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INCREASES IN CURRENT LIMITATIONS IN CERTAIN RIVER BASIN MONETARY AUTHORIZATIONS

GOVERNMENT

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COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
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HEARING BEFORE THE SUBCOMMITTEE ON WATER RESOURCES OF THE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION HOUSE OF REPRESENTATIVES NINETY-FOURTH CONGRESS SECOND SESSION

ON

H.R. 12545

AUTHORIZING ADDITIONAL APPROPRIATIONS FOR PROSE-
CUTION OF PROJECTS IN CERTAIN COMPREHENSIVE RIVER
BASIN PLANS FOR FLOOD CONTROL, NAVIGATION, AND
FOR OTHER PURPOSES

MARCH 18, 1976

Printed for the use of the
Committee on Public Works and Transportation



INCREASES IN CURRENT LIMITATIONS IN CERTAIN
RIVER BASIN MONETARY AUTHORIZATIONS

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H. R. 12545

IN THE HOUSE OF REPRESENTATIVES

MARCH 16, 1976

Mr. JONES of Alabama (for himself, Mr. ROBERTS, Mr. DON H. CLAUSEN, Mr. JOHNSON of California, Mr. HAMMERSCHMIDT, Mr. MCCORMACK, Mr. COCHRAN, Mr. BREAUX, Mr. ABDNOR, Mr. NOWAK, Mr. TAYLOR of Missouri, Mr. FARY, and Mr. RISENHOOVER) introduced the following bill; which was referred to the Committee on Public Works and Transportation

A BILL

Authorizing additional appropriations for prosecution of projects in certain comprehensive river basin plans for flood control, navigation, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That (a) in addition to previous authorizations, there is here-
4 by authorized to be appropriated for the prosecution of the
5 comprehensive plan of development of each river basin
6 under the jurisdiction of the Secretary of the Army referred
7 to in the first column below, which was basically authorized
8 by the Act referred to by date of enactment in the second
9 column below, an amount not to exceed that shown opposite
10 such river basin in the third column below:

Basin	Act of Congress	Amount
Alabama-Coosa River Basin.....	Mar. 2, 1945	\$6,000,000
Arkansas River Basin.....	June 28, 1938	6,000,000
Brazos River Basin.....	Sept. 3, 1954	19,000,000
Columbia River Basin.....	June 28, 1944	39,000,000
Mississippi River and tributaries.....	May 15, 1923	220,000,000
Missouri River Basin.....	June 28, 1938	85,000,000
North Branch, Susquehanna River Basin.....	July 3, 1938	72,000,000
Ohio River Basin.....	June 22, 1936	23,000,000
Red River Waterway project.....	Aug. 13, 1938	32,000,000
San Joaquin River Basin.....	Dec. 22, 1944	46,000,000
Santa Ana River Basin.....	June 22, 1936	2,000,000
South Platte River Basin.....	May 17, 1950	22,000,000
Upper Mississippi River Basin.....	June 28, 1938	2,000,000

- 1 (b) The total amount authorized to be appropriated by
- 2 this Act shall not exceed \$574,000,000.

INCREASES IN CURRENT LIMITATIONS IN CERTAIN RIVER BASIN MONETARY AUTHORIZATIONS

THURSDAY, MARCH 18, 1976

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON WATER RESOURCES
OF THE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:03 a.m., in room 2167, Rayburn House Office Building, Hon. Ray Roberts (chairman of the subcommittee), presiding.

Mr. ROBERTS. The subcommittee will be in order.

This morning the Subcommittee on Water Resources meets to hear testimony on H.R. 12545 which would authorize additional appropriations for comprehensive river basin plans authorized for construction by the Corps of Engineers.

Basin monetary authorizations limit the amount of funds which can be appropriated to carry out projects within the specified river basins. There are also individual major projects where the amount of funds authorized to be appropriated is less than that needed to complete the project. This practice gives the Congress an opportunity to review and control the rate of accomplishment of these basin plans and major projects.

Additional authorizations will be required for 13 river basins to enable work in these basins to continue in fiscal year 1977. The basins and the amounts of additional authorization appear in the bill.

Appearing before the subcommittee to testify on this legislation is Maj. Gen. Ernest Graves, Director of Civil Works of the Corps of Engineers.

General Graves, I welcome you to the subcommittee.

First, before I call upon you, General Graves, I recognize the distinguished ranking member of this subcommittee, the gentleman from California, Mr. Clausen.

Mr. CLAUSEN. Thank you, Mr. Chairman.

I would like to join you in welcoming our witnesses from the Corps of Engineers.

I would like to especially welcome you, General Graves. This is the first time I am aware of that you are testifying before this subcommittee.

I think we understand correctly, and it is my hope that these authorizations will be sufficient to carry out the various programs until the end of fiscal year 1977.

I hope that these hearings will insure this bill will accomplish that purpose.

Thank you, Mr. Chairman.

Mr. ROBERTS. General Graves, would you please identify those accompanying you, and proceed as you wish.

TESTIMONY OF MAJ. GEN. ERNEST GRAVES, DIRECTOR OF CIVIL WORKS, OFFICE OF THE CHIEF OF ENGINEERS, CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY, ACCOMPANIED BY AUGUST J. SMET, CHIEF, PROGRAMS DIVISION, CIVIL WORKS OFFICE OF THE CHIEF OF ENGINEERS; EDWARD J. O'NEILL, CHIEF, WESTERN BRANCH, PROGRAMS DIVISION, CIVIL WORKS, OFFICE OF THE CHIEF OF ENGINEERS; JAMES O. KENDRICK, WESTERN BRANCH, PROGRAMS DIVISION, CIVIL WORKS, OFFICE OF THE CHIEF OF ENGINEERS; AND ALEX SHWAIKO, ACTING CHIEF, PLANNING DIVISION, CIVIL WORKS, OFFICE OF THE CHIEF OF ENGINEERS

General GRAVES. Mr. Chairman and Mr. Clausen, it is indeed my first time before this subcommittee, and it is a great pleasure to be here.

I have with me Mr. August Smet, Chief, Programs Division, Civil Works, Office of the Chief of Engineers; Mr. Edward J. O'Neill, Chief, Western Branch, Programs Division, Civil Works, Office of the Chief of Engineers; Mr. James O. Kendrick, Western Branch, Programs Division, Civil Works, Office of the Chief of Engineers; and Mr. Alex Shwaiko, Acting Chief, Planning Division, Civil Works, Office of the Chief of Engineers.

I have a fairly brief prepared statement, Mr. Chairman, and some slides to go with it, which I think will review the matter fairly completely and provide a basis for committee action.

Mr. ROBERTS. Thank you, sir. Proceed.

General GRAVES. I am pleased to have this opportunity to appear before you in support of the administration's request for increases in current limitations on river basin monetary authorizations. These increases are vitally important to allow timely construction of previously authorized projects to meet urgent water resource needs.

I regard construction of well-justified and environmentally responsive water resource development projects to be one of the most productive investments of public funds available to our Nation. These projects improve navigation, prevent flood damages, produce hydroelectric power, provide water supply, improve water quality, and offer water-based recreational opportunities for the American public. They are authorized and constructed to alleviate significant water-related problems and, hopefully, to prevent a recurrence of some of the more severe manifestations of these problems which have occurred in past years.

Beginning with the 1936 and 1938 Flood Control Acts, Congress approved a number of basin and project plans. These basin and project plans were based on general survey data, were broad in nature, and lacked sufficient detail to assure the Congress that ultimate development would be fully acceptable.

Consequently, the Congress limited the amount that could be appropriated for those particular plans. The requirement for additional authorization as development of the basin plan proceeded gave the

Public Works Committees, and the Congress, the opportunity periodically to review our progress as general plans evolved into definite project proposals.

In recent years more detailed plans have been authorized with monetary authorization limitations. These limitations permit the Public Works Committees to review progress on these project or basin plans as they proceed, before committing the Congress to the full cost of these plans. The limitations on monetary authority subsequently have been increased by the Congress, from time to time, to permit proceeding with construction of projects in the authorized plans.

There are presently 29 basin development plans subject to a monetary authorization limitation. The latest act providing increased monetary authorization was Public Law 94-101, which was signed into law on October 2, 1975. That act provided increased monetary authorizations for work expected to be accomplished through the 1976 transition quarter.

In accordance with section 607 of the Congressional Budget and Impoundment Control Act of 1974, the administration has submitted estimates of required increases in basin monetary authorizations for anticipated obligations through fiscal year 1978. These estimates reflect an additional requirement of \$398 million for 13 river basins through fiscal year 1977, and an additional \$441 million for the same 13 basins through fiscal year 1978. Further review and refinement of our anticipated obligations since the administration's submission have disclosed that the \$2 million increase requested for the Upper Mississippi River Basin through fiscal year 1977 and the \$4 million additional through fiscal year 1978 will not be required.

Mr. Chairman, the above estimates should be amended accordingly.

I would like to illustrate the concept of additional monetary authorization needs by referring to the situation in the Missouri River Basin.

The total estimated cost of all features of the basin plan is \$2.595 billion. The present monetary authorization limit on the amount which can be appropriated and obligated to advance the construction of authorized projects in the basin is \$1,782 billion, which is within the available authorizations.

Our projection of additional obligations through fiscal year 1977, based on the 1977 budget, would bring the total monetary authorization required to \$1.854 billion, an increase of \$72 million. An additional \$80 million would be required through fiscal year 1978, bringing the total amount requested for this basin to \$152 million.

Based on the fiscal year 1977 budget, 12 river basins will require additional authorization. We have scheduled our planned activities so as to permit continuation of work now underway in all river basins, through September 30, 1976.

However, in two river basins, the North Branch Susquehanna River and South Platte River, we are currently aware of critical work which should be done this construction season which we will not be able to undertake until additional monetary authorization has been provided. The additional requirements for these basins, beyond that reported last year, are a result of increased claims settlements, and unanticipated physical conditions encountered during construction.

Other river basins also could exhaust existing authorization sooner than we now contemplate if there are unprogramed requirements

between now and the end of September. Considering the unusually fine weather we have had in many parts of the Nation this winter, I am certain that some problems will arise simply because many contractors are proceeding more rapidly than we had initially programmed. Normally, we would cover the earnings of such contractors by transfers from other projects where we have experienced delays.

However, if the projects with increased requirements are subject to a monetary authorization limit, we still would have to shut down contracts despite having funds available. In addition to the Susquehanna and South Platte basins, we are carefully watching progress on projects in the Alabama-Coosa, Arkansas, Brazos, Columbia, and Mississippi River and tributaries basins, all of which could exhaust current authorizations before October 1976, with relatively small unprogramed additional requirements. Two other basins will exhaust current authorizations in October 1976, based on the budget program, but their current situation is not on critical as the seven I just mentioned. Three additional basins will exhaust their authorization during fiscal year 1977.

In previous years, it was the practice of the Congress to provide monetary authorization for a 2-year period, and, because our 2-year estimates of funding requirements were fairly optimistic, we were rarely faced with the possibility of having to terminate work on authorized projects due to the exhaustion of monetary authorizations.

The committee's indicated intent to limit additional authorizations to our requirements only for the budget year raises several potential problems that should be carefully considered. In addition to the type of unbudgeted requirement I have already discussed, our projects are continually subject to inflationary cost increases.

The individual project costs used in development of the fiscal year 1977 budget, and our monetary authorization requirements, are based on prices and conditions in effect on October 1, 1975. As inflation continues throughout the budget period, extending through September 1977, work that is not already under contract is likely to cost more than our current estimates. This could create a requirement on individual projects greater than the amount we are now reporting.

Another factor is the possibility that Congress may appropriate different amounts of money for individual projects than requested in the budget. As requested by your staff, the detailed justification data provided to your committee includes information on our full fiscal year 1977 capability for each project subject to monetary authorization in those basins approaching exhaustion of their current authorizations.

These capability amounts were developed considering each project by itself. They do not consider fiscal constraints, the administration's assessment of appropriate national priorities for Federal investments, or the impact of stated capabilities for other individual projects on the corps' overall capability.

I urge the committee to give favorable consideration to our request for additional monetary authorizations so that we can continue making progress toward meeting the water resource needs of our Nation.

Sir, this concludes my statement. My staff and I will be pleased to respond to any questions you may have.

Mr. ROBERTS. Thank you, General Graves, for a very clear and concise statement.

General, you state that further review indicates that additional authorization requested on the Mississippi will not be needed.

Then it seems to me another place, just a cursory examination, it might be needed. Can you give me an explanation?

General GRAVES. I was making reference to the upper Mississippi River, and I was talking later on about, among others, the Lower Mississippi River and tributaries project.

The situation on the upper Mississippi in 1977 is that there is very little likelihood that these contingencies, such as cost growth or additional appropriations are likely to have an adverse impact, but in some of the other areas, where we have a very large program ongoing, a relatively small percentage increase would push us over if we do not receive the additional authorization that I summarized for the 12 basins.

In the upper Mississippi for 1977, the pace of the work that is available for placement and the status of the projects make it unlikely that we are going to have any trouble there. Work has not progressed as far as we thought it would.

Mr. ROBERTS. As I understand it, your request for these additional authorizations is actually based on the administration's budget for fiscal year 1977.

Now, how many new construction, or preconstruction planning and survey starts are contained in this budget?

General GRAVES. Well, of course, there are only the three new planning starts, and there are no new construction starts.

The budget request does not contemplate any of those.

Mr. ROBERTS. Do you contemplate that the Appropriations Committee will add some new starts, and probably increase the requirements for the basins which need the authorizations?

General GRAVES. Judging from the comments and questions during our appearances before those committees, one could very easily infer that they plan to recommend to the Congress some new starts over and above the President's budget.

They inquired into this at length, and they expressed great concern that new starts were not included in the President's budget.

Mr. ROBERTS. General, do you feel the amounts requested in the administration's bill would include the necessary contingencies for overruns, and possibly add-ons?

General GRAVES. The administration's request is for 2 years, so except for the new start problem, we feel that the administration's amounts are reasonably adequate. The thing that could strain the amounts requested by the administration would be either the addition of new starts or the addition of some capability funds and, of course, we have had many inquiries from the committees as to our capability.

Now, considering fiscal year 1977 alone, if the Appropriations Committees recommend it, and the Congress appropriated amounts over and above the President's budget, then the amounts in the administration's request for additional monetary authorization through fiscal year 1977 would not be adequate, because they are based on the administration's fiscal year 1977 budget request.

If the Congress limits itself strictly to the administration's budget request, then I believe the amounts in the administration's proposed bill would be adequate.

Mr. ROBERTS. I can understand your concern about limiting increased authorizations to 1 fiscal year, but if you have examined the bill here we are considering, I think you will note it has increased amounts to cover the contingency of the increased appropriations.

My question is, Do you think these are sufficient?

General GRAVES. I believe that they are, and I understand the rationale for the amounts that are in the proposed bill.

I understand the rationale for the increases over the amounts proposed by the administration. They do in all but two cases cover the capability amount. Mr. Roberts, in those two cases they cover a reasonable increase over the administration's bill, approximately midway between the administration's requests for fiscal year 1977 and fiscal year 1978. We believe that will be adequate, based on a 1-year extension.

Mr. ROBERTS. Thank you.

The gentleman from California, Mr. Clausen.

Mr. CLAUSEN. Thank you, Mr. Chairman.

General, I wanted to expand on the questions propounded to you by the chairman.

I wonder if you can tell us what would be the effect of the corps' program, if the fiscal year 1977 budget submission is repeated for the next few years, that is, no new construction starts or planning starts.

General GRAVES. There are just three planning starts, Mr. Clausen, but there are no new construction starts. Obviously, this would lead to a tailing off of our program as we completed the ongoing projects. You will recall that in his budget message the President projected a \$2.25 billion level for this program in the 4 years following the budget year; there is enough of a backlog of continuing construction to consume that amount, but toward the end of that period we would get into a position where there would be a rapid decline in the level of effort because, having not undertaken the design and having not initiated projects, there would not be enough work underway to use the funds, even if they were to be appropriated.

There is a very large backlog of unmet needs. We made an assessment that, in terms of benefits that are not now being received, by the year 1985 there are some \$10 billion of unmet needs. The program that is outlined in the President's budget, and the follow-on years, would meet about 12 percent of these. That would indicate that, in terms of the need for further water resource development, there is a large potential here, and the program outlined by the President will not get very deeply into that.

Of course, the President's purpose, firmly announced and carried out consistently in addressing our budget, has been fiscal constraint aimed at achieving a balanced budget within 3 years, and that is the reason he set our program level where he did and projected a level program in the years ahead.

Mr. CLAUSEN. Now, you say that you have a projected \$10 billion in needs for water resource projects.

I wonder if you would give me a more detailed answer as to what is involved.

Are we talking about flood control, talking about water conservation, because the area I am very much concerned about is the area of erosion control in some of the rivers.

This is something we have not even begun to scratch the surface, yet it is a very serious problem in many of the river basins throughout the country.

You have just now been given authority to start addressing yourself to the problem.

General GRAVES. The estimate of needs is based briefly on the following, Mr. Clausen.

The comprehensive basin plans prepared in accordance with the Water Resources Planning Act of 1965 contain estimates of needs in each basin for additional tons of waterborne commerce, additional acres of land protected from floods, additional megawatts of hydroelectric power, et cetera. The dollar values of these needs correspond to the average annual benefits which would result if projects were built to meet these needs. If one adds up all these dollar values, one obtains the total of \$10 billion in unmet needs in 1985.

Now, most of these plans are rather sketchy, and quite incomplete, for the type of erosion control which Congress has recently authorized pilot programs to address.

I would expect that many of the erosion control benefits of which you speak would not be included in that \$10 billion figure which came out of the 1973 assessment.

I do not have now, but could provide for the record, some data on the erosion control problem, and would be pleased to do so.

Mr. CLAUSEN. I think it would be helpful, and I would ask unanimous consent, Mr. Chairman, that the General be permitted to submit a more detailed explanation of what he sees to be the erosion problem need.

Mr. ROBERTS. Without objection.

[The following was received for the record:]

DATA ON STREAMBANK EROSION

A survey of streambank erosion for the Nation as a whole made in 1968-69 by the Corps of Engineers indicated that damage of some degree is occurring on about 549,000 miles, or 8 percent, of the 7 million miles of streambank in the Nation. Of this total, the damage occurring on about 148,000 miles is sufficiently serious to warrant future studies in varying degrees of detail with a view to remedial action. Damages resulting from streambank erosion on these 148,000 miles were estimated to be some \$90 million annually, half from sediment damages, a third from land losses, and the rest from other types of damages. Damages along the remaining reaches of the Nations streams are probably in the order of \$30 to \$40 million annually for a total of \$120 to \$130 million.

A large amount of streambank protection, over 6,000 miles, has been or is being installed under various Federal programs, mostly as integral parts of projects constructed for other purposes. There have been a relatively small number of installations specifically for bank protection purposes under emergency or other authorities. Many measures to reduce streambank erosion have proven ineffective and short-lived. They are generally costly to install and maintain. Therefore, prevention of much of the damage from streambank erosion cannot be economically justified. The annual cost of prevention of the reported \$90 million damages on 148,000 miles of serious bank erosion is estimated to be \$420 million.

NATIONAL SHORELINE EROSION PROBLEM

The latest information we have on the extent of the erosion problem of our nation's coastal shoreline was provided to Congress in May 1973 in the Chief of Engineers report on the National Shoreline Study. The study was authorized in the River and Harbor Act of 1968. I will just highlight some of the findings of this study, which has not been updated since its completion.

The study found 20,500 miles of the ocean and Great Lakes shores of the United States, Puerto Rico, and the Virgin Islands undergoing significant erosion. The study further found that action to halt significant erosion appears justified along 2,700 miles of shore. The cost of constructing suitable protective works for these shores is estimated to be \$1.8 billion (1970 price levels).

About two-thirds of the areas where erosion is a serious problem are privately owned and not eligible for Federal assistance under present law. The study also finds that management to minimize adverse effects of erosion appears appropriate for 17,800 miles of shores undergoing significant erosion where action to halt the erosion may not be justified.

Table 1 of the Chief of Engineers report, provided below, shows the assessment of the shoreline problem by region of the country. Table 6 provides a summary of the ownership of critically eroding areas by region of the country. These tables and more detailed information are contained in House Document 93-121, 93rd Congress, 1st Session.

TABLE 1.—NATIONAL ASSESSMENT OF SHORE EROSION

[In miles]

Region	Total shoreline	Significant erosion	Critical erosion	Noncritical erosion	Noneroding
North Atlantic.....	8,620	7,460	1,090	6,370	1,160
South Atlantic-Gulf.....	14,620	2,820	980	1,840	11,800
Lower Mississippi.....	1,940	1,580	30	1,550	360
Texas Gulf.....	2,500	360	100	260	2,140
Great Lakes.....	3,680	1,260	220	1,040	2,420
California.....	1,810	1,550	80	1,470	260
North Pacific.....	2,840	260	70	190	2,580
Alaska.....	47,300	5,100	100	5,000	42,200
Hawaii.....	930	110	30	80	820
Total for the Nation.....	84,240	20,500	2,700	17,800	63,740

TABLE 6.—OWNERSHIP OF CRITICALLY ERODING AREAS

[In miles]

Region	Total shoreline	Critical erosion	Private	Federal	Non-Federal public
North Atlantic.....	8,620	1,090	680	130	260
South Atlantic-Gulf.....	14,620	980	720	140	80
Lower Mississippi.....	1,940	40	30	0	0
Texas Gulf.....	2,500	100	90	0	10
Great Lakes.....	3,680	220	150	10	50
California.....	1,810	80	30	0	50
North Pacific.....	2,840	70	40	10	20
Alaska.....	47,300	100	50	50	0
Hawaii.....	930	30	20	0	10
Total.....	84,240	2,700	1,810	340	480

Note: Sum of ownerships does not agree with total because ownership data is incomplete in some regions.

Mr. CLAUSEN. Now, I also wonder if you would submit for the record the status of all the 29 basin authorizations.

Would you submit that for the record, please?

General GRAVES. I certainly will, Mr. Clausen.

Mr. ROBERTS. Without objection, so ordered.

[The following was received for the record:]

STATEMENT OF MONETARY AUTHORIZATION

[In millions of dollars]

Basin or project	Estimated cost	Available monetary authorization	Balance authorization to complete	Funds allocated through fiscal year 1975	Authorization remaining after fiscal year 1975	Fiscal years 1976 and 1976 transition quarter allocation	Authorization remaining after Sept. 30, 1976	Require for fiscal year 1977 ²	Additional authorization to carry to end of fiscal year 1977 ²	Require for fiscal year 1978 ¹	Additional authorization to carry to end of fiscal year 1978 ¹
Alabama-Coosa River Basin...	815.9	275.0	540.9	264.7	10.3	10.3	0	3	3	5	8
Arkansas River Basin...	1,476.5	1,415.7	60.8	1,405.1	10.6	10.4	2	4	4	7	13
Arkansas-Red River Basin...	546.9	46.4	600.5	7.2	39.2	3.2	36.0	5	0	0	0
Baltimore Harbor...	114.1	40.0	74.1	40.0	40.0	0	40.0	0	0	0	0
Blue River Basin...	232.4	40.0	192.4	1.4	38.6	7	37.9	1	1	0	0
Brazos River Basin...	656.2	160.0	496.2	146.0	13.8	13.5	19.2	12	12	13	25
Central and Southern Florida...	543.0	244.3	298.7	211.1	33.2	14.0	0	6	0	9	0
Columbia River Basin...	2,679.1	1,974.3	704.8	1,937.4	36.9	36.9	0	19	19	26	45
Colorado River local proj ¹	2,307.3	(15.0)	(15.3)	(12.0)	(14.9)	0	(3.0)	0	0	0	0
Connecticut River Basin...	117.5	97.0	20.5	82.1	14.9	3	14.6	1	1	1	0
Cottonwood Creek, Calif.	262.0	40.0	222.0	0	40.0	0	40.0	0	0	0	0
Gulf Intracoastal Waterway, St. Marks-Tampa...	172.0	40.0	132.0	0	40.0	0	40.0	0	0	0	0
Illinois Waterway duplicate locks...	697.0	40.0	657.0	2.3	37.7	0	37.7	1	0	1	0
Mississippi River and tributaries...	5,714.0	2,317.9	3,396.1	2,121.1	196.8	196.8	0	144	144	152	296
Missouri River Basin...	2,595.0	1,782.1	812.9	1,692.9	89.2	69.4	19.8	92	72	80	152
North Branch, Susquehanna River Basin...	253.4	133.0	120.4	74.9	58.1	58.1	0	56	56	39	95
Ohio River Basin...	1,717.7	1,338.8	378.9	1,271.5	67.3	57.3	10.0	17	17	19	36
Ouachita River Basin...	108.3	73.3	35.0	64.0	9.3	5.4	3.9	2	0	1	0
Red Run Drain and Lower Clinton River...	208.0	40.0	168.0	1	39.9	6	39.3	1	0	2	0
Red River Waterway...	1,496.3	59.0	1,437.3	18.4	40.6	32.4	8.2	11	3	26	29
Sabine River Basin...	329.6	40.0	289.6	53.2	39.0	1.0	38.0	1	0	0	0
Sacramento River Basin...	120.7	72.7	48.0	4.2	19.5	4.2	15.3	3	0	5	0
San Joaquin River Basin...	310.8	192.5	118.3	126.3	66.2	49.6	16.6	59	43	53	96
Santa Ana River Basin...	69.2	45.5	23.7	33.5	2.0	6	1.4	2	1	2	3
South Platte River Basin...	184.1	113.3	70.8	92.7	20.6	20.6	0	22	22	13	35
Tampa Harbor...	142.0	40.0	102.0	1.3	38.7	9.0	29.7	5	0	8	0
Trinity River Basin...	1,196.0	83.0	1,113.0	19.7	63.3	9.8	53.5	3	0	8	0
Upper Mississippi River Basin...	148.6	133.7	14.9	130.2	3.5	1.1	2.4	0	0	1	0
Wabash River Basin...	239.3	50.0	189.3	2.6	47.4	3.0	44.4	3	3	1	0
White River Basin...	419.0	305.0	114.0	291.4	13.6	1.1	12.5	2	0	3	0
Total	23,554.6	11,232.5	12,322.1	10,062.3	1,170.2	609.3	486	486	488		

¹ Reflects decrease for these projects being considered for deauthorization.

² Rounded to nearest million.

³ Specific monetary authorizations within overall monetary authorization.

Note: Deficiencies in monetary authorizations: \$396,000,000—12 basins; \$833,000,000—12 basins.

Mr. CLAUSEN. Now, assuming this bill is approved as presented before the committee, and appropriations are consistent with the authorization levels, will the corps be able to initiate work on the small projects program?

General GRAVES. In view of the President's budget submission, it will be necessary for the Congress in enacting the appropriations bill to indicate that funds are provided for the small projects programs because the President's budget does not include any funds for the small project authorities. That provision of his budget would be superseded if Congress enacted a law indicating that a certain part of the appropriations were for this purpose, and the President signs the law. That would provide the necessary funds. Pursuant to the Budget and Impoundment Control Act, the Congress could assert that the money would be made available for such projects. I would remind the committee, however, that the small projects programs are not subject to the basin monetary authorizations.

Mr. CLAUSEN. All right. Now, and finally, will these basin authorizations be sufficient to carry your programs through fiscal year 1977?

General GRAVES. The ones that are included in the committee bill certainly will, yes, sir.

Mr. CLAUSEN. Thank you, Mr. Chairman.

Mr. ROBERTS. The gentleman from New Jersey.

Mr. ROE. Thank you very much, Mr. Chairman.

General, let me ask you two questions.

One, this is only for an informative point of view, but how closely do we coordinate with EPA vis-a-vis the point of view the water pollution control legislation that is pretty much mandated on the watersheds and basins to clean up water pollution?

Do you have any coordination there?

General GRAVES. Well, the answer to that is there is quite close coordination with EPA, quite a bit of our planning work meshes with EPA planning.

For example, section 208 of Public Law 92-500, you will recall, provides for a certification from EPA before the corps can include any storage for water quality in its reservoirs.

There are many interfaces in this rather complex effort. The basin commissions which carry out a great deal of this basin planning include representatives both from the corps and from EPA.

I would submit that there is close coordination. Sometimes we wish we were doing better in this area. It is a big Government, but provisions of law certainly provide the groundwork for effective coordination.

Mr. ROE. The reason which gives rise to that question, Mr. Chairman, is the point that I am becoming concerned, and in all due fairness and kindness, I am waiting for a report from the Corps of Engineers on the Passaic River Basin in the State of New Jersey, and we find, quite seriously, that the interrelationship of the optimum yield of that river basin is now getting into confrontation with EPA as it relates to water quality control in that basin.

It is one of the filthiest rivers, and I guess most treacherous in the northeastern part of the Nation, and what is really hurting us now, is we are losing the edge, we have not been able to get a response.

I know the Rivers and Harbors Board, in reviewing that project, the last report I got from your office, was it was pending and ready

to go through the OMB, and ultimately through the Secretary of the Army.

The Passaic Valley Shore Commission is the viable major agency for the disposal of sewage in that particular basin. It does not cover all of the communities and cities in the basin, but I would say it covers at least half of them.

What they are running into now is, in order to perfect their sewage disposal work that they are working on to the tune of about \$450 million, they have to raise \$100 million of matching funds locally.

You can realize the order of magnitude fiscally what that means.

Unless we can get some kind of a coordinated program on a broader fiscal tax basis, we are going to be stopped. It is a very serious problem.

What we are looking for is if you could, not right off the top of your head, but give me an update on it. It is vital that we move that project into the planning stage.

General GRAVES. I would like to submit for the record the exact Status, but the Chief of Engineers has issued his report, and I believe the matter is with the Secretary of the Army at the present time. He is considering the Chief's report.

Of course, when he has prepared his report, this must be provided to the Office of Management and Budget for views as to its relation to the President's program.

That is where it is at the present time, Mr. Roe.

Mr. ROE. So we are waiting in the Secretary's level, or does he wait for an input from Office of Management and Budget at this point?

General GRAVES. He must provide a draft of his report to the OMB, and the Office of Management and Budget must respond with views as to the relation of his report to the program of the President.

Once the OMB has indicated that the report is consistent with the President's program, then the Secretary of the Army will transmit it to the Congress.

Mr. ROE. Would you be kind enough to give us a update for the record on that?

General GRAVES. I certainly will.

[The following was received for the record:]

STATUS OF PASSAIC RIVER, N.J., REPORT

The Chief of Engineers submitted his report to the Assistant Secretary of the Army (Civil Works) on 20 February 1976. As of 31 March 1976 the Assistant Secretary has not requested the views of the Office of Management and Budget on the report.

Mr. ROE. Thank you, Mr. Chairman.

Mr. ROBERTS. The gentleman from New York?

Mr. WALSH. No questions.

Mr. ROBERTS. The gentleman from South Carolina?

Mr. HOLLAND. No questions.

Mr. ROBERTS. The gentleman from Pennsylvania?

Mr. EDGAR. No questions.

Mr. ROBERTS. The gentleman from Utah?

Mr. HOWE. No questions.

Mr. ROBERTS. There being no questions, the Chair is ready for a motion.

Mr. CLAUSEN. Mr. Chairman, I will move that H.R. 12545 before the subcommittee be reported favorably to the full committee.

Mr. ROBERTS. Is there a second?

Mr. EDGAR. I second.

Mr. ROBERTS. The motion has been made and seconded, that the subcommittee report H.R. 12545 to the full committee with the recommendation that it be passed.

All in favor signify by saying aye.

[Chorus of "ayes."]

Mr. ROBERTS. Those opposed signify by saying no.

[No response.]

Mr. ROBERTS. The ayes have it, and the bill is ordered reported to the full committee.

[Whereupon, at 10:35 a.m. the subcommittee proceeded to other business.]

APPENDIX

RÉSUMÉ

ESTIMATED ADDITIONAL INCREASES IN BASIN MONETARY AUTHORIZATIONS

[Millions of dollars]

Basin or project plan	Estimated increases through end of fiscal year	
	1977	1978
1. Alabama-Coosa River Basin.....	3	8
2. Arkansas River Basin.....	4	13
3. Brazos River Basin.....	12	25
4. Columbia River Basin.....	19	45
5. Mississippi River and tributaries.....	144	296
6. Missouri River Basin.....	72	152
7. North Branch Susquehanna River Basin.....	56	95
8. Ohio River Basin.....	17	36
9. Red River Waterway.....	3	29
10. San Joaquin River Basin.....	43	96
11. Santa Ana River Basin.....	1	3
12. South Platte River Basin.....	22	35
Total authorization.....	1 396	1 833

¹ Twelve basins.

ALABAMA-COOSA RIVER BASIN

The Alabama-Coosa River System drains an area of 22,800 square miles, of which about 130 square miles are in Tennessee, 5,350 square miles are in Georgia and 17,320 square miles are in Alabama. The basin has a maximum width of 110 miles and extends about 320 miles from southeast Tennessee and northwest Georgia diagonally across Alabama to the southwest corner of the State.

The River and Harbor Act of March 2, 1945, provides for the initial and ultimate development of the Alabama-Coosa Rivers and Tributaries for navigation, flood control, power development, and other purposes. The Act includes authorization for modification of the original plan as may be advisable from time to time in the discretion of the Secretary of the Army and the Chief of Engineers for the purpose of increasing the development of hydroelectric power. This Act also authorized the appropriation of \$60 million. Additional monetary authorization has been provided by subsequent acts, bringing the total monetary authorization to \$275 million.

Alabama-Coosa Basin

	Thousands
Total estimated cost of projects in the plan.....	\$815, 932
Present monetary authorization.....	275, 000
Allocations through June 30, 1975.....	264, 704
Remaining monetary authorization.....	10, 296
Additional scheduled obligations through Sept. 30, 1976.....	10, 254
Remaining monetary authorization after Sept. 30, 1976.....	42
Additional scheduled obligations through fiscal year 1977.....	2, 900
Required increase in monetary authorization through fiscal year 1977, based on budget.....	2, 858
Required increase in monetary authorization through fiscal year 1977, based on capability.....	5, 158

[In thousands of dollars]

Project	Fiscal year 1977—		Application of additional authorization based on fiscal year 1977	
	Budget	Capability	Budget	Capability
Projects for which additional authorization is required:				
Carters Lake, Ga.....	1,200	1,200	1,200	1,200
Jones Bluff lock and dam, Alabama.....	1,700	4,000	1,658	3,958
Total.....	2,900	5,200	2,858	5,158
Total requested authorization.....			3,000	
Maximum potential authorization which may be required.....				6,000

ARKANSAS RIVER BASIN

The Arkansas River Basin contains an area of about 160,500 square miles. The basin is about 870 miles in length in an east-west direction and approximately 185 miles in average width. It extends from the Rocky Mountains on the west to the Mississippi River on the east. The drainage basin occupies parts of the States of Colorado, New Mexico, Kansas, Oklahoma, Texas, Missouri, and Arkansas.

The general comprehensive plan for flood control and other purposes in the Arkansas River Basin was adopted by the Flood Control Act approved June 28, 1938, which authorized an appropriation of \$21 million for partial accomplishment of the plan. The plan has been further amended and modified and additional monetary authorization provided by subsequent acts.

The River and Harbor Act of July 24, 1946, authorized construction of a multiple-purpose plan for improvement of the Arkansas River Basin, Arkansas and Oklahoma, for navigation, flood control, and other purposes and authorized the appropriation of \$55 million for partial accomplishment of the plan. This plan has likewise been modified by subsequent acts, and additional monetary authorization provided.

The Flood Control Act of July 14, 1960, incorporated the authorized flood control plan and the multiple-purpose plan into a single plan of development and provided that all authorizations made available for the Arkansas River Basin would be applicable to the combined plan of development. The monetary authorization provided for the combined plan totals \$1,415.7 million.

Arkansas River Basin

	Thousands
Total estimated cost of projects in the plan.....	\$1,476,542
Present monetary authorization.....	1,415,667
Allocations through June 30, 1975.....	1,405,051
Remaining monetary authorization.....	10,616
Additional scheduled obligations through Sept. 30, 1976.....	10,379
Remaining monetary authorization after Sept. 30, 1976.....	237
Additional scheduled obligations through fiscal year 1977.....	4,020
Required increase in monetary authorization through fiscal year 1977, based on budget.....	3,783
Required increase in monetary authorization through fiscal year 1977, based on capability.....	5,638

[In thousands of dollars]

Project	Fiscal year—		Application of additional authorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
McClellan-Kerr Arkansas River navigation systems navigation lock and dam, Arkansas and Oklahoma	2, 247	4, 007	2, 118	3, 805
Fort Gibson Lake, units 5 and 6, Oklahoma	350	350	340	338
Ozark lock and dam, Arkansas	0	0	794	846
Recreation at completed projects:				
Canton Lake, Okla.	55	55	48	55
Dardanelle Lake, Ariz.	0	10	0	10
Elk City Lake, Kans.	0	85	0	85
Eufaula Lake, Okla.	75	75	75	75
Fort Gibson Lake, Okla.	75	75	75	75
Navigation locks and dams, Arkansas	300	300	265	281
Toronto Lake, Kans.	68	68	68	68
Total	3, 170	5, 025	3, 783	5, 638
Total requested authorization			4, 000	
Maximum potential authorization which may be required				6, 000

BRAZOS RIVER BASIN, TEXAS

The Brazos River rises in eastern New Mexico and flows southeasterly 1,210 miles to the Gulf of Mexico near Freeport, Texas. The basin has an overall length of about 640 miles and a maximum width of approximately 120 miles. It contains an area of about 44,670 square miles.

The Flood Control Act of 1954, approved September 3, 1954, adopted the basinwide plan of improvement in the Brazos River Basin and authorized the appropriation of \$40 million for initiation and partial accomplishment of the plan. Subsequent legislation has authorized additional amounts for continuation of the plan, and modified it to include additional projects. The monetary authorization provided to date totals \$160 million.

Brazos River Basin, Tex.

	Thousands
Total estimated cost of projects in the plan	\$656, 000
Present monetary authorization	160, 000
Allocations through June 30, 1975	146, 200
Remaining monetary authorization	13, 800
Additional scheduled obligations through Sept. 30, 1976	13, 500
Remaining monetary authorization after Sept. 30, 1976	300
Additional scheduled obligations through fiscal year 1977	12, 300
Required increase in monetary authorization through fiscal year 1977, based on budget	12, 000
Required increase in monetary authorization through fiscal year 1977 based on capability	21, 280

[In thousands of dollars]

Project	Fiscal year—		Application of additional authorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Aquilla Lake, Tex.	1, 400	5, 800	1, 345	5, 745
Millican Lake, Tex.	435	435	410	410
San Gabriel River, Tex.	10, 500	14, 500	10, 245	14, 272
Recreation at completed projects:				
Proctor Lake, Tex.	0	415	0	415
Summerville Lake, Tex.	0	78	0	78
Stillhouse Hollow Lake, Tex.	0	280	0	280
Waco Lake, Tex.	0	80	0	80
Total	12, 335	21, 588	12, 000	21, 280
Total requested authorization			12, 000	
Maximum potential authorization which may be required				22, 000

COLUMBIA RIVER BASIN

The Columbia River Basin drains an area of 259,000 square miles, of which 219,000 square miles are in the United States and 39,500 square miles are in Canada. The basin includes most of the States of Oregon, Washington, and Idaho; western Montana; small areas in Nevada, Utah, and Wyoming; and the southeastern drainage of the Province of British Columbia, Canada. The river flows a distance of 462 miles in Canada and 745 miles in the United States, for a total distance of 1,207 miles.

The Flood Control Act of June 28, 1938, approved the general comprehensive plan for flood control and other purposes in the Willamette River Basin and authorized \$11,300,000 for the initiation and partial accomplishment of the recommended plan. Individual projects were authorized in the Columbia and Willamette River Basins by the Flood Control Act of June 22, 1936, and subsequent acts. The Flood Control Act of May 17, 1950, approved a general comprehensive plan for both the Columbia and Willamette River Basins for flood control and other purposes and authorized the appropriation of \$115 million for the partial accomplishment of the plan. This monetary authorization has been increased by later acts. Monetary authorization provided to date totals \$1,974.3 million.

Columbia River Basin

	<i>Thousands</i>
Total estimated cost of projects in the plan.....	\$2, 679, 126
Present monetary authorization.....	1, 974, 300
Allocations through June 30, 1975.....	1, 937, 403
Remaining monetary authorization.....	36, 897
Additional scheduled obligations through Sept. 30, 1976.....	36, 897
Remaining monetary authorization after Sept. 30, 1976.....	0
Additional scheduled obligations through fiscal year 1977.....	17, 100
Required increase in monetary authorization through fiscal year 1977, based on budget.....	19, 000
Required increase in monetary authorization through fiscal year 1977, based on capability.....	38, 500

[In thousands of dollars]

Project	Fiscal year—		Application of additional authorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Cougar Lake, Oreg.....	871	871	931	931
Dworshak Dam and Reservoir, Idaho.....	5, 500	10, 000	6, 500	11, 000
Gate Creek Lake, Oreg.....	0	300	0	300
John Day lock and dam, Lake Umatia, Oreg and Washington.....	3, 100	3, 100	3, 100	3, 100
Libby additional units and reregulate dam, Montana.....	0	2, 000	0	2, 000
Libby Dam, Lake Koocanusa, Mont.....	6, 000	16, 500	6, 840	17, 340
Libby reregulated dam, power units, Montana.....	260	260	260	260
Strubbe Lake and Cougar additional units, Oreg.....	0	150	0	150
Dalles additional units, Washington and Oreg.....	300	1, 800	300	1, 800
Willamette R. Basin bank protection, Oreg.....	450	1, 000	450	1, 000
Recreation at completed projects:				
Cottage Grove Lake, Oreg.....	50	50	50	50
Fall Creek Lake, Oreg.....	142	142	142	142
Fern Ridge Lake, Oreg.....	239	239	239	239
Dalles lock and dam, Washington and Oreg.....	188	188	188	188
Total.....	17, 100	36, 600	19, 000	38, 500
Total requested authorization.....			19, 000	
Maximum potential authorization which may be required.....				39, 000

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT

The Mississippi River and Tributaries Project embraces an area of about 35,500 square miles. It extends from Cape Girardeau, Missouri, a short distance above the confluence of the Mississippi and Ohio Rivers, southward more than

600 miles to the Head of Passes, Louisiana, near the mouth of the Mississippi River. The area, varying in width from 30 to 125 miles, includes the lower portions of large tributaries which are subject to inundation by backwater from the Mississippi River during extreme floods.

The Flood Control Act of May 15, 1928 authorized a plan for flood protection in the alluvial valley of the Mississippi River, and such bank revetment and contraction works as required to provide a channel depth of 9 feet and a width of 300 feet below Cairo, Illinois. The 1928 Act also authorized the appropriation of \$325,000,000 to accomplish the plan of protection, which was designated as the Mississippi River and Tributaries Project (MR&T). Subsequent acts have modified the original plan to include additional projects and have increased the total monetary authorization. The present plan for the Mississippi River and Tributaries Project provides for five reservoirs, hundreds of miles of levees, channel improvements, river cutoffs, and major drainage works through the alluvial valley. Also, accomplishment and maintenance of a 12-foot navigation channel from Cairo, Illinois, to Baton Rouge, Louisiana. The monetary authorization provided to date totals \$2,317,922,000.

Mississippi River and tributaries project

	<i>Thousands</i>
Total estimated cost of projects in the plan-----	\$5, 713, 953
Present monetary authorization-----	2, 317, 922
Allocations through June 30, 1975-----	2, 121, 096
Remaining monetary authorization-----	196, 826
Additional scheduled obligations through Sept. 30, 1976-----	*196, 826
Remaining monetary authorization after Sept. 30, 1976-----	0
Additional scheduled obligations through fiscal year 1977-----	143, 651
Required increase in monetary authorization through fiscal year 1977, based on budget-----	143, 651
Required increase in monetary authorization through fiscal year 1977 based on capability-----	316, 376

[In thousands of dollars]

Project	Fiscal year—		Application of additional authorization based on fiscal year 1977 ¹	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Atchafalaya Basin, La.-----	31, 665	48, 765	31, 798	48, 898
Bayou Cocodrie and tributaries, La.-----	280	330	293	343
Cache Basin, Ariz.-----	1, 000	1, 800	1, 317	2, 117
Channel improvement, Ark.-----	36, 225	98, 000	36, 268	98, 043
Eastern Rapides and South-Central Avoyelles, La.-----	100	100	100	100
Lower Arkansas River, Ariz.-----	0	0	0	0
Lower Red River, La.-----	825	3, 500	876	3, 551
Lower White River, Ariz.-----	0	720	0	720
Mississippi River Levees, Ariz.-----	29, 725	66, 125	31, 855	68, 255
Mud Lake pumping plant, Tennessee-----	0	0	0	0
Old River control, Louisiana-----	2, 500	2, 500	2, 500	2, 500
Reelfoot Lake, lake No. 9, Kentucky, Tennessee-----	1, 500	2, 100	1, 525	2, 125
St. Francis Basin, Arkansas, Missouri-----	9, 750	17, 000	9, 750	17, 000
Teche-Vermilion Basin-----	1, 700	1, 700	1, 700	1, 700
Tensas Basin, Ark. and La.-----	6, 510	23, 550	6, 832	23, 872
West Kentucky tributaries, Kentucky-----	480	480	497	497
West Tennessee tributaries, Tennessee-----	2, 710	3, 210	2, 830	3, 330
Yazoo Basin, Miss.-----	11, 340	34, 440	12, 460	35, 560
Bushley Bayou, La.-----	300	300	300	300
Greenville Harbor, Miss.-----	400	400	400	400
Mississippi River, east bank, Vicksburg-Yazoo area, Miss.-----	140	140	140	140
Mississippi River, east bank, Natchez area, Miss.-----	200	200	200	200
Harris Fork Creek, Ky. and Tenn. (subject to con- gressional authorization)-----	0	200	0	200
Arkabutla Lake, Miss.-----	540	1, 840	540	1, 840
Enid Lake, Miss.-----	300	1, 400	300	1, 400
Granada Lake, Miss.-----	870	1, 770	870	1, 770
Sardis Lake, Miss.-----	300	1, 515	300	1, 515
Total-----	139, 360	312, 085	143, 651	316, 376
Total requested authorization-----			144, 000	
Maximum potential authorization which may be required-----				317, 000

¹ Reflects repayment of \$25,000,000 which was transferred in fiscal year 1975 for emergency work.

MISSOURI RIVER BASIN

The Missouri River Basin drains an area of 519,090 square miles, of which 509,375 square miles are in the United States and 9,715 square miles are in Canada. The basin includes all of Nebraska, most of South Dakota, large portions of North Dakota, Montana, and Wyoming, about half of Kansas and Missouri, and smaller parts of Colorado, Iowa and Minnesota. From its source in southwestern Montana, it flows for a distance of 2,460 miles to enter the Mississippi River above St. Louis, Missouri.

A general comprehensive plan for flood control and other purposes in the Missouri River Basin was approved by the Flood Control Act of 1938 which also authorized \$9 million for initiation and partial accomplishment of the plan. The Flood Control Act of 1944 expanded the general comprehensive plan for the Missouri River Basin to include the coordinated plan of the Corps of Engineers and the Bureau of Reclamation and authorized the appropriation of \$200 million for each agency. Additional projects and monetary authorizations have been included in subsequent acts, bringing the total monetary authorization to date to \$1,782,094,000.

Missouri River basin

	<i>Thousands</i>
Total estimated cost of projects in plan.....	\$2, 595, 037
Present monetary authorization.....	1, 782, 094
Allocations through June 30, 1975.....	1, 692, 894
Remaining monetary authorization.....	89, 200
Additional scheduled obligations through Sept. 30, 1976.....	69, 400
Remaining monetary authorization after Sept. 30, 1976.....	19, 800
Additional scheduled obligations through fiscal year 1977.....	91, 279
Required increase in monetary authorization through fiscal year 1977, based on budget.....	71, 479
Required increase in monetary authorization through fiscal year 1977, based on capability.....	84, 169

[In thousands of dollars]

Project	Fiscal year—		Application of additional authorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Garrison Dam-Lake Sakakawea, N. Dak.....	1, 000	1, 700	200	900
Harry S. Truman Dam and Reservoir, Mo.....	73, 500	80, 000	65, 545	72, C45
Hillsdale Lake, Kans.....	8, 000	9, 000	3, 000	4, 000
Lawrence, Kans.....	2, 600	2, 600	100	100
Missouri River levee system, Iowa, Nebraska, Kansas, and Missouri.....	3, 200	3, 700	200	700
Missouri River, Garrison to Oahe, N. Dak.....	800	1, 400	500	1, 100
Perry Lake area (road improvements), Kansas.....	76C	1, 500	700	1, 500
Stockton Lake, Mo.....	800	800	800	800
Melvorn and Pomona Lakes road improvement, Kansas.....	0	10	0	10
Tuttle Creek Lake road improvement, Kansas.....	0	50	0	50
Recreation at completed projects:				
Big Bend Dam-Lake Sharpe, S. Dak.....	0	142	0	142
Fort Randall Dam-Lake Francis Case, S. Dak.....	15	15	0	0
Garrison Dam-Lake Sakakawea, N. Dak.....	0	300	0	300
Gavins Point Dam-Lewis & Clark Lake, Nebr. and S. Dak.....	40	190	40	190
Melvorn Lake, Kans.....	131	273	46	188
Milford Lake, Kans.....	0	314	0	314
Oahe Dam-Lake Oahe, N. Dak. and S. Dak.....	0	418	0	418
Perry Lake, Kans.....	30	277	30	277
Pomme De Terre Lake, Mo.....	235	599	168	532
Pomona Lake, Kans.....	0	75	0	75
Stockton Lake, Mo.....	228	606	150	528
Total.....	91, 279	103, 999	71, 479	84, 169
Total requested authorization.....			72, 000	
Maximum potential authorization which may be required.....				85, 000

NORTH BRANCH SUSQUEHANNA RIVER BASIN

The North Branch Susquehanna River Basin drains an area of 11,306 square miles of which 6,270 square miles are in south-central New York and 5,036 square miles are in northeastern Pennsylvania. It is approximately 150 miles long and has a width of approximately 170 miles. It is bounded by drainage basins of Lake Ontario and the Mohawk River on the north, the Delaware River on the east, the West Branch of the Susquehanna River on the south and the Genesee River on the west.

The plan authorized by the Flood Control Act of 1958 provides for construction of the Cowanesque Lake and Tioga-Hammond Lakes projects in Pennsylvania; local flood protection works at Elkland, Pennsylvania, and Nichols, New York; channel improvements (for flood control) at Cortland, New York; and for \$30 million to be appropriated for partial accomplishment of the project plan. This act was amended to provide additional monetary authorization to the present amount of \$133 million.

North branch Susquehanna River basin

	<i>Thousands</i>
Total estimated cost of projects in the plan.....	\$253, 410
Present monetary authorization.....	133, 000
Allocations through June 30, 1975.....	74, 907
Remaining monetary authorization.....	58, 093
Additional scheduled obligations through Sept. 30, 1976.....	58, 093
Remaining monetary authorization after Sept. 30, 1976.....	0
Additional scheduled obligations through fiscal year 1977.....	56, 000
Required increase in monetary authorization through fiscal year 1977, based on budget.....	56, 000
Required increase in monetary authorization through fiscal year 1977, based on capability.....	72, 000

[In thousands of dollars]

Project	Fiscal year—		Application of additional au- thorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Cowanesque Lake, Pa.....	12, 600	17, 600	12, 600	17, 600
Tioga-Hammond Lakes, Pa.....	35, 500	48, 500	43, 400	54, 400
Total.....	48, 100	66, 100	56, 000	72, 000
Total requested authorization.....			56, 000	
Maximum potential authorization which may be required.....				72, 000

OHIO RIVER BASIN

The Ohio River is formed by the junction of the Allegheny and Monongahela Rivers at Pittsburgh, and flows in a general southwesterly direction to join the Mississippi River at Cairo, Ill. Its length is 981 miles, and its basin, comprising 204,000 square miles, lies between the Allegheny Mountains on the east and the Mississippi River Basin on the west. The basin is about 800 miles long along the northeast-southwest axis, and about 500 miles wide along its northwest-southwest axis. Lying in the basin are major portions of Ohio, Indiana, West Virginia, Kentucky, and Tennessee; large areas in Pennsylvania, Virginia, North Carolina, Alabama, and Illinois; and parts of New York, Maryland, Georgia, and Mississippi.

The Flood Control Acts of June 22, 1936, August 28, 1937, and June 28, 1938, approved a general comprehensive plan for flood control and other purposes in the Ohio River Basin, consisting of reservoirs, levees, floodwalls, and drainage structures for protection of cities and towns. Those acts were amended and supplemented by subsequent acts, which also included monetary authorization for further prosecution of the comprehensive plan. The monetary authorization provided to date totals \$1,338.8 million.

Ohio River Basin

	Thousands
Total estimated cost of projects in plan.....	\$1,717,741
Present monetary authorization.....	1,338,833
Allocations through June 30, 1975.....	1,271,560
Remaining monetary authorization.....	67,273
Additional scheduled obligations through Sept. 30, 1976.....	57,287
Remaining monetary authorization after Sept. 30, 1976.....	9,986
Additional scheduled obligations through fiscal year 1977.....	26,248
Required increase in monetary authorization through fiscal year 1977, based budget.....	16,262
Required increase in monetary authorization through fiscal year 1977, based capability.....	22,468

(In thousands of dollars)

Project	Fiscal year—		Application of additional authorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Brookville Lake, Ind.....	1,740	1,740	1,078	1,078
Burnsville Lake, W. Va.....	6,000	6,000	3,717	3,717
Caesar Creek Lake, Ohio.....	6,100	7,600	3,778	5,278
Cave Run Lake, Ky.....	1,900	2,900	1,177	2,177
East Fork Lake, Ohio.....	5,000	5,000	3,098	3,098
East Lynn Lake, W. Va.....	1,000	2,200	620	1,820
Evansville, Ind.....	1,400	2,400	867	1,867
Falmouth Lake, Ky.....	0	200	0	200
Mason J. Niblack pumps, Indiana.....	103	103	64	64
Recreation at completed projects:				
Barren River Lake, Ky.....	472	472	293	293
Bluestone Lake, W. Va.....	0	45	0	45
Dewey Lake, Ky.....	73	73	45	45
Fishtrap Lake, Ky.....	27	202	17	192
J. Percy Priest Dam and Reservoir, Tenn.....	280	280	174	174
John W. Flannagan Dam and Reservoir, Va.....	20	20	12	12
Kinzua Dam and Allegheny Reservoir, Pa. and N.Y.....	330	330	204	204
Nolin Lake, Ky.....	737	1,300	457	1,020
Rough River Lake, Ky.....	26	26	16	16
Shenango River Lake, Pa. and Ohio.....	180	180	112	112
Summersville Lake, W. Va.....	0	75	0	75
Sutton Lake, W. Va.....	0	48	0	48
West Fork Mill Creek Lake, Ohio.....	110	110	68	68
Wolf Creek Dam, Lake Cumberland, Ky.....	750	750	465	465
Youghiogheny River Lake, Pa. and Md.....	0	400	0	400
Total.....	26,248	32,454	16,262	22,468
Total requested authorization.....			17,000	
Maximum potential authorization which may be required.....				23,000

RED RIVER WATERWAY PROJECT

The Red River Waterway Project is located in northwest Louisiana, southwest Arkansas, northeast Texas, and southern Oklahoma.

The River and Harbor Act of 1968 approved the plan for navigation and bank stabilization for the Red River and authorized the appropriation of \$50,000,000 for initiation and partial accomplishment of the plan. The plan consists of providing a stabilized navigation channel 294 miles long, 9-feet deep, and 200-feet wide from the Mississippi River to Index, Arkansas. Also bank stabilization would be provided from Index, Arkansas, to Denison Dam, Texas. The monetary authorization provided to date totals \$59,000,000.

Red River waterway project

	<i>Thousands</i>
Total estimated cost of projects in the plan	\$1,496,300
Present monetary authorization	59,000
Allocations through June 30, 1975	18,373
Remaining monetary authorization	40,627
Additional scheduled obligations through Sept. 30, 1976	32,400
Remaining monetary authorization after Sept. 30, 1976	8,227
Additional scheduled obligations through fiscal year 1977	11,200
Required increase in monetary authorization through fiscal year 1977, based on budget	2,973
Required increase in monetary authorization through fiscal year 1977 based on capability	31,473

[In thousands of dollars]

Project	Fiscal year—		Application of additional au- thorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Mississippi River to Shreveport, La.	11,200	39,400	2,973	31,173
Shreveport to Daingerfield	0	200	0	200
Shreveport to vicinity index	0	100	0	100
Total	11,200	39,700	2,973	31,473
Total requested authorization			3,000	
Maximum potential authorization which may be re- quired				32,000

SAN JOAQUIN RIVER BASIN

The San Joaquin River, the only exterior drainage channel for an area of about 32,000 square miles, has its source in the Sierra Nevada Range about 25 miles southeast of the Yosemite Valley, California.

The Flood Control Act approved December 22, 1944, adopted the plan of improvement for flood control and other purposes on the lower San Joaquin River and tributaries, including the Tuolumne and Stanislaus Rivers, and authorized the appropriation of \$8 million for partial accomplishment of the plan. This monetary authorization has been increased by later acts, bringing the total monetary authorization to date to \$192.5 million.

San Joaquin River Basin

	<i>Thousands</i>
Total estimated cost of projects in the plan	\$310,835
Present monetary authorization	192,500
Allocations through June 30, 1975	126,252
Remaining monetary authorization	66,248
Additional scheduled obligations through Sept. 30, 1976	49,555
Remaining monetary authorization after Sept. 30, 1976	16,693
Additional scheduled obligations through fiscal year 1977	59,000
Required increase in monetary authorization through fiscal year 1977, based on budget	42,307
Required increase in monetary authorization through fiscal year 1977, based on capability	45,307

[In thousands of dollars]

Project	Fiscal year—		Application of additional au- thorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
New Melones Lake, Calif. (totals)	59,000	62,000	42,307	45,307
Total requested authorization			43,000	
Maximum potential authorization which may be re- quired				46,000

SANTA ANA RIVER BASIN

The Santa Ana River Basin contains an area of about 2,470 square miles and is the largest coastal basin in Southern California. The river rises in the San Bernardino Mountains and flows 100 miles southwest to the Pacific Ocean at a point near Newport Beach, about 30 miles southeast of Los Angeles. The drainage basin occupies parts of Orange, Riverside, and San Bernardino Counties.

The general plan for flood protection of the metropolitan area in Orange County, California was adopted by the Flood Control Act approved June 22, 1936, which authorized an appropriation of \$13,000,000 for partial accomplishment of the plan. The plan has been further amended and modified and additional monetary authorization provided by subsequent acts. The monetary authorization provided to date totals \$45,500,000.

Santa Ana River Basin

	<i>Thousands</i>
Total estimated cost of projects in the plan.....	\$59, 193
Present monetary authorization.....	45, 500
Allocations through June 30, 1975.....	43, 500
Remaining monetary authorization.....	2, 000
Additional scheduled obligations through Sept. 30, 1976.....	570
Remaining monetary authorization after Sept. 30, 1976.....	1, 430
Additional scheduled obligations through fiscal year 1977.....	2, 377
Required increase in monetary authorization through fiscal year 1977, based on budget.....	947
Required increase in monetary authorization through fiscal year 1977 based on capability.....	1, 456

[In thousands of dollars]

Project	Fiscal year		Application of additional au- thorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Recreation at completed projects:				
Brea Dam, Calif.....	120	120	120	120
Carbon Canyon Lake and Channel, Calif.....	150	150	150	150
Fullerton Dam, Calif.....		156		156
Prado Lake, Calif.....	2, 107	2, 460	677	1, 030
Total.....	2, 377	2, 886	947	1, 456
Total requested authorization.....			1, 000	
Maximum potential authorization which may be required.....				2, 000

SOUTH PLATTE RIVER BASIN

The South Platte River rises on the Continental Divide in central Colorado and flows northeasterly to its confluence with the North Platte River at North Platte, Nebraska. The drainage area of 24,030 square miles includes a section of the rugged eastern slope of the Rocky Mountains, with elevation exceeding 14,000 feet and extensive areas of the Great Plains.

The Flood Control Act of 1950 authorized a plan for flood control and related purposes in the South Platte River Basin in Colorado. The plan consists of Chatfield Lake and levee and channel improvements at three locations, including the city of Boulder. The act also authorized the appropriation of \$26,300,000 for partial accomplishment of the plan.

The plan was further modified by the Flood Control Act of 1968 to include construction of a dam and lake on Bear Creek, a tributary of the South Platte River. Subsequent acts bring the total monetary authorization to date to \$113,300,000.

South Platte River Basin

	<i>Thousands</i>
Total estimated cost of projects in the plan.....	\$184, 149
Present monetary authorization.....	113, 300
Allocations through June 30, 1975.....	92, 700
Remaining monetary authorization.....	20, 600
Additional scheduled obligations through Sept. 30, 1976.....	20, 600
Remaining monetary authorization through Sept. 30, 1976.....	0
Additional scheduled obligations through fiscal year 1977.....	21, 211
Required increase in monetary authorization through fiscal year 1977, based on budget.....	21, 211
Required increase in monetary authorization through fiscal year 1977, based on capability.....	21, 211

[Int thousands of dollars]

Project	Fiscal year—		Application of additional au- thorization based on fiscal year 1977	
	1977 budget	1977 capability	Budget	Capability
Projects for which additional authorization is required:				
Bear Creek Lake, Colo.....	12, 500	12, 500	15, 711	15, 711
Chatfield Lake, Colo.....	5, 500	5, 500	5, 500	5, 500
Total.....	18, 000	18, 000	21, 211	21, 211
Total requested authorization.....			22, 000	
Maximum potential authorization which may be required.....				22, 000



