
FEDERAL EMERGENCY MANAGEMENT AGENCY**Risk Mapping, Assessment, and Planning (RiskMAP)****DRAFT STATEMENT OF OBJECTIVES
(Production and Technical Services)****I. DESCRIPTION AND PURPOSE:**

As part of the Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA) has operated the Flood Map Modernization (Map Mod) program since 2004. This program began the work of conducting a large-scale overhaul of the nation's flood hazard maps. Work accomplished under the program has included data collection and analysis, map production, product delivery, and effective program management. Mapping services in support of the National Flood Insurance Program must be continued and updated Flood maps must be maintained as the program evolves to meet the objectives outlined in this document. This initiative will continue to produce digital flood hazard data, provide access to flood hazard data and maps via the Internet, and implement a nationwide state-of-the-art infrastructure that enables all-hazard mapping. The infrastructure developed during Map Mod will continue to evolve and be used to deliver flood hazard data in support of the National Flood Insurance Program (NFIP) and will also support the distribution of geospatial data of all hazards, including those that are man made. Since the political and technological environments are continuing to evolve, this initiative will require the continuous review of existing systems and potential development of new standards or approaches in meeting the objectives outlined below.

The purpose of this Statement of Objectives (SOO) is to obtain contract support which will replace the single National Service Provider Contract which expires in March of 2009; replace expired Regional Indefinite Delivery Indefinite Quantity contracts; and supplement the remaining Regional Indefinite Delivery Indefinite Quantity contracts.

This SOO will address only the Production and Technical Services acquisition. The Customer Service and Program Management contracts will be addressed in separate documents.

II. BACKGROUND:

FEMA's flood maps are one of the essential tools for flood hazard mitigation in the United States. These maps are used an estimated 20 million times annually in the private and public sectors, in the following ways:

- Lending institutions and insurance companies use them to determine who needs flood insurance and to determine flood insurance rates.
- Community planning officials, land developers, and engineers use them for designing and siting new buildings and infrastructure to be safe from flooding.
- States and communities use them for hazard mitigation planning and emergency management.

- Federal agencies use them when implementing Executive Order 11988, Floodplain Management.

The first phase of Map Mod will provide at its completion:

- A solid performance based project and program management infrastructure focused on results;
- A premier flood data collection and dissemination platform;
- Strong effective partnerships with state, local, and other federal governments;
- Digital flood hazard data and maps for 92% of the Nation's population;
- New, updated, or validated flood hazard data for 30% of the mapped stream miles; and
- Credible floodplain boundaries for 75% of mapped stream and coastal miles.

FEMA's Mitigation Directorate is undergoing philosophical and tactical shifts in how it delivers information necessary for flood hazard reduction. The concepts presented here form an appreciably improved, integrated approach to identifying flood hazards that are then woven into watershed-based risk assessments and State and local Hazard Mitigation Plans. FEMA published a Concept Paper in June 2007 to lay out a vision for this integrated approach. The Concept Paper can be found at <http://www.fema.gov/plan/ffmm>.

III. FEMA STRATEGIC GOALS:

"A Nation Prepared" is FEMA's vision and its mission is to lead America to prepare for, prevent, respond to, and recover from disasters. Risk MAP clearly helps ensure that both the Nation, as well as individual communities, are prepared for future floods and other hazard events. With accurate, up to date flood hazard data, states and communities have the tools to reduce future flood losses. FEMA has identified 6 strategic goals for the next 5 years as follows:

- Reduce loss of life and property
- Minimize suffering and disruption caused by disasters.
- Prepare the Nation to address the consequences of terrorism
- Serve as the Nation's portal for emergency management information and expertise
- Create a motivating and challenging work environment for employees
- Make FEMA a world class enterprise

IV. MITIGATION DIRECTORATE MISSION:

The mission of the Mitigation Directorate is to create safer communities by reducing loss of life and property; enable individuals to recover more rapidly from floods and other disasters; and lessen the financial impact of disasters on the Nation. This is accomplished through three primary objectives:

- *Analyze Risk* - Determining the impact of natural hazards that lead to effective strategies for reducing risk.

- *Reduce Risk* - Reducing or eliminating long-term risk from hazards on the existing built environment and future construction.
- *Insure for Flood Risk* - Reducing the impact of floods on the Nation by providing affordable flood insurance.

V. PROGRAM DESCRIPTION

In order to leverage the successes of Map Modernization and further enhance the usability and value of flood hazard mapping, FEMA has developed the RiskMAP program. RiskMAP combines flood hazard mapping, risk assessment tools and Hazard Mitigation Planning into one seamless program. The intent of this integrated program is to encourage beneficial partnerships and innovative uses of flood hazard and risk assessment data in order to maximize flood loss reduction.

The vision of RiskMAP includes several components. These include:

- (1) Identifying additional flood hazard data needs and establishing a life-cycle approach to mapping updates, including areas along the Nation's coast and those protected by levees;
- (2) Conducting informative watershed based risk assessments for all watersheds in the Nation opening the door for more effective risk communication, flood mitigation planning, and flood risk reduction performance tracking;
- (3) Ensuring Hazard Mitigation Plans are assessed and updated every five years locally and every three years at the state level; and
- (4) Keeping the Nation's flood maps credible, enhancing their quality, and maintaining ease of data availability.

As the current Map Modernization support contracts throughout the country are expiring, FEMA assessed the need for the new replacement, follow-on contractual support. After extensive consideration and analysis as well as significant input from industry, FEMA crafted an acquisition strategy to optimize stakeholder acceptance; deliver results using an enabling vision; ensure needed flexibility and adaptability exists; facilitate smooth and seamless transition; and provide innovation with problem solving capabilities to meet the challenges facing the program. This new strategy involves a restructuring of the business model where a National Service Provider currently provides program management, customer service and many other services required to run the overall effort. The restructuring will include separating the program management and customer service segments of executing the program from the actual production of digital maps. The new approach includes establishing separate contracts to provide three groupings of services:

- Program Management (PM)
- Customer and Data Services (CDS)
- Production and Technical Services (PTS)

VI. UNIVERSAL OBJECTIVES FOR PROGRAM MANAGEMENT; CUSTOMER AND DATA SERVICES; AND PRODUCTION AND TECHNICAL SERVICES

While each area will have separate contract(s), the success or failure of RiskMAP will hinge on the interaction and cooperation of all contractors working as a team to ensure the smooth, seamless flow of information to all stakeholders and partners, both internal and external, and a comprehensive, coordinated approach to provide information AND services to customers at all levels. A failure by a single contractor at any level may lead to program failure. It is the responsibility of all contractors to participate as team members with all other contractors.

To this end, FEMA has established Universal Objectives for all RiskMAP contractors. Additionally, there are Overarching Assumptions and Constraints that apply to all contractors.

Universal Objectives:

Universal Objective A: Provide a high level of cooperation across the RiskMAP program contractors, ensuring that the RiskMAP program mission overrides the individual contractors' preferences.

Universal Objective B: Implement program cost, schedule, scope, and quality management practices that enable reliable and efficient operations and forward-thinking innovation throughout the RiskMAP program

- Ensure that internal contractor systems for earned value management and performance management integrate with the RiskMAP program systems
- Monitor, evaluate, and mitigate risks within the PTS portion of RiskMAP
- Comply with the RiskMAP change control process
- Support the RiskMAP Program Management contractor in achieving the Program's goals

Overarching Assumptions and Constraints:

- All activities align with DHS/FEMA strategic goals and constraints
- Outreach activities are coordinated, integrated, and consistent with RiskMAP messaging throughout the program including appropriate advisory focus groups
- Solutions leverage existing FEMA investments and resources, are cost effective, and demonstrate a sound return on investment (ROI)
- The solution meeting these goals and objectives must address important federal mandates and business drivers, including, but not limited to: the Government Paperwork Elimination Act; the Government Information Security Reform Act; the Clinger-Cohen Act; the Government Performance and Results Act; the Federal

- Records Act; the Computer Security Act; the Freedom of Information Act; the Disabilities Act; Section 508 of the Rehabilitation Act; the Disaster Mitigation Act of 2000; the National Flood Insurance Reform Act of 1994; the Stafford Act; the Flood Disaster Protection Act of 1973, the Housing and Urban Development Act of 1969; and other laws and regulations specific to FEMA.
- The solution must comply with all statutes and demonstrate working knowledge of applicable regulations, policies, guidelines, and specifications that affect the NFIP, the mission of the Department of Homeland Security, and related multi-hazard programs including risk assessment in a pre- and post- disaster environment.
 - The solution must demonstrate the flexibility to accommodate a changing environment that includes a shift to all hazards and homeland security. In addition, the solution may recommend changes to improve efficiency and effectiveness of program functions and management.
 - Data security and privacy issues are a major focus of the federal government's information technology efforts. All program activities must be compliant with the Government Information Security Reform Act, OMB policies, and FEMA and the Department of Homeland Security requirements.
 - Information technology (IT) systems must be coordinated with and comply with FEMA and Department of Homeland Security enterprise architecture requirements.
 - The solution must include a transition plan describing how continuity of services will be maintained (e.g., production of flood hazard maps and related products, customer service and community outreach, program oversight, etc.)

VII. PRODUCTION AND TECHNICAL SERVICES OBJECTIVES.

OBJECTIVE 1

PRODUCE RISKMAP PRODUCTS: Produce effectual, flexible and sustainable RiskMAP products that are aligned with user needs using innovative production processes.

- Develop RiskMAP products that reflect the level of sophistication of and types of risk within each community studied.
- Create innovative RiskMAP products that will incorporate a variety of risk data.
- Align flood hazard mapping and other RiskMAP products with internal and external programs, data collection efforts, and industry accepted & FEMA defined standards.
- Identify flood hazard data needs & implement a life cycle approach that keeps the nation's flood maps and other RiskMAP products credible, enhances their quality, and maintains ease of data availability.

- Provide disaster support assistance in a timely manner.
- Develop flexible and innovative methods for the Regional Support Centers to cooperate with the FEMA regional offices, pre-existing mapping partners, and other contractors (on both a regional & national level).

OBJECTIVE 2

FOSTER MUTUALLY BENEFICIAL PARTNERSHIPS: Strengthen beneficial partnerships in order to develop improved understanding of flood risk and other hazard information and further the goals of RiskMAP.

- Enable and enhance beneficial partnerships among federal, state, local and tribal entities.
- Enable partners to develop into successful RiskMAP producers by leveraging the achievements of Map Modernization.
- Provide support to partners to facilitate innovative and efficient production of flood hazard data and other risk analysis products.
- Leverage best available data and production technologies from other agencies to maximize efficiency and improve accuracy of products and encourage partners to share in the cost of producing new data.
- Align RiskMAP activities with the functions of State and other Federal agencies.
- Support FEMA in working with other agencies with related missions to align procedures and standards.
- Provide support to foster a team relationship between federal and state entities to achieve loss reduction.
- Support FEMA in coordinating with non-governmental organizations.

OBJECTIVE 3

ADVANCE THE USE OF RISKMAP PRODUCTS: Promote the use of RiskMAP products throughout the RiskMAP lifecycle at the local level for loss reduction.

- Assist in the development and implementation of an iterative participatory RiskMAP process that promotes ownership of the data and an effective mitigation strategy.
- Ensure, through an interactive mapping process, timely adoption of DFIRMs and promote opportunities for enhanced floodplain management.
- Develop additional options to measure successful use of RiskMAP products for loss reduction.
- Educate local communities on the value of risk data and explain opportunities for integration and use, such as:

- Enhanced risk identification and associated loss reduction opportunities
- Loss estimation/HAZUS
- Risk Assessment
- Hazard Mitigation Planning
- Loss avoidance

VIII. PRODUCTION AND TECHNICAL SERVICES ASSUMPTIONS AND CONSTRAINTS:

- The PTS Contractor(s) must support the Risk Analysis Division on highly technical issues and unique regional area concerns, i.e., levees, coastal analysis, erosion hazards.
- The PTS Contractor must collect and report performance management / Earned Value Management data into FEMA's Earned Value Management System.
- Production must be continuously improved to be faster, better, cheaper.
- FEMA will establish a governance structure that has regular meetings among contractors and other partners to help ensure that feedback and input is solicited from all participants.
- The contractor will provide Regional Support Centers to be located near each Regional Office. The Regional Support Centers will directly support and assist the Regional Office in their day-to-day needs.
- Regional Support Centers must be able to be staffed and operational within a designated transitional period following contract award. The solution should include a strategy for development of the Regional Support Centers, but offices do not need to be operational when solutions are submitted.
- The Regional Support Center will be aligned with the specific needs of the individual region, to include: physical locations, experience in the NFIP and other mitigation programs, number of personnel, familiarity with the region, etc.
- The contractor's map production tools will meet FEMA's data, technology and engineering standards, and be sustainable as those standards change.
- The contractor will incorporate data that are created in post disaster situations into the needs collection management strategy for future use.
- Program level activities involving state and other federal agencies must be coordinated with the PM Contractor.
- The PM contractor will develop and manage a programmatic beneficial partnerships framework.
- CTP program will continue and be enhanced to involve the additional aspects of RiskMAP with capable partners.
- Outreach to locals is conducted by individuals cross trained in RiskMAP and other mitigation products and programs and experienced in outreach. These individuals must be able to effectively communicate integration and implementation opportunities in mitigation.
- FEMA, with contractor assistance, will develop & promote incentives to encourage use of RiskMAP products at the local level.
- The objectives encompass tasks, including, but not limited to:
 1. Perform Pre-scoping & Scoping.

2. Perform Topography acquisition.
3. Perform Base Map Acquisition.
4. Perform Hydrology and Hydraulic engineering analysis.
5. Perform Independent Quality Control on flood studies.
6. Perform Preliminary Digital Flood Insurance Rate Map (DFIRM) creation.
7. Perform Post-preliminary processing.
8. Deliver DFIRMs and supporting data to a repository and distribution facility.
9. Manage and coordinate appeals and resolution.
10. Review and process Letter of Map Revisions (LOMR) and Letter of Map Amendments (LOMA).
11. Manage flood mapping study projects and coordinate on studies with the program management contractor.
12. Prepare special correspondence.
13. Participate in development of Guidelines and Specifications for Flood Hazard Mapping Partners.
14. Support the Program Management Contractor in implementing the digital vision.
15. Provide assistance to partners on loss estimation technologies, such as HAZUS, and associated policies and guidance.
16. Convey policies and answer questions for local communities regarding risk assessments associated with mapping projects.
17. Provide technical assistance regarding policies and guidance to partners preparing Mitigation Plans.
18. Develop tools to improve the DFIRM production process.

IX. DEFINITIONS:

“Disaster support assistance” may include, but is not limited to: flood recovery maps, post-event data collection, HAZUS data validation & calibration.

Effectual means high-quality, timely and cost-effective.

Flexible means data is open source and compatible with existing technologies.

“Functions of State and other Federal agencies” include but are not limited to: the development of topographic, basemapping and risk data; loss estimation; Hazard Mitigation Planning activities; cost benefit analyses; etc.

Hazard Mitigation Planning: A process for States and communities to identify policies, activities and tools to implement mitigation actions. Mitigation is any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event.

“Level of sophistication” means the degree to which an entity is able to use technology and digital products. This may vary between simply being able to use a paper map to performing complicated analyses using new softwares and technology.

Local level: a governmental entity with authority over a city, town, village, small district or regional area (as opposed to a state or larger entity), with the ability to affect loss through regulation, mitigation projects or outreach and training to their citizens.

“Loss reduction opportunities” include, but are not limited to: Future conditions mapping, coastal flood hazard data, erosion zones, dam failure inundation mapping that exceed standard floodplain mapping.

Partner: An entity that leverages resources with FEMA, and potentially other entities, to achieve a shared vision of hazard and risk identification, communication, and reduction. Partners typically provide access to data that they maintain, but may also provide other types of support.

Production includes all risk assessment and mapping products, and specifically excludes the creation of Hazard Mitigation Plans.

RiskMAP products: DFIRMs, LOMCs, Loss Estimation Tools such as HAZUS, and Hazard Mitigation Plans. All RiskMAP products will be either produced by RiskMAP contractors or partners. All Hazard Mitigation Plans will be produced solely by partners at the local and state level.

RiskMAP programs: include Flood Hazard Mapping, Risk Assessment and Hazard Mitigation Planning.

Stakeholder: Has vested interest in RiskMAP programs but may not be contributing data. Stakeholders include partners and users, in addition to other entities. Current stakeholders include general public, state and local officials, lenders, insurance agents, realtors, homebuilders, environmental groups, engineers, surveyors, planners, flood insurance policy holders, other Federal Agencies, Congress, Office of Management and Budget and others.

Sustainable means to be able to incorporate changes in technologies and data.

User: Any technical or non-technical customers accessing, utilizing, or manipulating RiskMAP data, products, or systems.