BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Chairman, Committee On Environment And Public Works United States Senate

Update On Army Corps Of Engineers' Planning And Designing Time For Water Resources Projects

In 1978 GAO reported that it took, on the average, 25.9 years for the Army Corps of Engineers to plan and design flood control projects. GAO's current review of 18 flood control projects, 16 navigation projects, and 1 multipurpose project entering the construction phase in 1978-83 showed that it took, on the average, 29.4 years, 21.6 years, and 35.4 years, respectively, to plan and design these projects. The average for all 35 projects was 26.1 years.

This report discusses several congressional and administrative initiatives that could reduce the time it takes to plan and design the Corps' water resources projects.

HD
1694
.A5
U485
1984

GAO/RCED-84-16
JANUARY 4, 1984

Request for copies of GAO reports should be sent to:

U.S. General Accounting Office
Document Handling and Information
Services Facility
P.O. Box 6015
Gaithersburg, Md. 20760

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are $3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are $1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

RESOURCES, COMMUNITY,
AND ECONOMIC DEVELOPMENT
DIVISION

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

B-212140

The Honorable Robert T. Stafford
Chairman, Committee on Environment
and Public Works
United States Senate

Property of CSC Library

Dear Mr. Chairman:

In accordance with your March 3, 1983, request and subsequent agreements with your office, we have obtained information on the time required to plan and design the Army Corps of Engineers' water resources projects. Specifically, we determined

--the Corps' water project funding levels for fiscal years 1965-84,

--whether the 26-year time frame cited in our 1978 report[1] to plan and design the Corps' flood control projects was still valid and whether this time frame is similar for other Corps projects, and

--congressional and administrative changes or initiatives to shorten the time frame since our 1978 report.

The Corps of Engineers--operating through 11 divisions and 36 district offices--constructs, operates, and maintains federal water projects providing navigation, flood control, power, and other benefits. The Corps requested about $1.1 billion to plan and construct water resources projects for fiscal year 1984. This figure continues the downward trend in spending that began in fiscal year 1981, when funding was at $1.7 billion.

In 1978 we reported that, on average, 25.9 years was spent on planning and design studies before construction began on Corps flood control projects. In comparison, 18 flood control projects, 16 navigation projects, and 1 multipurpose project entering the construction phase during fiscal years 1978-83 required, on average, 29.4 years, 21.6 years, and 35.4 years, respectively. The average for all 35 projects was 26.1 years.

[1]Corps of Engineers Flood Control Projects Could Be Completed Faster Through Legislative and Managerial Changes, CED-78-179, Sept. 22, 1978.

MAY 20 1983

HD1694.A5 U488 1984
10265463

The authorization and appropriation process for the Corps' water projects has remained essentially unchanged since our 1978 report. However, the U.S. Water Resources Council's[2] new Principles and Guidelines for developing federal water and related land resources projects, changes implemented or under consideration by the Corps, and recent legislative and administrative initiatives could affect water project development time frames.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to obtain information on the time required to plan and design the Corps of Engineers' water resources projects. To determine the overall time frame to move a project from initial survey authorization to start of construction, we requested the Corps to provide us with information on all initial construction contracts that were awarded in fiscal years 1978-83. The Corps provided information on 63 projects. Comparable data concerning initial project authorizations and funding, feasibility report development and review, and construction authorization and funding were provided for 35 of the 63 projects. We did not verify the accuracy of the Corps information because of time constraints.

To determine those actions taken or in process to reduce project development time frames, we (1) interviewed Corps headquarters officials in the planning, policy, and programming offices, (2) reviewed proposed legislation and Corps regulations, and (3) discussed with Congressional Research Service, Congressional Budget Office, and Office of Technology Assessment officials the planning and developing of water resource projects.

The Corps of Engineers provided us with data on water project funding for fiscal years 1965-84. We used budget documentation to verify this data for fiscal years 1980-84.

Many variables influence the time required to develop a project, thus making comparisons difficult. Variables include the extent of local and congressional support, other demands on federal funds, as well as the complexities of the projects themselves.

---

[2]Although the Water Resources Council staff was released on September 28, 1982, its functions are being performed by Council members' staffs. Council members are the Secretaries of the Interior, the Army, Agriculture, Transportation, Commerce, Energy, and Housing and Urban Development and the Administrator of the Environmental Protection Agency.

This review was performed in accordance with generally accepted government auditing standards.

CORPS' WATER PROJECT FUNDING FOR FISCAL YEARS 1965-84

The following table shows the 1965-84 appropriations for the General Investigations and Construction accounts for the Corps' water projects. Total appropriations for these accounts are also shown.

Corps Of Engineers Appropriations
FY 1965 Through 1984

Fiscal year	Appropriation: General Investigations[a]	Appropriation: Construction	Combined total
	(millions)		
1965	$ 24.2	$ 957.0	$ 981.2
1966	25.5	994.2	1,019.7
1967	32.5	966.0	998.5
1968	34.4	967.6	1,002.0
1969	30.0	862.7	892.7
1970	41.2	712.0	753.2
1971	39.0	851.2	890.2
1972	50.7	1,025.1	1,075.8
1973	57.8	1,203.9	1,261.7
1974	56.1	873.6	929.7
1975	65.3	966.3	1,031.6
1976	66.8	1,237.2	1,304.0
1977	71.9	1,430.2	1,502.1
1978	107.0	1,537.8	1,644.8
1979	138.0	1,343.7	1,481.7
1980	142.1	1,661.0	1,803.1
1981	134.0	1,593.9	1,727.9
1982	137.2	1,430.0	1,567.2
1983	129.0	1,421.4	1,550.4
1984[b]	110.4	945.7	1,056.1

[a]Includes surveys and planning studies, restudies, special investigations, data collection, research and development, and since fiscal year 1982, advanced engineering and design and continuing planning and engineering funding.

[b]Fiscal year 1984 budget request.

Source: U.S. Army Corps of Engineers.

TIME FRAMES AND INFLUENCING FACTORS

Many years elapse before construction of the Corps' water projects is started. This may not be a major concern for projects located in remote areas which do not pose a threat to life and property, but it could mean the loss of life, repeated property damage, or loss of life-enhancing opportunities for major projects such as flood control dams and reservoirs located in populated areas. Waiting for congressional authorization and funding approval to construct a project is a lengthy process. Also, other factors, including project priorities, total water project funding, and changing economic and political conditions can affect project development time frames.

Time frame: from survey authorization to start of construction

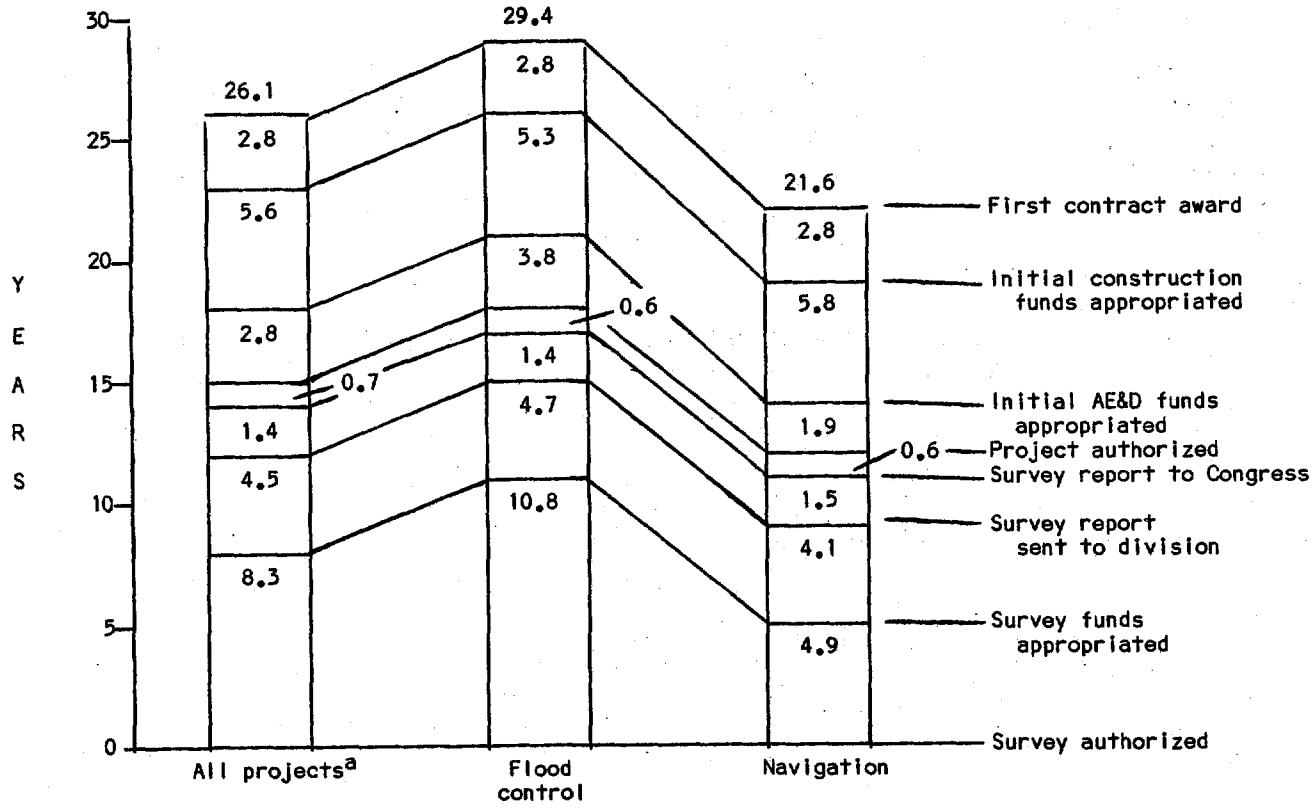
In 1978 we reported that it took, on average, 25.9 years for the Corps' flood control projects to progress from initial survey authorization to start of construction. This result was based on 57 completed survey investigations and 20 advanced engineering and design studies completed in fiscal years 1975 through 1977.

Our current review showed that it took an average of 26.1 years for a Corps' project to proceed from initial survey authorization to start of construction. This result was based on 35 projects--18 flood control, 16 navigation, and 1 multipurpose--for which construction contracts were awarded during fiscal years 1978 through 1983. The following are specific time frames:

Purpose	Number	Time	
		Average	Median
		------(years)----	
Flood control	18	29.4	33.4
Navigation	16	21.6	17.4
Multipurpose	1	35.4	-
Total	35	26.1	25.5

The time needed to complete the intermediate steps leading to construction for the 35 projects is presented in the following chart.

Average Time frames
Corps Projects FY 1978-83



[a]Includes one multipurpose water project.

As can be seen, the overall average time to reach start of construction for the 18 flood control projects was 29.4 years. Compared to our 1978 study results, this represents an increase of 3.5 years. The greatest differences in average time to complete the intermediate steps for these projects were (1) an increase of 4.2 years awaiting survey funds (from 6.6 to 10.8 years), (2) a decrease of 1.7 years in survey work (from 6.4 to 4.7 years), and (3) a decrease of 1.4 years in review time (from 2.8 to 1.4 years).

Major factors affecting timely development

The current process for authorizing, funding, and planning projects contributes to the lengthy periods in which no labor is directed toward project completion. For the 35 projects included in this review, an average of 11.8 years, or about 45 percent of the 26.1 years required to advance a project to first contract award, was spent awaiting congressional authorization or funding. Although this authorization and funding process is lengthy, it provides the Congress with control not only over which water resource projects will undergo a survey to determine

if a feasible solution is available, but also it gives the Congress an opportunity to individually approve projects for construction.

The Congress must appropriate funds for each survey effort. Accordingly, the appropriation request must be included in the budget estimate prepared for subsequent congressional approval. However, the budget cycle starts about 15 months before the year in which congressional action is taken. Thus, more than a year may pass before funds are appropriated for initiating a study.

Waiting for congressional authorization and funds for performing preconstruction planning and engineering (formerly advanced engineering and design) also contributes to the lengthy process. Until 1976, the Congress usually passed an omnibus construction authorization bill every 2 years. Since then, no new projects have been authorized, although omnibus legislation authorizing new projects has been introduced in both houses of the 98th Congress.

Other factors which might affect project authorization and funding include (1) the priority assigned to the project by executive and legislative bodies, (2) the total level of funding for water projects, and (3) factors such as changes in economic and political conditions at the local level.

Our 1978 report (see footnote on p. 1) presented options to the existing authorization and appropriation process which could eliminate much of the time spent awaiting authorization or funding of feasibility studies and project construction. However, we cautioned that each option would reduce congressional control. We presented the following options with the amount of time that each would have saved individually, if it had been adopted.

1. Using an annually replenishable fund, the Corps could initiate and carry out the survey phase. Design and construction of projects would require congressional authorization and be fully funded by a single appropriation. This option would have saved at least 6.6 years, on average, for the projects we reviewed in 1978.

2. Combine the authorization and funding steps within the existing process. This option would have saved about 9.4 years, on average, for the projects we reviewed in 1978.

3. Authorize and fund the survey and preconstruction planning and engineering work under a single congressional action. This option would have saved about 10.3 years, on average, for the projects we reviewed in 1978.

The Corps has a backlog of authorized water resources projects because many more projects have been authorized for preconstruction planning and engineering and construction than can be sufficiently funded under current water resources development spending levels. Our recent report, Water Project Construction Backlog--A Serious Problem With No Easy Solution, GAO/RCED-83-49, Jan. 2, 1983, presented three options to lessen the backlog problem and provide for more timely completion of projects.

--Increase the annual water project funding, which would allow uninterrupted progress on projects under construction.

--Require the nonfederal sector to contribute a more substantial portion of project costs, which might result in fewer new starts as greater care is taken in selecting projects for construction.

--Acknowledge that all projects authorized or under construction will not be built, which would require establishing a priority ranking system of projects for funding accompanied by possible deauthorization of the marginal projects.

CONGRESSIONAL AND ADMINISTRATIVE EFFORTS TO SHORTEN PROCESS

Although the lengthy authorization and appropriation process has been cited by us and in studies conducted for the U.S. Water Resources Council and by the Corps as the major single factor contributing to the long time to bring about needed water projects, it has remained essentially unchanged since our 1978 report. Recent legislative and executive initiatives, however, could affect the time needed to plan and design water projects.

Congressional initiatives

The authorization and appropriation process for the Corps' water resource projects has remained essentially unchanged since our 1978 report. The options that we discussed in that report and summarized on page 6 of this report have not been adopted by the Congress. Thus, the Congress maintains the same level of control and oversight over water projects. However, the following provisions of proposed legislation which are discussed in more detail in subsequent sections of this report could affect the Corps' water projects: (1) cost-sharing, (2) cost recovery for activities associated with operating, maintaining, and constructing the Nation's inland waterway system, (3) deauthorization of some projects, (4) measures to change project planning and construction procedures themselves, and (5) steps to resolve the current problems associated with

assuring local financial support (section 221 of the Flood Control Act of 1970).

Cost-sharing

The subject of sharing with nonfederal project sponsors the cost of building federal water projects has become a major policy issue in the Congress. S. 1031, the "Water Resources Policy Act of 1983," and S. 1739, the "Water Resources Development Act of 1983," both contain requirements that a nonfederal project sponsor agree to provide a certain percentage of the cost depending on the project purpose. Without such agreement, construction could not be initiated. Cost-sharing proponents in the Department of the Army advised us that it will result in selection of only the highest priority projects and faster completion of these projects as marginal projects are dropped from the system.

H.R. 3678, the "Water Resources, Conservation, Development, and Infrastructure Improvement and Rehabilitation Act of 1983," contains provisions for cost-sharing port development and flood control projects. This bill also confronts the issue of expediting the planning and construction phases of project development by requiring the Secretary of the Army to undertake a study and

> **". . . implement such measures as may be necessary to improve such capabilities, including the establishment of increased levels of personnel, changes in project planning and construction procedures designed to lessen the time required for such planning and construction, and procedures for expediting the coordination of water resources projects with Federal, State, and local agencies."**

This bill would also deauthorize about 325 projects with an estimated completion cost of $11.1 billion.

Fast tracking

In recent years several proposed legislative measures have included provisions for moving certain Corps' projects rapidly through the project development process. The first series of "fast track" legislation have been efforts to speedup the development of deep water ports so that the United States can be more competitive in the coal exporting market. These bills would require congressional action on projects within 60 to 90 days of the submission of feasibility reports, consolidate environmental impact assessments on certain aspects of port development, improve the procedures for processing permit applications, and mandate the procedures for judicial review of questions concerning the construction of these port improvements.

Other legislation containing fast track provisions is directed toward developing and/or rehabilitating the inland waterway system. S. 1554, "The Inland Waterway Improvement and Cost Recovery Act of 1983," provides not only for the recovery of certain capital, operation, and maintenance expenditures assignable to commercial waterway transportation but also provides fast tracking for certain projects. Under this bill, unless the Congress passes and the President approves a joint resolution disapproving a final environmental impact statement within 180 days of its receipt by the Congress, the Corps can begin construction without further approvals. The major difference between this and past legislative proposals is that instead of recovering 100 percent of the federal expenditures for operation and maintenance and capital construction, it would seek to recover 70 percent of these Corps' expenditures.

Although the above legislation would provide for certain fast track construction projects, some Corps projects have moved quickly through the development process to construction. These projects had strong congressional and local support and a lack of environmental concerns.

Federal/state cooperative agreement requirement

Section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d-5b) requires states or other nonfederal entities to guarantee payment for certain features (municipal and industrial water supply and recreation) of the Corps' projects before construction is started. We developed information on the section 221 requirement in our 1978 report and again in 1979.[3] In 1979, we stated that constitutional restrictions prohibited 35 states and the District of Columbia from entering into agreements which would place funding obligations on future legislatures. If a state is unable to guarantee the repayment of project costs, the Corps will not begin construction. We also stated that 49 projects estimated to cost about $615 million were being delayed or stopped by these requirements.

Although several states had met this provision by using methods other than obligating future state funds, these methods took additional time, required a major effort, and in some instances may not have been legally binding. Several attempts have been made to resolve the section 221 impasse, but the problem remains. S. 1739 would amend the Flood Control Act of 1970 to specify that agreements between the Corps and states

---

[3]Statement of facts provided to Senator Lloyd Bentsen, Apr. 10, 1979.

> **". . . may reflect that it does not obligate future legislative appropriations or other funds for such performance and payment when obligating future appropriations or other funds would be inconsistent with State constitutional limitations."**

This provision would allow the Corps to begin construction on water projects that have been approved by the Congress but which have been held up because states were unable to enter into agreements to fulfill their required financial cooperation.

Administrative changes or proposals to improve time frames

On July 8, 1983, the U.S. Water Resources Council's new Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies became effective. The guidelines, which place primary emphasis on economic development, replaced the Principles, Standards and Procedures. The purpose of the new guidelines

> **". . . is to reduce the burden on agencies in complying with detailed and legally binding technical rules for formulation and evaluation of water and related land resources plans and projects."**

Corps officials told us that the guidelines will eliminate some of the time consumed in developing alternative plans that were previously required under the Principles, Standards and Procedures.

The Corps has also taken steps to improve its project planning, review, and preconstruction planning and engineering policies and procedures. The changes that have taken place are (1) a two-phase planning approach, which includes a cost-sharing provision and (2) a continuing planning and engineering approach, which will continue planning on certain projects that have not been authorized for construction by the Congress.

Two-phase planning

Under the Corps' two-phase planning concept, the federal government will finance 100 percent of the reconnaissance phase. In this initial 12-month (18-month in certain cases) planning phase, the Corps will assess the need for additional study. If a feasible solution appears likely, the Corps is proposing that the nonfederal sponsor be required to equally share the cost of the feasibility study. H.R. 3678, which would formally establish such a two-phase feasibility study process, would require only 25 percent nonfederal funding of the feasibility phase. The Corps' program officials advised us that this process will help to weed-out low priority projects more quickly

and thus allow the Corps officials to concentrate on the most promising projects. However, all cost-sharing initiatives are currently on hold pending congressional action.

Continuing planning and engineering

The continuing planning and engineering approach was first introduced in the Corps' fiscal year 1982 budget request. Under this new approach, the Corps will continue planning on certain projects for which a feasibility report has been completed by a district but has not yet been acted upon by the Congress. All planning and engineering except the preparation of detailed plans and specifications will be completed. H.R. 3678 contains a similar provision for continued planning and engineering.

According to Corps officials, this new approach for planning and designing water projects was needed because with no new construction authorizations since 1976, projects have lost momentum. Corps officials told us that this initiative will result in more orderly and sustained progress in moving from the preauthorization study and report stage to the planning and engineering investigations stage; continued involvement of state and local governments and the coordination between Corps work forces and local participants; and maintaining technical expertise on the particular project. In June 1982, the Director of Civil Works, Office of the Chief of Engineers, estimated that the new initiative could shorten the time between the authorization of projects and initiation of construction by several years.

According to Corps officials all of these projects must be economically justified, have no known unresolvable environmental deficiencies, and be responsive to high-priority needs of urban flood damage prevention, hydropower generation, or commercial navigation.

AGENCY COMMENTS AND OUR EVALUATION

The Department of the Army generally concurred with the report findings. (See app. I.) The Department anticipates further improvement in the time it takes to complete survey and review work as a result of the new Principles and Guidelines and full implementation of its initiatives to simplify its planning guidance. The Department also emphasized the following benefits of increased nonfederal cost-sharing on water resources projects.

--The burden on the federal budget would be lessened and limited funds can be spread among a larger number of projects.

--It provides a "market test" of a project's value.

--It helps keep the interval between project authorization and funding of initial construction as short as possible.

However, as mentioned on page 11, the Congress has not yet approved increased nonfederal cost-sharing proposals.

Although the Department favors increased nonfederal cost-sharing on water resources projects, it does not believe that substantially increasing annual water project funding or establishing a priority ranking system of water projects--the other two options to lessen the backlog problem which we presented in our 1983 report (see p. 7)--are realistic. The Department also told us that actual construction backlogs are smaller than identified in our 1983 report.

The Department also advised us that many projects, or elements thereof, may eventually be deauthorized or reclassified to deferred or inactive status. If this occurred, it could further reduce the backlog problem. Although we agree that deauthorization may reduce the backlog of authorized projects, decisions regarding the deauthorization, in whole or in part, of these projects do not rest solely with the agency but are shared with the Congress. Also, even if the backlog is reduced, many authorized projects would remain. Newly authorized projects could add to the backlog problem, and they would compete with previously authorized projects for limited funds. This could have an affect on the time it takes to complete the previously and newly authorized projects.

- - - -

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of the Army; and other interested parties.

Sincerely yours,

J. Dexter Peach
Director

APPENDIX I

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, D.C. 20310

30 NOV 1983

Mr. J. Dexter Peach
Director, Resources, Community,
and Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Peach:

This is the Department of Defense response to your October 19, 1983, letter to the Secretary of the Army requesting comments on the draft GAO report, "Update on Time It Takes the Corps of Engineers to Plan and Design Water Resources Projects," GAO/RCED-84-16 (OSD Case No. 6380).

Although the draft GAO report contains no conclusions or recommendations, detailed responses to the relevant findings contained in the draft report are enclosed.

Sincerely,

William R. Gianelli
Assistant Secretary of the Army
(Civil Works)

Enclosure

Department of Defense Response
GAO Draft Report GAO/RCED-84-16
"Update On Time It Takes The Corps of Engineers
To Plan And Design Water Resources Projects"

OSD Case No. 6380

* * * * *

FINDINGS

FINDING A. The Authorization and Appropriation Process for Corps of Engineers (Corps) Water Projects Remains Essentially Unchanged. GAO found that it took an average of 26.1 years for a Corps project to proceed from initial survey authorization to start of construction. This result was based on 35 (18 flood control, 16 navigation and 1 multipurpose) projects on which construction contracts were awarded during fiscal years 1978 through 1983. In comparison, in 1978 GAO reported that it took, on average, 25.9 years for Corps flood control projects to progress from initial survey authorization to start of construction. The overall average time to reach start of construction for the 18 flood control projects was 29.4 years. Compared to GAO's 1978 study results this represents an increase of 3.5 years. The greatest difference in average time to complete the intermediate steps for these projects was (1) an increase of 4.2 years awaiting survey funds (from 6.6 to 10.8 years), (2) a decrease of 1.7 years in survey work (from 6.4 to 4.7 years), and (3) a decrease of 1.4 years in review time (from 2.8 to 1.4 years). (pp. 1-5, GAO Draft Report).

RESPONSE. DOD concurs. However, the above statistics indicate improvement in the time it takes the Corps to conduct the survey work such as project planning and engineering, and review time. Further improvement can be expected. This improvement will be achieved as a result of the initiatives the Administration has taken to simplify the planning guidance governing the formulation and evaluation of water projects. On March 10, 1983, the "Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies" were issued for agency implementation. These new Principles and Guidelines respond to widespread public concerns that the old Principles and Standards unnecessarily inhibited the water resource planning process by subjecting it to a number of arbitrary requirements under regulations as opposed to guidance. Also, other initiatives that should help achieve improvement in the project preauthorization stage are noted in Finding E.

FINDING B. Timeframes on Corps of Engineers Projects and Influencing Factors. Of the current average of 26.1 years required to advance the 35 projects to award of the first contract for actual construction, GAO found about 11.8 years (or 45 percent) were spent awaiting congressional authorization and funding approval of feasibility studies and project construction. GAO also found that in addition to the congressional legislative process, other factors which might affect project authorization and funding include (1) the priority assigned to the project by executive and

legislative bodies, (2) the total level of funding for water projects and (3) factors such as changes in economic and political conditions at the local level. GAO concluded its (GAO's) 1978 recommendations 1/ designed to reduce the time lapse had not been implemented because the Congress apparently wanted to continue to maintain the same level of control and oversight over water projects. GAO also concluded that while the many years which elaspe before construction of Corps water projects may not be a major concern for projects located in remote areas which do not pose a threat to life and property, it could mean a loss of life enhancing opportunities in the case of major projects such as flood control dams and reservoirs located in populated areas. (pp. 3-8, GAO Draft Report)

RESPONSE. DOD concurs.

FINDING C. The Corps Has Seldom Received Adequate Annual Survey and Preconstruction Planning and Engineering Funding for All Its Projects. GAO found that the Corps has seldom received annual appropriations large enough to cover the entire cost of the survey or the preconstruction planning and engineering phase for all its approved projects. GAO concluded that, as a result, a large backlog of authorized projects exists. GAO reiterated the various options it presented in its January 1983 report 2/ to lessen the backlog problem and provide for more timely completion of projects. These options were to--

- Increase the annual water project funding,
- Require the non-Federal sector to contribute a more substantial portion of project costs, and
- Establish a priority ranking system of projects for funding and possibly deauthorize the marginal projects. (p. 7, GAO Draft Report)

RESPONSE. DOD partially concurs. Two points deserve emphasis. First, with respect to the three options presented in GAO's recent report on the construction backlog, the Assistant Secretary of the Army (Civil Works) comments on that report concluded that option 2, increased cost sharing, has the greatest potential to reduce the backlog. Options 1 and 3 were indicated to be unrealistic. Second, the GAO estimate of the authorized active civil Works backlog was not considered relevant or realistic. The GAO report does not distinguish between those projects, or separable elements of projects, which are likely to be built and those which are not. Although the current Corps estimate of the backlog is $26.4 billion, the relevance becomes insignificant when the backlog is addressed in more realistic terms of "scheduled" and "unscheduled" balances to complete which total $10.2 billion and $16.2 billion respectively. The scheduled portion consists of outyear funding requirements for budgeted projects scheduled to complete after FY 1984, including the outyear requirements for the FY 1984 new construction starts. The bulk of the scheduled balance to complete reflects traditional cost sharing for work already

1/ GAO Report No. CED-78-179, "Corps of Engineers Flood Control Projects Could Be Completed Faster Through Legislative and Managerial Changes," Dated September 22, 1978 - OSD CASE NO. 4980

2/ GAO Report No. GAO/RCED-83-49, "Water Project Construction Backlog -- A Serious Problem With No Easy Solution," Dated January 2, 1983 - OSD CASE NO. 6200

underway and most projects are expected to be completed in five to ten years. The unscheduled portion reflects work that: (1) has not been funded for construction, including considerable work for parts of projects that likely will not be budgeted due to lack of local support or other non-funding reasons; (2) has unstarted separable elements having a benefit-cost ratio less than 1.0; and (3) includes some unstarted projects or project elements which are not presently ready for initiation of construction. Therefore, many projects, or elements thereof, in the unscheduled balance to complete category, although currently designated as active, may eventually be deauthorized or reclassified to the deferred or inactive categories.

FINDING D. Recent Legislative Initiatives Could Affect the Time Needed to Complete Water Projects. While, as previously noted, the Congress has not implemented the 1978 recommendations, GAO nevertheless found that other recent legislative initiatives could affect the time needed to complete water projects. GAO reported that chief among these involve (1) cost sharing; (2) cost recovery for activities associated with operating, maintaining and constructing the Nation's inland waterway system; (3) de-authorization of some projects; (4) measures to change project planning and construction procedures themselves; and (5) steps to resolve the current problems associated with assuring local financial support (section 221 of the Flood Control Act of 1970). GAO noted that the subject of sharing with project sponsors the cost of building federal water projects has become a major policy issue in the Congress. GAO also found that in recent years several proposed legislative measures have included special provisions for moving certain Corps projects rapidly through the project development process--i.e., "fast tracking." (pp. 7-10, GAO Draft Report).

RESPONSE. DOD concurs. However, the best way to shorten the process affecting the time needed to complete water projects is to bring into closer coincidence the authorization and construction funding decisions. Project authorization in the absence of assured initial construction funding would be an empty gesture. The mechanism which will keep the interval between authorization and funding as short as possible is increased non-Federal financing that would increase the non-Federal share of construction projects. The rationale for advocating greater non-Federal participation in project cost sharing and financing is two-fold. First, to the extent that beneficiaries actually are responsible for financing project construction, a burden on the Federal budget is removed and the limited dollars that are available can be spread among a larger number of projects. Second, non-Federal cost sharing provides a "market test" of a project's value.

FINDING E. Administrative Changes Or Proposals to Improve Timeframes on Corps Projects. GAO found that certain administrative initiatives have been implemented or are planned which are also designed to improve the timeframes on Corps projects. GAO cited the Water Resources Council's new Economic and Environmental Principles and Guidelines for Water Related Land Resources Implementation Studies, which became effective July 8, 1982 and which the Corps believes will eliminate some of the time-consuming analysis dealing with environmental issues. GAO also found that the Corps

APPENDIX I

has taken steps to improve its project planning, review, and preconstruction planning and engineering policies and procedures. In connection with the two-phase planning concept, GAO noted that the Corps expects this process will help to weed-out low priority projects more quickly and thus allow concentration on the most promising projects (although all cost sharing is currently on hold pending Congressional action). Concerning continuing planning and engineering, GAO found the Corps expects this new initiative could shorten the time between the authorization of projects and initiation of construction by several years. (pp. 10-13, GAO Draft Report).

RESPONSE. DOD concurs.

(085668)