

US Army Corps  
of Engineers ®  
Tulsa District

Civil Works Policy Guidebook



**BUILDING STRONG®**



# Table of Contents

Introduction .....	4
Sample General Request Letter .....	4
Ecosystem Restoration Overview.....	5
Section 206: Aquatic Ecosystem Restoration .....	8
Section 1135: Environmental Restoration.....	9
Section 204: Beneficial Use of Dredged Materials .....	10
Sample Study Request Letter.....	11
Flood Risk Management Overview .....	12
Section 14: Emergency Bank Protection .....	15
Section 205: Small Flood Control Projects .....	16
Section 208: Snagging and Clearing for Flood Damange Reduction.....	17
Planning Assistance to States and Tribes .....	18
Floodplain Management Services .....	20
Emergency Readiness and Response (Public Law 84-99) .....	23
Section 408 Request to Alter Federal Projects .....	26
Additional Missions.....	29
Sample Projects.....	31



# Introduction

The U.S. Army Corps of Engineers is the Nation's primary water resources development agency. Congress assigned the Corps of Engineers this Civil Works responsibility. The Corps of Engineers' water resources program began in 1824 when Congress provided funds for improving river navigation. Since then, the Corps of Engineers has been involved in developing recreation and commercial navigation, reducing flood damage, and restoring ecosystems. Along with these missions, the Corps of Engineers generates hydropower, makes water supply available to cities and industry and regulates development along navigable waters.

The Tulsa District, U.S. Army Corps of Engineers, was established in 1939 and is one of four districts that is in the Southwestern Division. Its civil works boundaries include Oklahoma, southern Kansas and northern Texas. The district's Civil Works mission is one of the largest in the Corps of Engineers. It includes 33 multipurpose reservoirs and five lock and dams on the McClellan-Kerr Arkansas River Navigation System (MKARNS). Although the primary purpose of district reservoirs is flood control, they also provide recreation, water supply, hydropower, navigation, and fish and wildlife habitat. The district's 150 miles of the MKARNS ties the most inland, ice-free river port in the United States to the Mississippi River and provides waterway commerce to the heartland of America. The Corps projects have averted billions of dollars in flood damages and the district's eight hydropower facilities generate about \$52 million in annual sales. The district operates 240 parks with more campsites – 6,000 – than any other district in the Corps.

The primary mission areas of the Corps of Engineers are:

- Flood Risk Management
- Emergency Response
- Commercial Navigation
- Recreation
- Regulatory
- Federal Real Estate Management
- Clean Water Act Compliance Regulation

This pamphlet describes the services the Corps of Engineers can provide sponsors and partners. If your community, local or state government, tribe or non-government organization seeks a partner to assist with a water and related land resources study or project, call our office or send a letter to the address below.

**District Engineer**  
**U.S. Army Engineer District, Tulsa District**  
**ATTN: Programs and Project Management**  
**Division (Loretta Turner)**  
**2488 E. 81st St.**  
**Tulsa, OK 74137**

**Loretta.J.Turner@usace.army.mil**

## Sample Letter

for General Request for Assistance

[DATE]

District Engineers  
U.S. Army Engineer District, Tulsa District  
ATTN: Programs and Project Management Division (Loretta Turner)  
2488 E. 81st St  
Tulsa, OK 74137

Dear Sir or Madam:

This letter is to request assistance from the U.S. Army Corps of Engineers to address (briefly describe the problem or need, including, if appropriate, the name of the body of water or waterway, and City, and/or County, and State). Please contact (name, title, phone number, email address) to arrange a further discussion of this inquiry.

Sincerely,

Signature and Title

# *Ecosystem Restoration*



# Ecosystem Restoration

Ecosystem restoration activities examine the condition of existing ecosystems and determine the feasibility of restoring degraded ecosystem structure, function and dynamic processes to a less degraded, natural condition. The Corps of Engineers' ecosystem restoration program seeks to provide a comprehensive approach for addressing the problems associated with disturbed and degraded ecological resources.

Corps of Engineers activities in ecosystem restoration concentrate on engineering solutions to water and related land resource problems. The principal focus is on those ecological resources and processes that are directly associated with the hydrology of the ecosystem and watershed. (A sample project is on Page 29.)

## What the Corps of Engineers Can Do

The Corps of Engineers has been authorized by Congress to perform ecosystem restoration in conjunction with water resource and related land resource issues. These services can be performed by seeking specific project authority or through the Continuing Authorities Program, aimed at smaller projects. Each of the programs requires a study (decision) process and a cost-share sponsor prior to a study or before implementation of a project.

## Study Process (Specifically Authorized Studies and Projects)

Before the federal government can participate in implementing a project, a feasibility planning study must be conducted to determine if the project has federal interest and is feasible.

### Feasibility Phase

The feasibility phase determines if there is a federal interest, optimizes the plan or plans to be built, and can take up to 3 years to complete if adequate funding is received in a timely manner. The feasibility phase is cost shared equally between the Corps of Engineers and the non-Federal sponsor. The non-Federal share of feasibility phase costs may be a combination of cash and in-kind products or services.

The feasibility report results in a recommendation to Congress for or against Federal participation in solutions to the water resources problems and opportunities identified in the study. There is national policy on how the Corps of Engineers determines when the Federal involvement is merited. A recommendation for Federal participation precedes a recommendation for construction authorization.

The recommendation for implementation is forwarded to Congress to ultimately decide if the project will be authorized. A project must be authorized by Congress for it to be implemented.

### Project Implementation and Local Partnership

Following authorization for construction of a project, the sponsor enters into a Project Partnership Agreement to define the responsibilities of each party. The sponsor must normally agree to the following:

1. Provide without cost to the United States all lands, easements, rights-of-way, relocations and disposal areas (LERRDs) necessary for the construction and subsequent maintenance of the project.
2. Provide without cost to the United States all necessary alterations of buildings, utilities, highways, bridges, sewers, and related and special facilities.
3. Hold and save the United States free from damages due to the construction and subsequent maintenance of the project, except damages due to the fault or negligence of the United States or its contractors.



4. Maintain and operate the project after completion without cost to the United States.
5. Prevent future encroachment, which might interfere with proper functioning of the project.
6. Assume responsibility for all costs in excess of applicable Federal cost limitations.
7. If the value of the sponsor's contribution above does not equal or exceed 35 percent of the project cost, provide a cash contribution to make the sponsor's total contribution equal to 35 percent.

## How to Request Assistance

General Investigation Study requests should be directed to:

Loretta Turner  
Programs and Project Management Division  
918-669-7074  
[Loretta.J.Turner@usace.army.mil](mailto:Loretta.J.Turner@usace.army.mil)



# Section 206

## Aquatic Ecosystem Restoration

Section 206 of the Water Resources Development Act of 1996

### What the Corps of Engineers Can Do

The Corps of Engineers has the authority, provided by Section 206 of the Water Resources Development Act of 1996, to plan, design and construct aquatic ecosystem restoration projects. It allows the Corps of Engineers to study, design and construct restoration projects in aquatic ecosystems (such as rivers, lakes and wetlands) that have not already been specifically authorized by Congress.

Local sponsorship for a Section 206 project must be provided by a state, municipality, local agency or Native American tribe empowered with sufficient legal and financial authority to comply fully with all local cooperation and participation requirements.

### Charges for Assistance

Individual projects are limited to \$10 million in federal cost. Non-federal interests must contribute 35 percent of the cost of construction and 100 percent of the cost of operation, maintenance, replacement, and rehabilitation.

### Several Stipulations Must be Met to Qualify Under this Program

a. The project must be complete within itself and not commit the Corps of Engineers to further construction. This means that the project must solve a specific problem and not require a subsequent project to complete the solution.

b. An environmental restoration project must be justified through a habitat unit evaluation. That is, the project will be evaluated on a cost per acre of habitat restored. The Corps of Engineers will support the recommended plan which maximizes the habitat units created at most effective cost.

c. The sponsor of the project must be willing and financially able to assist with the project. The sponsor is required to cost share feasibility (Initial \$100,000 full Federal then 50 percent Federal, 50 percent non-Federal) and project implementation (65 percent Federal, 35 percent non-Federal), provide lands, easements, rights-of-way, relocations and disposal areas (LERRDs) necessary for construction. In addition, completed projects will be operated and maintained by the project sponsor.

*Federal maximum participation limited to \$10 million per project.*

### How to Request a Study

An investigation under Section 206 may be initiated after receipt of a formal request from the prospective sponsoring agency and the availability of Federal funding. (A sample study request letter appears on Page 11.)

For more information contact:

Tony Clyde, Ph.D.  
Programs and Project Management  
Division  
918-669-7556  
Tony.Clyde@usace.army.mil



#### Authority and Scope:

Section 206 of the Water Resources Development Act of 1996, as amended, provides authority for the Secretary of the Army to carry out an aquatic ecosystem restoration and protection project. Such projects will usually include manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. A project is adopted for construction only after a detailed investigation determines that the project will improve the quality of the environment and is in the best interest of the public, and clearly shows the engineering feasibility and environmentally justification of the improvement. Each project is limited to a Federal cost share of not more than \$5 million. The Federal limitation includes all project-related costs for feasibility studies, planning, engineering, construction, and supervision and administration.



# Section 1135

## Environmental Restoration

Section 1135 of the Water Resources Development Act of 1986, as amended

### What the Corps of Engineers Can Do

The Corps of Engineers has the authority, provided by Section 1135(b) of the Water Resources Development Act of 1986, as amended, to plan, design and construct fish and wildlife habitat restoration measures. Local sponsorship for a Section 1135 project must be provided by a state, municipality, local agency or Native American tribe empowered with sufficient legal and financial authority to comply fully with all local cooperation and participation requirements.

### Project Eligibility Requirements

To be eligible for consideration, restoration measures must involve modification of the structures or operations of a project constructed by the Corps of Engineers or built jointly by the Corps and other Federal agencies that has contributed to environmental degradation. This is how this authority differs from Section 206.

### Charges for Assistance

An environmental restoration project must be justified through a habitat unit evaluation and the sponsor is required to cost share feasibility (Initial \$100,000 full Federal, then 50% Federal, 50% non-Federal) and project implementation (75% Federal, 25% non-Federal). The non-Federal sponsor is responsible for providing Lands, Easements, Rights-of-Way, Relocations and Disposal/Borrow Areas (LERRD), the value of LERRD is credited to the non-Federal sponsor's 25% share.

Following construction, the local sponsor would be responsible for the operation, maintenance, repair, rehabilitation, and replacement of the project.

*The maximum Federal expenditure per project is limited to \$10 million.*

### How to Request a Study

An investigation under Section 1135 may be initiated after receipt of a formal request from the prospective sponsoring agency and the availability of Federal funding.

**(A sample study request letter appears on Page 11.)**

For more information contact:

Tony Clyde, Ph.D.  
Programs and Project  
Management Division  
918-669-7556  
Tony.Clyde@usace.army.mil

### Authority and Scope:

Section 1135 of the Water Resources Development Act of 1986, as amended, provides authority for the Corps of Engineers to determine the need for project modifications in the structures and operations of Corps of Engineers projects for improving the environment in the public interest. Measures at other locations that have been affected by the construction or operation of the project can be undertaken, if such measures do not conflict with the authorized project purposes.

# Section 204

## Beneficial Use of Dredged Materials

Section 204 of the Water Resources Development Act of 1992

### What the Corps of Engineers Can Do

The Corps of Engineers can create aquatic and wetland habitats in connection with construction or maintenance dredging of an authorized Federal navigation project.

### Charges for Assistance

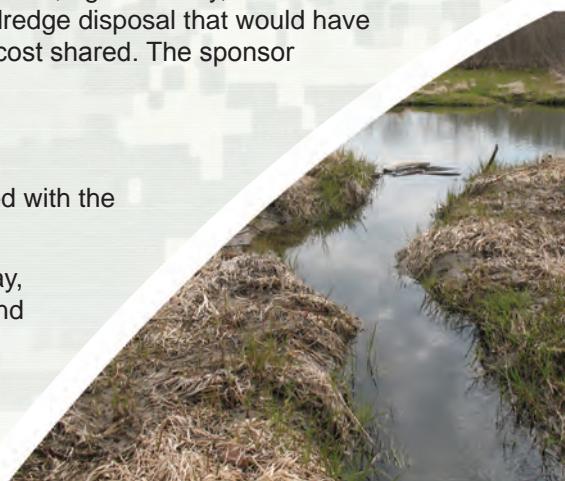
All project feasibility costs are 100% federally funded. Design and construction costs are cost shared 65% Federal and 35% non-Federal. The Federal cost limit is \$5 million.

The non-Federal sponsor cost share can be a contribution of cash or lands, easements, rights-of-way, relocations and disposal areas (LERRDs). Only the increased cost above the cost of the planned dredge disposal that would have been implemented without ecosystem restoration (referred to as the base plan) is cost shared. The sponsor pays 35 percent of the project costs above the base plan in a Section 204 project.

### Responsibility of Project Sponsor

Formal assurance in the form of a Project Partnership Agreement must be executed with the project sponsor. The project sponsor must normally agree to the following:

- Provide without cost to the United States all lands, easements, rights-of-way, relocations and disposal areas (LERRDs) necessary for the construction and subsequent maintenance of the project.
- Maintain and operate the project after completion without cost to the United States.
- Assume responsibility for all costs in excess of the Federal cost limitation of \$5 million.
- If the value of the sponsor's land contribution above does not equal or exceed 35 percent of the project cost, provide cash or work-in-kind contributions to make the sponsor's total contribution equal to 35 percent.



### How to Request Assistance

An ecosystem restoration project under Section 204 can be initiated upon receipt of a request from a prospective project sponsor.

For more information contact:

Tony Clyde, Ph.D.  
Programs and Project Management Division  
918-669-7556  
Tony.Clyde@usace.army.mil

#### Authority and Scope:

Section 204 of the Water Resources Development Act of 1992, as amended, provides authority for the Corps of Engineers to restore, protect, and create aquatic and wetland habitats in connection with construction or maintenance dredging of an authorized Federal navigation project.



# Sample Study Request Letter

[SPONSOR LETTERHEAD]

[DATE]

District Engineer  
U.S. Army Corps of Engineers

ATTN: Programs and Project Management Division (Tony Clyde)  
2488 E. 81st St  
Tulsa, OK 74137

Dear Sir or Madam:

The [SPONSOR NAME] is requesting assistance from the U.S. Army Corps of Engineers for a study to address the [flooding problems] [ecosystem restoration] [bank erosion problems] [other] in [GENERAL AREA DESCRIPTION].

[GENERAL PROBLEM DESCRIPTION PARAGRAPH]

The [SPONSOR NAME] intends to serve as the sponsor for the project. We are aware that the first \$100,000 in funding for the feasibility study is fully federally funded, and that any feasibility study costs above that would be cost-shared 50 percent Federal and 50 percent non-Federal. We understand that the total currently estimated cost of the feasibility study is [\$\_\_\_\_\_] [and that our estimated share of the study would be] [\$\_\_\_\_\_] OR IF A SECTION 14: [and that no sponsor share in the feasibility study is projected to be required at this time]. Further, we understand that the study cost is an estimate at this time and that final costs may differ, more or less, from the estimate. We are committed to this project and are willing, able and financially prepared to participate in the feasibility study. We look forward to executing a cost-sharing agreement for the study at the appropriate time in the process, when necessary. Thank you for your assistance with this much needed project. Please contact \_\_\_\_\_ for further information or assistance.

Sincerely,

SIGNATURE BLOCK  
Director, City Manager, Mayor, etc., as appropriate

# Flood Risk Management



# Flood Risk Management

Federal involvement in flood risk management began in the early 19th century in the Mississippi River Basin when interrelationships between navigation and flood risk management 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 Federal interest in flood risk management to the entire Nation.

Although efforts of Federal, state, tribal and local interests to reduce flood risk have been substantial, flooding still accounts for 90 percent of all natural disaster damage. Flooding forces several hundred thousand people to be evacuated from homes and work places every year. The purpose of flood risk management is to help prevent or reduce flood risk by using either structural or non-structural means or a combination of the two.

**Structural Measures:** Structural measures are physical modifications designed to reduce the frequency of damaging levels of flood inundation. Structural flood risk management measures include dams and reservoirs, channel modifications, levees or floodwalls.

**Non-Structural Measures:** Non-structural measures reduce flood damages without significantly altering the nature or extent of the flooding by changing the use of floodplains or by accommodating existing uses to the flood hazard. Non-structural measures include modifying homes, businesses and other facilities to reduce flood damages by elevating the structure or removing them from the floodplain. Remaining land can be used for ecosystem restoration, outdoor recreation or natural open space. Flood warning systems are also considered non-structural measures.

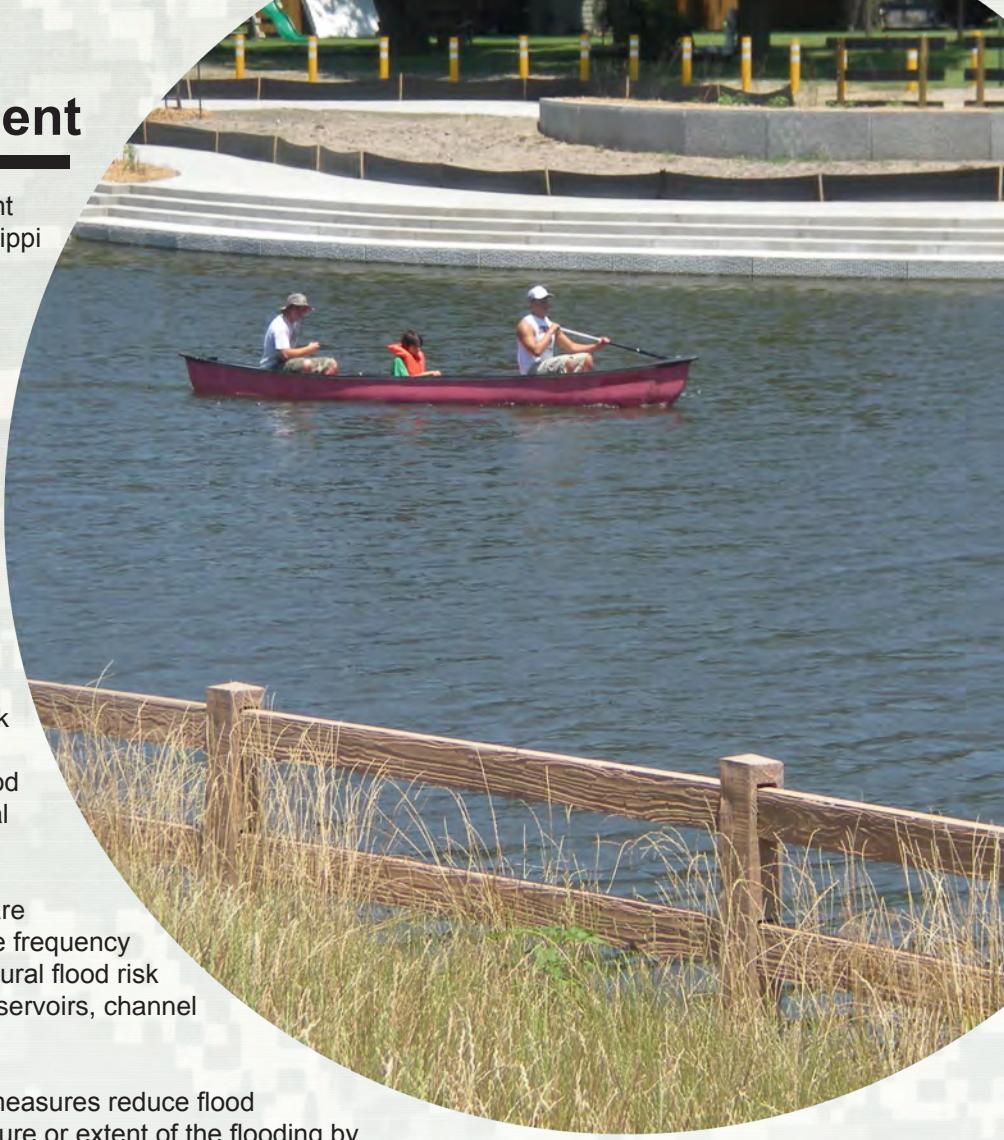
## What the Corps of Engineers Can Do

The Corps of Engineers has been authorized by Congress to perform flood risk management. These services can be performed under two different types of authorities: (1) specifically authorized flood risk management projects, and (2) the Continuing Authorities Program. Each of the authorities requires a study process and a cost share sponsor before implementation of a project.

**Specifically Authorized Flood Risk Management Projects:** With specific congressional authorization, the Corps of Engineers can evaluate flood problems, potential solutions, and recommend to Congress whether or not a project should be authorized. This approach is used for larger projects. Typical project features include dams, channel modifications, levees, and other flood control structures.

## Study Process, Project Implementation and Local Partnership:

Before the Federal government can participate in implementing a flood risk management project, a planning study must be conducted to determine if the project has federal interest, is feasible (benefits exceed the costs) and is environmentally acceptable.



## Feasibility Phase

The feasibility phase evaluates the problem and potential solutions in detail. It typically takes 18 months to three years to complete. The feasibility phase is cost shared equally between the Corps of Engineers and the non-Federal sponsor. The non-Federal share of feasibility phase costs may be a combination of cash and in-kind products or services.

The feasibility report results in a recommendation for or against Federal participation in solutions to the water resource problems and opportunities identified in the study. A recommendation for Federal participation may be made if the feasibility phase finds that the project is economically justified (benefits exceed the costs), technically feasible and environmentally acceptable. A project recommended for implementation can be submitted to Congress for authorization. Certain small flood risk management projects do not require a specific project authorization, and can be constructed under the Continuing Authorities Program.

## Project Implementation and Project Partnership

Before implementation of a project, the sponsor is required to enter into a Project Partnership Agreement to define the responsibilities of each party. The sponsor must normally agree to the following:

- Provide without cost to the United States all lands, easements, rights-of-way, relocations and disposal areas (LERRDs) necessary for the construction and subsequent operation and maintenance of the project.
- Provide without cost to the United States all necessary alterations of buildings, utilities, highways, bridges, sewers, and related and special facilities.
- Hold and save the United States free from damages due to the construction and subsequent maintenance of the project, except damages due to the fault or negligence of the United States or its contractors.
- Operate and maintain the project after completion without cost to the United States.
- Prevent future encroachment, which might interfere with proper functioning of the project for flood control.
- Assume responsibility for all costs in excess of applicable Federal cost limitations.
- Provide guidance and leadership in preventing unwise future development of the floodplain by use of appropriate floodplain management techniques to reduce flood losses.
- Provide a minimum cash contribution of 5% of the project cost.
- If the value of the sponsor's contribution above does not equal or exceed 35 percent of the project cost, provide a cash contribution to make the sponsor's total contribution equal to 35 percent.

## Charges for Assistance

The feasibility phase is cost shared 50/50 with the sponsor. Design and construction are cost shared at 65 percent Federal and 35 percent non-Federal.

## How to Request Assistance

Requests to initiate flood risk management studies or questions related to flood risk management projects should be directed to:

Loretta Turner  
Programs and Project Management Division  
918-669-7074  
[Loretta.J.Turner@usace.army.mil](mailto:Loretta.J.Turner@usace.army.mil)



# Section 14 Emergency Bank Protection

## Section 14 of the Flood Control Act of 1946

Section 14 of the 1946 Flood Control Act, as amended, permits construction of bank protection works to protect endangered highways, highway bridge approaches and other essential, important public works such as municipal water supply systems and sewage disposal plants; churches, hospitals, schools and other nonprofit public services; and known cultural sites that are endangered by flood-caused bank or shoreline erosion. (*A sample project is on Page 29.*)

Local sponsorship for a Section 14 project must be provided by a state, municipality, local agency or Native American tribe empowered with sufficient legal and financial authority to comply with all local cooperation and participation requirements.

Privately-owned riverfront and privately-owned facilities are not eligible for protection under the Section 14 authority. Erosion protection is not eligible under Section 14 if the problem is caused by the design or operation of the facility itself or by inadequate drainage or lack of reasonable maintenance. Repair of the facility itself is also excluded under Section 14.

A bank protection project must be economically justified, where the value of the infrastructure to be protected must be greater than the cost of the recommended corrective action. The maximum Federal expenditure per project is limited to \$5 million. If the project cost exceeds the \$5 million Federal cost limit, the difference must be provided by local cash contribution.

The first activity of an Emergency Bank Protection Project is the Planning and Design Analysis (PDA) effort. The first \$100,000 of PDA funds used will be funded 100 percent Federal and are not considered part of project implementation costs. Any PDA costs over \$100,000 will be cost shared on a 50-50 cost-share basis.

Following successful completion of the PDA phase, the construction phase would be initiated. The construction phase is considered a part of project implementation costs. Under the 35 percent to 50 percent cost sharing required for project implementation activities, the local sponsor would be responsible for providing a minimum of 5 percent cash plus the lands, easements, rights-of-way, relocations and disposal areas (LERRDs). The local sponsor's share is typically no more than 35 percent. Following construction, the local sponsor is responsible for the operation, maintenance, repair, replacement and rehabilitation of the completed project.

## How to Request a Study

An investigation under Section 14 may be initiated after receipt of a formal request from the prospective sponsoring agency and the availability of Federal funding.

For more information contact:

Tony Clyde, Ph.D.  
Programs and Project Management Division  
918-669-7556  
[Tony.Clyde@usace.army.mil](mailto:Tony.Clyde@usace.army.mil)

### Authority and Scope:

Section 14 of the Flood Control Act of 1946 provides a continuing authority for the Corps of Engineers to develop and construct emergency streambank and shoreline protection projects to prevent erosion damages to endangered highways, highway bridge approaches, public works facilities such as water and sewer lines, churches, public and private non-profit schools and hospitals, and other non-profit public facilities, without the need for specific congressional authorization. A project is recommended for implementation only after a study clearly shows the engineering feasibility and economic justification of the improvement.



# Section 205

## Small Flood Control

Section 205 of the Flood Control Act of 1948, as amended

The Corps of Engineers has the authority, provided by Section 205 of the 1948 Flood Control Act, as amended, to plan, design and construct small flood control projects that have not already been specifically authorized by Congress. Local sponsorship for a Section 205 project must be provided by a state, municipality, local agency or Native American tribe empowered with sufficient legal and financial authority to comply fully with all local cooperation and participation requirements.

Several stipulations must be met to qualify under this program.

- a. The project must be complete within itself and not commit the Corps of Engineers to further construction. This means that the project must solve a specific problem and not require a subsequent project to complete the solution.
- b. The project must be economically justified. That is, benefits from the project must be greater than the costs associated with project implementation, operations and maintenance. The Corps will support the recommended plan which maximizes the net benefits for the lowest possible cost.
- c. The project must be environmentally acceptable. Consideration of the environment is an integral part of the planning of the project. In all cases, the Corps prepares environmental analyses, which it coordinates with Federal, state and local agencies, and the concerned public.
- d. The sponsor of the project must be willing and financially able to assist with the project. The sponsor is required to cost share feasibility (initial \$100,000 full Federal then 50 percent Federal, 50 percent non-Federal) and project implementation (65 percent Federal, 35 percent non-Federal), provide lands, easements, rights-of-way, relocations and disposal areas (LERRDs) necessary for construction. In addition, completed projects will be operated and maintained by the project sponsor.

Federal maximum participation limited to \$10 million per project.

### How to Request a Study

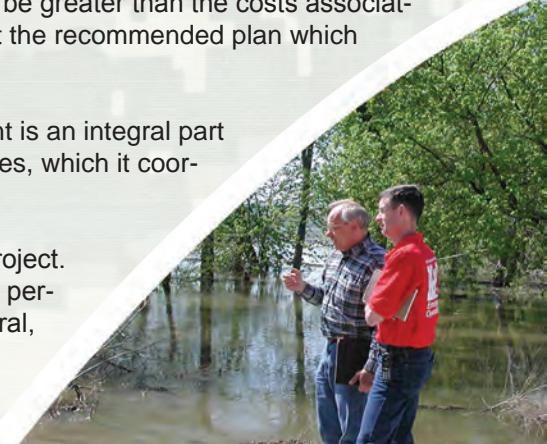
An investigation under Section 205 may be initiated after receipt of a formal request from the prospective sponsoring agency and the availability of Federal funding. (**A sample study request letter is on Page 11.**)

For more information contact:

Tony Clyde, Ph.D.  
Programs and Project Management Division  
918-669-7556  
Tony.Clyde@usace.army.mil

#### Authority and Scope:

Section 205 of the Flood Control Act of 1948, as amended, provides a continuing authority for the Corps of Engineers to develop and construct small flood control projects without the need of specific congressional authorization. A project is recommended for implementation only after a feasibility study clearly shows the engineering feasibility and economic justification of the improvement. Each project is limited to a Federal cost share of not more than \$7 million. This Federal limitation includes all project-related costs for feasibility studies, planning, design, construction, and supervision and administration.



# Section 208

## Snagging and Clearing for Flood Damage Reduction

Section 208 of the Flood Control Act of 1954, as amended

Section 208 of the 1954 Flood Control Act, as amended by the 1974 Water Resources Development Act, provides authority to the Corps of Engineers to remove accumulated snags and other debris and to clean and straighten the channel in navigable streams and tributaries in the interest of flood control. Work under this authority is limited to clearing and snagging or channel excavation and improvement.

Local sponsorship for a Section 208 project must be provided by a state, local agency or Native American tribe empowered with sufficient legal and financial authority to comply fully with all local cooperation and participation requirements. A clearing and snagging project must be economically justified with a flood reduction analysis, and the maximum Federal expenditure per project is limited to \$500,000. If the project cost exceeds the \$500,000 Federal cost limit, the difference must be provided by local cash contribution. The sponsor is required to cost share feasibility (initial \$100,000 full Federal, then 50 percent Federal, 50 percent non-Federal) and project implementation (65 percent Federal, 35 percent non-Federal).

Following successful completion of the feasibility study, the Plans and Specifications (P&S)/Construction phase would be initiated. The local sponsor would be responsible for providing the lands, easements, rights-of-way, relocations and disposal areas (LERRDs) requirements. Following construction, the local sponsor would be responsible for the operation, maintenance, repair, rehabilitation and replacement of the project.

Federal maximum participation limited to \$500,000 per project.

### How to Request a Study

An investigation under Section 208 may be initiated after receipt of a formal request from the prospective sponsoring agency and the availability of Federal funding. (A sample Study Request Letter is on Page 11.)

For more information contact:

Tony Clyde, Ph.D.  
Programs and Project Management Division  
918-669-7556  
Tony.Clyde@usace.army.mil

#### Authority and Scope:

Section 208 of the Flood Control Act of 1954 (Public Law 83-780) provides a continuing authority for the Corps of Engineers to study, develop, and construct in-stream clearing and snagging projects in the interest of flood risk management without the need for specific congressional authorization. Work under this authority is limited to clearing and snagging or channel excavation and improvement with limited embankment construction. If investigation indicates that placement of revetment or protection is needed to provide a complete and fully effective project, the sponsor is responsible for the costs of such revetment or protection.



# Planning Assistance to States and Tribes



# Section 22

## Planning Assistance to States and Tribes

Section 22 of the Water Resources Development Act (WRDA) of 1974, as amended

### What the Corps of Engineers Can Do

The needed planning assistance is determined by the individual states and tribes. Every year, each state and tribe can provide the Corps of Engineers its request for studies under the program, and the Corps then accommodates as many studies as possible within the funding allotment. Typical studies are only planning level of detail; they do not include detailed design for project construction. The studies generally involve the analysis of existing data for planning purposes using standard engineering techniques, although some data collection is often necessary. Most studies become the basis for state or tribal and local planning decisions. To assist in expediting a request for Planning Assistance to States activities, a sample letter and Cost Sharing Agreement are available for use as needed.

### Funding

The Planning Assistance to States (PAS) Program is funded annually by Congress. Federal allotments for each state or tribe from the nationwide appropriation are limited to \$500,000 annually, but typically are much less. Individual studies, of which there may be more than one per state or tribe per year, generally cost \$25,000 to \$75,000. These studies are cost shared on a 50 percent Federal, 50 percent non-Federal basis.

### Typical Studies

The program can encompass many types of studies dealing with water resources issues. Types of studies conducted in recent years under the program include the following:

- Water Supply and Demand Studies
- Water Quality Studies
- Environmental Conservation/Restoration Studies
- Wetlands Evaluation Studies
- Dam Safety/Failure Studies
- Flood Damage Reduction Studies
- Flood Plain Management Studies
- Coastal Zone Management/Protection Studies
- Harbor/Port Studies

### How to Request Assistance

State, local government and tribal officials who are interested in obtaining planning assistance under this program can contact the Tulsa District PAS program manager for further details.

Tony Clyde, Ph.D.  
Programs and Project Management Division  
918-669-7556  
Tony.Clyde@usace.army.mil

Tribal Assistance  
Loretta Turner  
Programs and Project Management  
Division  
918-669-7074  
Loretta.J.Turner@usace.army.mil

**Authority and Scope:**  
Section 22 of the Water Resources Development Act (WRDA) of 1974, as amended, provides authority for the Corps of Engineers to assist the states, local governments, and other non-Federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. Section 208 of WRDA of 1992 amended the WRDA of 1974 to include Native American Tribes.

# Floodplain Management Services



# Floodplain Management Services

The program's authority is provided by Section 206 of the Flood Control Act of 1960.

## What the Corps of Engineers Can Do

The Floodplain Management Services Program provides the full range of technical services and planning guidance that is needed to support effective floodplain management.

### Types of Assistance

**General Technical Services:** The program develops or interprets site-specific data on obstructions to flood flows; flood formation and timing; flood depths or stages; floodwater velocities; and the extent, duration and frequency of flooding. It also provides information on natural and cultural floodplain resources before and after the use of floodplain management measures.

**General Planning Guidance:** On a larger scale, the program provides assistance and guidance in the form of "Special Studies" on all aspects of floodplain management planning, including the possible impacts of off-floodplain land use changes on the physical, socio-economic and environmental conditions of the floodplain. Special Studies are accomplished at 100 percent Federal cost. However, funding for these studies is very limited and competitive.

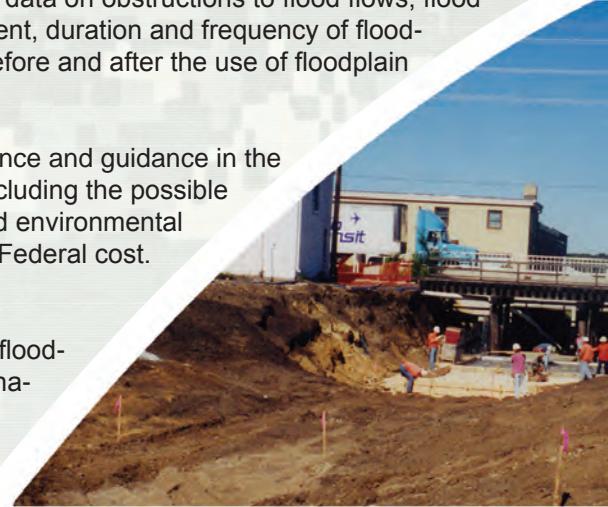
Special Studies can range from helping a community identify present or future floodplain areas to a broad assessment of the various floodplain management alternatives. Some of the most common types of Special Studies include:

- Floodplain Delineation/Flood Hazard Evaluation Studies
- Dam Break Analysis Studies
- Flood Warning/Preparedness Studies
- Regulatory Floodway Studies
- Comprehensive Floodplain Management Studies
- Urbanization Impact Studies
- Storm Water Management Studies
- Hydrologic, Hydraulic and Sediment Transport Modeling

The program also provides guidance and assistance for meeting standards of the National Flood Insurance Program and for conducting workshops and seminars on nonstructural floodplain management measures, such as flood proofing and relocation of structures from the floodplain.

### Guides, Pamphlets and Supporting Studies

Studies are conducted under the program to improve the methods and procedures for mitigating flood damages. Guides and pamphlets also are prepared on flood-proofing techniques, floodplain regulation, floodplain occupancy, natural floodplain resources and other related aspects of floodplain management.



### Authority and Scope:

The program's authority is provided by Section 206 of the Flood Control Act of 1960, as amended. Its objective is to foster public understanding of options for dealing with flood hazards and to promote prudent use and management of the Nation's floodplains.

Land use adjustments based on proper planning and the employment of techniques for reducing flood damages provide a rational way to balance the advantages and disadvantages of human settlement on floodplains. These adjustments are the key to sound floodplain management.



## Charges for Assistance

Upon request, program services are provided to state, regional and local governments, Native American tribes, and other non-Federal public agencies without charge, based on available funding.

Program services also are offered to non-water resource Federal agencies and to the private sector on a 100 percent cost-recovery basis. For most of these requests, payment is required before services are provided. A schedule of charges is used to recover the cost of services taking up to one day to provide. Letter requests or signed agreements are used to charge for those that take longer.

All requesters are encouraged to furnish available field survey data, maps, historical flood information and the like to help reduce the cost of services.

In addition, Section 202 of the Water Resources Development Act of 1999 authorized the voluntary contribution of funds by states, local governments and Native American tribes for the purpose of expanding the scope of services requested under Floodplain Management Services by these entities.

## How to Request Assistance

Agencies, governments, organizations and individuals interested in flood-related information or assistance should contact the Tulsa District below:

Loretta Turner  
Chief, Civil Works Branch  
Phone: 918-669-7074  
[Loretta.J.Turner@usace.army.mil](mailto:Loretta.J.Turner@usace.army.mil)



# Emergency Readiness and Response



**BUILDING STRONG®**

# Emergency Readiness and Response

Flood Control and Coastal Emergency Act (PL 84-99).

The Corps of Engineers also has authority under PL 84-99, Flood Control and Coastal Emergencies (FCCE) (33 U.S.C. 701n) (69 Stat. 186) for emergency management activities. Under PL 84-99, the Chief of Engineers, acting for the Secretary of the Army, is authorized to undertake activities including disaster preparedness, Advance Measures, emergency operations (Flood Response and Post Flood Response), rehabilitation of flood control works threatened or destroyed by flood, protection or repair of federally authorized shore protective works threatened or damaged by coastal storm, and provisions of emergency water due to drought or contaminated source. These authorities are typically implemented through the following key actions.

## Preparedness Assistance

The Flood Control and Coastal Emergency Act establishes an emergency fund for preparedness for emergency response to natural disasters; for flood fighting and rescue operations; for rehabilitation of flood control and hurricane protection structures. A request is made through the State Emergency Manager to the District Emergency Management Office.

## Response Activities

PL 84-99 allows the Corps of Engineers to supplement state and local entities in flood fighting urban and other non-agricultural areas under certain conditions (Engineering Regulation 500-1-1 provides specific details). This includes providing both technical and direct assistance consisting of consultation regarding flood fight operations; just-in-time training to flood fight and sandbag building teams; providing subject matter experts to Emergency Operations Centers and local officials; providing technical hydrologic and/or geotechnical expertise; inundation mapping information of known flooding areas; issuance of flood fight supplies such as sandbags and poly sheeting; and contingency contracting operations for use in implementing advance measure to prevent flood damages.



## Rehabilitation Assistance

Under the authority of PL 84-99, an eligible flood protection system can be rehabilitated if damaged by a flood event. The flood system would be restored to its pre-disaster status at no cost to the Federal system owner, and at 20 percent cost to the eligible non-Federal system owner. All systems considered eligible for PL 84-99 rehabilitation assistance typically have to be in the Rehabilitation and Inspection Program (RIP) prior to the flood event.

### Authority and Scope:

Public Law 84-99 provides authority for the Corps of Engineers to provide immediate and effective response and recovery assistance during emergencies and disasters.

## Homeland Security and Support to States and the Federal Emergency Management Agency

The District is authorized under the National Emergency Preparedness Program (NEPP) to support states and local authorities in catastrophic contingency planning. Oftentimes this is in coordination with the National Infrastructure Preparedness Plan and the National Response Framework. In these areas the District participates in the State Hazard Mitigation Teams,



State Drought Team and Catastrophic Planning Teams. In support of these activities the District assists local authorities in developing mitigation and preparedness plans for flood, critical infrastructure protection, drought, wildfires, ice storms, tornadoes and debris damages, emergency power restoration, generator assessments at critical public facilities, and support to Local Emergency Planning Committees and Emergency Coordinating Committees.

Under Emergency Support Function #3 within the National Response Framework the District maintains a Power Team and cadre of trained staff able to provide support to FEMA during a catastrophic event. A team of District-level staff remain ready to deploy at a moment's notice to support a disaster event in which emergency power restoration may be required. To support this program during non-disaster periods the District conducts training for state and local entities regarding the Emergency Power Facility Assessment Tool that will increase community resilience and readiness to disasters.

## How to Request Assistance

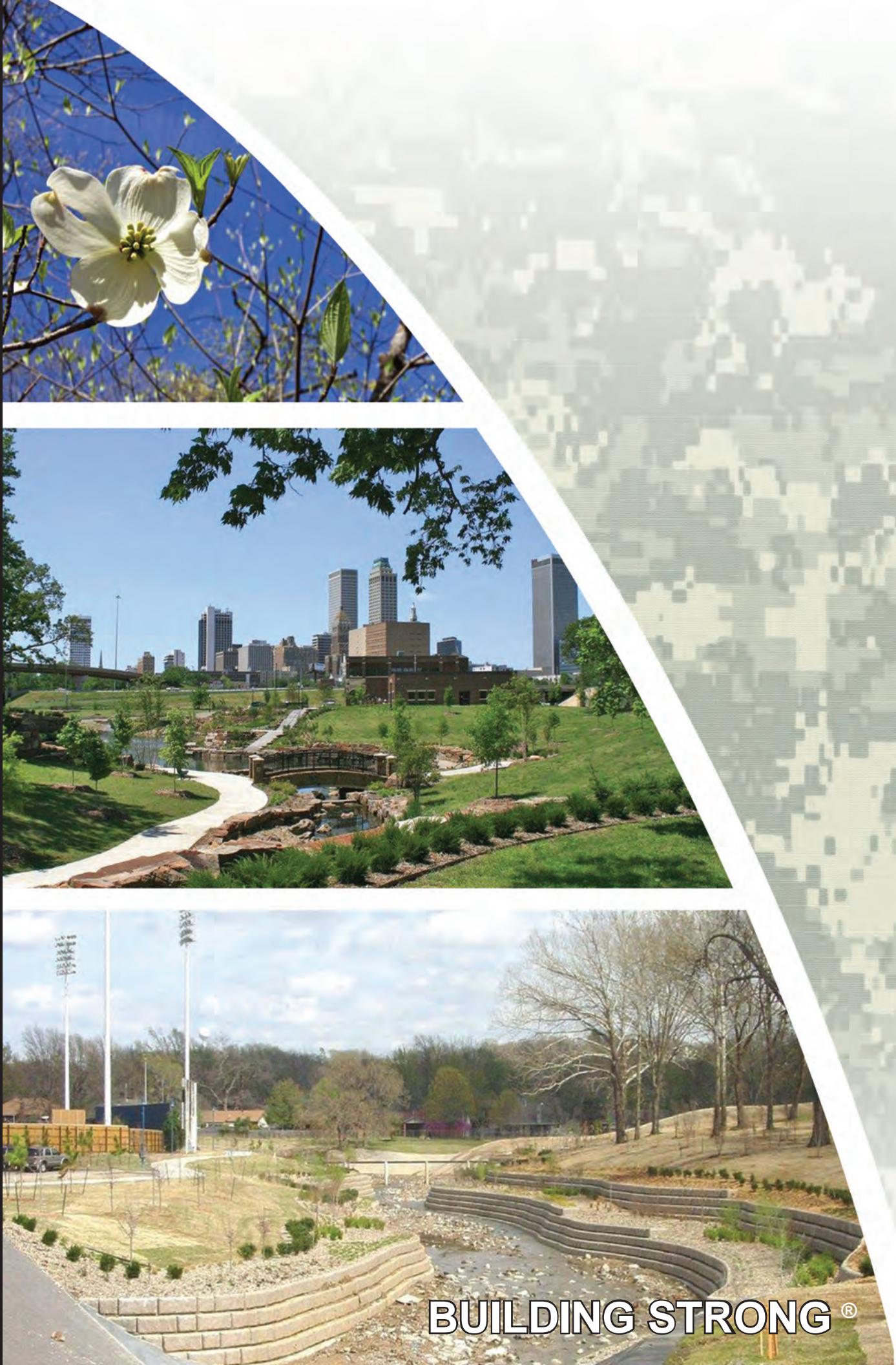
For more information please contact:

William Smiley  
Emergency Management and Security Office  
918-669-7330  
[William.E.Smiley@usace.army.mil](mailto:William.E.Smiley@usace.army.mil)

Kerri Stark  
Emergency Management and Security Office  
918-669-7431  
[Kerri.Stark@usace.army.mil](mailto:Kerri.Stark@usace.army.mil)



# Section 408 and Additional Missions



# Section 408

## Request to Alter Federal Projects

Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408.

### Purpose

The purpose of this policy is to improve consistency in processing requests both geographically and across Civil Works project types, outline a process that is scalable to be commensurate with the anticipated impacts of an alteration, and provide those seeking alteration a clear understanding of information required by them in seeking alteration to a Corps of Engineers project.

The Engineer Circular (EC) provides the policies and procedural guidance for an overall review process that can be tailored to the scope, scale and complexity of individual proposed alterations. It provides infrastructure specific considerations for dams, levees, floodwalls, flood risk management channels, and navigation projects. In addition, the EC contains procedural information regarding real property interests, environmental compliance, non-Federal hydropower development, hydrology and hydraulics and post-approval oversight.

### Step-by-Step Procedures

The following step-by-step procedures outline requirements necessary for non-federal interests to develop a Section 408 submittal for Tulsa District review:

**Step 1: Pre-Coordination.** Identifies potential issues, costs, timeline and determination of review of requirements.

**Step 2: Written Request.** Formally initiates the Section 408 process. Includes description of proposed alteration, non-Federal sponsor endorsement and other relevant associated information.

**Step 3: Required Documentation.** Includes detailed plans and specifications, hydrologic and hydraulics analysis, documentation on environmental compliance, real estate analysis and plan for technical review.

**Step 4: District-Led Agency Technical Review.** District drafts review plan to establish review procedures for the Section 408 request and conducts an Agency Technical Review to ensure that requirements set forth in the EC have been met.

**Step 5: Summary of Findings.** District drafts a Summary of Findings that documents outcome of the Agency Technical Review.



### Authority and Scope:

Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408 (commonly referred to as "Section 408") authorizes the Secretary of the Army, on the recommendation of the Chief of Engineers of the U.S. Army Corps of Engineers (USACE), to grant permission for the alteration or occupation or use of a USACE civil works project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project.



**Steps 6 and 7: Corps of Engineers Division and Headquarters Reviews (if required).** Division backchecks District Agency Review, if required, Headquarters conducts policy compliance and legal sufficiency reviews in order to confirm quality, assure completeness and identify conflicts. The Corps of Engineers Headquarters review is required if one of the following questions is affirmed:

- Independent External Peer Review?
- Environmental Impact Statement?
- Change how authorized purpose is met?
- Impact study alternatives?
- Flood Control Act credit?
- Hydropower?
- Assuming operations and maintenance responsibilities?



**Steps 8 and 9: Notification and Post-Permission Oversight.** District Commander notifies non-Federal interests of decision. If approved, final plans and specifications are back-checked and any updates to organizational processes are conducted, including monitoring.

## How to Request Section 408 Authorization

Non-Federal organizations interested in obtaining Section 408 authorization under this program can contact the Tulsa District Section 408 Coordinator for further details.

Tony Clyde, Ph.D.  
Programs and Project Management Division  
918-669-7556  
Tony.Clyde@usace.army.mil



# Additional Missions

In addition to our primary civil works missions, the Corps of Engineers has been involved in improving recreation and controlling beach erosion. Along with these missions, the Corps of Engineers generates hydropower, supplies water to cities and industry, regulates development in navigable waters and manages a recreation program.

## Regulatory

The Corps of Engineers has been involved in regulating activities by others in navigable waterways through the granting of permits since passage of the Rivers and Harbors Act of 1899. At first, this program was meant to prevent obstructions to navigation, although an early 20th century law gave us regulatory authority over the dumping of trash and sewage. Passage of the Clean Water Act in 1972 greatly broadened this role by giving the Corps of Engineers authority over the discharge of dredge and fill materials in the "waters of the United States," including adjacent wetlands.

A major aspect of the Regulatory program is determining which areas qualify for protection as wetlands. In reaching these decisions, the Corps of Engineers uses its 1987 Wetland Delineation Manual along with the appropriate regional supplement (available in PDF format). In making decisions on whether to grant, deny or set conditions on permits, District Commanders are required to consider "all factors in the public interest," including economic development and environmental protection. Numerous relatively minor activities in wetlands are covered by regional or nationwide general permits, allowing the regulatory staff to concentrate on cases that are more complex. Of the approximately 1,300 people who carry out this mission, about 70 percent have academic backgrounds in biology and environmental sciences. As the lead Corps of Engineers district for Regulatory matters in Oklahoma and in portions of Texas (Red River Basin) and Kansas (Civil Works Projects), the Tulsa District reviews more than 1,200 requests a year for the construction of structures and facilities, and the discharge of dredged material and fill in wetlands and navigable waters.



## How to Request Information

The contact for the Tulsa District Regulatory Program is:

Andy Commer  
Chief, Regulatory Office  
918-669-7616  
[Andrew.Comer@usace.army.mil](mailto:Andrew.Comer@usace.army.mil)

## Environmental Stewardship

The Corps of Engineers is the steward of approximately 12 million acres of land and water at 456 water resources projects located in 43 states. This property consists of hundreds of lakes, thousands of miles of rivers and streams, hundreds of reservoirs, 40,000 archeological sites and 5,000 historic sites. These areas are composed of various types of habitat, which support a variety of fish and wildlife. The archeological and historic sites are significant to our cultural and historical heritage.

Benefits include those associated with managing natural resources in a healthy and sustainable condition, fostering healthy lands and waters by balancing public uses and needs, protecting our cultural heritage and providing public

outdoor recreational opportunities. These efforts are performed in partnership with Federal, state and local government entities, quasi-public organizations and the private sector, and include state and Federal fish hatcheries, state wildlife management areas and Federal wildlife refuges. As part of our ongoing effort to raise awareness about environmental issues, our staff provides hundreds of environmental education programs every year that reach thousands of people.

Corps of Engineers lands and waters provide thousands of jobs and billions of dollars in revenue for local communities. More than 500 private concessionaires, with \$1 billion in assets, provide support services and facilities at Corps of Engineers lakes such as: marinas, bait shops, and grocery stores. Non-Federal interests manage 42 percent of the recreation and natural resources areas. This includes: approximately 200 state wildlife management areas, 25 Federal wildlife refuges, 50 state and federal fish hatcheries and hundreds of state and local government parks.

## Recreation

The Corps of Engineers is the Nation's largest provider of outdoor recreation, operating more than 2,500 recreation areas at 463 projects (mostly lakes) and leasing an additional 1,800 sites to state or local park and recreation authorities or private interests. The Corps of Engineers hosts about 360 million visits a year at its lakes, beaches and other areas, and estimates that 25 million Americans (one in ten) visit a Corps of Engineers project at least once a year. Supporting visitors to these recreation areas generate 600,000 jobs. For many citizens, the rangers at the recreation sites will represent their only contact with the Department of the Army.

The Tulsa District provides extensive recreational opportunities to the public. Tulsa District's 38 projects are located throughout Oklahoma, into southern Kansas and northern Texas. A great diversity of environments in the region provides varying backgrounds for outdoor fun. Recreational experiences such as hiking, fishing, hunting, camping, boating, swimming, picnicking, educational programs, wildlife viewing, equestrian riding and scuba diving are available at our lakes.

Tulsa District operates approximately 256 parks with 5,667 campsites, 45 improved swimming beaches and 218 boat ramps. There are also concession areas and over 200 parks operated by other government or private agencies at our lakes. An interagency recreation and reservation service called the National Recreation Reservation Service (NRRS) provides the public the opportunity to make reservations by phone or via the web at [www.recreation.gov](http://www.recreation.gov)

Recreation.gov is your one-stop shop for trip planning, information sharing and reservations brought to you by 12 federal participating partners. Seven of these partner agencies – include the Corps of Engineers, Forest Service, National Park Service, Bureau of Land Management, Bureau of Reclamation, Fish and Wildlife Service and National Archives – offer advance reservations at 2,500 federal areas for over 60,000 facilities and activities.



# Sample Projects

## Luther Road, Oklahoma County, Oklahoma

### Emergency Streambank and Shoreline Protection (Section 14)

This Continuing Authorities Program Section 14 project is located along the North Canadian River within Oklahoma County, about 10 miles east of Oklahoma City, Okla. Bank erosion associated with lateral migration of the North Canadian River was encroaching on the Luther Road embankment, significantly affecting use of this county road and associated public utilities. Over the past few years more than 700 feet of streambank had eroded due to toe cutting and subsequent vertical sloughing about 100 to 125 feet from Luther Road.

The value of the infrastructure at risk was about \$8.3 million. The local sponsor is the Board of County Commissioners of Oklahoma County, Okla. The decision document is the Luther Road, Oklahoma County, Okla., Emergency Streambank Protection Report, dated September 2012 and approved by the Commander, Southwestern Division, June 19, 2013, pursuant to the authority in Section 14 of the Flood Control Act of 1946, as amended.

The recommended plan stabilized about 3,500 linear feet of streambank of the North Canadian River adjacent to the west side of Luther Road. Riprap was placed along the toe of the slope, shaping the bank at a 3-foot horizontal to a 1-foot vertical slope, to the one-year frequency elevation, and balancing cut and fill of the existing slope.

On June 9, 2015, the contract for construction was awarded for \$2 million and was completed in April 2016.



AFTER

## Arkansas River Corridor Ecosystem Restoration

### General Investigation

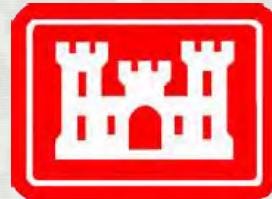
The 42-mile long study area focus is along the Arkansas River, from Keystone Dam to the Tulsa/Wagner County boundary, in Tulsa County, Okla. Extreme flow variability in the Arkansas River, resulting from the Corps of Engineers' Keystone Lake operations, has negatively impacted the environmental and aesthetic conditions. It also limits environmental quality and economic development potential along the Arkansas River Corridor in the greater Tulsa, Okla., area. Providing environmental flows is the focus of the study.



Two measures that can provide flow remain from a broad array considered to date. They are storage from Keystone Lake and a water storage structure downstream. There are also additional restoration measures being considered with the restoration of environmental flows:

- Least tern islands and habitat.
- Restoration of streamflow and creation of wetlands at Prattville Creek.
- Boulder clustering habitat upstream of Zink Lake
- Joint planting at existing riprap at Cherry Creek
- Left Bank slack water habitat restoration at I-44 bridge.

A tentatively selected plan is expected to gain approval in the summer of 2016 with a draft report to follow shortly afterward. The study has existing authority, which limits the federal share of implementation costs to \$50 million.



US Army Corps  
of Engineers ®  
Tulsa District

**BUILDING STRONG®**

Learn more at:  
**[www.swt.usace.army.mil](http://www.swt.usace.army.mil)**