ODNR – DIV. OF WATER FLOODPLAIN MANAGEMENT PROGRAM

PROGRAM ASSESSMENT & 5-YEAR CAP WORKPLAN 2004-2009

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SECTION 1: INTRODUCTION & BACKGROUND

Purpose

The purpose of this document is threefold: to combine various plans and assessments completed by the Floodplain Management Program into a single document that is congruent with Division, Department, and FEMA strategic plans; to develop a 5-year work plan for CAP-SSSE, and to fulfill the grant requirements of the FY04 CAP-SSSE Cooperative Agreement which specifies that such a document will be produced. In subsequent years, this document will be updated to include all the elements necessary to function as the Program's strategic plan (currently it does not have 5-year or strategic goals and objectives for the entire program – just those for CAP-SSSE in the 5-year CAP workplan).

Structure of Document

This document is a combination of a self-assessment to analyze current conditions and the environment, and a 5-year CAP workplan for the Floodplain Management Program. Affiliated plans that will be incorporated will be identified as Appendices to this plan (i.e., State of Ohio Map Modernization Business Plan). The *Association of State Floodplain Managers* Effective State Programs (2003) document is used to analyze program elements by breaking it down into functional pieces which are deemed by that document to be essential components of a state's floodplain management activities. The analysis of program elements identifies strategic issues, potential future activities, current estimated staff time dedicated to those components, and resource gaps to achieve effectiveness. Section 4, Program Evaluation, identifies how the program can be evaluated including benchmarking, and identifies specific performance measures and milestones. It also defines how other assessment tools will be used (i.e., Ohio Award for Excellence).

Previous planning documents and reference documents used in the development of this document include:

Floodplain Management Program Self Assessments (7/96, 3/04)
Draft Map Modernization Plan for the State of Ohio (2/04)
Ohio Water Resource Council Four-Year Strategic Plan (3/02)
Division of Water Strategic Plan (1/03)
Draft Department of Natural Resources Strategic Plan (5/04)
Effective State Floodplain Management Programs, Interim Draft (ASFPM, 2003)
Instructions for the Program Assessment Rating Tool (U.S. Office of Budget and Management)
2004 CAP-SSSE 5 Year Floodplain Management Work plan Outline (FEMA, 2004)
2004 CAP-SSSE, CTP-MAS, and MMMS Grant Agreements ODNR, Division of Water,
Floodplain Management Program: Standard Operating Procedure for Flood Disasters

Program Overview

Flooding is the leading natural hazard threat in Ohio. All 88 of Ohio's counties and over 700 cities and villages have flood hazard areas within their boundaries. Local and state floodplain management activities have been designed to help reduce future flood risk; however, millions of dollars are spent annually in the response to and recovery from flood events. Flooding is a natural occurrence that becomes a problem when development decisions are made without proper assessment of the hazard and risk. Since 2000, Ohio has had 10 Presidential flood disaster declarations, and many more undeclared flood events.

The Floodplain Management Program is providing leadership of public and private interests for the cooperative management of Ohio's floodplains to reduce flood damage and protect the floodplain resources. Broad strategies of partnership, technical assistance, public awareness/education, and recommended flood protection standards are applied to actively influence development, mitigation and management decisions concerning Ohio's floodplains. Program staff are recognized and respected for comprehensive floodplain management knowledge and expertise that has been developed over several decades as the National Flood Insurance Program Coordinator for the State of Ohio.

Mission Statement of the Floodplain Management Program:

To provide leadership to local governments, state agencies, and interested parties toward cooperative management of Ohio's floodplains to support reduction of flood damage and the recognition of the floodplain's natural function and benefit. Broad strategies of partnership, technical assistance, public awareness and education, recommended development and protection standards are directed at achieving this mission.

Land use and development decisions that impact the wise use of the floodplains rest largely with local and state governments in Ohio. The federal government has an interest through their administration of the National Flood Insurance Program and disaster assistance roles. The Floodplain Management Program mandate includes the responsibility for protecting the health and safety of Ohio citizens, integrating flood risk reduction and floodplain resource protection strategies with federal and local partners, and reducing financial burdens on state and local economies from unwise use of floodplains. The framework of the National Flood Insurance Program relies heavily on the collaboration between federal and state programs delivered at the local level.

Statutory Authority

The Floodplain Management Program **authorities and mandates** come from the provisions contained in the **Ohio Revised Code Sections 1506.04, 1521.13, 1521.14 and 1521.18:**

- Sect. 1506.04 requires Ohio counties or municipal corporations with coastal flood hazard areas to comply with the National Flood Insurance Program regulations or have equivalent local flood damage reduction standards.
- Sect. 1521.13 identifies the floodplain management responsibilities and flood damage reduction standards of the program, and designates the Division of Water as the State Coordinator for the NFIP.
- Sect. 1521.14 clarifies the floodplain management duties of state agencies and political subdivisions, sets conditions for agency funding of development in flood hazard areas, and promotes awareness of flood risk (markers for high water) and mitigation opportunities to reduce the future potential of flooding (floodproofing).
- Section 1521.18 requires all counties and municipal corporations with flood hazard areas to adopt local floodplain management standards, which comply with the minimum federal criteria of the National Flood Insurance Program.

Currently, a comprehensive revision of Section 1521 as it relates to the Floodplain Management Program is being considered as part of an omnibus bill. If proposed omnibus language is passed, the above summaries for 1521.13 and 1521.14 need to be adjusted. Section 1521.13 will be focused on the standards and requirements for activities funded or undertaken by the state and 1521.14 addresses enforcement and authority to remedy noncompliant development.

Strategic Planning Framework within the Division

As indicated earlier, this document attempts to unify components of strategic planning that the Floodplain Management Program has been doing for the last decade. The last major update to the Division of Water strategic plan was conducted in 2003, with a scheduled comprehensive update period of five years. However, the Division's strategic plan is reviewed, and updated if necessary, annually to reflect changing conditions and opportunities. It is envisioned that upon the completion of this document, any proposed changes will be included in the annual review of the Division's strategic plan, and that when it is time to perform a comprehensive update of the Division's strategic plan, this plan will be synchronized to be updated at the same time. As indicated earlier – this document is not quite a strategic plan for the Program; however it is envisioned that it will be in upcoming years.

The Department has been updating its strategic plan as well. This plan, which should be finalized during the summer of 2004, will require that division strategic plans (and program plans where they exist) be aligned with it.

This document should be the basis for developing long range, strategic goals and objectives, annual work plans, annual goals and objectives, as well as specialized work plans (possibly multi-year) and implementation plans.

SECTION 2: PROGRAM ASSESSMENT

Program assessment is an integral part of the strategic planning process, primarily used for budgeting and setting the future direction of a program. It can be accomplished in a variety of ways, including program self-assessments, SWOT analyses, focus groups, and surveys. All of these methods are used by the Floodplain Management Program to continually assess the program – from both an internal and external point of view. These assessment tools should be used periodically, and feed into the annual adjustment of the Program strategic plan or five year comprehensive update of the plan.

Another tool that is used in this document is a functional analysis of specific program elements using the *Association of State Floodplain Managers (ASFPM)* publication Effective State Programs. This document, developed in cooperation with FEMA, identifies all of the major functional areas of a state floodplain management program and details specific activities, which can be undertaken by a state floodplain management program. This analysis includes what is currently being done, what might be done in the future, and identifies resource gaps.

Internal Self-Assessment

An internally completed, program self-assessment was conducted in March 2004 and was based on the federal government's PART. The PART, or Performance Assessment Rating Tool, is meant to provide a consistent approach to evaluating federal programs during budget formulation. The Floodplain Management Program is strongly tied to the partnership framework of the National Flood Insurance Program, and negotiates annual cooperative agreements with the Federal Emergency Management Agency. Use of the PART will allow consistent evaluation of the Program's performance related to the goals, objectives and outcomes of the federal agency partner.

SWOT

For the last decade the Floodplain Management Program has utilized strategic planning to guide and direct our response to the challenges of the external and internal environment affecting the mission and vision of the Program in Ohio. To help determine that the current activities included the correct things with effective and efficient processes, a SWOT approach was employed. Key stakeholders and customers provided feedback in addition to internal staff and administration assessment to identify the Program Strengths, Weaknesses, Opportunities and Threats. The original SWOT was conducted in 1998; it was reviewed in 2001, and 2004.

Strengths and Weaknesses are assessed through core competencies, skills and resource requirements. Threats are identified by reviewing trends and external factors that can impact the Program's ability to achieve the mission and vision. Opportunities are identified both internally and externally to ensure that the Program will move toward things that will help achieve the mission and avoid performance and actions that will hinder the accomplishment of the mission and goals.

Following the SWOT analysis, major strategic issues were identified that summarize the trends and conditions that will shape the response of the Program. The strategic issues are broad statements of policy that may take multiple years to achieve. Annually, the Program goals and objectives are developed with specific outcomes in predicted timeframes to help move the

Program activities and focus toward the reduction of flood damage and protection / preservation of natural floodplain resources.

Focus Group

In addition to the SWOT, the Floodplain Management Program did a targeted outreach to major stakeholders in 2003. The Ohio Water Advisory Council and the Ohio Floodplain Management Association Board were given a presentation on the Program's mission, vision, priorities, strategic plan and activities. Following the presentation they were invited to complete and 8-question survey designed to capture the stakeholders' assessment of whether the staff and activities were effective and what future direction they would like to see.

The Program will use this information to help identify the value of our products and services, as well as, expand the opportunities that we have to influence land use and floodplain management decisions. The focus group information will help us to determine what we want to accomplish and how we will accomplish it. It is used to set our goals, objectives and outcomes and identify the program strategies. The Program desire would be to know if we are achieving results (flood loss reduction and floodplain resource protection) and providing the highest quality (value to customer) service/product possible.

Analysis of State Program Elements / Capability & Capacity Analysis

The analysis of the State of Ohio's Floodplain Management Program follows the "…blueprint for an effective state program designed to reduce losses and damage from floods, and to protect natural floodplain resources" as identified in Effective State Floodplain Management Programs This blueprint and approach to assessment of the Program by analyzing elements relative to principles for successful programs, were provided as a tool by the Association of State Floodplain Managers. Ohio Program components related to the guiding principles are summarized in the following tables and discussions.

State Program Element Analysis: Statutory Authority for State and Local Floodplain Management

Description of Program Element

State floodplain management programs need strong and clear authority. An effective program goes beyond the minimum level of commitment required by federal programs such as the NFIP to incorporate other techniques and actions that will enable it to best protect citizens, property and resources from flood losses. Effective programs extend into many facets of state government because many state agencies undertake or support programs and activities that inadvertently increase exposure to flood hazards.

ODNR – Division of Water is the State Coordinator of the NFIP and has statutory authority to coordinate floodplain management activities throughout the state. These activities are carried out by the Floodplain Management Program. The NFIP is a core component of the Program. The State of Ohio has both split and overlapping authority for activities in floodplain areas. For example, installation of individual manufactured homes in parks is regulated by the State of Ohio; however, community buildings within the parks are under local jurisdiction.

Profile of Existing Program

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision))	Gap between the current state and desired service (measured in FTEs per year)
Review/interpret federal/state legislation affecting state and local floodplain management authorities				√	M	.1	.25	.15
Review / develop development of state floodplain management statutes and rules including enabling legislation	√ ORC 1521.13	√			E	.1	.25	.15
State Compliance (Maintenance of state compliance list is only current activity)	√ ORC 1521.18	√			M	.1	1 (oversee state compliance program, develop rules, materials, process, etc.)	.9
Provide documentation for NFIP sanctions				√	M	.5	1 (Put more time into coordinating potential communities with FEMA / follow-up)	.5

TOTAL						**.8**	**2.5**	**1.7**

Discussion of Future Opportunities / Issues Related to Program Element

A Governors Executive Order promoting flood risk reduction among all state agencies, activities and programs; and a departmental policy to preserve and protect naturally functioning floodplain resources is needed to demonstrate high level commitment and leadership (currently does not exist). There is a legislative trend in Ohio towards preemptive regulations that concentrate regulatory authority in a single entity without regard to flood damage reduction. An example in 2004 is the manufactured home installation legislation that essentially eliminated all regulatory authority from local governments to have criteria related to installing such structures. However, investigation of the legislation revealed that floodplain management concerns were not accounted for and a commitment has been made by to correct the oversight as the intent of the bill wasn't to strip local floodplain managers of their permitting responsibilities.

A weakness in Ohio's current planning and land use regime is that although enabling authorities exist for land use planning, zoning, subdivision, and floodplain management, there are neither incentives nor requirements for communities to implement such measures. Currently the Program lacks a process to implement enforcement authorities, as they now exist in state law – whether the entity is a state agency or local community. Also there is no state authority to compel an individual violator into compliance. The development of technical rules for the assessment of the impact of development on flood hazards remains as an un-addressed mandate. Local regulatory program elements have been improved through the proposed changes to ORC 1521 by providing clear and explicit statements of authority to adopt floodplain regulations and "higher standards", establishing limitation on how long after the adoption of local regulations they can be overturned due to adoption process, and establishing clear authority on enforcement. Issues may emerge with the incorporation of floodplain management standards in the state building code – currently applied to commercial / industrial / multi-family development. The building code does not include use or area criteria (i.e., standards for floodways), and the issuance of a building permit is based only on performance standards – even if it does not meet local floodplain management regulations for such areas. A flood-related complication that keeps resurfacing is floodplain related erosion (in-channel for riverine, water-land interface on coasts). Current state regulations do not address this issue in an integrated way.

Another hurdle is that the State Hazard Mitigation Team does not exist in statute, rather it could be described as an ad hoc group. A final observation is that related water resource programs, including coastal, soil and water conservation, floodplain management, and OEPA's watershed programs are implemented independently without much coordination at the state level.

State Program Element Analysis: Comprehensive and Integrated State Floodplain Management

Description of Program Element

State floodplain management programs need to be comprehensive and integrated with other state functions. Many state agencies take actions and develop policies that influence new development and contribute to mitigation of existing risk. The Ohio Floodplain Management Program strives to ensure that flood hazards are identified, avoided, minimized and mitigated as part of state construction projects and projects undertaken with state funds.

Profile of Existing Program

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Technical assistance for plan, design and construction of publicly funded infrastructure projects (e.g. roads, water supply/treatment, utilities).	√ ORC 1521.13 (A)(5)	√	√	√ NFIP compliance	M	.25	1 Current technical assistance is given only when requested. It is desired that FPM staff could proactively contact agencies and assist with plan and design for all development in floodplains	.5
Review and comment on new / substantially improved manufactured home parks, hazardous waste facilities siting, and Ohio Water Pollution Control Loan Fund projects.				√ NFIP compliance	M	.25	1 Review timeline is for 30-day response; many times this is a delay to other agencies. The desired state would be to have a fulltime dedicated position and improve response time.	.5
Consultation and outreach to state agencies concerning administrative rule review and process comments to ensure projects / activities have reduced flood risk and impact by complying with local and NFIP criteria.	√ ORC 1521.14 (A) & (C)	√	√	√ NFIP compliance	E	.1	.5 Currently support is provided when requested. It is desired that the FPM could review and assist all agencies that have rules and processes related to state undertaken, funded or preempted development in floodplains. As the service expands it is expected that demand may grow.	.25

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Partnership with state agencies to promote integration of flood damage prevention / floodplain protection into other state functions (OhioEPA, OhioEMA, Ohio Dept. of Commerce, Ohio Dept. of Development, and Ohio Dept. of Transportation)	√ ORC 1521.14	√	√		E	.25	1 Due to the diversity of the programs, agency processes and approaches, it appears more efficient to have a fulltime dedicated staff to develop relationships and expertise in agency implementation of floodplain management across state government.	.75
Statewide inventory of structures located in or near federally identified flood hazard areas.		√	√	√	E	.15	.25 Since this is a new effort to establish a baseline, the maintenance and update of the inventory may require additional resources in the future that are not apparent now.	
TOTAL						**1.00**	**3.75**	**2.75**

Discussion of Future Opportunities / Issues Related to Program Element

Current program activities focus on priority state construction projects and agency processes to ensure state funded actions are compliant with the state, local and NFIP minimum criteria. Although, the state mandate provides authority for review of all agencies and local governments facilities / infrastructure design and planning information, the Floodplain Management Program has never had the resources to provide the reviews needed. Current monitoring and enforcement mechanisms are contained in ORC 1521.14(D) and 1521.18. Monitoring to-date is accomplished with NFIP tools (Community Assistance Visits, Probation and Suspension sanctions). The focus has been on NFIP participating communities. The NFIP is not designed to address state agencies, or nonparticipating communities.

Pending omnibus legislation will strengthen the enforcement authority of the program. It proposes that the director may request the attorney general to bring action for relief against any development, not in compliance with the standards of the NFIP, in noncompliant communities or where the action was funded, financed, undertaken or preempted by a state agency. The omnibus legislation also requires that existing publicly owned facilities that suffer flood damage, mark past and probable flood heights to assist in creating public awareness / knowledge about flood hazards. State agencies will be required to apply floodproofing measures to reduce additional flood damage of existing publicly owned facilities that suffer flood damage.

There is currently no requirement that public facilities undergo alternative analysis to demonstrate that flood hazards have been avoided or minimized. There are no requirements to mitigate unavoidable impacts. Critical facilities are not required to be located outside of flood hazard areas, or designed to account for the increased risk factors beyond the regulatory minimums of the NFIP. Administrative rules or guidelines concerning state-funded infrastructure, buildings and facilities located in flood hazard areas are needed to ensure that the risk and vulnerability to potential loss is minimized.

The inventory of structures located in federally identified flood hazard areas was completed in 2004 to provide a baseline for assessment of exposure and support mitigation planning. State agencies need to determine public facilities that are exposed to flood risk, how much the damage cost has been and could be at various frequency floods. Agencies must also determine if insurance coverage is adequate for the level of exposure. Mitigation actions need to be prioritized based upon the facilities nature, occupancy and users. For example, a critical facility such as a state prison may be a higher priority for mitigation action than a highway equipment storage facility.

Given the limited staff and resources within the current Floodplain Management Program, partnerships and outreach have been targeted at a few major stakeholder agencies. Education, technical assistance and outreach activities are needed with additional agencies such as Ohio Dept. of Insurance to address needs for better education of insurance agents concerning the flood insurance products and coverage. With the adoption of the International Code Council standards for commercial / industrial / multi-family development through the Ohio Basic Building Code, there is an emerging need to coordinate and train building officials and floodplain managers on the roles of each.

Great progress has been made in the coordination and cooperation between the Ohio Emergency Management Agency and the Floodplain Management Program; however, opportunities for improved health and safety are increasing. Better hazard identification and risk assessment are the primary needs addressed by the Map Modernization activities. The Disaster Mitigation Act of 2000 mandate for natural hazard mitigation plans from the state and communities by November of 2004 is resulting in greater demand for mitigation planning knowledge and technical assistance that the FPM is striving to build and provide.

State Program Element Analysis: Flood Hazard Identification and Risk Assessment

Description of Program Element

Flood hazard areas need to be identified and delineated in order to: avoid future flood damage and disaster costs, apply regulatory criteria, inform property owners and the public, and craft mitigation measures for existing at-risk development. Flood hazard areas change over time, through deliberate modification or as a result of changes in the watershed or the body of water itself. An effective state floodplain management program ensures that the flood risks are known and that changing conditions are accounted for.

The Ohio Revised Code requires the Division of Water collect, prepare, and maintain technical data and information on floods and floodplain management and make the data and information available to the public. When we know what and where the risk areas are, the state, communities, businesses, and individuals can make informed development, occupancy, and mitigation decisions. Ohio has over 35,000 miles of streams and rivers, 700 communities with identified flood hazard areas, and thousands of miles of streams and rivers with only approximate flood information. Flooding is Ohio's leading disaster in both frequency and cost.

The Program's Flood Hazard Identification and Risk Assessment effort is small in terms of staff size but is capable in many activities related to flood hazard identification and mapping. Additionally, the Program has identified FEMA's Flood Map Modernization Program as a key strategic element to both increase capability and capacity in this area. The Division is participating in both the Map Modernization Management Support (MMMS) and Cooperating Technical Partner (CTP) programs.

Profile of Existing Program

The existing program will include activities that have been identified in the FY04 MMMS and CTP agreements.

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision)	Gap between the current state and desired service (measured in FTEs per year)
Flood hazard map study process coordination/management and priority identification	√	√		√	E	.2	.3 (based on full funding scenario in 2003 Map Modernization Plan for the State of Ohio)	.1
Inventory or periodic review of map needs	√	√			E	.25	1 (based on full funding scenario in 2003 Map Modernization Plan for the State of Ohio)	.75

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision)	Gap between the current state and desired service (measured in FTEs per year)
Technical assistance to communities in revising/updating flood maps	√	√		√	E	.75	1 (based on full funding scenario in 2003 Map Modernization Plan for the State of Ohio)	.25
Participation in and coordination of the Cooperating Technical Partners program		√		√	T	.5	2 (based on full funding scenario in 2003 Map Modernization Plan for the State of Ohio)	1.5
Establishing mapping standards	√	√			E	0	.5 (this would not be an annual need, just once to develop the standards and some smaller amount of time every five years for rule review and update.	.5
Perform Flood Studies	√			√	E	1	2.6 (based on full funding scenario in 2003 Map Modernization Plan for the State of Ohio)	1.6
Review new flood studies produced for FEMA map updates (QA/QC)	√				E	.25	.25	0
Development and maintenance of GIS mapping data layers	√	√		√	E	.5	1 (based on existing demand and backlog of data maintenance)	.5
Researching and obtaining available base mapping				√		.25	.25 (based on full funding scenario in 2003 Map Modernization Plan for the State of Ohio)	0
TOTAL						**3.70**	**8.9**	**5.2**

Discussion of Future Opportunities / Issues Related to Program Element

Since the beginning of the management of Ohio's floodplains a need has existed to identify risk areas. Historically, the Floodplain Management Program has been involved in floodplain mapping to some degree; however, the Program never had an overly large mapping program. Instead, when resources were made available, the Program's mapping capability allowed it to complete small new flood studies.

The single largest opportunity to increase the Program's capability and capacity in floodplain mapping is through FEMAs Map Modernization program. The Program has positioned itself to build its capability in flood hazard identification (mapping) to the extent that

it is felt it can be supported for the duration of the map modernization program and beyond. The vision of the Program's mapping element is to develop expertise in conducting flood studies, impact analyses, the production of DFIRMs, QA/QC checks, and utility through GIS, while maintaining a relatively small mapping program in terms of staff size.

Specific annual plans or work plans that are applicable to this element are the CTP agreement and associated Mapping Activity Statements, the MMMS annual work plan, the Map Modernization Plan for the State of Ohio, and the CAP-SSSE 5-Year Floodplain Management work plan. One issue that could affect future staffing is funding for the Map Modernization Program, and what is FEMA's strategy for long-term storage of map products (will it be centralized or will there be pressure to have states assume that responsibility).

State Program Element Analysis: Protection of Natural Floodplain Functions and Resources

Description of Program Element

Throughout history, Ohio's river systems have offered many benefits that have contributed to the development of the state. After two centuries, the character of the state's rivers and floodplains has changed; the natural functions and riparian areas are being altered by human actions. The desire to develop in the floodplains and riparian areas results in increased danger to both humans and the functions of the floodplains. Natural floodplain functions and resources throughout the state need to be respected. A holistic floodplain management program moves beyond the protection of people and property to recognize the value of letting floodplains function as floodplains (storage / conveyance of flood water, reduced sedimentation, aquifer recharge, pollution filtering, biodiversity and ecosystem integrity, wildlife / waterfowl habitat, passive and active recreation areas, enhanced agricultural lands, and aesthetic open space).

Profile of Existing Program

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Education / awareness concerning the natural function and benefits to influence land use and development decisions.		√	√	√	E	.1	.5 Current effort limited to presentations on how to expand the NFIP focus of flood loss reduction for people and property. Desired state includes proactive effort to identify programs and partners that will achieve better protection and preservation of floodplain resources.	.4
Newsletter articles and Div. Fact Sheet promoting protection / preservation of natural floodplain functions and benefits.	√ ORC 1521.13	√	√		E	.25	.25 The desire would be to at least maintain support / outreach for natural benefit and function of floodplain information.	0
Cooperation and collaboration with other Divisions / agencies concerning policy, practices, and management of floodplain resources.	√ ORC 1521.13	√	√	√	E	.5	1 fulltime dedicated staff focused on identifying and coordinating the fragmented state and local programs that contribute to natural floodplain function and benefits protection.	.5

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Support of Community Rating System communities.		√		√	M	.1	.25 Currently, one staff has been trained and supports the applications, period reviews and presentations on CRS. Promoting the CRS with all community contacts, and helping communities assess their ratings is desired.	.15
TOTAL						**.95**	**2**	**1.05**

Discussion of Future Opportunities / Issues Related to Program Element

The inability to overcome the continued losses of natural and beneficial floodplain functions maybe the biggest weakness of the current Floodplain Management Program. Because of the historic connection of the program activities to the National Flood Insurance Program (funding and priorities), the preservation and protection of floodplain resources and functions has not been well served. Several other programs, policies and actions within the Ohio Dept. of Natural Resources do help offset this program weakness. Development of a "higher standards" model floodplain management regulation for NFIP communities and the statewide inventory of structures in flood hazard areas are two actions taken to help frame the importance and identification of naturally functioning floodplains.

Development of a departmental Floodplain Management Policy focused on the protection and preservation of the floodplain natural functions and resources should provide a framework for a watershed-based approach to the land and water resource management decisions. Currently, sediment / erosion control, water quality, stormwater management, wetland protection, coastal management, scenic river program, natural area management, and floodplain management are all distributed to many divisions and program areas across the department and throughout state agencies.

The protection / preservation of the resources continues to compete with the need or desire for continued economic development and use of floodplain areas. The "No Adverse Impact" principal is being encouraged in Ohio to allow communities an opportunity to improve their sustainability. By extending the regulatory focus or standards beyond the flood hazard area, communities and the state can manage growth in general to ensure that all impacts are considered and every property owner has ownership in the outcomes of their development plan.

The state does not have comprehensive or specific requirements for land use planning. Zoning is used by some local communities but not overly accepted as a method for controlling development. The natural hazard mitigation plans required by DMA2000 and other FEMA mitigation programs (HMGP, FMA and PDM) are viewed as helping to cover that lack of planning mandates in Ohio communities but are voluntary in nature. The Program has increased capacity to facilitate and support the communities in development of natural hazard mitigation plans. A compendium of communities that have adopted higher regulatory standards has been developed and is shared at workshops and outreach events to encourage communities to reduce future flood risks and increase their sustainability.

State Program Element Analysis: Guiding Development and Managing Impacts

Description of Program Element

This program element is based on the principle that development within the state should be guided away from flood-prone areas, and for development that occurs within flood hazard areas, adverse impacts should be identified and minimized. Effective state programs in this regard have state statutes that require a hazards element in comprehensive planning, provide assistance in local plan development whether the plan is a mitigation plan or comprehensive plan (including the provision of assistance in using tools such as HAZUS), allows for flexible zoning techniques (conservation zoning), may have state permitting programs and regulations, allows the adoption of flexible subdivision regulations, and encourages the use of impact analyses.

Ohio's approach to this element includes the development of "model" higher standards that are provided to communities wishing to adopt them, and a budding capability in providing mitigation planning assistance. Such capability was built as a result of the Appalachian Flood Risk Reduction Program (AFRRI) which was implemented between 2002-2004.

Profile of Existing Program

ACTIVITY	**RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES**				**CAPABILITY**	**CAPACITY**		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision)	Gap between the current state and desired service (measured in FTEs per year)
Development of and encouragement to use higher regulatory standards	√				M	.25	.50	.25
Mitigation Planning Guidance and Assistance		√			E	.25	1	.75
TOTAL						**.5**	**1.5**	**1**

Discussion of Future Opportunities / Issues Related to Program Element

Communities nationwide must adopt a natural hazards mitigation plan by November 2004, or they will not receive FEMA mitigation assistance nor be eligible for FEMA mitigation programs. Additionally, communities adopting such plans will be required to update them in five years and the level of sophistication of such plans will be expected to increase (i.e., risk assessments that have a vulnerability

analysis). In Ohio, the AFRRI project allowed the Program to develop expertise in mitigation planning and risk assessment. Additionally, HAZUS MH has just been released which is a tool that performs advanced risk assessments. It is logical, and the vision of the Program to build expertise using HAZUS MH in the Program to assist Ohio communities with mitigation planning and putting together mitigation project applications. This expertise will compliment the Ohio Emergency Management Agency mitigation staff's efforts to generate solid mitigation projects.

The release of the most current version of Ohio Floodplain Regulation Criteria (OFPRC) has resulted in increased community interest in adopting "higher" floodplain management standards (as OFPRC contains optional higher standards that can be adopted by communities). Since communities must adopt updated floodplain regulations when new flood maps are issued (which will be nearly all Ohio communities in the next 7 years due to FEMA's Map Modernization) program, opportunities exist to educate communities about higher floodplain management standards and how they can lead to more effective floodplain management. So, OFRPC must be periodically reviewed and updated based on better management techniques and community feedback.

State Program Element Analysis: Flood Mitigation and Recovery Strategies

Description of Program Element

Effective state floodplain management programs use post-flood mitigation and recovery strategies to break the damage-repair-damage-repair cycle that occurs with disasters if the recovery does not incorporate actions to reduce future risk. There is a window of opportunity after a flood disaster when those impacted (private and public sectors) by the flood are more likely to consider alternatives to restoring their property to its pre-disaster condition. This opportunity presents itself because the property owners and communities must take actions to recover, and there are frequently new sources of funding (disaster assistance, insurance, mitigation programs). For NFIP participating communities the corrective aspect of the program allows for reducing or eliminating existing risk that they may have been living with prior to the disaster event. The substantial damage determination is key to applying the NFIP flood protection criteria to pre-FIRM structures.

Profile of Existing Program

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Preparedness, Response and Recovery activities in accordance with ODNR, Division of Water "Standard Operating Procedure for Flood Disasters."	√ ORC 1521.13	√	√	√	M	3-5 is average no. of staff that respond to small disaster. GIS engineering, floodproofing expertise are all desired and not currently used.	Currently, service level requires the reprioritizing of staff activities -other critical program elements are not addressed for the time it takes to respond and complete short-term recovery. The desired level of staffing would provide dedicated staff to complete long-term recovery such as mitigation project development, NFIP compliance for permitting and repair, and documentation of flooding (high-water marking, inundation mapping). Perhaps 5-7 to address substantial damage training, event documentation and community compliance with NFIP is desired level of support. However, since this service level is not consistent (depending on events) there is no gap identified.	0
Participate in development, implementation and review of state hazard mitigation plan related to flood hazards.	√ ORC 1521.13			√	E	.1	.25 Service has been provided only in response to request. Desired service would include the staff resources to support our proactively suggesting strategies and activities for flood hazard mitigation.	.15
Participate on state mitigation team to develop priorities for state mitigation funds and selection of feasible projects.	√ ORC 1521.13			√	E	.5 Currently team meets 3-4 times per year.	Desire is to provide the equivalent of 1 dedicated FTE to support the administrative, policy and project support. With the development of mitigation plans, it is anticipated that there may be more feasible projects and more mitigation grant funds utilized in the state.	.5

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Training and outreach to support post-disaster inspection and substantial damage determinations.		√	√	√	M	.1 Currently staff support 4-6 one-day trainings per year	.5 To accomplish training, continuing education and roll-out of this new response/recovery effort.	.4
Coordination and review of FMA and PDM(C) applications and projects with OhioEMA and FEMA	√ ORC 1521.13			√	E	.25 assist with review 1 FMA plan and participated in PDM selection annually	.5 The activities associated with FMA could be served better if outreach to repetitive loss communities were done proactively.	.25
TOTAL						**.95**	**2.25**	**1.3**

Discussion of Future Opportunities / Issues Related to Program Element

The State of Ohio does not have a formalized mitigation team and does not have a permanent mitigation-funding source. In response to some recent disaster events, state funding was allocated by the legislature to leverage federal mitigation dollars and support local efforts. The current mitigation team is largely focused on the selection and review of mitigation projects to utilize Hazard Mitigation Program funds in post-disaster periods. The team functions as advisory to the Ohio Emergency Management Agency, and members are programmatic level. Policy makers and agency administration has not taken an active role. To promote comprehensive integration of mitigation into the state's planning and policy, a formal creation of the team with specific goals and responsibilities is needed. Programmatic and policy changes that inadvertently contribute to flood risk should be identified. For example, state funded infrastructure or development projects in flood hazard areas may be increasing the potential for future damage. Technical assistance for the development of local mitigation plans has been provided by the OhioEMA and ODNR, Division of Water; however, with the mandates of federal law (DMA2000) and approaching deadlines for approved plans as condition for future mitigation funding, it is anticipated that more technical assistance maybe provided by the private sector. Also, current resources of the combined agencies may not serve the increased demand for plan review and comment. The primary mitigation programs in the state (HMGP, FMA and PDM) are administered by the Ohio Emergency Management Agency. Other state agencies that contribute technical assistance and support do not receive any of the federal funding for mitigation planning and administration of the grant programs.

Although mitigation of damage to public facilities and infrastructure is now being considered, the state does not have the resources to provide analysis of feasible and cost-effective protection measures in the window of post-disaster recovery. Opportunities to mitigate are no doubt still being missed.

The program has created a "standard operating procedure" for response to disasters to focus on the increased demand for support of inspections, permitting and NFIP compliance activities. Although, the creation of this capability has been adequate in the relatively small disasters since it was developed, the initiative with the Ohio Building Officials Association is a priority because of the potential need for more personnel trained in construction, estimating repair costs, estimating damage levels, identifying mitigation options, and supporting the FEMA substantial damage tools available to local communities.

Currently, the Increased Cost of Compliance insurance coverage is not well utilized. Technical assistance to property owners, local floodplain managers and insurance agents is needed. The ICC intent is that it can help offset the cost of repairing a building to meet the federal, state and local floodplain management requirements. A proactive effort is needed with the major players (communities which must make the substantial damage determinations quickly after an event, property owners that are reimbursed for specific actions that meet the compliance requirements, and insurance adjusters who must understand and facilitate the claims process) outside of the response / recovery period. If the state had the resources to provide technical assistance and specific structure recommendations either before or during the flood response, the use of ICC and feasible mitigation actions could be increased.

State Program Element Analysis: Public Awareness

Description of Program Element

Development decisions and land use priorities are made at the local and individual property-owner level. To support the balanced use of hazard areas (floodplains) with the individual and community goals for economic development and growth, information about the flood hazard risk and viable risk reduction strategies is critical. Current and accurate flood hazard information must be incorporated into local and individual decision-making to achieve effective floodplain management.

Profile of Existing Program

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year)	Gap between the current state and desired service (measured in FTEs per year)
Participation on state Severe Weather Awareness campaign.		√	√	√	M	.1 Supports 2 campaigns and update/development of flood risk information annually.	.1 Is adequate to maintain current participation.	0
Support of Ohio State Fair activities, Farm Science Review, Project Wet and School Days.		√	√		M	.2 provides 320 hours annually to support of these outreach/aware-ness efforts.	.5 is the desired level to allow additional hours and commitment to these effective outreach venues.	.3
Development and maintenance of floodplain management fact sheets.	√		√	√	M	Less than .1 currently provides 40 hours annually.	.25 provides up to 450 hours for the improvement and addition to the existing fact sheets.	.15
Public presentations and general technical assistance related to floodplain management and flood hazards with a variety of program constituents.	√	√	√		M	.25 currently provides response only type of service.	.5 would allow for expansion of outreach and proactive outreach to target audiences such as design professionals, economic development community, public officials and legislators.	.25
TOTAL						**.65**	**1.35**	**.7**

Discussion of Future Opportunities / Issues Related to Program Element

Public awareness and outreach are rarely mandated functions of programs. However, it is an effective strategy to ensure that key decision-makers have risk information readily available. The use of new technologies such as the Internet and PowerPoint have allowed for improved efficiency in the distribution and delivery of outreach. To actually influence the land use and development decisions that result in reduced flood damage and protection of the natural floodplain's function and resources, more outreach and education is needed. The program has developed a Web site to help distribute information. Outreach is prioritized to constituents who have the largest ability to help with reducing damage and protecting the resources (e.g. local floodplain mangers, emergency managers, watershed management interests, design professionals, building code officials, elected officials, and state agencies).

The program currently has basic information on the Division Web site, the type of information and the interactive nature of what is provided needs improvement. The program currently has no baseline or measure of how many people are accessing the web data and if the information provided is useful and in the desired format. The flood hazard maps and flood study data is currently being updated by FEMA, there are challenges for the program in maintaining our competency and ability to link with these new digital and geo referenced materials. Training, hardware and software needs are all anticipated to maintain the ability to function as the NFIP State Coordinator. Some of these needs are being addressed through the FEMA Map Modernization Support and Cooperating Technical Partner initiatives. However, FEMA has articulated that they would like the state and local communities to have expanded roles in the maintenance and distribution of the flood hazard information. The changing federal flood hazard products are resulting in the need for update and revision to most of the state's printed floodplain management material.

Although the state has been proactive in implementing mitigation strategies and developing projects to reduce flood damage, there has not been a media campaign or readily available "success story" information developed. More material is needed to demonstrate that flood damage reduction through compliance with protection standards and flood mitigation activities are cost effective and good business practices.

State Program Element Analysis: Community Training and Technical Assistance

Description of Program Element

Training and technical assistance in floodplain management needs to be provided to the state's communities. Effective state programs recognize the importance of assessing community needs and providing ongoing training opportunities and access to technical assistance. In most communities, floodplain management is just one of many responsibilities that is handled by small staffs. Where larger communities may have some staff time dedicated to floodplain management, their issues and programs are usually much more detailed and complex. In both cases, there is an ongoing need for technical assistance and training.

Nearly all efforts of the Floodplain Management Program are based on the philosophy and goal of building community capability. This program element is almost entirely dedicated to that philosophy. Also, this is the area where the Program has the most expertise and longevity – it has been the foundational program element since the program has existed, even when the program was reduced to one person. Also, this element is very heavily funded through FEMA's CAP-SSSE program.

Profile of Existing Program

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision)	Gap between the current state and desired service (measured in FTEs per year)
Publications to assist in local program administration (local officials handbook, etc.)	√			√	M	.25	.25	0
Workshops and training				√	M	.25	1	.75
State association assistance				√	E	.25	.25	0
Newsletters and web pages				√	M	.15	.25	.1

ACTIVITY	RELATIONSHIP TO OTHER PLANS/GOALS/MANDATES				CAPABILITY	CAPACITY		
	Mandate Of State Program	Div. Strategic Plan	Dept. Strategic Plan	FEMA Flood Loss Reduction Goals (CAP and MAP-MOD)	Do staff have skills / knowledge to perform? Trained Experienced Mastered	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision)	Gap between the current state and desired service (measured in FTEs per year)
Community technical assistance (ordinance assistance, community assistance meetings, engineering review of flood studies and impact analysis, CAVs/CACs, NFIP coordination, enforcement and variance assistance, general technical assistance)	√			√	M	3	5 (increase solely attributed to meeting a rotation of CAVing each community every seven years)	2
TOTAL						**3.9**	**6.75**	**2.85**

Discussion of Future Opportunities / Issues Related to Program Element

The CAP-SSSE program funding has been relatively consistent, and increasing. However, demands from communities are trending upward and the technical assistance requests are increasingly complex. During the next five years, FEMA guidance has indicated that CAP-SSSE should be used for activities that will support map modernization – specifically assistance with adopting new regulations. Therefore, there will be a shifting of priorities for the use of CAP-SSSE funds.

State Program Element Analysis: GAP Analysis Summary

STATE PROGRAM ELEMENT	CAPACITY		
	Current Service Level (measured in FTEs per year)	Desired Service Level (measured in FTEs per year based on five year vision)	Gap between the current state and desired service (measured in FTEs per year)
Statutory Authority for State and Local Floodplain Management	.8	2.5	1.7
Comprehensive and Integrated State Floodplain Management	1.0	3.75	2.75
Flood Hazard Identification & Risk Assessment	3.7	8.9	5.2
Protection of Natural Floodplain Functions and Resources	.95	2	1.05
Guiding Development and Managing Impacts	.5	1.5	1
Flood Mitigation and Recovery Strategies	.95	2.25	1.3
Public Awareness	.65	1.35	.7
Community Training and Technical Assistance	3.9	6.75	2.85
TOTAL	**12.5**	**29**	**16.55**

SECTION 3: FUNDING & STAFFING

Effective state programs are adequately staffed with personnel who have the requisite knowledge, skills, and abilities in floodplain management. The number of flood-prone local jurisdictions and the frequency and severity of flooding are factors that influence state staffing levels. However, in determining the appropriate number of staff and variety of disciplines, each element of the program should be examined. For example:

- The degree of state regulatory authority affects staffing. Administering a program that issues state permits demands different staffing than one that monitors the performance of local jurisdictions.
- A state mapping program that performs studies in-house or reviews and approves materials submitted to communities requires different staffing than a program that reviews and coordinates the work of others.
- The number and frequency of community visits to monitor local program performance and provide technical assistance determines the number of staff required to provide the service needed for effective local programs.

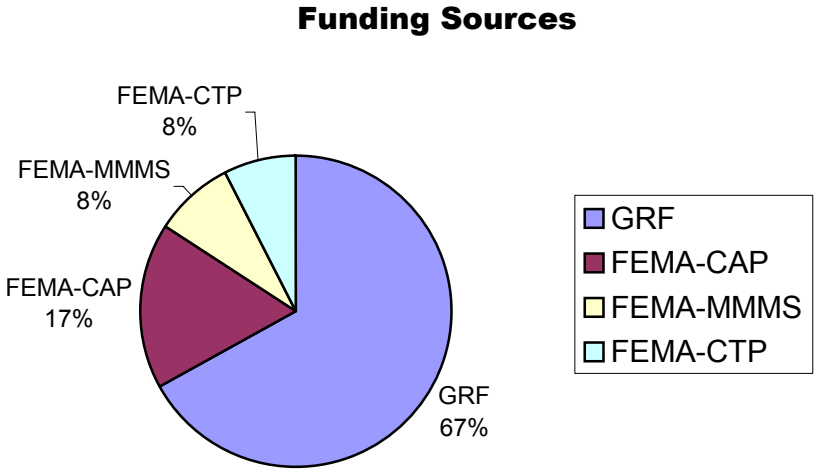
Although the level of staffing that is adequate varies from state to state, it is possible to get a rough idea of the number of personnel that would be needed for effectiveness. A rule of thumb based on some of the state programs that are or have been effective is to figure on one state floodplain management staff person for each 25 to 35 flood-prone communities in the state. That starting point could be adjusted up or down somewhat depending on factors such as level of state vs. local authority, intensity of development, or number of at-risk structures. The staff should have a mix of disciplines, which might include:

- Certified Floodplain Managers for consistency and overall program implementation.
- Professionals from the various specialties of planning to contribute interdisciplinary skills that are critical to many elements of floodplain management, such as integrating flood hazards into local planning and zoning processes, identifying opportunities to improve local processes to achieve multiple objectives, and others.
- Civil engineers, water resources engineers, and other engineers are required for flood mapping programs and as technical support for reviewing certain types of proposed developments, notably those that may have hydrologic or hydraulic impacts.
- Structural engineers may be required to support building code reviews or to evaluate proposals to floodproof individual buildings.
- Geographic information system (GIS) specialists are required to support a variety of functions ranging from mapping to public outreach to post-disaster impact analyses.
- Specialists in the geology, geography, ecology, coastal geomorphology, fluvial geomorphology, hydrology, meteorology, and emergency management may be essential, depending on the nature of a state's floodplains and flood-related hazards.
- Public information specialists and trainers are needed to craft effective outreach initiatives and to deploy technical workshops and training sessions.
- Administrative support staffs, including technicians, are vital to efficient service delivery.

The Floodplain Management Program in Ohio currently has 11 full time employees (FTEs) assigned to the program plus 1.5 FTE for division administration for a total of 12.5 FTEs. There is also a vacant GIS Intern position. A breakdown of these 11 staff positions is as follows: 1

Program Administrator, 1 Supervisor, 1 Administrative Assistant, 3 Environmental Specialist II's, 3 Environmental Specialist I's, 1 GIS Specialist, and 1 Natural Resource Engineer. Currently, the Program is utilizing approximately 1.5 FTE's from the Water Management Section (Engineering) to assist with FEMA's map modernization program. This scenario will likely continue into the foreseeable future.

The FY2005 Program budget (beginning July 1, 2004) has been estimated to be approximately $1.2 million.



In FY2005, sources of funding primarily came from two sources, FEMA and the State of Ohio's General Revenue Fund or GRF. According to the gap analysis in the previous section, it is estimated that 29 positions are necessary to create a fully staffed floodplain management program in Ohio. This leaves a gap of approximately 16.5 positions. Using a very broad cost estimate of $75,000.00 per position, the total cost to eliminate the gap is approximately $1.24 million. This number does not include any additional administrative costs that would also be necessary (additional supervisors, etc.)

SECTION 4: PROGRAM EVALUATION

Program Effectiveness

The Floodplain Management Program has had a significant impact on reducing flood losses and a somewhat lesser impact in protecting the natural benefits of flood hazard areas. Although we continue to largely meet our annual goals and objectives, there remains a tremendous amount of work to be done to achieve our overall program goals and statutory mandates.

Our approach in developing a balanced evaluation of the Program is one that not only uses performance metrics, but also looks more broadly at what we are doing (Is it the right thing?) and why it is working (Are we doing it the best way?). The Program must operate within the constraints of existing Department and Division strategic plans, and Program effectiveness is reviewed in terms of our desired outcomes to reduce flood damage and protect natural floodplain resources/functions. Measurement of the objectives, in addition to performance outputs is being considered in the evaluation of the overall Program. What remains to be done is to systematically and comprehensively measure overall performance where the data collected is utilized to adjust processes, evaluate performance, and identify future courses of action. Constraints such as staff time to devote to performance evaluation has impacted our ability to implement such a system.

Below is a table of some past and current Program performance measures:

OUTPUT/OUTCOME	METHOD OF MEASUREMENT
Successful flood risk reduction in Ohio through the coordination of the National Flood Insurance Program	Track NFIP participation rate of communities with identified special flood hazard areas (currently 95%). Track number of communities with no SFHAs participating in the NFIP (currently 51).
Greater flood risk reduction in Ohio than what is required under the NFIP	Track number of communities or percentage of all communities participating in the NFIP that have adopted at least one higher regulatory standard that achieves a higher level of protection than NFIP minimums (currently 250)
Successful implementation of annual CAP agreement	Complete all activities/products identified in approved agreement (track all of them), complete financial reports within required timeframes.
Effective workshops performed by the Program to achieve better understanding of floodplain management by participants	Develop and conduct survey after Flood Loss Reduction Workshops and other workshops given by the Program
High performance workplace to achieve effective and efficient program delivery. 100% of program staff trained in continuous improvement (i.e., QStP) and 100% staff, who provide technical and community assistance, certified as CFMs. Staff workload tied to Program's strategic plan and annual goals/objectives	Implementation of OPRS, documentation and systematic update of major processes, development and use of core competencies for staff, tracking of training and continuing education opportunities, tracking of number of staff trained in continuous improvement and those that are CFMs (currently 100%). Track development and implementation of annual workplan for staff
Effective project management	Require and track the development and completion of project charters. Develop and complete specific project-related performance measures (i.e., use of IBHS CLUE survey for AFRRI project)
Effective utilization of Program resources and identification of key areas where resources are needed	Focus group interviews, surveys, self assessments, and SWOT analysis performed with the update of the Program and Division strategic plan

Still there are areas where more quantifiable performance measures are needed. For example, the Floodplain Management Program perceives it has improved it's efficiency in responding to requests for flood hazard information by the integration of GIS technology and the development of custom applications to support information management, completion of a flood hazard structure inventory, the ability to complete hydrologic and hydraulic analysis with GIS tools, and greater utilization of the internet, but we have not developed performance measures nor systematically monitored performance in this area.

The key objectives of the Program are: human health and safety; protection of environmental health; achieving appropriate levels of compliance and enforcement; and influencing the behavior of people making land use and floodplain management decisions. These objectives identify cross-cutting priorities that are the basis of the partnerships with Program stakeholders.

SECTION 5: FIVE YEAR CAP WORKPLAN

The FY 2004 CAP agreement requires that a 5-year CAP workplan be developed to support the successful implementation of FEMA's flood map modernization program while ensuring that communities that participate in the National Flood Insurance Program achieve the flood reduction loss goals of the NFIP – the purpose of the CAP-SSSE program. This section will follow the outline provided by FEMA for the 5-year workplan and will identify how to balance the two priorities identified above, given the existing resources available and direction/mission of the Division of Water's Floodplain Management Program

I. State Authority to Manage Floodplain Areas

The Floodplain Management Program **authorities and mandates** come from the provisions contained in the **Ohio Revised Code Sections 1506.04, 1521.13, 1521.14 and 1521.18:**

- Sect. 1506.04 requires Ohio counties or municipal corporations with coastal flood hazard areas to comply with the National Flood Insurance Program regulations or have equivalent local flood damage reduction standards.
- Sect. 1521.13 identifies the floodplain management responsibilities and flood damage reduction standards of the program, and designates the Division of Water as the State Coordinator for the NFIP.
- Sect. 1521.14 clarifies the floodplain management duties of state agencies and political subdivisions, sets conditions for agency funding of development in flood hazard areas, and promotes awareness of flood risk (markers for high water) and mitigation opportunities to reduce the future potential of flooding (floodproofing).

Section 1521.18 requires all counties and municipal corporations with flood hazard areas to adopt local floodplain management standards which comply with the minimum federal criteria of the National Flood Insurance Program.

II. 5-Year Vision for the State's Floodplain Management Program

The overall vision of the Floodplain Management Program is to effectively influence land use and development decisions affecting Ohio floodplains to achieve reduced flood risk and protect natural floodplains. The vision for CAP-SSSE is to <u>assist</u> with implementation of the Program's overall vision through technical assistance to communities and the accomplishment of the flood loss reduction goals of the NFIP while effectively managing the community assistance aspects of FEMAs map modernization program. It is important to understand that CAP-SSSE is only one piece of our state floodplain management program, albeit an important one. The following long-term strategic goals reflect cross-cutting priorities related to State and FEMA flood damage reduction goals.

<u>Strategic Goals and Strategies to Accomplish:</u>

- Customers of the Division of Water have an expectation of quality products and service from the Floodplain Management Program**.** The Program is faced with an increasing demand for products / services yet limited resources and staff. **The Floodplain Management Program will implement High Performance Work Place tools, strategies and processes to ensure efficiency, outstanding customer service, and high employee satisfaction.**

- Reducing flood risk and protecting floodplain resources statewide requires collaboration and cooperation at multiple levels**.** Flood damage costs are rising, and local development decisions are neither always sustainable nor directed at balancing the floodplain resource value and flood risk. **The Floodplain Management Program will use partnerships, education / public awareness, technical assistance, and integration of technology to effectively influence land use and development decisions statewide.**

- The Division of Water has statutory mandates and federal National Flood Insurance Program Coordinator responsibilities for floodplain management. These mandates and regulations require actions and resources from the Floodplain Management Program. **The Division of Water will have a clear understanding of the Floodplain Management Program's mandates and the actions and resources required to support them.**

Evaluation and measurement of the success of the Ohio Floodplain Management program is being addressed in the annual work plans that establish the performance metrics, performance period, budget and quality of the Program products and services.

Current efforts of the Floodplain Management Program are identified in the Program Analysis section of this document, and the discussion contained therein identifies some of the strengths and weaknesses of the Program.

III and IV. Strategy to Improve Floodplain Management through CAP-SSSE & Gap Assessment

From a CAP perspective, the increased workload to support ordinance adoption / update of new and revised Flood Insurance Rate Maps, will use much of the CAP resources. Obviously, resources will need to be shifted to ensure that other CAP effective activities (e.g. technical assistance, education and training, compliance and enforcement) will continue to be delivered to the communities. The table below identifies fundable CAP activities, the proportion of each activity as part of the overall CAP-SSSE grant from FY05-FY09 (based on activities identify in the State's map modernization business plan), assumed FTE needs to maintain a basic level of service for existing tasks/activities, and the needs gap. Underneath each activity are the proposed performance measurement and method approach. The Ohio Floodplain Management Program would like to obtain baseline information, when available from the NSP, to help document and track the progress and trends related to these actions for State of Ohio.

		Projected FTEs (1 FTE = 1800 hrs)							
Activity	**Currently Done?**	**05**	**06**	**07**	**08**	**09**	**Desired Service Level**	**GAP**	**Comment**
5-year workplan develop / maintenance	Y	.1	.1	.1	.1	.1	.1	0	Minimum amount of hours needed for this task

Output/Outcome: 5-Year Floodplain Management Work Plan establishing State activities and demonstrating to FEMA State's progress toward meeting CAP-SSE and Map Modernization goals / State and FEMA efficiently and effectively working toward reduced flood risk.							**Method of Measurement**: State of Ohio will provide FEMA Region V with a draft Work Plan during third quarter of FY04. By First quarter of FY05 Ohio will have and utilize an approved 5-Year Work Plan for CAP-SSSE activities. Evaluation and adjustment of the strategies, actions and performance will be done annually.		
Ordinance Assistance	Y	1.1	1.1	1.1	1.1	1.1	1.1 (estimating 100 communities per year for seven years during map modernization)	0	The desired service level reflects the priority on ordinance assistance for map modernization. CAP resources will be shifted to meet this need
Output/Outcome: 1) 95 % of communities receiving LFD that partipate in the NFIP and have SFHAs will adopt updated regulations by the map effective date. 2) Modify ordinance adoption assistance process to get communities to update their regulations prior to the 30 day letter being sent by FEMA (cost savings to the Program) 3) 100% of communities receiving LFD will be provided opportunity for ordinance assistance from Program in a timely manner (as established in the ODNR Ordinace Update Assistance Process)							**Method of Measurement**: FPM will use CIS and FPGIMS (quarterly reports will summarize), to track the number of communities receiving Letters of Final Determination and those adopting compliant regulations by effective date. Establish baseline to identify % of communities receiving LFDs participating in the NFIP and having SFHAs that have adopted regulations prior to the 30 day letter being sent out by FEMA.		
CAV / CAC	Y	.5	.5	.5	.5	.5	2.5 (based on FEMA CAV manual recommendation that each community receive community assistance at least once every five years, we have determined a desired CAV frequency of once every seven years)	2	This will be the most impacted task as a result from shifting resources to the ordinance assistance task
Output/Outcome: Completed visit and follow-up in a timely manner as prescribed in the ODNR CAV manual.							**Method of Measurement**: FPM will use CIS and FPGIMS (quarterly reports will summarize), to track the number of communities assisted and prioritize those needing compliance or enforcement actions. Track timeliness of follow-up through TRACK (ODNR activity tracking database) and follow-up with staff during performance evaluations.		
CIS Data Entry	N	.1	.1	.1	.1	.1	.25	.15	ODNR staff will assume primary responsibility for CIS data entry; however, current work load projections indicate that there will be a gap in staff resources available to meet the desired service level. ODNR expects that assistance will be needed by Region V staff to fully meet the desired service level. Region V has agreed to provide assistance when needed to ensure this measure is achieved.
Output/Outcome: 100 % of current year CAP activities (applicable) entered into CIS							**Method of Measurement**: For any activity tracked by the CIS, FPM will enter the required information. This will be a new activity in the 2005 CAP. The amount of time to support this administrative activity will be tracked and establish a baseline resource need.		

State Model Ordinance Research	Y	.1	.1	.1	.1	.1	.1	0	Comprehensive update completed a few years ago, only need is minor tweaking
Output/Outcome: State model regulations that reflect current regulatory issues, incorporate current BMPs, and include regulatory standards beyond the NFIP minimums / increased flood risk reduction will result from the broader authority and goals to focus outside of the SFHA and NFIP minimums.							**Method of Measurement**: Track activities pertaining to this activity.		
Education and Outreach (Workshops, Conference, Newsletter, Web)	Y	.4	.4	.4	.4	.4	1.7 (based on program assessment – Community Training and Technical Assistance Element)	1.3	This could be impacted by map modernization activities; however, the Program has prioritized this activity higher than monitoring (CAV/CAC) activities so impact will likely be less
Output/Outcome: Stakeholder focused workshops /training will be delivered throughout the state. / Better understanding of the flood damage reduction regulations and the roles of local floodplain managers, design professionals, and consultants results in improved floodplain management decisions and development plans.							**Method of Measurement**: Track number of workshops conducted and participants. Conduct survey after each workshop to identify effectiveness.		
General Tech Asst	Y	1	1	1	1	1	1	0	Hours cannot be shifted out of this task because these are incoming requests (usually by telephone) over which we have no control
Output/Outcome: Continue on-demand delivery of service so requestors will receive the information they need in a timely manner to allow the FPM the best opportunity for influencing land use and floodplain management decisions.							**Method of Measurement**: The FPM will use the CIS to record the number, type of assistance, and recipient of assistance provided. Baseline information indicates that the FPM responds to approximately 325 inquiries monthly.		
Other Program Coordination	Y	.1	.2	.2	.2	.2	3.5 (based on program assessment – comprehensive and integrated floodplain management)	3.2	
Output/Outcome: Technical assistance, education / training and partnerships will be delivered and developed as needed to promote FPM goals / Floodplain management goals and objectives will be better integrated throughout federal, state and local agencies programs and actions.							**Method of Measurement**: FPM will track the number of project reviews, coordination meetings, and training delivered.		
Post Disaster Assistance	Y	.95	.95	.95	.95	.95	2.25 (based on program assessment – flood mitigation and recovery strategies)	1.3	This task is variable from year to year. Ohio has had a Presidential flood disaster declarations nearly every year in the past 10 years. During a major flood event, it will be necessary to enlist FEMA V staff help with ordinance assistance so Program staff can do post disaster assistance activities.

Output/Outcome: Services and Products identified in the SOP for preparedness, response, recovery and mitigation activities / The window of opportunity in the post-disaster situation can be maximized to implement projects, compliance and awareness that will result in reduced flood risk and sustainability in communities.							**Method of Measurement**: All post-disaster activities will be documented and approved by FEMA prior to the allocation of CAP resources to their support. Ohio has had 10 federally declared disasters since 2000, it is anticipated that during the next 5-10 years we will experience natural disaster due to flooding.		
Other Community Assistance (final meetings, Community Asst Meetings, etc.)	Y	.25	.25	.25	.25	.25	.5	.25	Service level impacted by shifting resources to map modernization activities. May not be able to participate in Community Assistance Meetings.
Output/Outcome: Documentation of assistance provided / Communities awareness to flood risk, NFIP mitigation strategies and flood map modernization will be improved.							**Method of Measurement:** Tracking of activities through CIS and/or TRACK.		
Total		**4.6**	**4.6**	**4.6**	**4.6**	**4.6**	**13**	**8.4**	**The projected hours for each FY is higher by .95 FTE than is actually true because post disaster activities are usually a zero hour activity in each year's CAP agreement. If the need arises, the hours are shifted away from other activities each year**

We have chosen not to vary the mix of activities from FY05 to FY09 because it is already nearly impossible to account for all of the variables that may affect map modernization and the production schedule. In general we have prioritized activities that are post-flood recovery is the highest, map modernization related as the second priority, training and outreach third, technical assistance fourth, and monitoring fifth.

V. Map Modernization Activities

The State of Ohio is participating in FEMA's Map Modernization program on a number of levels. Through a CTP agreement, the state will be conducting small scale flood studies and digital conversions. MMMS participation will result in implementation of the State of Ohio Map Modernization Business Plan at a level below the lowest funding alternative (essentially focusing on CTP development, partnership, outreach, and acquisition of digital products. Finally, the CAP-SSSE will be largely focused on assisting communities with adopting updated floodplain regulations by the new effective date.

For planning purposes, we anticipate 100 communities annually will need ordinance assistance. With just over 700 communities participating in the NFIP, this would result in 140 communities per year needing ordinance assistance in a five year time period. However, we anticipate that including the finalization of studies, the timeframe for map modernization program will be at least seven years, and that full funding will likely not occur each year for the next five years. Hence our 100 communities per year assumption. Since Ohio's Floodplain Management Program is centralized, there is little need to determine which communities will be mapped in

which years. There is sufficient flexibility to ensure the ordinance assistance need is met, unless there is a significant flood event.

The only significant hurdle to providing complete ordinance assistance to Ohio communities would be the occurrence of a significant flood event. In such a scenario, we would exercise our Post Flood Standard Operating Procedure, and, in a large event, this could result in the use of most if not all staff resources for a period of time. To mitigate against the effects of this occurring, we will coordinate closely with FEMA Region V.

The Program's process for assisting communities with ordinance updates begins with the issuance of a Letter of Final Determination (LFD). At three intervals after the LFD – one week, three months, five months) letters are sent to the community floodplain administrator and Chief Executive Official, regarding the ordinance update process and with an offer of technical assistance. Ordinance assistance and update materials can be either sent, e-mailed, or downloaded from the Program's website. Each community is assigned to a staff member who provides individual assistance including reviewing draft regulations, reviewing final regulations, and providing other assistance as needed. Also, the FEMA V CCO for Ohio assists in this process by contacting communities by telephone, especially those who have not made contact with our office. The Program assists newly mapped communities in much the same way. However, since these communities have one year to join the NFIP, the timeframes are adjusted.

VI. System to Evaluate Performance in Support of CAP and Map Modernization Goals

As noted earlier in this document, the Floodplain Management Program is accountable to many stakeholders and customers. Progress has been made in clarify what is expected of the Program. This has been accomplished through the development of mission, vision and strategic goals.

The beginning steps for examining the program activities and measuring our products / services against what is expected are in place. To date, this has mostly been accomplished through self-assessment and customer feedback and "counting" products. Current performance measures and data collection are skewed toward outputs or internal efficiency (i.e. time, cost, quantity). For example, we count the number of general technical assistance requests received, and pre-identify a certain number of CAVs that will be conducted in a given fiscal year. Tracking the impact of our activities or "quality" is much more difficult. For example, to gage the quality of our basic Flood Loss Reduction Workshops, we attempt to measure the degree of understanding and speaker effectiveness for workshops through a survey. In addition to how we have measured other CAP activities, we will identify performance measures in the next section, as required by the guidance produced by FEMA.

The *Five Year Floodplain Management Work Plan Outline* provided by FEMA requests that performance measures be selected to measure floodplain management successes in a particular state, with a recommendation to use the performance measures recommended in Appendix 1 of that document. Of those, one performance measure is required: *Maintain or improve the percentage of communities receiving new maps that adopt the map by the FIRM effective date.* Since October 2003, four countywide FIRMs have become effective. In those four counties the following were identified:

- 46 communities participating in the NFIP, with previously identified SFHAs
- 5 communities where the countywide map was the first showing identified SFHAs
- 8 communities shown on the FIRM with no identified SFHAs

Of these, the first class of communities, those already participating in the NFIP with previously identified SFHAs will be most affected if community regulations are not updated by the map effective date because there could be insured properties that would be unable to renew their flood insurance policies. Of the 46 communities, 2 did not adopt updated regulations by the new effective date and were suspended as a result, resulting in 96% of such communities that did adopt (Note that the five communities where the countywide map was the first showing SFHAs have one year to adopt regulations).

We propose using 95% as a baseline for this performance measure. The reason we are not using 100% is that there will always be a small number of communities that will not adopt by the effective date, regardless of the amount of assistance that is provided by either the state or FEMA.

As previously noted in this document, the approach to measuring the success of Floodplain Management in Ohio concerns both the specific performance measurement of activities and products, but it goes beyond that to also look at if the things we are doing are effectively reducing flood damage and protecting the natural resources of floodplains. Since many of the effectiveness measures are not direct, we are still developing our evaluation tools and measurement indicators.

To actually determine our levels of improvement for future years we would like to request the assistance of the NSP to track the baseline information associated with several metrics. For example, we do not currently track submit to rate information or the number of variances granted in local communities. This information is an indicator of less than effective local programs, but we do not have the database or resources to track. We have several repetitive loss structures in the state, but the FPM does not administer or track the mitigation project results (what is bought-out, retrofit or relocated). We are not sure how to integrate another agencies function and tracking with our program activities.