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Report To The Congress

F THE UNITED STATES

Congressional Guidance Needed On Federal Cost Share Of Water Resource Projects When Project Benefits Are Not Widespread

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Many water resource projects provide benefits to large segments of the country; however, the Corps of Engineers and the Soil Conservation Service have built some projects that primarily benefit only a few landowners or businesses.

For Corps and Service projects, the non-Federal entity is seldom required to share a larger portion of project cost to compensate for these special benefits, such as land enhancement or increased local taxes. The Congress needs to clarify its intent regarding cost sharing on such projects.

Non-Federal entities provide land, easements, rights-of-way, and relocate utilities. The estimated costs of such items are shown as the non-Federal cost share in project feasibility studies. GAO found that the estimated non-Federal cost share for Service projects usually contained extraneous cost items which are not actual project costs. Such costs inflate the total project cost and also make the non-Federal "share" appear much higher than it actually is. GAO says this practice should be stopped.





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COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20848

B-166506

To the President of the Senate and the Speaker of the House of Representatives

This report describes water resource projects that provide a significant amount of special localized benefits at the Federal taxpayers' expense.

We made our review to demonstrate the need for additional non-Federal cost sharing for water resource projects. The information contained in this report may be useful to the Congress in considering the authorization of future water resource projects.

We are sending copies of the report to appropriate House and Senate Committees; the Director, Office of Management and Budget; the Secretaries of the Army and Agriculture; and sponsors of the projects discussed in the report. We will also make copies available to interested organizations as appropriate and to others upon request.

Comptroller General of the United States

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COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

CONGRESSIONAL GUIDANCE NEEDED ON FEDERAL COST SHARE OF WATER RESOURCE PROJECTS WHEN BENEFITS ARE NOT WIDESPREAD

DIGEST

The Corps of Engineers and the Soil Conservation Service finance, construct, and sometimes maintain water resource projects (such as dams, levees, and floodwalls) to solve national water related problems. Project costs are shared by the Federal Government and local project sponsors. Standard cost sharing formulas vary depending on the agency and the project purpose.

Some projects benefit large segments of the country but others benefit primarily a few landowners or businesses. Other projects provide significant localized benefits or secondary benefits such as land enhancement or increased local tax revenues which were not a part of the rationale for building the project, but nevertheless are a direct result of the project.

The Congress established a general policy limiting Federal participation in water resource projects to situations that provide widespread benefits or which cannot be undertaken by local levels of government or private enterprise.

Generally, before the Congress authorizes a project the responsible agency performs a feasibility study describing the problem (flooding, drainage, etc.), proposes alternate solutions and recommends the Federal and non-Federal cost share. The Congress authorizes the project primarily on the basis of the information and recommendations contained in the feasibility study. Once authorized the recommended cost share becomes a requirement. (See p. 1.)

For projects having either limited beneficiaries or secondary benefits as GAO has defined them, the Corps has adopted policies requiring local project sponsors to share a larger percentage of the total project cost. However, these policies are vague and sometimes inconsistently applied by the Corps district offices.

The Corps feels that its policies comply with existing legislation; however, it believes the congressional intent is unclear. (See p. 27.)

The Soil Conservation Service, on the other hand, recognizes that such benefits accrue on some of its projects but it does not require increased non-Federal cost sharing because it believes it does not have adequate legal authority. (See p. 29.)

In GAO's opinion, both agencies have the legal authority to require non-Federal entities to share a larger percentage of project costs. (See p. 14.)

SOME PROJECTS PROVIDE SIGNIFICANT LOCAL BENEFITS

GAO believes that the Secretaries of the Army and Agriculture should increase the non-Federal share of project costs for federally assisted water resource projects which benefit only a few landowners or businesses or provide significant special localized or secondary benefits.

Both the Corps and the Service build water resource projects that provide highly localized benefits at the Federal taxpayers' expense. Of the 14 projects GAO reviewed, estimated to cost over \$447 million, 11 projects totaling \$259 million provide highly localized benefits. The Federal share for these projects was \$211 million, or 81 percent of the total project costs.

The \$50 million navigation project proposed by the Corps' Norfolk district is an example.

It is expected to benefit only three users. One user is expected to receive 86 percent of the project benefits and could completely repay project costs in 3 years with its estimated annual transportation savings. Instead, the Nation's taxpayers, if the project is approved, may have to pay for approximately 98.5 percent of the project. (See p. 16.)

GAO found examples of similar situations around drainage, navigation, and local flood control projects constructed with Federal tax dollars. (See app. I.)

National concerns and priorities have changed. Increasing competition for the Nation's resources makes it important that the Federal agencies require users who benefit most to share more of the costs of projects that do not provide widespread benefits.

GAO recommends that the Congress clarify its intent regarding cost sharing for water resources projects which do not offer widespread benefits and provide additional guidance to Federal agencies involved in water resource development.

NON-FEDERAL COST SHARE USUALLY OVERSTATED

Local sponsors provide land easements, rightsof-way, and utility relocations for most projects. In feasibility studies, the estimated
costs of these items are shown as the nonFederal cost share. However, GAO found that
the estimated non-Federal cost share in the
Service's studies usually contain extraneous
cost items which are not genuine project costs.
This inflated the total project cost and also
made the non-Federal share appear much higher
than it actually was.

Each of the six Service projects GAO evaluated included land treatment measures as a project cost and also as a part of the non-Federal contribution toward project cost. Land treatment measures (such as leaving protective crop residue from harvested crops or crop rotation) protect the soil and are required as a condition of Service participation in

watershed protection projects. Land treatment represents 55 percent (\$655 million) of the total non-Federal share for all of the projects approved by the Service through September 1979. (See p. 33.)

GAO believes land treatment is important and should be strongly encouraged. However, including this estimated cost along with other cost items—such as direct construction or land acquisition—and showing it as the non-Federal share of project cost is mis—leading because:

- -- Land treatment is the individual landowner's responsibility.
- --Land treatment is strictly voluntary and the Service has little or no control over implementing recommended treatment.
- --The Service does not effectively monitor or follow up on whether these measures are applied, and if so at what cost.
- --The Service does not include land treatment measures when estimating each project's benefit/cost ratio.

The Secretary of Agriculture should direct the Administrator of the Soil Conservation Service to stop including ongoing land treatment measures as a part of the estimated project cost and non-Federal share in Service feasibility studies.

AGENCY COMMENTS

The Corps did not concur with GAO's proposal that it provide more details concerning national and local benefits to the Congress and that additional non-Federal contributions for projects with significant special localized benefits be required. The Corps also said that the report does not follow the United States Water Resources Council terminology. Further, the Corps stated that it only recommends cost sharing for projects forwarded to the Congress and that the Congress establishes the cost-sharing provisions. Finally, the

Corps did not agree that its policies regarding cost sharing are unclear, inconsistent with congressional intent, or that application of these policies is universally inconsistent.

GAO did not use the Water Resources Council's terminology in its report for several reasons. First, the benefits discussed in the report go beyond the benefits specifically defined by the Water Resources Council. In addition many readers are not familiar with these specific terms and GAO felt that general terms would be more easily understood by most readers. GAO agrees that the Corps only recommends cost sharing and that the Congress establishes cost-sharing provisions. This is discussed in detail on pages 1 and 25.

GAO stands by its position that Corps policies are unclear and sometimes inconsistent with congressional intent. GAO reviewed eight Corps projects at six district offices and found that personnel at these offices either defined terms contained in Corps regulations inconsistently or could not define these terms. (See p. 28.)

The Soil Conservation Service agreed that some projects may provide significant amounts of secondary benefits and that these should be considered when establishing Federal vs. non-Federal cost sharing. The Service felt that the Secretary, under existing legislation, did not have the authority to increase the non-Federal cost share for costs associated with flood control. Further, the Service generally agreed with GAO's recommendation that land treatment costs should be shown separately from the estimated project costs.

However, it felt that accelerated and critical land treatment measures should be included in project costs because they are critical to the attainment of the project purposes and full benefit realization.

GAO still maintains that the Secretary of Agriculture has the authority to establish equitable cost-sharing requirements for all authorized project purposes. The section of

the act referred to by the Service does not preclude the Secretary from requiring additional non-Federal payments for specific local benefits as discussed in this report. (See p. 29.)

GAO believes that if the Secretary can ensure that the required accelerated and critical land treatment measures are being applied prior to project construction, then it should not be misleading to include this portion of land treatment along with other related project costs. GAO still believes that all other land treatment costs should be itemized but shown separately on a different schedule. (See p. 38.)

The Corps, the Service, and the project sponsors provided more specific comments related to individual projects which have been considered and appropriate changes incorporated into the report. (See p. 6.)

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ABBREVIATIONS

GAO	General Accounting Office
ОМВ	Office of Management and Budget
scs	Soil Conservation Service

CHAPTER 1

INTRODUCTION

Federal water resource programs have evolved over the years as Americans reached a consensus that the Federal Government should become involved in solving serious water-related problems. For example, according to the National Water Commission's report, 1/ the Federal program, to make inland waterways navigable, had its beginnings in an era when the Nation had practically no transportation system for bringing products to its cities and coastal harbors for export. Since there were but a few settlers in many undeveloped parts of the country, it was obvious that if waterways to transport their goods were to be built, the Nation as a whole would have to bear the cost. Today, however, most regions are highly developed, competing modes of transportation have evolved, and the beneficiaries of new waterways are in a much better position to help bear the related costs.

In short, present conditions and needs differ greatly from those that existed when the Nation's water programs were first established.

HOW PROJECTS ARE AUTHORIZED

Generally, the Corps of Engineer's and Soil Conservation Service's (SCS's) project authorization procedures are similar. A non-Federal entity such as a city, county, or soil and water conservation district applies to the appropriate agency for assistance with its water-related problem (flooding, navigation drainage, etc.). The agency performs a feasibility study addressing alternative solutions, determines their feasibility, proposes possible solutions and recommends to the Congress the Federal and non-Federal cost share. The Congress authorizes the project primarily on the basis of the information and recommendations contained in the feasibility study. authorized by the Congress, the recommended cost share becomes a requirement. (For ease of expression in this report, the cost share recommended by the agency is referred to as required by the agency since the Congress ordinarily accepts the agency's cost-sharing recommendation.)

^{1/}The National Water Commission was established by the National Water Commission Act (P.L. 90-515) September 26, 1968. The Commission was to review water resource problems and identify opportunities for the Nation to most effectively use its water resources.

Benefit cost analyses, which provide a quantified measure of the proposed projects' worth, are also developed to show the projects' economic feasibility. Projects are seldom authorized unless project benefits exceed the project cost; in other words, the benefit/cost ratio must generally be greater than one (unity). Once the project is authorized by the Congress, the local sponsor 1/ must ensure that all the legally required items of non-Federal cooperation such as securing land, easements, and rights-of-way are provided.

During fiscal year 1980, the Corps appropriation for water resource project construction was approximately \$1.5 billion while SCS's fiscal year 1980 appropriation totaled \$83 million. At the six Corps districts we visited, approximately \$5.9 billion had been spent on water resource project construction between fiscal years 1969 and 1979. The SCS had spent approximately \$291 million on project construction in the three States we visited during the same 10-year period. (Some projects included in these totals are multipurpose projects which include project purposes, such as water supply, not considered in our analysis because the associated costs are repaid by the local sponsor.)

PROJECT COSTS AND BENEFITS

Project costs are shared by the Federal Government and local sponsor (non-Federal entity), such as a State or local government. Standard cost-sharing formulas, established by law, have evolved over a long time period and vary depending on the project purpose (such as flood control or navigation) and the Federal agency involved. The Federal agencies compute the recommended cost share which becomes required of the local sponsor after the Congress authorizes the project. The non-Federal share varies from virtually nothing for a Corps flood prevention reservoir project to as much as 100 percent for that part of a project designed to control erosion on private beaches. For most projects, the local sponsors provide land, easements, rights-of-way, and utility relocations.

Some projects provide widespread benefits to large segments of the country while others provide benefits that are restricted to a few beneficiaries (limited beneficiaries) or an identifiable group of beneficiaries. Other projects provide significant special localized benefits, such as

^{1/}A local sponsor is usually a State or local government or a soil and water conservation district.

land enhancement and increased local tax revenue, which are <u>secondary-type</u> benefits which go beyond the projects' intended purpose. The amount of special benefits vary depending on the type of project and project location. In some situations, land is worth virtually nothing before a project is built; but afterwards, it becomes very desirable—and very expensive—real estate.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our review objectives were to

- --determine congressional intent concerning cost sharing for projects with limited beneficiaries and/or special localized benefits;
- --determine whether the Corps and SCS policies and procedures met the intent of the Congress concerning the projects;
- --identify projects with limited beneficiaries and/or special localized benefits and determine whether the Corps and SCS required any additional non-Federal contributions; and
- --evaluate the items included in the non-Federal cost share.

We limited our review to projects with flood control, drainage, navigation, and recreation as a major purpose. We did not consider projects which are initially federally financed but whose associated costs are fully repaid by non-Federal interests, such as water supply or hydroelectric power projects.

We also limited our review to an evaluation or analysis of project benefits (number of project beneficiaries, types of secondary benefits, etc.). We did not attempt to verify or validate the benefit/cost ratio, but rather accepted it and assumed that each project was justified accordingly.

To accomplish our objectives, we reviewed the legislative history, agency records and budget justifications describing water resource projects' purpose, economic impact, project benefits, and required cost sharing. To evaluate Corps and SCS policies we identified approximately 75 projects from Corps budget justifications and SCS computer analysis based on the size of the benefited area and the number of persons benefiting. From these, we selected and reviewed in detail,

eight Corps and six SCS projects which are identified in the tables below. Our selection was based on the number of people benefiting, the size of the benefited area, and the amount of special localized benefits resulting from the project.

Corps Current Project Cost Estimates

Project/purpose	Federal share	Non-Federal share	Total
		-(000 omitted)-	
Blue River Channel, Mo. Flood control	\$ 94,100	\$ 16,900	\$111,000
Grays Harbor, Wash. Navigation	<u>a</u> /46,692	892	47,584
Hendry County Fla. Flood control	13,190	4,529	17,719
Kaskaskia River, Ill. Navigation	131,960	7,665	139,625
Richmond Water Fil- tration Plant, Va. Flood control	9,350	41	9,391
River Rouge, Mich. Flood control	29,400	8,700	38,100
Southern Branch, Elizabeth River, Va. Navigation	5,282	2,352	7,634
York and Pamunkey Rivers, Va. Navigation	a/47,200	3,300	50,500
Total	\$377,174	\$44,379	\$421,553
Percent	89.3	10.7	100

a/Report has not been authorized by the Congress, but it has been through the Corps' internal review process and the recommended cost sharing was not questioned.

SCS Current Project Cost Estimates

Project/purpose	Federal Share	Non-Federal Share	<u>Total</u>	
Bayou Boeuf, La. Irrigation/recreation	\$ 3,910	-(000 omitted)- \$ 4,070	\$ 7,980	
Bayou Rapides, La. Irrigation/ recreation	<u>a</u> /1,682	2,373	4,055	
<pre>Indian Creek, Va. Flood prevention/ drainage</pre>	<u>a</u> /106	80	186	
Pohick, Va. Flood control	2,333	4,279	6,612	
Sarasota West Coast, Fla. Flood prevention/ drainage	2,387	1,689	4,076	
South Sumter, Fla. Flood prevention/ drainage	2,089	1,212	3,301	
Total	\$12,507	\$ <u>13,703</u>	\$26,210	
Percent	47.7	52.3	100	

a/Actual cost.

Note: These figures may vary slightly from other figures contained in the report due to rounding.

To determine the extent of the special localized benefits, we interviewed agency and local sponsor officials and affected landowners. We interviewed agency officials and reviewed agency records at Corps and SCS headquarters in Washington D.C., Corps district offices in Jacksonville, Florida; Kansas City, Missouri; Norfolk, Virginia; St. Louis, Missouri; Seattle, Washington; and Detroit, Michigan. We also talked to officials and examined agency records at SCS State offices in Richmond, Virginia; Gainesville, Florida; and Alexandria, Louisiana; and county SCS offices at Fairfax and Chesapeake, Virginia; Alexandria, Louisiana; and Bushnell and Sarasota, Florida.

To compare overall cost-sharing percentages for a large number of projects, we collected cost-sharing data at each Corps and SCS office visited. For Corps and SCS, we compiled information on all the projects that had been active as of July 1, 1969, through September 30, 1979. We did not include any deauthorized projects in our data base.

AGENCY AND LOCAL SPONSORS COMMENTS

We requested agency comments on a draft of this report from the Corps, SCS, and the local project sponsors for each project we reviewed. Specific comments from the Corps and SCS and our evaluation are included at the end of chapters 2 and 3. Detailed comments from the local sponsors are included at the conclusion of each case study in appendix I. All written comments received from the Corps, SCS, and local sponsors are included in appendix II.

Many of the local project sponsors emphasized that their projects provided widespread or general benefits in addition to the localized or secondary benefits discussed in our report. We do not take issue with this. Almost any benefit that accrues to an individual or locality can also be claimed as a national benefit. If a project provides the opportunity for an individual to change or intensify the use of his or her property thus increasing the property's value and earning potential, this can be projected as an increase in national productivity. Likewise, national benefits can be claimed for any navigation project on the basis that the project will result in transportation savings which are passed on to the consumer. We accept this and agree that national or widespread benefits can be claimed for virtually any project.

However, some projects provide considerably more widespread benefits than others. Likewise, some projects provide a significantly higher percentage of localized or secondary benefits to an identifiable group of beneficiaries such as significant land enhancement. Still other projects benefit only a limited number of individuals or businesses.

When this occurs, we believe that the Federal Government and the Nation's taxpayers should share these secondary type benefits which accrue as a direct result of the project. We did not propose that any projects be terminated--rather that in the future, local sponsors/beneficiaries should share the special benefits with the Federal Government through increased non-Federal contributions toward project cost.

CHAPTER 2

CORPS AND SCS POLICIES FOR COST SHARING ON

PROJECTS PROVIDING SPECIAL BENEFITS ARE UNCLEAR AND

MAY NOT COMPLY WITH CONGRESSIONAL INTENT

Both the Corps and SCS have the legislative authority to require additional non-Federal contributions for projects which provide a high percentage of special local benefits; however, they rarely do so. The Corps and SCS have different policies concerning Federal vs. non-Federal cost sharing for water resource projects which have only a few beneficiaries (limited beneficiaries) or provide special benefits to those located around the project (special localized benefits). these cases Corps policies require the non-Federal entities to bear a higher percentage of total project cost than projects providing widespread benefits. The Corps district offices seldom incorporate or apply the policies when computing the Federal and non-Federal cost shares. SCS, on the other hand, recognizes that its projects occasionally provide special benefits. However, it does not require additional non-Federal funds to compensate for these benefits when establishing the non-Federal share of project cost. SCS believes its enabling legislation does not specifically require it to collect more non-Federal funds.

CORPS POLICIES ARE INCONSISTENTLY APPLIED BY DISTRICTS

For most water resource projects, legislation and Corps policies require that the non-Federal entities provide the necessary land, easements, rights-of-way, and, if appropriate, operate and maintain the project. These requirements are well defined and usually met. Corps policy also requires that non-Federal entities provide additional contributions for projects which provide special secondary-type benefits. However, it seldom requires additional non-Federal contributions. Its regulations addressing special localized and secondary benefits in some cases are vague, containing undefined terms which are sometimes inconsistently interpreted, defined and applied by the various Corps district offices. In some instances, these regulations may also be inconsistent with congressional intent.

Corps has policies covering three special beneficiary situations

According to the Corps 1979 "Digest of Water Resources Policies and Authorities," 1/a fundamental congressional objective concerning Federal participation in water resource development is that such development should make an optimum public contribution. At the same time, the Congress seeks to maintain a reasonable balance between Federal responsibilities and those left with the States and other non-Federal entities. The Congress has generally established, in existing water resource legislation, that the Federal Government should

- --undertake only those activities which local levels of government or private enterprise cannot do as readily or as well from the standpoint of the national interest;
- --bear a part of project costs for programs that benefit the Nation as a whole, or are deemed necessary to protect the interest of future generations; and
- --not consider all project purposes to warrant equal or maximum Federal participation.

The costs of water resource projects under the Corps jurisdiction are shared between Federal and non-Federal interests in accordance with: (1) provisions of general river and harbor, flood control, and other legislation, (2) special acts authorizing specific projects, and (3) executive branch administrative instructions. The administrative instructions represent interpretations of law or discretionary authority for instances where the cost-sharing rules are not specified by law.

Legislative authorizations have established general rules for cost sharing (such as the land, easements, and rights-of-way policy of section 3 of the 1936 Flood Control Act as amended) or have otherwise prescribed percentages of costs to be required by non-Federal entities. Other requirements such as section 2 of the River and Harbor Appropriation Act of 1920 indicate, in our view, that the congressional intent was

^{1/}The "Digest of Water Resources Policies and Authorities" is a pamphlet which provides a summary of existing administrative and legislative water resource policies and authorities pertinent to the civil works activities of the Corps of Engineers.

to require additional non-Federal contributions (over and above the established standard percentages) in certain circumstances. The act states that:

"Every report submitted to Congress * * * shall contain a statement of special or local benefit which will accrue to localities affected by such improvement and a statement of general or national benefits, with recommendations as to what local cooperation should be required, if any, on account of such special or local benefit."

While section 2 only applies to navigation projects, similar considerations apply to flood control projects because of another provision of law (33 U.S.C. 701 (1976)).

The Corps had not fully complied with these requirements in the feasibility studies we reviewed. Although their studies sometimes discuss land enhancement and other secondary-type benefits, they do not clearly summarize or contrast special local benefits and general national benefits or specify appropriate non-Federal cooperation which should be required because of secondary or special local benefits. The Assistant Chief, Planning Division, told us that if the feasibility study does not specifically address these benefits, it can be assumed that the special benefits, when compared to the general or national benefits, were not significant enough to require additional contributions.

Subsequent to the 1920 River and Harbor Appropriation Act, the Corps adopted implementing regulations which recognize certain special beneficiary situations addressed in the act. Its regulations and policies support the view that when large special or secondary benefits accrue to a few beneficiaries, additional non-Federal contributions should be considered. The Corps has identified the following situations which could warrant additional non-Federal contributions toward project cost.

- --Windfall land enhancement benefits of unconscionable magnitude accruing to limited special interests resulting from reduced flood hazards.
- --Special benefits accruing from navigational improvements that would benefit a single user.
- --Enhanced land values resulting from dredged material disposal excavated from navigation projects.

Corps policy on windfall land enhancement benefits is unclear and inconsistent with legislative intent

The Corps established its policy on windfall benefits in a July 1961 memorandum entitled, "Federal Participation in Flood Control Developments that Encourage Land Utilization." The memorandum stated:

"Where windfall benefits of unconscionable magnitude will accrue to limited special interests, reporting officers will carefully describe the situation and state the basis considered appropriate for either eliminating or requiring special local cooperation on this account."

In essence, this requires cost sharing only when obvious windfall benefits accrue to <u>limited special interests</u>. In an August 25, 1967, Corps memorandum, enhancement benefits were further defined. The memorandum suggested that enhancement benefits be considered windfall benefits requiring additional cost sharing when

- -- the magnitude of the enhancement benefits exceed a certain percentage (initially set at 20 percent of the total flood control benefits) and
- -- the distribution of benefits to one landowner exceeds a certain percentage (initially set at 20 percent of the total flood control benefits).

Corps personnel in the six districts we visited were either unable to define or inconsistently defined the terms "limited special interests" or "windfall benefits of unconscionable magnitude." Officials at the district offices said that little additional guidance or clarification had been given as to how or when these regulations should be applied. None of the officials in the districts we visited thought they had any projects with windfall benefits of unconscionable magnitude that required additional non-Federal contributions.

In addition to being unclear, we believe that the Corps policy of requiring additional non-Federal participation only when these "obvious windfall benefits" accrue to <u>limited special interests</u> is inconsistent with the legislative intent. The Corps told us that this policy was based on section 1 of the 1936 Flood Control Act.

Section 1 of the act states that the Federal Government should participate in a flood control project

"* * if the benefits to whomsoever they may accrue are in excess of the estimated costs, and if the lives and social security of people are otherwise adversely affected."

We were unable to establish from our legislative review that the number of persons receiving obvious windfall benefits would change the nature of the benefits. Accordingly, we concluded that no distinction was intended between limited special interests receiving windfall benefits or a larger number of beneficiaries receiving similar benefits.

Corps "single user" policy for navigation projects may be inconsistent with congressional intent

present Corps policy requires that local sponsors contribute 50 percent toward navigation project construction costs if only one project user has been identified. In addition, the local sponsor must contribute 50 percent toward the project's operation and maintenance costs if it is a new channel. These requirements for annual contributions end when the Corps determines that multiple use--defined by the Corps as two or more users--begins. In other words, as soon as a second user is found, the Federal Government will eliminate the local sponsor's 50 percent contributions.

We believe that this policy is inconsistent with legislative intent. According to the Corps, its single-user policy is based on section 2 of the 1920 River and Harbor Appropriation Act which states:

"Every report submitted to Congress in pursuance of any provision of law for a survey, in addition to other information which the Congress has directed shall be given, shall contain a statement of special or local benefits which will accrue to localities affected by such improvement and a statement of general or national benefit, with recommendations as to what local cooperation should be required, if any, on account of such special or local benefit."

An examination of the legislative history showed that this provision was added by the Senate Committee on Commerce during the legislative process. The committee recognized that sometimes greater non-Federal cooperation was needed in river and harbor improvements. It acknowledged that several port districts had been established and had made substantial contributions to navigation improvements through taxes levied. The committee further stated that many projects produced more local benefits than national benefits and when such local benefits can be approximately measured, the community should share in its cost. The amendment was considered to be a way to develop a general policy on presentation of the local benefits of a project to be used as a basis in determining the amount of non-Federal cooperation.

From our review, it seems clear that the purpose of the statement concerning "special or local benefits," "general or national benefits," and required non-Federal cooperation, is to secure a higher non-Federal contribution when substantial direct localized benefits exist. The Senate report recognized that this kind of determination could not be made with great precision—the approximate measurement of localized benefits would be sufficient.

The Corps, however, has equated multiple user with general or widespread benefits and single user with special or localized benefits. Therefore, the Corps does not require the local sponsor to share a larger portion of project costs as long as there are two or more users. This rule of thumb appears inappropriate. It does not provide for circumstances where project benefits are substantially localized regardless of the number of users, or the converse where project benefits could be of national importance although there is but one local user. Further, automatically converting a project regarded as having special or localized benefits to one with general or widespread benefits when a second user is later obtained highlights the inconsistency of the Corps' policy.

While section 2 of the act literally only requires the Federal agency to include a statement of local or national benefits and any required local cooperation in feasibility studies, its purpose is to secure additional non-Federal contributions in proper circumstances. The Corps policy appears to run counter to this purpose. Accordingly, we believe the Corps' multiple use policy is not in conformity with the intent of section 2 of the 1920 River and Harbor Appropriation Act.

Corps policy on land enhancement of disposal sites is inconsistently applied

The third special situation where the Corps requires additional cost sharing is when special benefits accrue to landowners because material excavated from a river or

channel bottom is deposited on their land often enhancing land values. Corps policy requires that non-Federal entities provide a cash contribution equal to 50 percent of the land enhancement value assigned to the dredging material.

We believe the Corps' policy on land enhancement of disposal areas is being applied to navigation and not to other project purposes, such as flood control. The policy should apply to all project purposes, but generally the Corps only requires additional cost sharing for navigation projects. For example, the Corps recognized land enhancement on dredged material for the Southern Branch of the Elizabeth River navigation project (See p. 56). Other types of projects also require deepening and straightening of channels producing large amounts of dredged material. For example, the Corps did not consider the land enhancement value at disposal sites for the Blue River Channel flood control project. (See p.43). None of the other flood control projects in our review produced any dredged material.

SCS DOES NOT USE AUTHORITY TO REQUIRE MORE NON-FEDERAL FUNDS

SCS does not require non-Federal entities to provide a larger percentage of the total cost for projects with land enhancement benefits, windfall profits, or limited beneficiaries. They agree that such benefits occur, but do not consider them when allocating project costs between the Federal Government, States, and local sponsors. SCS officials stated that their reason for ignoring these benefits is that they were not specifically addressed in their enabling legislation—The Watershed Protection and Flood Prevention Act of 1954.

However, our review of the legislative history of the 1954 act revealed that the Secretary of Agriculture has the authority to establish equitable Federal and non-Federal costsharing requirements. The congressional discussion of the bill indicates that equitable cost sharing between the participants should be in proportion to the benefits received. The Chairman, House Committee on Agriculture, defined equitable cost sharing as a 50-50 proposition between the Federal Government and the local sponsors.

Even though SCS' authorizing legislation did not specifically discuss special beneficiary situations such as windfall profits or land enhancement, it did provide the Secretary of Agriculture with the discretion to establish equitable cost-sharing requirements. We believe SCS is within its legislative authority to require additional contributions from local sponsors in special beneficiary situations.

CONCLUSIONS

Although we believe the Corps and SCS have the legislative authority to require additional non-Federal contributions for projects with a high percentage of local benefits, they rarely do. The Corps and SCS have different policies for requiring larger percentages of project costs from local sponsors for projects providing limited or special benefits.

The Corps' policies require additional non-Federal share for specific situations—obvious windfall benefits, single—user navigation projects, and land enhancement on dredged materials. These policies are unclear, inconsistently applied, and are, in some instances, inconsistent with congressional intent. The Soil Conservation Service does not require a larger percentage of non-Federal share even though they agree such benefits occur.

The Congress recognized that some projects provided primarily localized benefits as early as 1920, when the Nation's inland waterway system was in its early developmental stages. Its intent to require a larger percentage of total project cost from non-Federal entities to compensate for the localized benefits seems even more appropriate in light of the highly developed transportation system which has developed over the years.

The impact of Corps and SCS policies concerning special beneficiary situations is discussed in the following chapters.

CHAPTER 3

SOME WATER RESOURCE PROJECTS

DO NOT PROVIDE WIDESPREAD BENEFITS

The Corps and SCS, after congressional approval, finance, construct, and often maintain water resource projects. In some instances, these projects have only one primary beneficiary or provide special localized benefits—such as increased earning potential or extraordinary land enhancement—to certain groups, businesses, or individuals primarily at the expense of the U.S. taxpayer. However cost sharing between Federal and non-Federal entities for these projects is generally the same as for other projects providing more general widespread benefits.

Legislation and procedures generally require local project sponsors to provide the necessary land, easements, rights-of-way, and utility relocations for most projects except flood control reservoirs. For projects providing benefits such as beach erosion control, the local sponsor is also required to contribute a designated percentage of the total project construction cost. If the land, easements, and rights-of-way do not fulfill the required non-Federal contribution, cash contributions are required. The traditional formulas establishing the required non-Federal share have evolved over the years as new agencies, programs, and project purposes have been authorized by the Congress.

Although many variations in the traditional cost-sharing formulas exist, the requirements are reasonably well defined and are usually met.

However, when the projects benefit only a small group or yield significant secondary or special localized benefits, the Federal Government rarely requires a larger percentage of project cost from local sponsors. Corps policies and procedures (as discussed in ch. 2) address limited beneficiary situations, but their requirements are vague and inconsistently applied at the various districts. Although SCS recognizes that these situations occur, their policies and procedures do not address these issues.

Consequently, some project beneficiaries have reaped significant special localized benefits at the Federal tax-payers' expense. The following synopses briefly identify and discuss several water resource projects which we believe provide significant special or localized benefits to identifiable beneficiaries. Additional information concerning each project is included in appendix I.

SOME PROJECTS HAVE ONLY A FEW BENEFICIARIES

In 4 of the 14 cases we reviewed a high precentage of project benefits went to only a few people or businesses. Estimated project costs ranged from about \$7 million to \$111 million.

Project name/ purpose	Location	Total Cost	Federal Cost	Number of bene-ficiaries
		(000 on	nitted)	
Blue River Channel Flood control Hendry County	Missouri	111,000	94,100	<u>a</u> /281
Flood control Southern Branch of	Florida	17,719	13,190	<u>b</u> / 21
Elizabeth River Navigation	Virginia	7,634	5,282	2
York and Pamunkey Rivers				
Navigation	Virginia	50,500	47,200	<u>c</u> / 3

<u>a</u>/One company will receive 55 percent of total project benefits.

York and Pamunkey Rivers Navigation Project

The York and Pamunkey Rivers Navigation Project in Virginia is an example of a proposed project which will benefit a limited number of identified users. (See p. 61). The project was internally approved by the Corps in 1973, but has not yet been authorized by the Congress. Although it is expected to provide transportation savings to only three users, additional non-Federal contributions were not recommended.

The recommended plan provides a two-lane navigation channel. The estimated total project cost is \$50.5 million of which the non-Federal share is estimated at \$3.3 million (6.5 percent). The non-Federal share is for lands, levees, spillways, relocations, berthing areas, and access channels.

b/Four landowners have control over 61 percent of benefited area.

<u>c</u>/One company will receive 86 percent of total project benefits.

The project has only three identified users, two of which are expected to receive 98.5 percent of the total project benefits. It provides a more economically efficient method of transporting oil to the American Oil Company and the Virginia Electric and Power Company. It is also expected to maintain depth in the York River entrance channel sufficient for present and future use by the Navy.

The estimated <u>annual</u> benefits for each project beneficiary are shown below.

Beneficiary	Amount	Percent
American Oil Company Virginia Electric and	\$17,013,800	86.4
Power Company U.S. Navy	2,386,200 300,000	$\begin{array}{c} 12.1 \\ 1.5 \end{array}$
Total	\$ <u>19,700,000</u>	100

Additional non-Federal contributions were not recommended by the Corps despite the fact that the project is expected to benefit only three users and one user is expected to receive 86 percent of the estimated annual savings. One of the beneficiaries, American Oil Company, could completely repay the project cost in 3 years with its annual transportation savings. Instead, the Nation's taxpayers, if this project is approved, would have to pay for 98.5 percent of the project.

IDENTIFIABLE BENEFICIARIES SHOULD MAKE ADDITIONAL CONTRIBUTIONS

Some projects built by the Corps and SCS provided significant special localized benefits to direct, identifiable beneficiaries. These benefits can accrue in the form of increased earning potential, land enhancement, or in the case of a State or local entity, increased local real estate and income tax bases.

In these situations, the Federal Government is subsidizing individuals or groups of individuals who often have the ability (because of increased earnings) to make additional contributions.

Pohick Watershed Flood Prevention Project

The SCS Pohick Watershed project in Fairfax County, Virginia, provides significant increased income to housing

developers and increased tax revenue to Fairfax County. (See p. 69.) The project is creating choice lakefront property within 17 miles of Washington, D.C. SCS did not require any additional non-Federal contributions for these benefits.

The Pohick Watershed was the first SCS flood prevention project undertaken in a watershed being totally converted from rural to urban land use. It was authorized in 1968 because of the anticipated rapid change in land use. The plan was to supplement an overall development plan for an area rapidly converting from nearly natural cover conditions to an area of intensive urbanization.

In June 1970, SCS estimated the project construction and installation would cost \$1,878,520 with the Federal share being \$904,142 and the non-Federal share \$974,378. The project consists of seven floodwater retarding structures and is about 70 percent complete.

The project provides special local benefits to a small number of housing developers. After the SCS project was authorized and construction started, developers began building large subdivisions in this formerly undeveloped area. In addition to the homesites surrounding the lakes, many sites are directly on the lakeshores. At project completion, the seven lakes formed by the floodwater retarding structures will create 571 choice lakefront homesites. Subdivisions have already been completed around four of the seven lakes. According to local real estate agents and county officials, homes in Fairfax County with a lake view sell at a \$2,000 premium; therefore, the developers could receive additional income of \$1,142,000 because of the lakefront sites. development company building a subdivision around one of the lakes paid \$104,000 to increase the lake size. The subdivision has 150 lakefront homesites, and as a result of the sites, the company received additional gross income of \$300,000.

The Fairfax County real estate tax base has increased greatly during the period 1970 to 1979. Overall, the total county assessed value has increased 146 percent while the value in the Pohick Watershed area has increased about 1,800 percent. County officials did not know how much the project contributed to the 1,800-percent increase in value. However, with the advent of the SCS project and a county sewage system the project area developed rapidly. Real estate values in the project area increased \$1.1 billion from 1970 to 1979 resulting in additional annual county tax revenues of approximately \$17 million.

SCS has not required additional non-Federal contributions to compensate for these special localized benefits. We believe the local sponsor should have contributed more because there were readily identifiable beneficiaries who receive significant secondary benefits because of the project.

Hendry County Flood Control Project

In Hendry County, Florida, the Corps has planned a \$17.7 million flood control and water supply project which will benefit a total of 21 local farmers/corporations—four owners control 61 percent of the benefited land (See p. 46.) Although the Corps considers this project a flood control project, it will also provide major drainage benefits to vast amounts of marginal grassland which can then be used for more intensified ranching and farming operations (land enhancement). It also will increase the county's tax revenue. Even though the project had identifiable beneficiaries and may result in substantial land enhancement, the Corps did not request additional non-Federal contributions.

Special localized benefits will accrue to identifiable beneficiaries

The Corps analysis of future land use acknowledges that the project will permit 5,400 acres--presently used for pasture, rangeland, woodland, and truck crops cultivation -- to be upgraded for sugarcane production. The four largest landowners have stated that once the project is complete, they plan to grow sugarcane on land that was previously less productive. The largest landowner, a corporation that owns 34 percent of the project land, stated that the project will greatly improve its economic potential because an additional 3,200 acres of sugarcane could be grown on land previously used for a less productive purpose. A large sugar company, the second largest landowner, plans to move current cattle operations to its 17,846 acres in the water supply area. This move will allow them to develop their present ranch near Clewiston, Florida, into sugarcane, which they indicated would be more profitable. The largest family farm landowner also plans to convert 960 acres of land from cattle to sugarcane when the project is completed. Another rancher indicated plans to produce sugarcane on land currently used as pasture but has not determined the exact acres involved.

In addition, the project could provide a large land development company an estimated additional \$18 million gross income from sales. In 1975 the company transferred 2,560

acres to the Central County Drainage District which presently uses the area for flood control water storage but the land will revert back to the development company after project completion. The company plans to develop the land and incorporate it with 16,000 acres which have already been subdivided into homesites currently selling for about \$7,000 per acre. In a letter to the Corps, the company's Vice President stated that they would develop this additional land into 1- to 1-1/4-acre plots.

Subsequently, the land will be reinstated on the Hendry County tax roles and generate estimated additional tax revenues of approximately \$100,000 annually—a direct benefit to Hendry County.

Mechanism is available to collect additional non-Federal contributions

Contributions above the required non-Federal cost share were not requested by the Corps although the Hendry County project has only 21 readily identifiable beneficiaries (in addition to the county itself), and the local sponsor already has an established system to collect additional revenues.

The local sponsor, South Florida Water Management District, was established by the State of Florida to represent non-Federal interests on all matters pertaining to the Corps Central and Southern Florida project. The district maintains and operates numerous drainage canals as well as completed Corps projects and obtains its funds from ad valorem taxes and State grants. Taxpayers pay a water management millage which is collected by each county within the district and transferred to the district.

In fiscal year 1978 the district received approximately \$20 million in revenue from ad valorem taxes. Additional grants from the State of Florida amount to \$3 million. In the Okeechobee Basin the water millage was .397 (a typical property owner whose home is assessed at \$30,000, less homestead exemption, paid a bill of just under \$10 for fiscal year 1978).

The district also has an extensive tax base for the ad valorem taxes. The district's assessed property valuations have risen from \$1 billion in 1950 to over \$52 billion in 1977, and the 1979 district millage of .397 is below its .650 rate history average—the millage has been as high as

1.0 for 3 years during its 28-year history.

In addition, Hendry County is also a direct project beneficiary. The increased property values for land within the project area will generate additional tax revenues (as discussed earlier, the district will collect an estimated \$100,000 annually from 2,500 of the estimated 165,000 project acres). A Corps official from the Jacksonville District said that increased tax bases were not considered by the Corps when evaluating project benefits and computing non-Federal cash contributions.

Additional income will accrue to Hendry County as well as to a number of identifiable beneficiaries, providing a ready source of funds to help finance a higher percentage of project costs. We believe that it would have been appropriate to require additional local contributions from those who receive the project benefits.

Richmond filtration plant

The Richmond, Virginia, filtration plant—a \$9.4 million flood control project—authorized by the Congress in 1976 and designed to protect the city's water filtration plant is an example of a Corps project whose Federal cost share could have been reduced. The beneficiaries are readily identifiable—the city of Richmond, Henrico County, and those who depend on the city water system for their water supply.

However, the most recent cost estimates allocate approximately 99.6 percent of project cost to the Federal Government and only 0.4 percent--primarily city-owned land which will be contributed to the project--to the local sponsor.

According to the Corps Norfolk District project manager, this project is the first of its kind, and the Corps expects this project to set a precedent for the Federal Government to protect public water systems across the country which have traditionally been built in the flood plains. Richmond's filtration plant was out of service for about 3 days in 1972 because of flooding from tropical storm Agnes.

The Corps proposes to protect the system against the standard project flood (estimated to have an average flood frequency of about once every 360 years). The city, however, has already taken steps—since Agnes—to provide what their Department of Utilities Chief of Plants described as protection against a flood having an average flood frequency of 100 years.

If the Corps were building a project to provide a municipal and industrial water supply for the city, standard cost sharing would require that the city repay all associated project costs plus interest. However, since the Corps proposes to protect an existing system with a local flood protection project, the local sponsor will only contribute approximately 0.4 percent of the estimated \$9.4 million project cost.

Richmond's Department of Utilities Chief of Plants expressed doubts that the city would be able to finance the project without Federal assistance. If financed by the city, he said they would have to sell utility bonds and recoup their costs through increased water rates. He stated that the city is trying to hold its water rates down and that a large percentage of the city's core residents would not be able to pay this increased rate.

After reviewing the Corps feasibility study in 1976 the Office of Management and Budget (OMB) felt that the proposed project was not a Federal responsibility but one which should be undertaken by non-Federal interests as a feature of the water supply system—the cost of which is traditionally borne by municipalities. Their conclusion was based on the following observations:

- --The lack of flood protection is a design deficiency of the local water supply system.
- --The construction of an integral feature of the local water supply system lies outside the Corps area of responsibility.
- -- The project beneficiaries can be readily identified.
- -- The project financing is within the city's resources.

Using cost figures current at that time, OMB calculated that the average residential water bill would increase by about \$1.70 annually if the city constructed and financed the project by passing the cost on to the consumers.

Although project costs have escalated, even using current costs we estimate the average annual water bill would only increase by \$5.68 and the average monthly residential water bill would only increase by 47 cents. Our computations are based on the annual project cost of \$613,000 and the 108,000 customers that would benefit from the project. This would not seem to be an unreasonable increase or one which would place an undue hardship on the current customers.

CONCLUSIONS

When Federal water resource developments were first authorized, the programs were designed to encourage transportation, settlement, and economic development of the Nation. As early as 1920 the Congress recognized that some water resource projects provided a high percentage of "special local benefits," and in the 1920 River and Harbor Appropriation Act voiced its intent to require a higher non-Federal cost share for projects with a high percentage of special local benefits.

Conditions have since changed. Much of the Nation is now highly developed and new national concerns and priorities have surfaced (energy and the environment) and there is increasing competition for the Nation's resources. Because of these changing priorities it is even more important that the Federal agencies carefully evaluate the local versus the national benefits provided by each proposed project and consider this when recommending to the Congress the non-Federal cost share.

Both the Corps and SCS have financed, constructed, and sometimes maintained water resources projects which

- --benefit a very few individuals or businesses or
- --provide significant special or localized benefits to an identifiable group of beneficiaries.

Although both agencies recognize these situations, they have rarely required additional non-Federal contributions (over and above established standard cost-sharing formulas) as compensation. Consequently, the Federal taxpayer, most of whom will receive no direct project benefit, pays for most of the associated project cost. We believe the Corps and SCS should have required additional non-Federal funds for each of the projects discussed in this report.

As discussed in chapter 2, the law requires that the Corps identify and discuss the national project benefits vs. limited special benefits and recommend appropriate non-Federal cooperation.

While section 2 of the 1920 River and Harbor Appropriation Act literally only requires that the Federal agency include its findings of local versus national benefits and recommend what the local cost share should be on the basis of these benefits, its purpose is to secure a higher non-Federal contribution under certain circumstances. We believe that the Corps' multiple use policy (discussed in ch. 2) does not fully conform with the intent of section 2.

Further the Corps did not specifically compare local versus national benefits in each of the studies we reviewed. We believe that a separate discussion of these benefits should be included in each feasibility study to fully inform the Congress of the nature of the project benefits and any additional non-Federal contributions which should be required.

The Secretary of Agriculture also has discretionary authority under the Watershed Protection and Flood Protection Act of 1954 to require additional non-Federal contribution for projects with limited benefits. (See p. 13.)

We believe that the Federal agencies should require local sponsors to share a larger percentage of project cost when significant special local benefits (secondary benefits) accrue to project beneficiaries.

In our draft report we proposed that the Secretary of the Army direct the Corps to provide the Congress more detailed information concerning the nature of project benefits as required by section 2 of the River and Harbor Appropriation Act. We also proposed that the Corps clarify its procedures and establish more specific criteria to help the District Offices determine when a larger non-Federal share of project cost should be required.

Further, in our draft report we proposed that the Secretary of Agriculture use his discretionary authority under the Watershed Protection and Flood Prevention Act of 1954 and collect additional non-Federal funds for projects with limited benefits. We recommended that the Secretary direct the SCS Administrator to prepare regulations which recognize "special beneficiary situations," and ensure that each office applies these regulations when preparing future studies.

AGENCY COMMENTS AND OUR EVAULATION

On August 7, 1980, we met with Corps officials to obtain oral comments because the agency could not respond within the 30 days allowed for submitting written comments. However, in a September 8, 1980, letter (see app. II), the Corps provided written comments on our draft report. The Corps did not concur with our recommendations, providing the following overall comments.

The Corps stated that:

"The Flood Control Act of June 22, 1936, recognized the fact that flood damages destroy portions of the national wealth and adversely affect national

productive capacity. That recognition has been followed by all studies since that time. Flood damages to anyone in the nation are measured and counted as benefits in this national program. The present term for these types of benefits as approved by the United Stated Water Resources Council, is "National Economic Development Benefits" (NED). Your report does not follow this definition for national benefits, and thus gives rise to considerable confusion. It also suggests implicitly the allocation of costs to beneficial outputs which are not now recognized in the computation of benefit-cost ratios or in the Federal decision process."

We are familiar with the Water Resources Council's terminology but chose not to use it for several reasons.

First, many of the "National Economic Development" benefits discussed in the report are secondary type benefits which directly accrue to individuals, businesses, or communities around a project, such as land enhancement and intensified or changed land use. Granted, such benefits also tend to increase the economic value of the national output, but the impact of such benefits is much greater for those beneficiaries whose land or income is directly affected or improved.

We believe that the report message is more clearly communicated to most readers by stressing the immediate impact these benefits have on the direct beneficiaries. Therefore, the report addresses these as special localized or secondary benefits (benefits which go beyond project purposes). For example, the Corps letter points out that flood damage destroys portions of the national wealth and adversely affects national wealth and national productive capacity. Projects are authorized and built to prevent such damage. However, in addition to flood damage prevention, the same projects often provide substantial secondary benefits which go beyond the authorized project purpose. In addition to flood damage prevention (a NED benefit which is related to the project purpose), secondary benefits such as significant land enhancement and changed or intensified land use accrue to individuals, businesses, and communities located around a project. These benefits also contribute to increased national productivity; however, the impact of the benefit is much greater to the individual whose income or property is directly affected or improved.

Secondly, many of those who read our reports are not necessarily familiar with the Council's precise definitions which Federal agencies use in their planning.

Some of these benefits, such as increased local tax revenue, as the Corps letter points out, are not presently recognized in benefit-cost analyses or cost allocation procedures. As long as these benefits are identifiable and can be quantified, it would seem reasonable that the local beneficiaries should share these secondary type benefits with the Federal Government through an increased non-Federal share.

The Corps also commented that:

"The draft report gives the impression that the Corps of Engineers established the cost-sharing for the various projects discussed therein. This is misleading, since the Corps of Engineers only recommends cost-sharing for projects it forwards to Congress for authorization. Such recommended cost-sharing is based largely on past Congressional guidance or administrative practice accepted by Congress. The Congress actually establishes the requisite cost-sharing provisions, and the Corps of Engineers carries out the will of the Congress."

The overall authorization process, as well as the legislative basis for establishing the standard Federal versus non-Federal project cost sharing is discussed both in chapters 1 and 2. On page 8 we specifically identified and discussed three situations which have served to establish cost sharing for various types of projects. The report states that:

"The cost of water resource projects under the Corps jurisdiction are shared between Federal and non-Federal interests in accordance with: (1) provisions of general river and harbors, flood control, and other legislation, (2) special acts authorizing specific projects, and (3) executive branch and administrative instructions."

The Corps statement that it "only recommends cost sharing for projects it forwards to Congress for authorization" is correct. We have revised the report (see p. 1) to better explain the authorization process and defined our usage of the word "require" to more accurately describe the legislative basis as well as the other factors involved in establishing cost-sharing provisions. In addition, as discussed in chapter 2, section 2 of the River and Harbor Appropriation Act required the Corps to provide information concerning local versus national benefits. The Corps had not done this in the studies we reviewed. Consequently, the Congress has not always received complete information about the nature of

project benefits which is one of many factors to be considered before it can effectively evaluate the Federal agencies recommended cost sharing.

The Corps said that our

"* * * draft report also states that the Corps of Engineers policies for the implementation of Section 2 of the River and Harbor Act of 1920 are inconsistent with the congressional intent of this statute. This is incorrect. The draft report does not present a compelling argument for interpreting this statute in a different manner than the U.S. Army Corps of Engineers has construed and implemented it over a period of sixty years. Most cost-sharing legislation has been enacted since 1920, lending complexity to any attempt to assess congressional 'intent', in that Congress itself has added specific 'flesh' to its 1920 'intent.'"

Our position as discussed in detail in chapter 2 remains as stated. The River and Harbor Appropriation Act of 1920 required that the Corps provide the Congress specific information concerning local versus national benefits. The reason as stated in the legislative history was to secure additional non-Federal cost sharing for projects providing a significant amount of special localized benefits. The Corps had not provided this information in the studies we reviewed.

The Corps said our interpretation of the legislative intent of section 2 of the 1920 River and Harbor Appropriation Act was incorrect without commenting on our analysis. It stated that its regulations had been in effect for 60 years as support for its position. The longevity of a policy does not mean the policy is consistent with congressional intent. The Congress must rely on Federal agencies to comply with both the spirit and letter of legislative requirements since they are unable to always perform a detailed review of each item brought to their attention. The Congress acts on information provided by the Corps in its feasibility studies and if it fails to comply with the intent of section 2 of the 1920 River and Harbor Appropriation Act which specifically requires showing the national versus local benefits with recommended cost sharing, then the Congress does not have complete information on which to make an authorization decision or effectively reinforce the agency's interpretation of a specific act. We still believe that the Corps has failed to meet the intent of section 2 of the 1920 River and Harbor Appropriation Act.

Finally, although other cost-sharing legislation has been enacted since 1920, the original act has not been amended and the intent of the act remains the same.

The Corps said that the

"* * report correctly indicates that Corps procedures call for consideration of special additional local sharing when it is determined the project provides special benefits or will benefit only a limited number of beneficiaries. It is usual Corps practice to recommend special cost sharing for navigation projects benefiting only a single user; where dredged material will enhance the landfill; when recreation navigation benefits are claimed; and where the project will result in large windfall land enhancement. We do not agree that Corps policies regarding cost sharing are unclear, inconsistent with congressional intent, or that application of these policies is universally inconsistent."

The report presents an accurate description of the Corps policies and procedures at the six Corps offices we visited; four were unable to define the terms "windfall land enhancement benefits" or "unconscionable magnitude." They stated that no written guidance has been provided to explain the terms identified in the Corps policy for cost sharing when projects provide windfall land enhancement benefits.

Our position that Corps policies--such as the single user navigation policy and windfall land enhancement--are inconsistent with congressional intent is discussed in chapter 2 and remains the same.

The Corps also said that:

"The report on the York and Pamunkey Rivers Navigation does not have any official status and will not be transmitted to Congress. Depending on the results of current studies at Norfolk Harbor, the York and Pamunkey Rivers Navigation Study may be reinitiated and would comply with current criteria and standards. Therefore, York and Pamunkey Rivers Navigation is a poor citation."

Our evaluation was aimed at the Corps's and SCS's policies concerning cost sharing and whether additional non-Federal contributions had been recommended under certain circumstances. We made no attempt to question or evaluate the Congress' authorization process.

We recognized and stated in the report that the project had not been authorized. However, the study was still considered a good example, because it had been through the Corps internal review process—District and Board of Rivers and Harbors—and was forwarded by the Chief of Engineers to OMB for its review. The recommended cost sharing had not been questioned during the review process. After OMB reviewed the project, it suggested that the study not be forwarded to the Congress for review and authorization until feasibility studies for three other related projects were completed. Therefore, this project met our criteria for project selection.

We still believe that the Corps

- --has built water resource projects which provide significant secondary-type benefits that were not accounted for in Federal and non-Federal cost sharing,
- --has not consistently required additional non-Federal contributions to compensate for these benefits,
- --has policies (such as the single user navigation policy) which are inconsistent with congressional intent, and
- --has the legislative authority to clarify and strengthen its procedures.

The Corps also provided more specific comments related to individual projects, which have been considered and appropriate changes incorporated into the report.

On August 27, 1980, we met with SCS officials to obtain oral comments because the agency had not responded within the 30 days allowed for submitting written comments. Subsequently, on September 26 written comments were received and have been included in appendix II.

SCS agreed that some projects provide significant secondary type benefits which go beyond the authorized purposes and when this occurs, the non-Federal entity should be required to increase its share of project costs. However, SCS felt that the Secretary under existing legislation, did not have the authority to increase the non-Federal cost

share for costs associated with flood control. SCS said that section 4(2)(B) of the Watershed Protection and Flood Prevention Act of 1954 requires the Federal Government to pay all construction cost related to flood control.

After further review of the legislative intent of the act, we still maintain that the Secretary has the authority to establish equitable cost-sharing requirements for all authorized project purposes.

Section 4(2)(B) while providing that project construction costs applicable to flood prevention should be borne by the Federal government does not preclude collection for project costs not required for flood control. Also, even where there is no extra cost to the government there is no prohibition of collection for special benefits conferred. For example, fill dirt which is used to enhance the value of low-lying property might be sold to the highest bidder.

SCS also provided more specific comments related to individual projects. These comments were considered and appropriate changes have been incorporated into the report.

Since the Corps feels that its procedures meet the general requirements of the law and have been further validated by project authorizations which were based on these procedures, we believe it is unlikely that they would implement the proposal contained in our draft report. Also, since SCS feels it does not have authority to increase the non-Federal cost share, it is unlikely that the Secretary would take action on our draft proposal. Therefore, we have directed our recommendation to the Congress, suggesting a clarification of congressional intent in this area.

RECOMMENDATION TO THE CONGRESS

We recommend that the Congress clarify its intent regarding cost sharing for future water resource projects which provide significant special local benefits and give additional guidance to the Federal agencies involved in water resource development concerning such projects.

CHAPTER 4

NON-FEDERAL SHARE

SOMETIMES INFLATED AND OVERSTATED

Federal legislation generally requires that local water resource project sponsors provide needed land, easements, rights-of-way, and utility relocations. This is true for most water resource projects except large flood control reservoirs. The costs associated with non-Federal requirements are estimated by the Federal agency in its project feasibility study and the estimated dollar amounts itemized and shown as non-Federal contributions toward project cost. We found that the estimated non-Federal contributions in SCS studies included extraneous items which we felt were not actual project costs. Inclusion of such items not only inflates the total project cost but makes the non-Federal share appear much higher than it actually is.

We believe that inflating or overestimating non-Federal contributions is a serious matter because a high non-Federal contribution could be related to cost effectiveness or interpreted by the Congress as a barometer of strong non-Federal support which, in turn, could influence their authorization decision. This conclusion was reached in part by the National Water Commission in its 1973 report. The report stated that the degree of non-Federal support and willingness of the State, local sponsor, and direct beneficiaries to invest in the project is one test of a project's cost effectiveness.

We evaluated six SCS projects and concluded that the dollar amount shown in feasibility studies as non-Federal cost for all of these were overstated and misleading as to the actual non-Federal contribution.

SCS ONGOING LAND TREATMENT COSTS SHOULD NOT BE SHOWN AS A NON-FEDERAL SHARE

SCS's feasibility studies are reviewed both internally and by the OMB before they are sent to the Congress for its review and project construction authorization. These studies show land treatment measures as an actual cost of project installation, as well as a non-Federal cost-sharing contribution. Land treatment measures that protect the soil—such as leaving protective crop residue from harvested crops or crop rotation in agricultural areas and sodding and seeding lawns for newly constructed structures in urban areas—are required as a condition of Federal participation in all SCS watershed protection projects.

Although land treatment must be included in feasibility studies as a condition of Federal participation, we believe that showing it as a project cost line item (comparable to direct construction or land acquisition) is misleading, for several reasons.

Land treatment application is the individual landowner's responsibility and is done strictly on a voluntary basis. SCS cannot require that the measures be accomplished nor do they effectively follow up to determine what measures were applied and if applied, at what cost.

In addition, SCS has an ongoing national program completely unrelated to watershed protection projects that encourages the same type land treatment across the country. Including land treatment in watershed projects allows SCS to encourage accelerated land treatment application. Finally, although land treatment costs comprise the bulk of the non-Federal contributions toward project cost, it is not included in SCS' benefit cost analysis.

SCS has several ongoing programs to encourage soil conservation and land treatment

Since 1935 the SCS--through its approximately 3,000 conservation districts-has encouraged and assisted individual landowners to conserve and develop the Nation's soil and water resources. Its land treatment programs are part of a continuing nationwide conservation operations program designed to encourage landowners to protect the soil and increase its richness. When the Watershed Protection and Flood Prevention Act of 1954 authorized SCS's watershed protection program, it provided a way for SCS to "accelerate" its nationwide land treatment program in any watershed area where the Congress authorized a project. SCS requires that land treatment measures be included as a condition of Federal assistance in connection with each project.

In fiscal year 1980 the Department of Agriculture spent approximately \$443 million on its land treatment program. This included \$199 million in technical assistance under its basic land treatment program, \$16 million for its Great Plains Conservation Program, \$215 million in Agricultural Stabilization Conservation Service funds (including low-interest, costsharing grants to farmers to help defray the cost of land treatment measures), and \$13 million in accelerated technical assistance under its watershed protection program--approximately 2.9 percent of the total land treatment program.

The land treatment measures encouraged under the water-shed protection program are basically the same measures which Agriculture would have encouraged landowners to apply under its regular land treatment program. The watershed protection program, however, provides an avenue for Agriculture to accelerate application of these measures by requiring work plans outlining Agriculture's suggested land treatment measures in the proposed project's watershed area.

Land treatment represents bulk of non-Federal share

Reporting land treatment as a project cost can be a misleading representation of the non-Federal share of project cost. This is further magnified because land treatment comprises the bulk of the non-Federal share of project cost.

As of September 1979 SCS had approved about 1,180 watershed protection projects at a total cost of about \$2.8 billion. Estimated land treatment cost (included in the total project cost and shown as part of the non-Federal contribution) for these projects totaled \$738 million--26 percent of the total project cost. The total non-Federal share or contribution toward project cost was shown as about \$1.2 billion or about 42 percent of the total project cost. The non-Federal land treatment measures totaled about \$655 million, representing about 55 percent of the total non-Federal contribution. These are also the estimated costs and costsharing ratios presented to the Congress in studies forwarded for its review and authorization.

As shown in the following table, the non-Federal contribution toward project construction drops significantly (from 41.7 to 25.2 percent) when land treatment is deducted from project cost.

Non-Federal Share of 1,180 Watershed Protection Projects With and Without Estimated Land Treatment Costs

Cost element	Total cost	Federal cost	Non-Federal cost
		-(000 omitted)	
Land treatment Land, easements, etc. Construction	\$ 737,854 344,674 1,758,886	\$ 83,016 14,476 1,558,510	\$ 654,838 330,198 200,376
Total project cost	2,841,414	1,656,002	1,185,412
Percent of project cost	100	58.3	41.7
Less land treatment	737,854	83,016	654,838
Adjusted total cost	\$2,103,560	\$ <u>1,572,986</u>	\$ 530,574
Adjusted percent of project cost	100	74.8	25.2

This table demonstrates that land treatment is the bulk of non-Federal contributions for all SCS projects and can significantly overstate both the total project cost as well as the non-Federal contribution toward project cost.

Land treatment is individual's responsibility and not effectively monitored by SCS

According to SCS the costs associated with land treatment are the individual landowner's responsibility. All suggested land treatment is strictly voluntary and although SCS encourages each landowner to apply these measures, they cannot require the landowners to perform any of the suggested treatments. In addition, it sometimes includes measures that are generally recognized as accepted farming practices which the landowner might apply even without a land treatment program.

Agriculture land treatment measures include such things as leaving protective crop residue from the harvested crop, crop rotation or planting cover crops after harvesting to protect the soil. In urban areas it includes sodding and seeding lawns for newly constructed structures or placing

straw-bale barriers which prevent erosion at construction sites. At some of the SCS projects we visited, costs associated with land treatment measures represented practices which the landowner would have done anyway--even without the program. For example, a district conservationist in Virginia said that the "cropland" land treatment measures estimated for the Indian Creek project located in Chesapeake, Virginia, represented normal operating expenses for planting and harvesting crops--operating expenses the farmers would have incurred anyway in day-to-day farming operations. These costs represented 78.3 percent of the project's total estimated land treatment measures.

Likewise, SCS's South Sumter Watershed Project in Florida had estimated local land treatment costs of \$518,850. The district conservationist said that measures such as the conservation cropping systems, pasture planting, wildlife habitat development, and farm ponds are often applied even without a project. The estimated cost for these measures was \$364,600, or 70 percent of the project's local land treatment costs.

Although strictly voluntary on the part of each landowner, the non-Federal land treatment costs are shown by SCS in their feasibility studies as part of the total project cost--comparable to non-Federal cash contribution toward project construction, or land easements and rights-of-way which must be secured by the local sponsor as part of their contribution toward project cost. Although shown as an actual project cost, SCS officials told us that there is no binding commitment on the landowner to apply these measures.

Furthermore, SCS had no system designed to "follow up" or determine what, if any, land treatment measures had been applied or at what cost. Consequently, SCS had little control over actual land treatment application and they seldom determined what the actual non-Federal contribution was. SCS officials at each of the offices we visited told us that they did not have a system designed to effectively follow up or monitor the application of land treatment and that there was no binding commitment by landowners to apply these measures. However, they still felt that land treatment should be included in the project cost because it contributes toward protecting watershed land, protecting projects from filling with sediment, extending project life, and ensuring that structures function properly.

However, SCS officials in Florida and Virginia agreed that showing land treatment as a project cost can distort the actual cost and non-Federal share because

- -- these costs are voluntarily paid by each landowner,
- --some measures would have been applied anyway,
- -- there is no procedure to determine whether the measures are actually applied and at what cost,
- -- they are not included in the benefit/cost analysis,
- -- they add substantial costs to the project which may never be incurred, and
- -- they make non-Federal interest and support appear much higher than it actually is.

Ongoing land treatment was not included in benefit/cost calculations

Although SCS shows land treatment cost as part of the total project cost and also as a non-Federal contribution, they did not include land treatment cost when calculating the project's benefit/cost ratio.

Benefit/cost analyses are developed and reported to the Congress to show the economic feasibility of proposed projects. The benefit/cost analysis is one of several factors considered by the Congress in project decisionmaking. It provides a quantified measure of a project's expected worth and thus serves a purpose similar to the estimated return on investment used in private business when expansion of facilities is considered. Water resource projects are seldom authorized or funded by the Congress unless the estimated project benefits exceed the estimated project costs.

The Associate Deputy Chief, Watershed Division, stated that land treatment was not included in the benefit/cost analysis prior to 1973. They are now required by the Water Resources Council's Principles and Standards to prepare a benefit/cost ratio for any land treatment measures. He felt that these costs were project related, but agreed that showing ongoing land treatment measures on the same schedule as other project costs could be misleading.

CONCLUSIONS

Land treatment is an important consideration and should be strongly encouraged along with SCS watershed protection projects. However, we believe that the way SCS currently shows land treatment in its feasibility studies—as a project installation cost—is confusing and misleading. The amount of non-Federal contribution may be considered as a barometer of the project cost effectiveness and non-Federal support. We believe that including land treatment as a project cost inflates the non-Federal share and is a very misleading representation for the Congress to use as a basis for project approval and authorization.

RECOMMENDATION

We recommend that the Secretary of Agriculture direct the Administrator of the Soil Conservation Service to stop including ongoing land treatment measures as part of the estimated project cost and non-Federal share in SCS feasibility studies. The estimated land treatment costs should be itemized but shown separately on a different schedule.

AGENCY COMMENTS AND OUR EVALUATION

SCS was unable to furnish written comments within 30 days, so on August 27, 1980, we met with SCS officials to obtain oral comments. Subsequently, on September 26 written comments were received and have been included in appendix II.

SCS generally agreed with our recommendation that land treatment costs should be shown separately from the estimated project costs. However, they felt that accelerated and critical land treatment measures should be included in project costs because they are critical to the attainment of the project purposes and full benefit realization. Accelerated land treatment includes measures relating to the project which cannot be adequately handled within an acceptable time by the ongoing conservation programs. Critical land treatment represents lands eroding above the average rate and the land involved is considered critical to the operation of the project.

SCS strengthened its monitoring procedures of both accelerated and critical land treatment measures in July 1978. The revised procedures require that 50 percent of accelerated and 75 percent of critical land treatment measures be applied as a condition for project construction. Agency officials felt these procedures alleviated some of the problems identified in our report.

The five SCS projects we reviewed were authorized before the 1978 policy revision. Further, none of the projects we reviewed identified any critical land treatment measures. All of the projects reviewed included accelerated land treatment measures; however, they represented only 6 percent of the total land treatment shown as part of project costs. We are not in a position to comment on the adequacy of SCS's revised monitoring policy for accelerated and critical land treatment measures since the projects we reviewed were authorized before the change. However, if the Secretary can ensure that the required accelerated and critical land treatment measures are being applied prior to project construction, then it should not be misleading to include this portion of land treatment along with other related project costs. We still believe that all other land treatment costs should be itemized but shown separately on a different schedule.

APPENDIX I

LIST OF CORPS AND SCS PROJECTS (PROPOSED AND AUTHORIZED) PROVIDING PRIMARILY SPECIAL LOCALIZED BENEFITS

Based on our review of 8 Corps and 6 SCS projects, we found that 11 had limited beneficiaries and/or a high percentage of special localized benefits, such as land enhancement and increased local tax revenues. The following table shows each project and identifies the type of special benefit(s) provided. Four of the 14 projects had a limited number of project beneficiaries. The remaining projects provided other types of localized benefits.

		Type of special	Appendix
Project	Agency	benefits	page no.
Blue River Channel			
Flood control			
Kansas City, Missouri	Corps	(a, b, c)	41
Hendry County			
Flood control			
Hendry County, Florida	Corps	(a, b, c)	46
Richmond Water Filtration			
Plant			
Flood control		_	=
Richmond, Virginia	Corps	(d)	51
Southern Branch of the			
Elizabeth River			
Navigation			
Chesapeake, Virginia	Corps	(a, b, c)	55
River Rouge			
Flood control	_		
Wayne County, Michigan	Corps	(d)	59
York and Pamunkey Rivers			
Navigation	_		63
Southern Virginia	Corps	(a)	61
Bayou Boeuf			
Irrigation and recreation		41.5	60
Alexandria, Louisiana	SCS	(b)	63
Bayou Rapides			
Irrigation and recreation		15.5	
Alexandria, Louisiana	SCS	(b)	66
Pohick Watershed			
Flood prevention	000	/ h	69
Fairfax County, Virginia	SCS	(b, c)	09
Sarasota West Coast			
Flood prevention and			
drainage	SCS	/b)	74
Sarasota, Florida	363	(b)	/4
South Sumter		•	
Flood prevention and			
drainage	scs	(b)	77
Sumter County, Florida	aca	(6)	, ,

Each of the projects listed above are discussed on the following pages of this appendix.

a/Limited beneficiaries.

b/Special localized benefits: land enchancement.
c/Special localized benefits: increase tax revenue.
d/Special localized benefits: other.

BLUE RIVER CHANNEL FLOOD CONTROL PROJECT

The Blue River Channel Flood Control Project in Kansas City, Missouri, provides special localized benefits basically to two beneficiaries—the city of Kansas City and Armco Steel (which will receive approximately half of the project's benefits). The project also enhances land located along the channel. The Corps, however, did not require any additional non-Federal contribution to offset these special benefits.

Status

The project was authorized in 1970. The Corps' initial proposal included four lakes and a 12-mile channel, but only the channel has been authorized for construction. As of early 1980 the Corps was waiting for the local sponsor to obtain the necessary rights-of-way before construction is started.

Description

The project runs 12 miles from 63rd Street, Kansas City, through a major industrial development area and then flows into the Missouri River. The project will widen and deepen the channel, reducing the 100-year flood zone 1/ by 8 to 10 feet.

Costs

The estimated project cost as of October 1979 is \$111 million. The Federal share is \$94 million and the non-Federal share is \$17 million.

Special localized benefits

The project provides special localized benefits primarily to Kansas City and Armco Steel. The city wants the project to protect its industrial development which contains the area's largest employers. The project will

--raise 1,944 acres out of the 100-year flood plain, allowing further industrial development;

^{1/}An area that has a 1 percent chance of flooding in any given year.

--create 5,500 new jobs over 20 years, and increase the city's tax earnings; and

--enhance 420 acres being filled with spoil materials.

In addition, Armco Steel--the other major beneficiary--will receive over half of the project's total flood control benefits.

The Blue River Valley contains heavy industrial development. Over 80 percent of the development land is used for manufacturing and transportation. The project will allow further industrial development on 1,944 acres, or 56 percent of the land now in the flood plain.

Future industrial development in the basin is contingent on the additional flood protection provided by the project. According to city officials, Kansas City had lost some of its industrial development over the years because of corporate tax disadvantages in Missouri. Consequently, industrial development had moved to Kansas, because its corporate tax system was more appealing to industry. Subsequently, Kansas City, Missouri, changed its tax structure making them comparable to the Kansas side of the city. City officials feel that the project will provide additional incentives and attract industrial development back to the Blue River Valley.

The project will also provide the city additional tax revenues. Kansas City collects an earnings tax which is equivalent to 1 percent of gross salaries earned in the city. The Corps stated in its Design Memorandum that total industrial employment in the flood plain is expected to increase by 5,500 positions over the next 20 years as a result of the project.

In connection with the project, 420 acres of presently unused land adjacent to the channel will be enhanced with materials dredged from the channel. The Corps recognized that several of the disposal sites will result in fairly large, relatively level areas, suitable for commercial development or city parks.

In addition, Armco Steel will receive approximately 55.5 percent of the total project flood control benefits estimated by the Corps. It sustained 66 percent of the total flood damages in 1961. Despite the benefits they will receive, Armco Steel has not strongly supported the project because they feel it will interfere with plant operation.

Armco officials have taken a hard line when discussing the project's construction. They have repeatedly stated that they will not tolerate any interference with the flow of steel. In meetings with Corps and city officials, Armco officials stated they want flood protection, but did not see any way to accomplish the construction without a shutdown which would cost \$1 million a day. They have told the city engineer that they would rather take their chances with floods than have the project construction interrupt their operations.

Non-Federal contribution

Kansas City, Missouri, is the local sponsor for the Blue River Channel Project, and is required to provide all the necessary lands, easements, rights-of-way, and bridge and utility modifications and relocations. In October 1979 the Corps estimated the non-Federal share at \$17 million. This includes \$14.2 million for lands and \$2.8 million for bridge and utility relocations.

The city is not required to contribute toward the increased value of land at disposal sites located along the Blue River Channel because of the Corps' inconsistent application of the cost-sharing policies relating to land enhancement on disposal sites. (See p. 12.)

The Corps Kansas City District Office used the policy which requires land enhancement benefits to be of an "unconscionable magnitude" before requiring additional cost sharing. The policy which requires additional local cost sharing for land enhancement of disposal areas—usually associated with navigation projects—was not considered appropriate for the Blue River Channel because it was a flood control project. If used, this policy would require an additional local cash contribution.

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Local sponsor comments (See app. II.)

The local sponsor stated that we did not recognize the regional importance of the businesses to be protected by the project. It also pointed out that the alternative of no flood protection improvement is costly to the Federal Government. The sponsor stated that if the project did not reduce the area of flooding by 1,944 acres it would be of no value and hence, would have no benefit. The sponsor said it cannot support or object to our statement that the project will create 5,500 new jobs over 20 years. It further stated that the creation of new jobs would be in the best interest of the Nation as well as the city.

As stated on page 6, we are not questioning the need for a project; however, we believe that local sponsors should contribute more to projects which provide a large amount of secondary or special local benefits. In addition to flood protection or flood damage prevention, the project allows intensification of industrial development on 1,944 acres which is a special local benefit that we believe the local sponsor should share with the Federal Government.

Our statement that the project will create 5,500 new jobs over 20 years was taken from the Corps Phase 1 Formulation and Economic Analysis of the project and was part of the project's economic justification. Further, some of the new jobs will be created by industries moving into the area (on land formerly in the flood plain) that would have located in other areas. Hence, many of the referenced widespread benefits (increase in Federal income tax base and reducing unemployment, etc.) would be realized elsewhere even without the project.

The sponsor felt that the enhancement of 420 acres is offset by the fact that the city is required to furnish 420 acres for the project, and 220 acres of the 420 acres to be enhanced is already protected from flooding. Further, it felt that the remaining land will not be as usable as we described. Finally, they stated that the spoil materials must be placed somewhere and any enhancement would simply be incidental to the project.

We believe that enhancement of 420 acres is not offset by the city's requirement to provide land for the project. Providing the necessary lands for Federal water projects has been a local sponsor requirement since the Flood Control

Act of 1936. This contribution of land is a standard practice and was not intended to be an exchange for special local benefits. Our statement on the usability of lands to be filled with dredged material was based on a letter from the Chief, Engineering Division, and memorandums by a Civil Engineer at the district office. Further, the fact that spoil materials have to be placed somewhere does not mean that the enhancement is of little value. If anything, it should call attention to the fact that the project is providing special local benefits, which the local sponsor should have been willing to share with the Federal Government.

The sponsor stated that while Armco Steel is the major industrial facility in the project area, the other businesses cannot be ignored. Further, there is no practical way of protecting the other businesses without protecting Armco Steel.

We previously identified the total number of businesses receiving flood protection in the draft report. However, Armco Steel is receiving over 50 percent of the total project flood control benefits. Since one business receives such a high percentage of project benefits and because the project allows for intensification of industrial development in the project area (a secondary benefit to the city), we believe that the local sponsor should have been required to share these special local benefits with the Federal Government.

HENDRY COUNTY FLOOD CONTROL PROJECT

The Hendry County Flood Control Project provides special local benefits to 21 landowners. The Corps is requiring a \$3 million cash contribution from the local sponsor for its share of the construction costs. However, this cash contribution does not consider certain special benefits accruing to the limited number of landowners receiving project benefits.

Status

The Hendry County flood control, drainage, and agricultural water supply project is part of the Central and Southern Florida Flood Control Project authorized in 1948. Four levees were constructed in the mid-1950s to prevent floodwaters originating on the then sparsely developed lands west of the levees from flooding the agricultural lands to the east. This construction and the subsequent increased development have aggravated flood problems on the lands west of the levees. The Hendry County project authorized in 1965 provides additional flood protection west of the levees. Authority for agricultural water supply was later obtained in 1968.

The Corps is waiting to receive a water quality certificate from Florida's Department of Environmental Regulations before starting construction.

Description

The project will provide a drainage channel by building another levee to the left of the existing levee. Drainage water will be pumped into the canal during periods of high water. The water supply aspect of the project will consist of a canal bringing irrigation water from Lake Okeechobee into the drainage canal during drought periods.

Costs

In January 1977 the Corps estimated the project cost at \$17.7 million (\$11.3 million for flood control and \$6.4 million for water supply) with the Federal share being \$13.2 million. The remaining \$4.5 million is to be provided by the local sponsor with \$2,955,000 in cash and the remaining \$1.5 million for land rights, relocations, and administrative items.

Benefits

Limited beneficiaries

The project will benefit a small number of landowners in Hendry County. The Corps has stated that "direct <u>flood control</u> benefits would accrue primarily to 21 landowners in this area." However, 13 landowners in the 34-square mile project area are receiving most of the benefits. Four of these landowners control 101,440 acres, or 61 percent of the total project area.

Two large landowners are corporations—Alico, Inc., and Fellsmore, a joint venture, whose land is leased by U.S. Sugar Corporation. Alico is the largest landowner with 35 percent of the land (58,240 acres). The land is currently used for cattle, timber, and vegetable farming. Alico has stated that its lands will become far more productive and capable of much greater development as a result of the project. U.S. Sugar leases 11,520 acres (7 percent of project area) owned by Fellsmore which is used for cattle and citrus.

The other two large landowners are family ranches, Hilliard Brothers and Jackman. Hilliard Brothers produces cattle and sugarcane on 20,160 acres (12 percent of the project). The Jackman ranch produces cattle on its 11,520 acres (7 percent of the project).

The water supply benefits will accrue to 13 landowners controlling 89,070 acres, with 11 of these also receiving flood control benefits, including Alico, U.S. Sugar, Hilliard, and Jackman.

Special localized benefits

The project is expected to change the future land use in Hendry County. The Corps analysis of future land use acknowledges that the project will allow 5,400 acres to become suitable for sugarcane. This acreage was land previously used for pasture, rangeland, woodland, and truck crops cultivation.

All four of the largest landowners have stated their plans to produce sugarcane upon completion of the project. The largest landowner, Alico, Inc., stated that the project will greatly improve the economic potential of 3,200 acres

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because sugarcane would be produced. U.S. Sugar Company, the second largest landowner, plans to move their cattle operation to 17,846 acres in the water supply area. This move will allow them to develop their present ranch near Clewiston into sugarcane which they consider to be more profitable. Hilliard Brothers, the largest family landowner plans to convert 960 acres of land from cattle to sugarcane when the project is completed. The Jackman ranch has also stated its intention to produce sugarcane on land currently used as pasture but has not determined the exact acreage involved.

In addition to encouraging sugarcane production, the project will provide the opportunity for Montura Ranch Estates owned by Pan American Land Development Corporation to sell additional land valued at \$18 million. The project will drain 2,560 acres currently used for flood control storage. Montura Ranch Estates has stated its intention to develop this land into 1- to 1-1/4-acre plots to sell for about \$7,000 an acre. In addition, the developed land will generate approximately \$100,000 annually from taxes which will be a direct benefit to Hendry County.

Non-Federal contribution

As of January 1977 the total project costs were estimated at \$17,719,000. The initial Federal cost was \$13,190,000 with the remaining \$4,529,000 provided by the local sponsor. The non-Federal share is broken down as follows.

Cash	\$2,955,000
Land, rights-of-way	586,000
Disposal areas	12,000
Relocations	969,000
Administration costs	7,000
Total	\$4,529,000

The district's cash contribution of \$2,955,000 is based on the cost-sharing policies for the Central and Southern Florida projects that have been estimated by the Corps in several House documents. The first Corps report in 1948 recommended a 15-percent cash contribution by the local

sponsor because the benefits charged to increased land use (land enhancement) were to be equally divided between Federal and non-Federal interests. In 1957 the Corps issued another report recommending the non-Federal cash contribution be raised to 20 percent. The report was in response to increased congressional concern that the Florida project was mainly a reclamation project and was inconsistent with western land-reclamation projects. Further, in 1968 the Corps recommended project modifications to provide for conservation and distribution of water resources in the Central and Southern Florida project area. In this report, the Corps analysis concluded that a 24 percent cash contribution was required. However, the report recommended continuing the 20 percent requirement because the 24 percent cash contribution was considered to be close enough to the previous 20 percent arrangement.

Local sponsor comments (See app. II.)

The sponsor stated that the project's purpose is to mitigate damages resulting from an earlier Corps project. Further, it believed the benefits resulting from the project are not actually benefits to the landowner but involve restorating rights that property owners were deprived of due to the original project.

We agree that the earlier project intensified the flooding/drainage problem in Hendry County. On page 46 of our
report, we stated that the earlier project and subsequent increased development have aggravated the county's flood problem.
However, we also believe the project is providing significant
land enhancement benefits to landowners which go far beyond
mitigation. The land was sparsely developed before the first
Corps project, indicating the natural condition of the land
precluded extensive agricultural development. Further, two
large landowners stated that they are against the current
project because it would overdrain their land and they would
rather have their land in its present condition.

The sponsor stated that the project "Description" is inadequate and incorrect for the uninformed reader. They provided a technical description of the project purposes and its features.

We believe a general non-technical description of the project better aids most readers. Our description of the

project was taken from a Corps feasibility study and other documents.

The sponsor stated that the project will restore significant environmental benefits to the Everglades National Park and reduce overdrainage of the project area. We are not questioning the need for the project or its benefits to the Everglades. Our review is concerned with the significant special local benefits accruing to landowners in the project area—secondary—type benefits that we believe should have been shared with the Federal Government.

The sponsor said it was not aware of any specific plans for landowners to convert their land to sugarcane upon completion of the project.

We obtained our information on the number of acres landowners plan to convert to sugarcane from letters in Corps files. These letters, signed by numerous individuals as well as company representatives, stated the number of acres they planned to convert to sugarcane upon project completion. Again, since the land was sparsely developed prior to the first Corps project, we still believe the proposed project will greatly enhance the land by allowing landowners to change its present land use to sugarcane production.

RICHMOND WATER FILTRATION PLANT FLOOD CONTROL PROJECT

The Water Filtration Plant Flood Control Project in Richmond, Virginia, provides special localized benefits to the water users in the city of Richmond and Henrico County, Virginia. The Corps did not require the local sponsor to provide an additional contribution for these special benefits.

Status

The project was authorized by the Congress in 1976. As of September 20, 1979, project construction had not begun.

Description

The project will consist of a floodwall surrounding the water filtration plant protecting it from a flood having an average recurrence interval of 360 years. The local sponsor, the city of Richmond, has already provided what it considers protection from a flood having an average recurrence interval of 100 years at an estimated cost of \$150,000 to \$200,000.

Costs

In 1976 the project was estimated to cost \$3,622,400 with a Federal cost of \$3,546,500 and the non-Federal share at \$75,900.

Information reported to the Congress in a December 1979 document showed that costs have increased 159.2 percent to \$9,400,000. The Federal cost is \$9,350,000 (99.6 percent) and the non-Federal cost is \$41,100 (0.4 percent). The non-Federal cost decreased because initial easement costs were overestimated.

Benefits

According to the July 1976 House Document 94-543, the project would result in substantial benefits to the city of Richmond, the Virginia National Guard, various commercial and industrial establishments, and area hospitals. The most significant benefits would be reductions in fire hazard and health threats. The estimated average annual benefits were as follows:

	Benefit
Fire damage reductions	\$346,000
Health threat reduction	66,000
Other presented losses	47,000
Total	\$ <u>459,000</u>

As of December 1979, the benefits have increased by 125.7 percent as shown below.

	Benefit	
Fire damage reduction Health threat reduction Other presented losses	\$ 856,000 106,000 74,000	0
Total	\$1,036,000	<u>)</u>

The Richmond Chief of Plants said the project also provided secondary benefits by establishing a dependable source of industrial water for future industrial growth.

Limited beneficiaries

The project benefits a single identifiable group, the residents in the city of Richmond and Henrico County, Virginia, who could pay for the project without Federal assistance.

When asked whether the city could pay for the project, the Richmond Chief of Plants expressed doubts that it would be able to finance the project without Federal assistance. The utilities, including the filtration plants, operate on user charges and do not receive tax funds per se. If the city financed the project, the utilities would have to sell bonds. The project costs could be collected through increased water charges, but he was concerned that a large percentage

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of the city's population would not be able to pay an increase in their water bill. He also said the city was trying to hold down its water rates.

However, OMB considered the project a non-Federal responsibility and a feature of the water supply system--a cost traditionally borne by municipalities. Their conclusion was based on the following:

- 1. The lack of flood protection is a design deficiency of the local water supply system.
- 2. Construction of an integral feature of the local water supply system lies outside the Corps' area of responsibility.
- The project beneficiaries can be readily identified because they are the customers of the water supply system.
- 4. The project financing is within the financial resources of the city.

OMB calculated that if the city constructed the project, the average annual residential water bill would increase by about \$1.70.

The annual costs over the 50-year life of the project have increased to \$613,600 since the OMB calculation was made. The current number of customers that would benefit from the project is 108,000. Using this information the annual residential water bill would increase by \$5.68 and the monthly bill by 47 cents.

Non-Federal contribution

The non-Federal share of the project cost is \$41,100 (0.4 percent) which is the value of land, easements, and rights-of-way. The city owns all of the project land except for about one-tenth of an acre.

Local sponsor comments (See app. II.)

The Chief of Utility Plants, City of Richmond, felt that our statement that "the project did not provide any general or widespread benefits" attributed to him was misleading. We have deleted this statement from the final

report; however, our position concerning the significant special local benefits provided by the project remains the same.

The Chief of Plants also questioned the meaning of the statement that the "project also provides secondary benefits by establishing a dependable source of industrial water." The benefits in question relate to new industries or businesses that might locate in Richmond--with a dependable source of water available--that would not otherwise consider the area as a site for development. This was clarified in the final report.

The sponsor expressed concern that city residents could not afford the estimated \$3 to \$6 annual increase in water bills if the city paid for the project. This figure was estimated based on the city paying for the entire project. First, it is doubtful this increase would create an undue hardship on city residents. However, we did not propose that the city fund the entire project, rather we believe that they should have provided additional non-Federal contributions. We feel that because of the nature of the benefits, the local sponsor (city) should have been required to provide additional contributions—above the amount normally required for a flood control project. In addition, the city has other options at its disposal for raising the additional funds.

The remaining comments dealt with statements made by OMB after it reviewed the project feasibility study. Their comments were included to show that OMB had some concerns similar to ours about the extent of Federal participation in this project. The sponsor questioned OMB's methodology in estimating the average annual increase in consumer water bills assuming the city funded the project. Although there is no detail included to show how OMB arrived at its estimate of annual increases, we made our own analysis and provided an explanation of our estimated increase using more current data. This analysis was not questioned by the local sponsor.

SOUTHERN BRANCH OF THE ELIZABETH RIVER NAVIGATION PROJECT

The Southern Branch of the Elizabeth River Navigation Project in Chesapeake, Virginia, will be used by only two companies. It increases the value of the land along the channel and further increases the tax revenues of Chesapeake, Virginia. The Corps had not required additional contributions for these special benefits.

Status

The project was authorized for construction in 1976, and construction was completed in May 1980.

Description

The project extends the 35-foot deep and 250-foot wide channel upstream a distance of 1.5 miles. It also includes an 800-foot square turning basin.

Costs

The estimated project costs in 1978 were as follows:

	<u>Federal</u>	Non- Federal (000 omitted)	<u>Total</u>
Construction	\$5,282	\$ 495	\$5,777
Land, easements, and rights-of-way Other		59 698	59 698
Berthing areas and access channels	and the same of th	1,100	1,100
Total	\$ <u>5,282</u>	\$2,352	\$7,634
Percent	69.2	30.8	100.0

Limited beneficiaries

Currently, the project only has two companies that will use the deepened channel. When the project was authorized, there was only one user--Foster Grant Company. The net transportation benefits to Foster Grant were estimated to be \$423,000 annually. In September 1973 the Board of Engineers for Rivers and Harbors noted that only one industry was expected to use the proposed channel extension. The Board recommended that non-Federal interests pay 50 percent of the annual charges for interest and amortization of the Federal first cost of the improvements. These payments should continue until multiple use of the channel actually occurred.

In 1977 Davis Grain Corporation purchased an industrial site on the channel. The corporation stated it intended to use the 35-foot channel depth once project construction was completed. In 1978 the Norfolk Corps District and the North Atlantic Division recommended to Corps headquarters that the cost sharing by non-Federal interests toward the Federal first cost of the channel improvement be waived because of Davis Grain Corporation's intended use of the channel. The Chief of Engineers concurred. The Chesapeake Planning Department Director said that Davis Grain Corporation will be the second industry benefiting from the project; therefore, the city will not have to make any additional contributions. The estimated average annual benefit to Davis Grain is \$218,000.

Special localized benefits

Land enhancement

The value of the land used for the soil disposal site and the land fronting on the deepened channel will be enhanced.

When the project was studied in 1973 and 1978, the Corps District Office estimated the real estate enhancement attributable to filling the low-lying areas at the spoil disposal sites. The Corps felt that filling this low area would result in appreciable land enhancement. In 1978 the Corps estimated the enhancement to 167 acres to be \$467,000. The local sponsor subsequently paid the U.S. Government \$125,500 toward the land enhancement.

In May 1978 the initial disposal site was changed. The new disposal site is a large existing borrow pit. The borrow pit was donated by the owner in exchange for use of the dredged material. In August 1978 the Corps decided that the value of the disposal site would not be enhanced because a permanent easement would be attached to the entire site.

However, the Norfolk District Office, at the insistence of the city of Chesapeake, decided that a permanent easement was not needed for the entire disposal site. The Corps now has only a temporary easement on 79 acres of the 133 acre site, which will end after the initial dredging was completed in May 1980. After the dredging is completed, the borrow pit owner will have unimpeded use of the 79 acres. He can level the property back to grade and have a good, usable piece of property to develop or sell. Either way, there will be substantial enhancement to the property. However, the Norfolk District does not plan to do another land enhancement study based on this change unless the Office of the Chief of Engineers requests it, and the Office is not aware of the change in disposal sites or the new land enhancement.

Because the original disposal site was not used, the city of Chesapeake has had introduced a section to a bill that, if passed by the Congress, would result in a refund of the \$125,500 paid toward the land enhancement of this site. The bill mentions nothing about the land enhancement associated with the new disposal site.

The value of the land fronting on the deepened channel will also increase because of the project. There are currently seven landowners who own property on the channel. The Chesapeake Real Estate Assessor said that some of the land along the 35-foot depth channel would be worth \$7,500 an acre more than land along the 12-foot depth channel.

The following table shows the increased land values to some of the current landowners benefiting from the project.

Landowner	Acres benefited	Estimated increase in land value
Martin Estate	46	\$342,000
Columbia Yacht Company	34	256,600
Foster Grant Company	61	149,900
Higgerson-Buchanan, Inc.	160	133,500
Davis Grain Corporation	29	70,000
Frank G. Burns, Jr., et al	154	69,300

Increased tax revenue

The Chesapeake Director of Industrial Development predicted the project would bring "the biggest boom in tax revenues in the city's history." The Real Estate Assessor also said the project would increase land values. The city will receive additional tax revenues of about \$41,850 annually from the increased value of the 600 acres benefiting from the project. The city also receives a tax of about 15 cents on every cubic yard of material hauled from the borrow pit disposal site. The city could receive \$300,000 in total from this tax.

Local sponsor comments (See app. II.)

The local sponsor felt our statement that "all of the lands, easements, rights-of-way, utility relocations and other associated non-Federal costs were donated by project beneficiaries" was unfair. They stated that the city of Chesapeake had contracted with the Corps to provide these items, and the fact that they were donated should not be a factor.

The section of the case study discussing non-Federal contributions has been moved and included in our overall discussion of project cost in the final report. In addition, the sentence discussing the source of local contributions toward the project cost was deleted.

The sponsor also stressed that the project provided regional and national benefits with increased shipping trade. As stated on page 6 we are not questioning the need for the project or the benefits accruing from the project's primary purpose—navigation. We are, however, interested in the large amount of special local benefits (secondary benefits) accruing to a limited number of businesses as a result of the project. We believe these benefits should have been shared with the Federal Government.

RIVER ROUGE FLOOD CONTROL PROJECT

The River Rouge Flood Control Project in Michigan provides special localized benefits to area residents. However, the Corps did not require additional non-Federal contributions.

Status

The project was authorized by the Flood Control Act of 1962 and was completed in 1978.

Description

The project provides for channel enlargement and straightening of the main stem of River Rouge and shortened the existing channel about 1-1/2 miles.

Costs

The initial 1961 cost estimate placed the project's total cost at \$19.6 million, with the Federal share \$8.7 million (44 percent) and the non-Federal share \$10.9 million (56 percent). However, in 1978, the final project costs escalated to \$38.1 million, and—in a reversal of roles—the Federal costs climbed to \$29.4 million (77 percent) while the non-Federal share fell to \$8.7 million (23 percent).

Benefits

The annual benefits of \$919,300 were estimated by the Corps in 1961. A large portion of the annual benefits, \$820,600, were accrued to flood protection. The remaining \$98,700 benefits accrued to the locality because the project would reduce the construction cost of a sewage system. The Corps estimated that the project would save the locality \$2.8 million.

Corps procedures require that non-Federal entities which receive special local project benefits make an additional cash contribution toward project construction costs. However, despite the substantial estimated annual savings that would accrue to the locality, the Corps decided to forego requiring any additional contributions from the local sponsor, since the non-Federal share was already greater than the Federal share. In the House document the Corps stated that " * * * costs apportioned to non-Federal interests * * * exceed

Federal construction costs. It is therefore considered that additional local cooperation is not warranted."

However, before the first construction contract was awarded in November 1967, the reversal in the cost-sharing ratio had already changed. The Federal share had increased to \$14.1 million and the non-Federal share had decreased to \$7.4 million from the original estimate made in 1961. The Federal cost increase was due mainly to a change in channel design from an earth to a concrete channel. The non-Federal cost decrease was due primarily to a decrease in relocation costs.

Non-Federal contribution

Even though the cost share percentages and the basis for the percentages changed, the Corps did not request an additional contribution from the local sponsor.

Local sponsor comments (See app. II.)

The local sponsor did not make any specific comments on our draft report. It felt it could not make a meaning-ful review since it received only an excerpt taken from the draft report.

BAYOU BOEUF IRRIGATION AND RECREATION PROJECT

The Bayou Boeuf Irrigation and Recreation Project in Rapides Parish, Louisiana, has encouraged residential development and increased land values in the project area. SCS has not required any non-Federal contributions for these special localized benefits.

Status

The project was approved in October 1965 and was still under construction.

Description

The project structural measures include two multiple-purpose reservoirs (Kincaid Lake and Indian Creek Lake) for irrigation and recreation, four water control structures, 10.6 miles of irrigation canals, 15 miles of clearing and snagging, and recreation facilities.

Costs

As of September 30, 1979, the cost estimates for the project are as follows:

	Federal	Non-Federal	Total
Construction, adminis- tration and engineering	\$3,807,945	\$2,650,689	\$6,458,634
Land, easements, and rights-of-way		417,203	417,203
Total	\$3,807,945	\$3,067,892	a/\$6,875,837
Percent	55.4	44.6	100

a/We deducted \$1,104,450 of land treatment costs according to our discussions in chapter 4.

It is estimated that the Federal annual maintenance cost will be \$441,000 throughout the life of the project.

Benefits

The project is estimated to provide \$19,700,000 annually in transportation savings.

Limited beneficiaries

The project is expected to have only three users, two of which are expected to receive 98.5 percent of the \$19,700,000 annual transportation savings. The proposed project provides a more economically efficient method of transporting oil to the American Oil Company and the Virginia Electric and Power Company. It also is expected to maintain depths in the York River entrance channel sufficient for present and future use by the Navy.

The estimated annual benefits for each beneficiary are shown below.

Beneficiary	Amount	Percent
American Oil Company Virginia Electric and Power	\$17,013,800	86.4
Company U.S. Navy	2,386,200 300,000	12.1 1.5
Total	\$ <u>19,700,000</u>	100

Local sponsor comments

We provided the local sponsor with an excerpt from our draft report. However, they declined to provide us with written comments.

Non-Federal contribution

The local sponsor did not make any additional contributions as a result of the land enhancement provided by the project. A parishwide ad valorem tax was voted in order to provide the non-Federal share of the funds necessary for project completion. The tax was \$4.00 per \$1,000 of appraised value.

Local sponsor comments

We provided the local sponsor with an excerpt from our draft report. However, they declined to provide us with written comments.

Benefits

The estimated average annual benefits were as follows:

	<u>Benefits</u>		
Irrigation	\$220,382		
Recreation	92,250		
Secondary	105,061		
Total	\$417,693		

Special localized benefits

Land enhancement and changed land use has occurred as a result of the project. Residential development has taken place on land that was previously in forest. The current value of the developed land is much higher than land that remained in forest.

The Chairman of the Lower West Red River Soil Conservation District said the land values along Lake Kincaid have increased as a result of the lake. Before the dam was built, the land was sold for \$300 an acre. Now a one-half acre lot costs \$15,000. He said the prices are very high because only a small part of the property along the lake was available for development since most of the land around the lake is owned by the U.S. Forest Service.

We verified this increase in land values with a local realtor who said that all the lots on Lake Kincaid have been sold. The price for a lakefront lot ranged from \$30,000 to \$33,333 an acre, while the price of a l acre lot without a lake view ranged from \$6,600 to \$10,500. While touring the project area we saw a l.4 acre lakefront lot advertised for \$45,000 (\$32,143 an acre).

The Soil Conservation District Chairman said a restaurant costing about \$300,000 had been built on lakefront property. There are also about 40 mobile home lots that rent for \$50 a month.

The District Conservationist said some of the property in the Lake Kincaid area would have developed without the lake, but not as much would have developed and the land values would not have been so high.

Benefits

The average annual project benefits are \$359,006, consisting of \$247,271 for irrigation and \$111,735 for recreation benefits.

Special localized benefits

A local official said that,

"Cotile Lake has meant more to the economic development of my ward than any other single thing. Five new businesses have developed, over 400 acres of land have been subdivided, and more than 100 homes built on it. Millions of dollars have been spent for construction of homes and camps by tourists in the Cotile Lake area."

The Soil Conservation District Chairman stated that land values have increased as a result of the project. The land along the bayou is still used for agriculture; however, it now has a dependable irrigation source. The project land now sells for \$2,000 to \$3,000 an acre compared to similar land not benefiting from the project which sells for \$1,200 to \$1,500 an acre.

The value of the land around the lake was enhanced as a result of the project. Before the project, the land covered by the reservoir (Lake Cotile) was pastureland, and the land around the reservoir was woodland. An appraiser's report projected that the land would have a higher and better use after project completion—particularly along and extending from the newly created shoreline.

The Conservation District chairman said the landowners around the lake "cashed in" on the project. One landowner owning 200 acres, worth about \$200 an acre, subdivided the land and sold lots for \$6,000 an acre. Speculators also bought some of the land and developed it.

Hot Wells Development Company bought land along the lake and developed it. In February 1963 the company purchased one parcel of 150.67 acres for \$250 an acre. In July 1974, the company sold one lot (about 1 acre) for \$3,200, and in June 1977 sold another lot (about 1 acre) for \$3,500.

BAYOU RAPIDES IRRIGATION AND RECREATION PROJECT

The Bayou Rapides Irrigation and Recreation Project in Rapides Parish, Louisiana, increased land values and encouraged residential development in the project area. SCS has not required any additional non-Federal contributions for the special localized benefits.

Status

The project was authorized for construction in June 1961, and it was completed in September 1966.

Description

The project included one multiple purpose reservoir (Lake Cotile), recreation facilities, and four low level weirs. $\underline{1}/$

Costs

The final reported project costs were as follows:

	<u>Federal</u>	Non-Federal	Total
Construction Engineering services Administration Land, easements, and	\$ 954,858 329,105 205,504	\$ 954,858 33,000 32,000	\$1,909,716 362,105 237,504
rights-of-way	94,737	381,892	476,629
Total	\$ <u>1,584,204</u>	\$ <u>1,401,750</u>	a/\$2,985,954
Percent	53.1	46.9	100

a/We deducted \$1,068,680 of land treatment in accordance with our discussion in chapter 4.

^{1/}A dam placed across a river or canal to regulate the flow.

POHICK WATERSHED FLOOD PREVENTION PROJECT

The Pohick Watershed Flood Prevention Project in Fairfax County, Virginia, provides increased income to housing developers and tax revenue to Fairfax County. SCS, however, did not require any additional non-Federal contributions for these benefits.

Status

The project was authorized in 1968 to maintain the natural flooding conditions during the anticipated urbanization of the area. The project is about 70 percent complete.

Description

The project consists of seven floodwater retarding structures. The local sponsors are also applying land treatment measures to the project area that are designed to control soil erosion during intensive urbanization.

Costs

In June 1970 SCS estimated the project would cost approximately \$1.9 million with the Federal share at \$900,000. The local sponsors are responsible for the remaining \$1 million. (Does not include \$3,362,844 of land treatment costs according to our discussions in chapter 4.)

Special localized benefits

The project provides special benefits to housing developers and to Fairfax County. The project is creating choice lakefront property within 17 miles of Washington, D.C.

One developer, the Yeonas Company, developed the land around Lake Braddock. The multipurpose lake was restricted to private use because the developer paid a portion of construction costs. Yeonas paid \$104,000 for the increase in the lake size in order to provide a centerpiece for its surrounding housing development. They also transferred title to the land under and around the lake to the Lake Braddock Homeowners Association.

Since the land around the reservoir was woodland before the project was constructed, we compared the December 1979 value of woodland to the selling price of residential property around the reservoir. We determined that the value of the land increased by \$1,750 to \$4,300 an acre as shown below.

Selling price per acre	Value of woodland per acre	Increase in value per acre (note a)
\$2,750 (non-lakefront)	\$1,000	\$1,750
\$5,300 (lakefront)	1,000	4,300

a/An undetermined amount of this increase is due to development costs.

In addition, the developed lakefront property has a higher value than other lots in the development. According to a December 1979 real estate advertisment, lakefront lots sold for about \$5,300 an acre while other lots in the development sold for about \$2,700 an acre--\$2,500 an acre difference.

Non-Federal contribution

The local sponsor did not make any additional contribution as a result of the land enhancement. The non-Federal share of the project costs were paid by an ad valorem tax assessed on all Parish residents. The tax was \$4.00 for each \$1,000 of appraised land value.

Local sponsor comments

We provided the local sponsor with an excerpt from our draft report. However, they declined to provide us with written comments.

Both sponsors stated that Pohick provides benefits other than the special local benefits described in our report. As stated on page 6, we are not questioning the need for a project or the benefits accruing from the project's purpose. We are interested in the large amount of special local benefits (secondary benefits) accruing to developers and Fairfax County as a result of the project.

The sponsor said that the project is more than 50 percent complete. They said that out of the seven dams comprising the project, four are complete, one is under construction, and two remain to be built. We have changed the figure to 70 percent in the final report.

The sponsor disagreed with our position that SCS cannot require the landowners to apply land treatment measures and has no monitoring system for the progress of measures being applied. They pointed out that Fairfax County was the first jurisdiction in the Nation to pass an erosion and siltation control ordinance in response to Pohick land treatment requirements. Both SCS and the sponsors review development plans for compliance with the ordinance but Fairfax County has sole responsibility for its enforcement.

Land treatment measures associated with SCS projects are voluntary. As discussed in chapter 4 SCS cannot require landowners to apply the recommended land treatment measures. SCS estimates the number of acres that require land treatment and the estimated costs. For Pohick these costs were estimated at approximately \$3.4 million. However, during our review SCS was unable to tell us how the estimate was calculated or how much land treatment had been applied. The only control SCS had was their review of development plans.

In addition to SCS's lack of control over land treatment, we believe land treatment measures include items that would have been done by landowners without the project. For example, local sponsors told us that sodding of lawns by developers was considered and included as part of the \$3.4 million land treatment discussed above. This is a practice the developer would have done anyway. Further, compliance with the Fairfax County erosion and siltation control ordinance is required of all developers throughout the county, and is not unique to development in the Pohick Watershed.

The lake's restricted use to the surrounding homeowners was considered a selling point by the developer and the homes with a lake view were sold at a \$2,000 premium. As a result of the SCS lake, Yeonas received an additional \$300,000.

Other developers have followed Yeonas' development plans of building houses around the lakes; however, the remaining lakes will provide public access. At project completion, the seven lakes will be surrounded by several subdivisions, including 571 lakefront homes. The lakefront homes alone will result in \$1,142,000 of additional income for the developers.

Fairfax County real estate tax base has increased greatly as a result of the Pohick watershed project. The assessed values of the houses in the project have increased by \$1.1 billion from 1970 to 1979. During the same period, of time the total assessed values in Fairfax County increased by \$8.8 billion. (Pohick watershed now represents 9 percent the total assessed value in 1979 vs. 4 percent in 1970.) The 1979 county real estate tax rate was \$1.54 per \$100 assessed value. This results in an annual \$17 million of revenues to Fairfax County from the Pohick Watershed area. In addition, homes in Fairfax County are resold on an average of every 6 years. The increased resale value of homes with a lake view averages \$5,000. This results in Fairfax County receiving an additional \$7,327 in taxes each year as a result of the SCS lakes.

Non-Federal contributions

The local sponsors, Northern Virginia Soil and Water Conservation District and Fairfax County Board of Supervisors, are required to provide only the standard land, easements, and rights-of-way, estimated at \$923,305. Additional non-Federal contributions for the significant special local benefits were not recommended by SCS.

Local sponsor comments (See app. II.)

We received comments from both the Northern Virginia Soil and Water Conservation District and the County of Fairfax Board of Supervisors. Both are project sponsors and their comments have been combined and summarized below.

The sponsor said our real estate value calculations do not indicate actual conditions. Specifically, they said the \$1.2 billion and \$14.1 billion values for property appreciation in the Pohick Watershed and the county are not substantiated by county records. Further, they stated our report was slanted to imply that the sole cause of appreciation in Pohick was due to the project. The sponsor maintains that the development was due primarily to the installation of a sewage treatment system.

Our calculations of real estate values were based on information contained in a county computer listing of land values and area by map grid. We contacted the assessment office that originally provided us with the computer listing. The office provided additional information and we revised our figures in the final report.

We agree that the sewage treatment system has contributed toward the extensive development in Pohick. However, the system is dependent on the SCS project. A memorandum prepared by the Virginia State SCS office stated,

"* * * the design and layout of this plant assumed that the Pohick Creek Watershed plan would be installed essentially as planned. Without the P.L. 566 project installed, the 100-year frequency storm would be 2.9 feet over the holding pond dikes."

Since the project is protecting the plant, the benefits accruing to the system are dependent on the project.

The sponsor said the estimated non-Federal costs, in 1970 at \$1 million were low and that Fairfax County has paid approximately \$2.2 million, for storm water management improvements which include lands, utility relocations, deepening of lakes, and siltation control devices. Further, they estimate that an additional \$2.6 million is needed to complete the project.

The estimates used were the most current figures SCS had available at the time of our review. According to figures given to us by a county official, \$564,000 was spent to acquire the needed lands as of January 1980. The other items listed by the sponsor—utility relocations, deepening of lakes and siltation control devices—were not considered by SCS to be part of the project and were not included in SCS cost figures or in the cost-sharing agreement with the local sponsors.

The sponsor stated the reference to the creation of "choice" lakefront property was subjective and does not necessarily represent actual conditions. We selected the wording to indicate the desirability of homes with a lake view. Several county employees in both the Departments of Public Works and Environmental Management stated that the homes having a lake view were sold at a premium. We verified this statement with a real estate agent and a homeowner's association around one of the lakes.

The sponsor said our discussion of development practices around the lakes was subjective and they could not substantiate our discussion. We obtained our information from talks with officials of both sponsoring organizations and personal inspection of the lake sites. We further verified this information with a real estate agent, homeowner's association, and information contained in SCS State office files. The number of homes shown in our report having a lake view is a conservative figure based on information developed by the county Department of Public Works.

The sponsor said the \$5,000 value assigned for the increased resale value for homes with a lake view is questionable and cannot be substantiated. This figure was given to us by a Fairfax County official in the Department of Public Works. We verified this figure with a real estate agent selling homes exclusively in a development around one project lake.

Benefits

SCS estimated that there would be land use changes as a result of the project. The 1961 work plan estimated that 160 acres of land would be developed as residential property with an estimated annual benefit of \$19,660. The 1970 work plan supplement estimated that about 2,000 acres had been developed into residential homesites ranging in size from 5 to 40 acres with an estimated annual benefit of \$26,840. The supplement also showed that 780 acres formerly in unimproved or semi-improved pasture was put into citrus resulting in benefits of \$100 or more per acre. A golf course was also located in the benefited area.

Special localized benefits

The project provided substantial enhancement benefits to this locality.

A landowner benefiting from the project has been able to convert about 620 acres of swampland into some of his best pastureland. The current value of this land is approximately \$900 per acre and the value of the land not on the channel is about \$700. Therefore, as a result of the channel, the value of his land has increased \$124,000.

The Sarasota Soil Conservation District Board of Supervisors, in a resolution favoring the project, stated that the project will enhance the value of the property and increase the amount of taxes collected. A very large portion of the land is in the hands of investors who had hoped to use the land for urban development. If the investors have to sell their land at a loss because of lack of water control, it could be a very depressing factor in the growth of the county.

The project has enhanced the value of land. Some land that had been used for farmland has been developed or is being developed into residential property. In late 1979 about 320 acres had been developed into residential property. According to real estate advertisements, this land could be puchased for \$7,000 to \$3,000 an acre while farmland was selling for about \$2,000 an acre. Therefore, the 320 acres of residential property is worth \$1,600,000 to \$1,920,000 more than it would be as farmland. Further, farmland has increased in value from \$200 an acre in 1964.

SARASOTA WEST COAST FLOOD PREVENTION AND DRAINAGE PROJECT

The Sarasota West Coast Project has enhanced local land values significantly but SCS did not require the local sponsor to make additional contributions toward the projects costs for this special localized benefit.

Status

The project was approved in September 1961. Work stopped on the project in 1972, because of perceived environmental problems. The project will probably not be completed.

Description

The structural measures in the original plan included 36 miles of channel improvements, one dike, one pump plant, and nine grade stabilization and water conservation structures. The plan was modified in 1970 eliminating 5 miles of channel improvements and one grade stabilization structure. Fourteen miles of channel work, the pump plant, dike, and three grade stabilization structures are completed.

Costs

In 1970 the estimated project costs were as follows:

	<u>Federal</u>	Non-Federa	<u>Total</u>
Construction	\$1,756,903	\$122,626	\$1,879,529
Engineering and administration	594,000	12,000	606,000
Land, easements, a rights-of-way	and	177,510	177,510
Relocations		117,490	117,490
Total	\$ <u>2,350,903</u>	\$ <u>429,626</u>	<u>a</u> /\$ <u>2,780,529</u>
Percent	84.5	15.5	100

<u>a</u>/We deducted \$1,295,000 of land treatment costs according to our discussions in chapter 4.

SOUTH SUMTER FLOOD PREVENTION AND DRAINAGE PROJECT

The South Sumter project benefited several landowners but one major landowner received a large share of the benefits. The project also significantly enhanced land values, and SCS has not required the local sponsor to make any additional contributions toward the project cost.

Status

The project was approved in August 1962 and closed out in September 1979. The project was about 55 percent completed.

Description

The principal watershed problems were flood damage and lack of adequate drainage of truck crops and pasturelands, with limited flooding occurring in residential areas. Initially, the structural measures consisted of about 47 miles of channel work, 14 grade stabilization structures, and 2 water control structures. In June 1973 the work plan was supplemented eliminating about 4 miles of channel work and adding a grade stabilization structure, and five water control structures.

Costs

The revised costs in the June 1973 $\underline{1}/$ work plan supplement were as follows:

^{1/} Although the project was closed out in September 1979, SCS did not have the final costs as of May 1980.

Non-Federal contributions

The local sponsor did not make any additional contributions toward the project costs for the special local benefits.

Local sponsor comments (See app. II.)

The Director, Aquatic Plant and Mosquito Control, Department of Environmental Services, County of Sarasota, Florida, questioned the value of \$9,000 per acre assigned to improved pastureland around the project. As suggested by his letter, this was a typographical error. The final report was changed to reflect the correct value--\$900 per acre.

A local sponsor official listed the following benefits of the project:

- -- The project improved flood control and increased land use and crop irrigation.
- -- A new industry, T. G. Lee Dairies, moved into the area.
- --The land is being used to a greater extent because flooding can be controlled and water in the canal can be pumped out for irrigation.
- -- There is no charge for the irrigation water.

The primary beneficiary of the one channel is T. G. Lee Dairies, the largest landowner in the project area, owning about 5,000 acres. According to the district conservationist, T. G. Lee purchased the land because of the benefits that would accrue from the project. In 1965, T. G. Lee considered purchasing the land but did not because a major part of the land was subject to flooding. However, he recognized that the project would provide the needed outlet for drainage requirements for improved pastures and a large dairy operation and subsequently purchased the land in 1967.

T. G. Lee planned to change 2,390 acres from unimproved pasture to 1,405 acres of cropland and 985 acres of pastureland. In 1968, SCS estimated the benefits to T. G. Lee from changed land use to be \$10.50 an acre, resulting in annual benefits to the 2,390 acres of \$25,095.

The project enhanced the value of the land. According to a local realtor, the land that T. G. Lee purchased was worth very little because it was flood plain and poorly drained. T. G. Lee bought this land for \$175 an acre in 1967 and today this land is worth a minimum of \$1,000 an acre because it is protected from flooding and has proper drainage. Currently, land that is flood plain and poorly drained is worth \$400 to \$500 an acre. Therefore, T. G. Lee's land is worth an additional \$1,195,000 (2,390 acres x \$500) because of the project.

Local contribution

SCS has not required the local sponsor to make any additional contributions to the projects even though they are receiving a significant amount of land enhancement.

	<u>Federal</u>	Non-Federal	<u>Total</u>
Construction	\$1,356,340	\$210,870	\$1,567,210
Engineering and administration	693,400	31,300	724,700
Land rights		450,700	450,700
Total	\$ <u>2,049,740</u>	\$ <u>692,870</u>	a/\$2,742,610
Percent	74.7	25.3	100

<u>a/We deducted \$557,750 of land treatment costs according to our discussions in chapter 4.</u>

Benefits

According to the June 1973 estimate, the project would result in the following annual benefits:

	<u>Benefits</u>	
Damage reduction	\$ 94,480	
Drainage	34,350	
Secondary	12,890	
Total	\$141,720	

Special localized benefits

The project benefits primarily one locality and one large landowner who received benefits from changed land use.

When the original plans were developed, about 300 people would have benefited from the project. The installed channels provide "outlets" for the removal of floodwater from 23,000 acres and provides needed drainage for 16,800 acres. The original work plan showed that the annual benefits from these channels and their structures was \$44,220, consisting of \$30,640 in damage reduction and \$13,580 in drainage benefits.



DEPARTMENT OF THE ARMY OFFICE OF THE ASSISTANT SECRETARY

WASHINGTON, D.C. 20310

REPLY TO

8 SEP 1980

Mr. Henry Eschwege
Director, Community and
Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

This is in reply to your letter of July 22, 1980, to the Secretary of the Army regarding your draft GAO report on "Federal Share of Water Resources Project Cost Should Be Reduced When Project Benefits Are Not Widespread," GAO Code 808460, OSD Case #5492.

We do not concur with your recommendations to the Secretary of the Army. The first recommendation to the Secretary of the Army is that he should direct the U.S. Army Corps of Engineers to "identify and specifically compare national project benefits to special localized benefits and, recommend higher non-Federal cost sharing to compensate for significant special or local benefits."

The Flood Control Act of June 22, 1936, recognized the fact that flood damages destroy portions of the national wealth and adversely affect national productive capacity. That recognition has been followed by all studies since that time. Flood damages to anyone in the nation are measured and counted as benefits in this national program. The present term for these types of benefits as approved by the United States Water Resources Council, is "National Economic Development Benefits" (NED). Your report does not follow this definition for national benefits, and thus gives rise to considerable confusion. It also suggests implicitly the allocation of costs to beneficial outputs which are not now recognized in the computation of benefit-cost ratios or in the Federal decision process.

Local sponsor comments (See app. II)

The local sponsor felt that our statement that "* * * one large landowner received land benefits from changed land use" was inaccurate, citing that 80 or more small landowners also received project benefits.

The quotation cited was part of an introductory sentence to a section of the case study. The entire sentence as it appeared in the draft read as follows: "The project benefits primarily one locality, and one large landowner who received benefits from changed land use." (Emphasis added.)

In the same section (three paragraphs later) our discussion continues stating "The South Sumter project benefited many landowners; however, one landowner received a large share of the benefits." The draft goes on to show that T.G. Lee owned about 5,000 acres in the project area and in connection with 2,390 of these acres will receive an estimated additional \$25,095 in annual benefits because of changed land use.

We believe that the statements contained in the draft are accurate as originally stated.

Appendix I discusses eight Corps projects that were reviewed as the basis for the GAO draft report. One of these was the York and Pamunkey Rivers Navigation, Southern Virginia. The report on the York and Pamunkey Rivers Navigation does not have any official status and will not be transmitted to Congress. Depending on the results of current studies at Norfolk Harbor, the York and Pamunkey Rivers Navigation Study may be reinitiated and would comply with current criteria and standards. Therefore, York and Pamunkey Rivers Navigation is a poor citation.

We are reviewing the information on the other "projects" cited in the GAO report to determine if the presentation is accurate. Appropriate comments will be furnished when review is complete.

Additional comments on specific pages and paragraphs of your report are in Enclosure 1.

Sincerely,

chael Blumenfeld

Assistant Secretary of the Army (Civil Works)

Enclosure

The draft report gives the impression that the Corps of Engineers established the cost-sharing for the various projects discussed therein. This is misleading, since the Corps of Engineers only recommends cost-sharing for projects it forwards to Congress for authorization. Such recommended cost-sharing is based largely on past Congressional guidance or administrative practice accepted by Congress. The Congress actually establishes the requisite cost-sharing provisions, and the Corps of Engineers carries out the will of the Congress.

The draft report also states that the Corps of Engineers policies for the implementation of Section 2 of the River and Harbor Act of 1920 are inconsistent with the Congressional intent of this statute. This is incorrect. The draft report does not present a compelling argument for interpreting this statute in a different manner than the U.S. Army Corps of Engineers has construed and implemented it over a period of sixty years. Most cost-sharing legislation has been enacted since 1920, lending complexity to any attempt to assess Congressional "intent," in that Congress itself has added specific "flesh" to its 1920 "intent."

The second recommendation states that, "The Corps should clarify its procedures concerning such projects, establish more specific criteria to help district offices determine when a larger non-Federal share of the project cost should be required, and ensure that each district consistently applies these when preparing feasibility studies."

The report correctly indicates that Corps procedures call for consideration of special additional local sharing when it is determined the project provides special benefits or will benefit only a limited number of beneficiaries. It is usual Corps practice to recommend special costsharing for navigation projects benefitting only a single user; where dredged material will enhance the landfill; when recreation navigation benefits are claimed; and where the project will result in large windfall land enhancement. We do not agree that Corps policies regarding cost-sharing are unclear, inconsistent with Congressional intent, or that application of these policies is universally inconsistent.

<u>Recommendation</u>: We also recommend that the Secretary of Agriculture use his discretionary authority under the Watershed Protection Act of 1954 and on future projects collect additional nonfederal funds for projects with significant localized benefits.

Response: During the August 27 meeting, the audit team was provided a copy of the Act (Section 4) that requires 100 percent Federal contribution for construction of flood prevention features. For other purposes to be served under the authority, we concur that the Secretary of Agriculture has the authority to provide less Federal funding than the maximum stated in the Act.

In a number of Public Law 566 projects reviewed by the team, we pointed out that Federal funds did contribute less than the stated maximum. The recreation aspects of the multipurpose site in the Pohick Watershed, Virginia, was specifically discussed. It is noted that all cost allocations have been in accordance with the Water Resources Council's Principles and Standards since 1973.

The Public Law 566 program will be reviewed in the next 12 to 18 months in compliance with Executive Order 12044. We intend to carefully examine the benefit accrual-cost share policies of purposes other than flood prevention during this review.

We appreciate having the information provided by the audit. It will be constructively used in conducting the Public Law 566 watershed program review.

Sincerely,

NOCHAN A. BERG

Chief

Sign of States

Sign of the intent of Appropriate

Schservator Selvice P.O. No. 2591 Nashington D.C. 20013

Mr. Henry Eschwage Director, Community and Economic Development Division U.S. General Accounting Office Washington, D.C. 20548

SEP 23 1980

Dear Mr. Eschwege:

This is a reply to your request for comments on your audit entitled "Federal Share of Water Resource Project Cost Should Be Reduced When Project Benefits Are Not Widespread."

We appreciate the opportunity to review the draft with members of the audit team on August 27, 1980. A number of issues were clarified. In particular, the concern on cost sharing with local sponsors and the legal requirement of the Act that Federal financial assistance for flood prevention requires that all construction costs be paid from Public Law 566 appropriations.

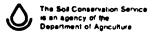
The following narrative discusses each recommendation contained in the report:

Recommendation: We recommend that the Secretary of Agriculture direct the Chief of the Soil Conservation Service (SCS) to stop including land treatment measures as part of the estimated project cost and nonfederal share in SCS feasibility studies. The estimated land treatment costs should be itemized but shown separately on a different schedule.

Response: We concur with the recommendation that the ongoing land treatment costs not be displayed in watershed plan tables that show Federal and local costs. This relates to those aspects of land treatment that are not essential to achieving specific project objectives. However, to the extent that certain land treatment is necessary to achieve project benefits, we feel that it is legitimate to include such costs with other project costs.

As a result of the President's water policy directives issued July 12, 1978, we have taken a number of actions dealing with the voluntary aspect of the land treatment portion of the Public Law 566 watershed program. The requirement that 50 percent of needed land treatment be planned above structures has been changed to require sponsors to install 50 percent prior to obligating Federal funds to construct a dam. Copies of this policy change were provided the audit team.

In response to the Presidential directives to SCS, we have implemented a monitoring system to assure accountability of those accelerated land treatment measures installed with Public Law 566 assistance that are necessary to accrue benefits claimed in the plan. Copies of pertinent policy changes were provided the audit team.



WO-AS-1

2. The projected increase of 5,500 new jobs over twenty years as the result of this project is difficult to support or object thereto. However, the creation of new jobs would seem best to be good for the nation as well as the City. Certainly such jobs would increase the City's earnings tax revenue but there would be also a much greater increase in national taxes. This is especially true when you consider that the City receives 1% earnings tax on the gross salary of all workers in Kansas City and the federal government receives something in excess of 10%.

- 3. The enhancement of 420 acres is offset by the fact that the City is required to furnish 420 acres. Under the current plans, 220 acres of this plan is already protected from flooding and the remaining 200 acres will not be filled to the 1-percent-chance-flood level. This land will not be as useable as your Appendix would seem to indicate. Even though the spoil materials are being placed on the land, the spoil materials must be placed somewhere, and any enhancement would simply be incidental to the project.
- 4. While Armco Steel is a major industrial facility in the Blue River Valley, we cannot ignore the many businesses along the project that will also be protected. There is no practical way of protecting the many businesses along the project area without also protecting Armco Steel.

We appreciate the opportunity and hope that these comments will be considered in the compilation of the final report.

Sincerely yours,

Don D. Hurlbert, P.E.

) Huller

City Engineer

DDH:jd



Public Works Department Division of Engineering

City of Kansas City, Missouri Heart of America 19th Floor, City Hall Kansas City, Missouri 64106

August 15, 1980

Mr. Henry Eschwege, Director United States General Accounting Office Washington, D.C. 20548

Dear Mr. Eschwege:

Appreciate the benefit of your letter and excerpt from draft report entitled "Federal Share of Water Resource Project Cost Should Be Reduced When Project Benefits Are Not Widespread." The draft report dwells on special benefits accruing to property owners along the proposed channel improvement of the Blue River.

I find it difficult to agree with the facts stated in the Appendix. The City would definitely benefit from this flood protection project, in that streets, utilities, and bridges would not be damaged by frequent flooding. Also, many of the businesses in the lower part of the valley would not be closed due to such flooding.

It appears that the draft report does not recognize the regional importance of these businesses, nor the considerable employment that they provide. It almost sounds like treatment of the City as merely another business, rather than a government entity which is striving to serve its people. In that light, it does not seem proper to us wherein the report suggests that a city should pay a larger share because of the benefit from "enhancement". The alternative of no flood protection improvement is a continuation of frequent flooding, flood damages, emergency costs, and repairs. It seems appropriate to bring in the fact that the federal government spends large sums every year on emergency costs and storm-damaged repairs.

We offer the following comments on your special localized benefits in the order listed in your Appendix.

1. The 1,944 acres mentioned will not be "raised"; instead the land area covered by the 1-percent-chance-flood would be reduced by the project ("raising" implies filling). If this were not the case, the project would be of no value and hence, would have no benefit.

As your letter suggests, you believe that non-Federal entitles should share a larger portion of project cost for federally-assisted water resource projects which provide significant specialized local benefits. It should be kept in mind that the construction of Levees L-1, L-2, L-3 and L-4 was to protect the rich agricultural lands to the east known as the Everglades Agricultural Area, which was an important consideration in the original authorization by Congress in 1948 of the Central and Southern Flood Control Project.

Although we have had considerable discussion with landowners in the project area, we are not aware of any specific plans to convert their land to sugarcane production upon completion of the project as stated in your excerpt. Much of the soll is not suitable for sugarcane production and again one must ask the question what alternate use would the landowner have enjoyed if the L-1, L-2, L-3 and L-4 levees had not been constructed originally.

In summary, we understand your position with respect to the cost sharing on federally-assisted water resource projects. However, we are of the opinion that the excerpt relating to the Hendry County Flood Control Project is not a representative example and is inappropriate for inclusion in your report. We look forward to your visit in August and if you would like to discuss this further at that time we would be happy to do so.

Sincerely.

19HN R. WODRASKA Deputy Executive Director

JRW/Jg



South Florida

John R. Maloy, Executive Director

Water Management District

Post Office Box V 3301 Gun Club Road West Palm Beach, Florida 33402 Telephone (305) 686-8800 Florida WATS Line 1-800-432-2045

IN REPLY REFER TO:

6-HCA

August 8, 1980

Mr. Henry Eschwege Director United States General Accounting Office Washington, D.C. 20548

RE: GAO letter dated July 23, 1980, relating to "Federal Share of Water Resource Project cost should be reduced when Project benefits are not widespread"

Dear Mr. Eschwege:

Relative to the above referenced letter and the excerpt concerning the Hendry County Flood Control Project, outlined below are the District comments for your consideration.

The Hendry County Flood Control Project, as authorized in 1965, is a direct result of the construction of Levees L-1, L-2, L-3 and L-4 and the adjacent borrow canal which occurred in the mid-1950's. It is the position of this District, which is a matter of record, that the primary purpose of the project is to mitigate damages resulting from the aforementioned construction. The alleged benefits resulting from the proposed project are not actually benefits accruing to the landowner, but involve restoration of rights that the property owner has been deprived of since construction of the original project.

For the uninformed reader, the <u>Description</u> section of the Hendry County Project excerpt is inadequate and incorrect. There is no mention of the improvement of the existing borrow canal (the main element of the Project); the inflow control mound is referred to as "another Levee" to the "left of the existing levee" (should read west); and most inflows to the system will be gravity, not "pumped" as stated. Another factor we in Fiorida are concerned about, the project as currently designed restores significant environmental benefits through restablishment of sheet flow across the northwest corner of Water Conservation Area 3A -- the Everglades. In addition, the existing system permits overdrainage through open channel connections and inadequate inflow controls. The proposed project provides for appropriate inflow control and adequate control structures to reduce overdrainage. The failure to properly portray the project blases an assessment for any purpose.

Robert L. Clark, Jr. Chairman — Fort Lauderdale

Robert W. Padrick Vice Chairman — Fort Pierce

J. Neil Gallagher

Nathaniel P Reed Hobe Sound

John L. Hundle Pahokee Robert K. Butler Okeechobee Charles L. Crumptor

Jeanne Bellamy

2. potable water most of them would have to close. Should water service be lost for a sustained period of time, closings would not only have an adverse impact in the Matropolitan area but over a widespread area. Unemployment would result and the products manufactured by these plants could trigger shortages of products that are supplied to all areas of the country.

- 3. As with most core cities, a large percentage of the population of Richmond is in the lower income bracket. With inflation and the high cost of energy, it has become increasingly difficult, particularly for the lower income bracket, to meet basic needs. Accordingly the City feels it has an obligation to keep water rates as low as possible so that all of it's citizens can obtain this vital service at the lowest possible cost.
- 4. We are unable to determine how the Office of Management and Budget arrived at their conclusion, outlined in Appendix I, as to the amount that each residential customer's bill would be increased if the project was financed solely by the City of Richmond. In our opinion, the average annual increase per customer would be substantially higher than that reflected in Appendix I.
- 5. The statement "The lack of flood protection is a design deficiency of the local water system:" is also somewhat misleading. The original filter plant was constructed in 1924 at the existing settling basins that were constructed in 1909. The capacity of the plant was expanded in 1950. To the best of my knowledge, the potential for flooding the plant at the potential river elevations contained in the study was not fully recognized until the Corps of Engineers completed their study in 1965. Prior to the 1972 flood, no damage was inflicted to the plant during prior floods.

I hope this will help to clarify any statements made in Appendix I. Should you have any further questions concerning this project, please do not hesitate to contact me on (804) 780-4884.

Very truly yours,

G. M. Deleno

Chief of Utility Plants

CMD/10

Certified Mail Return Receipt Requested

City of Richmond
Department of Public Utilities



900 East Broad Street Richmond, Virginia 23219

August 6, 1980

Mr. Henry Eschwege Director Community and Economic Development Division United States General Accounting Office Washington, DC 20548

> Re: Richmond Water Filtration Plant, Flood Control Project - Appendix I

Dear Mr. Eschwege:

I appreciate your forwarding me Appendix I excerpt and allowing me the opportunity to comment on some of the statements contained in the Appendix. My comments are as follows:

1. The statement "The Department of Utilities Chief of Plants said the project did not provide any general or widespread benefits" is misleading. By virtue of the fact that Richmond is the capitol of Virginia, the downtown area contains the central Government offices for the State, Federal offices, Federal Reserve Bank, Medical College of Virginia, and the major banks and financial institutions which with their auxiliaries comprise the financial heart of Virginia. In addition, Richmond is the core of the Metropolitan area and provides employment not only for the citizens of Richmond but for residents living in the surrounding counties. Also, the Richmond Water Plant not only provides water for the City of Richmond but also provides better than 90% of the water for neighboring Henrico County.

Following the inundation of the Plant in 1972 and loss of water service, the high-value downtown area was sealed off by the National Guard, and no one was allowed in the area except on important official business. In essence, the downtown area was closed. Had this condition existed for more than a few days, the State's economy and State and Local Governments would have suffered intolerably. In view of this, I am of the opinion that the project does provide general and widespread benefits.

2. I am at a loss as to what is meant by the statement "the Richmond Chief of Plants said the project also provided secondary benefits by establishing a dependable source of industrial water." The Richmond Plant does provide the potable water needs for industries located in the City and neighboring Henrico County. Without

the concern in this report is to show more people should pay more. No statement is made concerning the fact that the project was carried out as specified by federal mandates.

Sincerely yours,

Milton A. Perry, AICP Director of Planning & Inspections

/ac

John T. Maxwell, City Manager P. Hunter Cox, Industrial Development Authority Robert W. Daniel, Jr., U.S. Congressman

CITY OF CHESAPEAKE

Public Service Building 300 Cedar Road Chesapeake, Virginia 23320

DEPARTMENT OF PLANNING

August 19, 1980

Henry Eschwege, Director United States General Accounting Office Community and Economic Development Division Washington, D. C. 20548

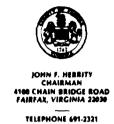
Dear Mr. Eschwege:

This is in response to the excerpt from a draft report entitled, "Federal Share of Water Resource Project Cost Should be Reduced when Project Benefits are not Widespread," in reference to the deepening of the Southern Branch of the Elizabeth River in Chesapeake, Virginia.

The general tone of the excerpt appears to me to be less than fair to the City of Chesapeake. The last paragraph on page 48 especially. The City of Chesapeake was charged with the responsibility to provide a disposal site and also a 25-year maintenance disposal site. The fact that the City did not have to purchase the site and could still fulfill its contractual obligation to the Corps of Engineers should not be a factor in considering cost benefits. Had there not been such an available disposal site, the City would, under its contractual agreement, have purchased one. Regardless, the City provided a site free of charge, as required, and complied with all design and other requirements established by the Corps of Engineers, including land enhancement.

The report narrows the benefits down to property owners and the City. Does not the region, the Commonwealth, and the Country at large benefit from increased shipping trade and job opportunities? Certainly it increases the value of the land, as any improvement of this nature would; but the purpose of the deepening relates directly to the ability to provide additional land available to industries needing deep draft accessibility. This type of industrial land is rapidly becoming very scarce.

I do not feel that the author of this report had the full picture of this project that is finally being completed after more than fifteen years of waiting. It appears that



COUNTY OF FAIRFAX

BOARD OF SUPERVISORS

AUG 8 1980

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MARIE TRAVESKY

United States General Accounting Office Community and Economic Development Division 441 "G" Street, N.W. Room 6800 Washington, D. C. 20548

Attention: Mr. Henry Eschwege, Director

RE: Comments on draft report, "Federal Share of Water Resource Project Cost Should Be Reduced When Project Benefits are not Wide Spread"

Dear Mr. Eschwedge:

The referenced draft report, as transmitted by your letter of July 23, 1980, has been reviewed by staff from Fairfax County with respect to the Pohick Watershed Flood Prevention Project. As a result of this review the following comments are presented and conform in the order of the respective subheadings of Appendix I of the referenced report:

Pohick Watershed Flood Prevention Project: The purpose of the Pohick Watershed project in Fairfax County, as presented in this section, should be expanded to include the primary objectives of the project as follows: (1) Controlling erosion and sediment at or near the source and (2) maintaining flood conditions near their present levels. The statement that implies that the purpose of this project is to provide ". . . increased income to housing developers and tax revenue to Fairfax County" is subjective and misleading and should be deleted.

Status: The statement that this project is more than 50 percent complete is not correct. Of the seven dams comprising the total project, four dams are complete, one dam is currently under construction, and two dams remain to be built.

Description: No comment.

Costs: The costs presented in this section are estimates from 1970. As of this date, the total costs expended by Fairfax County for the storm water management improvements in the Pohick Watershed is approximately \$2.2 million. Note that this figure is substantially higher than the \$1 million estimate presented in 1970. Further, the additional estimated cost to Fairfax County to complete this project is approximately \$2.6 million.

Freddie G. Burton Managing Director Director of Aviation

Joseph N. Hartmann Assistant Managing Director

Robert A. Larson Assistant Managing Director

John E. Kinville County Highway Engineer

> Robert E. Murphy General Counsel

Datis B. Norton

Director of Finance

Michael Berry Chairman

Grace R. Hampton Vice Chairman

Henry J. Galecki Secretary & Clerk



Wayne County Road Commission

OPERATORS OF ROADS + AIRPORTS + PARKS

415 CLIFFORD . DETROIT, MICHIGAN 48226 . PHONE 224-7600

August 8, 1980

Mr. Henry Eschwege, Director Community and Economic Development Division United States General Accounting Office Washington, D.C. 20548

Dear Sir:

Your letter of July 23, 1980, has been received and reviewed by the staff of the Wayne County Road Commission.

The letter includes an excerpt from the draft report entitled "Federal Share of Water Resource Project Cost Should be Reduced When Project Benefits Are Not Widespread." The excerpt from Appendix I refers to the River Rouge Flood Control project in Wayne County, Michigan. At this time there are no specific comments to be made since the two page excerpt is taken from the Draft Report from the Appendix and, therefore, it is virtually impossible to make a meaningful review of the material since basic material was not enclosed.

Yours truly,

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS

R.A. Law

Robert A. Larson, Assistant Managing Director

RAL: K

CC: Rep. John D. Dingell

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It is our desire that these comments be incorporated into the final report. If additional information is required, please do not hesitate to contact me.

Very truly yours,

John F. Herrity, Chairman Board of Supervisors

JFH/bas

- cc: J. Hamilton Lambert, County Executive

- cc: G. G. Ehrich, Director, Department of Public Works
 cc: J. W. di Zerega, Director, Office of Capital Facilities
 cc: J. E. Sunday, Director, Utilities Planning and Design Division
 cc: S. Patteson, Supervisor of Assessments

Concerning land treatment costs, both the County and developers are incurring costs for these measures. The County is incurring the costs of inspection for siltation and erosion control measures and the developers are incurring the costs of construction of the siltation and erosion control measures. Purther, the County also incurs costs for the maintenance of any publicly maintained retention/detention ponds.

Since the land treatment measures are constructed by developers, actual cost data is not available to the County. Further, County costs incurred for inspection and maintenance of land treatment measures are extensive, although the actual costs have not been determined.

Special Localized Benefits

- (a) Paragraph 1: The reference to the creation of "choice" lake front property is subjective and does not necessarily represent actual conditions. This word should be deleted.
- (b) Paragraph 2, 3, and 4: No data to substantiate. Appears to be totally subjective.
- (c) Paragraph 5: The calculations presented in this section to indicate an increase in the Fairfax County tax base, as a result of the Pohick Watershed project, do not indicate actual conditions. Actual appreciated real estate values in the Pohick Watershed were compared to actual appreciated property values in other parts of the County. Additional comments relating to this paragraph are as follows:
 - (1) The \$1.2 billion and \$14.1 billion figures for property appreciation from 1970 to 1979 in the Pohick Watershed and County wide, respectively, are not substantiated by a review of County records.
 - (2) The correct County tax rate for 1979 is \$1.54 per \$100 assessed value.
 - (3) The \$5,000 value assigned for the increase resale value for homes with a lake view is questionable and cannot be substantiated.
 - (4) In general, the calculations presented in this paragraph are confusing. Additional clarification is required. It is apparent that the report is slanted to imply that the sole cause of appreciation in the Pohick Shed is due to the existence of the impoundments. The data submitted does not support this implication and the narrative should be clarified accordingly.

was passed to meet the land treatment requirements of PL566. The District and SCS do review all site plans in the Pohick Creek Watershed for adequacy of erosion and siltation controls and other land treatment measures. Since this is a local ordinance, the County does have the sole responsibility for its enforcement. However, SCS and District personnel do make frequent inspections and report non-compliance to the proper County authorities.

The non-federal contribution of \$4,286,149 against the \$900,000 federal funds appears to us to be a favorable ratio.

We will be looking forward to the final report.

Sincerely,

Puller A. Hughes, Jr.

Executive Director

PAH/mlb

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Puller A. Hughes, Jr.

Executive Director

COMMONWEALTH of VIRGINIA

NORTHERN VIRGINIA SOIL AND WATER CONSERVATION DISTRICT

3945 CHAIN BRIDGE ROAD, SUITE B FAIRFAX, VIRGINIA 22030 AUGUST 11, 1980 TELEPHONE (703) 591-6660

Mr. Henry Eschwege, Director U.S. General Accounting Office Community and Economic Development Division 441 G Street, N.W. Washington, D.C. 20548

Dear Mr. Eschwege:

Thank you for the opportunity to comment on the excerpt from the draft report, "Federal Share Of Water Resource Project Cost Should Be Reduced When Project Benefits Are Not Widespread." The letter is addressed to me as Chairman of the Northern Virginia Soil and Water Conservation District. I would be honored; however, the Chairman is Joseph T. McKinney, 1305 Macbeth Street, McLean Virginia, 22102.

We do not disagree that there is increased income to both private enterprise and tax revenue to Fairfax County derived from the Pohick Creek Watershed Project; however, the same can be said of most any federally assisted program.

We do disagree with your inference that only the residents of Fairfax County and those landowners in particular around the impoundments receive benefits. With the exception of Lake Braddock, the lakes are all owned by Fairfax County and will be open to the general public for recreational use. The benefits derived from flood prevention, sedimentation and non-point pollution protection provided by these structures in no way can be construed to be "special local benefits." Protection of main transportation routes into the nation's capital can hardly be described as "special localized benefits." The protection of the Potomac estuary from siltation and pollutants can hardly be termed "special localized benefits." No place in your report have you computed these benefits and compared them with the additional income allegedly received by Fairfax County and the Yeonas Developers.

You, also, state that "SCS cannot require the landowners to apply these measures, and it does not follow-up to see that they are applied." We have to disagree strongly with the implication of this statement. Fairfax County at the urging and with the leadership of the Northern Virginia Soil and Water Conservation District and SCS was the first jurisdiction in the nation to pass an ordinance to control erosion and siltation on development sites. This ordinance

Sumter County Recreation and Water Conservation and Control Authority

Sumter County Courthouse P.O. Box 446 Bushnell, Florida 33213 Office Phone: (904) 793-4571

JAMES R. EDWARDS, Chairman Wildwood, Florida 32785 JAMES W. VEAL

STANTON GIDEONS, JR Webster, Florida 33597

GLENN F. WADE, Vice-Chairman

S.D. ANDREWS

John W. Springstead, P.E., Sec.-Treasurer

Randall N. Thornton, Attorney

August 19, 1980

Mr. Henry Eschwege, Director United States General Accounting Office Community and Economic Development Division Washington, D.C. 20548

Dear Mr. Eschweget

This is to acknowledge receipt of your letter of July 23, 1980.

I am pleased to comment on some of the portions of Appendix 1 of your draft, because we feel there are some inequities therein. In regard to page 65 concerning limited beneficiaries, we take exception with the statement that "one large landowner received land benefits from the changed land use." There were, in addition to a large landowner, eighty (80) or more small landowners in the truck farming business who did receive benefit from the project. Also, a small community, City of Webster, receives benefit. The combination of the benefits from these large number of people will far exceed the benefits, as stated in your Appendix on page 65.

In reference to your letter, we would like to place our opinion on record, as we discussed with your Auditor in this office, in that, should the cost-sharing retto be higher from a local sponsor, then these projects would not be built. It is imperative that we maintain the current cost-sharing ratio, or one very close to it, otherwise, there will be no local participation in the P.L. 566 Program.

Should you have further question regarding our comments, please contact me.

Very truly yours,

JOHN W. SPRINGSTEAD, P. E.

Secretary-Treasurer

JWS: tos

CERTIFIED MAIL

(080460)

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COUNTY OF SARASOTA

FLORIDA

DEPARTMENT OF ENVIRONMENTAL SERVICES

COMMISSIONERS: ANDREW SANDEGREN . DISTRICT I BEVERLY CLAY . DISTRICT 2 JAMES D NEVILLE * DISTRICT 3 JOHN M. SABA, JR. * DISTRICT 4 LARRY RHODES * DISTRICT 5

NORMAN E. THOMAS DIRECTOR

ED MARONEY COUNTY ADMINISTRATOR

August 7, 1980

Mr. Henry Eschwege, Director Community and Economic Development Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Eschwege:

Ms. Murphy of the Sarasota County Clerk's Office was kind enough to send me a copy of your letter and the draft report on the Sarasota West Coast Flood Control and Drainage Project.

Our agency is responsible for the control of aquatic vegetation and water levels within this system, and I would like to make one minor comment concerning your report.

Under the heading Special Localized Benefits you list the current value of improved pasture land along with the project at \$9,000. per acre. This is obviously a typographical error. Improved pasture along the Slough is currently assessed for taxes and agricultural purposes at \$195. per acre. The market assessment for such land depending on accessibility is about \$1,200. per acre. Land farther from the Slough would be assessed at \$800. to \$900. per acre. Recent sales of improved pasture with development potential go in the neighborhood of \$2,000. to \$3,000. per acre. This information was obtained from the Tax Assessor's office in Sarasota County.

I want to thank you for this opportunity to comment, and hope these new figures will be included in your re-write of the draft report.

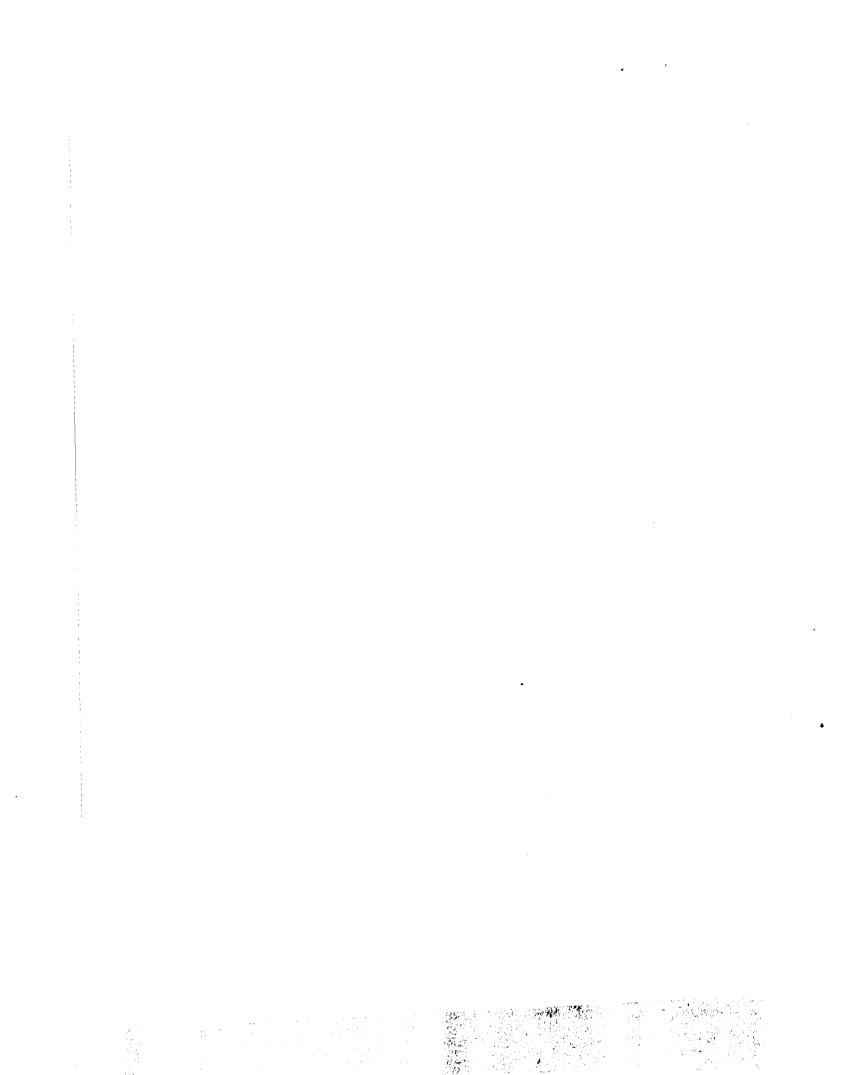
> Sincerely, Norman Thomas, Director

Aquatic Plant and Mosquito Control

NT:ib

xc: Jeni Murphy, Deputy Clerk Ed Maroney, County Administrator Tony Polizos, Soil Conservation Service

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