

IMPROVEMENT OF RIVERS AND HARBORS

COMMUNICATION

FROM

THE ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS)

TRANSMITTING

A REPORT FROM THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, COMPILING THE PRELIMINARY EXAMINATION, SURVEY, AND REVIEW REPORTS ON RIVER AND HARBOR, FLOOD CONTROL, AND BEACH EROSION CONTROL IMPROVEMENTS TRANSMITTED TO CONGRESS AS OF DECEMBER 31, 1974, REQUESTED BY AN ITEM ON PAGE 4 ON HOUSE REPORT NO. 91-1665



DECEMBER 16, 1975.—Referred to the Committee on Public Works and Transportation and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

LETTER OF TRANSMITTAL

DEPARTMENT OF THE ARMY,
OFFICE OF THE ASSISTANT SECRETARY,
Washington, D.C., November 14, 1975.

HON. CARL ALBERT,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: I am transmitting herewith a report dated November 3, 1975 from the Chief of Engineers, Department of the Army, on the compilation of preliminary examination, survey, and review reports transmitted to Congress as of December 31, 1974, on river and harbor, flood control, and beach erosion control improvements, requested by an item on page 4 of House Report 91-1665, 91st Congress, second session, which accompanied H.R. 19877, a bill authorizing the construction, repair, and preservation of certain public works.

Sincerely,

VICTOR V. VEYSEY,
Assistant Secretary of the Army
(Civil Works).

(III)

LETTER OF SUBMITTAL

REPORT OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D.C., November 3, 1975.

DAEN-CWP-A

Subject: Revision of House Document No. 92-191, 92d Congress,
Second Session.

The Secretary of the Army

1. I submit for transmission to Congress a revised edition of pages 1 to 516, inclusive, of the report printed in House Document No. 92-191, 92d Congress, second session, extending the compilation of preliminary examination, survey, and review reports on river and harbors and flood control improvements to December 31, 1974, as directed by Congress on page 4 of House Report of the Committee on Public Works No. 91-1665, 91st Congress, second session.

2. The request for revision of the compilation is as follows: Section 107 of the River and Harbor Act of 1962 authorized and directed the Secretary of the Army to prepare and transmit to Congress a compilation of survey and review reports on river and harbor and flood control improvements. The last report submitted pursuant to this section was in 1972. It is the Committee's desire that the compilation be brought up-to-date and kept current through regular supplemental submissions to the Congress.

3. The report as now revised lists data on all preliminary examination, survey, and review reports made to December 31, 1974, on river and harbor and flood control improvements, together with data on cooperative beach erosion control studies. Publication of the data in document form is recommended.

W. C. GRIBBLE, JR.,
Lieutenant General, USA,
Chief of Engineers.

IMPROVEMENT OF RIVERS AND HARBORS

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers		
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents						
							House or Senate	Number	Congress	Session		Year	Page
A													
(1) Abbapoola Creek, Johns Island, S.C.	Oct. 28, 1930	Favorable				Unfavorable	(1)						
Abbeville, S.C.	July 6, 1937	do.	May 28, 1938	\$10,800	Favorable	Favorable	H.	*97	76	1			
Aberdeen Creek, Gloucester County, Va.	Mar. 20, 1950	do.	July 31, 1973		Unfavorable	Unfavorable	(1)						
Abita River, La.	May 16, 1911	Unfavorable	Jan. 26, 1962			Unfavorable	(1)						
Absecon Creek, N. J.	Oct. 13, 1910	Favorable	Feb. 1, 1911	15,000	Favorable	Favorable	H.		428	62	2		
Absecon Inlet, N. J. (see also Atlantic City Harbor and Beach Thoroughfare and New Jersey coast flood control).			Oct. 20, 1880			do.	H.	*71	62	1	1881	831	
			Jan. 14, 1898	500,000	Favorable	Unfavorable	H.	*252	55	2	1898	1125	
		Sept. 15, 1909	Favorable	Oct. 25, 1909	645,000	do.	Unfavorable	H.	747	61	2		
		Sept. 28, 1910	do.	Jan. 7, 1911	300,000	do.	Favorable	H.	1395	61	3		
		Jan. 6, 1921	do.	May 12, 1922	190,000	do.	do.	H.	375	67	2		
		June 14, 1926	Unfavorable		240,000		Favorable	(1)					
Between Atlantic City and Brigantine Beach	Oct. 24, 1894	do.	Nov. 26, 1945	16,000		Unfavorable	H.	*504	79	2			
To Brigantine Inlet, channel back of Brigantine Beach.			Dec. 21, 1886	100,000	Unfavorable	Unfavorable	H. Ex.	79	53	3	1895	1094	
Academy Creek, Ga. (See Brunswick Harbor, Ga.)						do.	H.	58	50	1	1887	821	
Accotink Bay, Va.			Jan. 22, 1872	19,000	Favorable		S. Ex.	35	42	2	1872	707	
Acushnet River, Mass. (See New Bedford Harbor, Mass.)													
Adams Bayou, Sabine River, Tex.			Apr. 11, 1946*	73,000		Favorable	H.	*626	79	2			

* Report not published.

* Interim report.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers	
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							House or Senate	Number	Congress	Session		Year
Adams Creek, N.J.	Sept. 9, 1915	Unfavorable				Unfavorable	H.	534	64	1		
Adams Island, N.Y. (See Hudson River, N.Y., between Albany and Troy.)												
Adams (Tobias) Landing, Vt.	Sept. 3, 1892	do.				do.	H. Ex.	64	52	2	1893	3215
Admiralty Inlet to Crocket Lake, Wash.	Mar. 20, 1914	do.				do.	H.	*983	63	2		
Afognak, ocean frontage, Alaska	Nov. 5, 1927	do.				do.	(¹)					
Afton Harbor, Minn. (See St. Croix Lake, etc.)												
Agate and Burlington Bays, Minn. (see also Burlington Bay.)	Oct. 8, 1884	Favorable	Jan. 5, 1885	\$370,000	Unfavorable	Unfavorable	H. Ex.	94	48	2	1885	1954
Agate Bay Harbor (Two Harbors), Minn.	Oct. 15, 1930	do.	Feb. 5, 1932 Apr. 11, 1944	90,400 1,876,000	Favorable	Favorable	H. Com.	*17	72	1		
						do.	H.	*805	78	2		
Agricultural Areas from Mile 195 to Mile 300 above the Ohio River. (See Mississippi River)												
Aguadilla Harbor, P.R.	Mar. 2, 1936	Unfavorable				Unfavorable	(¹)					
	Mar. 19, 1942	Favorable	Aug. 19, 1943			do.	(¹)					
			Mar. 9, 1971			Unfavorable	Unfavorable	(¹)				
Ahnapee River and Harbor, Wis.			Dec. 9, 1870	370,000	Favorable	Favorable	H.	60	41	3	1871	125
			Oct. 13, 1875	95,000	do.	do.	H.				1876	*346
			Dec. 16, 1875	19,266	Unfavorable	Unfavorable	H.	*172	54	2	1897	2755
			Dec. 31, 1896			do.	(¹)					
	Sept. 19, 1925	Unfavorable				do.	H. Com.	20	61	2		
	Dec. 28, 1906	do.										
Alabama Coast (See Hurricane studies)												
Alabama-Coosa Rivers, Ala. and Ga.			Oct. 9, 1959	*129,300,000		Favorable	H.	*320	86	2		
Alabama and Coosa Rivers, Ala. (see also Coosa River and Etowah, etc., and Mobile River and tributaries, salinity).	Nov. 15, 1907	Favorable	Oct. 8, 1908	36,000	Favorable	do.	H.	*1089	60	2		
Alabama-Coosa branch of Mobile River system, Alabama and Georgia (see also Prattville, Ala.).	Dec. 31, 1928	do.	{ Aug. 28, 1931 (Apr. 11, 1933 Oct. 15, 1941 ¹	{		Unfavorable } (¹) } Favorable	H.	*66	74	1		
			Mar. 8, 1876	{ 60,000,000 229,741 459,773, }		do.	H.	*414	77	1		
Alabama River, Ala. (see also Etowah, etc.; Tombigbee and Alabama Rivers to Perdido											1876	498

River, Ala. and Fla.).			Dec. 10, 1890	386,251	do	H. Ex.	140	51	2	1891	1761
			Nov. 15, 1905	650,000	do	Favorable	H.	378	59	1	
At Montgomery, Ala.			Dec. 10, 1946	* 1,284,000	do	do	H.	*83	85	1	
Between Montgomery and Selma	July 31, 1911	Unfavorable				Unfavorable	H.	1115	62	3	
Waterway to Escambia River, Fla. and Ala.			Mar. 26, 1956			do	(1)				
Alafia River, Fla. (see also Tampa Harbor)	Feb. 5, 1889	Favorable				do				1889	1357
	Feb. 17, 1931	Unfavorable				do	(1)				
			Aug. 1, 1940	189,000	Favorable	Favorable	S.	*16	77	1	
Alameda Creek, Calif.	Nov. 27, 1882	do				Unfavorable	S. Ex.	30	48	1	1884
	May 21, 1942	do				Unfavorable	(1)				2207
			Aug. 16, 1962	* 14,680,000	Favorable	Favorable	S.	*128	87	2	
Alameda Harbor, Calif.	Dec. 5, 1927	do				Unfavorable	(1)				
Alamicut River, Wash.	Aug. 16, 1909	do				do	H.	302	61	2	
Alamitos Bay, Calif.	Mar. 18, 1936	do				do	(1)				
			Sept. 13, 1954			do	(1)				
Alamitos Bay, Los Angeles County, Calif.	Feb. 3, 1939	Favorable	May 4, 1942			do	(1)				
Alamogordo, N. Mex., streams at and in vicinity of.			May 21, 1962	7 2,100,000		Favorable	H.	*473	87	2	
Alapaha River and tributaries, Ga.			Nov. 30, 1972		Unfavorable	Unfavorable	(1)				
Alaqua Bayou, Fla.	Sept. 16, 1892	Unfavorable				Unfavorable	H. Ex.	86	52	2	1893
Alaska:											1738
Harbors and rivers in:			Nov. 12, 1953	1,322,100		Favorable	H.	*414	83	2	
Northwestern			Jan. 15, 1959			Unfavorable	H.	*99	86	1	
Southeastern			Apr. 8, 1954	* 3,471,900		Favorable	H.	*501	83	2	
Southwestern			Dec. 29, 1955	355,000		do	H.	*390	84	2	
Alaska Roads. (See Nome-Shelton, Kugruk River, etc.)											
Albany Harbor, Calif. (See Oakland Harbor, etc.)											
Albany, Berkeley, and Emeryville Harbors, Calif. (see also Berkeley Harbor, Calif.)	Dec. 10, 1934	Unfavorable				Unfavorable	(1)				
Albany to Schenectady, N.Y., waterway by way of Hudson and Mohawk Rivers.	Mar. 5, 1938	do				do	(1)				
Albemarle and Chesapeake Canal. (See Norfolk Harbor to Atlantic Ocean, etc.)											
Albemarle Sound, N.C., ship channel to Atlantic Ocean (see also Norfolk Harbor to Albemarle Sound, Inland waterway).			{ Feb. 12, 1829 Oct. 20, 1843	{ 327,734 2,083,037			S.	166	20	2	
Albemarle Sound, N.C., to and including Ocracoke and Beaufort inlets (see also Core Sound).	Aug. 8, 1900	Favorable	* Nov. 22, 1900	{ 1,611,500 3,597,000	Favorable	Favorable	H.	202	56	2	1901
Albemarle Sound to Point Harbor, N.C.	Nov. 3, 1927	Unfavorable				Unfavorable	(1)				
Abeni Falls on Pend Oreille River, Idaho (Columbia River).			* Nov. 29, 1948	\$26,995,000		Favorable	S.	*9	81	1	

¹ Report not published.

² Plus \$20,600,000, at such time as waterway to Gadsden, Ala., is assured, for reach between Gadsden, Ala., and Rome, Ga.

³ Interim report.

⁴ Abandonment of project recommended.

⁵ Plus cash contribution by local interests, estimated at \$182,000, of 12 percent of the first cost of improvement.

⁶ Includes \$4,070,000 cash contribution as Federal participation in cost of DeValle Reservoir to be constructed by State of California. Federal participation is based on 30.7 percent not to exceed \$4,080,000.

⁷ Plus non-Federal cost of \$450,000.

⁸ Initial construction cost estimated at \$2,473,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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							House or Senate	Number	Congress	Ses-sion		Year	Page
Aleutki Island, Alaska. (See Sitka Harbor, Alaska.)													
Alexandria Bay Harbor, N.Y.	Jan. 9 1897	Unfavorable				Unfavorable	H.	205	54	2	1897	3312	
Alexandria Harbor, La. (See Red River.)	Dec. 28, 1935	do				do	(1)						
Alexandria Harbor, Va. (See Potomac River at Alexandria.)													
Algiers, La. (See Intracoastal Waterway from the Mississippi River at New Orleans; Mississippi River at New Orleans to Corpus Christi, Intracoastal Waterway; and Intracoastal Waterway in the vicinity of Algiers at New Orleans, La.)													
Algoma Harbor, Wis. (see also Ahnapee Harbor)	Feb. 3, 1941	do				do	(1)						
Algonac, on St. Clair River, Mich.	Dec. 26, 1888	do				do					1889	2285	
Alhambra Creek and tributaries, California flood control.	Nov. 10, 1948					do	(1)						
Alice, Tex., streams in vicinity of	Sept. 17, 1958		May 7, 1968	\$ 8,000,000	Favorable	Favorable	H.	*336	90	2			
Alkali Canyon, Oreg.	Nov. 7, 1939	Favorable	Nov. 6, 1941	118,000		Unfavorable	(1)						
Allapatchee River (Alligator Creek), Fla.	May 18, 1939	Unfavorable				Favorable	H.	*631	77	2			
Allatoona Creek, Ga. (See Alabama-Coosa branch of Mobile River system.)			June 3, 1939 ³	13,000,000	Favorable	Favorable	H.	*674	76	3			
Allatoona Dam, Etowah River, Ga. (See Alabama-Coosa branch of Mobile River system.)			Jan. 23, 1953	686,000		do	H.	*491	83	2			
Allegheny and Monongahela Rivers and tributaries.													
Allegheny and Monongahela Rivers, W. Va., Pa., and Md. (See Loyalianna Creek, at Latrobe,													

Pa.; Turtle Creek, Pa.; Youghiogheny River, Pa. and Md.).

Allegheny-Genessee Rivers, N.Y. and Pa.

Allegheny River to Olean, N.Y.	Jan. 23, 1953				Unfavorable	(¹)				
Allegheny, Monongahela, and Ohio Rivers and their tributaries, reservoirs at headwaters of Allegheny Reservoir-Allegheny River, N.Y. and Pa.	Dec. 4, 1912	Unfavorable			do	H	*1289	62	3	
Allegheny Reservoir-Allegheny River, N.Y. and Pa.				Nov. 16, 1938	35,700,000	Favorable	Favorable	H	*300	76 1
Allegheny River, Pa., at Freeport, Pa., flood control.	Mar. 29, 1939	Unfavorable		Dec. 11, 1939		Unfavorable	Unfavorable	(¹)		
Allegheny River, Pa. and N.Y. (see also Pittsburgh Harbor):										
At and in vicinity of Olean, N.Y.				Apr. 12, 1946	3,952,700	Favorable	S	*245	79	2
At Coudersport, Pa.				Sept. 19, 1957		Unfavorable	(¹)			
At Salamanca, N.Y.				Jan. 4, 1961	1,390,000	Favorable	H	*166	87	1
Below dam No. 4				Apr. 15, 1930	3,615,000	Favorable	do	H	356	71 2
Below Freeport				Apr. 22, 1932	4,906,000		H. Com		16	72 1
Channel (9-foot) to East Brady				Mar. 9, 1876	765,132					1876 II, 147
Conewango Creek, Warren, Pa.	Jan. 16, 1951			Jan. 8, 1934	2,642,000		H. Com		27	73 2
French Creek (Franklin) to Olean				Feb. 5, 1880	40,000		S. Ex		89	46 2 1880 1767
Kinzua Dam				Oct. 21, 1968		Unfavorable	Unfavorable	(¹)		
Locks and dams Nos. 1, 2, and 3				Jan. 21, 1902	611,865		H		371	57 1 1902 1901
Locks and dams Nos. 8 and 9	Jan. 30, 1926	Favorable		Jan. 31, 1930	3,000,000	Favorable	H	*721	71	3
Locks and dams				Nov. 5, 1930	3,800,000		Favorable	H		
Near Pittsburgh				Nov. 29, 1904	256,521	Favorable	do	H	167	58 3 1905 1862
Oil City, Pa.				Jan. 19, 1912	2,788,000	do	do	H	*540	62 2 1876 II, 147
Olean to Warren	Sept. 30, 1892	Unfavorable		Mar. 9, 1876	269,564		Unfavorable	Unfavorable	(¹)	
Tarentum, lock and dam near, and lock and dam between Tarentum and Herr Island Dam.	Oct. 3, 1892	Favorable		Dec. 5, 1962			H. Ex		61	52 2 1893 2540
Tarentum to Pennsylvania State line, and Franklin to Lake Erie.				Dec. 9, 1895	500,000		H. Ex		37	52 2 1893 2538
To French Creek (Franklin)				Nov. 25, 1898	4 ¹ 7,980,115 5 ² 3,224,892 6 ³ 2,499,384	Unfavorable	H	*72	55	3 1899 2411
To Olean				May 20, 1832			H		343	25 2
Upper, in, and around Bradford, Pa., flood control.				Dec. 19, 1878	51,425		H. Ex		21	45 3 1879 1371
Upper River and Conewango Creek, removing dams, etc.				Mar. 17, 1838	877,466		H		343	25 2
				Apr. 16, 1949	6,466,700	Favorable	S	*20	81	1
				Nov. 13, 1897	14,797 93,297		H		110	55 2 1898 2211

¹ Report not published.

² Plus non-Federal costs of \$900,000.

³ Interim report.

⁴ Oil City to State line.

⁵ Monterey to Oil City.

⁶ Natonia to Monterey.

Alpena Harbor, Thunder Bay River, Mich.	Dec. —, 1870	53,496			H. Ex.	60	41	3	1871	{ 158-159
	Jan. 25, 1876	4,764			H.	121	44	1	1876	{ 548
	Dec. 15, 1888 Favorable	36,087	Favorable	Favorable	H.			1	1876	{ 2288
	Jan. 6, 1917 do	67,500	do	do	H.	*830	65	2	1889	
	Apr. 17, 1889				H. Com.		1	1		
	Nov. 6, 1917				H. Com.	*42	67	1		
	Sept. 27, 1921		(?)	(?)	H. Com.		72	1		
	June 13, 1932	94,000			H. Com.					
Alpine, Tex. (See Pecos River, Tex.)										
Alsea Bay, Bar, Harbor, and River, Oreg.	Dec. 27, 1875				S. Ex.	42	44	1	1876	{ *11
	Sept. 23, 1878 Favorable				S. Ex.	14	45	3	1879	{ 644
	Dec. 3, 1879		Unfavorable	Unfavorable	S. Ex.	*34	46	2	1880	{ 1810
	Nov. 26, 1890 Unfavorable			Unfavorable	H. Ex.	85	51	2	1880	{ 2336
	Oct. 18, 1913 do	640,000	Unfavorable	do	H.	*1593	63	3	1891	{ 3246
	Jan. 22, 1936 do		do	do	(?)					
	Dec. 12, 1946 do		do	do	(?)					
	Sept. 10, 1954 do		do	do	(?)					
Alsea River and tributaries, Oreg. flood control	Mar. 15, 1938 Favorable		Unfavorable	do	(?)					
Alsea River, Oreg.	Oct. 10, 1892 do		Favorable	Favorable	H. Ex.	53	52	2	1893	3440
	Jan. 1, 1895	3,000	Favorable	do	H. Ex.	235	53	3	1895	3505
	Oct. 5, 1897 Unfavorable		Unfavorable	Unfavorable	H.	111	55	2	1898	*2995
	Jan. 23, 1936 do		do	do	(?)					
Altamaha (Lower) River and Darien Harbor, Ga.										
Altamaha River, Ga. (see also Oconee, etc.; Tennessee River; Hiwassee River; Darien Harbor, Ga.; Mississippi River to Atlantic Ocean and Etowah, etc., and Lower Altamaha River and Darien Harbor).	Nov. 3, 1884 Unfavorable	60,000			H. Ex.	19	46	3	1881	1107
	Dec. 29, 1882	40,000	Favorable		S. Ex.	51	47	2	1883	930
	June 12, 1890	128,627			H. Ex.	260	48	2	1885	1234
	July 3, 1911	635,360	Favorable	Favorable	H.	283	51	2	1890	1372
	June 23, 1909 Favorable		Favorable	Favorable	H.	*443	62	2		
Altamaha River at Macon, Ga.	Feb. 1, 1946	349,000		do	H.	*560	79	2		
	(?)									
Altamaha River system, Ga.	Dec. 16, 1912				H. Com.	10	62	3		
	Sept. 26, 1929 Favorable		Unfavorable	Unfavorable	H.	*68	74	1		
	July 5, 1932									
Alto Lake, Fla. (See Waldo, Fla., to Little Lake Santa Fe.)										
Alvin, Tex. (See Gulf Intracoastal Waterway, waterway from.)										
Alviso Creek, Calif.	Dec. 11, 1896	47,855	do	do	H.	145	54	2	1897	3343
	Oct. 29, 1890 Unfavorable		do	do	H. Ex.	16	51	2	1891	2964
Alviso Harbor and Creek, Calif.	May 15, 1942				(?)					
Alviso Slough, Calif.	Oct. 22, 1892 Unfavorable		do	do	H. Ex.	44	52	2	1893	3236
Amazon Creek, Oreg. (Columbia River)	Nov. 8, 1945 ⁴	226,000		Favorable	S.	*138	79	2		
	Apr. 30, 1954	*893,600		do	S.	*131	83	2		
Ambrose Channel, N.Y. (See New York Harbor.)										
Amelia Island, Fla. (See Beach Erosion studies.)										
Amelia River, Fla. (See also Fernandina Harbor)	Nov. 3, 1884 Unfavorable		Unfavorable	Unfavorable	H. Ex.	71	48	2	1885	1284

¹ Report not published.

² Repeal of condition requiring local cooperation recommended.

³ Interim report covering Ocmulgee River.

⁴ Interim report.

⁵ Plus cash contribution estimated at \$56,400.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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American River, Calif. (see also Sacramento and Feather Rivers and their tributaries; Sacramento River, debris control; Sacramento River and tributaries, Collinsville to Shasta Dam; and Sacramento San Joaquin Basin streams).	Aug. 12, 1895	Unfavorable				Unfavorable						1895	3335
Ames Reservoir, Iowa. (See Skunk River, Iowa.)													
Amite River and Bayou Manchac, La. (see also Mississippi River to the Intracoastal Waterway).			Dec. 17, 1842	{ \$6,000 13,000 }									
			Dec. 30, 1867	786,000	Favorable	Favorable	S. Ex.	31	40	2			
			Feb. 27, 1880	23,760	do	do	H. Ex.	54	46	2	1880	1185	
			June 27, 1882	3,450			S. Ex.	191	47	1	1882	1414	
			Dec. 24, 1888	3,000,000	Unfavorable							1889	1513
			Mar. 20, 1889	5,000	do							1889	1528
	Dec. 27, 1910	Unfavorable				Unfavorable	H.	257	63	1			
	Jan. 22, 1916						H.	1111	64	1			
	Aug. 2, 1923	Favorable	May 23, 1924	5,000	Favorable	Favorable	H.	*473	68	2			
Amite River, La., above mouth of Bayou Manchac.	Apr. 26, 1929	Unfavorable				Unfavorable	(1)						
Amite River, La. and Miss.	July 8, 1929	do				do	H.	480	71	2			
Amite River and tributaries, La.	Oct. 6, 1954	Favorable	Apr. 5, 1956	2 3,008,000		Favorable	H.	*419	84	2			
Annisook Canal, N.H.			Feb. 18, 1828				H.	173	20	1			
Anniston River, Minn. (See Superior Lake to Mississippi River.)													
Anniston River, Wis.	June 5, 1931	Unfavorable				Unfavorable	H.	*164	72	1			
Anacortes Harbor, Wash.	June 22, 1905	Favorable				do	H.	160	59	1			
			June 26, 1953	147,400		Favorable	S.	*120	83	2			
Capsante Waterway	Nov. 15, 1913	Favorable	July 2, 1915	84,000	Favorable	do	H.	*1117	64	1			
Anacortes Harbor and Capsante Waterway, Wash.	Dec. 15, 1930	Unfavorable				Unfavorable	(1)						

Anacostia River, D.C. and Md.			Dec. 12, 1872	6,050,000			S. Mis	15	42	3	1875	11, 111	
			Dec. 23, 1875	168,269			S. Ex	39	44	1	1876	353	
			Feb. 18, 1882	50,000	Favorable						1882	987	
			Nov. 7, 1888	10,000	Unfavorable	Unfavorable					1889	993	
		Sept. 25, 1890	Favorable	Oct. 24, 1891	656,000	Favorable	Favorable	H. Ex	30	52	1	1892	1064
			Dec. 1, 1898	2,194,720	do	do	H	*87	55	3	1899	1443	
Anacostia River, D.C.		Sept. 7, 1932	Unfavorable			Unfavorable	(¹)						
Navy Yard to Bladensburg, D.C.			Dec. 23, 1875	168,269			H. Ex	94	44	1	1876	356	
Anacostia River and Flats, D.C.		Mar. 6, 1916					H	1357	64	1	(¹)		
			Nov. 9, 1923				S	37	68	1	(¹)		
Anacostia River Basin, D.C. and Md.			Feb. 28, 1949	4,531,200		Favorable	H	*202	81	1			
Anacostia River, removal of drift in the Washington, D.C. metropolitan area. (See Potomac and Anacostia Rivers.)			Feb. 15, 1935	325,000	Favorable	Favorable	H. Com	*22	74	1			
Anacostia and Potomac Rivers													
Anaheim Bay Harbor, Calif. (See Beach Erosion studies.)													
Anahuac Channel, Tex.		{Nov. 26, 1930 } Unfavorable					Unfavorable	(¹)					
		{July 3, 1936 }											
Anahulu River. (See Kawainui Swamp and Wailua district, Territory of Hawaii.)							do	(¹)					
Anasco River, P.R.		Aug. 13, 1940	do					(¹)					
Anchorage Channel. (See New York Harbor.)							do	(¹)					
Anchorage Harbor, Alaska		Nov. 19, 1927	do				H	58	50	1	1887	1259	
Anclote Bay, Fla. (see also Clearwater Harbor)		Jan. 5, 1887	do				H. Ex	71	48	2	1885	1280	
Anclote Harbor, Fla.		Nov. 3, 1884	do				H. Ex	160	53	3	1895	1573	
Anclote River, Fla.		Dec. 21, 1894	Favorable	Dec. 27, 1897	51,500	Favorable	Favorable	H. Ex	*200	55	2	1898	1361
			do	Feb. 17, 1913	22,000	do	do	H	*18	63	1		
		Nov. 15, 1912	do	Mar. 9, 1927	30,800	do	do	(¹)					
		Dec. 11, 1926	Unfavorable	Dec. 6, 1938	10,000	do	Favorable	H	*243	76	1		
		Mar. 18, 1938	Favorable	Aug. 2, 1974		Unfavorable	Unfavorable	(¹)					
County bridge to head of navigation		July 2, 1915	Unfavorable				Unfavorable	H	1112	64	1		
From county bridge to the Gulf of Mexico		Nov. 20, 1930	Favorable	{Sept. 18, 1931 } Favorable	95,000	Favorable	Favorable	H	*229	72	1		
				{Mar. 26, 1934 }	90,000	(¹)	Favorable	H. Com	36	73	2		
Anclote River-Lake Butler-Safety harbor (Old Tampa Bay), Fla., waterway		June 8, 1939	Unfavorable				Unfavorable	(¹)					
Anderson Ranch Reservoir, Idaho. (See Boise River, Idaho.)								S. Ex	57	46	3	1881	1305
Andre Bayou, La. (see also Baratavia Bay, etc.)		Feb. 3, 1881	do				Unfavorable	(¹)					
Androscoggin River and tributaries, Maine and New Hampshire.		Jan. 24, 1938	Favorable	Nov. 30, 1944				(¹)					
Androscoggin River Basin, Me. and N.H.				Apr. 12, 1968		Unfavorable	do	(¹)					

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¹ Report not published.
² Plus cash contribution, estimated at \$67,000, or equivalent work, by local interests, of 18.6 percent of construction cost.
³ Plus cash contribution, estimated at \$25,000, by local interests of 14.5 percent of the cost of dredging and breakwater construction.

⁴ Report of special board on reclamation and development.
⁵ Eliminates requirement of \$20,000 local contribution.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys			Recommendation of the Chief of Engineers	Where published				Annual report of Chief of Engineers		
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation		Congressional documents						
							House or Senate	Number	Congress	Session	Year	Page	
Androscoggin River, Maine and N.H.	July 12, 1929	Unfavorable				Unfavorable	H.	*646	71	3			
Androscoggin River, Maine, below Brunswick (see also Brunswick Harbor).	Oct. 7, 1882	do					S. Ex.	30	48	1	1884	473	
Between Merrymeeting Bay and Lewiston and Auburn.	Jan. 17, 1917	do				Unfavorable	H.	79	65	1			
Andura Creek, Va. (See Nandua Creek, Va.).													
Angelina River, Tex.			Dec. 30, 1873			Unfavorable	H. Ex.	84	43	2	1874	742	
Annacock Harbor, Va. (See Onancock Harbor.)													
Anna Maria and Longboat Keys, Fla. (See Beach Erosion studies.)													
Annapolis Harbor, Md.			Jan. 8, 1879	\$55,000			H. Ex.	49	45	3	1879	574	
			Nov. 10, 1880	66,000			S. Ex.	40	46	3	1881	871	
			Nov. 28, 1896	142,000			H.	57	54	2	1897	1309	
	Apr. 17, 1928	Unfavorable				Unfavorable	(¹)						
	Aug. 10, 1932	do	Oct. 23, 1933	24,000	Favorable	Favorable	H. Com.	*23	73	2			
			May 27, 1937	29,500	do	do	H. Com.	*48	75	2			
Ann. Cape, Mass. (See Rockport and Sandy Bay.)	Dec. 9, 1957					Unfavorable	(¹)						
Annessex River, Md., to Pocomoke Sound. (See Broad Creek, Md.)													
Annisquam River and Canal, Mass. (See Gloucester Harbor.)													
Antwine, Okla. (See Braman Reservoir.)													

Apalachicola Bay. (See Carrabelle, Fla., to Lanark, etc.)										
To Mexican border. (See Franklin Canal, St. Mary Parish, La.; and Intracoastal Waterway from Mobile, Ala., to New Orleans, La., etc.)										
Apalachicola Bay, Fla.	Apr. 27, 1921 Feb. 27, 1933	Favorable Unfavorable	Feb. 25, 1924	55,000	Favorable	Favorable	H.	*106	69	1
Gulf of Mexico, through Indian Pass, Fla.			Oct. 27, 1971		Unfavorable	Unfavorable	(1)			
St. George Island, Fla.	Feb. 15, 1945	Favorable	June 16, 1952	428,700		Unfavorable	Unfavorable	(1)		
St. George Sound at East Point, Fla.	Apr. 22, 1949	do.	Jan. 11, 1951	87,000		do.	H.	*557 *156	82 82	2 1
Two Mile			Dec. 1, 1964		Unfavorable	Unfavorable	(1)			
Apalachicola Bay and St. George Sound, Fla. (see also St. George Sound).	Apr. 15, 1911 Apr. 13, 1917	Unfavorable do.				Unfavorable	H.	1057 *316	62 65	3 1
Apalachicola Bay, East Pass, and Carabelle Bar, Fla. (see also St. George Sound).	Jan. 5, 1906	do.				do.	H.	*316	65	1
Apalachicola Bay, Fla., and approaches to Apalachicola.			Dec. 24, 1832 Feb. 23, 1835	8,772			H. Com.	41	61	2
			Mar. 28, 1872	100,000	Favorable		H. Ex.	241	42	2
			Feb. 5, 1879	185,000	do.		H. Ex.	82	45	3
			Sept. 17, 1896	100,000	do.	Unfavorable	H.	129	54	2
West Pass	Oct. 20, 1915	Unfavorable				do ³	H.	*860	64	1
Apalachicola Bay to St. Marks River, Fla., Intracoastal Waterway.			May 4, 1939	32,500	Favorable	Favorable	H.	*442	76	1
Apalachicola Bay to Withlacoochee River, Fla., Intracoastal Waterway (see also Carrabelle, Crooked, Ochlockonee Rivers and Ochlockonee Bay, Fla.)	Apr. 27, 1936	Favorable	June 1, 1937	480,000	do.	do.	H.	*291	75	1
Apalachicola, Chattahoochee, and Flint Rivers, Ga. and Fla.			Feb. 8, 1939	6,500,000	do.	do.	H.	*342	76	1
Apalachicola River, Fla. (see also remarks under Chattahoochee River and New Orleans, La., to Columbus, Ga.; Florida River, Liberty County, Fla., etc.; and inland waterway from New Orleans, etc.)			Sept. 8, 1872	80,333			H. Ex.	241	42	2
	Oct. 4, 1915			46,400			H.			
	June 13, 1916			3,000			H.	*1725	64	2
Bristol and Blountstown, Fla.			Dec. 12, 1967		Unfavorable	Unfavorable	(1)			
Apalachicola River to East Pass, Fla.	Oct. 8, 1913	Unfavorable				Unfavorable	H.	*834	63	2
Apalachicola River to St. Andrews and St. Josephs Bays, Fla.	Mar. 14, 1938	Favorable	Jan. 17, 1939	81,000	Favorable	Favorable	H.	*257	76	1
Apalachicola River, to St. Andrews Bay, Fla. (see also St. Andrews Bay).	Nov. 10, 1909	do.	Jan. 17, 1910	614,700	do.		H.	670	61	2
			Dec. 5, 1932	450,000		Favorable	H.			
Apishapa River, Colo., flood control (see also Pugaritoire and Apishapa Rivers, Colo., flood control).	Dec. 21, 1938	Unfavorable		340,000			H. Com.	*52	72	2

¹ Report not published.

² Map(s); no report.

*Abandonment of project for West Pass and Link Channel recommended.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers		
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Apopka Lake, Fla. (See Oklawaha River, Fla., to Kissimmee River).			Feb. 8, 1946			Unfavorable	(1)						
Apple River, Jo Davies County, Ill., flood control	Nov. 26, 1852	Unfavorable	Sept. 30, 1870	\$367,600			H. Ex.	60	41	3			
Appomattox River, Va. (see also Petersburg Harbor).			July 10, 1889	311,523 387,926			H. Ex.	113	52	2	1889	*955	
	Oct. 8, 1892	do				Unfavorable	H. Ex.	113	52	2	1893	1345	
	Aug. 22, 1900	Favorable	Nov. 23, 1900	256,915	Favorable		H.	139	56	2	1901	1467	
	Sept. 25, 1907	do	Feb. 5, 1908	23,000	do	Favorable	H.	*952	60	1			
			Jan. 11, 1939	110,030	do	do	H.	*223	76	1			
At Hopewell, Va.			Aug. 25, 1958			Unfavorable	(1)						
Up to Petersburg	Dec. 26, 1922	Favorable	May 6, 1925	287,000 91,000	Favorable		H.	215	69	1			
Vicinity of Petersburg			May 16, 1942			Unfavorable	(1)						
Apponaug Cove, R. I.			Apr. 2, 1959	180,000		Favorable	H.	*143	86	1			
Apponaug Harbor, R. I.	June 10, 1893	Unfavorable				Unfavorable					1893	869	
Appoquinimink River, Del.			Jan. 1, 1881	41,094			H. Ex.	34	46	3	1881	826	
	Oct. 18, 1888	Favorable	Nov. 23, 1889	39,963	Favorable	Favorable	H. Ex.	19	51	1	1890	943	
	May 17, 1911	do	Mar. 30, 1912	11,000 42,800	do	do	H.	*149	63	1			
Aquatic Plant Control, expanded project for			June 2, 1965	5,030,000		Favorable	H.	*251	89	1			
Aquia Creek, Va.			Jan. 22, 1872	18,000			S. Ex.	*35	42	2	1872	707	
	Dec. 3, 1888	Favorable	Jan. 13, 1890	101,278	Favorable	Favorable	H. Ex.	*135	51	1	1890	1096	
	Sept. 25, 1907	do	Jan. 17, 1908	12,150	Unfavorable	Unfavorable	H.		964	60	1		
	Oct. 24, 1910	do	June 16, 1911	21,400	Favorable	Favorable	H.	*579	62	2			
	Feb. 8, 1917	do	Feb. 23, 1917	2,700	do	Unfavorable	H.	*181	65	1			
Aquilla Reservoir, Aquilla Creek, Tex. (See Brazos River and tributaries.)													
Aranas Bay. (See Little Bay, Tex., harbor at Fulton.)													
Aranas Pass and Bay, Tex. (see also Corpus Christi and Matagorda Bay to Aransas Bay	Dec. 6, 1906	do	Dec. 22, 1906	438,699	do		(H. Com.)	43	61	2			
							(H. Com.)	5	59	2			

Waterways and Rio Grande to Mississippi River Waterway and Port Aransas and St. George Sound, ecl., and Louisiana and Texas Intracoastal Waterway).	Sept. 24, 1910	do	Nov. 22, 1910	375,000	do	Favorable	H	1094	61	3		
Half Moon Reef.	Mar. 24, 1891	Unfavorable				Unfavorable					1891	1943
To Brazos Santiago. (See St. George Sound to Rio Grande.)			May 22, 1906	123,750	Favorable	Favorable	H	*338	59	2		
To Corpus Christi (see also Harbor City, Tex., and Corpus Christi Harbor, Tex., and Galveston Bay to Corpus Christi, Tex.).	June 16, 1909	Favorable	Jan. 3, 1910	541,850	do		H	678	61	2		
	Mar. 24, 1914	Unfavorable		207,900		Unfavorable	H. Com	15	63	2		
	Jan. 16, 1931	Favorable ⁴	Aug. 6, 1929	515,000	Favorable	Favorable	H. Com	*9	71	1		
			June 17, 1935	279,000	Unfavorable	do	H. Com	*130	72	1		
To Cuero.			June 14, 1906	73,800	Favorable	Favorable	H	*63	74	1		
				92,700	do	Unfavorable	H	*336	59	2		
To Pass Cavallo. (See Rio Grande to Mississippi River Waterway and St. George Sound, etc.)	May 6, 1909	Favorable	Jan. 6, 1910	302,146	do	do	H	*734	61	2		
To Rockport.	Oct. 3, 1910	Unfavorable				do	H. Com	54	61	3		
To Rockport and Corpus Christi and Corpus Christi Channel.	May 2, 1871	do	Feb. 1, 1879	186,845	Favorable	Unfavorable					1871	526
			Aug. 9, 1879	432,980							1879	*928
			June 22, 1887	759,185							1880	*1245
Aransas Pass and Harbor, Tex. (see also Port Aransas).	Apr. 18, 1853	do		1,658,500	Favorable	Favorable					1888	1312
			Dec. 17, 1898	1,525,000	Favorable	Favorable	H	*119	55	3	1899	1973
	May 6, 1909	Favorable	Dec. 31, 1909	215,000	do	do	H	*639	61	2		
And coast of Texas in vicinity of Port Aransas, Rockport, and Corpus Christi.	Dec. 21, 1920	Unfavorable	Dec. 11, 1921	2,028,125	Unfavorable	Unfavorable	H	*321	67	2		
			Nov. 19, 1934	277,500			H. Com	*13	74	1		
Aransas Pass to Corpus Christi, Tex., channel (see also Rockport Harbor and channel, Tex.).			Feb. 26, 1938	1,637,000	Favorable	Favorable	H	*574	75	3		
			Apr. 26, 1938	⁶ 50,000	do ⁶	do	H	*643	75	3		
			May 24, 1954	⁷ 20,000	do	do	H	*487	83	2		
Aransas Pass, Tex. (See Port Aransas-Corpus Christi Waterway, Tex., and Gulf Intracoastal Waterway, vicinity Aransas Pass.)			Apr. 14, 1941	1,052,000	do	do	H	*383	77	1		
To the Intracoastal Waterway, channel from.				37,000	do	do	H					
				180,000	do	do	H					

¹ Report not published.

² Plus cash contribution, estimated at \$120,000, by local interests of 40 percent of the cost of construction.

³ Non-Federal interests to participate to the extent of 30 per centum of cost of operations.

⁴ Eliminates local cooperation.

⁵ Maintenance for 1st year.

⁶ Maintenance for each of next 3 years.

⁷ Annual maintenance thereafter.

⁸ Improvement to afford connection between Aransas Pass and Intracoastal Waterway.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published					
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of Chief of Engineers	Congressional documents				Annual report of Chief of Engineers	
							House or Senate	Number	Congress	Session		Year	Page
Arcadia Harbor, Mich.	Aug. 22, 1899	Unfavorable				Unfavorable	H.	132	56	1	1900	3942
	July 28, 1909	do	Oct. 29, 1902	\$15,000	Favorable	Favorable	H.	194	58	2	1904	3037
	Jan. 24, 1910	do				Unfavorable	H.	321	61	2		
	Jan. 6, 1911	do				Unfavorable	H. Com.	10	61	2		
	Nov. 5, 1915	(?)				(?)	H.	701	62	2		
							H.	668	64	1		
Arcadia Reservoir, Okla. (See Deep Fork River, Okla.)												
Arcata, Calif. (See Humboldt Harbor and Bay.)	Sept. 6, 1910	Favorable	Jan. 28, 1911	50,000	Favorable	Favorable	H.	*513	62	2		
Archers Creek, S.C.			Jan. 14, 1913				H. Com.	13	62	3		
Archers Hope River, Va.			Mar. 6, 1880	13,571	Favorable		S. Ex.	117	46	2	1880	906
	Oct. 29, 1910	Favorable	Oct. 21, 1911	19,400	Unfavorable	Unfavorable	H.	1130	62	3		
	May 12, 1926	(?)		72,038	Unfavorable	(?)	H.	467	69	1		
	June 2, 1909	Unfavorable				Unfavorable	H.	406	61	2		
Arecibo Harbor, P.R.	July 1, 1927	do	July 7, 1933	468,000	Favorable	Favorable	H.	*214	73	2		
	June 3, 1930	Favorable					H.	461	64	1		
Arkansas River and tributaries. (See also Cadron Creek, Ark.; Clear Creek at Pierce City, Mo.; Galla Creek, Ark.; Grand (Neosho) River and tributaries; Hickory Creek, Mo.; Mississippi River, North Canadian River, N. Mex., Tex., and Okla.; Polecat Creek, Okla.; Tenkiller Ferry, Okla.; and White and Arkansas Rivers and tributaries, Grand Prairie region, Arkansas.)	Mar. 24, 1915		June 14, 1932	35,000	Unfavorable	(?)	H.	461	64	1		
	Apr. 30, 1929	Favorable	Oct. 28, 1933		do	Unfavorable	H.	*308	74	1		
			June 21, 1937	756,000	Favorable	Favorable	H. Com.	*43	75	1		
	May 4, 1950	Favorable	Dec. 1, 1952	725,000	do	do	H.	*185	83	1		
			Sept. 19, 1938		Unfavorable	Unfavorable	(?)					
	Dec. 4, 1939	Favorable	Sept. 20, 1945	435,000,000	do	Favorable	H.	*758	79	2		
			Mar. 19, 1946			do	H.	*447	78	2		
			Jan. 15, 1944	\$10,299,400	do	do	H.	*447	78	2		
			Mar. 11, 1885		Favorable	Favorable	S.	1	49		1885	1576
Bell Ferry to Robroy railway bridge				349,000			H.	*510	61	2		
Between Little Rock and Ozark	May 27, 1909	Favorable	July 31, 1909	3,793,775	Favorable	Favorable	H.					

Between Little Rock and Pine Bluff, Ark.; Fourche Bayou, Ark., between Little Rock and North Little Rock, flood control.	Oct. 7, 1936	do	Apr. 29, 1939	641,000	do	Favorable	H	*718	76	9		
Bradens Bend, Okla.	Apr. 28, 1915	Unfavorable				Unfavorable	H	*683	64	1		
Carthage and Monett, Mo.	Mar. 24, 1947			7542,000		Favorable	H	*445	80	2		
Conway County, Ark., Drainage and Levee District No. 1.	Jan. 5, 1951			166,600		do	H	*167	82	1		
Conway County, Ark., Drainage and Levee District No. 2.	Nov. 18, 1957					Unfavorable	(U)					
Conway County Levee Districts Nos. 1, 2, 6, and 8.	Aug. 7, 1939					do	(U)					
Conway County Drainage and Levee Dis- trict No. 10.	Aug. 11, 1943			662,000		Favorable	H	*341	78	1		
Crawford County Levee District, Ark, flood control.	Apr. 22, 1958					Unfavorable	(U)					
Dardanelle, Ark.	Dec. 17, 1938			284,000	Favorable	Favorable	H	*720	76	3		
Below	Oct. 26, 1897				Unfavorable		H	106	55	2	1898	1676
Dodge City, Kans., and vicinity	June 26, 1913	Unfavorable				Unfavorable	H	*202	63	1		
Douglas	June 19, 1962			2,157,000		Favorable	H	*498	87	2		
Fort Gibson to Little Rock	Apr. 2, 1909	Unfavorable				Unfavorable	H	69	61	1		
Fort Smith, Ark.	Apr. 2, 1870			176,400			H. Ex.	295	41	2	1888	1386
Above	Jan. 31, 1887			1,307,935	Favorable		H	234	50	1		
To Tulsa	Aug. 15, 1877			10,000	do		H. Ex.	94	45	3	1897	1085
Fort Smith, Van Buren, and Dardanelle	Feb. 5, 1879	Unfavorable		100,000	do	Unfavorable	H	206	61	2		
Fort Smith, Van Buren, and Little Rock	Apr. 8, 1884			15,000	Favorable		H. Ex.	151	48	1	1884	1395
Garden's Bottom Drainage District No. 2, Yell County, Ark.	Mar. 10, 1897				Unfavorable		H	24	55	1	1897	1989
Great Bend, Kans.	June 17, 1946			1,485,000		Favorable	H	*221	80	1		
Hannaberry Lake area, Ark.	Sept. 30, 1964			104,030,000	Favorable	Favorable	H	*182	89	1		
Holla (Holly) Bend Bottom, Ark.	Sept. 11, 1957					Unfavorable	(U)					
Hutchinson, Kans., to mouth of Walnut	Sept. 28, 1950			252,000		Favorable	H	*157	82	1		
Hutchinson, Kans., vicinity of	Jan. 28, 1932				Unfavorable		H	*308	74	1		
John Martin Dam, Colo., above	Nov. 16, 1956					Unfavorable	(U)					
Kaw Reservoir	Sept. 13, 1972			40,408,000	Favorable	Favorable	H	*143	93	1		
Keystone Reservoir, Yale Water Supply	July 6, 1962			83,230,000		Favorable	S	*143	87	2		
Las Animas, Colo., and vicinity	June 20, 1966				Unfavorable		(U)					
Little Rock, Ark.:	July 10, 1964			1,541,000	Favorable	Favorable	H	*165	89	1		
At and below	July 31, 1925	Unfavorable					(U)					
Near	Aug. 26, 1913	do					H	*873	63	2		
To Mississippi River via Grand Prairie	May 8, 1957						(U)					
To mouth of Grand River	Jan. 25, 1921	Unfavorable					(U)					
Mannford Reservoir (Keystone site)	May 13, 1949			37,273,000		Favorable	S	*107	81	1		

- ¹ Report not published.
² Abandonment of project recommended.
³ Favorable for snagging operations only, mouth to mouth of Neosho; annually.
⁴ Navigation route from Little Rock, Ark., to the Mississippi River (supplemental Chief of Engineers report).
⁵ Interim report.

- ⁶ Includes \$4,171,800 for modification of work previously authorized.
⁷ \$132,000 at Carthage and \$410,000 at Monett.
⁸ Plus cash contribution by local interests of \$7,400 or construct proposed drainage ditch.
⁹ Plus non-Federal cost of \$323,000.
¹⁰ Plus non-Federal cost of \$1,810,000.
¹¹ Plus non-Federal cost of \$184,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Arkansas River—Continued													
Mouth to Fort Smith	Apr. 13, 1868	Favorable											
Mouth to Little Rock			Sept. 20, 1867										
			July 1, 1885										
	Sept. 14, 1915	Favorable	Apr. 24, 1920	\$2,538,544	Unfavorable	Unfavorable	(1)						
Mouth to source			Nov. 23, 1900	25,263,400	Favorable	Favorable	H	*150	56	2	1901	2128	
Muskogee, to			May 27, 1907	300,000	Favorable	Favorable	H	71	61	1			
				800,000	Favorable	Favorable	H						
North Little Rock, Ark.			Mar. 1, 1955			Unfavorable	(1)						
Ozark lock and dam and lock and dam No. 9, Ark.			Jan. 17, 1968	125,200,000	Favorable	Favorable	S	*111	90	2			
Palarm Creek, Ark., vicinity of			May 19, 1952			Unfavorable	(1)						
Pine Bluff, Ark.			Jan. 23, 1880	100,000	Favorable	Favorable	S.Ex.	67	46	2	1880	1468	
			Mar. 7, 1884	55,500	do	do	H.Ex.	151	48	1	1884	1395	
			Feb. 8, 1897		Unfavorable	Unfavorable	H	294	54	2	1897	1990	
			May 27, 1907	25,000	Favorable	Favorable	H	71	61	1			
Caving banks in vicinity of Hensley Bar and the McFadden place, Ark.	Feb. 27, 1946	Favorable	July 15, 1949	911,000	Favorable	Favorable	H	*489	81	2			
Pueblo, Colo., flood protection			Aug. 1, 1949 ²	209,000		do	H	*327	81	1			
Salt Fork at Cherokee, Okla.			Mar. 18, 1939	800,000	Favorable	do	H	*480	76	2			
Sequoyah and Haskell Counties, Okla., flood control.			Sept. 19, 1938			Unfavorable	(1)						
Star Lake, Okla., vicinity of	Apr. 23, 1923	Unfavorable				do	(1)						
Tamaha, southeastward to the mouth, and San Bois Creek, Okla.			June 4, 1962			do	(1)						
Tulsa, Okla., levees at	Dec. 22, 1937	Favorable	July 23, 1940	513,000	Favorable	Favorable	H	*157	77	1			
Wichita to Fort Gibson			Jan. 23, 1836	1,696,900	do	do	H.Ex.	90	49	1	1886	1391	
Wichita to White River Cutoff			Mar. 16, 1888	16,360,000			H	234	50	1	1888	1389	
Wybark and Choska, Okla.			Sept. 10, 1965		Unfavorable	Unfavorable	(1)						
Arkansas-Red River Basins, water quality study			May 18, 1962	300,000		Favorable	S	*105	87	2			
Water Quality Control, pt. 1 of a 2 part report.			Apr. 18, 1966	46,400,000	Favorable	Favorable	S	*110	89	2			

Arkansas and Walnut Rivers, Arkansas City, Kans.	June 10, 1957			Unfavorable	(1)								
Arkansas River watershed, New Mexico, Conchas Dam project.	Sept. 26, 1955			do	(1)								
Arlington Experimental Farm. (See Potomac River and tributaries, Maryland, Virginia, West Virginia, and Pennsylvania.)													
Arlington, Oreg., Columbia River at. (See Columbia River at Arlington, Oreg.)													
Aroostook River, Maine	Dec. 13, 1873	50,000	Unfavorable	H. Ex		84	43	1	1874	11,327			
	June 30, 1880	50,000		H. Ex		84	43	1					
Arrow Rock, Mo. (See Missouri River.)													
Arrowrock Dam, Idaho. (See Boise River, Idaho.)													
Arroyo Colorado, Tex. (see also Corpus Christi to Point Isabel and Harlingen, Tex., to the Gulf; and Louisiana-Texas Intracoastal Waterway, Corpus Christi to the Rio Grande).	May 11, 1908		Favorable	Unfavorable	H	1216	60	2					
To Harlingen	May 6, 1914		do	do	H	1731	64	2					
To Point Isabel, Intracoastal Waterway	Apr. 18, 1916		Unfavorable	do	H	1239	64	1					
Arroyo Grande Creek, county of San Luis Obispo, Calif.	Nov. 27, 1945			do	(1)								
Arroyo Seco, Calif. (See Salinas River, Calif.)													
Arshamomaque Creek, Long Island, N.Y. (See Hashamomuck (Arshamomaque) Creek, Long Island, N.Y.)													
Arthur Kill, N.Y. and N.J. (see also Staten Island, New Jersey Channel, with New York Harbor, N.Y., channel west of Robbins Reef Light-house, to connect mouth of: Kill von Kull; New York and New Jersey channels; and Raritan River to Arthur Kill).	Aug. 1, 1892		Unfavorable	do	H. Ex	77	52	2	1893	1083			
	July 18, 1907		do	do	H	533	60	1					
	Mar. 12, 1920		do	do	(1)								
	Aug. 9, 1945	11,561,000	Favorable	Feb. 28, 1949	Favorable	*233	81	1					
And Piles Creek, N.Y. and N.J.	Jan. 9, 1906		do	do	H	591	59	1					
Arthur Lake. (See Mermentau River) Artificial Beach. (See Beach Erosion study at Orchard Beach, Pelham Bay, N.Y.)													
Ash Creek, Conn.	Mar. 2, 1936		Unfavorable	Unfavorable	(1)								
Ashpoo River, S.C.	May 21, 1872	1,300							1873	733			
	Nov. 17, 1888		Unfavorable	Unfavorable	H. Ex	117	50	1	1889	1216			
To Coosaw River, S.C. (Fenwicks Cut)	Dec. 6, 1930	79,050	Favorable	July 9, 1931	Favorable	*129	72	1					

¹ Report not published.

² Interim report.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers		
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of Chief of Engineers	Congressional documents						
							House or Senate	Number	Congress	Session		Year	Page
Ashland Harbor, Wis. (see also Great Lakes Harbors studies).	Nov. 30, 1876	Unfavorable											
	Dec. 13, 1879	do					S	32	46	2	1880	1929	
	Oct. 21, 1884	Favorable	Jan. 1, 1885	\$136,000	Favorable		H	89	48	2	1885	*2010	
			Nov. 27, 1885	142,377							1886	*1674	
	June 2, 1909	do	Oct. 15, 1909	46,224	Favorable	Favorable	H	*536	61	2			
	Jan. 28, 1916			112,968	do	Unfavorable							
				10,000			H	*1698	64	2			
	Apr. 6, 1931	Favorable	Mar. 25, 1930	230,000	Favorable	Favorable	S	*133	71	2			
			June 6, 1932	208,000	do	do	H. Com.	*46	72	1			
			Feb. 13, 1941	24,000	do	do	H	*337	77	1			
		Aug. 28, 1873	9,800	do							1873	756	
		Nov. 20, 1900	264,396	do		H	115	56	2	1901	1619		
Ashley River, S.C.	Sept. 10, 1900	Favorable	Feb. 12, 1912	51,150	do		H. Com.	4	62	2			
	June 28, 1915	do	July 31, 1916	200,000	do	Favorable	H	*1810	64	2			
	Aug. 30, 1916												
	Jan. 3, 1918	Unfavorable				Unfavorable	H	1001	65	2			
	Apr. 29, 1935	do	Jan. 10, 1936	340,000	Favorable	Favorable	H	*449	74	2			
	Nov. 12, 1935												
	Ashport, Tenn. (See Mississippi River.)			July 14, 1826	12,000								
				Sept. 30, 1857	38,013			S. Ex.	15	35	1		
				Aug. 25, 1866	57,377							1867	140
				Feb. 28, 1895	465,000	Favorable						1895	*3122
May 19, 1906		Unfavorable	Jan. 20, 1910	1,385,529	Favorable	Unfavorable	H	86	59	2			
Apr. 15, 1909		Favorable				Favorable	H	*654	61	2			
Sept. 30, 1912		Unfavorable				Unfavorable	H	*1295	62	3			
May 28, 1915		Favorable	Feb. 11, 1916	83,000	Favorable	Favorable	H	*987	64	1			
May 12, 1931		Favorable	July 22, 1932	925,000	do	do	H	*43	73	1			
			Nov. 18, 1935	528,000			H. Com.	*78	74	2			
		Feb. 21, 1941	38,000	Favorable	Favorable	H	*321	77	1				
		June 29, 1954	4,900,000	Favorable	do	H	*486	83	2				

Assateague Anchorage, Va., harbor of refuge	Dec. 14, 1923	Favorable	{Jan. 17, 1925 May 15, 1927}	4, 975, 000	Favorable	Unfavorable	(1)						
Assateague Channel, Accomac County, and Chincoteague Island, Va. (see also Smaller Drain, Assateague Island, Va.)	June 13, 1938	Unfavorable				do	(1)						
Assateague Creek and Smaller Drain, Va. (See Smaller Drain, Assateague Island, Va.)													
Assawaman Bay, Del. (See Chincoteague Bay, Delaware Bay Waterway.)													
Assonet River, Mass.	Aug. 10, 1899	do				do	H	102	56	1	1900	1300	
Astoria Harbor, Oreg. (see also Columbia River below Tongue Point).	Apr. 4, 1905	Favorable	Oct. 6, 1906		Unfavorable	do	H	216	59	2			
Astoria Harbor (Lower), Oreg. (See Lewis and Clark River.)													
Astoria, Oreg. (See Columbia and lower Willamette Rivers between Portland, Oreg., and the sea.)													
Atchafalaya Basin Access Channels, La.			Dec. 3, 1969 ²		Unfavorable	Unfavorable	(1)						
Atchafalaya Bay. (See Atchafalaya River, La., etc.)													
Atchafalaya Bay and River, La. (see also Charenton Canal, and Grand Lake, and Plaquemine and Teche Bayous, and Mississippi River, and Red and Atchafalaya Rivers).			July 24, 1871	{ 104, 800 122, 300 140, 300 }	Favorable						1871	554	
	Apr. 10, 1897	Unfavorable					H	27	55	1	1897	1779	
	Apr. 11, 1899	Favorable	Jan. 19, 1900	1, 939, 399	Unfavorable		H	410	56	1	1900	2282	
	Sept. 8, 1908	Unfavorable					H. Com	17	61	2			
	Nov. 20, 1884	Favorable	Mar. 18, 1885		Unfavorable						1885	1432	
Above Berwick Bay			Apr. 26, 1882	92, 604			S. Ex.	172	47	1	1882	1393	
Berwick Bay to mouth of Red River							S. Ex.	30	48	1	1884	1285	
Berwick Bay to Gulf of Mexico	Aug. 30, 1882	Unfavorable				Unfavorable							
			Nov. 16, 1888	{ 9, 300, 000 10, 000, 000 14, 000 }	Unfavorable	do					1889	1510	
Mouth of Red River to Brashear			Oct. 5, 1874		Favorable						1874	771	
	Nov. 5, 1909	Favorable	Jan. 22, 1910	{ 650, 000 500, 000 13, 022, 500 5, 131, 750 3, 751, 200 }	do	Favorable	H	669	61	2			
Atchafalaya River, La.			July 17, 1919		Unfavorable	Unfavorable	H	*288	66	1			
And Bayous Courtableau, Teche, and Vermilion, navigable connection between streams.	Feb. 16, 1918	Favorable				do	H	*1230	65	2			
And the Atchafalaya Bay ship channel.													
Bayous Chene, Boeuf, and Black, La.			Mar. 31, 1945		do	(1)							
			Mar. 6, 1967	38, 645, 000	Favorable	Favorable	H	*155	90	1			

¹ Report not published.

² Mississippi River Commission report.

³ Plus non-Federal cost of \$881,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published						
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Atchafalaya River, La.—Continued													
Morgan City to Gulf of Mexico (Bayous' Terrebonne, Petit Caillou, Grand Caillou, DuLarge, and connecting channels).			July 26, 1962	\$45,000		Favorable	H.	*583	87	2			
Morgan City to Mississippi River via Old River, La.			May 1, 1951	2 440,000		do	S.	*53	82	1			
Separation from waters of Mississippi River. (See Red and Atchafalaya Rivers.)													
Athens, Ohio. (See Hocking River.)													
Atherton Creek, San Mateo County, Calif.	Sept. 29, 1930	Unfavorable	Apr. 18, 1966		Unfavorable	Unfavorable	(1)						
Atkins Bay, Maine						Unfavorable	(1)						
Atlantic City. (See Beach Erosion studies; Hurricane studies; New Jersey coast, flood control; and Pleasantville, N.J.)													
Atlantic City Harbor, N.J. (see also Absecon Inlet, Beach Thoroughfare, and Cape May to Great Bay)			(Oct. 18, 1884 May 31, 1887)	960,000 3,000,000	Unfavorable		H. Ex.	71	48	2	1885 1887	862 *815	
Atlantic City to Fortescue Creek, N.J., waterway through Cape May, Cumberland, and Atlantic Counties	Sept. 30, 1938	Unfavorable				Unfavorable	(1)						
Atlantic-gulf ship canal, Florida: Cumberland Sound, Ga. and Fla. to Mississippi River Waterway.	Dec. 1, 1931												
Florida ship canal.													
Georgia-Florida Waterway	Jan. 27, 1932												
St. Marys River, Ga. and Fla.													
Geological and ground water conditions.	Dec. 18, 1935						S.	147	74	2			

Atlantic-Gulf Waterway, Fla. (See Cross-Florida Barge Canal; and Punta Rasa-Fort Pierce Waterway.)												
Atlantic Highlands, N.J.	Apr. 13, 1906	Favorable										
Atlantic Highlands, N.Y. (See Sandy Hook Bay, off Atlantic Highlands, N.Y.)					Unfavorable	H	85	59	2			
Atlantic Intracoastal Waterway:												
Albermarle Sound to Pungo River, N.C.			June 25, 1964		Unfavorable	do	(1)					
Bridges, Va. and N.C.			Nov. 24, 1970	11, 220, 000	Favorable	Favorable	H	*142	92	1		
Norfolk, Va. to Jacksonville, Fla.			June 2, 1965		Unfavorable	Unfavorable	(1)					
Atlantic Ocean to Gulf of Mexico, canal. (See Florida, waterway across State of.)												
Atlantic tidewaters. (See Great Lakes to—)												
Auburn Lake, N.Y., flood control. (See Oswego, Oneida, Seneca, and Clyde Rivers, N.Y.)												
Aucilla River, Fla.	Aug. 26, 1881	Unfavorable										
Auglaize, Blanchard, and Ottawa Rivers, Ohio, and tributaries, flood control, and control of pollution.	Oct. 26, 1929	do					S. Ex.	11	47	1	1882	1302
Auglaize, Blanchard, and Ottawa Rivers, Ohio, flood control.	Sept. 5, 1940	do					H	*132	72	1		
Au Gres River, Mich.	Dec. 26, 1888	do					(1)					
	Oct. 9, 1913	do					do				1889	2277
	Jan. 7, 1931	do					H	*517	63	2		
Augusta Narrows, Ark. (See White River at.)			Aug. 8, 1962				do					
Auke Bay, Alaska							do					
Au Sable Harbor, Mich. (See Coasts of Great Lakes; Harbors of refuge for light draft vessels.)			Nov. 25, 1966		Unfavorable	do	(1)					
Au Sable River, Mich.			Oct. 16, 1866	114, 754								
			Feb. 5, 1875									
			Jan. 25, 1876	900, 000			H. Ex.	121	44	1	1875	286
	Dec. 26, 1888	Unfavorable									1876	550
	May 29, 1907	do			Unfavorable	H		71	60	1	1889	2279
	July 12, 1909	do			do	H. Com		15	61	2		
	Jan. 2, 1963	do					(1)					
Ausable River, N.Y., flood control.	Apr. 11, 1947	do			Unfavorable	(1)						
Ausable River, N.Y.	May 11, 1929	do			do	(1)						
Austwell Channel, Tex.	June 28, 1916	do			do	H		488	71	2		
Au Train Lake. (See Lake Superior to Lake Michigan Waterway.)					do	H. J.		*1732	64	2		
Au Train River, Mich., harbor at mouth.	July 14, 1947						do				(1)	
Aux Becs Scies Lake, Mich. (See Frankfort Harbor.)												
Avoca, N.Y. (See Cohocton River at.)												
Avon, N.C. (See Pamlico Sound to.)												

¹ Report not published.

² Mississippi River Commission report.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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							House or Senate	Number	Congress	Session		Year	Page
B													
Babylon Creek, N.Y.	Jan. 20, 1897	Unfavorable				Unfavorable	H.	222	54	2	1897	1172	
Bachelors slough, Wash.	Nov. 22, 1913	Favorable	May 26, 1914	\$3,250	Favorable	do	H.	*1176	63	2			
Backman and Joe's Creek, Dallas, Tex.			May 9, 1972		Unfavorable	Unfavorable	(¹)						
Back Bay of Biloxi and Bayou Bernard to Handsboro, Miss.	May 12, 1938	do	Mar. 9, 1939	6,000	Favorable	Favorable	H.	*326	76	1			
Back Bay of Biloxi, Miss. (see also Biloxi)	Oct. 3, 1884	do				Unfavorable	H. Ex.	71	48	2	1885	1373	
	Dec. 16, 1930	Unfavorable				Favorable	(¹)						
	May 17, 1938	Favorable	Feb. 23, 1939	4,000	Favorable	Unfavorable	H.	*258	76	1			
And Bayou Bernard			May 1, 1963		Unfavorable	Unfavorable	(¹)						
At Cranes Neck and Biloxi Mud Flats	Nov. 12, 1918	Unfavorable				do	H.	*258	66	1			
Channel to	Jan. 23, 1917	do				do	H.	176	65	1	1893	1784	
Up to Handsboro	May 10, 1893	do											
Back Cove, Portland, Maine. (See Portland.)			Aug. 18, 1936	27,000	Favorable	Favorable	H.	*73	75	1			
Back Creek, Anne Arundel County, Md.	Dec. 23, 1935	Favorable	Apr. 3, 1830	40,000			H.	199	25	3			
Back Creek, Md. (see also Honga River, etc., Anchorage in. (See Delaware River to Chesapeake Bay.)						Unfavorable	H.	291	65	1			
Back Creek to York River, Va.	Mar. 26, 1917	Favorable				do	(¹)						
	June 30, 1923	do	Dec. 28, 1925	11,400	Unfavorable	do	(¹)						
			Aug. 28, 1934	22,500	Favorable	Favorable	H. Com.	*6	74	1			
			Jan. 14, 1913	5,000	Unfavorable	do	H.	*1391	62	3			
Back River, Ga. (see also Terry Creek)	Sept. 5, 1912	do	July 2, 1928	30,000	do	Unfavorable	(¹)						
	June 3, 1927	do	Nov. 12, 1929	30,000	Favorable	Favorable	S.	57	71	2			
						Unfavorable	(¹)						
Back River, Md.	June 21, 1933	Unfavorable				do	(¹)						
	Oct. 19, 1956												
Back River, Maine. (See Sasanoa River.)													

Black River, Mass. (See Weymouth River.)																			
Back River to Wallace Creek public landing, Elizabeth City County, Va.	Dec. 9, 1935	Unfavorable				Unfavorable	(1)												
Back River, Va. (See Harris Creek and Newport News-York River Waterway.)																			
Back River, Front Cove, Va.	Mar. 31, 1961					do	(1)												
Back Sound, N.C. (See North River, N.C.)																			
Back Sound to Lookout Bight, N.C.: Channel from																			
Through Shackelford Banks, N.C.	Nov. 30, 1935	Unfavorable	Feb. 16, 1942	50,000		Favorable	H	*746	77	2									
Bad River, Mich. (see also Flint and Saginaw Rivers).	Dec. 31, 1894	Favorable	Nov. 22, 1897	50,000	Favorable	do	H	*251	75	1									
Bad River and tributaries, S. Dak. (see also White and Bad Rivers S. Dak. and Nebr.).	Sept. 30, 1932	Unfavorable		5,000		do	H, Ex	232	53	3	1895	2852							
Bad River, S. Dak. and Nebr. (See White and Bad Rivers, S. Dak. and Nebr.)				21,000		do	H	135	55	2	1898	2600							
Bad River, Wis.	Aug. 29, 1932	do				Unfavorable	H	*189	73	2									
Bad River, Wis., Mellen and Odanah and vicinities.	June 29, 1954			\$ 761,800		do	H	*71	73	1									
Baffins Bay, Tex. (See Corpus Christi to Point Isabel.)						Favorable	H	*165	84	1									
Bagaduce River, Maine	May 12, 1926	(?)																	
Bagaduce River, Maine, from Penobscot to—	Dec. 10, 1935	Unfavorable				Unfavorable	(1)	467	69	1									
Brookville	Dec. —, 1886	Favorable	Feb. 2, 1888	46,875	Favorable	do	H, Ex	157	50	1	1888	398							
South Fork	Jan. 27, 1914	Unfavorable				Unfavorable	H	*870	63	2									
Leading up to Penobscot Village	Aug. 17, 1892	do				do	H, Ex	17	52	2	1893	724							
Bahia Honda, Fla. (See Florida East Coast Canal and Miami to Key West.)	Nov. 23, 1897			45,700	Unfavorable	do	H	*144	55	2	1898	842							
Baileys Cut. (See Satilla River, Ga.)																			
Baker(s) Bay, Columbia River, Wash. (See Columbia River to Ilwaco.)	Dec. 22, 1930	Favorable	Aug. 19, 1932	54,000	Favorable	Favorable	H	*44	73	1									
	May 28, 1936	Unfavorable				Unfavorable	(1)												
			June 17, 1939	170,000	Favorable	do	H	*443	76	1									
			Feb. 28, 1949	442,000		do	S	*95	81	1									
Bakers Bay to Shoalwater (Willapa) Bay, Wash., canal. (See Willapa Bay.)																			
Bakers Haulover Inlet, Fla. (see also Beach Erosion studies.)	May 27, 1959			\$ 239,000		do	H	*189	86	1									
Badhill. Reservoir, N. Dak. (See Sheyenne River)																			
Baldwin Bay, N.Y. (See Milburn Creek, Swift Creek, etc.)																			

¹ Report not published.

² Abandonment if project recommended.

³ Includes \$66,000 for items of local cooperation to be furnished by Bureau of Indian Affairs.

⁴ Plus cash contribution, estimated at \$239,000, by local interests of 50 percent of the first cost of construction.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published					
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							House or Senate	Number	Congress	Session		Year
Baldwin River, N. Y.	Oct. 4, 1884	Unfavorable					H. Ex.	71	48	2	1885	789
Ballard, Wash. (See Puget Sound-Lake Washington Waterway.)												
Ballona Creek, Calif. (See Los Angeles and San Gabriel Rivers and Ballona Creek, Calif.)			Feb. 24, 1828	\$ 223,081								
Baltimore Harbor, Md. (see also Potomac River Patapsco River).			Jan. 5, 1881	1,250,000	Favorable	Favorable	H. Ex.	*36	46	3	*1881	860
			Dec. 17, 1886	620,000			H. Ex.	67	49	2	1887	880
			Sept. 19, 1894	1,240,000			H.	57	53	3	1895	1201
			Oct. 17, 1896	2,500,000	Favorable		H.	50	54	2	1897	1308
			Jan. 26, 1901	2,500,000			S.	118	56	2	1901	1394
And channels			May 3, 1928	10,700,000			H. Com.	*11	70	1		
			Aug. 31, 1928	5,300,000	Favorable	Favorable	H.	*29	71	1		
			June 30, 1942	4,686,375			H.	*741	79	2		
			Jan. 3, 1957	1,997,000			H.	*86	85	1		
				28,161,000			H.					
Anchorage facilities opposite Prudential Oil Co. wharves.	Feb. 23, 1921	Unfavorable					Unfavorable	(*)				
And approaches thereto	July 31, 1915	Favorable	Dec. 2, 1915	876,100	Favorable	Favorable	H.	*799	64	1		
Channel to Curtis Bay			Dec. 13, 1890	25,000			H. Ex.	102	51	2	1891	1243
			Jan. 26, 1901	85,000			S.	118	56	2	1901	1394
			Dec. 16, 1902	196,000			H.	186	57	2	1903	1032
			Nov. 22, 1912	3,465,000	Favorable	Favorable	H.	7	63	1		
			(Jan. 15, 1867)	123,700							1867	417
Fort McHenry to mouth of Patapsco River			(May 23, 1867)	200,000	do							
Middle Branch, Patapsco River, from Light Street Bridge to foot of Eutaw St.	Oct. 7, 1892	Favorable				Favorable	H. Ex.	84	52	2	1893	1262

South Branch, Patapsco River, from Craighill Channel to Light Street Bridge.	.....do.....do.....do.....	H. Ex.....	84	52	2	1893	1262					
West Branch, Patapsco River, from Light Street Bridge to head of tidewater.	Jan. 20, 1879	207,600 Favorable	H. Ex.....	49	45	3	1879	579				
Southwest Baltimore (Spring Garden) Harbor.	Mar. 4, 1896	{ 314,000 }	H.....	304	54	1	1896	1006				
York Spit Channel.	Nov. 22, 1912	Favorable	Dec. 18, 1912	{ 524,287 }	Favorable	Favorable	H.....	*1190	62			
Baltimore Metropolitan Area, Maryland. (See Hurricane studies.)												
Banana Creek and River, Fla.	Mar. 20, 1950											
Banana Creek, Fla.	Dec. 12, 1917	Unfavorable										
Banana River to Mosquito Lagoon, Merritt Island, Fla., waterway.	Apr. 30, 1936	do.										
Bangor Harbor. (See Penobscot River.)												
Baptism and Manitou Rivers, Minn.	Nov. 28, 1931	do.										
Baraboo River, Wis.	Dec. 6, 1966											
Barataria Bay, La., and connecting waters.	Oct. 18, 1915	do.	Mar. 1, 1917	61,700	Unfavorable	Unfavorable	H.....	*250	72	1		
Barataria Bay, La., New Orleans to Grand Pass (see also Little Lake).			Aug. 17, 1881	{ 78,486 }	Favorable	Favorable	H.....	*200	65	1		
Barataria Bay Waterway, La.	May 18, 1949	Favorable	Oct. 19, 1956	{ 108,158 }						1881	1307	
			Oct. 21, 1966	1,647,000	Unfavorable	Favorable	H.....	*82	85	1		
Barbers Point Harbor, Oahu, Hawaii. (See Honolulu Harbor, Hawaii.)					Unfavorable	Unfavorable	(1)					
Bar Harbor, Maine.	June 1, 1936	Unfavorable	May 31, 1940		do.	Unfavorable	(1)					
Bar Harbor, Maine, between Rodicks Island and Mount Desert Island.	Jan. 16, 1947	Favorable	May 9, 1957			do.	(1)					
Bar Lake, Mich. (See Arcadia Harbor and Empire, Mich., etc.)	Jan. 10, 1887	do.	July 27, 1887	500,000						*1887	483	
Barbourville, Ky. (See Upper Cumberland River, Ky., and Tenn.)												
Barcelona Harbor, N.Y. (see also Coasts of the Great Lakes, harbors of refuge for light-draft vessels).	Dec. 19, 1935	do.	Mar. 2, 1936		Unfavorable	Unfavorable	(1)					
Barge channel. (See Mississippi River, Baton Rouge to the Gulf of Mexico, barge channel through Devils Swamp.)												
Barneget Pay, N.J., inlet from Atlantic Ocean, near head of (see also Cranberry Inlet).	Apr. 30, 1868	Unfavorable									1868	708
Barneget Bay and Great Egg Harbor Bay, N.J., sound between (see also Cranberry Inlet).	Oct. 20, 1890	do.					H. Ex.....	42	51	2	1891	1093
Between Mantoloking and Bay Head	Oct. 31, 1896	do.					do.....	115	54	2	1897	1229
Barneget Inlet, N.J. (see also Cranberry Inlet).	Aug. 13, 1892	do.					H. Ex.....	16	52	2	1893	1185
	Oct. 6, 1931	Favorable	July 31, 1933	533,000	Favorable	Favorable	H. Com.....	19	73	2		
			May 23, 1935	533,000	do.	do.	H. Com.....	*85	74	2		
			July 2, 1942				do.....					
			Aug. 2, 1945 ¹				Unfavorable	(1)				
			Sept. 24, 1948	*4,500			Favorable	H.....	*358	79	1	
							Unfavorable	(1)				

Barneget Inlet to Cape May Canal, N.J. (See Beach Erosion studies.)

¹ Report not published.

² Annually for dredging.

³ Interim report.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published							
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				Annual report of Chief of Engineers			
							House or Senate	Number	Congress	Session	Year	Page		
Barnstable Bay and Buzzards Bay Canal. (See Buzzards Bay and Barnstable Bay Canal, and Gape God Canal and East Dennis.)														
Barren Island Gaps, Md. (See Honga River and Tar Bay, Md.)														
Barren River, Ky. (see also Green and Barren Rivers, etc.)	Nov. 11, 1890	Unfavorable				Unfavorable	H. Ex.	15	51	2	1891	2475		
Barren River, Ky., and Tenn., flood control	Feb. 24, 1942	Favorable	Sept. 19, 1944	\$9,700,000		Favorable	H.	*765	78	2				
Barrington Harbor, R. I. (See Warren River and Barrington Harbor, R.I.)														
Barroom Bay, Tex.-La., and Texas Intracoastal Waterway, connecting channel.			June 1, 1939	6,300	Favorable	Favorable	H.	*428	76	1				
Barron River and Chokoloskee Bay, Fla.	Jan. 12, 1931	Unfavorable				Unfavorable	(1)							
Bartholomew Bayou, La. and Ark.			Mar. 28, 1872	34,716	Favorable		H. Ex.	252	42	2	1872	383		
			Jan. 22, 1879	23,005			H. Ex.	61	45	3	1879	997		
			Dec. 20, 1880	26,862			H. Ex.	38	46	3	1881	1453		
			Jan. 15, 1885	20,000	Favorable		H. Ex.	147	48	2	1885	1549		
	May 25, 1916					(1)	H.	1692	64	2				
	May 12, 1926	(2)				(1)	H.	467	69	1				
Basin Bayou and Choctawatchee Bay, Fla., waterway connecting.	Mar. 23, 1956					Unfavorable	(1)							
Bass Harbor Bar, Maine (see also Deer Island thoroughfare).	Aug. 28, 1911	Favorable	Sept. 13, 1912	10,000	Favorable	Favorable	H.	*1128	62	3				
Bass Harbor, Maine.			Nov. 27, 1962			Unfavorable	(1)							
Bass River Harbor, Mass.			Feb. —, 1830	19,930										
	Aug. 18, 1899	Unfavorable					H.	142	56	1	1900	1282		
	May 12, 1926	(2)				(2)	H.	467	69	1				
	July 13, 1938	Favorable	Sept. 25, 1941			Unfavorable	(1)							
			June 7, 1974			Unfavorable	(1)							

IMPROVEMENT OF RIVERS AND HARBORS—Continued

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							House or Senate	Number	Congress	Session	
Bay Mabel, Fla. (See Caloosahatchee River and Lake Okeechobee drainage areas and Port Everglades to Caloosahatchee River.)			June 2, 1965	\$9,360,000	Favorable	Favorable	H	*506	89	2	
Bay Ocean Peninsula. (See Tillamook Bay and bar, Oreg.)			Jan. 28, 1964	1,524,000	Favorable	Favorable	H	*203	89	1	
Bayou Bartholomew and tributaries, Ark. and La.											
Bayou Bodcau Reservoir, Bayou Bodcau, and Red Chute, Loggy, Black, and Cypress Bayous, Ark. and La.											
Bayou Coden, Ala.	Aug. 14, 1941	Favorable	May 21, 1942 Mar. 6, 1970	6,880	Unfavorable	Favorable	H	*824	77	2	
Bayou DeView. (See Cache River, Ark. and Mo.)											
Bayou Grand Caillou, to Gulf of Mexico, La.			Apr. 3, 1970		Unfavorable	Unfavorable	(1)				
Bayou LaBatre, Ala.			May 4, 1964	262,000	Favorable	Favorable	H	*327	88	2	
Bayou La Fourche, La.			Aug. 1, 1945	5,550,000		do	S	*191	79	2	
And Lafourche-Jump Waterway			Feb. 2, 1959	4,664,000		do	H	*112	86	1	
Bayou Macon, La. (See Boeuf and Tenas Rivers and * * *)											
Bayou Meto, Ark. (see also White and Arkansas Rivers, Grand Prairie region.)			Aug. 4, 1945			Unfavorable	(1)				
Bayous Petit Anse, Tigre, and Carlin, La.			Mar. 25, 1958	106,000		Favorable	S	*70	85	2	
Bayou Pierre in vicinity of Shreveport, La., flood control.	Oct. 15, 1943	Favorable	June 7, 1945	190,000		do	H	*285	79	1	
Bayou Pierre Lake. (See Tones Bayou.)											
Bayou Sara Harbor, La.						Unfavorable	H. Ex	63	53	3	1895 1795
Bayou Scofield. (See Empire, La., to Gulf of Mexico Waterway.)	Sept. 21, 1894	Unfavorable									
Bayou Segnette Waterway, La.			Jan. 21, 1954	520,000		Favorable	H	*413	83	2	
Bayous Terrebonne, Petit Caillou, Grand Caillou, DuLarge and connecting channels and Atchafalaya River, Morgan City to Gulf of Mexico.	Oct. 7, 1948	Favorable	July 26, 1962	45,000		do	H	*583	87	2	
Bayport Channel and Harbor, Fla.			Feb. 23, 1973		Unfavorable	Unfavorable	(1)				

Bay Ridge Channel, New York Harbor, Break-water, Bay Ridge and Red Hook Channels.	Feb. 17, 1923	Unfavorable	Feb. 14, 1924	{	594,000	Unfavorable	Unfavorable	(1)					
Bay Ridge Channel, New York Harbor, removing shoal and for 23 feet depth.	Oct. 17, 1890	do		}	2,190,000		do	H. Ex.	60	51	2	1891	940
Bay Ridge Channel, New York Harbor, triangle area between Bay Ridge and Red Hook Channels, and Red Hook and Buttermilk Channels (see also Buttermilk Channel and Gowanus Bay).	May 10, 1905	Unfavorable	Feb. 24, 1897	{	2,000,000			H.	*337	54	2	1897	1177
	May 22, 1909	do		}	5,300,000			Unfavorable	H.	65	59	1	
	Oct. 14, 1913	Favorable	Dec. 15, 1913					do	H.	205	61	2	
Bay Ridge and Red Hook Channels, N.Y. Bay Ridge Channel.	May 27, 1930		May 27, 1930		1,150,000	do	Favorable	H.	*863	63	2		
								H. Com.	*44	71	2		
Bay River, N.C. (see also Pamlico River; Vandermere Harbor and Bay River at Bayboro, N.C.).	Jan. 27, 1883	Unfavorable	Dec. 23, 1909		21,000	Favorable	Favorable	S. Ex.	30	48	1	1884	1064
	Apr. 23, 1909	Favorable						H.	583	61	2		
Northwest Prong.	Feb. 27, 1913	do	Oct. 10, 1913		9,337	do	Unfavorable	H.	*810	63	2		
			Aug. 7, 1935		9,000			H. Com.	*72	74	2		
Bay River to Neuse River, N.C., Inland Waterway. (See Norfolk-Beaufort inland waterway.)													
Bay Shore Harbor, N.Y.	Mar. 13, 1939	do	Sept. 27, 1945				Unfavorable	(1)					
Bay Shore, Long Island, N.Y.	Sept. 20, 1899	Unfavorable					do	H.	43	56	1	1900	1442
Bayside Channel. (See New York and New Jersey Channels.)													
Bays, inlets, and rivers along the coast of Oregon.	June 2, 1950						do	(1)					
Bay, the, Ark. (tributary of St. Francis River)	Jan. 10, 1881	Unfavorable						H. Ex.	62	46	3	1881	1497
Beach Creek, Va.	Feb. 21, 1917	do					Unfavorable	H.	*330	65	1		
	Oct. 4, 1927	do					do	(1)					
	Aug. 26, 1935	do					do	(1)					
Lancaster County, Va.			Feb. 18, 1964			Unfavorable	do	(1)					
Beach erosion. (See Gay Head, Mass.)													
Beach Erosion studies:													
Amelia Island, Fla.	Mar. 31, 1961					do	H.	*200	87	1			
Ansheim Bay Harbor, Calif.	Nov. 30, 1953				148,400	Favorable	H.	*349	83	2			
Anna Maria and Longboat Keys, Fla.	Oct. 9, 1947					Unfavorable	H.	*760	80	2			
Atlantic City, N.J.	Jan. 30, 1950				1,579,000	Favorable	H.	*538	81	2			
	Apr. 1, 1964				\$ 1,585,000	do	H.	*325	88	2			
Atlantic Coast of Long Island, Fire Island Inlet, and shore w. to Jones Inlet, N.Y.	Sept. 3, 1964				\$ 27,250,000	do	H.	*115	89	1			
Bakers Haylover Inlet, Fla.	Dec. 19, 1945					Unfavorable	H.	*527	79	2			
Barnegat Inlet to Cape May Canal, N.J.	May 27, 1959				\$ 4,464,000	Favorable	H.	*208	86	1			
Belle Pass to Racoon Point, La.	Oct. 6, 1961					Unfavorable	H.	*338	87	2			
Berrien County, Mich.	Dec. 3, 1957				\$ 304,000	Favorable	H.	*336	85	2			
Blind Pass, Fla.	Mar. 22, 1937					Unfavorable	H.	*187	75	1			
Bolivar Peninsula in vicinity of Rollover Fish Pass, Tex.	Oct. 14, 1959					do	H.	*286	86	2			
Braddock Bay, N.Y.	July 8, 1955					do	(1)						
Brevard County, Fla., shores of	June 3, 1968				\$ 680,000	Favorable	H.	*352	90	2			
Broward County and Hillsboro Inlet, Fla.	June 15, 1964				\$ 1,583,000	do	H.	*91	89	1			
Camp Pendleton and Oceanside, Calif.	Aug. 25, 1960				1,498,000	do	H.	*456	86	2			

¹ Report not published.

² Plus non-Federal cost of \$907,000, including \$207,000 for associated land drainage.

³ Federal cost includes Federal share of beach nourishment for 10-year period.

⁴ Federal cost is net cost to the United States and includes Federal share of beach nourishment over the 50-year life of the recommended project.

⁵ Plus non-Federal cost of \$683,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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							House or Senate	Number	Congress	Session		Year
Beach erosion studies—Continued												
Cape Cod, Mass., Chatham to Point Gammon.....			Mar. 29, 1943			Unfavorable	(1)					
Cape Cod Canal to Race Point, Provincetown, Mass.....			May 13, 1960	\$ 188,000		Favorable	H	*404	86	2		
Carolina Beach and vicinity, North Carolina			Oct. 5, 1961	\$ 805,000		do	H	*418	87	2		
Carpinteria to Point Mugu, Calif.....			June 6, 1952	53,150		do	H	*29	83	1		
Chatham, Mass.....			Feb. 6, 1957			Unfavorable	H	*167	85	1		
Clark Point, New Bedford, Mass.....			Aug. 16, 1962	60,000		Favorable	H	*584	87	2		
Cleveland and Lakewood, Ohio.....			Mar. 25, 1948	851,900		do	H	*502	81	2		
Cold Spring Inlet (Cape May Harbor), N.J.			Feb. 12, 1952	237,500		do	H	*206	83	1		
Colonial Beach, Va.....			June 2, 1949	35,000		do	H	*333	81	1		
Compo Beach, Westport, Conn.....			June 24, 1935			Unfavorable	H	*239	74	1		
Connecticut, State of:												
Area 1, Ash Creek to Saugatuck River.....			June 14, 1949	203,500		Favorable	H	*454	81	2		
Area 2, Hammonasset River to East River.....			do	139,000		do	H	*474	81	2		
Area 3, New Haven Harbor to Housatonic River.....			Mar. 27, 1952	124,800		do	H	*203	83	1		
Area 4, Connecticut River to Hammonasset River.....			Apr. 10, 1952			Unfavorable	H	*514	82	2		
Area 5, Pawcatuck River to Thames River.....			Sept. 29, 1952			do	H	*31	83	1		
Area 6, Niantic Bay to Connecticut River.....			Dec. 2, 1952			do	H	*84	83	1		
Area 7, Housatonic River to Ash Creek.....			May 4, 1953	130,000		Favorable	H	*248	83	2		
Areas 8 and 11, Saugatuck River to Byram River.....			Mar. 12, 1957	229,000		do	H	*174	85	1		

Area 9, East River to New Haven Harbor	Jan. 12, 1956	8,400	do	H	*395	84	2
Area 10, Thames River to Niantic Bay	Aug. 21, 1957		Unfavorable	H	*334	85	2
Coronado, Calif.	Sept. 30, 1941		do	H	*636	77	2
Corpus Christi Beach, Tex.	July 16, 1970	525,000	Favorable	H	*415	91	2
Daytona Beach, Fla.	Mar. 25, 1938		Unfavorable	H	*571	75	3
Delaware Bay, Cape May Canal to Maurice River, N.J.	Mar. 15, 1961		do	H	*196	87	1
Delaware Coast, beach erosion control and hurricane protection	May 13, 1968	*5,584,000	Favorable	S	*90	90	2
Delaware coast, Kitts Hummock to Fenwick Island.	Apr. 17, 1957	*346,400	do	H	*216	85	1
Dillingham, Alaska	Mar. 26, 1973		Unfavorable	Unfavorable	(1)		
Duval County, Fla.	June 2, 1965	*4,486,000	Favorable	H	*273	89	1
Ediz Hook, Port Angeles, Wash.	Aug. 21, 1972	4,553,000	Favorable	Favorable	H	101	93
Evanston, Ill., city of	Mar. 3, 1965	392,000	do	H	*159	89	1
Fair Haven Beach State Park, N.Y.	July 22, 1954	101,700	do	H	*134	84	1
Falmouth, Mass.	Mar. 18, 1964		Unfavorable	H	*326	88	2
Fire Island Inlet to Jones Inlet, Long Island, N.Y.	Mar. 13, 1956	2,724,000	Favorable	H	*411	84	2
Fire Island Inlet to Montauk Point, Long Island, N.Y.	May 27, 1960	*19,580,000	do	H	*425	86	2
Folly Beach, S.C.	Apr. 1, 1935		Unfavorable	H	*156	74	1
Fort Fisher, N.C.	Dec. 29, 1931		do	H	*204	72	1
Fort Macon, Atlantic Beach and vicinity, North Carolina.	Aug. 3, 1962	*218,000	Favorable	H	*555	87	2
Fort Niagara State Park, Niagara County, N.Y.	Sept. 6, 1968	*1,327,000	do	H	*319	91	2
Fort Pierce, Fla.	Aug. 17, 1964	*592,000	do	H	*84	89	1
Galveston Bay, Tex.	Aug. 9, 1950	Unfavorable	Unfavorable	H	*346	83	2
Galveston Bay, Galveston County, Tex.	do	do	do	H	*346	83	2
Galveston Bay, Harris County, Tex.	Sept. 24, 1934		do	H	*74	74	1
Galveston, Tex.	June 4, 1934		do	H	*400	73	2
Galveston Island (gulf shore), Tex.	May 22, 1953		do	H	*218	83	1
Grand Isle, La.	Sept. 22, 1936		do	H	*92	75	1
	Feb. 14, 1955		do	H	*132	84	1
Haleiwa Beach, Oahu, Hawaii	May 15, 1964	572,400	Favorable	H	*107	89	1
Hamlin Beach State Park, N.Y.	Jan. 13, 1955	367,700	do	H	*138	84	1
Hampton Beach, N.H.	Sept. 12, 1932		Unfavorable	(1)			
	Oct. 1, 1953	140,000	Favorable	H	*325	83	2
Hancock County, St. Louis Bay, Miss.	Mar. 18, 1943		Unfavorable	(1)			
Harrison County, Miss.	July 24, 1944		do	(1)			
	Mar. 8, 1948	1,133,000	Favorable	H	*682	80	2
Hawks Nest Beach, Old Lyme, Conn.	Aug. 14, 1939		Unfavorable	(1)			
Hills Beach, Biddeford, Maine	Aug. 8, 1962		do	H	*590	87	2
Holly Beach, Louisiana	Nov. 11, 1971		Unfavorable	Unfavorable	(1)		
Hollywood Beach, Fla.	May 14, 1937		do	H	*253	75	1
Humboldt Bay (Buhne Pt.), Calif.	July 24, 1957	38,200	Favorable	H	*282	85	2
Hunting Island Beach, S.C.	Feb. 25, 1964	*999,000	do	H	*323	86	2
Huron, Erie County, Ohio	Oct. 16, 1942		Unfavorable	H	*220	79	1
Illinois shore of Lake Michigan	Jan. 28, 1952	872,400	Favorable	H	*28	83	1
Jacob Riis Park, Long Island, N.Y.	Jan. 17, 1935		Unfavorable	H	*397	74	2
Jupiter Island, Fla.	Aug. 20, 1947		do	H	*765	80	2
Kenosha, City of, Wis.	May 25, 1955		do	H	*273	84	2
Key West, Fla.	Apr. 25, 1958	*349,200	Favorable	H	*413	85	2

¹ Report not published.

² Federal cost includes Federal share of beach nourishment for 10-year period.

³ Plus periodic nourishment of the beach.

⁴ Plus non-Federal cost of \$551,000.

⁵ Federal cost is net cost to the United States and includes Federal share of beach nourishment over the 50-year life of the recommended project.

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Beach Erosion studies—Continued											
Kitty Hawk, Nags Head, and Oregon Inlet, N.C.			Apr. 1, 1935			Unfavorable	H	*155	74	1	
Lake County, Ohio			Mar. 28, 1950			do	H	*596	81	2	
Lee County, Fla			May 21, 1970	\$ 731,400		Favorable	H	*395	91	2	
Leland Harbor, Mich			June 20, 1950			Unfavorable	(C)				
Lido Key, Fla			June 19, 1969	\$ 504,900		Favorable	H	*320	91	2	
Long Beach, Calif			Mar. 18, 1943			Unfavorable	(C)				
Long Island, N.Y., south shore			May 12, 1947			do	(C)				
Long Island, N.Y., North Shore			Dec. 3, 1970	3,683,000	Favorable	Favorable	H	*198	92	2	
Lynn-Nahant Beach, Mass			Sept. 26, 1950	154,670		Favorable	H	*134	82	1	
Manasquan Inlet and adjacent beaches, New Jersey			Aug. 24, 1936	28,000		Unfavorable	H	*71	75	1	
Manatee County, Fla			Oct. 18, 1972	219,000	Favorable	Favorable	S	*37	93	1	
Manitowoc County (Two Rivers to Manitowoc), Wis.			Nov. 22, 1955	47,000		Favorable	H	*348	84	2	
Martha's Vineyard, Mass			May 12, 1966			Unfavorable	(C)				
Martin County, Fla			July 14, 1969			do	(C)				
Miami Beach, Fla			Mar. 5, 1937			do	H	*169	75	1	
Milwaukee County, Wis			Sept. 28, 1945			do	H	*526	79	2	
Mission Beach, Calif			Sept. 30, 1943			do	(C)				
Mullet Key, Fla			June 20, 1966	\$ 501,000		Favorable	H	*516	89	2	
Nantasket Beach, Mass			Sept. 27, 1950			Unfavorable	(C)				
Narragansett pier, R.I.			Mar. 31, 1961	1,152,000		Favorable	H	*195	87	1	
Nelsoott, Oreg	Aug. 28, 1947	Unfavorable					(C)				
New Hampshire shore			Jan. 30, 1962	\$ 255,000		Favorable	H	*416	87	2	
Newport (Cliff Walk), R.I.			July 28, 1964	\$ 340,000		Favorable	H	*228	89	1	
Niagara County, N.Y.			Oct. 17, 1942			Unfavorable	H	*271	73	1	
North Carolina shoreline			Dec. 5, 1947			do	H	*763	80	2	
Ocean City, N.J.			July 8, 1952	199,000		Favorable	H	*184	83	1	
Oceanside, Ocean Beach, Imperial Beach and Coronado, San Diego County, Calif.			Feb. 28, 1956	288,300		do	H	*399	84	2	
Ohio shoreline of Lake Erie:											
Ashtabula to Pennsylvania State line			Oct. 22, 1951			Unfavorable	H	*350	82	1	
Chagrin River to Fairport, Lake County			Mar. 28, 1950			do	H	*596	81	2	

Cleveland and Lakewood	Mar. 25, 1948	851, 900	Favorable	H	*502	81	2
Erie County, vicinity of Huron	Oct. 16, 1942		Unfavorable	H	*220	79	1
Euclid to Chagrin River	Nov. 9, 1953		do	H	*324	83	2
Fairport to Ashtabula	Oct. 22, 1951		do	H	*351	82	2
Fairport Harbor	June 1, 1950		Unfavorable	(1)			
Lake County	Mar. 28, 1950		Unfavorable	H	*596	81	2
Michigan-Ohio State line to Marblehead	Mar. 15, 1945		do	H	*177	79	1
	Sept. 29, 1960	* 1, 058, 500	Favorable	H	*63	87	1
Sandusky to Vermilion	Aug. 29, 1952		Unfavorable	H	*32	83	1
Sandusky Bay	Jan. 23, 1953		do	H	*126	83	1
Sheffield Lake Community Park	Oct. 6, 1961	103, 000	Favorable	H	*414	87	2
Sheffield Lake Village to Rocky River	Jan. 23, 1953		Unfavorable	H	*127	83	1
Vermilion to Sheffield Lake Village	June 13, 1952	146, 000	Favorable	H	*229	83	1
Old Orchard Beach, Me.	Nov. 13, 1935		Unfavorable	(1)			
Orange County, Calif.	Feb. 13, 1940		do	H	*637	76	3
Orange County (Newport Bay to San Mateo Creek), Calif.	May 9, 1960	* 422, 000	Favorable	H	*398	86	2
Orange County (San Gabriel River to Newport Bay), Calif.	Aug. 8, 1962	* 2, 845, 000	do	H	*602	87	2
Orchard Beach, Pelham Bay, N.Y.	Oct. 7, 1937		Unfavorable	H	*450	75	2
Palm Beach, Fla.	Nov. 4, 1947	7, 500	Favorable	H	*772	80	2
Palm Beach County, Fla.:							
Lake Worth Inlet to South Lake Worth Inlet	Dec. 11, 1957	* 351, 100	do	H	*342	85	2
Martin County line to Lake Worth Inlet and South Lake Worth Inlet to Broward County line.	Dec. 27, 1960	* 212, 800	do	H	*164	87	1
Pawleys Island, Edisto Beach and Hunting Island, S.C.	Sept. 7, 1951		Unfavorable	(1)			
Pemberton Point to Cape Cod Canal, Mass.	July 30, 1959	* 154, 300	Favorable	H	*272	86	2
Perdido Pass, Alabama Point, Ala	May 17, 1955		Unfavorable	H	*274	84	2
Perth Amboy, N.J.	Apr. 6, 1965	82, 000	Favorable	H	*186	89	1
Pinellas County, Fla.	Dec. 22, 1953	31, 200	do	H	*380	83	2
	Sept. 14, 1966	* 169, 400	do	H	*519	89	2
Plum Island, Mass.	Jan. 23, 1953		Unfavorable	H	*243	83	2
Point Judith, R.I.	July 6, 1962	2, 414, 000	Favorable	H	*521	87	2
Point Mugu to San Pedro breakwater, Calif.	June 5, 1952	3, 099, 000	do	H	*277	83	2
Port Hueneme, Calif.	Nov. 10, 1950	4, 041, 000	do	H	*362	83	2
Presque Isle Peninsula, Erie, Pa.	Oct. 10, 1952	1, 753, 000	do	H	*231	83	1
	Apr. 13, 1960	* 560, 000	do	H	*397	86	2
Punta Las Marias, San Juan, P.R.	Dec. 16, 1947		Unfavorable	H	*769	80	2
Quincy Shore Beach, Mass.	Jan. 4, 1951	299, 000	Favorable	H	*145	82	1
Racine County, Wis.	Nov. 18, 1952		Unfavorable	H	*88	83	1
Raritan and Sandy Hook Bays, N.J.	Apr. 30, 1962	3, 097, 000	Favorable	H	*464	87	2
Revere and Nantasket Beaches, Mass.	Sept. 9, 1968	* 2, 750, 000	do	H	*211	91	2
Revere Beach, Mass.	Sept. 15, 1950	337, 300	do	H	*146	82	1

¹ Report not published.

* Federal cost includes Federal share of beach nourishment for 10-year period.

² Represents Federal share of 29.6 percent of total first cost of construction estimated at \$1,150,000.

⁴ First costs only.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published					
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	House or Senate	Number	Congress	Session	Year	Page
Beach Erosion studies—Continued												
Rhode Island south shore			Aug. 29, 1949	\$134,000		Favorable	H.	*490	81	2		
Ruckport, Mass.			June 20, 1962			Unfavorable	H.	*515	87	2		
Rollover Fish Pass, Tex.			Oct. 14, 1959			do	H.	*286	86	2		
Saco, Me.			Apr. 26, 1956			do	H.	*32	85	1		
St. John's County, Fla.			May 12, 1966			do	S.	*97	89	2		
St. Johns River, Fla.	Dec. 26, 1950	Unfavorable					(1)					
St. Lucie Inlet, Fla.			Mar. 22, 1974	3,738,000	Favorable	Favorable	H.	*294	93	2		
St. Simon Island, Ga.			June 4, 1940	7,500		Unfavorable	H.	*820	76	3		
Salisbury Beach, Mass.			June 19, 1962			do	H.	*517	87	2		
San Diego, Calif. (Sunset Cliffs)			Mar. 4, 1966	689,000		Favorable	H.	*477	89	2		
San Diego County, Calif.			Aug. 25, 1959	1,498,000		do	H.	*456	86	2		
Oceanside, Ocean Beach, Imperial Beach, and Coronado, Calif.			Feb. 28, 1956	288,300		do	H.	*399	84	2		
San Juan, P.R.			Aug. 29, 1962	2139,400		do	H.	*575	87	2		
Sandy Hook to Barnegat Inlet, N.J.			July 15, 1955	3,080,600		do	H.	*361	84	2		
			Sept. 9, 1957	2,935,000		do	H.	*332	85	2		
Santa Barbara, Calif.			Mar. 12, 1938			Unfavorable	H.	*552	75	3		
			Dec. 5, 1947			do	H.	*761	89	2		
Santa Cruz County, Calif.			Feb. 26, 1957	516,000		Favorable	H.	*179	85	1		
Sea Island, St. Simon's Island, and Tybee Island, Ga.			Apr. 5, 1972		Unfavorable	Unfavorable	(1)					
Saukirk Shores State Park, N.Y.			Dec. 28, 1953	133,600		Favorable	H.	*343	83	2		
Sheffield Lake Community Park, Ohio			Oct. 6, 1961	109,300		do	H.	*414	87	2		
South Kingstown and Westerly, R.I.			June 27, 1958	2160,300		do	H.	*30	86	1		
Tybee Island, Ga.			Nov. 3, 1970	529,000	Favorable	do	H.	*105	92	1		
Ventura, Calif.			May 4, 1962	709,000		do	H.	*458	87	2		
Virginia and Biscayne Keys, Fla.			Aug. 15, 1962	700,000		do	H.	*561	87	2		
Virginia Beach, Va.			Aug. 22, 1952	675,000		do	H.	*186	83	1		
			Oct. 6, 1961	500,000		do	H.	*382	87	2		
			Mar. 1, 1972	11,179,000	Favorable	do	H.	*365	92	2		
Waikiki Beach, Oahu, Hawaii			Jan. 23, 1953	227,000		do	H.	*227	83	1		
			June 4, 1964	72,490,000	Favorable	do	H.	*104	89	1		
Waimea Beach and Hanapepe Bay, Kauai, Hawaii			Apr. 25, 1956	220,000		do	H.	*432	84	2		
Wessagusset Beach, Weymouth, Mass.			Dec. 11, 1959	132,000		do	H.	*334	86	2		

Willoughby Spit, Va.....			Jan. 7, 1938			Unfavorable	H.....	*482	75	3			
Winthrop Beach, Mass.....			Oct. 10, 1947		216,000	Favorable	H.....	*764	80	2			
Wrightsville Beach, N.C.....			Jan. 6, 1934			Unfavorable	H.....	*218	73	2			
			Mar. 22, 1962		* 374,000	Favorable	H.....	*511	87	2			
Beach Haven Inlet, N.J.....	May 31, 1939	Unfavorable					(1)						
Beach Thoroughfare, N.J., at and near, meeting of tides from Absecon and Egg Harbor Inlets (see also Absecon Inlet, and Atlantic City Harbor).	Oct. 28, 1896	Favorable					(1)						
	June 22, 1900	do	Nov. 20, 1900		36,000	Favorable	H.....	51	54	2	1897	1235	
								94	56	2	1901	1353	
Beals Creek at Big Spring, Tex.....			Dec. 4, 1970		1,578,000	Favorable	Favorable	H.....	*115	92	1		
Beals Harbor, Maine.....	Jan. 18, 1946	do	June 3, 1947		85,700	Favorable	Favorable	H.....	*553	80	2		
Bear Creek and Lynch Cove, Md.....	Dec. 3, 1946	Unfavorable					Unfavorable	(1)					
Bear Creek, Calif. (See Merced County streams, Littlejohn Creek and Calaveras River stream groups.)													
Bear Creek Basin, Colo.....			Jan. 15, 1968		32,314,000	Favorable	Favorable	S.....	*87	90	2		
Bear Creek, Colo., flood control			Oct. 29, 1943		220,000		do	H.....	*356	78	1		
Bear Creek, Ky.....	Aug. 17, 1925	Favorable	Aug. 31, 1926	{	10,000	Favorable	} H.....	685	69	2			
					33,000			Favorable					
Bear Creek, Md.....	June 21, 1933	Unfavorable					Unfavorable	(1)					
Bear Creek, Miss. (branch of Yazoo River)	Aug. 22, 1895	Unfavorable	Dec. 10, 1881		6,000		S. Ex.....	69	47	1	1882	1563	
	Oct. 10, 1907	Favorable	Apr. 4, 1908		3,000	Favorable	Unfavorable	H.....	908	60	1	1895	1990
	May 2, 1916	(1)					Favorable	H.....	1696	64	2		
	May 12, 1926	(1)						H.....	467	69	1		
	Mar. 27, 1940	Favorable	Aug. 12, 1943				Unfavorable	(1)					
Bear Creek, Miss. and Ala., a tributary of Tennessee River.													
Bear Creek or River, Miss. and Tenn., branch of Tennessee River (see also Tombigbee River and Big Bear River, and Tennessee River and tributaries).			Jan. 26, 1882		5,900		S. Ex.....	92	47	1	1882	1869	
Bear Creek, Mo. (See Mississippi River.)													
Bear Creek, San Joaquin County, Calif.....			July 22, 1960				Unfavorable	(1)					
Bear Creek Harbor, Lake Ontario, N.Y.....			Oct. 28, 1872		250,000		S. Ex.....	25	42	3	1873	385	
Bear River, Calif. (See Sacramento and Feather Rivers and tributaries; Sacramento River and tributaries, debris control; Sacramento River and tributaries, Collinsville to Shasta Dam; and Sacramento-San Joaquin Basin.)													
Beaufort Harbor, N.C. (see also North River to Beaufort Harbor, N.C., water route; New Bern to Beaufort Harbor, inland waterway; Core Sound to Beaufort Harbor; and Pamlico Sound to Beaufort Harbor, etc.).			Jan. 29, 1881		82,000	Favorable	H. Ex.....	78	46	3	1881	1013	
	Apr. 30, 1909	Favorable	Sept. 15, 1909	{	27,500	do	} H.....	*511	61	2	(1)		
					27,676			Favorable					
	Apr. 25, 1913	do	Feb. 16, 1914		15,900			do					
			May 6, 1924		53,100	Favorable	H.....	*1108	63	2			
	Aug. 5, 1935	Unfavorable			9,500	do	Favorable	H. Com.....	*8	68	2		
							Unfavorable	(1)					

¹ Report not published.

² Federal cost includes Federal share of beach nourishment for 10-year period.

³ Federal cost includes Federal share of beach nourishment for 25-year period

⁴ Abandonment of project recommended.

⁵ Favorable for Gallants Channel route only

⁶ Plus non-Federal cost of \$809,000.

⁷ Plus non-Federal cost of \$1,310,000

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				
							House or Senate	Number	Congress	Session		Year	Page
Beaufort Harbor, N.C.—Continued											
And Gallants and Bulkhead Channels	Oct. 28, 1925	Favorable	May 5, 1939 Dec. 28, 1926	\$54,000 55,000	Favorable do	Favorable do	H H	*334 *776	76 69	1 2	
Breakwater	Feb. 13, 1893	Unfavorable				Unfavorable	H. Ex.	246	52	2	1893 1457
To New River, N.C., inland waterway	Jan. 27, 1883	do				do	S. Ex.	30	48	1	1884 1055
	Oct. 24, 1884	Favorable	Feb. 2, 1885	6,000 62,000	Favorable		H. Ex.	258	48	2	1885 1133
	Feb. 29, 1916						H	*1775	64	2	
Beaufort Inlet, N.C. (see also Albemarle Sound to Ocracoke and Beaufort Inlets; Norfolk to Beaufort Inlet Waterway; and Morehead City Harbor, N.C.):											
And Harbor, N.C.	July 23, 1907	Favorable	Oct. 1, 1908	142,000	Unfavorable	Unfavorable	H	*1454	60	2	
To Boston, Mass., waterway. (See Boston Harbor; and Boston to Beaufort Waterway.)	Oct. 15, 1930	Unfavorable				do	(1)				
To New Bern, N.C., via inland waterway and Neuse River.	July 6, 1931	do				do	(1)				
Beaufort Inlet to Bogue Inlet, N.C. (See Hurricane studies.)											
Beaufort, N.C., to Cape Fear River (see also New River up to Richlands, N.C.; and Masonboro Inlet and connecting channels):											
And waterway to Jacksonville, N.C., inland waterway.	Feb. 27, 1937	Unfavorable	Dec. 14, 1936	6,000	Favorable	Favorable	H	* 16	75	1	
Inland waterway, Wrightsville Beach, N.C.			Jan. 27, 1941	9,000		Unfavorable	(1)				
				5,800,000	Favorable	Favorable	H	*346	77	1	
Intracoastal Waterway	June 15, 1925	Favorable	Feb. 8, 1926	3,200,000	Favorable		H	*450	69	1	
			Nov. 3, 1939	24,000		do	H	*660	76	3	

Beaufort, N.C., to Jacksonville, N.C., and New River to Jacksonville, N.C., inland waterway (see also New River, N.C., up to Richlands).	Apr. 29, 1947	196, 100	do	H	*421	80	1				
Beaufort, N.C., to Key West, Fla., waterway	July 1, 1911	31, 054, 000	Favorable	Unfavorable	H	*229	63	1			
Beaufort to Cape Fear River	Apr. 12, 1912 ²	2, 872, 111 3, 724, 219 5, 677, 800 1, 227, 800 427, 400			H	*229	63	1			
Cape Fear River to Little River											
Little River to Winyah Bay											
Winyah Bay to Charleston Harbor											
Charleston Harbor to Savannah River											
Savannah River to Fernandina	Apr. 12, 1912 ²	195, 000 251, 726 2, 491, 056 2, 127, 950			H	*229	63	1			
Fernandina to St. Johns River											
St. Johns River to Indian River											
Indian River to Key West											
Beaufort River, S.C. (see also Savannah, Ga., and Beaufort, S.C., channel between).	May 12, 1880	1, 800 9, 900	Unfavorable		S. Ex	195	46	2	1880	1032	
	Nov. 23, 1888	Favorable			H. Ex	42	51	1	1890	1234	
	Apr. 7, 1903	do			H	199	58	2	1904	1565	
Beaufort River and Port Royal Harbor, S.C.	July 30, 1925	do	Unfavorable		H						
And adjacent waters	Nov. 1, 1930	do	Unfavorable	do	(1)						
					(1)						
Beaufort River and Port Royal Sound up to Beaufort, S.C.	Nov. 18, 1920	Unfavorable	do	do	(1)						
					(1)						
Beaufort, S.C., anchorage basin. (See Charleston, S.C., to St. Johns River, Fla.)											
Beaufort, S.C., to Savannah, Ga., waterway. (See Charleston, S.C., to Savannah, and Beaufort River, S.C.)											
Beaumont and Orange to Sabine Pass, Tex. (See Sabine and Neches River.)											
Beaumont Harbor, Tex. (See Neches River.)											
Beaumont-Kirby Canal, Tex. (See Sabine-Neches Waterway, Texas-Beaumont-Kirby Canal.)											
Beaumont turning basin extension. (See Sabine-Neches Waterway, Tex.)											
Beaver Bay, Minn. (See also Coasts of the Great Lakes, harbors of refuge for light-draft vessels).	Oct. 17, 1907	Jan. 23, 1882	149, 666	Unfavorable		S. Ex	103	47	1	1882	2108
						H	450	60	1		

¹ Report not published.

² Supplemental report.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys			Recommendation of Chief of Engineers	Where published				Annual report of Chief of Engineers	
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation		Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
Beaver Bay River, Minn.	Sept. 22, 1931	Unfavorable				Unfavorable	H.	*226	72	1		
Beaver Brook Dam and Reservoir, at and in vicinity of Keene, N.H.			Aug. 28, 1957	\$319,500	Favorable	Favorable	S.	*68	90	2		
Beaver Creek, flood control. (See Fall River and Beaver Creek, S. Dak.; Kansas River and tributaries, Colorado, Nebraska, and Kansas.)			June 24, 1970		Unfavorable	Unfavorable	(1)					
Beaver Creek, Lincoln County, Ore.			May 6, 1963	\$11,252,200	Favorable	Favorable	S.	*33	88	1		
Beaver Creek, Okla., Waurika Reservoir	Aug. 21, 1937	do.				Unfavorable	(1)					
Beaverkill Creek, N.Y., flood control	Apr. 14, 1938	Favorable	Feb. 11, 1941			do.	(1)					
Beaver River, Okla. (See North Canadian River, Okla. and Tex.)						do.	H.	225	58	2	1904	2529
Beaver River, Pa.	Apr. 16, 1903	Unfavorable	Aug. 3, 1932			do.	H.	*277	73	2	(5)	
Beaver, Shenango, and Mahoning Rivers, Pa. and Ohio.	Nov. 22, 1930	Favorable	July 27, 1933 ¹	34,460,000		do.	H.	*345	84	2		
			May 20, 1955	37,090,000	230,000	Favorable	H.					
Beaver Slough at Clinton, Iowa						do.	H.					
Beaver Slough, Oreg., Westport Slough to Wallace Slough.	Jan. 14, 1931	Unfavorable				Unfavorable						
Beech River, Tenn.	Oct. 28, 1907	do.				do.	H.	58	60	1		
Beechridge, Ill. (See Mississippi River.)			Dec. 9, 1875	347,000			H. Ex.	71	44	1	1876	1,190
Belfast Bay and Harbor, Maine.	Jan. 3, 1889	Favorable	Dec. 20, 1889	52,000	Favorable	Favorable	H. Ex.	81	51	1	1890	455
Belfast Harbor, Maine.	Oct. 14, 1915	do.	July 31, 1916	35,000	do.	do.	H.	*1885	64	2		
	Apr. 21, 1943	Unfavorable				Unfavorable	(1)					
Belhaven Harbor, N.C.	Dec. 12, 1910	do.				do.	H.	*1098	62	3		
	Jan. 12, 1926	Favorable	Jan. 26, 1927	55,000	Favorable	Favorable	H.	*778	69	2		
	Aug. 25, 1935	Unfavorable	Feb. 16, 1937			Unfavorable	(1)					
			May 2, 1938	53,000		Favorable	H.	*693	75	3		
			Dec. 12, 1950	13,500		do.	H.	*389	82	2		
Bellaire, Ohio. (See Ohio River.)						do.					1887	484
Bellamy River, N.H.	Jan. 13, 1887	Favorable	July 26, 1887	28,000	do.	(1)	H.	467	69	1		
	May 12, 1926	(1)										

Belle Fountain Ditch and Drainage District No. 17, Mississippi County, Ark.	Apr. 11, 1968 ¹	4,638,000	Favorable	Favorable	H.	*339	90	2		
Belle Fourche River and tributaries, Wyoming, flood control.	July 19, 1937		Unfavorable		(U)					
Belle Glade, Lake Okeechobee to Intracoastal Waterway, Fla.	Dec. 15, 1950				(U)					
Belle Pass to Raccoon Point, La. (See Beach Erosion studies.)										
Belleplaine, Minn. (See Minnesota River.)										
Belle (Bell) River, Mich.	May 8, 1880	17,500	Favorable		S. Ex.	176	46	2	1880	2059
	Jan. 27, 1893		Favorable	Nov. 30, 1895	H.	72	54	1	1896	2745
	Oct. 4, 1915		Unfavorable		H.	642	64	1		
Bellevue Conservancy District, Ohio (Sandusky River).	Nov. 6, 1939		Favorable	Mar. 9, 1942	(U)					
Bellevue, Iowa. (See Mississippi River.)										
Bellevue, Ohio, and vicinity	Sept. 6, 1955				(U)					
Bellingham Bay, Wash. (see also New Whatcom Harbor).	Jan. 1, 1895		Favorable	June 14, 1897	H.	228	53	3	1895	3472
Bellingham Harbor, Wash.	Apr. 27, 1907		do.	Mar. 26, 1908	H.		55	1	1897	3478
	May 7, 1923		do.		H.	*1161	60	2		
	June 10, 1925		Unfavorable		(U)					
				Mar. 20, 1951	H.	*558	82	2		
				Apr. 18, 1957	S.	*46	85	1		
				75,000	Favorable					
Squalicum Creek Waterway	May 12, 1927		Favorable	Nov. 22, 1927	H.	*187	70	1		
				July 15, 1935	Favorable					
				2,000	Favorable					
Bellingham Harbor, Wash., and Nooksack River.	Jan. 27, 1931		Unfavorable		H. Com.	70	74	1		
Bellingham, Wash. (See Whatcom Creek at.)					(U)					
Bellows Pond and Canada Lake drainage area, Fulton County, N.Y., flood control.	Nov. 14, 1939		do.		(U)					
Belton Reservoir. (See Brazos River and tribu- taries, Oyster Creek and Jones Creek, Tex.)										
Belvedere. (See Delaware River, N.Y., Pa., N.J., and Del. dams.)										
Belvedere Cove, Calif.	Mar. 10, 1936		do.		(U)					
Belvedere Harbor, Calif.	Feb. 26, 1903		do.		H.	246	58	2	1904	3424
	Apr. 16, 1913		do.		H.	*211	63	1		
	Mar. 10, 1936		do.		(U)					
Benicia Harbor, Solano County, Calif.	Apr. 18, 1938		do.		(U)					
Bennetts Creek, Va.	Aug. 10, 1943		Unfavorable	Dec. 8, 1888					1889	971
				Feb. 14, 1964						
York County, Va.					(U)					

¹ Report not published.

² Plus non-Federal costs of \$557,500.

³ Plus non-Federal costs of \$13,847,800.

⁴ Supplement report.

⁵ Only the supplemental report is printed.

⁶ Abandonment of project recommended.

⁷ Mississippi River Commission report.

⁸ Plus cash contribution, estimated at \$3,400, by local interests of 3.9 percent of the cost of dredging.

⁹ Annually.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published						
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents						
							House or Senate	Number	Congress	Session	Year	Page	
Bennett River, N.C.	Aug. 15, 1905	Unfavorable	Dec. 5, 1912	\$6,000	Favorable	Unfavorable	H.	179	59	1			
Benton Harbor and Canal, Mich. (See St. Joseph Harbor and River.)	Oct. 25, 1912	Favorable*				Favorable	H.	*1362	62	3			
Beresford Creek, S.C., from Cooper River to Bridge Farm wharves.	Sept. 1, 1938	do.	Feb. 7, 1969 Apr. 25, 1939	21,000	Unfavorable Favorable	Unfavorable Favorable	(1) H.		*603	76	3		
Beresford Lake, Fla. (See St. Johns River to Lake Beresford, Fla.)			Jan. 10, 1880	3,332,426			S. Ex.	69	46	2	1880	*529	
Bergen Neck, N.J., ship canal													
Bergen Point, N.J. (See Weehawken to.)													
Berkeley Harbor, Calif. (see also Oakland, Albany, Berkeley, and Emeryville Harbors).	Jan. 28, 1918	Unfavorable					H.	*1076	65	2			
Bernard Bayou, Miss. (See Back Bay and Bayou Bernard to Handsboro, Miss.)	Sept. 24, 1936	do.				Unfavorable	(1)						
Berriens Creek, N.Y.	Nov. 1, 1892	do.				do.	H. Ex.	80	52	2	1893	993	
Barrien County, Mich. (See Beach erosion studies.)						do.					1889	2157	
Berry Lake, Ind.	Jan. 3, 1889	do.				do.					1889	2157	
Berwick Bay to Gulf of Mexico, waterway (see also Atchafalaya River and Mississippi River).	Jan. 20, 1891	do.				do.	H. Ex.	198	5	2	1891	1847	
Bessie, Tenn. (See Mississippi River.)													
Beta Crise Bay, Mich. (see also Keweenaw Point, Mich., harbor of refuge.)	Jan. 24, 1936	do.				do.	(1)						

Bethany Beach. (See Rehoboth Beach, Bethany Beach, etc., Delaware).														
Bethel Harbor, Alaska. (See also Kuskokwim River, Alaska.)	Oct. 21, 1936	do				do	(1)							
Bethlehem, Pa. (See Lehigh River, Pa.)														
Betterton Harbor, Kent County Md	May 14, 1948	Favorable	Sept. 19, 1955	78,000		Favorable	H	*333	84	2				
Beverly Harbor, Mass. (see also Salem Harbor).	Nov. 1, 1888	do	Dec. 2, 1889 (2)			Favorable	H. Ex	*27	51	1	1890	525		
	Aug. 9, 1899	Unfavorable					H	52	56	1	1900	1182		
	Aug. 13, 1900	Favorable	Nov. 20, 1900	10,000		Favorable	H	129	56	2	1901	1065		
	June 12, 1905	do	June 4, 1906	39,608		do	Favorable	H	*916	59	1			
	Sept. 25, 1912	do	June 10, 1913	173,000		do	do	H	*220	63	1			
	Jan. 14, 1914						H. Com	8	63	2				
			Nov. 16, 1920	321,000		Favorable	H. Com	7	66	3				
						Unfavorable	H	79	62	1				
Outer Harbor	Sept. 30, 1910	Unfavorable												
Biddeford. (See Wood Island Harbor, Maine.)														
Bidwells Creek, N.J. (Cape May County)	Oct. 20, 1930	do					do	(1)						
	Mar. 10, 1939	do					do	(1)						
Bienvenue Bayou, La	Mar. 15, 1923	do					do	(1)						
	June 5, 1931	do					do	(1)						
Big and Little Grassy Creeks, Ill			Nov. 7, 1941				do	(1)						
Big and Little Suamico Rivers, Wis	Dec. 7, 1935	Favorable for Big Suamico.	Mar. 27, 1936	20,000		Favorable	Favorable	H	*498	74	2			
Big Annessex River, Md. (See also Crisfield Harbor, Md.)	Jan. 2, 1914	Favorable	Oct. 13, 1914	5,600		do	do	H	*1328	63	3			
Big Assawoman Bay, Del. (See Chincoteague Bay, Va., to Delaware Bay, etc.)														
Big Barataria Bayou, La. (See Barataria Bay and connecting waters.)														
Big Barren River, Ky. (See Barren River and Green and Barren Rivers, etc.)														
Big Bay, Mich. (See Coasts of the Great Lakes, harbors of refuge for light-draft vessels.)														
Big Bayou Metre (Metre), Ark	Nov. 1, 1882	Unfavorable					S. Ex	30	48	1	1884	1408		
Big Bear River or Creek, branch of Tennessee River, Miss, and Tenn. (See also Tombigbee River and Bear Creek.)	Mar. 12, 1887	Favorable	Jan. 26, 1882	5,900			S. Ex	92	47	1	1882	1869		
			Oct. 27, 1887	50,000			H. Ex	84	50	1	1888	1639		
Big Black River, Miss			Dec. 10, 1881	32,000			S. Ex	69	47	1	1882	1565		
	July 18, 1902	Unfavorable					H	207	58	2	1904	2072		
	Apr. 27, 1911	do					do	H	242	63	1			
	May 12, 1926 (3)						do	H	467	69	1			
And tributaries—flood control			Mar. 21, 1932			Unfavorable	Unfavorable	H	*72	73	1			

1 Report not published.
2 Below Gatesville only.
3 No estimate.

4 Included in report on New Orleans industrial canal.
5 Cox's Ferry to mouth.
6 Abandonment of project recommended.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published							
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				Annual report of Chief of Engineers			
							House or Senate	Number	Congress	Session	Year	Page		
Big Blue River, an affluent of the Kansas River and its tributaries, Kansas, flood control (see also Kansas River and tributaries, Colorado, Nebraska, and Kansas.)	May 10, 1937	Unfavorable				Unfavorable	(1)							
Big Blue River, Mo., 15th St., Kansas City to Missouri River	May 28, 1931	do				do	(1)							
Big Bull Creek, S.C.	Nov. 6, 1941	do				do	(1)							
Big Brush Creek and tributaries, Tennessee River, Tenn.	Jan. 23, 1953	do				do	(1)							
Big Chazy River, N.Y.	Dec. 19, 1928	Unfavorable				do	H.	490	71	2				
Big Coal and Little Coal Rivers, W. Va. (see also Coal River).	Sept. 29, 1894	do				do	H. Ex.	82	53	3	1895	2465		
Big Creek, Ark. and Kans. (See Boeuf and Tensas Rivers and Bayou Macon, Ark. and La.)														
Big Creek, Ga. (See Ocmulgee to Flint River Waterway.)			Aug. 17, 1964	\$2,702,000	Favorable	Favorable	S.	*22	89	1				
Big Creek, Hays, Kans.														
Big Deadmans Creek, Calif. (See Merced County streams.)						do	(1)							
Big Elk Creek and Elk River, Cecil County, Md., flood control.	Mar. 27, 1939	do				do	(1)							
Big Elk River, Oreg.	Oct. 15, 1897	do				do	H.	112	55	2	1898	2997		
Big Escambia Creek, Fla. (See Escambia River, Fla. and Ga.)														
Big Fork and Little Fork Rivers, Minn.	Oct. 31, 1906	Favorable				do	H.	215	59	2				
Big Fork River, Minn.	May 12, 1932	Unfavorable				do	H.	*73	73	1				
Big Fossil Creek, Richland Hills, Tex.			May 10, 1950	\$1,851,400		do	H.	*407	86	2				
Big Hatchie River, Tenn. (see also Hatchee River).			Dec. 20, 1879	30,000		do	H.				1880	1330		
Big Hill Creek, Kans.	July 7, 1902	Unfavorable	Aug. 1, 1962	\$2,522,060		Unfavorable	H.	243	58	2	1904	2348		
						Favorable	H.	*572	87	2				

Big Hockhocking (also known as Big Hocking) River, Ohio.	Jan. 11, 1887	Favorable	Nov. 25, 1887	5,000	Unfavorable	H. Ex.	88	50	1	1888	1720
Big Horn Canyon Reservoir, Wyo. (See Yellowstone River and tributaries, Wyoming, Montana, and North Dakota.)											
Big Horn River, Mont. (See Yellowstone River and tributaries, Wyoming, Montana, and North Dakota.)											
Big Iron River, Mich.	Aug. 19, 1952				do	(1)					
Big Kanawha River, W. Va. (See Kanawha River.)											
Big Kingston Creek, Md.	Dec. 6, 1946	Unfavorable			do	(1)					
Big Lagoon, Fla. (See Pensacola Bay to Mobile Bay.)											
Big Lagoon to Pensacola Harbor, Fla. (alternate route.)			July 6, 1949	88,000	Favorable	H.	*325	81	1		
Big Lake. (See St. Francis River, Mo. and Ark.)											
Big Marco Pass and Harbor at Big Marco, Fla. (see also Naples Bay, Fla., to Gordons Pass, etc.)	Dec. 18, 1946	Unfavorable			Unfavorable	H.	1437	62	3		
Big Muddy River, Ill.	Jan. 26, 1926	do			do	(1)					
Big Muddy River (Muddy Creek), Butler County, Ky. (see also Green, etc.)	July 31, 1915	do			do	H.	*525	64	1		
Big Mulberry Creek, Ark., flood control	Jan. 13, 1937	Favorable	Mar. 21, 1940		Unfavorable	do					
Big Pass, Fla. (See Clearwater Harbor.)			Aug. 6, 1948		do	(1)					
Big Pigeon River, Tenn. and N.C. (See Tennessee River and tributaries.)											
Big Piney Creek, Ark., flood control	Sept. 27, 1948				do	(1)					
Big Salkehatchie River, S.C. (See Combahee and Big Salkehatchie Rivers, S.C.)	Aug. 16, 1938	Unfavorable			do	(1)					
Big Sand Creek, Miss., vicinity of North Carrollton, prevention of bank caving.			Nov. 8, 1940		Unfavorable	do					
Big Sandy Creek and Mexico Bay, N.Y.	Oct. 28, 1955				do	(1)					
Big Sandy Creek and Mexico Bay, N.Y., harbor on Mexico Bay.	July 8, 1936	Unfavorable			do	(1)					
Big Sandy Creek, N.Y.			Jan. 22, 1829	36,465		H.	106	20	2		
			Sept. 30, 1875	182,600		H. Ex.	92	44	1	1876	603

¹ Report not published.

² Plus cash contribution, estimated at \$8,600, by local interests of 0.46 percent of the cost for construction.

³ Plus non-Federal cost of \$1,263,000 allocated for water supply.

⁴ Plus non-Federal cost of \$1,009,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[* Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys			Recommendation of the Chief of Engineers	Where published				Annual report of Chief of Engineers		
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation		Congressional documents						
							House or Senate	Number	Congress	Session	Year	Page	
Big Sandy River, Ariz. (See Bill Williams River and tributaries.)	June 15, 1907	Unfavorable				Unfavorable	H.	222		60			
Big Sandy River, Ky., W. Va., and Va.	Aug. 3, 1934	do				do	H.	*245		74			
Mouth to Pikeville, on the Levisa Fork, and to Warfield, on Tug Fork.			Feb. 24, 1875	\$15,000 1,922,536	Favorable		H. Ex.	75	43	2	1875	756	
Mouth to Chesapeake & Ohio RR. bridge	Oct. 18, 1892	Unfavorable				Unfavorable	H. Ex.	66	52	2	1893	2647	
Mouth to Pikeville, on Levisa Fork, and to mouth of Pond Creek, on Tug Fork.			Jan. 10, 1889	3,396,557	Favorable	Favorable	H.	456	55	2	1889	1889	1990
			Apr. 27, 1898	4,725,000	do	do	H.	326	56	1	1900	3400	
			Jan. 10, 1900	4,725,000			H.	*235	56	2	1901	2750	
			Nov. 26, 1900				H.						
Levisa Fork:													
Virginia State line to Dismal Creek	Jan. 20, 1887	Favorable	Nov. 25, 1887	5,750	Favorable		H. Ex.	88	50	1	1888	1795	
Dismal Creek to Pikeville (Piketon)			Jan. 6, 1876	18,000	do		H. Ex.	91	44	1	1876	11,	140
To Grundy, Va.	Feb. 6, 1883	Unfavorable				Unfavorable	S. Ex.	30	48	1	1884	1755	
Russell Fork of the Levisa	Oct. 30, 1890	do				Favorable	H. Ex.	29	51	2	1891	2476	
			Nov. 10, 1891	93,000	Favorable	Favorable	H. Ex.	25	52	1	1892	2101	
Louisa, Ky., dam near	Feb. 27, 1914	Unfavorable				do	H.	1159	63	2			
Tug and Levisa Forks	Nov. 14, 1931	do				Unfavorable	(¹)						
			Apr. 24, 1946	82,300,000		Favorable	H.	*264	80	1			
			July 9, 1951			Favorable	(¹)						
			May 20, 1959	3,681,000		Favorable	H.	*184	86	1			
			June 30, 1965	51,491,000	Favorable	do	H.	*246	89	1			
			June 10, 1958	625,000		do	S.	*105	85	2			
For flood control on Tug Fork at Williamson, W. Va.						Unfavorable	H.						
Big Sandy River, Tenn.	Oct. 18, 1905	Unfavorable				do	H.	153	59	1			
	Oct. 26, 1907	do					H.	217	60	1			
Big Satilla River, Ga. (See Satilla River.)	Sept. 18, 1929	do				do	H.	189	72	1			
Big Sioux and Little Sioux Rivers, Iowa and S. Dak.													

Big Sioux River, S. Dak. and Iowa (see also Sioux River).	May 31, 1909	do.																	
Big Sioux River and tributaries, Iowa and S. Dak.	Oct. 25, 1940	do.																	
Sioux City, Iowa, and North Sioux City, S. Dak.	Mar. 5, 1946	do.	325,420	Favorable	H.	408	61	2											
	July 22, 1954	do.	3,430,000	do.	H.	561	79	2											
	Feb. 7, 1964	do.	* 6,480,000	Favorable	H.	133	84	1											
	Mar. 8, 1968	do.	* 2,750,000	do.	H.	199	88	2											
Big Sioux River at Sioux Falls, S. Dak.					S.	*94	90	2											
Big Slough. (See St. Francis River, Mo. and Ark.)	June 1, 1962	do.		Unfavorable	(?)														
Big South Fork River and tributaries, Tenn., flood control.	Dec. 8, 1949	do.			(?)														
Big Stone Lake and Lake Traverse, Minn. and S. Dak. (see also Red River of the North and tributaries, and Mississippi River reservoirs, and Boise de Sioux River).	Oct. 20, 1884	do.	400,000	Unfavorable	H. Ex.	71	48	2	1885	1951									
	Jan. 16, 1895	Favorable	(Nov. 15, 1897)		H. Ex.	256	53	3	1895	2208									
			(Apr. 26, 1900)		H.	134	55	2	1898	1834									
			Aug. 11, 1903		H.	675	56	1	1900	2833									
	Mar. 26, 1917	Unfavorable	{ 357,957		H.	*539	58	2	1904	2260									
			{ 435,266																
			{ 1,176,972																
Big Stone Lake and Whetstone River, Minn. and S. Dak.	May 18, 1962	do.	3,885,000	do.	H.	199	65	1											
Big Sunflower River, Miss. (see also Yazoo River, Miss., and tributaries).	Jan. 2, 1879	do.		Favorable	H.	579	87	2											
	Apr. 4, 1896	Unfavorable	66,000	Favorable	S. Ex.	42	45	3	1879	982									
	Dec. 13, 1905	Favorable			S.	245	54	1	1896	1638									
	Oct. 16, 1907	do.	75,000	Favorable	H.	667	59	1											
			Oct. 20, 1908		H.	1251	60	2											
			Aug. 22, 1911		H. Com.	2	62	2											
	May 12, 1926 ¹		350,000	do.	H.	467	69	1											
	Apr. 21, 1931	Unfavorable			H.														
	June 23, 1935 ¹				Unfavorable														
	Nov. 16, 1956	do.			(?)														
Big Sur River (Sur River) and tributaries, Monterey County, Calif.					(?)														
Big Tarkio River, Little Tarkio and Squaw Creeks, Mo.	Oct. 19, 1956	do.			(?)														
Big Thoroughfare River, Md. (See Twitch Cove and; and Tangier Sound to Chesapeake Bay via Ewell, Md.)					(?)														
Big Thoroughfare and Tylers River, Md., channel.	Sept. 4, 1941	do.			(?)														
Big Timber Creek, N.J.	June 13, 1923	Favorable			(?)														
	June 9, 1927		131,000	Favorable	H.	*217	70	1											
	May 15, 1933		64,000	Favorable	H. Com.	*15	73	1											
			38,500																
Biles Creek, Pa. (See Delaware River, vicinity of.)																			
Billings, Mont. (See Yellowstone River and tributaries, Wyo., Mont., and N. Dak., flood control.)																			
Bill Williams River, Ariz., and tributaries, flood control.	Apr. 13, 1939	do.	Apr. 11, 1944	3,202,000	Favorable	H.	*625	78	2										

¹ Report not published.

² Plus non-Federal cost of \$384,000.

³ Plus non-Federal cost of \$160,000.

⁴ Abandonment of project recommended.

⁵ Recommends abandonment of maintenance and operation of lock and dam.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published					
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				Annual report of Chief of Engineers	
							House or Senate	Number	Congress	Session		Year	Page
Biloxi Bay and Harbor, Miss. (see also Back Bay and Ship Island, and Ship Island to Biloxi.)			Feb. 16, 1882	\$35,000	Unfavorable		S. Ex.	131	47	1	1882	1322
	Oct. 21, 1907	Favorable	Oct. 1, 1908	55,000 85,800 175,340 350,620	do	Unfavorable	H.	*1088	60	2		
Biloxi Harbor, Miss.	Apr. 18, 1926	do	Dec. 8, 1926	82,000	Favorable	Favorable	H.	*754	69	2		
	Jan. 21, 1936	Unfavorable				Unfavorable	(1)					
	Oct. 21, 1941	Favorable	Apr. 26, 1938	20,000	Favorable	Favorable	H.	*639	75	3		
			Feb. 28, 1949	(2)	do	do	H.	*256	81	1		
Apr. 14, 1959	Favorable	Apr. 14, 1959	325,000	do	do	H.	*271	86	2			
		June 3, 1966	753,090	Favorable	do	H.	*513	89	2			
Biloxi, Miss. (See Back Bay of Biloxi, Miss.)						Unfavorable	(1)					
Bingen, Wash. (See Columbia River, between Vancouver, Wash., and The Dalles, Oreg.)	Aug. 21, 1937	Unfavorable				Unfavorable	(1)					
Birch Creek, N.Y., flood control	Mar. 9, 1939	Favorable	Aug. 6, 1940	34,000	Favorable	Favorable	S.	*89	77	1		
Birch Creek, Oreg., tributary of Umatilla River, flood control.												
Birmingham. (See Valley Creek, Ala.)						Unfavorable	(1)					
Birmingham Canal, Ala. (See Black Warrior River and Fivemile Creek, Canal.)	May 3, 1956											
Bernie Creek, Wash.	Feb. 18, 1895	Favorable	Jan. 31, 1897	239,000			H. Ex.	343	53	3	1895	1566
				845,000			H.	295	54	2	1897	1588
			Apr. 9, 1900	1,493,743	Unfavorable	Favorable	H.	662	56	1	1900	1897
			Oct. 7, 1911	390,000	Favorable		H.	*554	62	2		
Sept. 22, 1910	do		1,417,000	Favorable		H. Com.	14	62	3			
Jan. 27, 1913						H.	*1588	65	3			
Mar. 20, 1918	Favorable					Unfavorable						
Bismarck, N. Dak. (See Missouri River.)			Nov 27, 1968		Unfavorable	do	(1)					
Bissell Cove R.I.	Nov. 10, 1882	Unfavorable					S. Ex.	30	48	1	1884	663
Bissels Cove, R.I.												

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers		
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							House or Senate	Number	Congress	Session		Year	Page
Black River, Mich. (see also Coasts of the Great Lakes, harbors of refuge for light-draft vessels).			Jan. 9, 1933	\$86,000		Unfavorable	H. Com.	54	72	2			
			Apr. 21, 1943			(?)	(?)						
At Little Girls Point (Ohmans Creek), Gogebic County.	Feb. 11, 1936	Unfavorable				do	(?)						
Black River, Lake Superior, Mich. (Gogebic County).			Oct. 12, 1888	500,000	Unfavorable	do					1889	2026	
Black River, Alcona County, Mich.	Nov. 3, 1930	Unfavorable				do	(?)						
Black River, Sanilac and St. Clair Counties, Mich. (see also Port Huron Harbor).	June 30, 1913	do				do	H.	*234	63	1			
At mouth			July 21, 1871	134,244	Favorable						1871	177	
			Dec. 9, 1889	224,244	do							180	
				69,300	do								
At Port Huron	Aug. 2, 1915	(?)				(?)	H.	*436	64	1	1889	2291	
	Dec. 15, 1888	Favorable	May 9, 1889	55,110	Favorable	Favorable							
	July 13, 1929	do	Oct. 30, 1929	25,000	do	do	H.	162	71	2			
			Mar. 30, 1951			Unfavorable	(?)						
Black River, N.Y. (see also Moose and Black Rivers, N.Y.).	July 15, 1829	Favorable	1836	26,998		Unfavorable	H.	74	24	2	1889	2429	
	May 12, 1926	(?)	July 30, 1889	579,600	Unfavorable	Unfavorable	H.	467	69	1			
			Apr. 16, 1951			Unfavorable	(?)						
Lyons Fall to Carthage	Dec. 15, 1896	Unfavorable				do	H.	143	54	2	1897	3306	
To harbor at Dexter	Jan. 27, 1883	do					S. Ex.	30	48	1	1884	1061	
Black River, N.C.	Oct. 24, 1884	Favorable	Feb. 13, 1885	10,000							1885	1148	
			Nov. 26, 1827	14,465									
Black River, Ohio (Lorain Harbor) (see also Lorain Harbor).			1828	25,334									
			Nov. 1, 1897	590,500	Unfavorable		H.		131	55	2	1898	2717
				695,500	Favorable		H.	*1200	65	2			
	Apr. 18, 1918	Unfavorable	Mar. 3, 1919		Unfavorable	do	H. Com.	1	66	1			

Black River, S.C.-----	May 20, 1909	do				do	H	341	61	2		
Kingstree to mouth-----	Jan. 26, 1881	do	July 21, 1860			do	(C)					
	Apr. 8, 1903	do	Feb. 21, 1891	25,000	Favorable	Favorable	H. Ex.	78	46	3	1881	1040
Up to Kingstree-----	Apr. 8, 1913	do				Unfavorable	H. Ex.	286	51	2	1891	1435
Black River, Wash. (see also Duwamish River)-----	Nov. 5, 1890	do				do	H	238	58	2	1094	1570
Black River and Renton Harbor, Wash-----	Nov. 21, 1917	do				do	H. Ex.	*124	63	1		
Black River, Wis-----	Sept. 26, 1931	do				do	H	27	51	2	1891	3257
	May 27, 1936	Favorable	Dec. 11, 1936	85,000	Favorable	Favorable	(C)	944	65	2		
Black Rock Harbor, Conn. (see also Bridgeport Harbor).-----			Feb. 15, 1827	6,201			H. Com	*23	75	1		
			June 9, 1831	10,900			H	52	20	1		
	Nov. 8, 1882	Favorable	Dec. 12, 1883	80,000			S. Ex	*50	48	1	1884	666
			Oct. 30, 1888	157,609	Favorable	Favorable					1889	741
				1,025,000								
Black Rock Channel, N.Y. (see also Buffalo Harbor, River, and ship canal).-----	Oct. 3, 1894	do					H. Ex.	46	53	3	1895	856
And Tonawanda Harbor, N.Y.-----	Feb 25, 1920	Unfavorable					H	*981	66	3		
	Sept. 18, 1923	Favorable	Feb. 25, 1924	75,000	Favorable	do	H	*289	68	1		
	Aug. 31, 1931	do	Jan. 30, 1933	1,044,000			H	*28	73	1		
			June 17, 1935	797,000	Unfavorable	Unfavorable	(C)					
				353,060								
			Feb. 7, 1940		do	do	(C)					
			Apr. 16, 1942	108,000		Favorable	H	92	79	1		
Black Rock Harbor, N.Y. (see also Buffalo Harbor).-----	Oct. 1, 1902	do	Mar. 4, 1954	270,000		do	H	*423	83	2		
	Dec. 30, 1904	do	Sept. 29, 1903	3,473,239	Favorable	do	H	428	58	2	1904	3271
	Nov. 14, 1905						H. Com	36	61	2		
Blackstone River, Mass. and R.I. flood control (see also Scott's Brook, Mass.).-----	July 29, 1937	Favorable	Apr. 11, 1944	4,631,000		Favorable	H	*913	59	1	(C)	
Blackstone River, Providence, R.I., to Worcester, Mass.-----	Aug. 31, 1936	Unfavorable	Feb. 25, 1964		Unfavorable	Unfavorable	(C)	*624	78	2		
						do	(C)					
Blackstone River Basin, lower Woonsocket, R.I.-----			Feb 3, 1958	4,297,000		Favorable	S	*87	85	2		
Black Vermillion River at Frankfort, Kans.-----			Mar. 1, 1956	770,000		do	H	*409	84	2		
Black Walnut Harbor, Md.-----			Dec. 23, 1938	21,000	Favorable	do	H	*217	76	1		
At mouth of Great Choptank River-----	Sept. —, 1892	Unfavorable				Unfavorable	H. Ex.	69	52	2	1893	1239
	July 7, 1913	do	Dec. 5, 1914	46,500	Unfavorable	do	H	*1508	63	3		
				165,000								
	Apr. 28, 1923	Favorable	Oct. 3, 1916		do	do	H Com	7	64	2		
						do	(C)					

¹ Report not published.

² Abandonment of project recommended.

³ Report on cooperation by local interests.

⁴ Plus cash contribution, estimated at \$570,000, by local interests of 16.1 percent of the cost of work to be accomplished by the Federal Government.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
Black Warrior River, Ala., and Five-mile Creek Canal.	Nov. 28, 1896	Favorable				Favorable	H.	*77	54	2	1897	1704
			Nov. 19, 1898	\$4,500,000 4,000,000	Unfavorable	Unfavorable	H.	*88	55	3	1399	1730
	Jan. 22, 1917	Unfavorable					Unfavorable	H.	*78	66	1	
Black Warrior River, Ala. (see also Warrior River):			Jan. 27, 1875	151,103			H. Ex.	75	43	2	1875	11, 16
Below Locust Fork			Aug. 15, 1880	1,200,000	Favorable		S. Ex.	42	46	3	1881	1218
Tuscaloosa to forks of Sipsay and Mulberry			Jan. 30, 1896	1,750,000			H.	*259	54	1	1896	1461
Daniels Creek to Mulberry and Locust Forks			Nov. 25, 1901	14,000	Favorable		H.	239	57	1	1902	1288
			Sept. 6, 1910	292,152	do	Favorable	H.	*72	62	1		
Mulberry Fork, above Sanders Shoals	June 7, 1909	Favorable	July 14, 1920	442,665	Favorable	Favorable	(1)					
To Five-mile Creek Waterway	Feb. 27, 1918	do		1,852,360	Favorable	Unfavorable	(1)					
Black Warrior, Warrior, and Tombigbee Rivers, Ala.	Dec. 1, 1936	Unfavorable ²	Apr. 24, 1934	162,000		do	(1)					
Lock and dam replacement			Mar. 26, 1935	3,550,000			H. Com.	45	73	2		
Blackwater Bay and River, Fla.	Mar. 24, 1923	Unfavorable				Unfavorable	(1)					
Blackwater Bay and River and East Bay, Fla.			Aug. 27, 1881	20,000			S. Ex.	11	47	1	1882	1309
	June 27, 1902	Unfavorable				Unfavorable	H.	193	58	2	1904	1792
			Jan. 17, 1972			do	(1)					
Blackwater Creek or River, Va. (See Chowan River, N.C., and Blackwater Creek (River), Va.)			Mar. 3, 1875	14,850			H. Ex.	60	45	2	1875	11, 161
	Aug. 3, 1905	Favorable		8,000		Favorable	H.	177	59	1		
	May 13, 1915	Unfavorable				Unfavorable	H.	179	63	1		
	Apr. 27, 1931	do				do	(1)					
Bladensburg. (See Anacostia River Basin, D.C. and Md.)						do	H.	69	60	2		
Blaine Harbor, Wash.	Apr. 11, 1907	Favorable				do	(1)					
	Feb. 8, 1936	Unfavorable	May 4, 1953	354,800		Favorable	H.	*240	83	2		

Blakely Mountain Dam. (See Ouachita River, Ark., and La.)									
Blanchard River, Ohio. (See Auglaize, Blanchard and Ottawa Rivers, Ohio.)									
Blanchard River, Ohio and tributaries. (See Auglaize, Blanchard and Ottawa Rivers.)									
Blewetts Falls, N.C. (See Great Pee Dee River.)									
Blieders Creek, New Braunfels, Tex.	May 6, 1959	1,060,000	do	H	*180	86	1		
Blind Brook and tributaries, N.Y., flood control	Nov. 18, 1944		Unfavorable	(¹)					
Blind Pass, Fla. (See Beach Erosion studies.)									
Blind Pass, Pinellas County, Fla. (See Johns, Blind, and Pass-a-Grille Passes, Fla.)									
Blinkhorn Creek, Nansemond County, Va.	June 19, 1964		Unfavorable	do	(¹)				
Block Island, R.I., harbors at (see also Great Salt Pond and Point Judith Pond).	Sept. 10, 1867								
	Nov. 1, 1867	1,445,000						1868	788
	Jan. 15, 1868	1,500,000		H. Ex.	81	40	2	1868	785
	Mar. 6, 1868	372,000							
		553,798							
		2,915,016		S. Mis.	81	40	2	1877	201
	Mar. 15, 1880	8,000	Favorable					*1880	390
	Dec. 7, 1881	19,000	do	S. Ex.	26	47	1	1882	562
	Dec. 30, 1884	46,189	do	S.	*27	48	2	*1885	610
	May 4, 1888	5,000	do	S. Ex.	*164	50	1	*1888	506
	Dec. 10, 1895	83,985	Favorable	H.	*83	54	1	1896	673
	Sept. 26, 1907		Favorable	do	Favorable	H.	*828	60	1
	May 12, 1926		(²)	do	(²)	H.	467	69	1
	May 8, 1931		Favorable						
		202,000							
		458,000	Unfavorable	Unfavorable	(¹)				
		153,000							
Harbor of refuge									
Block Island, Inner Harbor, R.I.	Jan. 14, 1936		Unfavorable	do	(¹)				
				do	(¹)				
				do	(¹)				
		16,000	Favorable	Favorable	H.	330	77	1	
Block Island Sound, Conn. (See Race, between Block Island Sound and Long Island, Conn., removing Valient Rock.)									
Blood River, La. (See Tickfaw River.)									
Bloomfield Creek, Staten Island, N.Y.	July 24, 1923		do		Unfavorable	(¹)			
Blossom Cova. (See Shrewsbury River, N.J.)									
Blue Buck Bar and Point, Tex. (See Sabine River and Pass.)									

¹ Report not published.

² Via Valley River, Bessemer and Birmingham, Ala.

³ Elimination of dredging outer harbor, west of entrance channel.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers	
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
Blue Hill Harbor, Me	Nov. 17, 1890	Unfavorable				Unfavorable	H. Ex.	19	51	2	1891	611
	Oct. 18, 1946	Favorable	Apr. 1, 1952			do	(1)					
Bluehill Inner Harbor, Me	Aug. 14, 1911	do	Nov. 3, 1972			Unfavorable	(1)					
						do	H.	420	62	2		
Blue Lake, Oreg. (See Columbia Slough.)			June 30, 1969	\$95,027,000	Favorable	Favorable	H.	*332	91	2		
Blue River Kansas City, Mo												
Bluestone Reservoir, New River, W. Va. and Va. (See Kanawha River, W. Va., Va., and N.C.)												
Bluewater floodway. (See Rio Grande and tributaries, New Mexico.)												
Bluff Creek, Miss.			Feb. 16, 1889	1,000	do	do					1889	1461
Bluffton, S.C., channel to waterway between Charleston, S.C., and St. Johns River, Fla.	May 12, 1926	(*)					H.	467	69	1		
	June 25, 1927	Favorable	Mar. 29, 1928	36,000	Unfavorable	Unfavorable	(1)					
Boat Basin, at or near Beaufort, S.C.			Feb. 17, 1965		do	do	(1)					
Boca Ciega Bay, Fla. (see also Clearwater Harbor and Boca Ciega Bay; and Johns Pass to Boca Ciega Bay, Fla.)	Jan. 5, 1887	Unfavorable				do	H.	58	50	1	1887	1259
	Sept. 23, 1912	Favorable	Feb. 21, 1913	10,700	Favorable	Favorable	H.	*135	63	1		
Channel from Clearwater Harbor to Tampa Bay, Fla.	Nov. 7, 1928	Unfavorable				Unfavorable	(1)					
Boca Ciega Pass, Fla. (See Beach Erosion study at Bland Pass, Fla.)			Feb. 14, 1877	6,614,300	Unfavorable		H. Ex.	22	45	3	1877	1051
Boca Grande, Fla. (See Charlotte Harbor.)							(1)					
Bodega Bay (harbor of refuge), Calif.	Apr. 21, 1931	Unfavorable				Unfavorable						
	Jan. 14, 1937	Favorable	Oct. 4, 1937	565,000	Favorable	Favorable	H.	619	75	3		
Boeuf and Tensas Rivers and Bayou Macon, Ark. and La. flood control.			Nov. 6, 1964	\$853,000	do	do	H.	*106	89	1		
			Dec. 16, 1943	5,013,000	do	do	S.	*151	78	2		
			Apr. 8, 1946	4,930,000	do	do	(1)					
Boeuf and Tensas Rivers and Bayou Macon, Ark. and La.			May 24, 1956 ⁴	1,212,000	do	do	H.	*108	85	1		

Boeuf Bayou, La. (see also Cocodrie, etc., and Rapids, Boeuf, etc.)	June 19, 1909	Unfavorable		Unfavorable	H	409	61	2		
	Nov. 20, 1915	Favorable	Apr. 12, 1917	440,000	Unfavorable	do	H	*1032	65	2
Boeuf River, La. (see also Bayou La Fourche, La.)	May 12, 1926	(*)					H	467	69	1
Boeuf River, La. and Ark			Dec. 1, 1880	20,020	Favorable		H. Ex.	38	46	3 1881 1423
			Dec. 6, 1884	7,290	do		H. Ex.	99	48	2 1885 1545
			July 1, 1891	12,000						
			July 1, 1893	40,000						
	Feb. 21, 1895	Unfavorable			Unfavorable		H. Ex.	350	53	3 1895 1969
Bogalusa, La. (See Pearl River.)										
Boggs Bay (or Bogues Bay), Va. (See Franklin City to Cape Charles Waterway.)										
Boggy Creek, Okla. (See Boswell Dam and Reservoir, Okla.)										
Boggy River, Ohio	Feb. 9, 1926	do			do		(1)			
Bogue Chitto, La. (See Chitto Bogue.)										
Bogue Falia, La. (See Chefunct River and Bogue Falia, La., from Lake Pontchartrain to Covington.)										
Bogue Inlet and Swansboro, Hbr., North Carolina			Mar. 23, 1965		Unfavorable	do	(1)			
Bogue Inlet, N.C. (see also Hurricane studies)	Aug. 17, 1896	do			do		H	316	54	2 1897 1418
			Sept. 29, 1940		Unfavorable	do	(1)			
Bogue Phalia, Miss. (See Phalia Bogue; and Yazoo River, lower tributaries, Mississippi.)										
Bogues Bay, Va. (See Boggs Bay.)										
Bogue Sound, N.C. (see also Beaufort Harbor to New River, N.C., inland waterway; also New River to Swansboro, N.C., inland waterway).	Apr. 19, 1909	Favorable	Jan. 20, 1900	{ 27,000	Favorable		H	*649	61	2
				{ 19,000	Favorable					
Bohicket Creek, S.C. (See Church and Bohicket Creeks, etc.)										
Bois Blanc Island (Pointe Aux Pins), Mich			Mar. 5, 1963		Unfavorable	Unfavorable	(1)			
Bois de Sioux River, Minn. (see also Big Stone Lake, etc.)	Dec. 4, 1907	Unfavorable			do	do	H	493	60	1
Boise River and tributaries, vicinity of Boise, Idaho.			Mar. 10, 1966	1,576,000	Favorable	Favorable	H	*486	89	2
Boise River Idaho (multiple purpose) (see also Columbia River and tributaries).	June 6, 1938	Favorable	Apr. 12, 1940	*13,100,000	Favorable	Favorable	H	957	76	3
Dry Creek	Sept. 8, 1955						(1)			
Bolinas Channel, Calif	Dec. 21, 1939	Unfavorable					do			
Bolinas Harbor, Calif., channel to the sea	May 7, 1915	do					(1)			
Bolivar Peninsula in vicinity of Rollover Fish Pass, Tex. (See Beach Erosion studies.)							H	537	64	2
Bonfouca Bayou, La.	Jan. 22, 1895	Favorable			Favorable		H. Ex.	273	53	3 1895 1783
	June 9, 1923	do	May 7, 1924	22,000	Favorable	do	H	*474	68	2
			June 22, 1962			Unfavorable	(1)			
Bonita Channel, Calif. (See San Francisco Harbor, entrance channels.)										
Bonnars Ferry, Idaho. (See Kootenai River, Idaho.)										

¹ Report not published.

² Plus non-Federal costs of \$11,242,000.

³ Abandonment of project recommended.

⁴ Mississippi River Commission report.

⁵ Plus cash contribution, estimated at \$523,000, by local interests of 36 percent for construction of mole, and 50 percent for construction of channel.

⁶ Anderson Ranch Reservoir, Arrowrock Dam.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				Annual report of Chief of Engineers		
							House or Senate	Number	Congress	Session	Year	Page	
Bonneville Dam. (See Columbia River, Wash. and Oreg., Willamette River to Bonneville Dam.)													
Bon Secours Bay, Ala. (See Pensacola Bay, Fla., to Bon Secours Canal; and St. George Sound, Fla., to Rio Grande Waterway, Pensacola Bay to Mobile Bay.)													
To Gulf by way of Oyster Bay	Jan. 29, 1936	Unfavorable				Unfavorable	H.						
	July 26, 1948					do	H.						
	Aug. 3, 1955					do	H.						
Bon Secour River, Ala.			Sept. 4, 1953		Unfavorable	do	H.						
Bonum Creek, Westmoreland County, Va.			June 10, 1957			do	H.						
			Dec. 6, 1956		Unfavorable	do	H.						
			Feb. 17, 1960			do	H.						
Boone River, Iowa, Tunnel Mill Dam													
Boonville, Mo. (See Missouri River.)	Apr. 22, 1897	Favorable				Favorable	H.	46	55	1	1897	803	
Boothbay Harbor, Maine	Aug. 18, 1899	do	Dec. 20, 1899		Unfavorable	do	H.	277	56	1	1900	1117	
	Nov. 22, 1910	do	Jan. 10, 1911	\$18,000	Favorable	Favorable	H.	*82	62	1			
	Oct. 3, 1930	Unfavorable				Unfavorable	H.						
			Aug. 10, 1962			do	H.						
			June 18, 1952			do	H.						
Mill Cove	Apr. 22, 1946	Favorable				do	H.						
Booth Point, Fla. (See Tampa Bay, (old) to vicinity of Booth Point, Fla.)													
Boquet River, N.Y.	Feb. 27, 1883	do					S. Ex.	30	48	1	1884	2162	
	Oct. 3, 1890	do				Unfavorable	H. Ex.	30	51	2	1891	2940	
	Mar. 23, 1929	do				do	H. Com.	*48	71	2			
Borgne Lake, La. (See New Orleans industrial canal and Mobile Bay to New Orleans.)													
Boston Canal, La.	Oct. 3, 1938	do				do	H.						
Boston Canal, Vermilion Parish, La.	Mar. 5, 1936	do				do	H.						
Boston Harbor, Mass. (See also Hull and Charles River; and Chelsea River to creek; and	Oct. 7, 1883	Favorable	Oct. 11, 1883		(?) Favorable	do	S. Ex.	74	48	1	1884	588	
	Jan. 18, 1938	do	Dec. 13, 1938	103,000	do	Favorable	H.	*225	76	1			

Mystic River; and South Bay; and Winthrop Harbor).	Feb. 12, 1942	Unfavorable				Unfavorable	(1)							
Allerton Point	May 8, 1905	do				do	H	140	59	1				
Approach to Navy drydock	Aug. 25, 1934	do	Mar. 25, 1935	128, 700	Favorable	do	H. Com	*29	74	1				
Broad Sound Channel	June 16, 1900	do	Nov. 28, 1900	10, 612, 710	do	do	H	*119	56	2	1901	1096		
			Dec. 6, 1900	7, 994, 248				(2)			1903	*771		
Channel on Pleasure Bay side of Fort Independence.	Oct. 22, 1925	Unfavorable				Unfavorable	(1)							
Chelsea River	May 20, 1942	do				do	(1)							
Dec. 1, 1919	do					do	(1)							
East Boston Channel	Oct. 27, 1892	do	Oct. 15, 1894	60, 000			(H. Ex	55	52	2	1893	793		
							(H. Ex	*58	53	3	1895	649		
							(S. Ex	74	48	1	1884	488		
							(H. Ex	206	48	2	1885	543		
Fort Point Channel	Oct. 4, 1884	Favorable	Jan. 27, 1885	100, 000	Favorable									
To Massachusetts Ave	Oct. 18, 1920	do				Unfavorable	(1)							
40-foot main ship channel			Apr. 28, 1943	660, 000		Favorable	H	*733	79	2				
Navy yard to President Roads			Nov. 19, 1897	1, 644, 553		Favorable	H							
Main ship channel			do	1, 557, 621		do	H	*133	55	2	1898	886		
Main ship channel and anchorage area	Jan 31, 1931	Favorable	Jan. 12, 1932	4, 779, 000		do	(H	*244	72	1				
				4, 800, 000		Favorable	(1)							
Mystic South Channel	Aug. 13, 1957	do	July 1, 1946	1, 802, 000		Unfavorable	H	*244	80	1				
President Roads	Feb. 15, 1945	do	Nov 19, 1897	481, 941	Favorable	Favorable	H	*133	55	2	1898	886		
President Roads to Broad Sound						do	H							
President Roads to the sea	Dec. 11, 1912	Favorable	Apr. 4, 1914	1, 545, 000		Favorable	(H	*931	63	2				
Reserved channel				3, 845, 000		do	H							
Seaplane channel	May 13, 1953	do	Oct. 5, 1955	675, 000		Favorable	H	*349	84	2				
Seaplane channel and anchorage basins			Jan. 10, 1944	(4)		do	H	472	78	2				
Seawall at Winthrop Beach	July 31, 1911	Unfavorable	May 31, 1939	2, 300, 000	Favorable	do	H	*362	76	1				
	July 10, 1933	do				Unfavorable	H	258	62	2				
Shirley Gut	May 14, 1934	do				do	(1)							
	Sept. 9, 1940	do				do	(1)							
Shirley Gut, Mass., channel between Point Shirley and Deer Island, Mass.			Dec 14, 1966		Unfavorable	do	(1)							
Vicinity of Winthrop, breakwater	Aug. 31, 1927	do				do	(1)							
Winthrop Head	May 9, 1905	do				do	H	144	59	1				
Winthrop to East Boston	Feb. 24, 1936	do				do	(1)							
Boston Harbor and Narragansett Bay Canal	Feb. 3, 1825	Favorable				do	S	32	18	2				
Boston to Beaufort Inlet, waterway (see also Norfolk Harbor and New Jersey Intracoastal Waterway):														
Boston to Narragansett Bay			Oct. 4, 1911	40, 047, 000	Unfavorable	Unfavorable	H	*391	62	2				
Narragansett Bay to Long Island Sound			do	12, 322, 000	Favorable	do	H	*391	62	2				

¹ Report not published.

² No estimate.

³ Map only.

⁴ Recommends abandonment of seaplane channel in location authorized, with provision for alternate location in the future. (This recommendation and all previous authorities revoked by Public Law No. 420, 78th Cong., 2d sess., approved Sept. 7, 1944.)

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers	
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
New York Bay to Delaware River.....			Oct. 4, 1911	\$45,000,000	Favorable	.....	H.	*391	62	2	.....
			Feb. 14, 1912	18,736,230	Unfavorable	Favorable	.....	H.	196	63	1	.....
			Nov. 30, 1920	45,000,000	Favorable	Unfavorable	.....	H.				.....
				40,000,000	.....	.....	.....	H. Com.	6	66	3	.....
				86,000,000	Unfavorable	do	.....	H. Com.				.....
Delaware River to Chesapeake Bay.....			Apr. 23, 1930	89,011,000	do	do	.....	H. Com.	38	71	2	.....
			Aug. 18, 1933	173,256,000	.....	.....	.....	H.	*219	73	2	.....
			Oct. 4, 1911	12,424,500	Favorable	Favorable	.....	H.	*391	62	2	.....
			Feb. 14, 1912	7,902,007	do	do	.....	H.	196	63	1	.....
		Mar. 11, 1915	.....	.....	.....	.....	S.	14	64	1	(3)	.....
		Dec. 14, 1918	.....	.....	.....	.....	H.	1600	65	3	(3)	.....
			May 13, 1930	43,000,000	.....	.....	.....	H. Com.	*41	71	2	.....
			do	104,000	Favorable	Favorable	.....	S.	*151	71	2	.....
			do	15,000	do	do	.....	H. Com.	*18	73	2	.....
			July 10, 1933	58,000	.....	.....	.....	H.	201	72	1	.....
Anchorage in Back Creek.....			Aug. 28, 1931	67,000	.....	.....	H. Com.	*24	73	2	.....
Delaware City Branch.....	Dec. 13, 1930	Unfavorable	Nov. 13, 1933	12,500,000	.....	.....	H.				.....
Ship canal.....			Oct. 4, 1911	5,401,580	Favorable	Favorable	.....	H.	*391	62	2	.....
Norfolk to Beaufort.....			Dec. 6, 1921	5,400,000	do	do	.....	H. Com.	5	67	2	.....
			Mar. 11, 1926	5,500,000	do	do	.....	S.	*23	71	1	.....
		Favorable	Apr. 3, 1928	6,728,000	Unfavorable	Indefinite	.....	S.				.....
			June 20, 1922	.....	do	Unfavorable	.....	H.	(1)			.....
Virginia Cut lock.....			Oct. 10, 1967	.....	Unfavorable	Unfavorable	.....	(1)			.....
Boswell Dam and Reservoir, Bogy Creek, Oklahoma (Red River).												
Boulder, Colo. (See South Platte River and tributaries, Colorado, Wyoming, and Nebraska.)												
Bouquet River, N.Y. (See Boquet River.)												
Bowie River, Miss. (See Leaf and Bowie Rivers)												

Bowlers Harbor (wharf), Va. (See Rappahannock River, vicinity of)																			
Bowmans River to Cumberland, Md., for canal				Apr. 19, 1926															
Boyce Landing, Red River, La. (See Red River, La.)																			
Boyer River, Iowa	Mar. 30, 1939	Favorable	Mar. 20, 1943	17, 830		Favorable	H	*254	78	1									
Braddock Bay and Hamlin Beach State Park, N.Y.	May 28, 1948		June 3, 1968	*500, 000	Favorable	Unfavorable	(1)												
Braddock Bay, N.Y. (See Beach Erosion studies.)						Favorable	H	*358	90	2									
Braden River, Manatee County Fla						Unfavorable	(1)												
Bradenton, Fla. (See Manatee River, etc.)	Nov. 4, 1919	Unfavorable				Unfavorable	(1)												
Bradford, Pa. (See Allegheny River (upper) in and around Bradford), flood control.																			
Bradford's Bay, Accomack County, Va.	May 6, 1926	Favorable	Mar. 30, 1929	25, 000	Favorable	do	(1)												
			Oct. 3, 1933	47, 000	Unfavorable	do	(1)												
Brady Creek, Tex., tributary of Colorado River, flood control.			June 21, 1939	825, 000	Favorable	Favorable	H	*441	76	1									
Brainerd, Minn. (See Mississippi River.)																			
Braman Reservoir, Okla., flood control.	Jan. 11, 1938	Unfavorable				Unfavorable	(1)												
Brandywine River, Del. (see also Christiana River and Wilmington Harbor).	Dec. 12, 1882	Favorable	Nov. 22, 1883	96, 525	Favorable		S. Ex.	59	48	1	1884	879							
Branford Harbor, Conn.	Nov. 8, 1882	do	Dec. 12, 1883	5, 000	do		S. Ex.	*50	48	1	1884	679							
	Sept. 12, 1900	do	Nov. 2, 1900	78, 000	do		H	100	56	2	1901	1188							
	May 17, 1937	Unfavorable		5, 000	do		H	80	60	1									
	July 26, 1915	Favorable	Apr. 18, 1916	30, 000	Favorable	Unfavorable	H	*1292	64	1									
	Dec. 27, 1930	do			do		(1)												
	Mar. 30, 1936	Unfavorable			do		(1)												
			Sept. 28, 1956		do		(1)												
Bransons Cove, lower Machodoc River, Va.	May 5, 1947			28, 600		Favorable	H	*420	80	1									
Brazos Island Harbor, Tex. (see also Brazos Santiago, etc.).	Mar. 12, 1937			585, 000	Favorable	do	H. Com.	*32	75	1									
	Apr. 17, 1939			127, 500	do	do	H	*335	76	1									
	Oct. 15, 1940			635, 000	do	do	H	*347	77	1									
	Feb. 28, 1949			*3, 050, 000	do	do	H	*192	81	1									
	June 1, 1960			4, 381, 000	do	do	H	*428	86	2									
And Gulf Intracoastal Waterway at Port Isabel	Apr. 19, 1946			170, 000	do	do	H	*627	79	2									
At or near Port Isabel	Aug. 20, 1943					Unfavorable	(1)												

¹ Report not published.

² Supplemental report.

³ Report of Secretary of War, relative to purchase of Chesapeake & Delaware Canal.

⁴ Includes purchase price of Chesapeake & Delaware Canal.

⁵ For purchase of Dismal Swamp Canal.

⁶ Construction of salt water guard lock: includes local contribution of \$200,000.

⁷ For Braddock Bay only.

⁸ Plus cash contribution of \$500,000 by local interests of 50 percent of 1st cost of construction estimated at \$473,500 and \$26,500 for navigation facilities and recreational fishing features.

⁹ Includes \$80,000 for small-boat basin.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				
							House or Senate	Number	Congress	Session		Year	Page
Brazos River, Tex. (see also Galveston Bay to Brazos River, canal; and Cedar Bayou; and Double Bayou; and Rio Grande to Mississippi River, waterway; and St. George Sound, etc.; and Mill Creek):			Apr. 1, 1854	\$44, 000		None	H. Ex.	124	33	1	
			Jan. 11, 1957				S.	*34	85	1	
Aquilla Reservoir on Aquilla Creek, Tex.			Sept. 19, 1966	2 19, 493, 000	Favorable	Favorable	S.	*52	90	1	
Brazos River Channel & Dock Co.'s improvements at mouth.			Feb. 18, 1897				S.	138	54	2	1897 1815
Clear Fork of, Abilene area			June 19, 1962	3 31, 200, 000		Favorable	H.	*506	87	2	
Freeport Harbor (see also mouth to Velasco)			Dec. 9, 1924	1, 000, 000	Favorable	do.	H. Com.	10	68	2	
			May 15, 1928	1, 600, 000	do.	do.	H. Com.	18	70	1	
From 8 miles above mouth to Gulf of Mexico.			June 30, 1879								
Jupiter Cut	Sept. 7, 1910	Unfavorable				Unfavorable	H.	280	62	2	
Mouth			June 30, 1879								1879 938
			Sept. 24, 1880	522, 890							1881 1351
			Sept. 6, 1887				H. Ex.	109	50	1	1888 1292
			Feb. 2, 1899	85, 000	Favorable		S.	108	55	3	1899 1976
			Apr. 18, 1900	1, 465, 000 375, 000	do.		H.	652	56	1	1900 2426
			Feb. 6, 1908	60, 000			H.	*1087	60	2	
	Feb. 1, 1910	Unfavorable				Unfavorable	H. Com.	27	61	2	
Mouth to Freeport, Tex.	Sept. 20, 1913	Favorable	July 23, 1914	455, 000	Favorable	Favorable	H.	*1469	63	3	
Mouth to Velasco Harbor, Tex.	Sept. 20, 1853	Unfavorable		500, 000			H.	9	63	1	
	June 12, 1912	Favorable				Unfavorable	H.				
			Apr. 11, 1932	226, 500			H. Com.	*15	72	1	
			Jan. 8, 1934	79, 040			H. Com.	*29	73	2	
Old Washington to Waco	July 11, 1905	do.		2, 915, 000			H.	*705	59	1	
	June 5, 1909	do.	Dec. 23, 1910				H.	*95	62	1	
	Apr. 6, 1917	(†)				(†)	H.	298	66	1	

Repairs to jetties.....	Nov. 23, 1900	175,000			H	133	56	2	1901	2022
Running Water Draw Watershed, Plainview, Tex.	Apr. 7, 1965	\$ 3,200,000	Favorable	Favorable	H	*192	91	1		
San Gabriel River Watershed.....	Sept. 18, 1962	\$ 20,250,000		do	H	*591	87	2		
To Galveston, waterway.....	Dec. 14, 1906	141,528	Favorable	do	H	*640	59	2		
To Old Washington.....	Aug. 29, 1900	Favorable	Dec. 22, 1900	{	2,450,000	do	H	283	56	2 1901 2004
					225,000					
To Pass Cavallo, Tex. (See Rio Grande to Mississippi River, waterway, and St. George Sound, etc.)										
To Richmond.....	Dec. 7, 1892	do	Feb. 14, 1895		10,000		H. Ex.	136	52	2 1893 1893
										1895 1838
To Rosenberg.....	Nov. 26, 1927	Unfavorable	July 10, 1875		286,484		Unfavorable	(¹)		1875 929
To Waco (see also Old Washington to).....	Feb. 24, 1891	Unfavorable	Jan. 30, 1901	{	5,950,000	Favorable	H. Ex.	63	52	1
					3,725,090		H	450	56	2 1901 2009
	Aug. 29, 1900	Favorable	Feb. 15, 1895	{	3,000,000	Unfavorable	Unfavorable			1895 1833
					4,000,000					
Waco To Richmond.....										
Brazos River, Tex., and tributaries; flood control.	Apr. 30, 1921	Unfavorable	Apr. 19, 1948 ⁷		\$ 15,582,000		do	(¹)		
	Aug. 20, 1931	do	Aug. 9, 1949		122,584,000		do	H	181	72 1
			May 4, 1939 ⁷		10,150,000	Favorable	do	H	*390	81 1
Covering Leon River.....										81 1
Oyster Creek and Jones Creek.....										*535 81 2
Whitney Dam project, flood control, navigation, power.										*390 76 1
Brazos Sar, Jago, Tex. (See Brazos Santiago.)										
Brazos Santiago Harbor, Tex. (see also St. George Sound to Rio Grande.)			Apr. 18, 1853							
			Jan. 23, 1856		300,000					
Harbor and bar.....			Apr. 7, 1871		774,630		Unfavorable	S. Ex.	5	34 1
			Sept. 29, 1877							1871 544
			Jan. 6, 1881		740,272	Indefinite				1888 1322
	Dec. 11, 1894	Unfavorable				Favorable				*1882 1478
							Unfavorable	H. Ex.	140	53 3
										1895 1830
	Oct. 14, 1909	Favorable	Nov 17, 1910	{	2,700,000	Unfavorable	do	H	200	63 1
					to					
					4,200,000					
	Nov. 17, 1915	do	Oct. 12, 1918		66,000	Favorable	Favorable	H	*1710	65 3
	Sept. 29, 1927	Unfavorable					Unfavorable	(¹)		
			May 3, 1928		1,600,000	Favorable	Favorable	H. Com.	*9	70 1
			Aug. 27, 1929		1,700,000	do	do	H. Com.	*10	71 1
			Jan. 15, 1930		4,783,000	do	do	H. Com.	16	71 2
			Mar. 14, 1932			do	do	H. Com.	10	72 1
			June 20, 1935		30,800	Unfavorable	Unfavorable	(¹)		
Off Point Isabel.....	Oct. 19, 1899	do	Apr. 19, 1882		327,979	Favorable	do	H	60	56 1
To Point Isabel through Laguna Madre										1900 2469
To Rio Grande. (See St. George Sound to Rio Grande.)										1882 1477

¹ Report not published.² Net Federal cost after reimbursement by local interests of \$4,119,000.³ Plus non-Federal cost of \$7,400,000.⁴ Abandonment of project recommended.⁵ Plus non-Federal cost of \$2,600,000.⁶ Estimated cost of modification of authorized project.⁷ Interim report.⁸ \$15,500,000, Belton Reservoir; \$82,000, Eastland, Tex.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published					
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents					
							House or Senate	Number	Congress	Session	Year	Page
Breton Bay (Leonardtown Harbor), Md.			Jan. 19, 1875	\$13,000	Favorable	H. Ex.	75	43	2	1875	11, 108	
				30,000								
	June 10, 1899	Favorable	Dec. 9, 1899	22,560		H.	209	56	1	1900	1743	
				36,480		H. Com.	33	61	2	1903	1044	
	Dec. 7, 1912	Unfavorable	Apr. 18, 1913	6,000	Favorable	H.	*127	63	1			
			Apr. 6, 1934	3,000	do	Favorable						
				4,800	Unfavorable	Unfavorable	(*)					
Brevard County, Fla., shores of. (See Beach Erosion studies.)			Sept. 26, 1838	52,800								
Bridge Island, Mich. (See St. Marys River, south canal.)			Dec. 11, 1852	10,000								
Bridgeport Harbor, Conn. (see also Black Rock Harbor and Johnsons Creek.)			Jan. 12, 1867									
			Jan. 23, 1869		Unfavorable					1869	413	
			Jan. 12, 1871	72,000		H. Ex.	60	41	3	1871	788	
			July 1, 1874	566,922								
			July 14, 1879	126,050								
			Oct. 28, 1895	90,000		H.	*61	54	1	1896	803	
			Aug. 23, 1898	307,470	Favorable					1899	1173	
			Jan. 20, 1899	110,000		H.	209	55	3	1899	1187	
				65,000								
	Nov. 21, 1906	Favorable	Dec. 18, 1906	560,000	Favorable	Favorable		{ 275 } { *521 }	50	2		
	Sept. 1, 1909	do	Feb. 11, 1910	90,000	do	do	H.	*751	61	2		
	Jan. 6, 1911	Unfavorable				Unfavorable	H.	*89	62	1		
	Nov. 25, 1912	Favorable	Mar. 19, 1914	175,300	Favorable	Favorable	H.	*898	63	2		
	Jan. 31, 1928	do	July 26, 1929	877,000	do	do	H.		281	71	2	
				504,000		Favorable						
Feb. 26, 1936	do	Mar. 10, 1937	192,500	Favorable	do	H.	*232	75	1			
		Apr. 9, 1940	529,000	do	do	H.	*819	76	3			
		Apr. 26, 1946	955,000	do	do	H.	*680	79	2			
		Oct. 19, 1956	2,076,000	do	do	H.	*136	85	1			

Bridges																			
Brier Creek, Ga.	June 19, 1905	Favorable	Jan. 11, 1887					S. Ex.	105	49	2								
Mouth to Waynesboro	June 3, 1915	Unfavorable				Favorable		H	143	59	1								
Brigantine Beach and Inlet, N.J. (See Absecon Inlet and Atlantic City.)						Unfavorable		H	*407	64	1								
Bristol, Maine. (See New Harbor.)																			
Bristol Harbor, R.I.	Dec. 1, 1925	do				do		(U)											
	Dec. 23, 1927	do				do		(U)											
Britton Bay, Md. (See Breton Bay.)			July 7, 1967	\$ 873,000	Favorable	Favorable		H	*174	90	1								
Broad and Combahee Rivers, S.C.			July 21, 1960																
Broad Bay, Va. (see also Link Horn River, etc.)			Feb. 21, 1880					Unfavorable	(U)										
Broad Creek, Del. (See Broad Creek River.)								S. Ex.	104	46	2	1880	900						
Broad Creek, Md.																			
	Oct. 14, 1890	Favorable	Jan. 9, 1882	60,000				S. Ex.	68	47	1	1882	948						
	Oct. 7, 1910	do	Aug. 31, 1891	54,000	Favorable	Favorable		H				1891	1223						
			Jan. 16, 1911	112,200	Unfavorable	do		H	*269	62	2								
				57,200															
Annessex River to Pocomoke Sound	June 30, 1931	Unfavorable						(U)											
Broad Creek, Middlesex County, Va.	Dec. 6, 1938	Favorable	May 11, 1939	20,500	Favorable	Unfavorable		H	*381	76	1								
Broad Creek, N.C. (See Manteo, N.C., to Oregon Inlet via Broad Creek.)																			
Broad Creek (Gittings Creek), N.C.			Apr. 30, 1965			Unfavorable		Unfavorable	(U)										
Broad Creek, Pamlico County, N.C.	Apr. 17, 1918	Unfavorable						H											
Broad Creek River, Del.								do											
	Nov. 13, 1890	Favorable	Feb. 4, 1880	60,000				S. Ex.	*1226	65	2								
	May 29, 1909	do	Mar. 18, 1891	15,000				H	90	46	2	1880	640						
			Nov. 20, 1909	14,520	Favorable	Favorable		H	601	61	2	1891	*1209						
			Nov. 6, 1940		Unfavorable	Unfavorable		(U)											
			May 7, 1957					(U)											
Broad Creek River, Sussex County, Del.			June 7, 1963					(U)											
Broadkill Creek, Del. (see also Mispillion River and Broadkill Creek, waterway).			Sept. 11, 1872	80,447	Unfavorable	do		(U)											
	Sept. 6, 1894	Unfavorable						H. Ex.	60	42	3	1872	792						
	June 6, 1905	Favorable	Mar. 29, 1906	33,330	Favorable	Favorable		H. Ex.	70	53	3	1895	1151						
	Apr. 30, 1913	do	Dec. 11, 1913	26,840	do	do		H	*214	59	2								
				60,000	do	Favorable		H	*1109	63	2								
Broadkill River, Del. (see also Chincoteague Bay to Delaware Bay and Delaware Bay, harbor of refuge, and Rehoboth Bay to Delaware Bay, outlet).	Aug. 17, 1928	Unfavorable	Oct. 24, 1929	220,000	Unfavorable	Unfavorable		(U)											
			July 7, 1966		do	do		(U)											
Broadkill River and waterway from Indian River Inlet to Rehoboth Bay, Del.			Jan. 3, 1941	224,000	Favorable	Favorable		H	*344	77	1								
Broad River, N.C. and S.C. (see also Congaree and Santæ Rivers).			Apr. 15, 1880	90,000	Indefinite			S. Ex.	166	46	2	1880	1010						
	Jan. 27, 1883	Unfavorable						S. Ex.	30	48	1	1884	1058						
	Nov. 19, 1888	do										1889	1203						
Broad Sound, Mass. (See Boston Harbor.)																			
Broadwater Creek, Md.	Dec. 24, 1935	do						Unfavorable	(U)										
	May 23, 1939	Favorable	Oct. 22, 1941	60,000		Favorable		H	622	77	*2								

¹ Report not published.

² Pl.'s cash contribution, estimated at \$465,000, by local interests.

³ Plus cash contribution, estimated at \$491,000, by local interests.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys			Recommendation of the Chief of Engineers	Where published				Annual report of Chief of Engineers	
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation		Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
Bronx Kills, N.Y. (See Harlem River.)	Mar. 10, 1938	Favorable	Dec. 8, 1938		Unfavorable	Unfavorable	(1)					
Bronx Kills and Harlem River, N.Y.			Jan. 14, 1881	\$136,275			H. Ex.	54	46	3	1881	665
Bronx River, N.Y.	Dec. 1, 1890	Favorable	Aug. 25, 1891	85,985	Favorable	Favorable					1891	949
	Apr. 26, 1911	do	Feb. 5, 1912	939,000	do	do	H.	*897	62	2		
Bronx River and tributaries, New York			Dec. 1, 1944			Unfavorable	(1)					
Brooklin, Maine. (See Center Harbor, Brooklin.)												
Brooklyn, Calif. (See Oakland Harbor.)												
Brooklyn, Ill. (See Mississippi River.)												
Brookport, Ill. (See Ohio River)												
Broward County and Hillsboro Inlet. (See Beach Erosion studies.)												
Broward County, Fla., intracoastal waterway through	Feb. 9, 1940	Favorable	Dec. 14, 1943			do	(1)					
Broward County, vicinity of Hollywood, Fla.			June 2, 1965		Unfavorable	do	(1)					
Brown Bay, Gloucester County, Va.	Feb. 6, 1958					do	(1)					
Brown Fort, Tex. (See Rio Grande at Fort Brown.)												
Browns Creek, Fla. (See St. Johns River, Fla., Jacksonville to the Ocean.)			Oct. 27, 1888	43,000	Unfavorable		H. Ex.	22	51	1	1890	669
Browns Creek, Sayville, N.Y.	May 18, 1889	Favorable	Nov. 26, 1889	46,000	Favorable	Favorable	H. Ex.	22	51	1	1890	673
	Dec. 10, 1915			10,000			H.	991	64	1		
Brownsville, Nebr. (See Missouri River.)												
Brownsville, Tex. (See Brazos Island Harbor, Tex.)												
Brule Harbor, Wis.	Jan. 26, 1912	Favorable	Aug. 2, 1912	16,500	Unfavorable	Unfavorable	H.	*1129	62	3		
	Oct. 30, 1912	Unfavorable				do	H.	*241	63	1		
Brule River, Minn.	July 29, 1932	do				do	H.	*74	73	1		

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Buffalo Bayou, Tex. (see also Galveston Bay to Houston, water route; and Galveston Bay ship channel).			Apr. 4, 1871	\$382,017	Favorable							1871	533
			Jan. 10, 1880	3,443,113	Unfavorable		H. Ex.	53	46	3	1881	1344	
And Houston ship channel, flood control.			Mar. 15, 1920	1,125,341	Favorable								
		Favorable	Jan. 31, 1921	249,000	Favorable	Favorable	H	93	67	1			
White Oak Bayou			Apr. 1, 1937	9,000,000	Favorable	do	H	*456	75	2			
Buffalo Bayou and tributaries, Texas, flood protection for Houston, Tex.			Sept. 3, 1964	2,180,000	do	do	(H)	*169	89	1			
			June 18, 1952	25,997,000	do	do	H	*250	83	2			
Buffalo breakwater, New York		Favorable	Mar. 29, 1905	1,296,875	Favorable	do	H	*240	59	1			
Buffalo Creek, N.Y. (see also Cayuga, Buffalo and Cazenovia Creeks, N.Y.).		Unfavorable	Oct. 25, 1924		Unfavorable		(1)						
Buffalo Creek and tributaries, W. Va. and Pa.			June 19, 1952			do	(1)						
Buffalo Fork of White River, Ark. (see also Black River).			Jan. 9, 1897	3,500	Favorable		H	207	54	2	1897	1994	
Buffalo Harbor, N.Y. (see also Black Rock Harbor; Erie Basin; Erie Canal and Black Rock Channel and Tonawanda Harbor, N.Y.; and Great Lakes Harbors studies).			Sept. 30, 1857	27,679			(S. Ex.	15	35	1			
			Dec. 7, 1866	1,697,194	do		(S. Ex.	16	35	1	1867	224	
			June 27, 1867										
			Dec. 27, 1867	597,233								1868	205
			Mar. 23, 1874	642,226								1874	229
			Feb. 19, 1895	83,000								1895	3149
			July 1, 1895	1,357,725	Unfavorable							1895	3153
		Unfavorable	Sept. 15, 1913	2,200,000		Unfavorable	H	*286	63	1			
			Dec. 20, 1915	198,000	Favorable		H	*1139	64	1			
			Mar. 24, 1916	161,000		Favorable							
			Jan. 9, 1929	132,000	Favorable		H. Com.	1	71	1			
				83,375		Favorable							
				77,000		Unfavorable	(1)						
		Unfavorable	July 24, 1936			Unfavorable	(1)						
			Aug. 4, 1952			do	(1)						

And Black Rock harbors.....	Nov. 8, 1912	Unfavorable			do	H	*30	63	1	
At Watson elevator, etc.....			June 29, 1909	62, 205	Unfavorable	do	H	*298	61	2
Black Rock Harbor.....			Jan. 10, 1910	62, 205	Favorable	do	H. Com	2	61	2
			Oct. 1, 1835	321, 430			H	82	24	1
Breakwater.....	Mar. 29, 1905	Favorable	July 17, 1905	1, 296, 875	Favorable	Favorable	H	*240	59	1
Buffalo Creek and Buffalo ship canal.....	Apr. 25, 1917	do	Oct. 18, 1917	26, 400	do	do	H	*1004	65	2
Buffalo entrance to Erie Basin and Black Rock Harbor.	June 24, 1909	Unfavorable	May 18, 1897	248, 113	do	do	H	*72	55	1
			June 3, 1935	3 80, 000		Unfavorable	H	*327	61	2
			Mar. 16, 1903	475, 426	Favorable	Unfavorable	H. Com	*54	74	1
Erie Basin.....	Oct. 4, 1902	Favorable					H	35	58	2
Inner Harbor entrance.....	June 26, 1909	Unfavorable					H	*298	61	2
	Sept. 8, 1915	do					H	*1012	64	1
Lake Erie entrance to Black Rock Harbor and Erie Basin.	July 6, 1900	Favorable	Nov. 8, 1900	814, 643	Favorable		H	*125	56	2
Outer Harbor, entrance to.....	Oct. 20, 1910	do	June 10, 1911	378, 000	do	Favorable	H	*550	62	2
	Aug. 28, 1923	Unfavorable	Mar. 15, 1924	624, 750	do	Favorable	H	*481	68	2
River and ship canal, New York.....	Aug. 29, 1931	Favorable	Nov. 8, 1932	22, 000	Unfavorable	do	H	*46	73	1
			Nov. 5, 1941	1, 853, 000		Favorable	H	352	78	1
River and ship canal, Black Rock Channel, and Tonawanda Harbor, N.Y.	July 24, 1936	Unfavorable		3, 171, 000		Unfavorable	(1)			
Scajaguada (or Scajaguada) Creek.....	Sept. 11, 1884	Favorable	Jan. 17, 1885	26, 000	Unfavorable	Unfavorable	H. Ex	157	48	2
Buffalo River, Ark., Gilbert and Lone Rock Reservoir sites.			Mar. 10, 1966		Unfavorable	Unfavorable	(1)			
Buffalo River, Minn. (See Red River of the North drainage basin.)										
Buffalo River, Miss.....	Nov. 18, 1884	Unfavorable					H. Ex	71	48	2
Buffalo River, Tenn. (See Tennessee River and tributaries.)										1430
Buffalo, Wyo. (See Yellowstone River and tributaries, Wyoming, Montana, and North Dakota, flood control.)										
Buffington Harbor, Ind. (See also Calumet-Sag Channel).	Sept. 18, 1930	do				Unfavorable	(1)			
Buggs Island Dam. (See Roanoke River, Va. and N.C.)										
Bulkhead Harbor, N.C. (See Beaufort Harbor, N.C.)										
Bullard Creek, Goodhue County, Minn., flood control.	May 25, 1939	do				do	(1)			
Bullards Bar, Calif. (See Yuba River Basin, Calif.)										
Bull Creek, S.C. (See Bluffton, S.C., etc.)										
Bullocks Point Cove, R.I.....			Sept. 26, 1952	4 145, 000	Favorable	Favorable	H	*242	83	2
Bulls Bay, S.C. (See Alligator Creek.)										

¹ Report not published.

² Plus non-Federal cost of \$670,000.

³ Annually.

⁴ Plus cash contribution, estimated at \$103,400, by local interests of 42 per cent of the cost.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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							House or Senate	Number	Congress	Session	Year	Page	
Bunganuc Creek, Maquoit Bay, Maine.....	Dec. 27, 1946	Unfavorable				Favorable	(1)						
Bunnell, Fla. (See Crescent Lake, Fla., to Flagler Beach, waterway.)													
Buras, La. (See Empire, La., to Gulf of Mexico, waterway.)													
Bureau Creek, Ill. (see also Illinois River and tributaries), flood control.	Apr. 26, 1939	do				Unfavorable	(1)						
Burlington Bay, Minn. (see also Agate and Burlington Bays.)	Aug. 13, 1900	Indefinite	Nov. 10, 1900	\$435,000 376,500		Favorable	H	*114	56	2	1901	2889	
Burlington Canal, Vt. (See Wells River.)													
Burlington Harbor, Iowa. (See Mississippi River.)													
Burlington Harbor, Vt.	May 2, 1940	Favorable	Feb. 23, 1942			Unfavorable	(1)						
Breakwater			Mar. 15, 1961			do	(1)						
			Feb. 7, 1834	28,727		do	H	131	23	1			
			Sept. 30, 1857	21,286		do	S	42	35	1			
			Nov. 7, 1866	333,442		do	H, Ex	56	39	2	1866	179	
			Dec. 20, 1900	57,750 71,855		Favorable	S	105	56	2	1901	1072	
Burns Creek, Calif. (See Merced County streams.)	Nov. 25, 1907	Unfavorable				Unfavorable	H	*1109	60	2			
Burns Ditch Harbor, Ind. (see also Calumet-Sag Channel.)	Nov. 8, 1930	do				do	(1)						
	Nov. 29, 1935	do				do	(1)						
	Nov. 29, 1935	do				do	(1)						
Burns Waterway Harbor, Ind. (See Great Lakes Harbors studies.)													
Burnt River and tributaries, Oregon, flood control.	Aug. 16, 1938	do				do	(1)						
Burt Lake, Mich. (See Crooked Lake, etc.)													

Burtens Bay, Va. (See Franklin City to Cape Charles, Va., inland waterway.)														
Burwells Bay, Va.	Aug. 9, 1938	Favorable	June 28, 1939			Favorable	do	(1)						
Isle of Wight County, Va.			Dec. 16, 1966			Unfavorable	do	(1)						
Bushley Bayou Area, La.			Sept. 7, 1973 ²	13,350,000		Favorable	Favorable	H	*157	93	1			
Bushnellville Creek, N.Y., flood control	Aug. 21, 1937	Unfavorable						Unfavorable	(1)					
Bush River, Md.			Jan. 12, 1882	{	30,000	Indefinite		S. Ex.	68	47	1	1882	949	
			Nov. 10, 1950	}	27,000									
Butte Creek, Cherokee Canal, Calif. (see also Sacramento River and tributaries, Calif.)														
Butte des Morts Lake Harbor, Wis.	Nov. 4, 1920	Unfavorable						do	(1)					
Buttermilk Bay. (See Buzzards Bay, etc., Mass.)			May 25, 1935		783,000	Favorable	Favorable	H. Com.	*55	74	1			
Buttermilk Channel, New York Harbor, N.Y. (see also Bay Ridge Channel and Gowanus Bay.)			Mar. 22, 1962		2,226,000			do	H	*483	87	2		
For channel 40 feet deep at mean low water and 1,200 feet wide.	June 25, 1900	Favorable	Nov. 28, 1900		1,900,000			H	*122	56	2	1901	1299	
And Gowanus Bay channels, for removing shoals, building sea wall on Governors Island, and for 26-foot channel along Brooklyn wharves from point opposite Wall St. ferry to foot of Bryant St., Brooklyn.	Oct. 17, 1890	Unfavorable	June 3, 1935		783,000			H. Com.	*55	74	1			
								H. Ex.	26	51	2	1891	937	
Buzzards Bay and Barnstable Bay Canal (see also Cape Cod Canal).	Feb. 3, 1825	Favorable	Feb. 15, 1825					S	32	18	2			
			Nov. 13, 1829	{	455,815	Unfavorable	Unfavorable	H	83	18	2			
				}	704,437								Unfavorable	H	*1341	63	3
Buzzards Bay to Buttermilk Bay, Mass., channel from.	Dec. 11, 1913	Unfavorable	Sept. 30, 1914		18,300			Favorable	H	*552	80	2		
Byram Harbor, Conn.	Nov. 26, 1894	Favorable						do	H. Ex.	23	53	3	1895	863
Byram River and Harbor, N.Y. (See Port Chester Harbor.)														
Byram River and tributaries, Connecticut, flood control.	Nov. 13, 1942	Unfavorable						Unfavorable	(1)					
C														
Cabaret Slough, Ill. (See Mississippi River.)														
Cabin Branch and Curtis Creek, Md.	Dec. 12, 1912	do						do	H	*1439	62	3		
Cabin Creek, Md.	Feb. 17, 1880	do							S. Ex.	90	46	2	1880	738
Cache River, Ark. (See also White River and upper Cache River).			Jan. 25, 1871		4,000			H	60	41	3	1871	354	
			Dec. 16, 1880		30,316			H	38	46	3	1881	1477	
			Jan. 22, 1887		7,000	Favorable		S. Ex.	105	49	2	1887	1547	
	July 25, 1895	Favorable						Favorable				1895	2037	
	Nov. 17, 1928	Unfavorable						Unfavorable	(1)					

¹ Report not published.

² Mississippi River Commission report.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				Annual report of Chief of Engineers		
							House or Senate	Number	Congress	Session		Year	Page
Cache River, Ark., and Mo., flood control.....			Dec. 4, 1941			Unfavorable	(1)						
			Mar. 10, 1949	\$22,400,000		Favorable	S	*88	81	1			
			Mar. 31, 1961			Unfavorable	(1)						
Cache River, Ill.													
Cache River, Ill., prevention of break from Mississippi River at Beechridge. (See Mississippi River.)						do	(1)						
Cache River, Ill., tributary of Ohio River.....	Feb. 11, 1942	Unfavorable				Favorable	S	*39	89	1			
Caddo Dam, La.....			Apr. 13, 1965	\$ 1,934,000	Favorable	Favorable	S						
Caddo Lake, Tex. and La. (see also Cypress Bayou and Jefferson-Shreveport Waterway).	July 27, 1907	Favorable	Nov. 2, 1907	100,000	do	do	H	*220	60	1			
Caddo River, DeGray Dam and Reservoir, Ark. (See Ouachita River.)													
Cadet Bayou, vicinity of Lakeshore, Miss.			Apr. 3, 1970			Unfavorable	Unfavorable	(1)					
Cadet Bayou, Miss., in vicinity of Waveland, Hancock County.	Feb. 27, 1939	do	Aug. 7, 1939	11,000	Favorable	Unfavorable	(1)						
Cadle Creek, Anne Arundel County, Md.....	Dec. 23, 1938	do	June 24, 1939	5,500	do	Favorable	H	*456	76	1			
Cadron Creek, Ark.			Oct. 24, 1958			Unfavorable	Unfavorable	(1)					
			July 31, 1973			Unfavorable	Unfavorable	(1)					
Cadron Creek, Ark., flood control.....	Jan. 15, 1937	do		43,000		Favorable	H	*250	75	1			
			Sept. 30, 1941			Unfavorable	Unfavorable	(1)					
Cahaba River, Ala.....			Jan. 27, 1875	40,000	Favorable		H. Ex.	75	43	2	1875	11, 11	
			Feb. 1, 1881	577,000			H	36	46	3	1881	1232	
	July 21, 1909	Unfavorable				Unfavorable	H	697	61	2			
	May 12, 1926	(?)				Unfavorable	H	467	69	1			
Caillouet Canal, La. (See Grand Caillou and Le Carpe Bayous.)													
Calais Breakwater. (See St. Croix River, Maine.)			Apr. 11, 1923	229,000	Favorable	Favorable	H	217	68	1	(*)		
Calaveras River, Calif., flood control.....			Aug. 28, 1962	\$ 1,960,000		do	H	*576	87	2			
Calaveras River, Calif., Mormon Slough.....													

Calaveras Stream Group, Calif. (See Littlejohn Creek.)

Calcasieu Lake and River, La. (see also Rio Grande to Mississippi River, waterway).	July 19, 1905	Favorable	Jan. 9, 1906	{ 1,150,000 } { 1,165,000 } { 2,135,000 } { 1,585,000 } { 1,410,000 } { 590,000 }	Unfavorable	Unfavorable	H	724	59	1	-----
Calcasieu Lake to Sabine Lake, La., waterway via Black Bayou (see also Black Bayou). Calcasieu Pass, La. (See Calcasieu River, La.)	Nov. 13, 1890	Unfavorable					do	H. Ex	125	51	2	1891 1850
Calcasieu River and Pass, La. (see also Rio Grande to Mississippi River, waterway; and Lake Charles deep water channel, ship channel, etc.).			July 30, 1871	{ 15,000 } { 40,000 } { 25,080 } { 600,000 } { 600,000 } { 45,000 } { 32,000 } { 16,992,000 }	Favorable						1871 557
			Jan. 10, 1881		do	H. Ex	46	46	3	1881	1301
			Dec. 2, 1886		do	Unfavorable	58	50	1	1887	1402
			Nov. 19, 1888		do	Favorable				1889	1527
	July 31, 1916				do						
			June 1, 1960	{ 32,000 } { 16,992,000 }	Favorable		H	*148	65	1	-----
			Aug. 25, 1967		do	H	*436	86	2	-----	
			Nov. 13, 1947		Unfavorable	Unfavorable	(¹)				
Calcasieu River and tributaries, Louisiana			Mar. 17, 1932		Unfavorable	do	H	*75	73	1	-----
Calcasieu River, Bayou Nezpique and Bayou Teche, La.	Dec. 15, 1928	Favorable									
Calcasieu River, La.			Sept. 17, 1934	10,208,000	do	do	(¹)				
	May 18, 1936	Favorable	Apr. 27, 1937	9,260,000	Favorable	Favorable	H	*299	75	1	-----
At Lake Charles, La.		do	June 17, 1941	55,000	do	do	H	*465	77	1	-----
Cost Sharing—Salt Water Barrier			June 11, 1963	(²)	do	do	H	169	88	1	-----
Devil's Elbow, La.			Sept. 21, 1970	*3,762,000	Favorable	do	S	*111	91	2	-----
Gulf of Mexico to city of Lake Charles, La.	Jan. 21, 1918	Favorable	July 9, 1920	25,800	do	do	H	974	66	3	-----
To Sabine Pass, waterway (see also Rio Grande to Mississippi River).	Nov. 20, 1882	Unfavorable			do	do	S. Ex	30	48	1	1884 1285
To Sabine River, Tex. and La. (See St. George Sound to Rio Grande, etc.)											
Calcasieu River salt water barrier, La.			July 30, 1962	*3,310,000	Favorable	Favorable	H	*582	87	2	-----
Calcite Harbor, Mich.	Sept. 25, 1930	Unfavorable			Unfavorable	Unfavorable	(¹)				
Caledonia, N.Y. (See Genesee River.)											
Calf Island, Roque Island Bluffs and Seawall Point, Maine.			May 28, 1964		Unfavorable	do	(¹)				
Calhoun Point, Ill. (See Mississippi River.)											
Calhoun-Victoria Soil Conservation District, Tex.			Oct. 25, 1966		do	do	(¹)				
Caliente Creek, Calif. (See Kern River, Calif.)											
California. (See Central Valley reclamation project.)											

- ¹ Report not published.
- ² Abandonment of project recommended.
- ³ Plus non-Federal cost of \$28,000.
- ⁴ Report of California Debris Commission.

⁵ Plus non-Federal cost of \$1,500,000.

⁶ Local interests not be required to bear 50 percent of construction of salt water barrier system.

⁷ Plus non-Federal cost of \$356,000

⁸ Plus non-Federal cost of \$43,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published					
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents					
							House or Senate	Number	Congress	Session	Year	Page
California mining debris, prevention of injury to navigable waters by (see also Sacramento and Feather Rivers and tributaries and Sacramento River and tributaries).			Mar. 22, 1880	\$250,000		Favorable	H. Ex.	*69	46	2		
			Jan. 10, 1881	150,000	Favorable	H. Ex.	76	46	3	1881	*2485	
			Aug. 10, 1910	33,800,000	do	Unfavorable	H.	*81	62	1		
			June 17, 1913	12,517,008	do	Favorable	H. Com.	*5	63	1		
Calion, Ark. (See Ouachita River near Calion, Ark.)			Aug. 12, 1943			Unfavorable	(1)					
Calleguas Creek, Calif., Los Angeles County streams, flood control.			Aug. 27, 1879	20,000	Favorable		H. Ex.	82	45	3	1879	863
Caloosahatchee River, Fla. (see also Kissimmee River and Indian River to San Carlos Bay and Pensacola Bay to Florida East Coast Canal).	Aug. 1, 1935	Favorable				Unfavorable	H.	180	59	1		
	May 29, 1925	do				Indefinite	(1)					
	Jan. 11, 1927	do				Favorable	H.	*690	69	2		
	July 27, 1937	do				Unfavorable	H.	347	60	1		
	Jan. 11, 1939	do				Favorable	H. Com.	8	61	2		
	Oct. 4, 1912	do	Dec. 18, 1912	{	95,000	Favorable	Unfavorable	H.	*137	63	1	
				25,000		Favorable						
Mouth to Fort Myers	Apr. 24, 1917	do				Unfavorable	H.	756	65	2		
	July 10, 1933	Unfavorable				do	(1)					
	Mar. 4, 1936	Favorable	Jan. 24, 1951			do	(1)					
			Dec. 20, 1956	1,259,000		Favorable	H.	*109	85	1		
To Anclote River, Fla.												
To Port Everglades. (See Port Everglades to Caloosahatchee River and Lake Okeechobee drainage areas, Florida (see also Everglades, Fla., and Florida, central and southern, flood control).			{	1,115,706	Favorable	Favorable	H.	*215	70	1		
			{	620,000								
			Jan. 26, 1929	10,740,000	Favorable	do	(H. Com.	25	70	2		
							S.	*213	70	2		
	Jan. 21, 1930						H. Com.	47	71	2	(2)	
	Feb. 8, 1930						S.	225	71	3	(3)	
			Mar. 12, 1930	9,692,000	Favorable	Favorable	S.	*115	71	2		
			Apr. 26, 1937	806,000	do	do	H. Com.	*28	75	1		

	Oct. 22, 1935	Unfavorable			Unfavorable	Unfavorable	(¹)												
			July 17, 1939 ⁴	3,960,000	Favorable	Favorable	H	*469	76	1									
And the North New River Canal			June 20, 1933		Unfavorable	Unfavorable	(¹)												
Kissimmee River-Fisheating Creek	Dec. 8, 1937	Unfavorable				do	(¹)												
Side channels			June 5, 1943	5,100		Favorable	H	*736	79	2									
Caloosahatchee River to Withlacoochee River, Fla., Intracoastal Waterway from.	Jan. 7, 1937	Favorable	May 5, 1939	3,200,000	Favorable	do	H	*371	76	1									
Calumet Harbor, Ill.			Dec. 1, 1836	142,214															
			1845 ⁴																
			May 15, 1850	115,445															
			Nov. 30, 1869	299,875	Favorable														
				695,000	Unfavorable														
			June 30, 1895	154,550	Favorable														
			Feb. 21, 1896	1,134,870	do		H	*277	54	1	*1895	2771							
	Aug. 28, 1909	Favorable	Oct. 7, 1911	38,170		Favorable	H	237	63	1	*1896	2533							
Calumet Harbor and River, Ill.			Mar. 29, 1940		Unfavorable	Unfavorable	(¹)												
Calumet Harbor and River, Ill. and Ind. (see also Great Lakes Harbors studies).	Jan. 22, 1931	Favorable	June 25, 1932	4,540,000	Favorable	do	H	*494	72	2									
			Feb. 6, 1939	910,000	do	Favorable	H	*233	76	1									
			Mar. 31, 1971		Unfavorable	Unfavorable	(¹)												
Calumet Harbor, Lake Winnebago, Wis. (see also Fox River).	Aug. 4, 1892	Unfavorable				Unfavorable	H. Ex.	117	52	2	1893	2783							
Calumet Lake to Calumet River, Ill., canal	Sept. 10, 1884	do					H. Ex.	71	48	2	1885	2057							
Calumet River, Ill. and Ind.			Dec. 17, 1867 ⁶																
	Aug. 15, 1868	Unfavorable	Dec. 23, 1872				S. Ex.	25	42	3									
			Jan. 7, 1882	125,000	Favorable		S. Ex.	77	47	1	*1882	2247							
	Sept. 9, 1882	Favorable		181,250			S. Ex.	30	48	1	1884	1951							
			Oct. 6, 1882	225,000	Favorable	Favorable	S. Ex.	9	47	2	1883	1748							
				625,000			H. Ex.	71	48	2	1885	2059							
	Sept. 10, 1884	do	Mar. 27, 1885	200,000	Unfavorable														
				375,000															
	Nov. 16, 1896	Unfavorable	Dec. 10, 1888	1,537,360	do	Unfavorable													
			Feb. 23, 1889	1,000,000	Favorable														
	Aug. 3, 1903	Favorable	Sept. 16, 1903	662,480	do	Favorable	H	*172	58	2	1889	2151							
	Nov. 11, 1907	do	Nov. 25, 1907	78,000	do	do	H	349	60	1	1904	2941							
	May 2, 1913	Unfavorable				Unfavorable	H	224	63	1									
	May 28, 1915					Unfavorable	H	*470	64	1									
	June 5, 1945	Favorable	Dec. 19, 1950	434,300		Favorable	H	*153	82	1									
Calumet River to Lake Michigan, canal			Jan. 3, 1889	1,888,550	Unfavorable	Unfavorable													
Calumet-Sag Channel, Ill. (see also Illinois Waterway and Grand Calumet River, Ill. and Ind.).	Nov. 22, 1930	Favorable	June 15, 1933	2,814,500	Favorable	Favorable	H	*180	73	2	(⁷)								
			Jan. 19, 1937		(⁷) Favorable	do	H. Com.	*19	75	1									
And Indiana Harbor and Canal, Ind.	July 2, 1936	Unfavorable				Unfavorable	(¹)												
			Nov. 15, 1938	25,900,000	Favorable	Favorable	H	*145	76	1									

¹ Report not published.

² Report of Secretary of Agriculture.

³ Report of Okeechobee Flood Control District of Florida.

⁴ Interim report.

⁶ Map(s); no report.

⁶ Made in connection with survey for canal from Lake Michigan to the Mississippi River via Illinois River.

⁷ Report of special board of officers.

⁸ No change in authorized cost.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers		
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents						
							House or Senate	Number	Congress	Session		Year	Page
Calumet-Sag Channel and Little Calumet River, Ill.			Feb. 23, 1942			Unfavorable	(1)						
Camas Slough, Wash. (See Washougal Slough.)													
Camas, Wash. (See Columbia River at Camas, Wash.)						do	(1)						
Cambridge Creek to Fishing Bay via Little Blackwater River, Md.	Mar. 26, 1936	Unfavorable					(1)						
Cambridge Harbor, Md.	Oct. 20, 1939	do				do	(1)						
			Jan. 2, 1871	\$36,000									
			Sept. 13, 1887	17,136	Favorable		H. Ex.	60	41	3	1871	615	
			Sept. 25, 1896	8,120	do		H.	105	49	2	1887	851	
	Nov. 22, 1886	Favorable	Nov. 18, 1909	14,500	do	Favorable	H.	119	54	2	1897	1297	
	May 14, 1909	Favorable		10,500	Unfavorable	Unfavorable	H.	*560	61	2			
	Apr. 27, 1923	do	Dec. 15, 1923	18,500	Favorable	Favorable	H.	*210	68	1			
			Aug. 18, 1936	15,000	do	do	H. Com.	*7	75	1			
			Apr. 13, 1942	34,000	Favorable	do	(1)						
	Feb. 7, 1946	do	Mar. 18, 1947	77,000	Unfavorable	Unfavorable	H.	*381	80	1			
			July 31, 1973		Unfavorable	Unfavorable	(1)						
Camden County Streams, N.J.													
Camden Harbor, Ark. (See Ouachita River.)			Dec. 16, 1872	33,000	Favorable		S. Ex.	25	42	3	1873	1106	
Camden Harbor, Maine	Jan. 18, 1887	Favorable	Jan. 28, 1888	59,390	do		H.	141	50	1	1888	403	
	June 15, 1899	do	Dec. 23, 1899	7,400	do		H.	263	56	1	1900	1111	
	Oct. 27, 1907	do	Oct. 7, 1908	20,000	do	Favorable	H.	*1117	60	2			
	Dec. 13, 1920	Unfavorable				Unfavorable	(1)						
	Sept. 14, 1927	do				do	(1)						
	Oct. 10, 1930	Favorable	Jan. 29, 1932	30,000	Unfavorable	do	(1)						
			June 4, 1947			do	(1)						
			Apr. 3, 1970		Unfavorable	do	(1)						
Breakwater to Negro Island	Aug. 31, 1900	Unfavorable				do	H.	1093	62	3			
Camden, S.C. (See Columbia and Camden to Charleston, S.C., waterway.)													
Camp Pendleton and Oceanside, Calif. (See Beach Erosion studies.)													

Canada Lake drainage area, New York. (See Bellows Pond and Canada Lake drainage area, Fulton County, N.Y.)									
Canadian River and tributaries, New Mexico, flood control.	Nov. 26, 1929	.....do.....	.....do.....	H.....	*371	71	2	.....	.....
Canal Creek, Calif. (See Merced County streams.)									
Canandaigua Lake, N.Y., flood control. (See Oswego, Oneida, Seneca, and Clyde Rivers, N.Y.)									
Canapitsit Channel, Mass.....	Dec. 19, 1890	Favorable.....	Nov. 14, 1891	4, 800	Favorable.....	H. Ex.....	59	52	1 1892 645
	May 12, 1926	(?).....			(?).....	H.....	467	69	1
Canarsie Bay, N.Y.....			Feb. 11, 1879	88, 000		H. Ex.....	89	45	3 1879 400
Canaseraga Creek. (See Genesee River, vicinity Dansville, N.Y.)									
Canaveral Harbor, Fla.....	Sept. 18, 1892	Favorable.....				H. Ex.....	54	52	2
			Feb. 11, 1895	{ 4, 091, 010 Unfavorable.....		H. Ex.....	321	53	3 1895 1604
				{ 7, 460, 970 Favorable.....		H.....			
	Dec. 6, 1917	Unfavorable.....			Unfavorable.....	H.....	875	65	2
	July 29, 1927	.....do.....			.....do.....	(.....)			
	Nov. 18, 1935	.....do.....			.....do.....	(.....)			
	July 25, 1939	Favorable.....	Mar. 17, 1941	1, 661, 000	Favorable.....	Favorable.....	367	77	*1
			July 6, 1962	+ 5, 076, 000	.....do.....	.....do.....	*140	87	2
Cane Creek, Okla.....	July 10, 1958					Unfavorable.....	(.....)		
Cane River, La.....	Jan. 10, 1883	Unfavorable.....				S. Ex.....	30	48	1 1884 1366
	Jan. 7, 1891	.....do.....				Unfavorable.....	H. Ex.....	184	51 2 1891 2022
	May 12, 1926	(?).....				(.....)	H.....	467	69 1
Grand Ecote to Colfax.....	June 18, 1915	Unfavorable.....				Unfavorable.....	H.....	*412	64 1
Cane River, N.C. (See Tennessee River and tributaries.)									
Caney Creek, Grayson County, Ky.....	Oct. 10, 1935	.....do.....				.....do.....	(.....)		
Caney Creek, Tex.									
	July 24, 1899	Favorable.....	Jan. 14, 1889	30, 000	Unfavorable.....	.....do.....			1889 1580
	Mar. 6, 1916	.....do.....	Jan. 24, 1900	20, 000	Favorable.....	H.....	450	56	1 1900 2453
			Sept. 13, 1917	16, 750	.....do.....	Unfavorable.....	H.....	1042	65 2
Caney Fork River, Tenn.....			Feb. 20, 1879	30, 228	.....do.....	H. Ex.....	106	45	3 1879 1275
	Oct. 16, 1884	Indefinite.....	Sept. 24, 1886	53, 000	.....do.....	.....do.....			1887 1768
	June 22, 1909	Unfavorable.....				Unfavorable.....	H.....	693	61 2
	Mar. 24, 1914	.....do.....				.....do.....	H. Com.....	16	63 2
Canisteo (Sanisto) River, N.Y. (see also Susquehanna River and tributaries).	May 28, 1937	Favorable.....				Favorable.....	(.....)		
Cannasanier Lake, La. (See Tonos Bayou, etc.)									
Cannonball River at Mott, N. Dak.....			Aug. 14, 1956	434, 000		.....do.....	H.....	*35	85 1
Cannonball, Grand, and Moreau Rivers, N. Dak. and S. Dak.	July 15, 1932	Unfavorable.....				Unfavorable.....	H.....	*76	73 1

¹ Report not published.
² Abandonment of project recommended.

³ Definite project, flood control; authorized under sec. 5 of Flood Control Act of June 22, 1936.
⁴ Plus the cost of work already authorized.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys			Recommendation of the Chief of Engineers	Where published				Annual report of Chief of Engineers	
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation		Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
Cannon River, Minn., flood control (see also Mississippi River Reservoirs).	Aug. 20, 1938	Unfavorable				Unfavorable	(1)					
Canoe Creek, Ky. (See Ohio River.)												
Canochee River, Ga. (see also Ogeechee and Canoochee Rivers).			Nov. 27, 1880	\$55,499			H. Ex.	19	46	3	1881	1157
Canton, Ky. (See Cumberland River and tributaries, Kentucky and Tennessee).												
Canton, Mo. (See Mississippi River at Canton, Mo., flood protection, interim).												
Canton Reservoir. (See North Canadian River, N. Mex., Tex., and Okla.)												
Canyon Dam site near New Braunfels, Tex. (See Guadalupe River, Tex.)												
Cape Ann, Mass. (See Rockport and Sandy Bay.)												
Cape Canaveral, Fla. (See Canaveral Harbor, Fla.)												
Cape Channel (Pamlico Sound) Buxton, N.C.			May 13, 1965		Unfavorable	Unfavorable	(1)					
Cape Charles City, Va., harbors of			May 1, 1940		do	do	(1)					
			May 12, 1942	470,000		Favorable	H.	*90	79	1		
Cape Charles City Harbor, Va.			Oct. 24, 1888	155,100	Unfavorable		H. Ex.	29	51	1	1890	971
			Nov. 21, 1889	142,340								
	June 10, 1911	Unfavorable				Unfavorable	H.	1085	62	3		
	Oct. 23, 1912	do				do	H.	*1112	62	3		
	Aug. 4, 1915	(2)				(2)	H.	*524	64	1		
Cape Charles, Va. (See Franklin City.)	June 17, 1931	Favorable	July 27, 1933	20,000	Unfavorable	Unfavorable	(1)					

Cape Charles, Va., and Cherrystone Channel, harbor of refuge.	May 8, 1936	do	Nov. 9, 1937	27,000	Favorable	Favorable	H	*580	75	3		
Cape Cod and Cape Cod Harbor, Mass.			Dec. 21, 1835				H	247	25	2		
Cape Cod Canal, Mass.			Feb. 27, 1957	*360,000		Favorable	H	*168	85	1		
			Aug. 29, 1974		Unfavorable	Unfavorable	(1)					
Cape Cod Canal and Buzzards Bay, Mass.	Aug. 4, 1930	Favorable	Nov. 10, 1930	34,233,000	Favorable	Favorable	H	*795	71	3		
At Sandwich, Mass.			Sept. 21, 1939	23,250,000		Unfavorable	(1)					
Buzzards Bay and Barnstable Bay entrances.			Feb. 3, 1882	350,000			S. Ex	104	47	1	1882	579
				918,000								
Buzzards Bay to Cape Cod Bay, Mass.	Jan. 25, 1918	Favorable	Apr. 4, 1918	8,265,743	Favorable	Favorable	H	1768	65	3		
				10,000,000		do						
				5,000,000								
							H	1812	65	3		
							H	68	66	1		
							H	139	67	2		
							H. Rept.	181	68	1		
							H. Com.	3	69	1		
							H. Com.	*15	74	1		
							S.	32	18	2		
							H	83	18	2		
							H	431	77	1		
Hyannis to Barnstable Bay, Mass.	Feb. 3, 1825	Unfavorable	Dec. 10, 1934	26,000,000								
Onset Bay, Mass.												
Cape Cod Canal to Race Point, Provincetown, Mass. (See Beach Erosion studies.)	Oct. 3, 1940	Favorable	Mar. 13, 1941	96,000	Favorable	Favorable	H					
Cape Cod, Mass. (See Provincetown Harbor, Mass.)												
Cape Cod, Mass., Chatham to Point Gammon. (See Beach Erosion studies.)												
Cape Cod ship canal, Massachusetts, approaches	Feb. 16, 1897	Unfavorable				Unfavorable	H	311	54	2	1897	864
Cape Fear River Basin, Randleman and Howards Mill Reservoir, N.C.			Mar. 29, 1968	*19,463,000	Favorable	Favorable	H	*343	90	2		
Cape Fear River, N.C. (see also Northeast Branch, Cape Fear River, N.C., and Brunswick River and Deep Creek and Beaufort, N.C., to Key West and Beaufort to Cape Fear River, N.C., Inland and/or Intracoastal Waterway).	Mar. 31, 1930	Favorable	Apr. 11, 1933		Unfavorable	do	H	193	73	2		
			July 16, 1952	25,462,000		do	H	*508	87	2		
Above Fayetteville.	Jan. 27, 1883	Unfavorable					S. Ex	30	48	1	1884	1064
				2,555,000	Favorable		H	*65	54	1	1896	1144
Above Wilmington, N.C.	Feb. 1, 1923	Favorable	Oct. 24, 1895	652,000	do							
			(Dec. 31, 1924	1,520,000		Favorable	H	*786	71	3		
			Nov. 15, 1930									
			Apr. 14, 1939		Unfavorable	Unfavorable	(1)					
			June 30, 1965	*1,510,000	Favorable	Favorable	H	*252	89	1		
Anchorage Basin at Wilmington	Aug. 9, 1900	do	Nov. 24, 1900	291,500	do							
And Waccamaw River, S. C., waterway. (See Waccamaw and Cape Fear Rivers, waterway.)				30,000	do		H	*180	56	2	1901	1557

¹ Report not published.

² Abandonment of project recommended.

³ Plus cash contribution by local interests of 20 percent of project construction cost, estimated at \$90,000.

⁴ Plus non-Federal costs of \$12,460,000.

⁵ Plus non-Federal costs of \$108,000.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys			Recommendation of the Chief of Engineers	Where published				Annual report of Chief of Engineers	
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation		Congressional documents					
							House or Senate	Number	Congress	Session		Year	Page
And Deep River.....			June 1, 1872	\$2,316,711	Unfavorable		H. Ex.	108	42	3	1872	741
At and below Wilmington.....			Dec. 10, 1827	39,818			H.	127	20	1		
			July 11, 1829	154,588								
			Mar. 30, 1853	958,200								
			Mar. 18, 1858	443,400								
			Feb. 28, 1889	1,800,000	Favorable	Favorable	H. Ex.	35	51	1	1889	1132
			Jan. 13, 1906	1,050,000	do	do	H.	545	59	1		
	Aug. 5, 1909	Favorable	Jan. 31, 1911	572,940	do	do	H.	*287	62	2		
			May 5, 1939	790,000	do	do	S.	*83	76	1		
			Sept. 8, 1938	675,000	do	do	H.	*131	76	1		
			Mar. 26, 1948	1,331,000	do	do	H.	*87	81	1		
Below Wilmington.....	Dec. 14, 1912	Unfavorable				Unfavorable	H.	*17	63	1		
	Feb. 28, 1920	Favorable	Feb. 28, 1921	2,275,000	Favorable	Favorable	H.	*94	67	1		
	Feb. 17, 1926	do	Sept. 28, 1928	785,045	Favorable	Favorable	H.	*615	70	2		
			May 13, 1930	281,000	Favorable	do	H. Com.	39	71	2		
Carolina Beach pier, channel to mouth.....	Sept. 12, 1916	Unfavorable	Aug. 13, 1870	100,000		Unfavorable	H.	1990	64	2		
Northeast Branch. (See Northeast Branch). To Little River. (See Beaufort, N.C., to Key West.)												
To Winyah Bay, S.C., vicinity of Single- ton swash, Intracoastal Waterway).	Aug. 10, 1948					Unfavorable	(1)					
Waterways from Neuse River, N.C., to Norfolk Harbor, Va. (See Norfolk Harbor, Va., to Cape Fear River, waterway, also Neuse River to Cape Fear River, waterway.)												

Wilmington to Fayetteville.....	Jan. 26, 1881		56,000	Favorable.....	{S. Ex.....	45	46	3	
	Aug. 9, 1900	Favorable.....	Nov. 24, 1900		{H. Ex.....	78	46	3	1881 1018
			Feb. 7, 1907	1,320,000	do.....	H.....	180	56	2 1901 1557
			Feb. 14, 1908	1,320,000	Unfavorable.....	H. Com.....	16	59	2
				550,000	Favorable.....	{H.....	890	60	1
				615,000	Favorable.....	{H.....			
Wilmington to the sea.....	Oct. 5, 1915	do.....	Apr. 28, 1917	303,625	Favorable.....	do.....	H.....	*746	65 2
Wilmington to Navassa.....	Feb. 17, 1926	do.....	Sept. 22, 1928	23,500	do.....	do.....	H.....	*615	70 2
			May 13, 1930	23,500	do.....	do.....	H. Com.....	39	71 2
			Nov. 19, 1936	81,600	do.....	do.....	H. Com.....	*17	75 1
Cape Fear River to Beaufort, N.C., Intracoastal Waterway. (See New River up to Richlands, N.C.)									
Myrtle Sound. (See Beaufort to Cape Fear River, N.C., Intracoastal Waterway.)									
Cape Fear River, N.C., to St. Johns River, Fla., Fort Moultrie Military Reservation yacht basin.			July 31, 1939		do.....	Unfavorable.....	(1)		
Cape Fear River, N.C., to St. Johns River, Fla., Intracoastal Waterway.	Jan. 16, 1928	Favorable.....	Apr. 8, 1929	{ 5,907,000	Favorable.....	Favorable.....	{H.....	*41	71 1
			Mar. 25, 1938	{ 8,835,000	Favorable.....	Favorable.....	{H.....		
			July 3, 1936	710,000	do.....	Favorable.....	H.....	*618	75 3
	May 4, 1936	Unfavorable.....		2,760,000	do.....	do.....	H. Com.....	*6	75 1
			Mar. 22, 1939	11,000	Favorable.....	Favorable.....	(1)		
	Jan. 23, 1947	do.....	Aug. 11, 1948		Unfavorable.....	Unfavorable.....	(1)		
Bridges in Horry County, S.C.			Apr. 22, 1932	350,000	do.....	do.....	(1)		
Near Ocean Drive Beach, S.C.	June 8, 1950		Aug. 11, 1948?		Unfavorable.....	Unfavorable.....	(1)		
Vicinity of Savannah River, Ga.			Mar. 14, 1932	{ 995,432 }	do.....	do.....	(1)		
Winyah Bay to Charleston, D.C.				{ 1,000,000 }	do.....	do.....	(1)		
Yacht basin at Southport, N.C.	Apr. 18, 1938	Unfavorable.....	Jan. 17, 1938	23,500	Favorable.....	Unfavorable.....	H. Com.....	*11	72 1
					Favorable.....	Favorable.....	H.....	*549	75 3
Cape Fear to North Carolina-South Carolina State line. (See Hurricane studies.)									
Cape Foulweather, Oreg. (See Foulweather, Cape.)									
Cape Girardeau, Mo. (See Mississippi River.)									
Cape Gregory, Oreg., harbor of refuge. (See Gregory, Cape.)									
Cape Lookout, N.C. (See Lookout, Cape.)									
Cape Lookout, Oreg., harbor of refuge. (See Lookout, Cape.)									
Cape May City, N.J. (see also Cold Spring Inlet).	Nov. 1, 1890	do.....				Unfavorable.....	H. Ex.....	39	51 2 1891 1099

¹ Report not published.

² Study on cause of silting and remedial measures therefor.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

[*Indicates that maps are printed with report]

Locality	Preliminary examinations		Surveys				Where published				Annual report of Chief of Engineers
	Date of report	Recommendation	Date of report	Estimated project cost	Recommendation	Recommendation of the Chief of Engineers	Congressional documents				
							House or Senate	Number	Congress	Session		Year	Page
Cape May County, N.J., waterway connecting New Jersey State inland waterway and Delaware Bay.	Mar. 6, 1936	Favorable.....	Sept. 30, 1938	\$2,100,000	Favorable.....	Favorable.....	H.....	*133	76	1	
Cape May to Great Bay, north of Atlantic City, thoroughfare, New Jersey (See also Atlantic City Harbors).	Dec. 24, 1886	do.....	Apr. 25, 1888	{ 130,000 } { 200,000 }	do.....	do.....	H. Ex.....	306	50	1	1888 730
Cape May, N.J., to New York Bay, N.Y., inland waterway.	Oct. 3, 1890	Unfavorable.....				Unfavorable.....	H. Ex.....	50	51	2	1891 1097
Cape Neck River, York, Maine.	June 15, 1917	do.....				do.....	H.....	727	65	2	
Cape Neck River, York, Maine, mouth.			Aug. 16, 1962			do.....	(?).....				
Cape Porpoise Harbor, Maine.	July 29, 1915	do.....				do.....	H.....	526	64	1	
			Oct. 2, 1845	24,161							
	Oct. 26, 1894	Favorable.....				Favorable.....	H. Ex.....	22	53	3	1895 583
	June 3, 1905	do.....	Jan. 9, 1899	125,000	Favorable.....	Favorable.....	H.....	160	55	3	1899 1050
	May 12, 1926	(?).....	Oct. 10, 1905	46,000	do.....	Favorable.....	H.....	*191	59	1	
	Jan. 28, 1942	Favorable.....	May 8, 1943			(?).....	H.....	467	69	1	
			June 2, 1947	341,500		Favorable.....	(?).....				
Cape Small Harbor, Maine.	Aug. 4, 1902	Unfavorable.....				Favorable.....	H.....	*555	80	2	
Cape Vincent Harbor, N.Y.			Feb. 12, 1889	320,000	Favorable.....	do.....	H.....	244	58	2	1904 793
			Mar. 6, 1897	212,800							1889 2432
			Mar. 11, 1897	230,000							
			July 19, 1897	200,000							
	Mar. 13, 1917	Unfavorable.....				Unfavorable.....	H.....	304	65	1	
	Mar. 31, 1923	do.....				do.....	(?).....				
			Oct. 21, 1935	494,000	Unfavorable.....	do.....	(?).....				
			May 5, 1939	59,000	Favorable.....	Favorable.....	H.....	*363	76	1	
			Sept. 30, 1857	192,000			S. Ex.....	16	35	1	
Harbor of refuge											
Cape Arago, Calif. (See Points Dume and.)											
Cape Arago Waterway. (See Anacortes Harbor, Wash.)											

Carankaway Bay and River, Tex.	Apr. 7, 1916	Unfavorable			Unfavorable	H.	*1240	64	1		
Cardens Bottom Drainage District No. 2. (See Arkansas River, Kans., Okla., and Ark., etc.)											
Calrin Bayou, La. (see also Petit Anse, Tigre, and Calrin Bayous, and Teche Bayou, La., to Intracoastal Waterway)			Aug. 14, 1891	40,000	Favorable	do				1891	1838
Carmouchee River. (See Ozaechee River.)											
Carolina Beach and vicinity, N.C. (See Beach Erosion studies and Hurricane studies.)											
Carolina Beach Harbor, N.C.			June 13, 1966	*3,200	Favorable	Favorable	H.	*515	89	2	
Carondelet Canal, La. (See Pontchartrain Lake to Mississippi River.)											
Carpenter Point, Md. (See Charleston, Northeast River to Havre de Grace, channel).											
Carpinteria to Point Mugu, Calif. (See Beach Erosion studies.)											
Carp River, Mich.	June 25, 1931	Unfavorable				Unfavorable	H.	*142	72	1	
	Sept. 19, 1955					do	(¹)				
At Leland, Mich.			Feb. 2, 1870	237,940	Unfavorable		H. Ex	65	41	2	1870 148
	Oct. —, 1887	Unfavorable					H. Ex	58	50	1	1887 2208
Carquinez Strait, Calif. (see also San Joaquin River, from San Francisco to Stockton and San Pablo Bay).			July 26, 1887								
			July 15, 1935	2,500	Unfavorable	Unfavorable	(¹)				
	Oct. 25, 1938	Unfavorable					(¹)				
At or near Benicia, Calif.	Aug. 9, 1937	do					(¹)				
Channel to Golden Gate, off Points Pinole and Wilson and Lone Tree Point, San Pablo Bay.	Mar. 29, 1899	Favorable	Sept. 6, 1899	381,000	Favorable	Favorable	H.	89	56	1	1900 4258
To San Joaquin River at Antioch, through Suisun Bay.	Aug. 21, 1900	do	Dec. 12, 1900		Unfavorable		H.	201	56	2	1901 3449
Carrabelle Bar and Harbor, Fla. (see also Dog Island Harbor and East Pass, Carrabelle Bar, etc., and Apalachicola Bay).			Feb. 15, 1882	72,000		Favorable	S. Ex	131	47	1	1882 1314
	Feb. 6, 1895	Favorable					H. Ex	328	53	3	1895 1680
	June 24, 1899	do	Oct. 31, 1899	27,450	Favorable		H.	63	56	1	1900 2152
	July 12, 1900	do	Dec. 15, 1900	47,300	do		H.	*227	56	2	1901 1800
	June 17, 1911	Unfavorable					H.	622	62	2	
	Apr. 24, 1933	do					(¹)				
	Sept. 16, 1935	Favorable	Dec. 23, 1936	250,000	Favorable	Favorable	H.	*184	75	1	
			Mar. 12, 1954	*1,000		do	H.	*451	83	2	
			Jan. 7, 1966		Unfavorable	Unfavorable	(¹)				
Carrabelle, Crooked, Ochlockonee Rivers and Ochlockonee Bay, Fla.	Apr. 27, 1936	do	June 1, 1937	480,000	Favorable	Favorable	H.	*291	75	1	
Carrabelle, Fla. to Lanark, Turkey Point, Alligator Harbor Tide Creek, and Panacea, Gulf Intracoastal Waterway from.	Nov. 3, 1948	Unfavorable				Unfavorable	(¹)				
Carrabelle Harbor, Fla. (See Carrabelle Bar and Harbor.)											
Carris River, N. Y.	Oct. 20, 1894	do				do	H. Ex	40	53	3	1895 1003
Carrot Island Slough, N.C.	July 20, 1902	Favorable	July 20, 1093	{	52,000	Unfavorable	do	210	58	2	1904 1505
				{	45,000						

¹ Report not published.

² Abandonment of project recommended.

³ Plus contribution by local interests of $\frac{1}{3}$ the cost of construction, not to exceed \$20,000.

⁴ Annual maintenance dredging.

⁵ Increased cost of annual maintenance.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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							House or Senate	Number	Congress	Session	Year	Page
Carters Creek, Va.	June 10, 1899	Favorable	Dec. 4, 1899	\$33,900 25,600 1,800	Favorable	Unfavorable	H	*185	56	1	1900	1747
	May 10, 1921	Unfavorable			Unfavorable								(1)
	Sept. 16, 1927	Favorable	May 19, 1928	21,600	Favorable	Favorable	H	*518	70	2		
Carter Lake, Iowa and Nebr.	June 20, 1938	Unfavorable	Jan. 26, 1962		Unfavorable	Unfavorable	(1)					
					do	do	(1)					
Carthage and Monett, Mo. (See Arkansas River and tributaries.)												
Caruthersville, Mo. (See Mississippi River.)												
Carvers Bay, Mich.	Feb. 12, 1936	do				do	(1)					
Carvers Harbor, Vinalhaven, Maine	Oct. 26, 1892	Favorable	Feb. 2, 1895	64,000	Favorable	Favorable	H. Ex.	*304	53	3	1895	587
	Aug. 23, 1911	do	Jan. 24, 1912	16,000	do	do	H	*624	62	2		
			June 22, 1962	205,000		do	S	*118	87	2		
Cascade River, Minn.	May 13, 1932	Unfavorable				Unfavorable	H	*77	73	1		
Cascades, Columbia River. (See Columbia River, Oreg., and Wash.)												
Casco Bay, Maine. (See Brunswick Canal; South Harpswell, Maine south side of channel; and Portland Harbor, Maine.)												
Cases Inlet (North Bay), Puget Sound, Wash. (See Hood Canal)												
Caseville Harbor, Mich. (see also Pigeon River)	Oct. 21, 1882	do					S. Ex.	30	48	1	1884	2077
	June 15, 1905	do				Unfavorable	H	192	59	1		
	Sept. 23, 1915	do	Nov. 22, 1960	2 327,000		do	H	483	64	1		
					Favorable	H	*64	87	1			
Caseys Pass, Fla. (See Little Sarasota Bay.)												

Cashie River, N.C.	Oct. 31, 1884	Favorable	Jan. 26, 1885	3,000			H. Ex	263	48	2	1885	1053
	Oct. 19, 1896	Unfavorable					H.	88	54	2	1897	1381
			Mar. 15, 1937	27,000	Favorable	Unfavorable	H. Com	*31	75	1		
Below Windsor	Apr. 30, 1926	Favorable	June 6, 1963		Unfavorable	Favorable	(¹)					
Cashville (Broadway Road), Accomack County, Va., to Onancock River.	Mar. 4, 1938	Unfavorable	Feb. 11, 1927	5,000	Favorable	Favorable	H.	779	69	2		
Cassidy Bayou, Miss.			Dec. 10, 1884	8,000	Unfavorable	Unfavorable	H. Ex	71	48	2	1885	1534
			Sept. 19, 1887	5,000	Favorable							
Mouth, near Marks, to Belen, Miss.	May 17, 1893	Favorable										
Cass Lake, Minn., outlet to the Mississippi River.	Aug. 19, 1909	Unfavorable					Unfavorable					
Cass Lake and Leech Lake, Minn.	Dec. 20, 1920	do.					do	324	61	2		
Cass Lake, Knutson Dam, Minn.	July 2, 1926	do.					(¹)					
Cassville, Wis., to Mile 300. (See Mississippi River.)			Mar. 31, 1961				do					
							(¹)					
Castaigne Bayou, La., bar	Dec. 21, 1911	do.										
Channel	May 26, 1928	do.					H.	251	63	1		
Harbor of refuge			Feb. 27, 1880	3,410			do					
Jetties	July 10, 1933	Unfavorable					(¹)					
Castaigne Bayou, La. (See Castaigne Bayou.)							Unfavorable					
Castine Bayou, La. (See Castaigne Bayou.)												
Castle Haine, N.C. (See Northeast River.)												
Caster Bayou, La. (see also Little River and tributaries.)	Jan. 7, 1891	do.					do					
Catahoula Shoals, La. (See Ouchita River.)	Jan. 29, 1895	do.					H. Ex	185	51	2	1891	2028
Catano Bay to San Juan Harbor, P.R., channels from.	Dec. 11, 1913	Favorable	Aug. 31, 1915	26,000	Favorable	Favorable	H. Ex	303	53	3	1895	1962
Catawba River, N.C., and S.C. (see also Santee River and Wateree River).			Dec. 23, 1875	2,000,000	do.		H.	*482	64	1		
	Dec. 24, 1887	Unfavorable					H. Ex	94	44	1	1876	1,367
	Feb. 4, 1887	do.					S. Ex	161	56	2	1880	911
	Dec. 15, 1887										1888	958
	July 2, 1888						H. Ex	58	50	1	1888	961
Cat Creek or River, Va. (see also Franklin City).	June 12, 1907	Favorable	Apr. 11, 1908	12,100	Favorable	Favorable	H.	*957	60	1	1888	962
Cathance River, Maine	May 12, 1926	(³)	Nov. 20, 1879	30,000	do.		S. Ex	33	46	2	1880	354
	Feb. 26, 1946	Favorable	Aug. 25, 1947				H.	467	69	1		
							Unfavorable					
Cats Bay, Va. (See Quinby Creek, Va.)							(¹)					
Catskill Creek, N.Y. (see also Esopus, Rondout, and Catskill Creeks, N.Y.)	Oct. 26, 1896	do.					H.	56	54	2	1897	1011
	July 28, 1902	do.	Oct. 28, 1903	3,600	Favorable	Favorable	H.	*59	58	2	1904	1054
				74,111								
	Dec. 23, 1938	Unfavorable	July 29, 1930		(⁴) Unfavorable	Unfavorable	(¹)					
							do					
							(¹)					

¹ Report not published.

² Plus cash contribution, estimated at \$327,000, by local interests of 50 percent of the first cost of construction.

³ Abandonment of project recommended.

⁴ Unfavorable until all private rights to collect tolls are satisfied.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Locality	Preliminary examinations		Surveys				Where published						
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Catskill Creek, Greene County, N.Y., flood control.	Aug. 21, 1937	Unfavorable				Unfavorable	(1)						
Cattaraugus Creek, N.Y.	Dec. 26, 1935	Favorable	1835	\$55,712	Unfavorable	Unfavorable	(1)						
	Sept. 16, 1938	Unfavorable	Oct. 4, 1966	\$1,285,000	Favorable	Favorable	H	*97	90	1			
Vicinity of Gowanda, N.Y., flood control.	June 1, 1948												
Cavallo Pass, Tex. (See Matagorda Bay, etc., and Pass Cavallo, etc.)	Mar. 11, 1938	Favorable	Aug. 15, 1940	575,000	Favorable	Favorable	H	*326	77	1			
Cayuga, Buffalo, and Cazenovia Creeks, N.Y., flood control.	Nov. 30, 1935	Unfavorable	Apr. 20, 1948			do.	(1)						
Cayuga Creek and Little River, Niagara Falls, N.Y.	Nov. 26, 1946	Favorable	July 8, 1952	\$29,100		Favorable	H	*246	83	2			
			May 22, 1959	\$3,950,000		do.	H	*204	86	1			
Cayuga Inlet, Ithaca, N.Y.													
Cayuga Lake, N.Y., flood control. (See Oswego, Oneida, Seneca, and Clyde Rivers, N.Y.)													
Cazenovia Creek, N.Y. (See Cayuga, Buffalo, and Cazenovia Creeks, N.Y.)													
Cedar Bayou Pass, Corpus Christi Pass, and pass at Murdocks Landing, Tex.	Apr. 19, 1948					Unfavorable	(1)						
Cedar Bayou, Tex. (see also Brazos River).			July 10, 1875	5,750	Favorable	Unfavorable	H	58	50	1	1875	1,1941	
	Jan. 10, 1887	Unfavorable											
	Jan. 25, 1889	Favorable	Dec. 14, 1889	18,150	Favorable	Favorable	H. Ex.	84	51	1	1890	1815	
	Dec. 27, 1922	Unfavorable		51,700			(1)						
			Feb. 18, 1930	50,000	Favorable	Favorable	S	107	71	2			

Cedar City, Mo. (See Missouri River.)														
Cedar Creek, Conn. (See Bridgeport Harbor, Conn.)														
Cedar Creek, Del. (see also Mispillion River to Broadkill Creek.)	July 6, 1896	do					Unfavorable	H		79	54	2	1897	1293
Cedar Creek, Ga. (See Ocmulgee to Flint River, waterway.)														
Cedar Creek, Ill. (See Henderson River, Ill.)														
Cedar Creek, Md. (See Little Annemessex River to Tangier Sound, Md., vis Cedar and Flap Cap Creeks.)														
Cedar Creek, N.J.	Nov. 6, 1912	Favorable	Dec. 13, 1913	18,140	Favorable	Favorable	H							
Ocean County	Jan. 31, 1938	Unfavorable								*826	63	2		
Cedar Creek, Tex. (See Trinity River and tributaries, Texas.)	Sept. 29, 1938	Favorable	June 19, 1939			Unfavorable	do	(1)						
Cedar Island Channel, Fla.			Dec. 6, 1972			Unfavorable	Unfavorable	(1)		498	83	2		
Cedar Keys Harbor, Fla.			Sept. 8, 1873	37,510										
			Feb. 29, 1884	133,502		Favorable							1873	721
	Jan. 22, 1883	Favorable		25,000					(S. Ex.	30	48	1		
	Jan. 4, 1897	Unfavorable							(S. Ex.	128	48	1	1884	1223
	Aug. 2, 1905	do				Unfavorable	H			247	54	2	1897	1583
	Jan. 15, 1913	do				do	H			155	59	1		
	Jan. 14, 1891	do				do	H			*100	63	1		
Boat No. 4 channel			Feb. 29, 1884											
Northwest Channel	Jan. 22, 1883	do	Feb. 29, 1884	75,000					H. Ex.	205	51	2	1891	1676
Cedar Keys Harbor and Channel, Fla.	Apr. 1, 1927	do							(S. Ex.	128	48	1		
									(S. Ex.	30	48	1	1884	1218
Cedar Keys to Clearwater Harbor and Tampa, Fla., waterway (see also Clearwater Harbor).	Jan. 22, 1883	do	May 12, 1966			Unfavorable	Unfavorable	(1)						
Cedar Point, Ala., and Dauphin Island, shoal between. (See Dauphin Island.)									(1)					
Cedar River, Iowa	Dec. 4, 1909	do												
Cedar River, Iowa, flood control	Apr. 22, 1940	do				Unfavorable	H			696	61	2		
Cedar River, Iowa and Minn. (See Iowa and Cedar River, Iowa and Minn.)														
Cedar River and Harbor, Mich.			Nov. 30, 1881	138,000										
	May 12, 1926	(1)	Jan. 10, 1883						S. Ex.	12	47	1	1882	2119
			June 29, 1965						S. Ex.	12	47	1	1883	1639
Cedar River, Wash.			May 14, 1959	*664,000	Favorable	(5)			H.	467	69	1		
Cedar Run Creek, N.J., from main channel to Wire Creek.	Feb. 1, 1936	Unfavorable				Unfavorable	H			*248	89	1		
Centennial Lake, at Vicksburg, Miss., to Mississippi River.	Apr. 19, 1913	Favorable	Nov. 21, 1913	125,000	Favorable	Favorable	H			*667	63	2		
Center Harbor, Brooklin, Maine														
Center Hill. (See Cumberland River and tributaries, Kentucky and Tennessee.)	Oct. 2, 1905	do				Unfavorable	H			241	59	1		

¹ Report not published.

² Plus cash contribution, estimated at \$560,000, by local interests for recreational navigation, recreational fishing on breakwaters, and maintenance costs allocated to flood control.

³ Plus cash contribution, estimated at \$35,600, by local interests of 55 percent of the cost.

⁴ Plus cash contribution, estimated at \$85,000, by local interests of 2.1 percent of first cost of construction.

⁵ Abandonment of project recommended.

⁶ Plus cash contribution, estimated at \$121,000, by local interests of 15 percent of first cost of construction of navigation facilities and 50 percent of structural modifications to provide for sport fishing walkway.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Centerport Harbor, Long Island, N.Y.	May 14, 1947	Unfavorable	Nov. 1, 1888	\$133,795	Unfavorable	Unfavorable	(1)					1889	2102
Centerville Creek, Manitowoc County, Wis.													
Central and southern Florida projects. (See Florida waterways, central and southern.)			Dec. 3, 1946 ²			Favorable	H	146	80	1			
Central Valley reclamation project, California			June 23, 1955	4,331,000		Favorable	S	*103	84	2			
Chadakoin River and Lake Chautauqua, Jamestown, N.Y.			Feb. 3, 1942			Unfavorable	(1)						
Chagrin River and tributaries, Ohio, flood control.	June 23, 1939	Favorable	Sept. 24, 1880	200,420		Unfavorable	S. Ex.	41	46	3	1881	2339	
Chagrin River, Ohio	Nov. 1, 1886	Unfavorable				Unfavorable	H	58	50	1	1887	2333	
	Jan. 4, 1889	do				do					1889	2336	
			Apr. 30, 1965	\$2,200,000	Favorable	Favorable	S	*35	89	1			
Chagrin River, Ohio, vicinity of mouth, flood control.			Dec. 2, 1946			Unfavorable	(1)						
Chain of Rocks, Mississippi River. (See Mississippi River between Ohio River and mouth of Missouri River, Chain of Rocks.)						do	(1)						
Chambers Creek and Yellow Creek, Tenn., flood control.	Apr. 2, 1940	Favorable	June 6, 1942			do	(1)						
Chambers Creek, Tex. (See Trinity River and tributaries, Texas)													
Chamita Dam and Reservoir (on Rio Chama). (See Rio Grand and tributaries, New Mexico.)						do	(1)						
Champlain Canal, N.Y.	Jan. 28, 1952	Unfavorable				do	(1)						
Champlain Lake, East Alburg to West Swanton, Vt.	Jan. 24, 1936	do				do	(1)						

Champlain Lake, N.Y., and Vt. (see also Gordons Landing).	May 19, 1911	Favorable	Nov. 25, 1912	737,000	Favorable	Favorable	H	*1387	62	3		
Champlain Lake, N.Y., at Four Channels at the Narrows (see also Whitehall Harbor).	Oct. 15, 1884	do	Jan. 28, 1885	50,000	do	Favorable	H. Ex	211	48	2	1885	2314
Rouses Point Harbor	May 19, 1911	do	Nov. 25, 1912	737,000	do	Unfavorable	H	*1387	62	3		
Champlain Lake to Memphremagog Lake, canal (see also Lamoille Canal).	June 26, 1915	Unfavorable	Dec. 1, 1825	306,419		Unfavorable	H	*485	64	1		
Champlain Lake, Vt., at St. Albans	Nov. 25, 1907	Favorable	July 28, 1908	858,751		Favorable	Favorable	H				
Champlain Lake, Vt., South Hero to Milton	Mar. 2, 1936	do	Jan. 9, 1937	5,000	Unfavorable	Unfavorable	(¹)	*1109	60	2		
Champlain River, N.Y.	Feb. 27, 1883	Unfavorable					S. Ex	30	48	1	1884	2165
Champlain Creek, Islip, N.Y.	Nov. 28, 1890	do					H. Ex	66	51	2	1891	942
Chandlers River, Maine	Apr. 22, 1897	Favorable					H	43	55	1	1897	798
	May 16, 1911	Unfavorable					H	265	62	2		
	Apr. 17, 1935	do					(¹)					
	Nov. 16, 1935	do	Apr. 23, 1937		Unfavorable	do	(¹)					
Chapel Creek, Dorchester County, Md.	Mar. 12, 1948	Favorable	Dec. 12, 1950			do	(¹)					
Chapel Point Harbor, Md. (See Port Tobacco River.)							(¹)					
Charenton Canal, La., from Bayou Teche to Grand Lake (see also Atchafalaya Bay).			Feb. 27, 1880	73,196			H. Ex	54	46	2	1880	1187
Chariton and Little Chariton Rivers and tributaries, Iowa and Mo.			Mar. 22, 1965	9,167,000	Favorable	Favorable	H	*238	89	1		
Chariton River, Iowa and Mo., flood control	Apr. 21, 1939	Favorable	Apr. 22, 1944	1,610,300		do	H	*628	78	2		
Charles Cape, Va. (See Franklin City and Cape Charles City.)			May 4, 1949	14,583,640		do	H	*561	81	2		
Charles Lake, La., to Sabine River. (See Mississippi River to Corpus Christi, Tex.)												
Charles River, Mass. (see also Boston Harbor)			Dec. 17, 1878	85,000	Favorable		S. Ex	29	45	3	1879	290
Charleston Harbor, S.C. (see also Chesapeake Bay to Charleston, waterway, and Beaufort, N.C., to Key West).	1852	Favorable										
	June 26, 1854	do	May 13, 1871	61,200			S. Ex	30	41	3	1871	579
			Mar. 9, 1878	1,800,000			S. Ex	71	45	2	*1878	554
			Nov. 18, 1898	3,000,000								
	Apr. 9, 1903	Unfavorable	Oct. 10, 1903	2,408,552	Favorable	Favorable	H	*83	55	3	1899	1551
			Dec. 31, 1909	371,616		do	H	499	58	2	1904	1574
	Dec. 7, 1910	Favorable	May 15, 1911	350,000		do	S	*300	61	2		
			Sept. 9, 1940	140,000	Favorable	Favorable	H	288	62	2		
				1,820,000	Unfavorable	do	H	*156	77	1		
And Cooper River, S.C.	July 25, 1921	do	May 15, 1925	479,000	Favorable	Favorable	H					
			Feb. 18, 1939	314,000		do	H	*249	69	1		
			June 22, 1954	3,603,000	Favorable	do	H					
				465,000	do	do	H	*259	76	1		
				200,000	do	do	S	*136	83	2		

¹ Report not published.

² Bureau of Reclamation, Interior Department, report.

³ Plus non-Federal costs of \$755,000.

⁴ Rathbun Reservoir, \$14,554,000; flood protection at Mystic, Iowa, \$29,640.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Charleston Harbor, S.C.—Continued To Savannah River. (See Beaufort, etc.)			July 28, 1899	\$281,600	Favorable	Favorable	H	*84	56	1	1900	1908
Charleston Harbor, S.C., to Alligator Creek or River, waterway between (see also Alligator Creek; and Charleston Harbor to McClellanville).			Mar. 18, 1902	206,910 152,570 125,290							1903	1133
Charleston Harbor, S.C., to McClellanville (see also Alligator Creek; and Charleston Harbor to Alligator Creek).	Aug. 23, 1919	Unfavorable				Unfavorable	H	524	66	2		
Charleston Harbor, S.C., to North Santee River.			Apr. 12, 1940	(?)	Favorable	Favorable	H	*114	77	1		
Charleston Harbor, S.C., to Orangeburg, waterway. (See Orangeburg, etc.)			Dec. 8, 1941			Unfavorable	(1)					
Charleston, S.C., and St. Johns River, Fla., Intracoastal Waterway between (alternate route via Frederica River, Ga.).			Jan. 27, 1955			do	(1)					
Charleston, S.C., to St. Johns River, anchorage basin at Beaufort, S.C.			Nov. 4, 1913	100,000	Favorable	Favorable	H	*627	63	2		
Charleston, S.C. (Intracoastal Waterway between Charleston and St. Johns River, Fla., between Buckingham Landing and Hilton Head Island, Beaufort County, S.C.).	Apr. 24, 1913	Favorable	July 15, 1924	110,000	do	do	S	178	68	2		
Charleston, S.C., to Savannah, Ga., waterway (see also Beaufort, N.C., to Key West, Fla., and Savannah, Ga., to Beaufort, S.C.).												

Charleston to Columbia, S. C., waterway	Feb. 29, 1936	Unfavorable				Unfavorable	(1)							
Charleston to Winyah Bay, S. C., waterway	Dec. 9, 1912	Favorable				Favorable	H							
Charleston Neck Canal, S. C.			June 6, 1913	20,000	Favorable	Favorable	H	*178	63	1				
Charleston, Northeast River, Md., to Havre de Grace and from Havre de Grace to Red Point via Stump Point and Carpenter Point, channel from n.	Jan. 8, 1947	Unfavorable	Nov. 27, 1880	439,789	do.	Unfavorable	H. Ex	19	46	3	1881	1164		
Charleston, South Slough, Oreg., channel at Charleston, W. Va. (See Kinawaha River.)			Feb. 12, 1948	349,300		Favorable	H	*646	80	2				
Charlevoix Harbor, Mich.			Oct. 28, 1858	198,044	Unfavorable	Unfavorable	H				1869	78		
			Aug. 26, 1873	192,780	Favorable	Favorable	H				2	1873	281	
			Dec. 29, 1896	160,000	do.	Favorable	H	*154	43	2				
	Oct. 3, 1902	Unfavorable				Unfavorable	H	*144	54	2	1897	2953		
	Jan. 11, 1913	do				Unfavorable	H	222	58	2	1904	3048		
	Dec. 6, 1930	do				do.	H	*26	63	1				
	Sept. 1, 1937	Favorable	Feb. 19, 1938	15,000	Favorable	Favorable	(1)							
The south arm breakerwater	July 21, 1947					Unfavorable	S	*163	75	3				
Charlotte Harbor, Fla. (see also Punta Rasa to Charlotte Harbor inside passage; St. Johns River and Peace River; and Hurricane studies)	Apr. 28, 1950					Unfavorable	(1)							
	Nov. 3, 1884	Unfavorable				do.	(1)							
	Jan. 12, 1891	Favorable	Feb. 25, 1891	35,300	Favorable	Favorable	H. Ex	71	48	2	1885	1286		
	Sept. 18, 1902	do		468,000		Unfavorable	H				1891	*1681		
	Dec. 18, 1912	do				do.	H	181	58	2	1904	1714		
			Apr. 6, 1925	100,000		Unfavorable	(1)	*121	63	1				
			May 25, 1927	22,500	Favorable	Favorable	H. Com	*1	70	1				
			May 11, 1939		Unfavorable	Unfavorable	(1)							
			July 10, 1947			do.	(1)							
			Feb. 28, 1949	214,000		Favorable	H	*186	81	1				
			Dec. 7, 1971			Unfavorable	(1)							
And Boca Grande	Sept. 5, 1899	Favorable	Nov. 3, 1899	140,000	Favorable	do	H	*76	56	1	1900	2048		
And Boca Grande Channel			Mar. 13, 1936	59,000	do	do	H. Com	*95	74	2				
And Peace Creek			Mar. 10, 1880	17,000	do	do	S. Ex	128	46	2	1880	1100		
And Peace River, Punta Gorda to Cleveland, Fla.	Feb. 18, 1936	Unfavorable	Dec. 22, 1938		Unfavorable	Unfavorable	(1)							
And San Carlos Bay	Jan. 5, 1887	do				do	H	58	50	1	1887	1258		
Gulf to town of Boca Grande	Aug. 1, 1918	Favorable	Apr. 4, 1919	100,000	Favorable	Favorable	H	*113	66	1				
Gulf to Punta Gorda, channel			July 22, 1907	40,000	Unfavorable	Unfavorable	H. Com	1	60	1				
Port Charlotte, Channel to	Feb. 18, 1911	Unfavorable	Apr. 1, 1912	40,000	Favorable	Favorable	H	*699	62	2				
To Punta Gorda	Nov. 29, 1911	Favorable	Nov. 29, 1972		Unfavorable	Unfavorable	(1)							
Charlotte Harbor, N.Y. (see also Rochester (Charlotte) Harbor, N.Y., and Genesee River Harbor, N.Y.)	Oct. 14, 1921	do	Nov. 24, 1924	54,000	Favorable	Favorable	H	657	68	2				
			Jan. 22, 1829	28,000		do	H	106	20	2				
	Feb. 13, 1889	Unfavorable		53,919		Unfavorable	H							
	June 18, 1909	Favorable	July 15, 1909	31,680	Favorable	Favorable	H	342	61	2	1889	2424		
	Nov. 29, 1912	do	Aug. 20, 1913	28,000	do	Unfavorable	H	*287	63	1				
	Jan. 3, 1918	Unfavorable		3,800	do	do	H	*1109	65	2				
	Dec. 14, 1925	do			do	do	(1)							

¹ Report not published.

² No additional cost to United States.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Charlotte Lake, Tex.	Aug. 10, 1915	Unfavorable				Unfavorable	H.	992	64	1			
Charlotte River, Fla. (See Charlotte Harbor.)													
Chartiers Creek at Washington, Pa.	May 25, 1951	Favorable	July 11, 1957	\$1,286,000		Favorable	H.	+286	85	2			
Chartiers Creek Basin, Pa.			Dec. 24, 1953	12,207,000	Favorable	do	H.	+302	88	2			
Chassahowitzka River, Fla.	Dec. 15, 1950	Unfavorable				Unfavorable	(1)						
Castaway Bayou, La. (See Castaigne Bayou.)			Oct. 27, 1888	15,000	Favorable	Favorable					1889	599	
Chatham (Stage) Harbor, Mass.			June 17, 1941	87,000	do	do	H.	+456	77	1			
Chatham Mass. (See Beach Erosion studies.)						Unfavorable	H. Ex.	69	53	3	1895	647	
Chatham New Harbor, Mass.	Oct. 29, 1894	Unfavorable				do	H.						
Chattahoochee River, Ga., and Ala. (see also New Orleans, La., to Columbus, Ga.; Apalachicola, Chattahoochee, and Flint Rivers, Ga., and Ala.; and inland waterway from New Orleans, etc.)	Mar. 4, 1916	Favorable	July 24, 1918	1,000,000 to 32,790,000	Unfavorable	do	H.	+1664	65	3			
Above Columbus—						do	H. Ex.	17	46	2	1880	+1705	
Thomson Bridge to Columbus			Nov. 19, 1879	4,370,811			S. Ex.	132	47	1	1882	1875	
West Point to Bolton			Feb. 25, 1882	436,474			H.	134	51	2	1891	1756	
West Point to Franklin			Dec. 4, 1893	100,000	Favorable	Favorable	H. Ex.	111	56	2	1901	1793	
			June 5, 1900	1,149,914			H.						
			Aug. 31, 1952	52,930,000		Favorable	H.	+570	87	2			
Below Columbus			July 4, 1853	30,000							2	1872	584
			Mar. 28, 1872	464,000			H.	241	42	2	1873	699	
			June —, 1873	145,247									
			Jan. 10, 1883			Favorable	S. Ex.	51	47	2			
			Sep. 26, 1961	500,000		do	S.	+109	87	2			
Walter F. George lock and dam	Sept. 2, 1932	Favorable	May 12, 1919	13,500,000	Favorable	do	H.	+479	76	2			
Chattanooga, Tenn., and Rossville, Ga.	Aug. 31, 1916	do				do	H.	+1792	64	2	(1)		
Cheat River, Pa. and W. Va.			Jan. 7, 1839	13,000	Favorable	do	H.	243	53	2	1889	1905	
Cheat River, W. Va.						Unfavorable	H.	216	60	1	1904	2538	
	Jan. 21, 1903	Unfavorable				do	H.	467	69	1			
	Oct. 7, 1907	do				(1)	H.						
	May 12, 1926	(1)											

IMPROVEMENT OF RIVERS AND HARBORS—Continued

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Chenango River Basin, N.Y. (See Whitney Point Reservoir, Otselic River, N.Y.—Chenango River Basin.)						Favorable.....	(1 ²)					
Chenango River, N.Y. (see also Susquehanna River, at Oxford, N.Y.).	Nov. 4, 1937	Favorable.....										
Chena Slough, Alaska. (See Tanana River and Chena Slough, Alaska.)						Unfavorable.....	(1)					
Chene Bayou, La. (see also Crook Chene Bayou). Chequamegon Bay, Wis. (See Ashland Harbor.)	Feb. 5, 1921	do.....										
Cheraw, S.C. (See Great Pee Dee River.) Cherokee Gorge, Calif. (See Sacramento and Kern Rivers, debris control.)												
Cherokee, Okla., Salt Fork at. (See Arkansas River and tributaries.)	July 16, 1938	do.....	Apr. 19, 1939	\$10, 500, 000	Favorable.....	Favorable.....	H.....	*426	76	1		
Cherry Creek and tributaries, Colorado, flood control.												
Cherry Grove, Tilghman, Ocean Drive, Crescent, Atlantic, and Windy Hill Beaches, S.C. (See Hurricane studies.)												
Cherrystone Channel, Va. (See Cape Charles, Va., and Cherrystone Channel, harbor of refuge.)	Nov. 28, 1882	Unfavorable.....					S. Ex.....	30	48	1	1884	953
Cherrystone Creek, Va.	Mar. 7, 1936	do.....				Unfavorable.....	(1)					
Chesapeake & Delaware Canal (see also Inland waterway, Delaware River to Chesapeake Bay, Del. and Md.), at Chesapeake City, Md., anchorage basin).												

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Chesapeake Bay Waterway, Md. (See Middle River, Dark Head Creek, Gunpowder River, Chesapeake Bay Waterway, Md.)	Aug. 8, 1900	Favorable	Nov. 9, 1900	\$5,203	Favorable	H.	87	56	2	1901	1478	
Chesconnesex Creek, Va.												
Chest Creek, Pa. (See Susquehanna River and tributaries.)			Jan. 4, 1881	10,781		H. Ex.	34	46	3	1881	792	
Chester Creek, Pa.						Unfavorable	(1)					
Chester, Pa. (See Delaware River.)	May 14, 1947	Unfavorable				H.	*797	63	2			
Chester River Channel, Md.	Jan. 23, 1913	Favorable	Jan. 3, 1914	12,000	Favorable	Favorable						
Chester River, Md. (See also Kent Island Narrows; and Macum Creek, Queen Annes County, Md., at mouth of Chester River).				12,750	do	H. Ex.	65	51	1	1890	954	
Crumpton to Jones Landing	Jan. 22, 1889	do	Dec. 7, 1889	15,000		S. Ex.	25	42	3	1873	817	
Kent Island Narrows			Dec. 18, 1872	23,000								
Kirbys Landing to Crumpton			Nov. 23, 1880	7,000		S. Ex.	40	46	3	1881	856	
Queen Anne's County, Md.			Mar. 28, 1972	9,000	Unfavorable	Unfavorable	(1)					
Sprys Landing to Crumpton				11,000		S. Ex.	40	46	3	1881	856	
Chester River, Pa.				13,000		H.	677	62	2			
Chestnut Creek, Va., flood control				3,600	Favorable	Favorable	H.	*506	78	2		
Chestnut Hill. (See Delaware River, N.Y., Pa., N.J., and Del. dams.)	Apr. 3, 1911	Favorable	Dec. 19, 1911	276,125		H.						
Chetco Cove, Oreg.			Dec. 14, 1943									
Chetco Cove Harbor, Oreg.	Jan. 22, 1936	Unfavorable				Unfavorable	(1)					
Chetco River and tributaries, Oregon, flood control.	Sept. 16, 1937	do				do	(1)					
Chetco River, Oreg.	Mar. 22, 1956	do				do	(1)					
Chetco River and tributaries, Oregon, flood control.	do	Unfavorable				do	(1)					
Chetco River, Oreg.	Feb. 11, 1938	do				do	(1)					
Chetco River, Oreg.	Sept. 16, 1892	do				do		*92	52	2	1893	3429
Chetco River, Oreg.	Mar. 10, 1939	Favorable	Dec. 23, 1941	190,000		H. Ex.	817	77	2			
Chetco River, Oreg.			Mar. 4, 1965	\$1,303,000	Favorable	Favorable	H.	*21	89	1		

Chevreuil Bayou, La.....	Sept. 29, 1938	Unfavorable																	
Chevreuil Bayou and Tigre Bayou, St. James Parish, La.....	Dec. 29, 1948	Favorable	Sept. 23, 1954	\$ 627, 000		Unfavorable	(1)												
Cheyenne River, S. Dak.....	Jan. 9, 1891	Unfavorable				Favorable	H.....	*347	84	2									
Cheyenne River, S. Dak. and Wyo.....						Unfavorable	H. Ex.....	182	51	2	1891	184							
	Feb. 20, 1929	Favorable for project study.	Aug. 4, 1880			Unfavorable	H.....	*190	72	1	1880	1478							
Chicago Harbor, Ill. (see also Ship channel, etc., and Calumet-Sag Channel).			May 3, 1930			Unfavorable	H.....												
			Aug. 3, 1959	272, 000		Favorable	H.....	*280	86	2									
			Feb. 24, 1830	59, 722															
			Dec. 31, 1855	138, 516															
			Nov. 15, 1856				S. Ex.....	77	34	1									
			Sept. 30, 1857	174, 450			S. Ex.....	16	34	3									
			Nov. 15, 1858	219, 342			S. Ex.....	42	35	1									
			Aug. 2, 1864																
			June 30, 1865	88, 704															
			Nov. 30, 1869	900, 000		Favorable													
			Sept. 8, 1874	78, 000			H. Ex.....	114	41	2	1870	99							
			Nov. 4, 1878	600, 000		Favorable													
	May 14, 1915																		
	June 15, 1931	Unfavorable					H.....	*1303	64	1	1879	*1562							
	Mar. 13, 1933	do					(1)												
And adjacent harbors.....	Aug. 29, 1909	Favorable	Apr. 1, 1940			Unfavorable	do.....												
Yacht and interchange harbors.....	Feb. 6, 1937	Unfavorable	Nov. 28, 1911	1, 211, 195		Favorable	H.....	*710	62	2									
Chicago Harbor and River, Ill. (See Great Lakes Harbors studies.)						Unfavorable	(1)	*237	63	1									
Chicago River, Ill.....			Nov. 8, 1880	{ 27, 750 }															
				{ 55, 250 }			H. Ex.....	95	47	1	1881	2165							
And its branches.....	Dec. 13, 1917						H.....	*710	65	2	(1)								
Mouth to stockyards on South Branch, and Belmont Ave. on North Branch.	Apr. 17, 1926					Unfavorable	H.....	*774	69	2	(1)								
North Branch.....	Sept. 14, 1899	Favorable	Aug. 9, 1893	700, 000															
			Nov. 14, 1899	{ 810, 000 }		Favorable	H.....				1893	2794							
				{ 500, 000 }															
			Nov. 8, 1880	285, 000			H. Ex.....	95	56	1	1900	3863							
			Apr. 17, 1944	28, 000			H.....	95	47	1	1881	2165							
			June 6, 1953			Favorable	H.....	*767	78	2									
Above North Ave.....	May 12, 1915	(1)				Unfavorable	(1)												
Between Addison St. and lock at Wilmette.							H.....	*1294	64	1									
South Branch, West Fork.....	July 7, 1905	Favorable	Feb. 28, 1949	776, 000		Favorable	H.....	*294	81	1									
	May 28, 1909	do	Dec. 12, 1905	896, 000		Favorable	H.....												
West Fork and South Fork.....	Oct. 27, 1910	Unfavorable					H.....	700	59	1									
Chicago to St. Louis, waterway. (See Great Lakes to Gulf of Mexico and Lockport, Ill., etc.)	May 19, 1915	(1)					H.....	392	61	2									
							H.....	1220	62	3									
							(1)	*1294	64	1									

¹ Report not published.

² Plus cash contribution, estimated at \$9,000, by local interests of 6.5 percent of first cost of constructing small-boat access channel and portion of dike adjacent thereto.

³ Plus cash, estimated at \$257,000, or equivalent work by local interests of 29 percent of construction for which the United States is responsible.

⁴ Report of Col. C. Kaller on encroachments and obstructions.

⁵ Report on fixed bridges.

⁶ Abandonment of project recommended.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

* PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Chichagof Island, Alaska. (See Tenakee Inlet and Port Frederick on Chichagof Island, Alaska.)			May 24, 1875	\$10,380			H. Ex.	60	45	2	1875	11,170
Chickahominy River, Va.	Dec. 19, 1888	Favorable	Nov. 30, 1889	4,000	Favorable	Favorable	H. Ex.	*41	51	1	1890	1086
	Jan. 26, 1891	Unfavorable				Unfavorable	H. Ex.	217	51	2	1891	1305
Chickalah Creek, Logan and Yell Counties, Ark.	July 3, 1958			11,500			H. Ex.	95	45	3	1879	841
Chickashay (Chickasaha) River, Miss.			Feb. 6, 1879	30,000	Favorable	Favorable	H. Ex.	230	58	2	1889	1463
			Feb. 16, 1889	2,500	do	do	H.	467	69	1	1904	1854
			June 9, 1903				H.					
	May 12, 1926	(?)				(?)	H.					
	June 22, 1951					Unfavorable	H.	1730	64	2		
	Dec. 3, 1915	Unfavorable				do?	H.					
Mouth to Shubuta				6,500								
Chickasaw Creek, Mobile County, Ala.	May 11, 1909	Favorable	Dec. 3, 1909	14,000	Unfavorable	do	H.	712	61	2		
				29,000								
	June 15, 1931	{do ^s }	July 15, 1932	41,800	Favorable	Favorable	H.	*47	73	1		
		{Unfavorable}		42,000								
Chickasawha (Chickasawhay) River, Miss. (See Chickasahay River).						do	H.	*410	75	2		
Chickasawhay River and tributaries, Mississippi, flood control. (See also Chunky Creek, etc.)	Mar. 1, 1937	Favorable										
Chico Bayou, Fla. (See also Pensacola Bay into Chico Bay, Fla.)	Feb. 5, 1923	do	Aug. 11, 1925	110,000	Favorable	Unfavorable	(?)					
Channel from Pensacola Bay	Dec. 6, 1930	Unfavorable		77,000			do					
Chico Creek, Calif., and adjacent streams			Mar. 31, 1961				S. Ex.	30	48	1	1884	1005
Chicamuxen Creek, Md.	Dec. 21, 1882	Unfavorable					H.	*434	86	2		
Chicopee River Basin, Mass. (Connecticut River Basin.)			June 1, 1960	5,180,000		Favorable						

Chien Lake, La., to Intracoastal Waterway	Apr. 8, 1931	Unfavorable					Unfavorable	(1)						
Chiffo Dam and Reservoir. (See Rio Grande and tributaries, New Mexico.)														
Chikaskia River. (See Salt Fork River and Arkansas River and tributaries.)														
Chikaskia River, Okla., levees south of Antwine, flood control. (See Braman Reservoir, Okla.)														
Chincoteague Bay, Md. (See George Island Landing, Md., to Chincoteague Bay, Md.)														
Chincoteague Bay, Va. (See also Chesapeake Bay to Chincoteague Bay, Va., inland waterway.)	Dec. 14, 1940		Unfavorable	do				(1)						
At Chincoteague, Va.	May 23, 1938	Unfavorable		do				(1)						
At Greenbackville and Franklin City, Va.	May 11, 1936	do	Feb. 6, 1937	25,700	Favorable	Favorable	H		*233	75	1			
Channels and inlet, harbor of refuge	Jan. 17, 1931	do						(1)						
To Delaware Bay, at or near Lewes, Del., waterway.	Oct. 17, 1884	Favorable	Apr. 6, 1885	350,000	Favorable	do	H, Ex		107	48	2	1885	891	
	Aug. 31, 1905	do	Dec. 1, 1905	50,300	do	Favorable	H		*538	59	1			
	Feb. 28, 1920	do	Sept. 2, 1921	246,400	do	do	H		*128	67	2			
			Dec. 10, 1929	410,400	Unfavorable	Unfavorable	H							
Chincoteague Harbor, Accomack County, Va.			Nov. 27, 1962		do	do	(1)							
Chincoteague Inlet, Va. (See also Hommacks, Md., and Franklin City, Va.)	Dec. 31, 1909	do	July 6, 1910	55,000	do	do	(1)							
Franklin to Chincoteague Island			Feb. 13, 1880	633,752	Favorable	do	H		1094	62	3			
				61,250										
				97,500			S. Ex		90	46	2	1880	742	
For breakwaters	Oct. 30, 1888	Favorable	Feb. 4, 1890	143,750										
Chincoteague Island, Va. (See Assateague Channel, Accomack County, and Chincoteague Island, Va.)				3,782,688	Favorable	Favorable	H, Ex		207	51	1	1890	980	
Chino Creek, Calif., flood control. (See San Antonio and Chino Creeks; and Santa Ana River and tributaries.)														
Chinook, Wash. (See Columbia River, Wash., Chinook to Sand Island.)														
Chipola River, Ala. and Fla.			Oct. 7, 1948			Unfavorable	(1)							
Chipola River, Fla.			Aug. 26, 1881	21,000			S. Ex		11	47	1	1882	1305	
	Nov. 11, 1897	Indefinite	Jan. 30, 1889	7,500	Favorable	Favorable	H					1889	1416	
	May 18, 1911	Unfavorable				Unfavorable	H		101	55	2	1898	1423	
						do	H		463	62	2			
Upper	May 12, 1926	(*)	Dec. 12, 1967		Unfavorable	do	(1)		467	69	1			
							H							

* Report not published.

† Abandonment of project recommended.

‡ Favorable for adoption of a project for snagging.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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							House or Senate	Number	Congress	Session		Year	Page
Chippewa Harbor, Isle Royale, Mich. (See Coasts of the Great Lakes, harbors of refuge for light-draft vessels.)													
Chippewa River, Mich. (See Tittabawassee and Chippewa Rivers.)						Unfavorable	H	*171	72	1			
Chippewa River, Wis. (see also Mississippi River reservoirs).	Nov. 20, 1929	Unfavorable	Aug. 16, 1955			do	()						
Below Chippewa Falls	July 26, 1944	Favorable	Jan. 30, 1875	\$167,645			H. Ex.	75	43	2	1875	375	
			Dec. 13, 1875	579,807	Favorable		H. Ex.	68	44	1	1876	707	
							S. Ex.	12	49	1	1887	1726	
Causes of overflow	Dec. 7, 1886	Unfavorable	Feb. 4, 1896			Unfavorable	H	*245	54	1	1896	1864	
2 miles south of Dells Dam			Nov. 3, 1941	136,000		Favorable	H	625	77	*2			
Chittenango Creek and tributaries, New York	July 13, 1939	Favorable	Mar. 12, 1969			Unfavorable	()						
				55,000	Favorable						1889	1465	
Chitto Bogue, La.	June 21, 1883	Unfavorable	June 24, 1889	15,000	do	Favorable	H	*445	56	1	1900	2403	
Chocolate Bayou, Tex.	July 24, 1893	Favorable	Jan. 24, 1900			do	H	*217	89	1			
			Mar. 29, 1965	1,254,000	do	do	H	*768	80	2			
Chocolate Bayou and Bastrop Bayou, Tex.			July 23, 1947	266,480		do	H	*337	76	1			
Chocolate Bayou, Bastrop Bayou, and Oyster Creek, Tex.			Apr. 28, 1939	78,000		do	H						
Choctaw Bayou, La. (see also Jordan River and tributaries).	Nov. 23, 1912	Unfavorable				Unfavorable	H	*19	63	1			
Choctawhatchee Bay, Fla. (see also East Pass Channel into Choctawhatchee Bay, Fla.):						do	()						
And entrance through East Pass	June 20, 1923	do				do	()						
Channel to Santa Rosa, Fla.	Nov. 22, 1930	Favorable	Sept. 15, 1931	11,500	Unfavorable	do	()						
East Pass Channel to the gulf	June 2, 1927	do	Jan. 25, 1928	7,280	Favorable		H	209	70	1			
				600		Favorable	H. Ex.	86	52	2	1893	1738	
Mouth of Alaqua Bayou	Sept. 16, 1892	Unfavorable				Unfavorable	()						
Small boat channel at Bay Bridge to Freeport, Fla. (See La Grange to Bayou, Fla.)	Mar. 29, 1956					do	()						
Waterway connecting Basin Bayou			Mar. 23, 1956			do	()						

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Christiana River and Wilmington Harbors, Del. (see also Brandywine River and Wilmington Harbor).			Jan. 7, 1881	\$206,701	Favorable		H. Ex.	34	46	3	1881	771
			June 18, 1891	392,000	do						1891	*1138
				303,430	do	Favorable	H	66	54	1	1896	973
	Nov. 16, 1894	Favorable	Aug. 15, 1895	1,269,494	Unfavorable	Unfavorable	H	399	61	2		
Christiansted Harbor, St. Croix, V.I.	May 9, 1909	Unfavorable				do	(1)					
	Mar. 23, 1921	do			Unfavorable	do	(1)					
Chuckatuck Creek, Va.	July 13, 1946	Favorable	Sept. 25, 1928			Favorable	H	*771	80	2		
	Dec. 8, 1888	Unfavorable	June 21, 1948	261,000	Unfavorable	Favorable					1889	968
Chuckatuck River, Va.			Mar. 21, 1961			do	(1)					
	Nov. 28, 1927	Favorable				do	(1)					
Chugae Point, Dauphin Island, Ala., to Indian Mounds and channel to.	Sept. 13, 1938	Unfavorable				do	(1)					
	Jan. 22, 1936	Favorable	Jan. 11, 1937		Unfavorable	do	(1)					
Chunky Creek, Chickasawhay River, and Pascagoula River, Miss.	Mar. 24, 1939	do	Jan. 29, 1944			do	(1)					
	Oct. 18, 1951		July 26, 1962	2,574,000		Favorable	H	*549	87	2		
Church and Bohicket Creeks, and Church Flats, S.C. (see also Charleston, S.C., to Savannah, Ga. waterway).	Feb. 5, 1918	Unfavorable				Unfavorable	H	*1156	65	2		
			Feb. 9, 1828	5,500			H	154	20	1		
Churchs Cove, Little Compton, R.I.												
Cibolo River, Tex. (See Antonio River and tributaries.)					Unfavorable	Unfavorable ³	H	*308	74	1		
	Nov. 6, 1939	Favorable	Sept. 15, 1931			do	(1)					
Cimarron River, N. Mex., Kans., and Okla., flood control.			Mar. 31, 1947									
Cincinnati, Ohio. (See Licking River, harbor of refuge and Ohio River; and Mill Creek Valley in Cincinnati, Ohio.)												
Citadel, South Carolina Military Academy, Ashley River to (see also Ashley River, S.C.).	Nov. 12, 1935	do	Jan. 10, 1936	340,000	Favorable	Favorable	H	*449	74	2		

City Island, New York City, breakwater	July 22, 1931	Unfavorable																	
City West Harbor, Ind.																			
Clackamas Rapids. (See Willamette River at.)			Feb. 8, 1838	150,000		Unfavorable	(¹)												
Clackamas River, Ore.	Dec. 22, 1888	Unfavorable					S	225	25	2									
Claiborne-Annapolis Ferry. (See Matapeake, Md., at Claiborne-Annapolis Ferry.)																			
Claiborne Harbor, Md.	Nov. 7, 1894	do				Unfavorable												1889	2523
	June 1, 1899	Favorable	Oct. 26, 1899	17,490	Favorable	do	H. Ex.	61	53	3	1895	1199							
Clallam Bay, Wash.	Jan. 1, 1895	Unfavorable	May 27, 1930	12,125	do	Favorable	H.	81	56	1	1900	1677							
Clam Creek, N.J. (See Absecon Inlet, N.J.)						do	S	*157	71	2									
Clarendon and Lower White River, Ark., damages from backwater of Mississippi River.			Feb. 1, 1892			Unfavorable	H. Ex.	226	53	3	1895	3456							
			Mar. 9, 1892	1,000,000		Favorable	H. Ex.	118	52	1									
Clarion River, Pa.			Oct. 28, 1881	40,000		Unfavorable	H. Ex.	163	52	1									
				6,000,000			S. Ex.	18	47	1	1882	1938							
Clark Creek or River, S.C. (see also Lynch River)	Dec. 12, 1895	Favorable																	
	Feb. 4, 1887	do	Sept. 5, 1887	7,500		Favorable	H.	187	54	1	1896	2208							
	May 12, 1926	(¹)																	
Clarke River, Ky. (Tennessee River and tribs.)			May 30, 1972			Unfavorable	(¹)	467	69	1									
Clark Fork. (See Columbia River and tributaries.)																			
Clark Fork of Columbia River from international boundary to mouth of Big Blackfoot River, Mont. (see also Pend Oreille River)	Mar. 21, 1891	Unfavorable				Unfavorable	(¹)												
Clark Fork River, Idaho, Albany Falls to Lake Pend Oreille.	Oct. 14, 1915	do				Unfavorable												1891	3250
Clark Hill Reservoir, Ga. (See Savannah River, Ga., S.C., and N.C.)							H.	1095	64	1									
Clark Point, New Bedford, Mass. (See Beach Erosion studies.)																			
Clark River, Ore. (See Lewis River, etc.)																			
Clarksburg, W. Va. (See Monongahela River, etc., West Virginia.)			June 2, 1965			Unfavorable	do												
Clarks Point, Alaska (Southwestern Alaska)							(¹)												
Clarksville, Mo. (See Mississippi River.)																			
Clarksville, Tenn., Cumberland River at, flood control.	June 7, 1939	Unfavorable					do												
Clason Point Harbor, N.Y.	Oct. 6, 1917	do					(¹)												
Clatskanie River, Ore.	Feb. 7, 1895	Favorable	Dec. 20, 1897	13,000	Favorable	do	H.	542	65	2									
	Apr. 1, 1905	Unfavorable					H.	330	53	3	1895	3596							
	June 12, 1909	Favorable	Oct. 5, 1909	4,200	Favorable	Unfavorable	H.	218	55	2	1898	3049							
			Sept. 8, 1910	\$ 55,000	do	Favorable	H.	134	59	1									
							H.	633	61	2									
							H.	28	62	1									

¹ Report not published.

² Plus non-Federal cost of \$1,000,000.

³ Combined with 308 report on Arkansas River and tributaries.

⁴ Abandonment of project recommended.

⁵ For construction of combination dredge and snagboat for maintenance work on Lewis, Cowlitz, and Clatskanie Rivers.

IMPROVEMENT OF RIVERS AND HARBORS—Continued

PRELIMINARY EXAMINATION AND SURVEY REPORTS MADE TO DEC. 31, 1974—Continued

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Clatskanie to the Columbia River.....	May 22, 1915	Favorable.....	Sept. 22, 1915	\$4,620	Favorable.....	Favorable.....	H.....	698	64	1			
	Oct. 26, 1927	Unfavorable.....				Unfavorable.....	(?).....						
Clatskanie River and tributaries, Oregon, flood control.	Mar. 15, 1938	do.....				do.....	(?).....						
Claypit Creek. (See Shrewsbury River, N.J.)	July 11, 1905	do.....				do.....	H.....	71	59	1			
Clayton Harbor, N.Y.....	Mar. 18, 1921	do.....				do.....	(?).....						
			Aug. 26, 1935	1,929,000	Unfavorable.....	do.....	(?).....						
				313,000		do.....	(?).....						
				184,000		do.....	(?).....						
Clear and Dogy Creeks, Osage County, Okla.....	Nov. 13, 1957	Unfavorable.....	Sept. 21, 1933	9,000	Favorable.....	Favorable.....	H.....	*264	73	2			
Clear Creek and Clear Lake, Tex.....	Jan. 28, 1931		Nov. 27, 1940	30,000	Favorable.....	Favorable.....	H.....	*319	77	1			
Clear Creek, Ill. (See Reeds Creek, Marys River, Kincaid Creek, and Clear creek.)						Unfavorable.....	(?).....						
Clear Creek at Pierce City, Mo., Arkansas River Basin.	Feb. 16, 1950												
Clear Creek, Tenn. (See Tennessee River and tributaries.)	July 24, 1899	Favorable.....	Jan. 24, 1900	10,000	Unfavorable.....	Favorable.....	H.....	*449	56	1	1900	2385	
Clear Creek, Tex.....			Mar. 8, 1968	\$12,600,000	Favorable.....	Favorable.....	H.....	*351	90	2			
Clearfield Creek, Pa. (See Susquehanna River and tributaries.)		Unfavorable.....				Unfavorable.....	(?).....						
Clear Fork of the Mohican River in Richland County, Ohio, flood control.	Dec. 23, 1946						H. Ex.....	30	48	1	1884	2210	
Clear Lake, Calif.....	Nov. 27, 1882	do.....					H. Ex.....	58	50	1	1887	1490	
Clear Lake, La.....	Sept. 19, 1887	do.....					H.....	*293	86	2			
Clearwater Bay, Little Pass, Fla.			Aug. 14, 1959	\$104,000		Favorable.....	H.....	12	49	1	1885	1323	
Clearwater Harbor, Fla. (see also Cedar Keys to Clearwater Harbor and Tampa Waterway and Boca Ceiga Bay).	Oct. 30, 1884	Favorable.....	Feb. 14, 1885	11,553	Favorable.....	Unfavorable.....	S. Ex.....	249	54	2	1897	1578	
	Jan. 19, 1897	do.....				do.....	(?).....						
			May 28, 1935		Unfavorable.....	do.....	H.....	*174	63	1			
And Boca Ceiga Bay, Fla.	May 31, 1913	Unfavorable.....				do.....	(?).....						
	Nov. 9, 1928	do.....				do.....							