HOW TO CONSTRUCT A SANDBAG EMERGENCY LEVEE

HOW TO FILL SANDBAG

Fill sandbags 1/2 to 2/3 full, tie at top so bag will lay flat when put in place (Overfilled bags leave gaps in levee allowing water to seep through.)

PLACING SANDBAGS

Sandbags should be placed flat on ground, overlapped, tamped into place and stairsteped.

Polyethylene (poly) comes in rolls 20 ft by 100 ft (or 200 ft). It is used to wrap sandbag levees to prevent seepage. The poly should be placed on the downstream portion of the levee first, then worked upstream with a two- to three-foot overlap. There should be at least a two-foot overlap along the riverside toe and it must be anchored down with sandbags, both at the toe, and along the sideslopes.

OTHER CORPS OF ENGINEERS FLOOD CONTROL PROGRAMS

- Section 14, 1946 Flood Control Act
  - Provides for emergency bank protection.
- Section 208, 1954 Flood Control Act
  - Provides for snagging and clearing.
- Section 3, River and Harbor Act of 1945
  - Provides for channel clearing.
- Section 205, 1948 Flood Control Act
  - Provides for expediting of small flood control projects.
- Section 107, 1960 River and Harbor Act
  - Provides for small navigation projects.
- Section 103(a), 1962 River and Harbor Act
  - Provides for small beach erosion control projects.
- Section 3, River and Harbor Act of 1968
  - Provides for prevention and mitigation of shore damage caused by existing Federal navigation works.
- Section 206, 1960 Flood Control Act
  - Provides flood plain management services.

DEPARTMENT OF AGRICULTURE FLOOD CONTROL PROGRAMS

Section 216, 1960 Flood Control Act
- Provides emergency watershed protection (against flooding and the products of erosion) through the Soil Conservation
Public Law 85-58
- Provides cost-sharing assistance to farmers for emergency conservation measures on farmlands through the Agricultural Stabilization and Conservation Service.

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BUILDING STRONG®
First responsibility for protecting homes and property from flooding damage rests with the individual. Non-Federal interests which include local government and levee and drainage districts share the responsibility, and together they form the community’s first line of defense in preventing flooding damage. Occasionally, local resources are not able to contain or control a flooding emergency situation. The US Army Corps of Engineers’ flood emergency assistance program is intended to supplement and support state, county, local governments and levee and drainage districts.

THE CORPS CAN HELP

The Corps of Engineers assistance for flood includes providing flood fight personnel for technical advice, sandbags, plastic sheeting, pumps or other materials and equipment for an imminent or actual flood emergency.

The Corps’ assistance is intended to be supplemental and not a replacement for community self-help, and requires a written request for assistance from a state or local official. No assistance can be provided directly to individuals. The sponsoring agency can be a state, county, city or other entity fully authorized to provide requirements of local cooperation and to pay a local share of the costs.

Since most emergency work is to provide protection for an immediate situation, Corps of Engineers authority does not extend to the reimbursement of flood fighting expenditures incurred by state or local authorities, or flood and debris cleanup, or the removal of temporary flood control structures.

On written request, the Corps of Engineers may assume a leadership role and direct flood fighting efforts. However participation by the Corps of Engineers in emergency operations may extend to operational control of emergency forces if requested by state and local authorities. This action will be subordinate to the state and local responsibilities and authorities and exercised only when the situation exceeds the non-Federal capability.

REQUIREMENTS FOR CORPS ASSISTANCE

Local interests must execute a Cooperative Agreement to include the following items:

(a) Furnishing of land easements, and rights-of-way:
This item provides for sites of structures, for borrow and disposal areas, and for access; also, for all other rights in upon through or over private property as needed by the United States in connection with the authorized work. Performance by the local interests under their assurance to furnish lands, easements, and rights-of-way will normally not be considered a contribution, if more advantageous to the Federal Government. Borrow and disposal areas may be assumed as a Federal responsibility. Easements must be provided for future Federal inspection of maintenance or removal. If a public agency sponsors a project for a non public applicant the applicant must provide an easement to the sponsor for future maintenance or removal, as well as for Federal inspection. Easement should extend to the life of the project.

(b) Hold and save clause:
Where the property concerned is under tenancy, both the property owner and the tenant should sign the local cooperation agreement.

(c) Maintain and operate clause:
This clause must include: “It is understood that the foregoing maintenance and operation requirement extends to interrelated features of all protective work under the control of (insert name of owner or sponsor).”

LOAN OR ISSUE OF SUPPLIES AND EQUIPMENT

The Corps of Engineers role is to provide supplemental support to state and local interests during flood fight operations. The state and local interests have the primary responsibility for expending sufficient resources to insure effective flood fight preparedness. Maximum use of “Local resources” must be made before assistance in the form of supplies and equipment can be “provided” by the Federal Government.

Typical preparedness activities by local interests should include the stock piling of adequate flood fight supplies (sandbags, polyethylene sheeting) and advance rental or procurement of equipment such as pumps, generators, boats and motors. Flood response plans and proper maintenance of any existing flood protection facilities is also key. Expendable supplies such as sandbags will be replaced in kind or paid for by local interests to the extent considered feasible and practicable by the Division or District Engineer.

REHABILITATION OF DAMAGED FLOOD CONTROL STRUCTURES

The Corps of Engineers will provide assistance in the rehabilitation of flood control projects damages by a flood event provided the flood control project status is “active.” “Active” Flood control projects are those projects that have been properly operated and maintained and have an acceptable or minimum acceptable rating from the Corps annual inspection program.

ADVANCE MEASURES

Advance Measures consist of those activities performed prior to flooding or flood fight to protect against loss of life and damages to urban areas and/or public facilities from flooding. Emergency work under this authority will be considered when requested by the Governor of a state confronted with an imminent threat of unusual flooding. Corps assistance will be to complement the maximum efforts of the state and local authorities. Projects will be designed for a specific threat and, unless specifically accepted, will be temporary in nature.