood hazard information to prospective buyers of residential real estate. The legislation imposes a $10 increase to a current municipal land use fee to fund a new state hazard mitigation and floodplain management grant program. These new grant funds can be utilized by municipalities to: 1) Prepare local hazard mitigation plans; 2) Prepare applications to participate in the NFIP Community Rating System (CRS); or 3) Complete hazard mitigation projects in accordance with an approved local hazard mitigation plan. The grant will reimburse up to 90% of the costs incurred with these activities. Grant requirements and guidance will be developed by the CTDEP over the next two years.

III. Vision for Floodplain Management in Connecticut

1. Current Floodplain Management Efforts

Each fiscal year, the CTDEP FMP and FEMA Region I negotiate a scope of work and budget for the CAP-SSSE program, in accordance with annual program guidance. Program activities vary yearly to reflect funding availability and changes in CAP-SSSE program goals and municipal needs. For the current FY2004, the CAP-SSSE agreement contained the following activities:

- Develop a five-year state floodplain management strategic plan.
- Develop a draft model state ordinance/regulation.

- Provide ordinance assistance to communities receiving new Flood Insurance Rate Maps (FIRM).
- Perform twelve Community Assistance Visits (CAVs).
- Enter CAV and ordinance adoption information into the CIS database.
- Provide assistance to sponsoring state representative on new Connecticut floodplain management legislation.
- Host HAZUS-MH training workshop in New Haven, Connecticut.
- Publish four newsletters distributed electronically via e-mail.
- Finalize Local Officials Floodplain Management Reference Manual.
- Attend training sessions, workshops, and conferences.
- Send PSA information packets to Connecticut Broadcasters Association members.
- Administer and manage hazard mitigation grants (HMGP, FMA, PDM) and contracts.
- Provide mapping assistance to municipalities as necessary.
- Provide technical assistance to local officials, design professionals and the general public.
- Assist communities in joining CRS, or in improving their current CRS rating.
- Aid local communities and regional planning organizations (RPO) in the development of hazard mitigation plans.
- Cooperate with other state, federal and local agencies on various floodplain management activities.
- Provide post-disaster assistance to communities if necessary.

In FY2004, FEMA initially provided the State of Connecticut with $131,936.00 in CAP-SSSE funding (75% federal share). An additional $10,460.00 was provided when funds became available for a total CAP-SSSE award of $142,396.00. FMA Technical Assistance (FMA-TA) funds of $19,500 were also provided. The CAP-SSSE and FMA-TA funds ($161,896.00) support only 1.8 full-time employee (FTE -salary and fringe benefits). This does not include required travel, mileage, equipment, training and other program expenses. Currently, 2.0 FTE are employed in the FMP. This funding gap will increase with mandatory collective bargaining salary increases (approximately 5.5% annually), step increases, promotions, and increases to the state fringe benefit rate.

2. Strengths of the Current State Floodplain Management Program

The State of Connecticut has a long history of strong floodplain management and participation in the NFIP. The SCEL Program was established after severe flooding affected the state in 1955. This continuity in floodplain management has proven to be a key strength in Connecticut.

The CTDEP has a well established floodplain management program with committed and knowledgeable staff in place within the FMP, OLISP, SCEL, and floodplain management certification programs. The CTDEP has established and maintained a cooperative working relationship with other state agencies (OEM, Department of Transportation, Department of Education, Department of Economic and Community Development) and with federal agencies (FEMA Region I, USACE, NRCS) in the area of floodplain management and natural hazard mitigation.

Existing state and local regulations (SCEL, State Flood Management, Wetlands, CZM) are in place to discourage unwise floodplain development. Through Public Act 04-144, "An Act Concerning Floodplain Management and Hazard Mitigation", higher regulatory standards are required to be incorporated into existing municipal floodplain regulations.

Every municipality in Connecticut participates in the NFIP (177 communities). An increasing number of municipalities are participating in the NFIP CRS. Approximately half of all municipalities are in the process of preparing a natural hazard mitigation plan through RPOs. As a result, more municipalities are eligible and applying for FEMA natural hazard mitigation grants. As additional municipalities complete an approved hazard mitigation plan, the number of municipalities applying for hazard mitigation grants should continue to increase.

3. Weaknesses of the Current State Floodplain Management Program

Limited federal funding is provided to support all aspects of the NFIP, MAP MOD, planning, and natural hazard mitigation grant programs. FEMA's changing priorities and increased tasks (mitigation planning, e-grants, MAP MOD), in addition to the CAP-SSSE activities, has resulted in a reduced focus on NFIP compliance and training at the local level.

Due to the State of Connecticut hiring process, a minimum of 6 to 10 months is generally needed to hire new staff. The CTDEP is exploring the possibility of an agency re-organization in the near future. Also, a panel appointed by the new governor is conducting a national search for a new DEP commissioner. Both of these major events will cause some disruption.

Even though all Connecticut communities participate in the NFIP, the part-time nature and frequent turnover of community officials makes it difficult to develop and maintain floodplain management expertise on the community level.

4. State Vision for Floodplain Management

The state vision for floodplain management is to promote sound floodplain management polices for the protection of life and property from flooding while encouraging the preservation and restoration of the natural functions of the floodplains.

In cooperation with federal, state and local agencies, the CTDEP FMP will endeavor to increase the awareness of flood risks, identify significant flood hazard potential areas, assist local governments in maintaining effective floodplain management programs, and assist in the implementation of programs and projects to prevent and mitigate potential flood damages.

IV. Connecticut Strategy to Improve Floodplain Management

1. Proposed CAP-SSSE Activities

It is expected that over the next five years CAP-SSSE activities will continue to be performed. However, the level of effort and specific type of activity is likely to change based on shifting

FEMA priorities or funding. The following CAP-SSSE activities are expected to be conducted over the next five years:

- **Floodplain Management Work Plan.** The five-year floodplain management work plan will be updated and revised as necessary.
- **Community Assistance Visits (CAVs).** CAVs remain the effective means to evaluate community compliance under the NFIP. CAVs will be conducted in communities with a high policy base, upon request for assistance, or when experiencing increased development pressure. Generally, coastal communities are visited once every five years and inland communities are visited once every ten years. There are 29 coastal and 148 inland municipalities. To visit each coastal community once every five years, six coastal CAVs per year are required. To visit each inland community once every ten years, 15 inland CAVs per year are required.
- **Model Ordinance**. A draft state model ordinance/regulation was prepared in FY2004. We will continue to work to complete this model ordinance/regulation. The anticipated revision and development of DFIRMs through the MAP MOD initiative and new Connecticut floodplain management legislation has brought additional items to consider for the model ordinance/regulation.
- **Ordinance Assistance**. Routine ordinance reviews were not conducted in FY2004. FMP efforts were re-directed into developing the model ordinance. Ordinance assistance was provided to any community adopting new FIRMs. With the finalization of the model ordinance and in support of the MAP MOD initiative, it is anticipated that additional time will be spent in the future on local ordinance assistance activities.
- **CIS Data Entry**. CAV and ordinance information will be entered into CIS.
- **Workshops, Training and Newsletter.** Workshops and training sessions for local officials, other state agencies, engineers, surveyors, RPOs, and other groups will be conducted. The specific nature of the training will depend on identified needs. It is planned that in the next few years increased training for local officials will be required on how to perform benefit to cost analyses (BCA) and the utilization of e-grants for hazard mitigation grant applications. As DFIRMs are revised more training on the elevation certificate will be needed for local officials and surveyors. HAZUS training should be emphasized for regional planners and community officials. CTDEP staff will continue to attend conferences, workshops and training sessions each year. The quarterly newsletter will continue to be published.
- **General Technical Assistance.** Technical assistance will be provided to local officials, design professionals, other state agencies, and the general public as needed.
- **Mapping Assistance.** Mapping assistance is anticipated to increase in support of the MAP MOD initiative.
- **Coordination with Other State Programs.** Coordination with other state programs is an integral part of the CAP-SSSE and these activities will continue.
- **Post-Disaster Assistance**. Assistance will be provided to communities following a presidential disaster declaration as needed in cooperation with OEM. Changes to the scope of work would be negotiated with FEMA Region I in the event of a disaster declaration.
- **Other Activities**. Additional activities conducted annually include administration and management of the HMGP, FMA and PDM natural hazard mitigation grant programs.

Mitigation planning assistance is provided to communities and RPOs. CRS assistance is provided to new communities wishing to join the program and existing communities striving to improve their CRS rating.

- **New Connecticut Legislation.** Significant time will be needed to develop new program guidance for the recently enacted Connecticut Floodplain Management Act. This work will include program planning, design, development, implementation and management.

2. Program Milestones for FY 2005-2009

Below are listed proposed program milestones for FY2005-2009 based on current program initiatives. These milestones may vary in subsequent years with program priority changes.

- Develop a comprehensive model floodplain ordinance/regulation.
- Develop a strategy for municipal adoption of the model ordinance/regulation.
- Encourage communities to adopt higher regulatory standards through the model.
- Track municipalities with higher regulatory standards.
- Prepare guidance and develop program to implement the new Connecticut floodplain legislation.
- Encourage every municipality in the state to adopt a local hazard mitigation plan.
- Evaluate and improve the state process administrating hazard mitigation grants.
- Train municipalities in the state natural hazard mitigation grant program roles and responsibilities and contracting process.
- Train municipalities on BCA and e-grants for submittal of the national hazard mitigation grant applications.
- Assist communities in joining the CRS or in improving their current rating.

3. Partnerships and Coordination with Other Programs

Coordination with other state agencies is an integral part of all CAP-SSSE activities. The CTDEP works closely with the Connecticut OEM on disaster response and drills, mitigation grants management, and development of the state hazard mitigation plan. In the near future, OEM will be consolidated into a new Connecticut Department of Homeland Security (CTDHS). Management of the hazard mitigation grant programs or portions of these programs may be transferred to CTDHS. The CTDEP coordinates with many other state agencies on the Connecticut Interagency Hazard Mitigation Committee (CIHMC) to review hazard mitigation grant applications. The CTDEP FMP works closely with the OLISP on CZM issues to ensure that projects are compliant with the NFIP regulations. Through the flood management certification program, the CTDEP reviews permit applications for state projects, principally for the CTDOT and DOE, located in the floodplain. Federal partners include FEMA Region I, NRCS, USGS, NOAA, NWS and USACE.

4. Workload Allocation

Below is an estimation of the percentage of time the CTDEP FMP will spend conducting each of the fundable CAP-SSSE activities in FY2005-2009. These percentages can vary yearly with changes to program priorities. Due to the implementation of the MAP MOD initiative, there is

an anticipated future increase in outreach, technical assistance, and ordinance compliance assistance and a subsequent reduction in other activities.

CAP-SSSE FUNDABLE ACTIVITIES	FY2005	FY2006	FY2007	FY2008	FY2009
Five-Year Floodplain Management Plan	1%	1%	1%	1%	1%
Ordinance Assistance	5%	10%	15%	15%	15%
CAVs	15%	10%	10%	15%	15%
CIS Data Entry	1%	1%	1%	1%	1%
State Model Ordinance Development	20%	15%	5%	0%	0%
Workshops, Training & Newsletter	5%	5%	20%	20%	20%
Staff Training, Conferences, Workshops	5%	5%	5%	5%	5%
General Technical Assistance	10%	10%	10%	10%	10%
CT Floodplain Mgmt Act Program Development	10%	10%	5%	5%	5%
Mapping Assistance	5%	10%	10%	10%	10%
HMGP, FMA, PDM Grants Management	10%	10%	10%	10%	10%
Mitigation Planning Assistance	5%	5%	5%	5%	5%
CRS Assistance	3%	3%	3%	3%	3%
Coordination with Other State Agencies	5%	5%	5%	5%	5%
Post-Disaster Community Assistance*	0%*	0%*	0%*	0%*	0%*

**If a disaster occurs this number will increase and other activities will be limited or cease.*

5. Multi-Year Efforts

The MAP MOD initiative is the most important multi-year effort due to the increased workload and amount of funding related to this initiative. Phase I is outreach to the municipalities. Phase II is ordinance compliance work. With the implementation of the Map Modernization Management Support (MMMS), it is anticipated that future mapping assistance will be performed by a mapping contractor.

Two years will be required to develop the guidance and program requirements for the newly passed Connecticut Floodplain Management Act. Part of this legislation requires revision to municipal floodplain ordinances and regulations. In FY2004, the CTDEP began to develop a state model floodplain ordinance/regulation. This effort will continue in 2005 and possibly in 2006. Training and technical assistance for municipalities will occur in subsequent years. Significant re-training of municipal officials will be required in the next five years due to a re-vamping of the State's hazard mitigation grant programs, contracting process, and municipal responsibilities under these programs.

V. Map Modernization Activities

1. Map Modernization Business Plan

The recently completed State of Connecticut Map Modernization Business Plan sets forth a strategy under which the state will increase its participation in the FEMA MAP MOD initiative. The CTDEP could be in a position to expand its FMP capability and capacity for MAP MOD,

provided long-term funding assistance is available through FEMA that would allow for adequate staffing. The primary recommendation of the plan is to hire a new full-time, state mapping coordinator and an engineering position to provide technical assistance. The specific duties of the state mapping coordinator are expected to include, as a minimum: (1) Oversee the mapping contractor production and performance schedule; (2) Administrative and management activities, such as annual Business Plan updates, NFIP community status assurance efforts related to Map Modernization; (3) Assisting in identifying study/restudy needs; (4) Oversee the input of data into MNUSS through mapping contractor and partner support; (5) Outreach and community training activities; (6) Assist in the development of technical standards agreements; (6) Assist in coordinating the interagency agreements for Flood Insurance Studies; and (7) Assist communities with ordinance changes, updates, and map adoption issues as needed.

The new state mapping coordinator would be located in the CTDEP FMP and would work closely with CAP-SSSE funded FMP staff on all aspects of MAP MOD, particularly in the area of ordinance adoption. The business plan outlines an ambitious project of re-mapping the entire state by FY2010. This would require adoption of updated ordinances/regulation in all 177 Connecticut communities that participate in the NFIP. Due to the "home rule" type of local government in Connecticut, extensive coordination will be required to ensure that map revision schedules coincide with town meeting schedules or other local adoption processes. Assuming the requested MMMS funding is provided, the map coordinator and the mapping contractor would be responsible for most of the coordination effort, while CAP-SSSE funded staff would perform the actual ordinance review and comment.

2. CAP-SSSE Support for Map Modernization

With existing staff, the FMP has been only marginally involved in mapping activities. In each of the last five or more years there have been only small Limited Map Maintenance (LMMP) and Primary Map Revision (PMR) restudies conducted in Connecticut with a very limited mapping budget from FEMA Region I. The CTDEP has periodically participated in scoping activities, review of preliminary maps, and has attended some post-preliminary processing meetings. The FMP strongly lacks the staffing capacity to conduct significant amounts of additional technical work given other commitments. To realize the full vision of the FMP outlined previously in support of MAP MOD, additional technical and program management capability and capacity will be needed.

The FMP plans to, in addition to existing responsibilities, manage a portion of the State's mapping activities with FEMA's assistance. These activities include the hiring of a state mapping coordinator and a mapping contractor to conduct and manage flood studies in Connecticut. The specific activities that the FMP will perform or manage will depend upon the funding available from FEMA. The FMP staff will perform ordinance reviews and provide comments associated with map updates. Ordinance reviews and mapping assistance workload is also expected to rise significantly during the five-year planning period.

VI. Needs Analysis and Gap Assessments

It is assumed that the current CAP-SSSE funding levels, with possible adjustment for inflation each year, will continue for FY2005-2009. For FY2004, the CAP-SSSE and FMA-TA funding provided does not fully support the salary and fringe benefits for the 2.0 FTE in the CTDEP FMP. Current funding provides partial salary and fringe benefits for only 1.8 FTE and does not cover other program expenses such as required travel, mileage, equipment, supplies and professional membership dues. This funding gap will progressively increase over time due to mandatory union collective bargaining salary increases, step increases, state fringe benefit rate increases, promotions, and inflation. In the past, the State of Connecticut closes this funding gap with state funds in order to fully support 2.0 FTE and other program expenses. Due to state budget constraints, we do not anticipate the ability of state funding being available to bridge the federal funding gap. The State of Connecticut is seeking a commitment from FEMA to fully fund 2.0 FTE and all other program expenses. Actual program expenses (salary, fringe benefits, travel, training and supplies) projected for FY 2005 are $200,141 and for FY2006 are $210,613.

The workload allocation table in Section IV assumes maintenance of current staffing levels dedicated to CAP-SSSE activities. As the funding gap increases in future years, adjustments will need to be made to the tasks and services provided under the CAP-SSSE. These adjustments can include fewer CAVs, fewer workshops and training sessions, fewer newsletters, and fewer training sessions and conferences for staff. The activity reduction may result in compliance problems associated with insufficient close contact with communities and untrained state and community officials.

Some activities cannot be reduced, such as general technical assistance. A large portion of time spent on technical assistance is associated with project reviews, which directly results in ensuring that the project is in compliance with the NFIP requirements. Failure to perform these reviews will likely result in non-compliant construction. Not responding to general technical assistance inquires (telephone, letter or e-mail) is unacceptable. With the start of the MAP MOD initiative, mapping assistance and ordinance assistance will increase in future years as communities receive new maps.

It is important to note that if current staff levels cannot be maintained or if a disaster or other unanticipated workload shift occurs, all activities, including NFIP compliance activities, would need to be reduced even further or eliminated entirely.

VII. Connecticut's Performance Measures and Evaluation Procedure

After consulting with FEMA Region I, the following performance measures will be used to measure floodplain management successes in the State of Connecticut. The table below summarizes these performance measures.

State of Connecticut Performance Measures

Outcome/Output	Method of Measurement
Maintain or improve the percentage of communities that adopt new maps by the FIRM effective date.	Compare the number of communities receiving new maps with how many adopted the new maps and have compliant ordinances (i.e., how many were suspended for failure to adopt).
Increase the percentage of communities that adopt new maps prior to 30-day letter being sent.	Compare the percentage of communities in FY-2004 that received a 30-day letter, with the number in subsequent years.
Increase the number of CRS communities.	Compare the number of CRS communities in FY 2004 with the number in subsequent years.
Increase the number of CRS class improvements.	Compare the number of CRS class improvements in FY 2004 with the number in subsequent years.
Numeric or percentage of repetitive loss structures mitigated, with special emphasis on those repetitive loss properties on the target list.	Percent of allocated FMA funds expended in planning for or mitigation of repetitive loss structures. Work closely with the FEMA Regions to develop projects for HMGP, or applications for PDM that address mitigation of repetitive loss structures.
Increase the number of communities that have adopted the latest State model ordinance, or have adopted a stand-alone ordinance, that meets or exceeds the standards on the State model.	Compare the FY 2004 number of communities that have adopted the latest model ordinance, with the number in subsequent years.
Increase number of communities adopting local hazard mitigation plans that are FEMA approved.	Compare the number of communities having these in FY 2004 and compare to subsequent years.
Increase floodplain management training in the State.	Compare the number of local officials, surveyors, engineers attending workshops in FY 2004 and compare to subsequent years.
Increase the number of communities that adopt and enforce higher regulatory standards.	Compare the number of communities in FY 2004 with the number in subsequent years.
Quantify general technical assistance calls that your office handles.	Document all general technical assistance calls in CIS Recommend that the State categorize the type of calls (mapping, flood insurance, etc.) and the constituent group (local govt., citizen, etc). We will be developing a screen in CIS for this purpose to document these.
Increase State inter-agency coordination resulting in increased floodplain management	Document the number of workshops, meeting, technical assistance visits, project reviews, etc., with other state agencies with annotations describing how these improved floodplain management.