STATE OF IOWA

5 –YEAR COMPREHENSIVE FLOOD PLAIN MANAGEMENT PLAN

FY 2005

SEPTEMBER 8, 2004

Iowa 5-Year Comprehensive Flood Plain Management Plan

I. State Authority:

- Iowa General Assembly created the Iowa Natural Resources Council in 1949.
- Legislation gave it authority over all flood plain activities in 1957.
- Authority, which currently resides with IDNR, is published in Iowa Code Chapter 455B.
- Administrative rules published in Chapters 567-70 through 76, Iowa Administrative Code.

II. Vision for flood plain management over next 5-years:

- Iowa's program is unique among Region VII States. To understand vision, one must first understand the functions of existing State FPM Program.
- IDNR has permitting authority over most flood plain management activities. Therefore, considering limited staff resources, statutory requirements of reviewing and permitting proposed flood plain development takes precedence over NFIP related activities.
- Currently 7 staff members in FP Management Program. Of those, only 1.5 staff positions perform activities that can be considered directly related to – or in support of - the NFIP. Only 0.75 position is currently funded by CAP-SSSE.
  - The primary NFIP based activities provided by the 1.5 State FPM Program staff positions at this time are: Technical assistance to communities, lenders, agents, media, engineers, other state agencies, and the public; CLOMR/LOMR review, hydrology approval for FIS, Map-Mod support (including prioritization of community study needs, developing strategy for mapping currently unmapped counties, attending T&C's, etc.), ordinance development and review, implementation of strategy for updating repetitive loss structure inventory on "Big" list through partnership with local communities, first responder to state constituents immediately following a disaster and technical assistance and support/coordination with FEMA after a disaster declaration. Participates as a partner on the Interagency Hazard Mitigation Team. These activities are closely tied to those statutorily required of the program.
  - Other NFIP based activities conducted as time allows include: CAV's, CAC's, workshops for local officials (NFIP, CSC, and special interest), attending Final Map Meetings and Special Conversion meetings.

- The remaining staff members perform duties that, although not recognized by the NFIP or the CAP-SSSE, directly promote the goals and objectives of the NFIP and FEMA: Reduction of flood damages. These are as follows:
  - Review of applications for construction of buildings, fill, bridges/culverts, WW and water treatment facilities, channel changes, streambank stabilization, levees, dams, flood protection works and other miscellaneous obstructions/uses in the FP.
  - The State's FP Management Program requires permits in flood hazard areas even if they have not been identified by FEMA (i.e., in unmapped counties) and regardless of whether or not the community participates in the NFIP.
  - The State's FPM Program develops 100 yr. flood elevation information for all "high hazard" damage potential buildings (i.e., residential homes, commercial buildings, public buildings, etc.) and requires elevation/flood proofing to at least 1.0 ft. above the 100 yr. flood. The same level of protection is also required for WW and water treatment facilities.
  - The State's FPM Program develops floodway information where it suspects proposed development will encroach too closely to the channel. This floodway information is used to govern the location of buildings, WW and water treatment facilities, levees, fill and other misc. obstructions and uses.
  - Bridges and culverts (new and replacement) must be designed so as to minimize backwater to a maximum of 1.0 ft for the 100 yr. frequency flood event. Bridges must provide a minimum of 3.0 ft. of freeboard between the low superstructure and 50 yr. frequency flood. This stringent criteria not only minimizes the risk to the bridges and roads during a flood, but also minimizes damages to upstream properties.
  - The State's FPM Program is also responsible for the State Dam Safety Program.
  - Provides technical assistance to EMD, FEMA, local governments and citizens during and after a flood event. Such assistance is provided regardless of whether or not there is a Presidentially Declared disaster.
  - The State FPM Program retains permitting authority in communities participating in the NFIP. Therefore, a permit is required from the State FPM Program as a condition of the granting of most local permits.
  - Where a community has a detailed FIS published by FEMA, the FPM Program can delegate a portion of its permit authority to the community. However, the approval and/or concurrence of the State FPM Program are required for the permitting of any bridge, dam or variance from the community's FPM regulations.

- As can be seen from this, the State FPM Program for Iowa involves much more than those activities approved for CAP-SSSE funding.
- Because of our current statutory responsibilities, the primary vision for the future of the State FPM Program must concentrate on continuation and improvement of those activities involving: The review and permitting of proposed flood plain development; dam safety; technical review of FEMA map products (including LOMR/CLOMR review and hydrology approval); ensuring community compliance with local flood plain management regulations; assistance to EMD, FEMA, local communities and citizens during and after a flood event; and providing technical assistance to communities, consultants and citizens.
- Current CAP-SSSE funding is small, and the future is unknown. For this reason, it is difficult to incorporate much in the way of CAP-SSSE funded activities into program vision. In the interim – and to the extent made possible by staffing and CAP-SSSE funding – we envision conducting additional workshops for community FPM officials, planners and emergency managers; conducting regular CAV's and CAC's.

III. Strategy for Improvement

- To the extent possible based on staff and CAP-SSSE funding, we will engage in the following activities:
  - Conduct Community Assistance Visits (CAVs) for selected communities
  - Conduct Community Assistance Contacts (CACs) for participating NFIP communities
  - Maintain Community Information System (CIS) database of community needs as identified from CAVs and CACs
  - Assist communities in preparing, adopting and revising flood plain management regulations.
  - Review communities' flood plain management regulations for compliance with NFIP and IDNR standards.
  - Assist communities regarding NFIP compliance issues.
  - Conduct special conversion meetings in coordination with FEMA.
  - Provide flood plain management information as requested by correspondence and telephone calls from communities, consultants and the general public
  - Develop a strategy for promoting the Community Rating System to communities.

- Continue with the implementation of our strategy for updating repetitive loss structure inventory list through communities.
- Update and rewrite model flood plain management ordinances as needed to ensure they are compliant with the minimum requirements of both the NFIP and IDNR.
- Promote flood plain management compliance strategies, such as the sharing of permit officials between small communities, which help ensure the effective enforcement of flood plain management regulations.
- Publish a yearly Flood Plain Management Newsletter which will be mailed to all communities participating in the NFIP.
- Provide Base Flood Elevation (BFE) information to participating communities.
- Provide Map change information to participating communities.
- Review proposed flood plain development projects for participating communities.
- Assist and participate in mini-workshops conducted by CSC representatives for agents, lenders and local officials.
- Conduct, assist and participate in NFIP Workshops for local permit and elected officials
- Make presentations to appropriate trade associations and groups such as the Iowa League of Cities, Iowa Association of Counties, etc.
- Administer the Certified Flood Plain Managers (CFPM) Exam for interested local permit officials
- Contact non-participating communities with respect to possible participation in the NFIP
- Assist in efforts associated with Map Modernization Program.
- Review of and comment on hydrology associated with all new and revised studies.
- Review preliminary FIS to ensure accuracy.
- Review requests for LOMR and CLOMR for compliance with State and FEMA requirements.
- Assess, evaluate and prioritize mapping needs for communities in the state.
- Attend applicable training sessions available at the Emergency Management Institute.
- Attend appropriate conferences and seminars such as the ASFPM Conference, meetings at Region VII, and other National Flood Conferences.

- Maintain affiliations and actively participate in the network of NFIP State Coordinators and ASFPM.
- Provide technical assistance and support to other states and other Iowa State Agencies as requested.
- IDNR staff will be available and will coordinate activities with FEMA after a disaster declaration.
- Participate with FEMA and CSC in providing technical assistance to communities after a disaster declaration.
- Participate in the activities of the Interagency Hazard Mitigation Team

- As explained earlier, our program vision focuses primarily on those activities that are statutorily required by State law and, to the extent possible with staffing and CAP-SSSE funding, includes several activities identified as CAP-SSSE fundable.
- Therefore, the milestones commonly used to measure and demonstrate the progress and effectiveness of the State FP Management program do not correspond well to CAP-SSSE fundable activities.
- Milestones that can be used to measure the Programs progress as it applies to CAP-SSSE related activities are as follows:
  - Maintain or improve the % of communities that adopt new maps by the FIRM effective date;
  - Increase (or maintain) the % of communities that adopt new maps prior to the 30 day letter being sent;
  - Increase the number of flood prone communities enrolled in the NFIP;
  - Increase the number of CAV's and CAC's conducted;
  - Maintain floodplain management compliance in the state.
  - Increase (or maintain) the number of communities that have adopted the latest State model ordinance;
  - Increase number of workshops conducted for local flood plain management officials;
  - Continue implementing strategy to verify repetitive loss inventory data.
  - Increase the number of certified floodplain managers (CFM) in the state.
  - Increase the number State Floodplain Management staff that are certified floodplain managers (CFM)
  - Increase (or maintain) State inter-agency coordination as it relates to floodplain management.
- The State FP Management program currently partners/coordinates well with most other State and Federal agencies including:

- State Homeland Security/Emergency Management Division -- SHLS/EMD
- Iowa Department of Transportation -- IDOT
- Iowa Department of Economic Development -- IDED
- Iowa Department of Public Defense – IDPD
- Iowa Department of Agriculture and Land Stewardship -- IDALS
- Natural Resources Conservation Service -- NRCS
- United States of America Corps of Engineers -- USACE
- County Engineers, Councils of Government, etc.

  - This is accomplished as a result of the State FP permitting requirements. Most State, Federal and local governmental agencies are aware that permits are required and what the relevant criteria are for specific types of projects.
  - The State FP Management program provides technical assistance to SHLS agency during flood events. And, it provides Q100 elevation and flood frequency information to SHLS after flood event for use in formulation of mitigation projects.
  - In addition to the permitting requirements of the State FP Management program, a MOA between the IDNR and IDOT requires the IDOT to coordinate with local community where one of their projects affects the flood plain of a detailed study stream.
  - IDED works with State FP Management program to ensure that businesses looking to locate or expand in the State are aware of FP permitting requirements.

- As explained earlier, the resources dedicated to NFIP/CAP-SSSE related components of the State FP Management program are small when compared to the overall program. Therefore, approximately 21% of total staff resources are dedicated to functions directly in support of the NFIP. However, only 18% of total staff resources will be dedicated to CAP-SSSE fundable activities. Based on that assumption, the following is an estimate of the percent of time (total) that the State FP Management program will spend on the these select CAP-SSSE fundable activities:
  - Developing the 5-Year Flood Plain Management Work Plan - - 0.05
  - Ordinance Assistance - - .5
  - CAV/CAC's - - 2.3
  - CIS data entry - - 0.2
  - State model ordinance research - - 0.05

- Workshops and other training - - 0.2
- General technical assistance - - 13.0
- Mapping assistance - - 0.5
- Coordination with other State programs to ensure State NFIP compliance - - 0.2
- Post disaster assistance to communities - - 1.0

- The above referenced percentages of time are for an average year and do not take into account fluctuations resulting from extreme flood activity or any increased involvement with ordinance and map reviews associated with increased Map Modernization efforts. However, as can be seen from the above list, the vast majority of our CAP-SSSE funded activities are associated with providing general technical assistance (13% of the 18% total). Therefore, if such a fluctuation in workload were to occur, we would have no choice but to reduce the number of CAV/CAC's and workshops performed (2.5% of the 18% total).

IV. Needs analysis and gap assessments

- As mentioned several times, the current CAP-SSSE funding for the State FP Management program is relatively small and only accounts for 0.75 of the 1.5 positions currently performing activities directly related to the NFIP and Map Modernization.
- The Multi-Hazard Implementation Plan (MHIP) is not yet available. Therefore, we are unable to use it to project the scheduled start of flood mapping projects.
- The State of Iowa has 99 counties with (including currently unmapped counties) approximately 500 flood prone communities. If the Map Modernization program were funded at a level that would achieve the stated goal of providing new digital flood maps for all communities within 5 years, this would require that an average of 100 Iowa communities would be required to adopt new flood plain management ordinances each year. Based on the current funding levels, and the competing demands of the programs statutorily required functions, it is impossible that the State FP Management program would be able to provide the ordinance review and other related functions needed to support the Map Modernization program under such a scenario.
- Current CAP-SSSE funding is adequate to support only 0.75 of a staff position. State funding is not available to support the remaining 25% of this position. Because the current grant was not accepted until the 2nd quarter of FY04, we have been able to maintain this position as "full time" for the remainder of this fiscal year. However, additional funding will be needed in FY05. Otherwise, the State FP Management Program may be unable to

continue this position or, at the very least, will be forced to limit it to a "part time" status.

V. Map Modernization Activities

- Some of the activities listed in the State's Map Modernization Business Plan (i.e., technical review of mapping projects, review of hydrology and hydraulic modeling, technical assistance, limited scoping, etc.) are already performed by the State FP Management Program, though not to the extent that would be required if Map-Mod were more fully funded. Also listed is the preparation of a base map inventory. Much of the remainder of the Plan outlines actions that should be taken by the State FP Management Program in order to create an "in house" flood plain mapping program. However, the creation of such a mapping program is largely dependent on the allocation of State funding for the hiring and training of staff. At this time, no such funding has been committed or otherwise requested by the Department. Therefore, there is no definite timeline for the creation of this mapping program.
- The Map Modernization Business Plan does not include a schedule for the completion of maps. The State FP Management Program will not be responsible for the production of flood map products or for the management of CTP projects. The Map Modernization Business Plan does not attempt to determine the likely workload resulting from the Map-Mod Program.
- Because of this, there are no linkages between this plan and the Map Modernization Business Plan.
- Depending on staff resources and funding, the State FP Management Program will continue to provide ordinance and study review. To the extent possible based on staff and CAP-SSSE funding, the State FP Management Program will also assume responsibility for ensuring timely adoption of ordinance by communities prior to the effective FIRM date. Each community will be contacted regarding the need to update its ordinance upon receipt of the 90 day appeal letter.
- Newly mapped communities will be contacted regarding participation in the NFIP 30 days prior to the release of their preliminary maps.

VI. System for evaluating State's performance

See attached table

Outcome -Performance Measure Summary

Outcome/Output	Method of Measurement
Maintain 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). (Historically, 100% of communities adopt new maps by the FIRM effective date.)
Maintain the percentage of communities that adopt new maps prior to the 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. (Historically, 100% of communities adopt new maps prior to the 30-day letter being sent receive.)
Increase the number of flood prone communities enrolled in the NFIP in the state.	Compare the number of flood prone communities enrolled in the program at the end of FY the number of non-participating flood prone communities that should be enrolled.
Increase the number of CRS communities or CRS class improvements.	Compare the number of CRS communities in FY-2004 with the number in subsequent years. YR-1: Develop Strategy and identify "target" communities. YR-2 – 5: Implement Strategy.
Increase the number of technical assistance contacts (CAVs and CACs) to communities in your state that result in increased compliance.	Compare the number of CACs and closed CAVs reported in CIS and compare the number to subsequent year totals.
Maintain floodplain management compliance in the state.	During CAV's, record the number of NFIP violations (as a percentage of the total number of buildings evaluated). Compare this percentage with the number of violations discovered in subsequent years. Compare the percent of LOMC violations in FY-2004 with numbers in subsequent years. *Note: Measurement of this outcome may require a longer time period and a large sample to adequately measure the outcome and establish a State baseline.*
Maintain 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.

Continue implementing strategy to verify repetitive loss inventory data.	Compare the number of communities receiving request to update repetitive loss inventory with the number returning completed, accurate repetitive loss worksheet.
Increase floodplain management training in the State.	Document the number of local officials, surveyors, engineers, and community planners attending workshops in FY-2004 and compare to subsequent years.
Increase the number of certified floodplain managers (CFM) in the state	Compare the number of CFMs in FY-2004 with the number in subsequent years.
Increase the number of State Floodplain Management staff that are CFMs.	Compare the number of CFMs in FY 2004 with the number in subsequent years.
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.