

# REAL ESTATE

# A GUIDE FOR PROJECT PARTNERS

## HOW CAN THE CORPS HELP?

### Mission and Programs of the Corps of Engineers

#### INTRODUCTION

The Army Corps of Engineers is the Federal government's largest water resources development and management agency. Our water resources (civil works) program began in 1824, when Congress first appropriated funds for improving navigation. Since then, we have been involved in improving navigation in rivers and harbors, reducing flood damages, and controlling beach erosion. Many projects designed for these missions also generate hydroelectric power; supply water for cities, industries and agriculture; and provide outdoor recreation. Evolving missions in the environment and infrastructure complement our traditional focus as we enter a new century.

This guide provides an overview of the types of water resource projects and opportunities that the Corps can assist sponsors and other interested parties in addressing. It will also describe the various Corps programs that are available for help.

#### PRINCIPLES AND GUIDELINES

The federal objective of water resources planning is to contribute to national economic development while protecting the nation's environment.

Principles and Guidelines, published in 1983 by the U.S. Water Resources Council and used during the study process, have a single Federal objective and provide flexibility to address other state, local, national and international concerns relevant to the planning setting.

The Principles and Guidelines prescribed the following six-step planning process to solve problems:

- ⇒ Identify water resources problems in the study area.
- ⇒ Collect data on the problems identified.
- ⇒ Develop alternatives to solve the problems.
- ⇒ Evaluate the effects of the alternatives.
- ⇒ Compare alternatives.
- ⇒ Select a plan for recommendation or decide to take no action. The alternative plan with the greatest net economic benefits consistent with protecting the nation's environment is normally selected. An exception may be granted by the Secretary of the Army.

Economic and environmental evaluation procedures have been incorporated into the Principles and Guidelines to provide water resources agencies the best current analytical techniques available.

On November 17, 1986, President Ronald Reagan signed the Water Resources Development Act of 1986 (PL 99-662). In addition to authorizing scores of new water resource projects, this landmark law made numerous changes in the way potential new projects are studied, evaluated, cost shared and funded. PL 99-662 establishes a framework for a cost sharing partnership between the Federal government and non-Federal interests that affords the latter a key role in project planning and allows the Federal government to spread its resources over more water projects than would have been possible before. In December 1996, these policies were amended by the Water Resources Development Act of 1996. All projects are subject to budgetary limitations after Congressional authorization.

## **MISSIONS: TYPES OF PROJECTS AND OPPORTUNITIES**

### **Navigation**

The Federal interest in navigation improvements stems from the commerce clause of the Constitution. Subsequent Supreme Court decisions have established that the Federal obligation to regulate navigation includes the right to make necessary improvements in waterways. Navigation in harbors and inland waterways is essential to our nation's transportation system.

The primary objective of navigation improvements is to assist in the development, safety and conduct of waterborne commerce. This is done by deepening and widening waterways so commercial ships and other watercraft can move efficiently and safely. Other

objectives include improvements to promote commercial fishing and recreational boating, and for storm refuge.

Various programs are used to improve navigation. Port and harbor developments typically consist of navigation channels that permit safe passage of vessels and any necessary breakwaters or jetties for protection against hazardous wave conditions. Inland waterways include navigation channels and locks. Non-Federal interests are responsible for providing the infrastructure necessary for full harbor and waterway development, including docks and landside warehousing and transportation facilities.

### **Flood Control**

The Federal interest in flood control began in the early nineteenth century in the Mississippi River basin when the interrelationships between navigation and flood control became apparent. As the nation developed, disastrous floods endangered life and property as well as transportation. In the Flood Control Act of 1936, Congress extended the Federal interest in flood control to the entire country.

While the efforts of Federal, State and local interests to reduce flood damages have been substantial and effective, flooding still accounts for ninety percent of all natural disaster damage and requires several hundred thousand people to be evacuated from home and work places every year. The purpose of flood control work is to reduce flood damages and disruptions by containing flood flows in problem areas.

Flood control methods usually work in one of three ways; most flood control projects use a combination of these approaches. First, dams and reservoirs can be located upstream from damage centers to hold back water from large storms, and gradually release it in amounts that will not cause high damages downstream. Flood control lakes often include additional storage capacity for multiple uses such as navigation, irrigation, recreation, municipal and industrial water supply, hydroelectric power, and fish and wildlife conservation.

Second, watercourses can be locally modified along the damage areas so that they can accommodate larger amounts of water during storm periods. This is done by enlarging or diverting river or stream channels or by providing levees and floodwalls along channels.

Third, homes, stores and other facilities can be modified to reduce flood damage by elevating them or evacuating them from the flood plain. Remaining lands can be used for purposes suitable to the flood plain such as outdoor recreation and natural open space. Flood warning systems can be installed to increase the time available for temporary evacuation and flood fighting.

### **Ecosystem Restoration**

Ecosystem restoration activities examine the condition of existing ecosystems, or portions thereof, and determine the feasibility of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, natural condition. Ecosystem restoration provides a more comprehensive

approach for addressing the problems associated with disturbed and degraded ecological resources than does focusing only on fish and wildlife habitat.

Corps activities in ecosystem restoration concentrate on engineering solutions to water and related land resources problems. The Corps' principal focus in ecosystem restoration is on those ecological resources and processes that are directly associated with, or directly dependent upon, the hydrological regime of the ecosystem and watershed(s). Not all ecosystem restoration opportunities are appropriate for Corps involvement. There will be instances where components of ecosystem restoration problems or opportunities are addressed by other agencies through their missions and programs. Those restoration opportunities that involve modification of hydrology or substrate are likely to be most appropriate for Corps initiatives. Such activities are most likely to address ecosystems associated with wetlands, riparian, and aquatic systems. Generally, it will not be appropriate for the Corps to conduct ecosystem restoration activities on upland, terrestrial sites that are not closely linked to water and related land resources.

The Corps of Engineers has the authority, provided by Section 1135 of the Water Resources Development Act of 1986, as amended, to make modifications in the structures and operations of water resources projects constructed by the Corps of Engineers to improve the quality of the Kenvironment. **[To improve the quality of the environment the Corps of Engineers, under the authority of Section 1135 of the Water Resources Development Act of 1986, as amended,**

**can modify structures and operations of water resources projects they have constructed.]** The primary goal of these [new] projects is ecosystem restoration with an emphasis on projects benefiting fish and wildlife. To qualify under this program, projects must be justified—that is, the benefits resulting from constructing the project both monetary and non-monetary must justify the cost of the project. The project also must be consistent with the authorized purposes of the **existing** project being modified, environmentally acceptable, and complete within itself. Each separate project is limited to a total cost of not more than \$5 million, including studies, plans and specifications, and construction.

Section 204 of the Water Resources Development Act of 1992, gives the Secretary of the Army the authority to enter into cooperative projects with non-Federal sponsors to use dredge material from new or existing Federal projects to protect, restore, or create aquatic and ecologically related habitats, including wetlands. The environmental, economic, and social benefits, monetary and non-monetary, must justify the costs, and the project must not result in environmental degradation. The cost sharing (25% non-Federal, 75% Federal) would be applied to the incremental cost above the least cost method of dredged material disposal consistent with engineering and environmental criteria.

### **Hurricane and Storm Damage Reduction**

Hurricanes periodically cause tidal floods and catastrophic loss of life and property along the Atlantic and Gulf coasts. In some cases, tidal flooding can

be prevented or reduced by building protective structures, such as dams or barriers, in estuaries; by raising the heights of dunes and natural beaches; and by building groins, dikes, seawalls or breakwaters.

### **Coastal and Shoreline Erosion**

Erosion of coastal shorelines by tides, waves and currents claim extensive shorefront lands and properties every year. Protection against ocean and lake shoreline erosion is typically provided with seawalls, groins or other structures that reduce waves' destructive effects; by filling and nourishing beaches and dunes to replace and maintain lost areas; and by planting vegetation that will hold and stabilize erodible materials. In certain situations, we may treat river streambank erosion problems using such measures as gabions, riprap and vegetative plantings.

### **Water Supply**

Providing municipal and industrial water supply is primarily the responsibility of non-Federal interests. However, beginning with the Water Supply Act of 1958, we may, at the request of local interests, include water supply storage in new projects and may modify existing projects for new or additional water supply storage. In limited emergency circumstances, we may provide emergency supplies of clean water to a locality confronted by a source of contaminated water likely to cause a substantial threat to public health.

### **Hydroelectric Power**

Facilities for hydroelectric power are also primarily the responsibility of non-

Federal interests. However, we may include hydroelectric power development in multipurpose projects when it complements the major objectives of flood control or navigation. Power generators and related equipment may be built into dams and reservoirs as an integral part of those projects.

### **Outdoor Recreation**

Development of outdoor recreation facilities at Corps projects dates back to the 1944 Flood Control Act. With about 4,400 recreation areas at over 400 project sites, there are more than K 500 million annual recreation days of public use at our recreation facilities providing a variety of opportunities for picnicking, camping, swimming, boating, hunting, fishing, hiking, and Kother pastimes. Passive recreation opportunities can be incorporated into projects supported by the local sponsor.

### **Environment**

Our projects must not only include facilities to mitigate unavoidable environmental damages, but must also consider environmental restoration through opportunities created by projects. Such opportunities include species management under the Fish and Wildlife Coordination Act of K1958,- Pprotection of habitat for endangered species under the Endangered Species Act of 1973, preservation of archeological resources and historic sites under the National Historic Preservation Act of 1966, and opportunities provided by other Federal laws. Single purpose environmental projects may also be considered.

### **Water Quality Control**

The Federal Water Pollution Control Act, as amended, requires that any Federal agency planning a lake project must consider including water storage for regulation of stream flow and quality improvement. Water storage cannot be provided as a substitute for other means of controlling waste at the source, and the Environmental Protection Agency must determine that there is a need for storage for water quality.

### **Aquatic Plant Control**

KThe 1965 Rivers and Harbors Act, **Public Law 89-298**, authorizes us to conduct research and control or eradicate undesirable aquatic plants. The Corps conducts research on the use of chemicals, mechanical harvesters, and natural enemies (insects, pathogens and fish) to control these plants.

### **PROGRAMS: WAYS THE CORPS CAN HELP**

#### **Individually Authorized Studies and Projects**

The traditional and most common way for us to help a community solve a water resource problem is to conduct a study and, if shown by the study to be feasible, construct a project. This approach uses a six-step process and requires that the Congress provide us with the authority to both study and construct a project. The process is:

1. Problem Perception - A local community perceives or experiences a water resource problem that is beyond its ability to alleviate or solve alone.

2. Request for Federal Action - The community asks its Congressional delegation for help, and the Congress authorizes us to study the identified problem, generally in accordance with a signed feasibility cost sharing agreement.

3. Study Problem and Report Preparation - The local Corps District studies the community's identified water resource problem, and reports its findings in a feasibility report. A project may be recommended for construction if it is **determined to be** feasible and meets certain requirements.

4. Report Review and Approval - The feasibility report is reviewed at the Washington level by the Corps Assistant Secretary of the Army (Civil Works), and the Office of Management and Budget. When approved, the report is sent to Congress.

5. Congressional Authorization - Congress authorizes the Corps to construct a project.

6. Project Implementation - We design the project and a Project Cooperation Agreement is **knegotiated and** signed by the Non-Federal Sponsor and the Assistant Secretary. The project is built and turned over to the sponsor for ongoing use, including operation and maintenance.

In this approach, Congress individually authorizes each study and project. Non-Federal Sponsors must share the study and construction costs with us and usually pay for all operation and maintenance costs. This approach may be used to address any one of a variety

of water resource problems including navigation, flood control and many of the other needs described above.

### **Continuing Authorities Program**

Congress has provided the Corps with six standing authorities to study and build water resource projects for specific purposes and with specific limits on how much Federal money can be spent for a project. The process and rules, such as cost sharing, that apply to individually authorized studies and projects also apply to this Program, except that individual Congressional authorizations are not needed. This saves development and approval time and permits quicker response to small, local problems. The types of problems that can be addressed by the by the Continuing Authorities Programs are:

✧ Flood Control - Authorized by Section 205 of the 1948 Flood Control Act, as amended; the Federal share may not exceed \$7 million for each project.

K✧ Navigation - Authorized by Section 107 of the River and Harbors Act, *[Need the year]* as amended; the Federal share may not exceed \$4 million for each project.

✧ Shore Protection - Authorized by Section 103 of the 1962 River and Harbors Act, as amended; the Federal share may not exceed \$2 million for each project.

✧ Emergency Streambank and Shoreline Protection for Public Facilities - Authorized by Section 14 of the 1946 Flood Control Act, as amended; the Federal share may not exceed \$1,000,000 for each project.

✧ Snagging and Clearing for Flood Control - Authorized by Section 208 of the 1954 Flood Control Act, as amended; the Federal share may not exceed \$500,000 for each project.

✧ Shore Damage Attributable to Federal Navigation Works - Authorized by Section 111 of the 1968 Rivers and Harbors Act, as amended; the Federal share may not exceed \$5 million for each project.

### **Flood Plain Management Services Program**

The Flood Plain Management Services Program is a means to use our technical expertise in flood plain management to help others outside the Corps. Upon request, we will furnish States, Kcounties, cities and **other** Federal agencies with flood hazard information, technical services and planning guidance. Requests from individuals are also honored when the requested information is readily available.

The types of technical services that can be provided under this program include data and analysis of depth, velocity, extent, duration and frequency of flooding and estimates of potential flood losses. Planning guidance includes: comprehensive flood plain management planning; and development of flood plain regulations, flood warning and flood emergency preparedness systems, flood proofing and other remedial measures for addressing flood problems. The program also conducts studies to improve methods and procedures for flood damage prevention and abatement and prepares guides and pamphlets on topics such as floodproofing, flood plain

regulations and other flood plain management topics.

### **Planning Assistance to States Programs**

The Planning Assistance to States Program, also known as Section 22 of the Water Resources Development Act (WRDA) of 1974, permits us to use our technical planning expertise to supplement and support State efforts to undertake broad statewide, comprehensive water resource planning. Upon request, we will cooperate with a State in the preparation of plans for the development, use and conservation of water and related land resources located within the State's boundaries. Assistance is given within the limits of available appropriations, but is limited to \$300,000 annually for each State. Local and regional officials who are interested in assistance for their communities under this program should contact their State water resource agency.

Typical problems and opportunities studied under this Program are related to: flood control, water quality, hydropower, erosion, navigation, and related environmental resources.

### **Support for Others**

The Support for Others Program permits other Federal agencies and State and local governments to essentially hire the Corps to do work that is related to our areas of expertise. Such work must meet several tests to be accepted. For example, work for State and local governments can only be performed if the requester certifies that the work cannot be procured reasonably and expeditiously through ordinary business

channels. Also, we must be able to accomplish the work within current manpower and resource constraints.

The types of work we can do under this Program include, within certain limitations: studies and planning activities; engineering and design, including the preparation of plans and specs; construction management and training. Examples of recent work under this Program are:

- ✧ Performing technical analysis for the Federal Emergency Management Agency in support of the National Flood Insurance Program.
- ✧ Providing a State with technical assistance and training in implementing water pollution control facilities.
- ✧ Preparing extensive environmental studies and documents for a regional water board.
- ✧ Designing and constructing a city's flood control improvements.

#### Emergency Operations

Disaster preparedness and assistance during and before natural disasters are primarily State and local responsibilities. However, in cases when a disaster exceeds the State and local capabilities, Federal help is available. The Corps can provide needed additional assistance, usually at the request of the affected State, to help communities deal with a variety of life-threatening natural disasters, including floods, coastal storms and drought. We have also been involved in responding to tornadoes, earthquakes and volcanic eruptions.

Examples of the emergency activities we can do are:

- ✧ Assist State and local authorities in performing emergency work to protect life and property prior to predicted flooding.
- ✧ Supply or loan flood fight materials, such as sandbags and pumps, if State and local supplies are exhausted during the flood.
- ✧ Furnish technical advice to State and local officials during an emergency.
- ✧ Hire equipment and operators for flood fight operation.
- ✧ Remove log or debris jams that are blocking stream flow.
- ✧ Support efforts to deal with ice jam induced flooding.
- ✧ Repair and rehabilitate flood control works damaged or threatened by floods.
- ✧ Provide emergency water for human health and welfare to areas with either a contaminated source of water or suffering from drought.
- ✧ Inspect Federal and non-Federal flood control works.
- ✧ Assist State and local officials in flood emergency preparedness planning and training.
- ✧ Assist **the** Environmental Protection Agency in providing temporary housing during environmental cleanups.

In situations where there is an immediate threat to life and property, such as during a flood, local communities should direct their requests for assistance to their State emergency response agency, which will contact us. In other cases where technical assistance and support preparedness is needed, we may contact the state directly.

### **Regulatory Function**

Numerous public laws, dating back to 1890, charge the Corps with responsibility for regulating various activities that affect water resources. If a sponsor, other public agency, private group or individual proposes to undertake a regulated activity (listed below), they must apply to us for a permit that will allow them to do so. We will review the proposal and decide whether or not to allow the activity to proceed. Our decision is based on a full public interest review involving a balancing of the proposed activity's benefits against the any detrimental impacts. In addition to this balancing process, specific environmental standards must be met for discharges of dredged or fill material. In most cases, permits are issued with conditions that describe additional actions that must be taken to protect the environment and otherwise make the proposal acceptable.

Types of regulated activities are:

- ✧ Construction of dams and dikes in navigable waters of the United States.
  
- ✧ Construction of other structures or work, including excavation, dredging or disposal activities in navigable waters of the United States.

- ✧ Altering or modifying the course, conditions, location, or physical capacity of a navigable water of the United States.

- ✧ Construction of fixed structures and artificial islands on the outer continental shelf.

- ✧ Discharges of dredged material into waters of the United States.

- ✧ Transporting dredged material for the purpose of dumping it in ocean waters.

If you anticipate building a dock, dredging a channel, filling wetlands, or doing another activity that may need a Corps permit, you should contact the Chief of the Regulatory Program at the local Corps District Office for more information.

### **Programs of Other Agencies**

Local, State and other Federal agencies administer other programs that offer assistance in other areas of water resource development and management. The annual "Catalog of Federal Domestic Assistance" describes all of the Federal programs available for help in not only water resources but also all aspects of community needs. The catalog is available in most libraries.