

## The Way We Do Business

*navigation*

*flood damage reduction*

*hurricane and beach erosion protection*

Partners For America's Future

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## Planning, Designing and Implementing a Water Resource Study

The U.S. Army Corps of Engineers undertakes studies of water resource problems and opportunities in response to directives from Congress. Authorizations are contained in public laws or in resolutions of the House of Representatives or the Senate. The Transportation and Infrastructure Committee of the Senate Environment and Public Works Committee. Studies specifically authorized by Congress are described below. Smaller, less complex projects are usually authorized by standing program authorizations that are discussed later in this report.

### 1. Problem Perception

Local citizens or local government perceive or experience a problem, such as flooding, shore erosion, navigation restriction, etc., and request action of local government to solve.

### 2. Request for Federal Action

Local government officials contact their Congressional representatives to request study authorization.

### 3. Study Program and Report Preparation

In addition to authorizing the study, Congress must appropriate funds. This is normally done as a result of the study being authorized. This process can require 18 to 36 months. Once funding is available, the study using a two-phased planning process discussed later in this report.

### 4. Report Review and Approval

Feasibility studies are documented in a report and submitted to the Corps headquarters in Washington, D.C. to determine if the report recommendations are in accord with current administration policies. After completion of the feasibility phase, detailed design of the recommended project begins. This phase, which is cost shared in the same proportion as the project, is called "Preconstruction Engineering and Design." This phase concludes with the preparation of detailed construction drawings and specification often called "plans and specs."

### 5. Congressional Authorization

Following a successful review and coordination with the Office of Management and Budget, the Assistant Secretary of the Army for Civil Works forwards the report to Congress, which must authorize the recommended project in a Water Resources Development Act.

### 6. Project Implementation

Once authorized by Congress and "plans and specs" are complete, construction of the project may begin. For most water resource projects, construction costs are shared between the federal government and a non-federal sponsor. Prior to construction, a Project Cooperation Agreement must be signed. This agreement describes the responsibilities of the parties involved. In some cases, the non-federal sponsor will be responsible for maintaining the project, following completion.

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improve safety



Hailed as the "1000-mile marvel," the Gulf Intracoastal Waterway (GIWW) through Texas was completed in 1989. GIWW provided an unbroken shallow-draft vessels and opened up commerce from Mexico to Florida, linking Texas with the nation's inland waterway systems.

- Navigation
- Flood damage reduction
- Coastal erosion restoration and protection
- Hydroelectric power development
- Water supply and water quality control
- Recreation

- Acoustic plant control
- Flood plain management
- Coastal storm protection
- Regulatory
- Emergency operations

These activities call for careful coordination of many interests, including consideration of environmental impacts. Communication and coordination between various navigation districts, project sponsors, agencies and environmental interests is another beneficial service available to waterway users from the Galveston District.

The Galveston District is the center of excellence for coastal navigation and environmental restoration. For more information, contact: Public Affairs Office, 2000 Fort Palm Road, Galveston, TX 77553, 409-746-3004, E-mail: [cewg-pa@hqs02.usace.army.mil](mailto:cewg-pa@hqs02.usace.army.mil).

Additional information on projects, news and organizations can be found on the Galveston District website at [www.usg.usace.army.mil](http://www.usg.usace.army.mil).