

FLOODPLAIN MANAGEMENT PLANS



REQUIREMENT

§ 467f-2 (e) (e) Floodplain management plans

(1) In general As a condition of receipt of assistance under this section, the non-Federal sponsor shall demonstrate that a floodplain management plan to reduce the impacts of future flood events in the area protected by the project—

(A) is in place; or

(B) will be—

(i) developed not later than 1 year after the date of execution of a project agreement for assistance under this section; and

(ii) implemented not later than 1 year after the date of completion of construction of the project.

(2) Inclusions A plan under paragraph (1) shall address—

(A) potential measures, practices, and policies to reduce loss of life, injuries, damage to property and facilities, public expenditures, and other adverse impacts of flooding in the area protected by the project;

(B) plans for flood fighting and evacuation; and

(C) public education and awareness of flood risks.

(3) Technical support

The Administrator may provide technical support for the development and implementation of floodplain management plans prepared under this subsection.

Background

Floodplain management plans (FMPs) support dam safety by establishing public policy that promotes public risk awareness and community planning. FMPs can also be useful in the development of community warning and evacuation planning.

The concepts contained in this guidance are adapted from the USACE Policy Guidance Letter (PGL) No. 52, Floodplain Management Plans and were developed to closely follow the 1994 Unified National Program for Floodplain Management

and to ensure compatibility with the NFIP's Community Rating System (CRS).

Requirements

A FMP to reduce the impacts of future flood events in the area impacted by the dam project is a condition of grant award. The FMP may either be in place, or developed not later than 1 year after the date of execution of a project agreement for assistance; and implemented not later than 1 year after the date of completion of construction of the

project. If a floodplain management plan(s) is in place, it must be submitted with the application.

FMPs must address the following to meet the requirements of the HHPD grant program:

- Potential measures, practices, and policies to reduce loss of life, injuries, damage to property and facilities, public expenditures, and other adverse impacts of flooding in the area impacted by the project.
- Plans for flood fighting.
- Plans for evacuation.
- Public education and awareness of flood risks.



Flood waters reach up this mailbox in a residential neighborhood in Bismarck, N.D. July 10, 2011.

Developing HHPD Floodplain Management Plans

If applicants choose to develop FMPs for the HHPD grant program, the application must include a signed statement from the applicant that the plan will be developed within 1 year after the date of execution of a project agreement and implemented within 1 year of completion of construction.

The plan may be a dam-specific, stand-alone, local plan that is limited to the area impacted by the dam and implemented by the applicant, subapplicant, non-federal sponsor, dam owner, and others. Alternatively, the FMP may also be a state or local plan that meet CRS requirements (see Section 5.4.4) if FEMA determines the plan adequately addresses the flood risk reduction strategies associated with the dam as required by the HHPD program. If a stand-alone dam-specific FMP is developed, it must be submitted to the relevant floodplain management officials. The floodplain management officials may include the plan as an attachment to the local floodplain ordinance during the next update cycle. See Appendix H for an example floodplain management plan outline.

Roles and responsibilities must be clearly defined in the

FMP. Because different entities may be responsible for different elements of the FMP, all parties named in the plan must sign concurrence that they agree to implement their roles. For example, the applicant may be responsible for public education and awareness of flood risks, state and local emergency management may be responsible for plans for flood fighting and evacuation, and the dam owner may be responsible for potential measures and practices (such as interim risk reduction measures) that reduce the loss of life, injury, and damage to property downstream of the dam. Each participant must have clearly defined roles and documentation that they are aware of their roles and agree to implement them must also be included in the floodplain management plan.

The following process should be followed and documented to ensure that development and implementation of the FMP involves the appropriate stakeholders and addresses the appropriate needs of the local community:

- There should be an identified non-federal planner, or a planning committee established by the non-federal interest, responsible for overall accomplishment of the FMP.
- There should be active public involvement throughout the FMP development process. This should include coordination with other local, regional, state, and federal agencies and non-governmental groups.
- Problems associated with the flood hazard should be assessed. Other problems and needs such as water quality, water supply, recreation, and environmental concerns, should also be addressed during this process.
- Based on the problems and needs identified through the planning process, goals should be set, and an action plan developed to meet those goals.
- The action plan is a blueprint for implementation of the FMP. The FMP will be developed not later than 1 year after the date of execution of a project agreement for assistance and must be implemented not later than one year after completion of construction of the federal project.

The FMP should contain (1) documentation of the process used to develop the FMP, including records of meetings and public involvement activities, (2) a listing of the goals and objectives, (3) a listing of the strategies and tools considered and reasons for inclusion or rejection, and (4) a detailed action plan for implementation of the activities selected for inclusion in the FMP. Also, as a minimum, the FMP prepared and implemented by the non-federal sponsor must include the following activities:

- The non-federal sponsor must maintain and provide public access to the most current dam flood hazard maps and related information.

- On an annual basis, the non-federal interest must provide information to owners and residents of flood prone property within its jurisdiction concerning the residual flood risk and availability of flood insurance.

Note that there is no “standard” FMP. In most cases, no single strategy will be sufficient; rather, a combination of strategies and tools will most likely be needed to further reduce the residual risks associated with the dam to acceptable levels. By selecting the best mix of these strategies, decision makers can tailor the FMP to the characteristics of a specific floodplain and to the needs of its constituents. The combination must be based on what is available, practicable, affordable, and likely to be successful for the floodplain in question, keeping in mind the dual purposes of floodplain management: reducing loss of life, disruption, and damages.

FEMA can provide technical support for the development and implementation of FMPs. Grant funds may be used for the development of the FMPs.

Recommended Best Practices

Coordinated Plan Preparation

It is recommended as a best practice that the applicant and/or subapplicant develop the FMP concurrently with any feasibility studies that are conducted for the proposed project. This will ensure that the FMP preparation and feasibility study are compatible. Relevant information should be included in the next update of the state, local, or tribal mitigation plan.

If a feasibility study is performed, much of the effort and information needed to support the preparation of a FMP will likely be developed as part of the feasibility study, including elements such as:

- A description of the flood hazard.
- A description and delineation of the floodway and natural storage areas.
- A description of the natural and beneficial values including potential recreation areas, open space, wetlands and wildlife preserves.

- Hydrologic and hydraulic data, including flood damage data and other technical data.

Community Rating System

Applicants may choose to develop FMPs that qualify for CRS credit. The CRS is a program developed by FEMA to provide incentives for those communities in the NFIP that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding. Communities that participate in the CRS may qualify for reduced NFIP insurance premiums for exceeding minimum requirements. For more information about the CRS program, please visit <https://www.fema.gov/national-flood-insurance-program-community-rating-system>. The Hazard Mitigation Planning and the CRS Key Topics Bulletin is another useful reference.

CRS state and local FMPs are typically updated every 5 or 10 years. Updates involve a 10-step planning process that requires public involvement, coordination with other agencies and organizations, and adoption by the community’s governing body.

Developing a FMP as part of their HHPD subapplication may allow communities to receive CRS credit for actions under two sections of FEMA’s CRS:

- **CRS Section 510** – Floodplain Management Planning has a maximum credit for this element is 382 points for floodplain management planning (512.a) or 140 points for repetitive loss area analysis (512.b).
- **CRS Section 630** - Warning and Response for Dams has a maximum credit of 160 points. Credited activities include having a state dam safety program (SDS), a dam failure threat recognition system (DFR), a dam failure warning (DFW), a dam failure response operations (DFO), and coordination of dam failure critical facilities planning (DCF). To receive any Activity 630 credit other than SDS, the community must receive some credit in each of the elements DFR, DFW, DFO, and DCF.

It is expected that if an applicant meets the grant application criteria, the applicant may qualify for CRS credits under Section 630.

