FLOOD PLAIN MANAGEMENT SERVICES PROGRAM

Flood Control & Flood Plain Management

US Army Corps of Engineers

OVERVIEW:

The Corps of Engineers through its Flood Plain Management Services Program uses its technical expertise in flood plain management to help those outside the Corps to deal with floods and flood plain related matters. Section 206 of the Flood Control Act of 1960, as amended, provides the authority for this program. Upon request and without charge, the Corps of Engineers will furnish to States, Federally recognized Indian Tribes, counties, and cities the flood plain information and technical assistance that they need to plan for prudent use of land subject to flooding from streams, lakes, and oceans. Assistance is given within the limits of available appropriations, which have averaged around $8 million annually over the last five years. Assistance is also available to Federal agencies and private persons on a fully reimbursable basis.

OBJECTIVES:

The objective of the Flood Plain Management Services (FPMS) Program is to support comprehensive flood plain management planning with technical services and planning guidance at all appropriate Tribal, State, regional, and local governmental levels; and thereby, to encourage and to guide them toward prudent use of the Nation's flood plains for the benefit of the national economy and welfare. Adjustment of land use based on proper planning and employment of a variety of techniques for reducing flood damage potential constitutes a rational means by which the locational advantages and natural resources of flood plains can be balanced with the inevitable hazards which floods pose.

TYPES OF ACTIVITIES:

Upon request, the FPMS Program provides a full range of technical services and planning guidance on floods and flood plain issues within the broad umbrella of flood plain management. Involvement of requestors is encouraged. They may furnish field survey data, maps, historical flood information and the like. Such participation by requestors can help to reduce costs to the general public, to set work priorities, and to assure continued community interest. Activities under the Corps FPMS Program are described in the following paragraphs.

GENERAL TECHNICAL SERVICES:

Flood and flood plain related data are obtained or developed and interpreted. Topics include: flood formation and timing, flood depth or stage, flood-water velocity, extent of flooding, duration of flooding, flood frequency, obstruction to flood flows, "regulatory floodways," natural and cultural resource values of note, and flood loss potentials before and after employment of flood plain management measures.

GENERAL PLANNING GUIDANCE:

Planning assistance and guidance is provided for implementing or meeting requirements of: flood plain regulations; flood warning and flood emergency preparedness; hurricane evacuation planning; flood proofing measures (e.g., elevation, closures and seals, and anchorage); permanent evacuation and relocation; and the National Flood Insurance Program. The Corps assists in all aspects of flood plain management planning. This can range from helping a community identify the future of the flood plain and related problems (present or future), to a broad assessment of remedial measures (of both the flood modifying and occupance modifying varieties) that may be appropriate. Included are the possible impacts of off-flood plain land use changes on the physical, socio-economic and environmental conditions of the flood plain.

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GUIDANCE, PAMPHLETS AND SUPPORTING STUDIES:

The Program includes studies to improve methods and procedures for mitigating flood damages and the preparation of guides and pamphlets on topics such as flood proofing, flood plain regulations, flood plain occupance, economics of flood plain regulations, and important natural flood plain resources. Guides and pamphlets are prepared for use by tribal, state and local governments in planning and in taking action to reduce flood damages or damage potentials as part of a flood plain management program.

TYPES OF STUDIES/ACTIVITIES CONDUCTED UNDER THE FPMS PROGRAM:

* Dam Break Analyses
* Flood Warning/Preparedness ans Forecast Studies
* Floodway and Floodway Impact Studies
* Flood Plain Delineation /Flood Hazard Evaluation Studies
* Flood Damage Reduction Studies (Local Implementation)
* Alluvial Fan Studies
* Stormwater Management Studies
* Flood Proofing Alternatives Studies
* Comprehensive Flood Plain Management Studies
* Computer Automated Flood Hazard Data

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EMERGENCY OPERATIONS PROGRAM

Flood Control & Flood Plain Management

US Army Corps of Engineers

PROGRAM OVERVIEW:

Responding to natural disasters, such as floods, is primarily a Tribal, State and local responsibility. In instances when the disaster exceeds the capabilities of State, Tribe, or local agencies, however, Federal help is available. Under Public Law 84-99, the U.S. Army Corps of Engineers, District Office, can provide the needed additional assistance in the event of a life-threatening flood.

DISASTER PREPAREDNESS:

State, Tribal and local governments are responsible for flood emergency preparedness, including training personnel and stockpiling flood fight supplies. The role of the Corps of Engineers is to supplement the efforts of the States, Tribes and local governments.

What the Corps can do:

* Participate in flood emergency seminars or exercises when requested by State and local officials.
* Provide flood fighting materials, including sandbags, pumps and other materials, to supplement State and local supplies during a flood emergency.
* Inspect flood control works constructed or repaired by the Corps and advise local officials of required maintenance.
* Inspect non-Federal flood control works, when requested.

ADVANCE MEASURES PRIOR TO PREDICTED FLOODING:

Advance measures consist of any actions taken by the Corps prior to flooding or a flood fight to protect against loss of life and damage to improved property. An imminent threat of flooding must be present before advance measures can be considered. The threat must be established by the National Weather Service forecasts or by U.S. Army Corps of Engineers determinations of unusual flooding from adverse conditions. The threat must be of a nature that, if action is not taken immediately, damages will be incurred.

Criteria for Corps of Engineers assistance:

* There must be a reliable prediction of flooding based on existing conditions.
* Requested work must be technically feasible and economically justified.
* There must be sufficient time before the flood to complete the work.
* Maximum efforts by Tribal, local interests and State resources must be expended before Corps assistance can be provided.
* A written request from the Governor, a governor's authorized representative or responsible authority to include a qualified Indian Tribe, Alaska Native Corporation or tribal organization. If tribal lands are under the authority of the Bureau of Indian Affairs (BIA), the request should come from the BIA.

What the Corps can do:

* Strengthen Federal and non-Federal flood control works.
* Construct temporary levees to protect life and improved property (removal of the temporary levees is a local responsibility).
* Restore the original design capacity of Federal projects by channel clearing and dredging.
* Relieve the threat of flooding from possible dam failures by dewatering the impoundment, controlled breaching or strengthening of the structure.

EMERGENCY OPERATIONS:

In time of flood or coastal storm, the Corps of Engineers will undertake emergency operations to supplement local efforts in the following general categories: disaster assistance, flood fighting, and post flood recovery and/or rehabilitation. Emergency measures are of a temporary nature designed to meet the imminent threat of flood and to preserve existing protective works.

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Criteria for Corps of Engineers assistance: Corps policy requires local interests to furnish the following items of cooperation and assurances prior to undertaking any work: (a) provide without cost to the United States all lands, easements, and rights-of-way necessary; (b) hold and save the United States free from damages due to the authorized work, exclusive of damages due to the negligence of the United States or its contractor; and (c) operate and maintain the emergency work constructed by the Corps.

What the Corps can do:

* Assist in rescue operations.
* Furnish technical advice and assistance.
* Furnish flood fighting materials, such as sandbags, polyethylene sheeting, lumber, pumps, or rock to stabilize eroding levees. Government supplies are furnished only if local resources are or will be exhausted.
* Remove logs, ice, or other debris that is blocking stream flow and causing or likely to cause flooding to improved property or to endanger life.

ADDITIONAL EMERGENCY OPERATIONS:

The Corps of Engineers can also provide:

* Repair and rehabilitation of flood control works damaged or threatened by flood.
* Emergency drinking water to areas that have contaminated drinking water or are suffering from drought.

HOW TO OBTAIN HELP:

Contact your local officials. They will contact the proper person at the State or Tribal level, and if required, the State or Tribe will contact the Corps of Engineers. For more information on the Corps of Engineers assistance or eligibility for assistance during flood emergencies, contact the Emergency Management Branch of the Corps of Engineers at the regional District Office.

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Reclamation Programs

Flood Control & Flood Plain Management

ENVIRONMENTAL AREA: The Bureau of Reclamation (Reclamation) has technical programs in two main areas: Resource Management and Resource Development. The primary authorization for Reclamation's programs is the Reclamation Act of 1902, as amended, though there are a large number of other laws that authorize specific programs and activities. Many of the programs under Reclamation are constrained by the need to seek specific Congressional authorizations and appropriations for individual projects and activities. It should be understood that though many Reclamation programs are already authorized, Congress does not always appropriate funds for them.

Under Resource Management, Reclamation has a number of programs that provide technical assistance to and/or partnership activities with State, Tribal, and local entities and with other Federal agencies. These programs are in keeping with Reclamation's mission as a major Federal water management agency.

RANGE AND TYPES OF ASSISTANCE: The main program specific to Tribal entities is the Native American Affairs Program (NAAP). This program has two primary activities - the Department of Interior (DOI) Water Rights Settlement Federal Teams, and Reclamation's Technical Assistance to Tribes. Reclamation participates on DOI's water rights settlement teams in both a technical and leadership capacity. Also within NAAP, technical assistance is provided to tribes to facilitate their water and water-related resources management efforts on reservations and in communities. A wide range of technical assistance activities have been accomplished in support of tribes, many of which will be covered in more detail later in this (text). One of the main activity areas has been providing technical assistance to tribes in assessing their water supply and treatment needs and then identifying potential solutions to those needs. Planning studies and investigations, such as Needs Assessments and Appraisal and Technical Studies, are accomplished through partnerships with the tribe. On-site water and wastewater infrastructure assessments are also accomplished by Reclamation technical specialists in concert with tribal resource managers.

Reclamation has a group of programs known as Water Management and Conservation Programs (WM&C). Within this group, the following types of assistance are available:

- Challenge Grants program
- Technical Assistance
- Workshops
- Assessments and Evaluations

Reclamation provides drought assistance, per P.L. 102-250, to rural and urban communities and other entities to help them with planning and implementation of drought mitigation measures. This is accomplished through grants and loans and through direct technical assistance by Reclamation technical specialists. This program is not funded on a permanent basis and funding may not be available in a given fiscal year.

The Reclamation Wastewater and Groundwater Studies Act (Title XVI, P.L. 102-575), authorizes Reclamation to perform Appraisal and Feasibility Studies for communities pertaining to application of water recycling technology to recycle wastewater and thereby extend use of limited surface and ground water supplies. Identified solutions may include treatment of wastewater for later use as water supply for industrial and other uses. Identified treatment technology may range from use of constructed wetlands to advanced physical/chemical treatment of the wastewater. Funding must be pursued on an individual study and/or project basis.

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OBJECTIVES: One of Reclamation's historic missions has been the operations and maintenance (O&M) of its many natural resources and existing facilities. These include: water storage and distribution facilities, hydropower facilities, recreational facilities, lands and natural habitats. The Reclamation Act of 1902, as amended, provides the original authority for its O&M Programs. Congress also directs Reclamation to provide O&M of specific facilities through passage of water project authorization legislation. Reclamation can only act on those authorities after Congress has appropriated funds for those O&M activities.

Reclamation's O&M of its facilities and resources are accomplished in two ways. Either Reclamation personnel accomplish the work or through contract/agreement with water districts and/or other entities for their personnel to perform the work.

Reclamation also provides technical assistance and training to other agencies and entities in the O&M area. This includes O&M of: hydropower generation and transmission facilities; water storage and distribution facilities; water treatment facilities; and water-related recreation facilities.

In order for Reclamation to ensure that its facilities are operated and maintained at a high level of structural and operational safety, regular technical reviews are conducted by Reclamation specialists of Reclamation's facilities. As authorized by P.L. 95-578, Reclamation conducts safety evaluations of existing dams (SEED program) and accomplishes corrections of identified safety deficiencies through its Safety of Dams (SOD) program. Because of its expertise in these areas, Reclamation is also DOI's lead bureau for these activities, and through funding from BIA conducts these activities on many dams on tribal lands.

Being a Federal agency, Reclamation is also active in meeting the requirements set forth by Congress for all Federal agencies. In the cultural resources management area, under the guidance of such laws as the National Historic Preservation Act, the American Indian Religious Freedom Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act, Reclamation has been active in managing cultural resources on its lands and facilitating the management of cultural resources on other lands. Though Reclamation is primarily concerned with its own lands, technical assistance can be given to other agencies and entities in their own efforts.

The National Environmental Policy Act (NEPA) and Fish and Wildlife Coordination Act (FWCA) also require Federal agencies to comply with certain environmental and coordination requirements. Reclamation accomplishes NEPA compliance activities for a wide range of Federal actions, and can assist other agencies and entities with their NEPA compliance activities.

The other main program area for Reclamation, Resource Development, is associated with construction and development of resources activities. One program, the Wetlands Development Program is accomplished in response to the North American Wetlands Conservation Act and Fish and Wildlife Coordination Act. This program includes wetlands/riparian habitat restoration, enhancement and development, and wetlands/riparian habitat evaluation and management. Reclamation has provided technical assistance to many other agencies and entities in these areas and currently works in partnership with others as well.

Reclamation's original mission, as directed by the Reclamation Act of 1902, was the development of water resources in the arid West, which effectively translated into construction of water storage dams, diversion dams, and water distribution systems for agricultural and domestic water supplies. Reclamation is recognized around the world for its expertise in development and construction of these kinds of facilities.

Though Reclamation's main mission is now resources management, rather than resources development, it still has several major construction projects going on today. The Mni Wiconi Project in South Dakota and on the Pine Ridge Reservation is currently being constructed, and there are distribution facilities (municipal, rural and industrial) being constructed on the Standing Rock Sioux Reservation. The Animas-La Plata Project in Colorado and the Navajo Indian Irrigation Projects in the Four Corners area are also in various stages of construction. An example of an already constructed and operating water supply project is the WEB project in north-central South Dakota.

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Prior to actual construction of water projects, adequate planning and then feasibility analyses must be accomplished to the satisfaction of Congress before it will authorize a project. Once construction is authorized by specific legislation of Congress, construction still can not begin until Congress appropriates funds. Funds are appropriated on a yearly basis and are not guaranteed.

Reclamation is also involved in the planning and construction of municipal water recycling facilities, per Title XVI of P.L. 102-575. Construction of temporary technology demonstration projects is authorized under Title XVI and Reclamation is currently involved with several municipal and state partners in the planning and construction of these facilities.

As part of Reclamation's early development of water resources in the arid West, and because of increased demands for electricity by an rapidly expanding population, Reclamation has also constructed a large number of hydropower generation facilities on a number of its dams.. Some regional examples include Yellowtail Dam (Wyoming and Montana) and Boysen Dam (Wyoming).

This construction experience has enabled Reclamation to provide technical assistance, project construction management and oversight in those areas to other agencies and entities, including other countries around the world.

CONTACT: Additional Reclamation program information specific to tribes is available in the Reclamation Resource Manual issued in cooperation with the Mni Sose Intertribal Water Rights Coalition. Local office contacts and the areas they serve can also be found in the Reclamation Resource Manual or can be obtained from:

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