

# FLOODPLAIN MANAGEMENT SERVICES PROGRAM



Flood risk management (FRM) is one of the U.S. Army Corps of Engineers' (USACE) primary mission areas, and encompasses the development and communication of approaches, technologies, and solutions which reduce the risk of riverine flooding and coastal storm impacts. The Floodplain Management Services (FPMS) program serves as a tool to help achieve the USACE FRM mission by addressing the needs of people who live and work in floodplains, and the actions they can take to reduce property damage and prevent the loss of life caused by flooding.

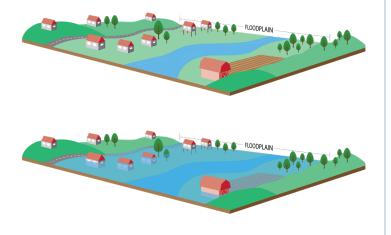
#### **OVERVIEW**

Through the FPMS program, USACE provides information on flood hazards to local interests, state agencies, tribal nations, and other federal agencies to guide development of the floodplains and flood-prone areas of the United States.

The program's objective is to foster public understanding of the options for dealing with flood hazards and promote prudent use and management of the nation's floodplains and flood-prone areas. The FPMS program provides a full range of technical services and planning guidance that is needed to support effective floodplain and flood risk management.

## WHAT IS A FLOODPLAIN?

Per Executive Order 11988, a floodplain is "the lowland and relatively flat area adjoining inland and coastal waters, including flood-prone areas of offshore islands." It also includes, at a minimum, that area subject to a 1-percent chance of flooding in any given year (Executive Order 11988).



#### WHAT IS FLOODPLAIN MANAGEMENT?

Floodplain management is a community-based effort to prevent or reduce the risk of flooding, resulting in a more resilient community. (**FEMA.gov**)

## **FPMS SERVICES AVAILABLE**

Under the FPMS program, USACE is authorized to compile and disseminate information on floods and flood damages, including identifying areas subject to inundation by floods of various magnitudes and frequencies, providing general criteria for guidance for use of floodplain areas to federal and non-federal interests and agencies, and advising other federal agencies and local interests on using the criteria when planning flood hazard mitigation.

#### **EXAMPLE FPMS ACTIVITIES & PRODUCTS**

- Developing studies or guidance
- Floodplain & flood inundation mapping
- **■** Flood hazard evaluation
- Hurricane evacuation preparation/planning
- Flood warning/ preparedness
- Flood risk reduction education & outreach
- Urbanization impacts assessment/planning
- Stormwater management assessment/planning

- Preliminary assessment of nonstructural measures and/or natural and nature-based solutions
- Inventory of flood-prone structure
- Workshops
- Tabletop exercises
- Emergency Action Planning
- Floodplain Management Plan Assistance
- Assessment tools& processes

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#### FLOODPLAIN MANAGEMENT SERVICES

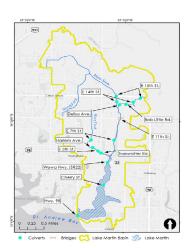
#### FPMS SUPPORTING COMMUNITIES



## City of De Soto, MO, Emergency Action & Evacuation Plan.

An Emergency Action and Evacuation Plan was produced to serve as a blueprint

to be implemented by the city. The team (De Soto Fire Department, Rural Fire Department, Police Department, and Public Works; Jefferson County Emergency Management; Valley Ambulance; Citizen's Committee for Flood Relief; and USACE) identified areas of greatest potential for life loss, roadways not available during a flood event, and recommended mitigation measures. A tabletop exercise and outreach plan prepared Emergency Management officials to respond and communicate during flash flood events.



Hydrology and
Hydraulics (H&H)
Support for Lake
Martin, FL. As part of
the Hurricane Michael
interagency recovery
coordination effort,
USACE provided a
localized H&H model
identifying existing
flooding causes and
potential solutions
for the cities of Parker

and Springfield, Florida. Results presented to local partners increased knowledge of flood risk. As a result, the St. Andrew and St. Joe Estuary Program submitted an application to protect areas in the upper portions of Lake Martin identified as important for conservation to alleviate flood risk. Partners included: cities of Parker and Springfield, Florida; Florida Department of Environmental Protection; Emerald Coast Regional Council; Department of Interior, Natural Park Service; Florida State University; United States Department of Agriculture, Natural Resources Conservation Service; Bay County, Florida; Environmental Protection Agency, Region 4; and Florida Division of Emergency Management.

#### FPMS SUB-PROGRAMS

# **Systems Approach to Geomorphic Engineering (SAGE)**

is a collaborative effort involving experts from states, academia, non-governmental organizations, and private sector engineering organizations that recognizes the value of an integrated approach to coastal risk reduction. SAGE combines ecosystem-based approaches and engineered infrastructure to achieve coastal resiliency on a landscape scale. By working with a public-private forum, SAGE can identify cost efficiencies, improve communication and information transfer, and implement multi-dimensional coastal resiliency projects.

National Nonstructural Committee (NNC) was chartered in 1985 to promote the use of nonstructural measures for reducing life loss and minimizing property damages. The objective of the NNC is to support USACE Headquarters by providing leadership in the development and implementation of nonstructural flood risk management measures, and by providing support for all USACE floodplain and flood risk management activities.

National Hurricane Program (NHP) is a federal interagency partnership between USACE, the Federal Emergency Management Agency (FEMA) and the National Oceanic and Atmospheric Administration to support FEMA's mandate to "provide evacuation preparedness technical assistance to state, local, and Tribal Nation governments, including the preparation of hurricane evacuation studies and technical assistance in developing evacuation plans, assessing storm surge estimates, evacuation zones, evacuation clearance times, transportation capacity, and shelter capacity." While the primary focus of the technical assistance is to support state, local, tribal nation, and territorial governments, the NHP also supports federal planning and decision-making.

## The NHP consists of seven major components:

- Hurricane Evacuation Studies (HES) and Evacuation Planning
- Hurricane Decision Support Tool (HURREVAC)
- Storm Surge Risk Products
- Hurricane Preparedness Training for Emergency Managers and Partners
- Hurricane Liaison Team Operational Decision Support
- Stakeholder Engagement
- Post-Storm Assessment

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