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WATER RESOURCES DEVELOPMENT ACT OF 1999

REPORT

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

TO ACCOMPANY

S. 507

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Calendar No. 72

106TH CONGRESS *1st Session* | SENATE | REPORT 106–34

WATER RESOURCES DEVELOPMENT ACT OF 1999

MARCH 23, 1999.—Ordered to be printed.

Mr. CHAFEE, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 507]

The Committee on Environment and Public Works, to which was referred the bill (S. 507) to provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill do pass.

GENERAL STATEMENT

In reporting the Water Resources Development Act of 1999, the Committee has chosen to adhere to the policies established in the 1986 Water Resources Development Act (P.L. 99–662), and continued in subsequent Acts, regarding the authorization of projects within the civil works program of the Army Corps of Engineers. This bill includes authorization for 43 new construction projects, for flood control, navigation, hurricane protection and beach erosion control, and environmental restoration.

The Water Resources Development Act of 1986, signed into law on November 17, 1986, marked the end of a 16-year deadlock, between the Congress and the executive branch regarding authorization of the public works program. In addition to authorizing numerous projects, the 1986 Act resolved longstanding disputes relating to cost-sharing, user fees, and environmental requirements.

Prior to 1986, disputes over these and other matters had prevented enactment of major civil works legislation since 1970. Between 1947 and 1970, civil works authorization bills were enacted every 2 to 3 years. This regular schedule had many advantages. It helped to avoid long delays between the planning and the execution of projects; assured that engineering work and economic analysis

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were applicable to current conditions; minimized the backlog of projects that have been considered but not authorized by Congress; and allowed the Public Works Committees of the Congress to review proposed projects, programs and agency policies on a regular schedule.

Nevertheless, this system broke down in the 1970's. There was no legislation enacted between 1970 and 1986 to authorize civil works projects for construction. The Water Resources Development Act of 1976 (Public Law 94–587) made some changes to Corps policies, but authorized no projects.

In 1986, a House-Senate Conference Committee produced a Conference Report (H. Rept. 99 1013) which was passed by the House and the Senate and signed into law on November 17, 1986 (Public Law 99–662). The Water Resources Development Act of 1986 was the largest and most comprehensive authorization of the Corps' Civil Works Program since the Senate Public Works Committee was created in 1947.

Some of the major reforms included in the Water Resources Development Act of 1986 (and maintained in this legislation) are listed below:

Cost-sharing formulas were established for deep draft harbor dredging (section 101), flood control (section 103), shoreline protection (section 103), streambanks erosion control (section 603), and other projects. Local Cooperation Agreements were required for all such projects. Projects for enhancement of fish and wildlife resources were allowed to be carried out at up to 100 percent Federal expense under section 906 and environmental restoration at 75 percent Federal expense under section 1135.

The Harbor Maintenance Trust Fund, capitalized by a new Harbor Maintenance Fee, was established to pay 40 percent of the Federal cost of maintaining authorized deep draft navigation channels (sections 210, 1402 and 1403), and was subsequently increased to 100 percent under the 1990 Water Resources Development Act.

Projects authorized prior to 1986 that were incomplete would be deauthorized without congressional action if no funds were expended on the project for a period of 10 years; projects authorized in 1986 or thereafter would be deauthorized if not funded for a period of 5 years (section 1001).

These policy changes applied to all projects contained in the Water Resources Development Acts of 1988 (Public Law 100–676); 1990 (Public Law 101–640); 1992 (Public Law 102–580); 1996 (Public Law 104–303) and will continue to apply to all projects contained in the Water Resources Development Act of 1999.

Statement of Committee Policy

Since 1986, it has been the policy of the Committee to authorize only those construction projects that conform with cost-sharing and other policies established in the Water Resources Development Act of 1986. In addition, it has been the policy of the Committee to require projects to have undergone full and final engineering, economic and environmental review by the Chief of Engineers prior to project approvals by the Committee.

The Corps of Engineers water resources project study process can be initiated when either of the two Public Works Committees of the

Congress approves a committee resolution requesting that the study of a potential project area be undertaken. Once such a resolution is approved by either committee, the Corps is authorized to proceed with a reconnaissance study of the proposed project at 100 percent Federal cost. The purpose of a reconnaissance study is to determine whether or not there is a Federal interest in the project. Authorization of a reconnaissance study may also be provided by statute. Army Corps policy now requires all reconnaissance studies to completed within 12 months and at a cost of no greater than $100,000.

If, after completion of the reconnaissance study, a project is deemed to be in the Federal interest, the Federal Government and a non-Federal sponsor may enter into an equally cost-shared feasibility study. The feasibility study includes a more detailed set of engineering, economic and environmental analyses to determine whether a project is justified to advance to the construction phase. When the feasibility study is completed, the Corps District Engineer reviews the results and forwards a recommendation on the project to the Division Engineer. The Division Engineer issues a Division Engineer's notice and then submits the report to Corps Headquarters. Headquarters performs a final policy review and submits the report for the mandatory (33 U.S.C. 701 1(a)) 90-day State and agency review period. After these reviews are complete and the report is found favorable, a report is prepared for the final recommendation of the Chief of Engineers. The report of the Chief of Engineers is forwarded to the Assistant Secretary of the Army (Civil Works) for Administration review and submission to the Congress.

Some of the projects sent to the Assistant Secretary of the Army by the Chief of Engineers are forwarded to the Congress with a recommendation that construction be authorized. Such a recommendation only occurs after the project has been reviewed by the Office of Management and Budget. It is the prerogative of the Administration to make recommendations regarding the authorization of Corps projects. However, the Committee is not bound by these recommendations. The decision to authorize a project rests with the two Houses of Congress.

The review of projects by the Chief of Engineers is technical in nature and does not involve either a political or policy judgment. The Committee practice of using Chief of Engineers' reports to measure the validity of projects does not represent a pre-clearance of projects with the Administration. If the technical Chief of Engineers' review process ever becomes unduly influenced by political or policy-related considerations, the Committee would reevaluate the practice of using Chief of Engineers' reports for the purpose of helping to determine project authorization.

The contingent authorization of water resources projects not expected to have final reports of the Chief of Engineers in the same calendar year as the Water Resources Development Act under consideration is contrary to the policy of the Committee. Exceptions to this fundamental Committee practice are not supported.

THE 1999 WATER RESOURCES DEVELOPMENT ACT

S. 507, the Water Resources Development Act of 1999, introduced on March 2, 1999, by Senators Warner, Chafee, Baucus, Voinovich, Lautenberg, Bennett, and Boxer, contains new project authorizations and new programs, as requested by the Administration, as well as several modifications to existing projects and programs also requested by the Administration. S. 507, as reported by the Committee, incorporates some of these provisions as outlined below.

SECTION 201—FLOOD HAZARD MITIGATION AND RIVERINE ECOSYSTEM RESTORATION PROGRAM

One of the Administration's major proposals is to authorize a new continuing authorities program (wherein the individual projects do not require congressional authorization) for non-structural flood control and riverine ecosystem restoration projects. This section proposes a major new initiative which would authorize the Secretary of the Army to construct non-structural (upland water storage, voluntary buyouts, setback levees, flood warning systems) flood control projects at a cost share of 65 percent Federal and 35 percent non-Federal. The legislation reported by the Committee recommends a 2-year program with a total authorization level of $75 million and a per project cap of $25 million. These numbers reflect a reduction from the Administration's original proposal. Members of the Committee reduced the cost and duration of the new program in order to better assess its efficacy after 2 years.

SECTION 202—SHORE PROTECTION PROJECTS

In 1998 the Administration proposed dramatic changes in cost sharing for coastal shore protection projects. The current cost sharing for shore protection projects is 65 percent Federal and 35 percent non-Federal for initial construction and for the 50-year renourishment life of the project. The Administration proposed to modify the cost share so that the renourishment work would be 35 percent Federal and 65 percent non-Federal. After conducting detailed budgetary, economic and equity analyses, the legislation reported by the Committee instead proposes that the renourishment be cost shared equally at 50–50 between the Federal and non-Federal project sponsors. The reported legislation would apply the new equal cost share to those projects (that advance to construction) not having a completed feasibility study before December 31, 1999.

SECTION 209—RECREATIONAL USER FEES

Additionally in 1998, the Administration proposed to modify the expenditure of fees collected at Corps recreation sites. The provision would allow the Corps to use any recreation fees it collects above an annual, national baseline level of $34 million to remain at the park from which the fee originated. For the portion of the fee that remains at the park, the Corps can only fund maintenance activities, such as campground or trail upkeep. The legislation reported by the Committee includes said provision.

SECTION-BY-SECTION ANALYSIS

Sec. 1. Short Title; Table of Contents

This section designates the title of the bill as "The Water Resources Development Act of 1999" and lists the table of contents.

Sec. 2. Definition of Secretary

This section defines the term "Secretary" for the purposes of this Act as the Secretary of the Army.

TITLE I—WATER RESOURCES PROJECTS

Sec. 101. Project Authorizations

This section provides authority for the Secretary to carry out 43 projects for water resources development, conservation, and other purposes substantially in accordance with the plans recommended in the reports referenced in the bill language. Descriptions of the projects are as follows:

(a) Projects with Chief's Reports

Subsection (a) of Section 101 authorizes the following 22 projects for water resources development, and conservation and other purposes to be carried out by the Secretary substantially in accordance with the plans, and subject to the conditions recommended in a final report of the Chief of Engineers.

SAND POINT HARBOR, ALASKA

Location.—Sand Point, Alaska.
Purpose.—navigation.
Problem.—Sand Point is one of the Alaska's most productive fishing areas. The harbor currently provides no permanent protected moorage for vessels larger than 80 feet. In recent years, the fleet operating in the Bering Sea/Aleutian Island area, made up primarily of vessels ranging from 80 to 160 feet, has grown significantly. Vessels fishing in the Sand Point area currently travel long distances to secure protected moorage.
Recommended Plan.—A mooring basin would be constructed adjacent to the south of the existing harbor. It incorporates the existing southern breakwater and the causeway to the city dock by extending the existing breakwater to form a basin for the design fleet. A second breakwater, 730 feet long, will be constructed from shore.
Project Costs.—Total cost $11,760,000. Federal cost $6,964,000; non-Federal cost $4,796,000.
Benefit/Cost Ratio.—1.9 to 1

RIO SALADO (SALT RIVER), ARIZONA

Location.—Phoenix and Tempe, Arizona.
Purpose.—environmental restoration and recreation.
Problem.—Portions of the Indian Bend Wash and the Salt River in Tempe, and a 5-mile section of the Salt River in Phoenix have experienced destruction of native plant communities and federally listed threatened and endangered species habitat.

Recommended Plan.—The plan would provide for water supply and infrastructure features to reestablish and support native vegetation and wildlife habitat; drop structures and low flow channels; monitoring and adaptive management plans; and a recreational plan.

Project Costs.—Total cost $88,048,000. Federal cost $56,355,000; non-Federal cost $31,693,000.

Benefit/Cost Ratio.—The cost of the recommended plan is justified by the restoration of valuable habitat.

TUCSON DRAINAGE AREA, ARIZONA

Location.—Tucson, Arizona.

Purpose.—flood damage reduction, environmental restoration, and recreation.

Problem.—Flooding results from increased development and its effect on rainfall runoff. Limited channel capacities of the existing channels and tributaries cause frequent and severe flooding.

Recommended Plan.—The plan consists of two large detention basin complexes, one at Randolph Golf Course in the upper watershed and the other upstream of Park Avenue in the center of the basin. The recommended plan provides protection from the 1-percent exceedance flood. The Park Avenue complex also provides for environmental restoration of approximately 10 acres of desert riparian habitat and includes limited recreational facilities compatible with the flood control and environmental purposes. Mitigation for project construction included 6.8 acres of riparian habitat and 0.4 acres of upland desert vegetation.

Project Costs.—Total cost $29,900,000. Federal cost $16,768,000; non-Federal cost $13,132,000.

Benefit/Cost Ratio.—1.3 to 1

AMERICAN RIVER WATERSHED, CALIFORNIA

Location.—Sacramento, California.

Purpose.—flood damage reduction.

Problem.—The flood plain at the confluence of the Sacramento and American Rivers has been widely developed over the past 150 years and now has approximately a 1 in 80 chance of being flooded by the American River in any year. Because the American River watershed is steep, runoff increases very rapidly after a major storm. Approximately 400,00 people live in the 55,000 acre area which could be flooded there are approximately 160,000 residential structures, 5,000 businesses and 1,200 government facilities including the State Capitol in the potential flood plain.

Recommended Plan.—The Stepped Release flood damage reduction project shall be implemented after the stabilization of existing levees and development of flood warning features, authorized in Water Resources Development Act of 1996, and after reviewing the design of such Stepped Release project features to determine if modifications are necessary to account for changes in hydrological or other conditions. The Committee has received assurances in a July 29, 1998, letter from the Assistant Secretary of the Army that the Corps has the discretionary authority to consider measures to minimize adverse project impacts or allow for more timely implementation of a project. The Assistant Sec-

retary further confirms that the measures developed by the Corps as part of the Stepped Release Plan will adequately mitigate for all potential downstream impacts. Implementation of the remaining downstream elements may be undertaken only after the Secretary, in consultation with affected Federal, state, regional, and local entities, has reviewed the elements to determine if modifications, as called for in the March 1996 SIR, including stepped operation of Folsom Dam and Reservoir, are necessary.
Project Costs.—Total cost $505,400,000. Federal cost $329,300,000; non-Federal cost $176,100,000.
Benefit/Cost Ratio.—1.6 to 1

LLAGAS CREEK, CALIFORNIA

Location.—Southern Santa Clara County, vicinity of the communities of Morgan Hill, San Martin, and Gilroy, California.
Purpose.—flood damage reduction.
Problem.—Due to commercial and residential growth in the Santa Clara Valley, annual damages estimated during a 1 in 100 year flood event would inundate 5,300 acres.
Recommended Plan.—The plan recommends completion the remaining reaches of the National Resources Conservation Service flood control project at Llagas Creek, California. The project consists of channel improvements and a diversion channel providing a 100-year level of flood protection, to 946 acres of urban land and 10 year protection to 1,280 acres agricultural land.
Project Costs.—Total cost $45,000,000. Federal cost $21,800,000; non-Federal cost $23,200,000.
Benefit/Cost Ratio.—1.0 to 1.0

SOUTH SACRAMENTO COUNTY STREAMS, CALIFORNIA

Location.—San Joaquin County (South Sacramento County Streams), California.
Purpose.—flood control, environmental restoration, and recreation.
Problem.—High risk of flooding potentially impacting 100,000 people and causing between $1 and $2 billion in damages.
Recommended Plan.—The plan would address flood problems and the need for additional water resources-related recreation and environmental restoration.
Project Costs.—Total cost $65,500,000. Federal cost $41,200,000; non-Federal cost $24,300,000.
Benefit/Cost Ratio.—4.2 to 1

UPPER GUADALUPE RIVER, CALIFORNIA

Location.—San Jose, Santa Clara County, California.
Purpose.—flood damage reduction and recreation.
Problem.—The area has experienced severe flooding, most recently in 1982, 1983, 1995, and 1998. Over 7,500 new residential and commercial buildings lie within the Federal Emergency Agency (FEMA) regulatory flood plain. The estimated damages have ranged from $3 million to nearly $15 million. It is estimated that a 1 in 100 year flood would result in approximately $280 million in damages within the study area.

Recommended Plan.—The plan recommends construction of the locally preferred plan described as the Bypass Channel Plan, which combines channel widening bypass channels, flood wall, and bridge replacement to increase channel capacity throughout the bypass area. The Bypass Channel Plan would remove over 6,600 buildings from the regulatory flood plain by widening almost 2 miles of existing channel, constructing over ° mile of flood walls and levees, constructing three bypass channels and replacing five bridges.

Project Costs.—Total cost $137,600,000. Federal cost $44,000,000; non-Federal cost $93,600,000.

Benefit / Cost Ratio.—2.1 to 1

YUBA RIVER BASIN, CALIFORNIA

Location.—Yuba City-Marysville, California.

Purpose.—flood damage reduction.

Problem.—Levee breaks in 1986 and 1997 inundated the two towns, resulting in evacuation, damages and loss of life.

Recommended Plan.—The plan would provide protection from a flood having 1 in 200 chance of occurring in any given year along the Yuba and Feather Rivers in reach 1, the area around and including the communities of Linda and Olivehurst, and reach 2, the area around Best Slough/Lower Reclamation District No. 784. The plan would also provide protection from a flood having 1 in 300 chance of occurring in any given year in reach 3, the City of Marysville. In reaches 1 and 2, the major features of the recommended plan include constructing a combination of new and deeper slurry walls for a distance of 6.7 miles, deepening 9 miles of interior toe drains, and constructing or modifying 9.5 miles of berms along sections of the Yuba and Feather Rivers. Mitigation for this project would utilize credit at the existing preservation banks established for the Sacramento River Flood Control, Phase II, Project.

Project Costs.—Total cost $26,600,000. Federal cost $17,350,000; non-Federal cost $9,250,000.

Benefit / Cost Ratio.—2.6 to 1

DELAWARE BAY COASTLINE: DELAWARE AND NEW JERSEY-BROADKILL BEACH, DELAWARE

Location.—Sussex County, Delaware, 3 miles northwest of Lewes.

Purpose.—hurricane and storm damage reduction and shore protection.

Problem.—The Broadkill beach area is vulnerable to hurricane and storm induced damages, including long term erosion, storm recession and inundation and wave attack. Storm induced damages for Broadkill Beach can be reduced with the construction of a shoreline protection project.

Recommended Plan.—The plan involves the placement of 1,305,000 cubic yards of sand to construct a beach berm and dune to provide shoreline protection to Broadkill beach. In addition, this section authorizes periodic nourishment of 358,000 cubic yards of sand every 5 years for a 50-year period.

Project Costs.—total cost $9,049,000. Federal cost $5,674,000; non-Federal cost $3,375,000.
Benefit/Cost Ratio.—1.6 to 1

DELAWARE BAY COASTLINE: DELAWARE AND NEW JERSEY-PORT MAHON, DELAWARE

Location.—Port Mahon, Kent County, Delaware, 7.5 miles east of Dover, Delaware.
Purpose.—ecosystem restoration and shore protection.
Problem.—The Port Mahon area has experienced shoreline erosion over the years, as well as the related problems of loss of wetlands and beach habitat; encroachment of the shoreline toward State Road 89 and potential loss of road access to various state and private-owed facilities in the area. Potential physical damages to structures in the area (including the fuel dock and underground pipeline which delivers jet fuel to Dover AFB; fishing piers; and boat docks); and lack of sufficient depth to allow for navigation of fishing vessels and fuel barges at low tide.
Recommended Plan.—The plan recommends construction of a shore protection project for ecosystem restoration on the Delaware Bay Coastline. Port Mahon is a significant breeding site for horseshoe crabs, and the plan would restore the horseshoe crab habitat through the placement of 306,000 cubic yards along the shoreline and subsequent periodic nourishment. The plan would also raise State Road 89. In addition, this section authorizes periodic nourishment of 150,000 cubic yards of sand every 7 years for a 50-year period at an estimated average annual cost of $234,000, with estimated annual Federal cost of $152,000 and an estimated non-Federal cost of $82,000
Project Costs.—Total cost $7,644,000. Federal cost $4,969,000; non-Federal cost $2,675,000.
Benefit/Cost Ratio.—The cost of the recommended plan is justified by the restoration of valuable habitat.

HILLSBORO AND OKEECHOBEE AQUIFER STORAGE AND RECOVERY PROJECT, FLORIDA.

Location.—Florida.
Purpose.—aquifer storage and recovery projects.
Problem.—Increased development and intense agriculture activity has depleted historic fresh water supplies throughout South Central Florida.
Recommended Plan.—The plan recommends construction of related aquifer storage and recovery projects at Hillsboro and Okeechobee, described in the U.S. Army Corps of Engineers Central and Southern Florida Water Supply Study, dated April 1989.
Project Costs.—Total cost $27,000,000. Federal cost $13,500,000; non-Federal cost $13,500,000.
Benefit/Cost Ratio.—2.8 to 1

INDIAN RIVER COUNTY, FLORIDA

Location.—Florida.
Purpose.—shoreline protection.

Problem.—The shoreline in Indian River County is vulnerable to hurricane and storm induced damages including long term erosion, storm recession and inundation and wave attack.

Recommended Plan.—This shore protection project consists of placing beachfill along two segments of shoreline in Indian River County, a 1.7 mile stretch at the north end of the county near Sebastian Inlet State Park and a 2.6 mile stretch in the town of Vero Beach.

Project Costs.—Total cost $11,100,000. Federal cost $6,800,000; non-Federal cost $4,300,000.

Benefit/Cost Ratio.—Sebastian Inlet State Park—1.9 to 1. Vero Beach—2.8 to 1.

LIDO KEY BEACH, SARASOTA, FLORIDA

Location.—Small barrier island, west coast 45 miles south/southwest of Tampa, Florida.

Purpose.—shore protection.

Problem.—Recent storms have accelerated beach erosion and resulted in structural damages. A shore protection project was authorized in 1970 which consisted of a protective and elevated beach along 6,200 feet of Gulf shore near the middle of Lido Key to alleviated beach erosion problems. The City of Sarasota completed the northern half of the project in 1970 without Federal participation. The Project was never completed and deauthorized on 1 Jan 1990 in accordance with the provision of section 1001(b) of the Water Resources Development Act of 1986.

Recommended Plan.—The plan calls for re-authorizing shore protection at Lido Key, and the calls for the Secretary to use available fund or funds advanced by the non-Federal sponsor to complete all studies, reports or other necessary documents for the development of project.

Project Costs.—Total cost $5,200,000. Federal cost $3,380,000; non-Federal cost $1,820,000.

Benefit/Cost Ratio.—6.8 to 1

TAMPA HARBOR-BIG BEND CHANNEL, FLORIDA

Location.—Florida.

Purpose.—navigation.

Problem.—The channel is primarily used by deep draft, integrated tug-barges hauling phosphate rock to a terminal near New Orleans (outbound) and coal to the Tampa Electric Company facility(inbound). Navigation on the Big Bend channel is difficult primary because of the narrow bottom width of the existing channel. Frequent strong winds and adverse weather conditions make navigation within the existing channels extremely difficult. Additionally, the 34-feet deep channel restricts its use to shallow draft vessels.

Recommended Plan.—The plan would modify the Tampa Harbor navigation project to deepen the entrance channel, east channel, and inner channel at Big Bend from 34 feet to 41 feet below mean low water (mlw). The entrance channel would be widened from 200 feet to 250 feet for a length of 1.9 miles. Additionally, the existing turning basin would be deepened to 41 feet mlw and expanded to provide a minimum width of 1,200 feet. Approxi-

mately 3.5 million cubic yards of dredged material would be placed on Disposal Island 3D.

Project Costs.—Total cost $12,356,000. Federal cost $6,235,000; non-Federal cost $6,121,000.

Benefit/Cost Ratio.—3.2 to 1

BRUNSWICK HARBOR, GEORGIA

Location.—Georgia.

Purpose.—navigation.

Problem.—Existing channel depths constrain traffic. Under present conditions, ships incur costly tidal delays and light loading especially bulk and breakbulk carriers. As traffic continues to increase, and as vessels in the world fleet continue to grow in size due to replacement of smaller ships with larger, more efficient ships, the problem will be exacerbated in the future. Also, ships currently calling at the port are experiencing problems with safe transit, turning capabilities and overall maneuverability in certain reaches of the inner/upper harbor.

Recommended Plan.—The plan consists of deepening the harbor by 6 feet, changing the authorized project depth in the Bar Channel from 32 feet below mean low water (mlw) to 38 feet below mlw and in the Inner and Upper Harbor from 30 feet below mlw to 36 feet below mlw. The channel will be widened to 400 feet from the new bridge, which will replace the existing Sidney Lanier Bridge. Also selected areas in Lower Turtle River and Upper East River ranges will be widened to 400 feet. A new turning basin will be constructed in Upper East River, and the existing basin in Lower Turtle River will be expanded.

Project Costs.—Total cost $50,717,000. Federal cost $32,966,000; non-Federal cost $17,751,000.

Benefit/Cost Ratio.—1.6 to 1

BEARGRASS CREEK, KENTUCKY

Location.—Kentucky.

Purpose.—flood damage reduction.

Problem.—Flooding occurred in 1937, 1964, 1970, 1973, 1990, 1993, and 1997. An occurrence of the 100-year flood will affect an estimated 929 structures and cause $48 million in damages.

Recommended Plan.—The plan would modification of 1 existing detention basin, 7 new detention basins, 1,850 feet of levee/floodwall, 2,000 feet of channel improvement, and 9 acres of trees and shrubs for environmental mitigation.

Project Costs.—Total cost $11,172,000. Federal cost $7,262,000; non-Federal cost $3,910,000.

Benefit/Cost Ratio.—2.7 to 1

AMITE RIVER AND TRIBUTARIES, LOUISIANA, EAST BATON ROUGE PARISH WATERSHED

Location.—Baton Rouge, Zachary, and Baker, Louisiana.

Purpose.—flood damage reduction and recreation.

Problem.—Flooding within watershed located in the parish of East Baton Rouge threaten residential and commercial structures.

Recommended Plan.—The plan will expand five watersheds within the parish of East Baton Rouge to reduce damages from larger floods. The project also includes a recreation bike trail from one of the watersheds.
Project Costs.—Total cost $112,900,000. Federal cost $73,400,000; non-Federal cost $39,500,000
Benefit/Cost Ratio.—2.5 to 1.

BALTIMORE HARBOR ANCHORAGES AND CHANNELS, MARYLAND AND VIRGINIA

Location.—Baltimore Harbor, Baltimore Harbor, Maryland and Virginia.
Purpose.—navigation.
Problem.—The existing anchorages and branch channels are not of substantial depth, length and width to accommodate vessels.
Recommended Plan.—The plan calls widening and deepening of Federal anchorage 3 and 4; widening and providing flared corners for state owed east Dundalk, Seagirt, Connecting, and West Dundalk branch channels; dredge a new channel and south Locust Point; and dredge a turning basin at Fort McHenry channel.
Project Costs.—Total cost $28,430,000. Federal cost $19,000,000; non-Federal cost $9,430,000.
Benefit/Cost Ratio.—4.3 to 1.

RED LAKE RIVER AT CROOKSTON, MINNESOTA

Location.—Crookston, Minnesota.
Purpose.—flood damage reduction.
Problem.—Recurring overland flooding from the Red Lake River causes damages to residential, commercial and public structures.
Recommended Plan.—The recommended plan consists of two downstream high-flow channels, levees and road raises providing flood damage reduction for the neighborhoods of Woods Addition, Thorndale and Riverside/Downtown, and flood plain management techniques for areas of the city not protected by permanent levees. Once it is in place, the proposed project would meet the National Flood Insurance Program requirements as administered by the Federal Emergency Management Agency. It would have a 1 percent chance of being exceeded in any 1 year.
Project Costs.—Total cost $8,950,000. Federal cost $5,720,000; non-Federal $3,230,000.
Benefit/Cost Ratio.—1.5 to 1.

NEW JERSEY SHORE PROTECTION, TOWNSENDS INLET TO CAPE MAY INLET, NEW JERSEY

Location.—New Jersey.
Purpose.—shore protection, ecosystem restoration and hurricane and storm damage reduction.
Problem.—The Townsends Inlet to Cape May Inlet area is vulnerable to hurricane and storm damages, including long term erosion, storm recession and inundation and wave attack. Storm induced damages can be reduced in this area with the construction of a shoreline protection project.

Recommended Plan.—The plan involves the placement of 3,111,000 cubic yards of sand to construct a beach berm and dune.
Project Costs.—Total $56,503,000. Federal cost $36,727,000; non-Federal cost $19,776,000.
Benefit/Cost Ratio.—1.8 to 1.

PARK RIVER, NORTH DAKOTA

Location.—Park River, Grafton, Walsh County, North Dakota.
Purpose.—flood control project.
Problem.—Recurrent flooding along the main steam of the Park River, causes significant flood problems at Grafton. The largest flood of record which occurred in 1950, inundated almost the entire city. More recent floods occurred in 1962, 1965, 1969, 1979, 1997.
Recommended Plan.—This project was authorized in section 401(a) of Water Resources Development Act 1986 and subsequently deauthorized on November 18, 1991, in accordance with section 1001(a) of Water Resources Development Act 1986, therefore, no construction may be initiated unless the General Reevaluation report deems the project still to be technically sound, environmentally acceptable, and economically justified. The previously authorized project provided flood protection for the City of Grafton. It consisted of a 3.75 mile long bypass channel that would extend upstream and tot the West of Grafton along the South Branch park River. The tieback levee would direct the flood flow to the inlet of the bypass channel a diversion structure would be a the point where the levee crosses the Park River. River flows that exceed 2,000 cubic feet per second (CFS) would be diverted through the proposed bypass channel. During period when the river flow is less than 2,000 the entire flow would go through the natural channel of the Park River, through Grafton.
Project Costs.—Total cost $28,100,000. Federal cost $18,265,000; non-Federal cost $9,835,000.
Benefit/Cost Ratio.—1.3 to 1.

SALT CREEK, GRAHAM, TEXAS

Location.—Salt Creek, Graham, Texas.
Purpose.—flood control, environmental restoration, and recreation.
Problem.—Loss of property and injuries to flood victims as a result of normal flooding of Salt Creek and backwater effects from the Brazos River. Structures valued at approximately $17 million are vulnerable to floods with a 1 percent probability of exceedance. Since 1972, eight significant floods have occurred. In 1978, a flood resulted in six deaths and property damage in excess of $62 million for the area including surrounding counties. In 1990, a flood on Salt Creek resulted in $625,000 damages to the community.
Recommended Plan.—The plan provides for permanent evacuation of 10-year floodplain containing 127 structures (94 residential, 30 commercial and 3 public); installation of a flood warning system to protect residents above the buy-out zone; installation of recreation amenities (trails and picnic sites); and environ-

mental restoration of floodplain lands including replanting of native trees and shrubs.

Project Costs.—Total cost $10,080,000. Federal cost $6,560,000; non-Federal $3,520,000.

Benefit/Cost Ratio.—1.4 to 1.

(b). Project Authorizations Subject to a Final Report

Subsection (b) of Section 101 authorizes the following 20 projects for water resources development, and conservation and other purposes to be carried out by the Secretary substantially in accordance with the plans, and subject to the conditions recommended in a final report of the Chief of Engineers as approved by the Secretary, if a favorable report of the Chief is completed not later than December 31, 1999.

NOME HARBOR IMPROVEMENTS, ALASKA

Location.—Nome, Alaska.

Purpose.—navigation.

Problem.—The existing Federal navigation project at Nome is not functionally adequate and requires major modifications and/or replacement to meet the needs of the growing fishing fleet and barge traffic.

Recommended Plan.—The major features of the recommended plan are a new jetty/breakwater system, a new channel design and configuration, a spur breakwater, and a sediment trap. The proposed breakwater will be located on the east side of the existing causeway, and the channel will be relocated to between the new breakwater and the causeway. A new entrance through the spit will be constructed. The breakwater spur will be added to the end of the causeway to provide additional protection to vessels using the causeway, and a sediment trap will be constructed on the east side of the existing breach in the causeway.

Project Costs.—Total cost $24,606,000. Federal cost $18,406,000; non-Federal $6,200,000.

Benefit/Cost Ratio.—1.5 to 1.

SEWARD HARBOR, ALASKA

Location.—Seward, Alaska.

Purpose.—navigation.

Problem.—Marine activities at Seward are driven primarily by commercial fishing and tourism. The demand for moorage space greatly exceeds the supply much of the year. All assigned (permanent) slips have been fully occupied throughout the summer for more than 15 years. Vessels and the mooring facilities are damaged during peak periods from minor impacts, overstressing of the float system, and other incidents caused by overcrowding.

Recommended Plan.—A 1,700-foot-long rubble mound breakwater would be constructed approximately 400 feet east of the existing harbor in a north-south alignment for a length of 1,070 feet. The seaward toe of the breakwater would maintain a minimum distance of 30 feet from the existing piles supporting the coal trestle. The remainder of the new breakwater would then change to a southwest alignment to form the eastern side of the new entrance channel. The new entrance channel would have the same

configuration and depth as the existing channel. The 330-foot gap of the old entrance channel would be closed by construction of a rubble mound structure. About 5.2 acres of additional uplands would be created south of the harbor using dredged materials. The basin would be dredged to –15 ft and –12.5 ft MLLW to optimize the requirements of the present and anticipated fleet.

Project Costs.—Total cost $11,930,000. Federal cost $4,019,000; non-Federal $7,911,000.

Benefit/Cost Ratio.—1.7 to 1

HAMILTON AIRFIELD WETLAND RESTORATION, CALIFORNIA.

Location.—City of Novato, Marin County, California.

Purpose.—wetlands restoration and related environmental improvements.

Problem.—the area is a former defense facility and includes land and wetlands degradation.

Recommended Plan.—In the Water Resources Development Act of 1996, Congress provided that publicly or privately owned upland sites may be considered for dredge disposal. The Hamiltonsite should not be given priority over other upland disposal sites that also are available in the San Francisco Bay Area. Specifically, the private Montezuma Wetlands site located in Solano County should be given fair and equal consideration, provided that the Montezuma site proves to be economically and environmentally feasible. The Secretary should consider developing a management plan that addresses the equitable distribution of the dredged material to various upland sites in cases where dredged material from Corps construction or maintenance dredging is available for beneficial use or other upland disposal methods in the Bay Area. In comparing the costs and benefits of public and private disposal options, the Secretary shall consider all costs and benefits, including all publicly funded costs, to ensure than an objective and equitable comparison of private and public facilities occurs.

Wetlands would be restored to the Hamilton Army Airfield and adjacent properties including the former antenna field using dredged material to accelerate marsh establishment and raise elevations for seasonal wetlands. Approximately 700 acres of habitat would be restored. The Secretary is directed to coordinate remediation and closure of the Hamilton Air Field site in Marin County, California, under the Base Realignment and Closure Act to ensure that the site is cleaned to the level that will allow implementation of the wetlands restoration project and that any issues associated with base closure, such as impacts to surrounding properties, are resolved by January 1, 2000. This plan would restore tidal salt marsh habitat in San Francisco Bay.

Project Costs.—Total cost $55,200,000. Federal cost $41,400,000; non-Federal $13,800,000.

Benefit/Cost Ratio.—The cost of the recommended plan is justified by the restoration of valuable habitat.

OAKLAND HARBOR, CALIFORNIA

Location.—Oakland, California Eastern Shore of Central San Francisco Bay.

Purpose.—navigation.

Problem.—Cargo movement into Oakland is hampered by the need for channel and turning basin improvements. Vessel dimensions are increasing, which cause further safety concerns.

Recommended Plan.—This project would deepen the channel to a depth of 50 feet. In addition, the non-Federal interests shall provide berthing areas and other local service facilities at an estimated cost of $43,000,000. Approximately 7.0 mcy of dredged material would be deposited in the middle harbor enhancement area, approximately 2.5 mcy would be transported to the proposed Hamilton Army Airfield wetlands restoration project, approximately 2.9 mcy would be disposed of at the existing Montezuma Wetlands restorationsite, approximately 0.4 mcy would be disposed of in upland sites.

Project Costs.—Total cost $214,340,000. Federal cost $143,450,000; non-Federal $70,890,000.

Benefit/Cost Ratio.—7.5 to 1

DELAWARE BAY COASTLINE: DELAWARE AND NEW JERSEY-ROOSEVELT INLET-LEWES BEACH, DELAWARE

Location.—Roosevelt Inlet-Lewes Beach, Sussex County, Delaware.

Purpose.—navigation mitigation, shore protection, and hurricane and storm damage reduction.

Problem.—Shoreline erosion at the western end of Lewes beach. In an attempt to prevent further erosion the state of Delaware has done several beach fills on an as needed basis. The Corps has also done a number of maintenance beach dredging and has placed the dredged material along Lewes Beach. Despite this effort, the shoreline continues to erode. Longterm erosion has resulted in destruction in shoreline protection by reducing the height and width of beach front.

Recommended Plan.—The proposed plan extends 1400 feet along the western edge of Lewes Beach and provides for placement of 174,000 cubic yards of sand to construct a berm and dune as well as the reconstruction of the south jetty. In addition, this section authorizes periodic nourishment for a 50-year period at an estimated average annual cost of $207,000, with an estimated annual Federal cost of $159,000 and an estimated annual non-Federal cost of $47,600.

Project Costs.—Total cost $3,393,000. Federal cost $2,260,000; non-Federal $773,000.

Benefit/Cost Ratio.—1.3 to 1.

DELAWARE COAST FROM CAPE HENELOPEN TO FENWICK ISLAND, BETHANY BEACH/SOUTH BETHANY BEACH, DELAWARE

Location.—Towns of Bethany Beach and South Bethany Beach, Delaware.

Purpose.—shore protection project for hurricane storm damage reduction.

Problem.—Long term erosion has resulted in a persistent reduction in storm damage protection by reducing the height and width of the beachfront.

Recommended Plan.—Authorize construction of a shoreline protection project. Involves placement of 3,453,000 cubic yards of sand along 14,950 feet of shoreline to construct a berm and a dune. The plan also includes dune, dune fencing, and periodic nourishment for a 50-year period to ensure the integrity of the design.

Project Costs.—Total cost $22,205,000. Federal cost of $14,433,000; non-Federal cost $7,772,000.

Benefit/Cost Ratio.—1.7 to 1.

JACKSONVILLE HARBOR, FLORIDA

Location.—Duval County, Jacksonville Harbor, Florida.

Purpose.—navigation.

Problem.—Due to the existing depths, many of the vessels that currently use Jacksonville Harbor must light-load or wait on high tides in order to enter or exit the harbor causing increased transportation costs. The current 38-foot mean low water project depth also impacts the introduction of larger vessels into the fleet that would visit the harbor.

Recommended Plan.—Deepen the main channel to a project depth of 40 feet below mean low water (MLW) from the 40-foot depth contour in the Atlantic Ocean to river mile 14.7; realignment of cuts 39–41 of the main channel; deepening of the West Blount Island Channel along cuts F and G to a 40-foot depth; raising of the dikes of the existing upland disposal area on the east end of Bartram Island.

Project Costs.—Total cost $26,116,000. Federal cost $9,129,000; non-Federal cost $16,987,000.

Benefit/Cost Ratio.—1.4 to 1.

LITTLE TALBOT ISLAND, DUVAL COUNTY, FLORIDA

Location.—Little Talbot Island, Duval County, Florida.

Purpose.—shore protection project for hurricane and storm damage prevention.

Problem.—Several times yearly, coastal flooding, erosion, and storm waves damage State Road A1A/SR–105, which is the main route used to travel between Amelia Island and the Jacksonville metropolitan area.

Recommended Plan.—Construction of a 3,300 foot long stone revetment over the existing rubble on the east side of the bridge. The Florida Department of Transportation intends to rehabilitate the bridge within the next few years and will raise the elevation of 2,400 feet of State Road A1A/SR–105 on the western approach of the bridge. Protection of this reach is not necessary.

Project Costs.—Total cost $5,915,000. Federal cost $3,839,000; non-Federal cost $2,076,000.

Benefit/Cost Ratio.—2.8 to 1

PONCE DE LEON INLET, VOLUSIC COUNTY, FLORIDA

Location.—Ponce De Leon Inlet, Volusic County, Florida.

Purpose.—navigation and recreation.

Problem.—The existing channels in Ponce DeLeon Inlet are experiencing extensive shoaling and costly maintenance. Of specific concern are the impacts and needs of the Port Authority, charter

boat operators, commercial fishermen, recreational boaters, and the U.S. Coast Guard (USCG). USCG search and rescue data from 1981 to 1991 indicates that 20 lives have been lost in the area of the inlet.

Recommended Plan.—Extend the south jetty by 1,000 feet oceanward and parallel to the existing north jetty.

Project Costs.—Total cost $5,454,000. Federal cost $2,988,000; non-Federal cost $2,466,000.

Benefit/Cost Ratio.—1.4 to 1.

SAVANNAH HARBOR EXPANSION, GEORGIA

Location.—Savannah Harbor, Georgia.

Purpose.—navigation.

Problem.—The existing channel at Savannah Harbor has experienced shoaling. Turning and navigation-related improvements are necessary.

Recommended Plan.—GPA has selected a plan that would provide for a 48 feet deep below mean low water (mlw) channel within the inner harbor and 48- 50 feet channels below mlw in the entrance channel; constructing 10 wideners in the inner harbor and 2 wideners in the entrance channel; enlarging Kings Island Turning Basin to 1,676 feet.

The Georgia Ports Authority (GPA) is completing the feasibility study on improvements to Savannah Harbor under the authority of Section 203 of the Water Resources Development Act of 1986. This project may be carried out only after the Secretary, in consultation with affected Federal, State (including the state of South Carolina), regional, and local entities, has reviewed and approved a feasibility report and an Environmental Impact Statement (EIS) that includes an analysis of the impacts of project depth alternatives ranging from 42 feet through 48 feet, and a selected plan for navigation, and an associated mitigation plan. Further, the Secretary of Interior, the Secretary of Commerce, and the Administrator of the Environmental Protection Agency, along with the Secretary, must approve the select plan and determine that the mitigation plan adequately address the potential environmental impacts of the project. The mitigation plan shall be implemented in advance of or concurrently with construction of the project.

Project Costs.—Total cost $230,174,000. Federal cost $145,160,000; non-Federal cost $85,014,000.

Benefit/Cost Ratio.—3.0 to 1.

TURKEY CREEK BASIN, KANSAS CITY, MISSOURI

Location.—Kansas City, Missouri.

Purpose.—flood damage reduction.

Problem.—Low lying developed areas in the reach above the mouth of Turkey Creek experience flooding from channel overflow from storms over the heavily urbanized upstream basin produces flooding independently or in combination with overland flow from the steep urbanized hillsides immediately adjacent to the flood plain.

Recommended Plan.—Channel modification including a leveed section with an embankment averaging 8 feet along 2,785 feet of the 5,730-foot modified channel; and three 4-percent-chance Kan-

sas Hillside interceptor diversion structures and a 6.67-percent-chance Missouri Hillside interceptor diversion structure.
Project Costs.—Total cost $42,875,000. Federal cost $25,596,000; non-Federal cost $17,279,000.
Benefit/Cost Ratio.—1.5 to 1.

DELAWARE BAY COASTLINE, OAKWOOD BEACH, NEW JERSEY

Location.—Oakwood Beach, New Jersey.
Purpose.—hurricane and storm damage reduction.
Problem.—Oakwood Beach area is vulnerable to shoreline erosion and storm induced wave attack damages.
Recommended Plan.—The proposed project involves the placement of 332,000 cubic yards of sand to construct a beach berm. In addition, this section authorizes periodic nourishment of 32,000 cubic yards every 8 years for a 50-year period at an estimated average annual cost of $90,000, with a Federal cost of $58,000 and a non-Federal cost of $32,000.
Project Costs.—Total cost $3,320,000. Federal cost $2,197,000; non-Federal cost $1,183,000.
Benefit/Cost Ratio.—2.0 to 1.

DELAWARE BAY COASTLINE, REEDS BEACH AND PIERCES POINT, NEW JERSEY

Location.—Reeds Beach and Pierces Point, New Jersey.
Purpose.—environmental restoration.
Problem.—Shoreline erosion at Reeds Beach and Pierces Point has resulted in the reduction of the height and the width of the beach front. Various fish and wildlife habitat is expected to be adversely impacted by future coastal storms.
Recommended Plan.—The plan calls for the construction of a shore protection project for ecosystem restoration on the Delaware Bay Coastline. Reeds Beach and Pierces Point are significant breeding sites and the plan would restore habitat through placement of 249,000 cubic yards of sand along the shoreline.
Project Costs.—Total cost $4,057,000. Federal cost $2,637,000; non-Federal cost $1,420,000.
Benefit/Cost Ratio.—The cost of the recommended plan is justified by the restoration of valuable habitat.

DELAWARE BAY COASTLINE, VILLAS AND VICINITY, NEW JERSEY

Location.—Delaware Bay Coastline, Villas and Vicinity, New Jersey.
Purpose.—environmental restoration.
Problem.—Shoreline erosion at villas and vicinity has resulted in the reduction of the height and width of the beach front. Shoreline erosion has adversely impacted on horseshoe crab habitat, a critical food source to many species of shorebirds and migratory birds, as well as the habitat of diamond back terrapin. These habitats are expected to be further impacted by future coastal storms.
Recommended Plan.—The plans calls for the construction of a shore protection project for ecosystem restoration on the Delaware Bay Coastline, including the placement of 950,000 cubic yards of sand along the shoreline restoring critical habitat.

Project Costs.—Total cost $7,520,000. Federal cost $4,888,000; non-Federal cost $2,632,000.
Benefit/Cost Ratio.—The cost of the recommended plan is justified by the restoration of valuable habitat.

LOWER CAPE MAY MEADOWS, CAPE MAY POINT, NEW JERSEY

Location.—Lower Cape May Meadows, Cape May Point, New Jersey.
Purpose.—navigation mitigation, ecosystem restoration and hurricane and storm damage reduction.
Problem.—The Federal navigation project adversely impacts shoreline causing erosion, leaving habitat area and Cape may Point vulnerable to storm damages.
Recommended Plan.—The plan also authorizes periodic nourishment for a 50-year period at an annual cost of $1,114,000, with a Federal cost of $897,000 and a non-Federal cost of $217,000.
Project Costs.—Total cost $15,952,000. Federal cost $12,118,000; non-Federal cost $3,834,000.
Benefit/Cost Ratio.—N/A -Outputs are non-monetary—Ecosystem Restoration. Storm damage increment has a 1.4 to 1 Benefit/Cost Ratio.

NEW JERSEY SHORE PROTECTION, BRIGANTINE INLET TO GREAT EGG HARBOR, BRIGANTINE ISLAND, NEW JERSEY

Location.—Brigantine Inlet to Great Egg Harbor, Brigantine Island, New Jersey.
Purpose.—shore protection and hurricane and storm damage reduction.
Problem.—Significant beach and dune erosion has left the island vulnerable to storm damages.
Recommended Plan.—In addition, this section authorizes periodic nourishment for a 50-year period at an estimated average annual cost of $465,000, with a Federal cost of $302,000 and a non-Federal cost of $163,000.
Project Costs.—Total cost $4,970,000. Federal cost $3,230,000; non-Federal cost $1,740,000.
Benefit/Cost Ratio.—1.2 to 1.

COLUMBIA RIVER CHANNEL DEEPENING, OREGON AND WASHINGTON

Location.—Oregon and Washington.
Purpose.—navigation.
Problem.—The existing 40-foot deep and 600-foot wide navigation channel restricts vessels to partial loading, and/or causes a sailing delay until the right combination of river flow and tidal conditions occurs.
Recommended Plan.—To deepen the river channel to an authorized depth of minus 43 feet Columbia River datum. The project area covers 11.6 miles of the Willamette River below Portland, OR and 103.5 miles of the Columbia River below Vancouver, WA. The plan will provide an additional 5 feet of overdepth and 100 feet of overwidth, for efficient maintenance on high shoaling areas.
Project Costs.—Total cost $182,423,000. Federal cost $106,132,000; non-Federal cost $76,291,000.

Benefit/Cost Ratio.—2.3 to 1.

MEMPHIS HARBOR, MEMPHIS, TENNESSEE

Location.—Memphis Harbor, Memphis, Tennessee.
Purpose.—navigation.
Problem.—The available port facilities at Memphis are near capacity. The Memphis and Shelby County Port Authority and local interests have expressed support for reauthorization of the project and the reformulation to achieve a smaller more affordable project.
Recommended Plan.—The project consists of the creation of new harbor facilities by dredging a channel of minimum dimensions of 500 feet wide by 12 feet deep by 4.9 miles long, extending from the Tennessee Chute to the west and north of the existing harbor facilities. Hydraulic fill from channel dredging will be used to create a 1,000-acre industrial area to the west of the existing harbor fill.
Project Costs.—Total cost $115,400,000. Federal cost $34,380,000; Non-Federal $81,020,000. These costs have not been updated since 1988.
Benefit/Cost Ratio.—3.9 to 1.

JOHNSON CREEK, ARLINGTON, TEXAS

Location.—Arlington, Texas.
Purpose.—flood damage reduction, environmental restoration and recreation.
Problem.—Loss of property and injuries to flood victims as a result of normal flooding of Johnson Creek. The area along Johnson Creek experienced severe damages in 1989 and 1990.
Recommended Plan.—The plan calls for permanent evacuation of 140 residential structures from the 25-year floodplain; installation of recreation amenities; and environmental restoration of floodplain lands including replanting of native trees and shrubs.
Project Costs.—Total cost $20,300,000. Federal cost $12,000,000; non-Federal cost $8,300,000.
Benefit/Cost Ratio.—1.5 to 1

HOWARD HANSON DAM, WASHINGTON

Location.—Howard Hanson Dam, Washington.
Purpose.—water supply and ecosystem restoration.
Problem.—The authorized irrigation and water supply components of the Howard Hanson Dam were not implemented when the dam was constructed by the Corps of Engineers, in the 1960's. The City of Tacoma Public Utility, Water Division, in response to water shortages experienced in the 1987 and 1992 droughts, anticipated increases in water demand in the Puget Sound Region, and a desire to correct the decline in salmon and steelhead fisheries and other natural resources in the Green River Basin.
Recommended Plan.—A dual-purpose water supply and ecosystem restoration project implemented in two phases: Phase I would provide for the construction of all mitigation features required for raising the existing dam pool to elevation 1,167 feet, and all ecosystem restoration features. Phase II would provide

for the construction of all remaining additional water storage project mitigation features required for a pool raise to elevation 1,177 feet; under this phase, an additional 2,400 acre-feet of Municipal and Industrial water supply storage plus 9,600-acre-feet of low flow augmentation water will be stored for a combined total of 32,000 acre-feet of water storage under the Howard Hanson Dam Additional Water Supply project.

Project Costs.—Total cost $75,600,000. Federal cost $36,900,000; non-Federal cost $38,700,000.

Benefit/Cost Ratio.—1.1 to 1

Sec. 102. Project Modifications

(a) Projects with Reports. This section provides authority for the Secretary to modify previously authorized projects for water resources development, conservation, and other purposes substantially in accordance with the plans recommended in the reports referenced in the bill language.

SAN LORENZO RIVER, CALIFORNIA

This provision authorizes the Secretary to modify the flood control project for San Lorenzo River, California, authorized by section 101(a)(5) of Public Law 104–303, to include as part of the project, stream bank erosion control measures at a total estimated cost of $4,000,000, with an estimated Federal cost of $2,600,000 and an estimated non-Federal cost of $1,400,000.

ST. JOHN'S COUNTY SHORE PROTECTION, FLORIDA

This provision modifies a project previously authorized under section 501 of the Water Resources Development Act of 1986 to include navigation mitigation as a purpose of the project in accordance with the filed Corps report, at a total cost of $16,086,000, with an estimated Federal cost of $12,949,000 and an estimated non-Federal cost of $3.137,000.

WOOD RIVER, GRAND ISLAND, NEBRASKA

This provision authorizes the Secretary to modify the flood protection project authorized in section 101(a)(19) of the Water Resources Development Act of 1996 (P.L. 104–303) in accordance with the Corps report dated June 29, 1998, at a total cost of $17,039,000, with an estimated Federal cost of $9,730,000 and an estimated non-Federal cost of $7,309,000.

ABSECON ISLAND, NEW JERSEY

This provision authorizes the Secretary to reimburse the non-Federal sponsor for work performed that would otherwise have been the responsibility of the Federal Government at the project authorized at Absecon Island, New Jersey, by section 101(h)(13) of Water Resources Development Act of 1996 (P.L. 104–303).

ARTHUR KILL, NEW YORK AND NEW JERSEY

This provision modifies the Arthur Kill, New York and New Jersey navigation project authorized in section 202(b) of Water Resources Development Act of 1986 (100 Stat. 4098) and modified by section 301(b)(11) of Water Resources Development Act of 1996

(110 Stat. 3711), to further modify the project to authorize funds for the project at a total cost of $276,899,000 with an estimated Federal cost of $183,200,000 and an estimated non-Federal cost of $93,600,000

WAURIKA LAKE, OKLAHOMA, WATER CONVEYANCE FACILITIES

This provision directs the Secretary to waive the requirement for the Waurika Project Master Conservancy District to repay the $2,900,000 in costs resulting from the October 1991 settlement of the claim of the Travelers Insurance Company.

(b) Projects Subject to Reports

The following projects are modified as follows, except that no funds may be obligated to carry out work under such modifications until completion of a final report by the Chief of Engineers, as approved by the Secretary, finding that such work is technically sound, environmentally acceptable, and economically justified, as applicable.

THORNTON RESERVOIR, COOK COUNTY, ILLINOIS

This provision modifies an element of the Chicagoland Underflow Plan, authorized by previous law, to include additional permanent flood control storage attributable to the NRCS Thorton Reservoir, Little Calumet River Watershed, Illinois. This project will be cost shared in accordance with section 103 of Water Resources Development Act of 1986. The Secretary of Agriculture may cooperate with the non-Federal interests.

WELLS HARBOR, WELLS, MAINE

This provision modifies a project authorized by previous law to include the realignment of the channel and anchorage areas. This provisions also deauthorizes certain portions of the project.

NEW YORK HARBOR AND ADJACENT CHANNELS, PORT JERSEY, NEW JERSEY

This provision modifies the New York Harbor and Adjacent Channels, Port Jersey, New Jersey navigation project, authorized by previous law to allow for the construction at a total cost of $100,689,000, with an estimated Federal cost of $74,998,000 and an estimated non-Federal cost of $25,701,000.

(c) Beaver Lake, Arkansas, Water Supply Storage Reallocation

This provision authorizes the Secretary to reallocate approximately 31,000 additional acre-feet at Beaver Lake, Arkansas, to water supply storage at no cost to the Beaver Water District or the Carroll-Boone Water District, except that at no time shall the bottom of the conservation pool be at an elevation less than 1076 feet, NGVD.

(d) Tolchester Channel S-Turn, Baltimore, Maryland

This provision authorizes the Secretary to straighten the Tolchester Channel S-Turn as part of the maintenance of the navigation project for Baltimore Harbor, authorized by previous law.

(e) Tropicana Wash and Flamingo Wash, Nevada

This provision directs the Secretary to reimburse any Federal costs incurred by the non-Federal interest to accelerate or modify construction of the Tropicana Wash and Flamingo Washes, Nevada project, in cooperation with state and local governments.

(f) Rediversion Project, Cooper River, Charleston Harbor, South Carolina

This provision directs the Secretary to pay the State of South Carolina not more than $3,750,000, if the State enters into an agreement with the Secretary to perform all future additional operation of the St. Stephen, South Carolina, fish lift. Maintenance of the fish lift will remain a Federal responsibility.

(g) Trinity River and Tributaries, Texas

This provision modifies a previously authorized project by adding environmental restoration as a project purpose.

(h) Beach Erosion Control and Hurricane Protection, Virginia Beach, Virginia

This provision directs the Secretary to accept additional annual payments from the City of Virginia Beach for the hurricane protection in an effort to maintain the projects construction schedule. Modification of the project cooperation agreement is not required. The Secretary is further directed to repay or credit the additional payments toward the non-Federal cost sharing requirements.

(i) Elizabeth River, Chesapeake, Virginia

This provision provides relief to the City of Chesapeake, Virginia for the annual cash payments made by the City for the navigation project on the Elizabeth River. The local sponsor has made the annual payments for twenty years.

(j) Payment Option, Moorefield, West Virginia

This provision authorizes the Secretary to permit the non-Federal sponsor for the Moorefield, West Virginia flood control project to pay, without interest, the remaining non-Federal cost of the project over a period to be determined by the Secretary, but not to exceed thirty years.

(k) Miami Dade Agricultural and Rural Land Retention Plan and South Biscayne, Florida

This provision amends previous law to authorize the Secretary to provide credit or to reimburse non-Federal sponsors for the costs of work in connection with preconstruction activities.

(l) Lake Michigan, Illinois

This provision modifies the project for storm damage reduction and shoreline protection, Lake Michigan, Illinois, from Wilmette, Illinois, to the Illinois-Indiana State line, authorized by previous law, to provide for reimbursement to the non-Federal sponsors for work done.

(m) Measurements of Lake Michigan Diversions, Illinois

This provision amends previous law to extend the authorization through fiscal year 2003, and by increasing the annual authorization level to $1,250,000.

(n) Project for Navigation, Dubuque, Iowa

This provision amends previous law to authorize the Secretary to construct a wetlands demonstration area of approximately 1.5 acres at the navigation project at Dubuque, Iowa.

(o) Louisiana State Penitentiary Levee

This provision amends previous law to allows the Secretary to credit against non-Federal share work performed in the project area.

(p) Jackson County, Mississippi

This provision modifies a previously authorized project to direct the Secretary to provide a credit not to exceed $5,000,000, against the non-Federal share of the cost of the project for the costs incurred by the Jackson County Board of Supervisors since February 8, 1994, in constructing the project, if the Secretary determines that such work was compatible and integral to the project.

(q) Richard B. Russell Dam and Lake, South Carolina

This provision conveys to the State of South Carolina all right, title, and interest of the United States in the parcels of land that are currently being managed by the South Carolina Department of Natural Resources for fish and wildlife mitigation purposes for the dam and lake. The Secretary may pay the State not more than $4,850,000, subject to the signing of a binding agreement.

(r) Land Conveyance, Clarkston, Washington

This provision conveys approximately 31 acres of land to the Port of Clarkston, Washington. Additional land in the vicinity of Clarkston, Washington, may also be conveyed if the Secretary determines that such land is excess. The Post of Clarkston shall pay fair market values for any land not retained in public ownership or that is used for other than public park or recreation purposes.

(s) White River, Indiana

This provision modifies the existing project to authorize the Secretary to undertake the riverfront alterations and the Beveridge Paper feature at a total cost not to exceed $25,000,000, of which $12,500,000 is the estimated Federal cost and $12,500,000 is the estimated non-Federal cost.

(t) Fox Point Hurricane Barrier, Providence, Rhode Island

This provision amends previous law to authorize the Secretary to undertake repairs to the Fox Point Hurricane barrier, Providence Rhode Island. The provision authorizes a total of $3,000,000, for such work, with an estimated Federal cost of $1,950,000, and an estimated non-Federal cost of $1,050,000.

Sec. 104. Project Deauthorizations

(a) Bridgeport Harbor, Connecticut

The navigation project authorized by previous law in Bridgeport Harbor, Connecticut, consisting of a 2.4 acre anchorage area 9 feet deep and an adjacent 0.60-area anchorage 6 feet deep, located on the west side of the Johnsons River, Connecticut, is not authorized after the date of enactment of this Act.

(b) Bass Harbor, Maine

The portions of the navigation project previously authorized at Bass Harbor, Maine, described by this subsection are not authorized after the date of enactment of this Act.

(c) Boothbay Harbor, Maine

The navigation project previously authorized at Boothbay Harbor, Maine, is not authorized after the date of enactment of this Act.

(d) East Boothbay Harbor, Maine

The remaining portions of the navigation project previously authorized at East Boothbay Harbor, Maine is not authorized after the date of enactment of this Act.

Sec. 105. Studies

(a) Caddo Levee, Red River below Denison Dam Arizona, Louisiana, Oklahoma, and Texas

The Secretary shall conduct a study to determine the feasibility of undertaking a project for flood control, including incorporating the existing levee, on the Red River below Denison Dam Arizona, Louisiana, Oklahoma, and Texas.

(b) Fields Landing Channel, Humboldt Harbor, California

The Secretary shall conduct a study to determine the feasibility of a navigation project at Fields Landing Channel, Humboldt Harbor, California.

(c) Strawberry Creek, Berkeley, California

The Secretary shall conduct a study to determine the feasibility of restoring Strawberry Creek, Berkeley, California, for environmental restoration, conservation of fish and wildlife resources, recreation, and water quality.

(d) West Side Storm Water Retention Facility, City of Lancaster, California

The Secretary shall conduct a study to determine the feasibility of undertaking measures to construct the West Side Storm Water Retention Facility, Lancaster, California.

(e) Apalachicola River, Florida

The Secretary shall conduct a study for the purpose of identifying alternatives for the management of material dredged in connection with operation and maintenance of the Apalachicola River naviga-

tion project, as well as alternatives which reduce the requirements for such dredging.

(f) Broward County, Sand Bypassing at Port Everglades Inlet, Florida

The Secretary shall conduct a study to determine the feasibility of constructing a sand bypassing project at Port Everglades Inlet, Florida.

(g) City of Destin-Noriega Point Breakwater, Florida

The Secretary shall conduct a study to determine the feasibility of restoring Noriega Point, Florida, to serve as a breakwater for Destin Harbor, including the feasibility of including Noriega Point as part of the East Pass, Florida, navigation project.

(h) Gateway Triangle Redevelopment Area, Florida

The Secretary shall conduct a study to determine the feasibility of undertaking measures to reduce the flooding problems in the vicinity of Gateway Triangle Redevelopment Area, Florida. The study shall include a review and consideration of studies and reports completed by the non-Federal sponsor.

(i) City of Plant City, Florida

The Secretary shall conduct a study to determine the feasibility of a flood control project in the city of Plant City, Florida. In conducting this study, the Secretary shall review and consider studies and reports completed by the non-Federal sponsor.

(j) Goose Creek Watershed, Oakley, Idaho

The Secretary shall conduct a study to determine the feasibility of a project for flood damage reduction, water conservation, ground water recharge, and ecosystem restoration project along the Goose Creek Watershed near Oakley, Idaho.

(k) Little Wood River, Gooding, Idaho

The Secretary shall conduct a study to determine the feasibility of restoring and repairing the Lava Rock Little Wood River Containment System to prevent flooding in the city.

(l) Snake River and Payette River, Idaho

The Secretary shall conduct a study to determine the feasibility of a flood control project along the Snake River and Payette River, Idaho.

(m) Acadiana Navigation Channel, Louisiana

The Secretary shall conduct a study to determine the feasibility of assuming operations and maintenance for the Acadiana Navigational Channel located in Iberia and Vermillion Parishes, Louisiana.

(n) Cameron Parish Wets of Calcasieu River, Louisiana

The Secretary shall conduct a study to determine the feasibility of a storm damage reduction and ecosystem restoration project for Cameron Parish west of Calcasieu River, Louisiana.

(o) Beneficial Use of Dredged Material, Coastal Louisiana

The Secretary shall conduct a study to determine the feasibility of using dredged materials from maintenance activities at Federal navigation projects in coastal Louisiana to benefit coastal areas in Louisiana.

(p) Contraband Bayou Navigation Channel, Louisiana

The Secretary shall conduct a study to determine the feasibility of assuming the maintenance of Contraband Bayou, Calcasieu River Ship Canal, Louisiana.

(q) Golden Meadow Lock, Louisiana

The Secretary shall conduct a study to determine the feasibility of converting the Golden Meadow floodgate into a navigation lock to be included in the Larose to Golden Meadow Hurricane Protection project.

(r) Gulf Intercoastal Waterway Ecosystem Protection, Chef Menteur to Sabine River, Louisiana

The Secretary shall conduct a study to determine the feasibility of undertaking ecosystem restoration and protection measures along the Gulf Intracoastal Waterway from Chef Menteur to Sabine River, Louisiana. The study shall address saltwater intrusion, tidal scour, erosion and other water resource- related problems in this area.

(s) Lake Pontchartrain, Louisiana, and Vicinity, St. Charles Parish Pumps

The Secretary shall conduct a study to determine the feasibility of modifying the Lake Pontchartrain Hurricane Protection project to include the St. Charles Parish Pumps and the modification of the seawall fronting protection along Lake Pontchartrain in Orleans Parish, from New Basin Canal on the west to the Inner Harbor Navigation Canal on the east.

(t) Lake Pontchartrain, Louisiana, and Vicinity Seawall Restoration, Louisiana

The Secretary shall conduct a study to determine the feasibility of modifying the existing seawall.

(u) Detroit River, Michigan, Greenway Corridor Study

The Secretary shall conduct a study to determine the feasibility of a project for shoreline protection, frontal erosion, and associated purposes in the Detroit River shoreline area from Belle Isle Bridge to the Ambassador Bridge in Detroit, Michigan.

(v) St. Clair Shores Flood Control, Michigan

The Secretary shall conduct a study to determine the feasibility of constructing a flood control project at St. Clair Shores, Michigan.

(w) Woodtick Peninsula, Michigan, and Toledo Harbor, Ohio

The Secretary shall conduct a study to determine the feasibility of utilizing dredged materials from Toledo Harbor, Ohio, to provide

erosion reduction, navigation, and ecosystem restoration at Woodtick Peninsula, Michigan.

(x) Tunica Lake Weir, Mississippi

The Secretary shall conduct a study to determine the feasibility of constructing an outlet weir at Tunica Lake, Tunica County, Mississippi for the purpose of stabilizing water levels.

(y) Protective Facilities for the St. Louis, Missouri, Riverfront Area

The Secretary shall conduct a study to determine the optimal plan to protect facilities that are located on the Mississippi River riverfront within the boundaries of St. Louis, Missouri.

(z) Yellowstone River, Montana

The Secretary shall conduct a comprehensive study to determine the hydrologic, biological and socio-economic cumulative impacts on the Yellowstone River. The study shall be conducted in consultation with the United States Fish and Wildlife Service, United States Geological Survey, and the Natural Resources Conservation Service and with the full participation of the State of Montana, tribal and local entities, and provide public participation. This study shall be submitted to Congress not later than 5 years after the date of enactment of this Act.

The study should be designed to recognize the river functions in relation to the cumulative effects of flood damage and the resulting stabilization projects through the assessment of river and riparian conditions and processes along the Yellowstone River floodplain from Gardiner to the confluence of the Missouri River. The study shall involve the public through input provided by local groups such as the Upper Yellowstone River Task Force.

(aa) Las Vegas Valley, Nevada

The Secretary shall conduct a comprehensive study to identify problems and opportunities related to ecosystem restoration, water quality, particularly the quality of surface run-off, water supply, and flood control within the Las Vegas Valley, Nevada.

(bb) Oswego River Basin, New York

The Secretary shall conduct a study to determine the feasibility of establishing a flood forecasting system within the Oswego River basin, New York.

(cc) Port of New York–New Jersey Navigation Study and Environmental Restoration Study, Port of New York–New Jersey

The Secretary shall conduct a comprehensive study of navigational needs to address improvements, including deepening of existing channels. In determining navigational needs, the Secretary shall examine other reports concerning the New York Harbor to determine the Federal interest. Studies shall be completed by December, 1999.

(dd) Bank Stabilization, Missouri River, North Dakota

The Secretary shall conduct a comprehensive study of bank stabilization on the Missouri River between the Garrison Dam and Lake Oahe in North Dakota.

(ee) Cleveland Harbor, Cleveland, Ohio

The Secretary shall conduct a study to determine the feasibility of undertaking repairs and related navigation improvements at Dike 14, Cleveland, Ohio.

(ff) East Lake, Vermillion and Chagrin, Ohio

The Secretary shall conduct a study to determine the feasibility of undertaking flood damage reduction at East Lake, Vermillion and Chagrin, Ohio. The Secretary may specifically consider construction of ice retention structures.

(gg) Toussaint River, Carroll Township, Ohio

The Secretary shall conduct a study to determine the feasibility of undertaking navigation improvements at Toussaint River, Carroll Township, Ohio.

(hh) Santee Delta Wetland Habitat, South Carolina

The Secretary shall complete not later than 18 months after the enactment of this Act, a comprehensive study to determine the feasibility of undertaking measures to enhance the wetland habitat in the Santee Delta area of South Carolina.

(ii) Waccamaw River, South Carolina

The Secretary shall conduct a study to determine the feasibility of a flood control project for the Waccamaw River in Horry County, South Carolina.

(jj) Upper Susquehanna-Lackawanna, Pennsylvania, Watershed Management and Restoration Study

The Secretary shall conduct a study to determine the feasibility of a comprehensive flood plain management and watershed restoration project at Upper Susquehanna-Lackawanna, Pennsylvania.

(kk) Niobrara River and Missouri River Sedimentation Study, South Dakota

The Secretary shall conduct a study to determine the feasibility of alleviating the bank erosion, sedimentation, and related problems of the lower Niobrara River and the Missouri River below Fort Randall Dam.

(ll) Santa Clara River, Utah

The Secretary shall conduct a study to determine the feasibility of undertaking measures to alleviate damage caused by flooding, bank erosion, and sedimentation along the watershed of the Santa Clara River, Utah.

(mm) Agat Small Boat Harbor, Guam

The Secretary shall conduct a study to determine the feasibility of undertaking the repair and reconstruction of the Agat Small Boat Harbor, Guam.

(nn) Apra Harbor Seawall, Guam

The Secretary shall conduct a study to determine the feasibility of undertaking measures to repair, upgrade, and extend the seawall at Apra Harbor Seawall, Guam.

(oo) Apra Harbor Fuel Piers, Guam

The Secretary shall conduct a study to determine the feasibility of undertaking measures to upgrade the piers in the Apra Harbor, Guam.

(pp) Maintenance Dredging of Harbor Piers, Guam

The Secretary shall conduct a study to determine the feasibility of undertaking maintenance dredging measures of areas adjacent to piers at Apra Harbor, Agat Harbor, and Agana Mariana, Guam.

(qq) Alternative Water Source Study

The Administrator of the EPA shall conduct a study of the water supply needs of States that are not currently eligible for assistance under Title XVI of the Reclamation Projects Authorization and Adjustment Act of 1992 (43 U.S.C. 390h et seq.).

TITLE II—GENERAL PROVISIONS

Sec. 201. Flood Hazard Mitigation and Riverine Ecosystem Restoration Program

This provision authorizes the Secretary to work with other Federal agencies to state and local governments both reduce flood damages and conserve, restore, and manage riverine and related land resources.

The program's emphasis will be placed on non-structural flood damage reduction measures and riverine and wetland ecosystem restoration measures that conserve, restore, and manage hydrologic and hydraulic regimes and restore the natural functions and values of the floodplain. Important related benefits include prevention of future flood damages and Federal flood disaster assistance costs, reduced risks and exposure to flooding, reduced community displacement due to flooding, improved water quality, improved habitat along streams, additional open space, and overall improved community well being. Modifying the use of upstream areas to reduce storm water runoff is a key element in reducing future flood damages and achieving revitalization of our riverine resources.

In the carrying out this program, the Secretary is expected to ensure that each comprehensive planning initiative emphasizes nonstructural flood hazard reduction measures and it is to be undertaken in collaboration and cooperation with the respective Federal, state and local agencies that have complementary programs and interests.

The Secretary may implement such projects after making a determination that the projects will significantly reduce potential

flood damages, will improve the quality of the environment, and are justified based on the monetary (National Economic Development) and non-monetary environmental benefits that the project provides. Federal and non-Federal cost sharing for all studies and projects undertaken pursuant to this authority will be in accordance with current laws and regulations. No more than $25,000,000 in Army Civil Works appropriations may be expended on any single project undertaken under this authority. All studies and projects undertaken under this authority from Army Civil Works appropriations shall be fully funded within the program funding levels provided in this subsection. Total Army Civil Works appropriations authorized under this section are $75,000,000, to be expended over a total of 2 years. The program established under this authority will be subject to an independent review, the purpose of which will be to evaluate the efficiency of the program in achieving the dual goals of flood hazard mitigation and ecosystem restoration.

This provision instructs the Secretary to examine the potential for flood damage reductions in the following high priority areas: Saint Genevieve, Missouri; Upper Delaware River Basin; New York; Tillamook County, Oregon; Providence County, Rhode Island; Willamette River Basin, Oregon; and Mill Creek, Cincinnati, Ohio.

This provision authorizes $75,000,000 for the period of fiscal years 2000 and 2001.

Sec. 202. Shore Protection

This provision creates a new cost sharing formula for the periodic nourishment of shore protection projects. The non-Federal share will be 50 percent of the cost of the periodic nourishment except that the cost of the periodic nourishment of privately owned shores will be borne by non-Federal interests, and the cost of periodic nourishment of federally owned shores will be borne by the Federal Government. The provision maintains the Federal and non-Federal cost sharing provisions of the Water Resources Development Act of 1986 for the initial construction of shore protection projects. In addition, this section makes it clear that those projects for shore protection that are authorized in this Act, as well as those projects that complete a feasibility study by December 31, 1999, shall be cost shared at the current 65 percent Federal and 35 percent non-Federal.

This proposal will provide for the orderly continuation of the Federal and non-Federal partnerships on shore protection projects by providing affordable projects in the context of a balanced Federal budget. The majority of hurricane and storm damage reduction projects are built in coastal areas. These coastal projects most often involve the periodic nourishment of beach areas over a 50-year project life. Besides reducing hurricane and storm damages, which is essential to preserving the viability of coastal areas, many of these projects are also essential to the economic viability of State, regional, and local recreation and tourism activities. To reflect the long-term non-Federal benefits that accrue to such shoreline protection projects, the provision amends section 103(d) of the Water Resources Development Act of 1986 to increase the non-Federal contribution associated with the periodic nourishment of such projects.

Sec. 203. Small Flood Control Authority

The Army Corps of Engineers' small flood control project continuing authority program is a popular program that provides a means for quick implementation for flood damage reduction studies and projects. The Federal project limits for section 205 were last increased in the Water Resources Development Act of 1986. This proposed increase in the Federal share of project cost from $5,000,000 to $7,000,000 will offset the rise in costs due to inflation during that period. Additionally, the provision encourages consideration of non-structural flood control measures in implementing projects under the authority.

Sec. 204. Use of Non-Federal Funds for Compiling and Disseminating Information on Flood and Flood Damages

This provision allows the Secretary to accept and expend certain funds provided by States and local governments to compile and disseminate information on floods and flood damages. The Water Resources Development Act of 1990 prohibited the collection of fees from such entities; nevertheless, the demand for information on floods and flood damages continues to increase. There have been a number of instances where states and local governments have offered to contribute funds to expand the services provided pursuant to this authority, but the agency has been unable to accept such contributions because of the statutory prohibition on collecting fees for such services. This section will allow the Secretary to accept voluntary contributions from state and local governments. By clarifying that this statutory prohibition does not apply to funds voluntarily contributed, the agency will be able to disseminate information on flooding and flood damages to a wider segment of the public.

Sec. 205. Aquatic Ecosystem Restoration

This provision will allow non-profit entities to participate as non-Federal project sponsors in aquatic ecosystem restoration and protection projects carried out under the authority of section 206 of the Water Resources Development Act of 1996 (P.L. 104–303), thereby expanding the universe for potential project sponsors beyond those that meet the definition of "non-Federal interest" as set forth in section 221 of the Flood Control Act of 1970.

Sec. 206. Beneficial Uses of Dredged Materials

This provision will allow non-profit entities to participate as non-Federal project sponsors in beneficial uses of dredged material projects carried out under the authority of section 204 of the Water Resources Development Act of 1992 (P.L. 102–580), thereby expanding the universe for potential project sponsors beyond those that meet the definition of "non-Federal interest" as set forth in section 221 of the Flood Control Act of 1970.

Sec. 207. Voluntary Contributions by States and Political Subdivisions

This provision expands the authority of the Secretary to receive funds from states and political subdivisions to be expended in con-

nection with funds appropriated by the United States for any authorized flood control work.

Sec. 208. Recreation User Fees

This provision allows the Secretary to retain and expend, without further appropriation, 100 percent of recreation user fee revenues above the base line of $34,000,000 for each fiscal year 1999 through 2002. The revenues retained by the Corps would be available through Fiscal Year 2005 for specific purposes, including repair and maintenance work and habitat for facility enhancement.

Under current law, all recreation user fee revenues collected at water resources development projects under the jurisdiction of the Department of the Army must be deposited into a special account in the Treasury and are made available to the Corps only after Congress provides an appropriation in subsequent fiscal years. Although the Corps has authority to collect recreation user fees and is encouraged to do so, to maximize revenues, the cost of collecting those revenues is provided for with funds that could be used for other recreation activities. This reduces the funds available for those activities. It also reduces the incentive for project managers to pursue expanded fee collection aggressively, since the cost of that collection is not reimbursed.

Sec. 209. Water Resources Development Studies for the Pacific Region

This provision expands studies authorized for the Pacific Region that includes American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands, to allow the Secretary to investigate existing water resource needs.

Sec. 210. Missouri and Middle Mississippi Rivers Enhancement Project

This provision authorizes the Secretary to develop projects to protect and enhance fish and wildlife habitat of the Missouri and Middle Mississippi Rivers. The projects shall provide for such activities as are necessary to protect and enhance fish and wildlife habitat without adversely affecting flood control, navigation, recreation, enhancement of water supply and private property rights. $30,000,000 is authorized to carry out the section for the period of fiscal years 2000 and 2001. The Federal share of the cost of each project shall not exceed $5,000,000 and the non-Federal share of the cost of each project shall be 35 percent.

Sec. 211. Outer Continental Shelf

This provision amends section 8(k)(2)(B) of the Outer Continental Shelf Lands Act to prohibit the Department of Interior from assessing fees on non-Federal sponsors of water resource projects. Currently, the Department of Interior is precluded from collecting fees from other Federal agencies who receive minerals, sand or other natural resources from the outer continental shelf.

This section allows for the reimbursement of non-Federal interests for fees assessed by the Department of Interior for use of Outer Continental Shelf sand.

Sec. 212. Environmental Dredging

This provision adds Snake Creek in Bixby, Oklahoma, and Willamette River, Oregon to the list of rivers contained in section 312 of the Water Resources Development Act of 1990 (P.L. 101–640) where the Corps is authorized to conduct dredging to restore environmental resources.

Sec. 213. Benefit of Primary Flood Damages Avoided Included in Benefit-Cost Analysis

This provision amends section 308(a) of the Water Resources Development Act of 1990 (P.L. 101–640) to direct the Secretary to include primary flood damage reduction benefits in the benefit base for justifying non-structural flood damage reduction projects. Failure to count these essential benefits in economic benefit cost evaluations has resulted in an unwarranted impediment to justification of non-structural flood damage reduction projects. These benefits, such as flood plain evacuation and relocation, are appropriate to be counted in benefit cost analysis for such projects. This provision does not modify the existing calculation of benefits for structural flood control projects.

Sec. 214. Control of Aquatic Plant Growth

This provision adds two plants, Arundo donax, and tarmarix, to the list of noxious weeds that the Secretary has authority to control and eradicate.

Sec. 215. Environmental Infrastructure

This provision amends section 219(c) of the Water Resources Development Act of 1992 (P.L. 102–580) by adding Lake Tahoe, California and Nevada; Lancaster, California, and San Ramon, California to the list of watersheds the Secretary is authorized to provide technical and planning and design assistance for water-related environmental infrastructure and resource protection and development.

Sec. 216. Watershed Management, Restoration, and Development

This provision amends section 503(d) of the Water Resources Development Act of 1996 (P.L. 104–303) by adding 11 watersheds to the list of watersheds the Secretary is authorized to provide technical, planning and design assistance for watershed management, restoration and development projects.

Sec. 217. Lakes Program

This provision amends the existing silt and aquatic growth removal program at specified lakes in the United States, authorized by section 602(a) of the 1986 Water Resources Development Act (100 Stat. 4148), by adding three additional lakes, located in Clear Lake, Lake County, California; Flints Pond, Hollis, New Hampshire; and Osgood Pond, Milford, New Hampshire.

Sec. 218. Sediments Decontamination Policy

This provision amends section 405 of the Water Resources Development Act of 1992 (P.L. 102–580) by requiring that sediment decontamination technologies result in practical end-use products and

increases the authorized program level from $5,000,000 to $22,000,000.

Sec. 219. Disposal of Dredged Material on Beaches

This provision amends section 145 of Water Resources Development Act of 1976 (33 U.S.C. 426j) by changing the non-Federal cost share for beneficial reuse projects from 50 percent to 35 percent. This change is necessary to allow the use of dredged materials from navigation projects on nearby shoreline projects at a lower overall cost to the Federal Government and state or local entities. It is noted that local communities need to be advised of the cost-share provisions of such beneficial use in a timely manner to budget for their cost-share of such use.

Sec. 220. Fish and Wildlife Mitigation

This provision amends section 906(e) of Water Resources Development Act of 1986 to allow non-Federal project sponsors to contribute in-kind facilities, supplies and services for up to 80 percent of allowable first costs of enhancement projects. The Committee is including such modifications to make the cost-sharing requirements with respect to Environmental Management Program enhancements consistent with all other Corps enhancement cost-share requirements,

Sec. 221. Reimbursement of Non-Federal Interest

This provision amends section 211(e) of the Water Resources Development Act of 1996 to clarify Congressional intent on Federal reimbursement for flood control projects constructed by non-Federal interests. The language makes it clear that any reimbursement to a non-Federal interest on a specific flood control project may occur only after appropriations have been approved for such project.

Sec. 222. National Contaminated Sediment Task Force

This provision directs the National Sediment Task Force, created under the National Contaminated Sediment Assessment and Management Act (P.L.102–580), to report to Congress on the status of remedial action plans in various areas of concern across the United States. Such report will include information on funding, the nature and sources of sediment contamination, the need for remediation at individual sites, and other associated issues related to contaminated sediment remediation.

Sec. 223. Great Lakes Basin Program

The proposed language directs the Corps to develop a strategic plan for programs within the Great Lakes basin. This plan will provide a means for assessing the ability of the Corps projects and programs to meet regional water resources needs. This plan should facilitate the integration of programs and projects with common objectives and resolution of those with conflicting objectives or consequences. It will also assess factors which are limiting the use of Corps programs and authorities.

The proposes language directs the Corps to develop an inventory of existing physical and biological data relevant to the Great Lakes biohydrogical projections, and biological elements. The Corps is also

directed to analyze this inventory for data inconsistencies and gaps.

The proposed language directs the Corps to conduct an economic study of the benefits from recreational activities at Federal navigation projects ion the Great Lakes. This study will provide data necessary for states to priorities resources for recreational infrastructure and provide a more complex picture of the economic value of Federal navigation projects in the Great Lakes.

Sec. 224. Projects for Improvement of the Environment

This provision amends section 1135 of Water Resources Development Act of 1986 to add the control of sea lamprey to the authorized purposes. Section 1135 authorizes the Secretary to make modifications to structures and operations at U.S. Army Corps of Engineers projects for the purpose of improving the quality of the environment.

Sec. 225. Water Quality, Environmental Quality, Recreation, Fish and Wildlife, Flood Control, and Navigation

This provision directs the Secretary to report to the Congress on water quality, environmental quality, flood control, navigation, and other associated matters in the western Lake Eerie watershed. The Secretary is directed to cooperate with Federal, State, and local agencies and non-governmental organizations in assembling such studies and investigations.

Sec. 226. Irrigation Diversion Protection and Fisheries Enhancement Assistance

This provision authorizes the Secretary to provide technical and planning assistance to non-Federal interests to formulate and evaluate fish screens, fish passage devices, and other measures to decrease the incidence of juvenile and adult fish inadvertently entering into irrigation systems. Such assistance shall be cost-shared evenly between the Federal Government and any non-Federal sponsor. Within 2 years of the date of enactment of this Act, the Secretary is directed to report to the Congress on fish mortality caused by irrigation water intake devices, and on appropriate mitigation measures to reduce such fish mortality.

Sec. 227. Small Storm Damage Reduction Projects

This provision amends section 3 of the Act of August 13, 1962 (33 U.S.C. 426g) by increasing the authorized level for Federal funding of small storm damage reduction projects from $2,000,000 to $3,000,000.

Sec. 228. Shore Damage Prevention or Mitigation

This provision amends Section 111 of the Rivers and Harbors Act of 1968 to increase the annual programmatic authority for shore damage mitigation from $2,000,000 to $5,000,000. The Secretary is also directed to examine the appropriateness of combining mitigation projects with other shore protection projects in the same area.

Sec. 229. Atlantic Coast of New York

This provision amends section 403 of Water Resources Development Act of 1992 to authorize additional funding of $2.5 million for the Atlianitc Coast of New York monitoring program.

Sec. 230. Accelerated Adoption of Innovative Technologies for Containmented Sediments

This provision amends section 8 of Water Resources Development Act of 1988 (33 U.S.C. 2314) to direct the Secretary to approve projects to test innovative technologies for environmental sound management of contaminated sediments.

TITLE III. PROJECT-RELATED PROVISIONS

Sec. 301. Dredging of Salt Ponds in the State of Rhode Island

This provision authorizes the Secretary to acquire a small dredge for the state of Rhode Island to perform dredging for environmental mitigation purposes at numerous coastal salt ponds in the state.

Sec. 302. Upper Susquehanna River Basin, Pennsylvania and New York

This provision amends section 567(a) of the Water Resources Development Act of 1996 (P.L. 104–303) by adding the Chemung River watershed, New York, to the list of watersheds the Secretary, in cooperation with the Secretary of Agriculture and the states of Pennsylvania and New York, is authorized to conduct a study and develop a strategy for using wetland restoration, soil and water conservation practices, and nonstructural measures to reduce flood damage, improve water quality, and create wildlife habitat.

Sec. 303. Small Flood Control Projects

This provision amends Section 102 of the Water Resources Development Act of 1996 (110 Stat. 3668) by adding Repaupo Creek and Delaware River, Gloucester County, New Jersey; Irondequoit Creek, New York; and Tioga County, Pennsylvania, to the list of small flood control projects the Secretary is authorized to conduct.

Sec. 304. Small Navigation Projects

This provision amends section 104 of the Water Resources Development Act of 1996 (P.L. 104–303) by adding Fortescue Inlet, Delaware Bay, New Jersey, and Braddock Bay, Greece, New York, to the list of small navigation projects the Secretary is authorized to study, and, if feasible, carry out under section 107 of the River and Harbor Act of 1960.

Sec. 305. Streambank Protection Projects

This provision directs the secretary to carry out small emergency streambank stabilization projects in Barrow, Alaska, Bay City, Michigan, Billings, Montana, and Point Marion, Pennsylvania.

Sec. 306. Aquatic Ecosystem Restoration, Springfield, Oregon

This provision authorizes the Secretary to reconfigure the existing pond at Springfield, Oregon, if the Secretary determines harm-

ful impacts are a result of a previously constructed flood control project by the Corps of Engineers.

Sec. 307. Guilford and New Haven, Connecticut

This provision directs the Secretary to expeditiously complete the activities authorized under section 346 of the Water Resources Development Act of 1992 (P.L. 102–580) at Sluice Creek in Guilford, Connecticut, and Lighthouse Point Park in New Haven, Connecticut. In July 1998, the Corps completed a reconnaissance study for Coastal Connecticut Ecosystem Restoration. The completion of a feasibility study is consistent with the long-term goal of the Corps' water resources development program for increasing the quality and quantity of the nation's wetlands and is of ecological significance for the state of Connecticut, including Long Island Sound. The Secretary is directed to complete the feasibility study within 48 months of the date of enactment of this Act.

Sec. 308. Francis Bland Floodway Ditch

This provision names the Eight Mile Creek, Paragould, Arkansas, flood control project the "Francis Bland Floodway Ditch".

Sec. 309. Caloosahatchee River Basin, Florida

This provision amends section 528(e)(4) of the Water Resources Development Act of 1996 (110 Stat. 3770) by adding the Caloosahatchee River Basin as a potential area which may be acquired by the non-Federal sponsor for water storage purposes within the Everglades and South Florida Ecosystem Restoration project area. The terms of crediting the non-Federal sponsor for land acquisition are not changed by this section.

Sec. 310. Cumberland, Maryland, Flood Project Mitigation

This provision authorizes the Secretary to participate in the restoration of the Chesapeake and Ohio Canal, consistent with the recommendations of the National Park Service's Rewatering Design Analysis. The project will be cost shared and operations and maintenance of the canal will be the full responsibility of the National Park Service. The project will be authorized at 65 percent Federal, 35 percent non-Federal.

Sec. 311. City of Miami Beach, Florida

This provision amends section 5(b)(3)(C)(i) of the Act of August 13, 1946 (33 U.S.C. 426h) by adding the City of Miami Beach, Florida, to those areas eligible for assistance under the National Shoreline Erosion Control Development and Demonstration Program.

Sec. 312. Sardis Reservoir, Oklahoma

This provision authorizes the Secretary to accept a prepayment of the full costs of water supply storage at Sardis Reservoir, Oklahoma. The amount to be paid by the State of Oklahoma will be determined through an independent audit.

Sec. 313. Upper Mississippi River and Illinois Waterway System Navigation Modernization

This provision directs the Secretary, in accordance with the Upper Mississippi River-Illinois Waterway System Navigation Study, to proceed immediately to prepare preconstruction engineering design plans and specifications for 1,200 foot extensions of locks 20–25 on the Mississippi River and the LaGrange and Peoria Locks on the Illinois River. This provision does not authorize construction and does not preempt the future findings of the Secretary on the engineering, economic and environmental feasibility of any specific approach to improve navigation along these waterways.

This provision also includes "findings" to emphasize what is at stake should the U.S. fail to modernize this critical transportation option to meet the needs of the next century. The U.S. is anticipated to experience increased trade activity over the next 50 years that will place greater demands on our transportation system. It should be the policy of the U.S. Army Corps of Engineers to aggressively pursue modernization of water transportation infrastructure authorized by the Congress to promote the relative competitive position of the United States in the international marketplace.

Sec. 314. Upper Mississippi River Management

This provision amends section 1103 of the Water Resources Development Act of 1986 (P.L. 99–662) by extending the existing authorization for the Upper Mississippi River Environmental Management Program for the period from 2002 through 2009. In addition, this provision increases the authorization level for fish and wildlife habitat rehabilitation and enhancement activities, from $8,200,000 to $22,750,000 for each of fiscal years 1999 through 2009. For the long term resources monitoring program, the authorization level is increased from $7,680,000 to $10,420,000 for each of fiscal years 1999 to 2009. For all enhancement and mitigation projects carried out on non-Federal land, the non-Federal share of the cost of each project shall be 35 percent and the cost of operation and maintenance of each project shall also be 100 percent non-Federal responsibility.

In addition, this provision authorizes the Secretary to investigate, and, if appropriate, carry out restoration of urban wildlife habitat in the St. Louis, Missouri, area with an emphasis on greenways. To the extent possible this project should include reclamation and wetlands restoration opportunities such as the Columbia Bottoms and the Rivers South Restoration Project near the River des Peres in LeMay in St. Louis County.

Sec. 315. Research and Development Program for Columbia and Snake Rivers Salmon Survival

This provision amends section 511 of the Water Resources Development Act of 1996 (P.L. 104–303) by increasing the existing authorization level in subsection 511(b)(2) from $12,000,000 to $35,000,000 for the Advanced Turbine Development program. Additionally, section 511 of P.L. 104–303 is modified by providing the Secretary with authority to develop and carry out methods to reduce caspian tern and cormorant nesting populations on and in the vicinity of certain Army Corps dredge spoil islands in the Columbia

River. An authorization level of $1,000,000 is provided for this purpose. Nothing in this section shall interrupt or preclude any ongoing salmon recovery program. It is noted that the report requested in 1999 on activities under subsection 511(a) remains unchanged.

Sec. 316. Nine Mile Run Habitat Restoration, Pennsylvania

This provision authorizes the Secretary to provide credit to the non-Federal interest for environmental and other pre-construction work completed for a habitat restoration project at Nine Mile Run Habitat Restoration, Pennsylvania.

Sec. 317. Larkspur Ferry Channel, California

This provision directs the Secretary to work with the Secretary of Transportation to find a solution to fulfilling the Federal commitment made to the local sponsor to take over the operation and maintenance of Larkspur Ferry Channel.

Sec. 318. Comprehensive Flood Impact-Response Modeling System

This provision authorizes the Secretary to study and implement a Comprehensive Flood Impact-Response Modeling System for the Coralville Reservoir and the Iowa River Watershed. The Secretary is directed to report to the Congress on the hydrologic, geomorphic, economic, and other associated data within the watershed, within 5 years after the date of enactment of this Act. $2,250,000 is authorized to carry out this provision.

Sec. 319. Study Regarding Innovative Financing for Small and Medium-sized Ports

This provision directs the Comptroller General of the United States to study various alternatives for innovative financing of future construction, operation, and maintenance of projects in small and medium-sized ports. The Comptroller General is directed to report to the Congress on the results of such study within 270 days of the date of enactment of this Act.

Sec. 320. Candy Lake Project, Osage County, Oklahoma

This provision directs the Secretary to convey Federal land at the Candy Lake Project in Osage County, Oklahoma, at fair market value, to previous non-Federal owners of such land.

Sec. 321. Salcha River and Piledriver Slough, Fairbanks, Alaska

This provision directs the Secretary to further evaluate, and if justified, carry out flood damage reduction measures along the river, to protect against surface water flooding.

Sec. 322. Eyak River, Cordova, Alaska

This provision directs the Secretary to further evaluate, and if justified, carry out flood damage reduction measures along the river.

Sec. 323. North Padre Island Storm Damage Reduction and Environmental Restoration Project

The Secretary is directed to carry out a project for ecosystem restoration and storm damage reduction at North Padre Island, Cor-

pus Christi Bay, Texas, at a total estimated cost of $30,000,000, with an estimated Federal cost of $19,500,000, and an estimated non-Federal cost of $10,500,000, if the Secretary finds that such work is technically sound, environmentally acceptable, and economically justified.

Sec. 324. Kanopolis Lake, Kansas

After completing a water reallocation study at Kanopolis Lake, Kansas, within 1 year of the date of enactment of this Act, the Secretary is directed to enter into water reallocation negotiations with non-Federal interests to determine the terms and conditions of such reallocation. The Secretary may negotiate a credit for a portion of the financial repayment to the Federal Government for work performed by non-Federal interests.

Sec. 325. New York City Watershed

This provision amends Section 552 of Water Resources Development Act of 1996 (110 Stat. 3780) to provide the state director for the New York City Watershed greater flexibility in entering into cooperative agreements with public entities for projects authorized under Section 552(c).

Sec. 326. City of Charlevoix Reimbursement, Michigan

This provision authorizes the Secretary to reimburse the City of Charlevoix, Michigan, for the Federal share of costs associated with construction of a new revetment connection to the Federal navigation project at Charlevoix Harbor, Michigan.

Sec. 327. Hamilton Dam Flood Control Project, Michigan

This provision authorizes the Secretary to construct the Hamilton County flood control project using general authority provided under 33 U.S.C. 701s.

Sec. 328. Holes Creek Flood Control Project, Ohio

This provision stipulates that the non-Federal share of project costs for the flood control project, Holes Creek, Ohio, shall not exceed the sum of the total amount projected as the non-Federal share in the September 30, 1996, Project Cooperation Agreement and 100 percent of the amount of any increases in the cost of the locally preferred plan over the cost estimated in the Project Cooperation Agreement.

Sec. 329. Overflow Management Facility, Rhode Island

This provision corrects a technical drafting error made in section 585(a) of the Water Resources Development Act of 1996 (110 Stat. 3791) by replacing "river" with "sewer".

Sec. 330. Anacostia River Aquatic System Restoration, District of Columbia and Maryland

This provision authorizes the Secretary to use the balance of funds previously appropriated for the Anacostia River Aquatic System Restoration project under section 1135 of the Water Resources Development Act of 1986 for construction of an aquatic restoration

system in the Anacostia River watershed under section 206 of Water Resources Development Act of 1996.

Sec. 331. Everglades and South Florida Ecosystem Restoration

This provision amends section 528 of the Water Resources Development Act of 1996 (P.L. 104–303) to extend the authorization of appropriations for critical restoration projects in South Florida through Fiscal Year 2003.

HEARINGS

On March 11, 1997, the Committee on Environment and Public Works met to consider S. 507, a bill to provide for the conservation and development of water and related resources, and to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and the President's proposed budget request for fiscal year 2000 for the Army Corps of Engineers. The committee received testimony from Hon. Joseph W. Westphal, Assistant Secretary for Civil Works, Department of the Army, and Michael L. Davis, Deputy Assistant Secretary of Policy and Legislation, Department of the Army.

ROLLCALL VOTES

On March 17, 1999, the Committee on Environment and Public Works met to consider S. 507, the Water Resources Development Act of 1999. The committee agreed by voice vote to the managers' amendments and an amendment by Senator Smith of New Hampshire, relative to innovative technologies. The committee by voice vote then ordered the bill to be reported as amended. No rollcall votes occurred on the amendments or the bill.

EVALUATION OF REGULATORY IMPACT

Section 11(b) of rule XXVI of the Standing Rules of the Senate requires publication in the report the committee's estimate of the regulatory impact made by the bill as reported. No regulatory impact is expected by the passage of S. 507. The bill will not affect the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104–4), the Committee finds that this bill would impose no Federal intergovernmental unfunded mandates on State, local, or tribal governments. All of its governmental directives are imposed on Federal agencies. The bill does not directly impose any private sector mandates.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Act requires that a statement of the cost of a reported bill, prepared by the Congressional Budget Office, be included in the report. That statement has been requested. However, it is the opinion of the committee that the business of the Senate should proceed without

delay, and that the CBO statement will be printed in the Congressional Record when it is available.

CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in **[**black brackets**]**, new matter is printed in *italic*, existing law in which no change is proposed is shown in roman:

UNITED STATES CODE

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

CHAPTER 9—PROTECTION OF NAVIGABLE WATERS AND OF HARBOR AND RIVER

* * * * * * *

§ 426g. Authorization of small projects not specifically authorized; expenditures; local cooperation; work to be complete; exceptions

The Secretary of the Army is authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 426e of this title, when he finds that such work is advisable, and he is further authorized to allot from any appropriations hereafter made for civil works, not to exceed $30,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: Provided, That not more than **[**$2,000,000**]** *$3,000,000* shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 426e(c) of this title: Provided further, That the provisions of local cooperation specified in section 426e of this title shall apply: And provided further, That the work shall be complete in itself and shall not commit the United States to any additional improvement to insure its successful operation, except for participation in periodic beach nourishment in accordance with section 426e(c) of this title, and as may result from the normal procedure applying to projects authorized after submission of survey reports.

§ 426h. "Shores" defined

As used in sections 426e to 426h of this title, the word "shores" includes all the shorelines of the Atlantic and Pacific Oceans, the Gulf of Mexico, the Great Lakes, and lakes, estuaries, and bays directly connected therewith*, including the city of Miami Beach, Florida.*

* * * * * * *

§ 426i. Shore damage prevention or mitigation

[The Secretary] *(a) IN GENERAL.—The Secretary* of the Army is authorized to investigate, study, plan, and implement structural and nonstructural measures for the prevention or mitigation of shore damages attributable to Federal navigation works, if a non-Federal public body agrees to operate and maintain such measures, and, in the case of interests in real property acquired in conjunction with nonstructural measures, to operate and maintain the property for public purposes in accordance with regulations prescribed by the Secretary. [The costs]

(b) COST SHARING.—The costs of implementing measures under this section shall be cost-shared in the same proportion as the cost-sharing provisions applicable to the project causing the shore damage. [No such]

(c) REQUIREMENT FOR SPECIFIC AUTHORIZATION.—No such project shall be initiated without specific authorization by Congress if the Federal first cost exceeds [$2,000,000] *$5,000,000.*

(d) COORDINATION.—The Secretary shall—

(1) coordinate the implementation of the measures under this section with other Federal and non-Federal shore protection projects in the same geographic area; and

(2) to the extent practicable, combine mitigation projects with other shore protection projects in the same area into a comprehensive regional project.

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CHAPTER 12—RIVER AND HARBOR IMPROVEMENTS GENERALLY

SUBCHAPTER IV—PARTICULAR WORK OR IMPROVEMENTS

* * * * * * *

§ 610. Control of aquatic plant growths

(a) There is hereby authorized a comprehensive program to provide for control and progressive eradication of water-hyacinth, *Arundo dona,* alligatorweed, Eurasian water milfoil, malaleuca, *tarmarix* and other obnoxious aquatic plant growths, from the navigable waters, tributary streams, connecting channels, and other allied waters of the United States, in the combined interest of navigation, flood control, drainage, agriculture, fish and wildlife conservation, public health, and related purposes, including continued research for development of the most effective and economic control measures, to be administered by the Chief of Engineers, under the direction of the Secretary of the Army, in cooperation with other Federal and State agencies. Local interests shall agree to hold and save the United States free from claims that may occur from control operations and to participate to the extent of 30 per centum of the cost of such operations. Costs for research and planning undertaken pursuant to the authorities of this section shall be borne fully by the Federal Government.

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§ 701h. Contributions by states and political subdivisions

The Secretary of the Army is authorized to receive from States and political subdivisions thereof, such funds as may be contributed by them to be expended in connection with funds appropriated by the United States for any authorized flood control *or environmental restoration* work whenever such work and expenditure may be considered by the Secretary of the Army, on recommendation of the Chief of Engineers, as advantageous in the public interest, and the plans for any reservoir project may, in the discretion of the Secretary of the Army, on recommendation of the Chief of Engineers, be modified to provide additional storage capaCity for domestic water supply or other conservation storage, on condition that the cost of such increased storage capacity is contributed by local agencies and that the local agencies agree to utilize such additional storage capacity in a manner consistent with Federal uses and purposes: Provided, That when contributions made by States and political subdivisions thereof, are in excess of the actual cost of the work contemplated and properly chargeable to such contributions, such excess contributions may, with the approval of the Secretary of the Army, be returned to the proper representatives of the contributing interests.

* * * * * * *

§ 701s. Small flood control projects; appropriations; amount limitation for single locality; conditions

The Secretary of the Army is authorized to allot from any appropriations heretofore or hereafter made for flood control, not to exceed $40,000,000 for any one fiscal year, for the [construction of small projects] *implementation of small structural and nonstructural projects* for flood control and related purposes not specifically authorized by Congress, which come within the provisions of section 701a of this title, when in the opinion of the Chief of Engineers such work is advisable. The amount allotted for a project shall be sufficient to complete Federal participation in the project. Not more than [$5,000,000] *$7,000,000* shall be allotted under this section for a project at any single locality. The provisions of local cooperation specified in section 701c of this title shall apply. The work shall be complete in itself and not commit the United States to any additional improvement to insure its successful operation, except as may result from the normal procedure applying to projects authorized after submission of preliminary examination and survey reports.

* * * * * * *

§ 709a. Information on floods and flood damage

(a) COMPILATION AND DISSEMINATION.— * * *

(b) FEES.—The Secretary of the Army is authorized to establish and collect fees from Federal agencies and private persons for the purpose of recovering the cost of providing services pursuant to this

section. Funds collected pursuant to this section shall be deposited into the account of the Treasury of the United States entitled "Contributions and Advances, Rivers and Harbor, Corps of Engineers (8862)" and shall be available until expended to carry out this section. No fees shall be collected from State, regional, or local governments or other non-Federal public agencies for services provided pursuant to this section, *but the Secretary of the Army may accept funds voluntarily contributed by such entities for the purpose of expanding the scope of the services requested by the entities.*

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UNITED STATES CODE—TITLE 43—PUBLIC LANDS

CHAPTER 29—SUBMERGED LANDS

SUBCHAPTER III—OUTER CONTINENTAL SHELF LANDS

* * * * * * *

§ 1337. Grant of leases by Secretary

(a) * * *

(k) OTHER MINERAL LEASES; AWARD TO HIGHEST BIDDER; TERMS AND CONDITIONS; AGREEMENTS FOR USE OF RESOURCES FOR SHORE PROTECTION, BEACH OR COASTAL WETLANDS RESTORATION, OR OTHER PROJECTS.—

(1) The Secretary is authorized to grant to the qualified persons offering the highest cash bonuses on a basis of competitive bidding leases of any mineral other than oil, gas, and sulphur in any area of the outer Continental Shelf not then under lease for such mineral upon such royalty, rental, and other terms and conditions as the Secretary may prescribe at the time of offering the area for lease.

(2)(A) Notwithstanding paragraph (1), the Secretary may negotiate with any person an agreement for the use of Outer Continental Shelf sand, gravel and shell resources—

(i) for use in a program of, or project for, shore protection, beach restoration, or coastal wetlands restoration undertaken by a Federal, State, or local government agency; or

(ii) for use in a construction project, other than a project described in clause (i), that is funded in whole or in part by or authorized by the Federal Government.

(B) In carrying out a negotiation under this paragraph, the Secretary may assess a fee based on an assessment of the value of the resources and the public interest served by promoting development of the resources. No fee shall be assessed directly or indirectly under this subparagraph against an agency of the Federal Government *or any other non-Federal interest subject to an agreement entered into under section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b).*

* * * * * * *

Public Law 99–662

WATER RESOURCES DEVELOPMENT ACT OF 1986

[As Amended Through P.L. 105–153, December 17, 1997]

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act many be cited as the "Water Resources Development Act of 1986".

* * * * * * *

SEC. 103. FLOOD CONTROL AND OTHER PURPOSES.

(a) FLOOD CONTROL.—

* * * * * * *

(d) CERTAIN OTHER COSTS ASSIGNED TO PROJECT PURPOSES.—[Costs of constructing]

(1) CONSTRUCTION.—Costs of constructing projects or measures for beach erosion control and water quality enhancement shall be assigned to appropriate project purposes listed in subsections (a), (b), and (c) and shall be shared in the same percentage as the purposes to which the costs are assigned, except that all costs assigned to benefits to privately owned shores (where use of such shores is limited to private interests) or to prevention of losses of private lands shall be borne by non-Federal interests and all costs assigned to the protection of federally owned shores shall be borne by the United States.

(2) PERIODIC NOURISHMENT.—In the case of a project authorized for construction after December 31, 1999, or for which a feasibility study is completed after that date, the non-Federal cost of the periodic nourishment of projects or measures for shore protection or beach erosion control shall be 50 percent, except that—

(A) all costs assigned to benefits to privately owned shores (where use of such shores is limited to private interests) or to prevention of losses of private land shall be borne by non-Federal interests; and

(B) all costs assigned to the protection of federally owned shores shall be borne by the United States.

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SEC. 202. GENERAL CARGO AND SHALLOW HARBOR PROJECTS.

(a) AUTHORIZATION OF CONSTRUCTION.— * * *

ARTHUR KILL, NEW YORK AND NEW JERSEY

The project for navigation, Arthur Kill, New York and New Jersey, Report of the Board of Engineers for Rivers and Harbors, dated March 31, 1986, at a [total cost of $42,600,000, with an estimated first Federal cost of $27,500,000, and an estimated first non-Federal cost of $15,100,000] *total cost of $260,899,000, with an estimated Federal cost of $195,705,000 and an estimated non-Federal cost of $65,194,000*. At such time as construction may be initiated in accordance with the terms of this subsection, the project shall

be included in and joined with the Kill van Kull and Newark Bay Channel, New York and New Jersey project under subsection (a) of this section.

NEW YORK HARBOR AND ADJACENT CHANNELS, NEW YORK AND NEW JERSEY

The project for (1) an access channel 45 feet deep below man low water and generally 450 feet wide with suitable bends and turning areas to extend from deep water in the Anchorage Channel, New York Harbor, westward approximately 12,000 feet along the southern boundary of the Port Jersey peninsula to the head of navigation in Jersey City, New Jersey, at [a total cost of $29,700,000, with an estimated first Federal cost of $21,000,000 and an estimated first non-Federal cost of $8,700,000; and (2) for a channel 42 feet deep below mean low water and generally 300 feet wide with suitable bends and turning areas to extend from deep water in the Anchorage Channel westward approximately 11,000 feet to the head of navigation in Claremont Terminal Channel, at a total cost of $16,000,000, with an estimated first Federal cost of $11,300,000 and an estimated first non-Federal cost of $4,700,000] *at a total cost of $100,689,000, with an estimated Federal cost of $74,998,000 and an estimated non-Federal cost of $25,701,000*. No disposal of dredged material from construction, operation, and maintenance of such project shall take place at Bowery Bay, Flushing Bay, Powell's Cove, Little Bay, or Little Neck Bay, Queens, New York.

* * * * * * *

SEC. 401. AUTHORIZATION OF PROJECTS.

(a) AUTHORIZATION FOR CONSTRUCTION.—* * *

EIGHT MILE CREEK, PARAGOULD, ARKANSAS

The project for flood control, [Eight Mile Creek, Paragould, Arkansas] *Francis Bland Floodway Ditch*: Report of the Chief of Engineers, dated August 10, 1979, at a total cost of $16,100,000, with and estimated first Federal cost of $11,200,000, and an estimated first non-Federal cost of $4,900,000.

* * * * * * *

SEC. 602. LAKES PROGRAM.

(a) * * *

(1) * * *

(17) Clear Lake, Lake County, California, removal of silt and aquatic growth and development of a sustainable weed and algae management program.

(18) Flints Pond, Hollis, New Hampshire, removal of excessive aquatic vegetation.

(19) Osgood Pond, Milford, New Hampshire, removal of excessive aquatic vegetation.

* * * * * * *

SEC. 1103. UPPER MISSISSIPPI RIVER PLAN.

(a)(1) This section may be cited as the "Upper Mississippi River Management Act of 1986."

* * * * * * *

[(e)(1) The Secretary, in consultation wit the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, is authorized to undertake, as identified in the master plan—

[(A) a program for the planning, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement;

[(B) implementation of a long-term resource monitoring program; and

[(C) implementation of a computerized inventory and analysis system.

[(2) Each program referred to in paragraph (1) shall be carried out for ten years. Before the last day of such ten-year period, the Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, shall conduct an evaluation of such programs and submit a report on the results of such evaluation to Congress. Such evaluation shall determine each such program's effectiveness, strengths, and weaknesses and contain recommendations for the modification and continuance or termination of such program.]

(e) UNDERTAKINGS.—

(1) IN GENERAL.—

(A) AUTHORITY.—The Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, is authorized to undertake—

(i) a program for the planning, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement; and

(ii) implementation of a program of long-term resource monitoring, computerized data inventory and analysis, and applied research program; and

(B) REQUIREMENTS FOR PROJECTS.—Each project carried out under subparagraph (A) shall—

(i) to the maximum extent practicable, simulate natural river processes; and

(ii) include an outreach and education component.

(iii) on completion of the assessment under subparagraph (D), address identified habitat and natural resource needs.

(C) ADVISORY COMMITTEE.—In carrying out subparagraph (A), the Secretary shall create an independent technical advisory committee to review projects, monitoring plans, and habitat and natural resource needs assessments.

(D) HABITAT AND NATURAL RESOURCE NEEDS ASSESSMENT.—

(i) AUTHORITY.—The Secretary is authorized to undertake a systemic, river reach, and pool scale assessment of habitat and natural resource needs to serve as

a blueprint to guide habitat rehabilitation and long-term resource monitoring.

(ii) DATA.—The habitat and natural resource needs assessment shall, to the maximum extent practicable, use data in existence on the date of enactment of this subparagraph.

(iii) TIMING.—The Secretary shall complete a habitat and natural resource needs assessment not later than 3 years after the date of enactment of this subparagraph.

(2) REPORTS.—On December 31, 2005, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, the Secretary shall prepare and submit to Congress a report that—

(A) contains an evaluation of the programs described in paragraph (1);

(B) describes the accomplishments of each program;

(C) include results of a habitat and natural resources needs assessment; and

(D) identifies any needed adjustments in the authorization under paragraph (1) or the authorized appropriations under paragraphs (3), (4) and (5).

(3) For purposes of carrying out paragraph [1(A)] *1(A)(i)* of this subsection, there is authorized to be appropriated to the [Secretary not to exceed $8,200,000 for the first fiscal year beginning after the date of enactment of this Act, not to exceed $12,400,000 for the second fiscal year beginning after the date of enactment of this Act, and not to exceed $13,000,000 per fiscal year for each of the succeeding eight fiscal years] *Secretary not to exceed $22,750,000 for each of fiscal years 1999 through 2009.*

(4) For purposes of carrying out paragraph [1(B)] *(1)(A)(ii)* of this subsection, there is authorized to be appropriated to the Secretary not to exceed [$7,680,000 for the first fiscal year beginning after the date of enactment of this Act and not to exceed $5,080,000 per fiscal year for each of the succeeding nine fiscal years] *$10,420,000 for each of fiscal years 1999 through 2009.*

[(5) For purposes of carrying out paragraph 1(C) of this subsection, there is authorized to be appropriated to the Secretary not to exceed $40,000 for the first fiscal year beginning after the enactment of this Act, not to exceed $280,000 for the second fiscal year beginning after the enactment of this Act, not to exceed $1,220,000 for the third fiscal year beginning after the enactment of this Act, and not to exceed $875,000 per fiscal year for each of the succeeding seven fiscal years.

[(6)(A) Notwithstanding the provisions of subsection (a)(2) of this section, the costs of each project carried out pursuant to paragraph (1)(A) of this subsection shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with the provisions of section 906 of this Act.

[(B) Notwithstanding the provisions of subsection (a)(2) of this section, the cost of implementing the activities authorized by paragraphs (1)(B) and (1)(C) of this subsection shall be allocated in accordance with the provisions of section 906 of this Act, as if such activity was required to mitigate losses of fish and wildlife.

(5) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out paragraph (1)(C) not to exceed $350,000 for each of fiscal years 1999 through 2009.

(6) TRANSFER OF AMOUNTS.—

(A) IN GENERAL.—For each fiscal year beginning after September 30, 1992, the Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, may transfer appropriated amounts between the programs under clauses (i) and (ii) of paragraph (1)(A) and paragraph (1)(C).

(B) APPORTIONMENT OF COSTS.—In carrying out paragraph (1)(D), the Secretary may apportion the costs equally between the programs authorized by paragraph (1)(A).

[(6)**]** *(7)*(A) Notwithstanding the provisions of subsection (a)(2) of this section, the costs of each project carried out pursuant to paragraph (1)(A)(i) of this subsection shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with the provisions of section 2283(e) of this title; except that the costs of operation and maintenance of projects located on Federal lands or lands owned or operated by a State or local government shall be borne by the Federal, State, or local agency that is responsible for management activities for fish and wildlife on such lands *and, in the case of any project requiring non-Federal cost sharing, the non-Federal share of the cost of the project shall be 35 percent.*

(B) Notwithstanding the provisions of subsection (a)(2) of this section, the cost of implementing the activities authorized by **[**paragraphs (1)(B) and (1)(C) of this subsection**]** *paragraph (1)(A)(ii)* shall be allocated in accordance with the provisions of section 2283 of this title, as if such activity was required to mitigate losses to fish and wildlife.

[(7)**]** *(8)* None of the funds appropriated pursuant to any authorization contained in this subsection shall be considered to be chargeable to navigation.

(f)(1) * * *

* * * * * * *

(2)**[**(A)**]** For purposes of carrying out the program of recreational projects authorized in paragraph (1) of this subsection, there is authorized to be appropriated to the Secretary not to exceed $500,000 per year for each of the first ten fiscal years binning after the effective date of this section.

[(B) For purposes of carrying out the assessment of the economic benefits of recreational activities as authorized in paragraph (1) of this subsection, there is authorized to be appropriated to the Secretary not to exceed $300,000 per fiscal year for the first and second fiscal years beginning after the computerized inventory and analysis system implemented pursuant to subsection (e)(1)(C) of this section is fully functional and $150,000 for the third such fiscal year.**]**

* * * * * * *

(k) ST. LOUIS AREA URBAN WILDLIFE HABITAT.—The Secretary shall investigate and, if appropriate, carry out restoration of urban wildlife habitat, with a special emphasis on the establishment of

greenways in the St. Louis, Missouri, area and surrounding communities.

* * * * * * *

SEC. 1135. PROJECT MODIFICATIONS FOR IMPROVEMENT OF ENVIRONMENT.

[(a) The Secretary**]** *(1) IN GENERAL.—The Secretary* is authorized to review the operation of water resources projects constructed by the Secretary to determine the need for modifications in the structures and operations of such projects for the purpose of improving the quality of the environment in the public interest.

(2) CONTROL OF SEA LAMPREY.—Congress finds that—

(A) the Great Lakes navigation system has been instrumental in the spread of sea lamprey and the associated impacts to its fishery; and

(B) the use of the authority under this subsection for control of sea lamprey at any Great Lakes basin location is appropriate.

* * * * * * *

SEC. 1142. MEASUREMENTS OF LAKE MICHIGAN DIVERSIONS.

(a) * * *

(b)There are authorized to be appropriated **[**$250,000 per fiscal year for each fiscal year beginning after September 30, 1986**]** *a total of $1,250,000 for each of fiscal years 1999 through 2003*, to carry out this section, including those funds necessary to maintain the measurements and computations, as well as necessary capital construction costs associated with the installation of new flow measurement devices or structures declared unnecessary and appropriate by the Secretary.

* * * * * * *

Public Law 100–676

WATER RESOURCES DEVELOPMENT ACT OF 1988

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Water Resources Development Act of 1988".

* * * * * * *

SEC. 8. INNOVATIVE TECHNOLOGY.

(a) USE.—The Secretary shall, whenever feasible, seek to promote long- and short-term cost savings, increased efficiency, reliability, and safety, and improved environmental results through the use of innovative technology in all phases of water resources development projects and programs under the Secretary's jurisdiction. To further this goal, Congress encourages the Secretary to—

(1) use procurement and contracting procedures that encourage innovative project design, construction, rehabilitation, repair, and operation and maintenance technologies;

(2) frequently review technical and design criteria to remove or modify unnecessary impediments to innovation;

(3) increase timely exchange of technical information with universities, private companies, government agencies, and individuals;

(4) foster design competition; and

(5) encourage greater participation by non-Federal project sponsors in the development and implementation of projects.

(b) ACCELERATED ADOPTION OF INNOVATIVE TECHNOLOGIES FOR MANAGEMENT OF CONTAMINATED SEDIMENTS.—

(1) TEST PROJECTS.—The Secretary shall approve an appropriate number of projects to test, under actual field conditions, innovative technologies for environmentally sound management of contaminated sediments.

(2) DEMONSTRATION PROJECTS.—The Secretary may approve an appropriate number of projects to demonstrate innovative technologies that have been pilot tested under paragraph (1).

(3) CONDUCT OF PROJECTS.—Each pilot project under paragraph (1) and demonstration project under paragraph (2) shall be conducted by a university with proven expertise in the research and development of contaminated sediment treatment technologies and innovative applications using waste materials.

* * * * * * *

Public Law 101–640

WATER RESOURCES DEVELOPMENT ACT OF 1990

[As Amended Through P.L. 105–153, December 17, 1997]

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Water Resources Development Act of 1990".

* * * * * * *

SEC. 101. PROJECT AUTHORIZATIONS.

Except as provided in this section, the following projects for water resources development and conservation and other purposes are authorized to be carried out by the Secretary substantially in accordance with the plans, and subject to the conditions, recommended in the respective reports designated in this section:

(1) SOUTHEAST ALASKA HARBORS OF REFUGE, ALASKA.— * * *

(4) SACRAMENTO METRO AREA, CALIFORNIA.—The project for flood control, Sacramento Metro Area, California: Report of the Chief of Engineers, dated June 29, 1992, at a total cost of $17,000,000, with an estimated Federal cost of $12,800,000 and an estimated non-Federal cost of $4,200,000, *is modified to authorize the Secretary to construct the project at a total cost of $32,900,000, with an estimated Federal cost of $24,700,000 and an estimated non-Federal cost of $8,200,000.*

* * * * * * *

SEC. 308. FLOOD PLAIN MANAGEMENT.

(a) [BENEFIT-COST ANALYSIS] *ELEMENTS EXCLUDED FROM COST-BENEFIT ANALYSIS.*—The Secretary shall not include in the benefit base for justifying Federal flood damage reduction projects—

(1)(A) any new or substantially improved structure (other than a structure necessary for conducting a water-dependent activity) built in the 100-year flood plain with a first floor elevation less than the 100-year flood elevation after July 1, 1991; or

(B) in the case of a county substantially located within the 100-year flood plain, any new or substantially improved structure (other than a structure necessary for conducting a water-dependent activity) built in the 10-year flood plain after July 1, 1991; and

(2) any structure which becomes located in the 100-year flood plain with a first floor elevation less than the 100-year flood elevation or in the 10-year flood plain, as the case may be, by virtue of constrictions placed in the flood plain after July 1, 1991.

(b) ELEMENTS INCLUDED IN COST-BENEFIT ANALYSIS.—The Secretary shall include primary flood damages avoided in the benefit base for justifying Federal nonstructural flood damage reduction projects.

[(b)] *(c)* COUNTIES SUBSTANTIALLY LOCATED WITHIN 100-YEAR FLOOD PLAIN.—For the purposes of subsection (a), a county is substantially located within the 100-year flood plain—

(1) if the county is comprised of lands of which 50 percent or more are located in the 100-year flood plain; and

(2) if the Secretary determines that application of the requirement contained in subsection (a)(1)(A) with respect to the county would unreasonably restrain continued economic development or unreasonably limit the availability of needed flood control measures.

[(c)] *(d)* COST SHARING.—Not later than January 1, 1992, the Secretary shall transmit to Congress a report on the feasibility and advisability of increasing the non-Federal share of costs for new projects in areas where new or substantially improved structures and other constrictions are built or placed in the 100-year flood plain or the 10-year flood plain, as the case may be, after the initial date of the affected governmental unit's entry into the regular program of the national flood insurance program of the National Flood Insurance Act of 1968.

[(d)] *(e)* REGULATIONS.—Not later than 6 months after the date on which a report is transmitted to Congress under subsection (d), the Secretary, in consultation with the Director of the Federal Emergency Management Agency, shall issue regulations to implement subsection (a). Such regulations shall define key terms, such as new or substantially improved structure, constriction, 10-year flood plain, and 100-year flood plain.

[(e)] *(f)* APPLICABILITY.—The provisions of this section shall not apply to any project, or separable element thereof, for which a final report of the Chief of Engineers has been forwarded to the Secretary before the last day of the 6-month period beginning on

the date on which regulations are issued pursuant to subsection (a) but not later than July 1, 1993.

* * * * * * *

SEC. 312. ENVIRONMENTAL DREDGING.

(a) OPERATION AND MAINTENANCE OF NAVIGATION PROJECTS.— * * *

(f) PRIORITY WORK.—In carrying out this section, the Secretary shall give priority to work in the following areas:

(1) * * *

* * * * * * *

(6) Snake Creek, Bixby, Oklahoma.

(7) Willamette River, Oregon.

* * * * * * *

Public Law 102–580

WATER RESOURCES DEVELOPMENT ACT OF 1992

[As Amended Through P.L. 105–153, December 17, 1997]

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Water Resources Development Act of 1992".

* * * * * * *

SEC. 204. BENEFICIAL USES OF DREDGED MATERIAL.

(a) IN GENERAL.— * * *

* * * * * * *

(g) NONPROFIT ENTITIES.—Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(b)), for any project carried out under this section, a non-Federal interest may include a nonprofit entity, with the consent of the affected local government.

* * * * * * *

SEC. 219. ENVIRONMENTAL INFRASTRUCTURE.

(a) IN GENERAL.—The Secretary is authorized to provide assistance to non-Federal interests for carrying out water-related environmental infrastructure and resource protection and development projects described in subsection (c), including waste water treatment and related facilities and water supply, storage, treatment, and distribution facilities. Such assistance may be in the form of technical and planning and design assistance. If the Secretary is to provide any design or engineering assistance to carry out a project under this section, the Secretary shall obtain by procurement from private sources all services necessary for the Secretary to provide such assistance, unless the Secretary finds that—

(1) the service would require the use of a new technology unavailable in the private sector; or

(2) a solicitation or request for proposal has failed to attract 2 or more bids or proposals.

(b) NON-FEDERAL SHARE.—The non-Federal share of the cost of projects for which assistance is provided under this section shall not be less than 25 percent, except that such share shall be subject to the ability of the non-Federal interest to pay, including the procedures and regulations relating to ability to pay established under section 103(m) of the Water Resources Development Act of 1986.

(c) PROJECT DESCRIPTIONS.—The projects for which the Secretary is authorized to provide assistance under subsection (a) are as follows:

(1) * * *

* * * * * * *

(19) LAKE TAHOE, CALIFORNIA AND NEVADA.—Regional water system for Lake Tahoe, California and Nevada.

(20) LANCASTER, CALIFORNIA.—Fox Field Industrial Corridor water facilities, Lancaster, California.

(21) SAN RAMON, CALIFORNIA.—San Ramon Valley recycled water project, San Ramon, California.

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SEC. 404. ATLANTIC COAST OF NEW YORK.

(a) DEVELOPMENT OF PROGRAM.— * * *

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(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated **[**$1,400,000 for each of fiscal years 1993, 1994, 1995, 1996, and 1997**]** *$2,500,000* to carry out this section. Such sums shall remain available until expended.

* * * * * * *

SEC. 405. SEDIMENTS DECONTAMINATION TECHNOLOGY.

(a) DECONTAMINATION PROJECT.—

(1) SELECTION OF TECHNOLOGIES.—Based upon a review of decontamination technologies identified pursuant to section 412(c) of the Water Resources Development Act of 1990, the Administrator of the Environmental Protection Agency and the Secretary shall, within 1 year after the date of the enactment of this Act, jointly select removal, pre-treatment, post-treatment, and decontamination technologies for contaminated marine sediments for a decontamination project in the New York/New Jersey Harbor.

(2) RECOMMENDED PROGRAM.—Upon selection of technologies, the Administrator and the Secretary shall jointly recommend a program of selected technologies to assess their effectiveness in rendering sediments acceptable for unrestricted ocean disposal or beneficial reuse, or both.

(3) PROJECT PURPOSE.—The purpose of the project to be carried out under this section is to provide for the development of 1 or more sediment decontamination technologies on a pilot scale demonstrating a capacity of at least 500,000 cubic yards per year.

(4) PRACTICAL END-USE PRODUCTS.—Technologies selected for demonstration at the pilot scale shall result in practical end-use products.

(5) ASSISTANCE BY THE SECRETARY.—The Secretary shall assist the project to ensure expeditious completion by providing sufficient quantities of contaminated dredged material to conduct the full-scale demonstrations to stated capacity.

(b) DECONTAMINATION DEFINED.—For purposes of this section, 'decontamination' may include local or remote prototype or production and laboratory decontamination technologies, sediment pretreatment and post-treatment processes, and siting, economic, or other measures necessary to develop a matrix for selection of interim prototype of long-term processes. Decontamination techniques need not be preproven in terms of likely success.

(c) AUTHORIZATION OF APPROPRIATIONS.—[There is authorized to be appropriated to carry out this section $5,000,000 for fiscal years beginning after September 30, 1992. Such sums shall remain available until expended] *There is authorized to be appropriated to carry out this section a total of $22,000,000 to complete technology testing, technology commercialization, and the development of full scale processing facilities within the New York/New Jersey Harbor.*

* * * * * * *

Public Law 104–303

WATER RESOURCES DEVELOPMENT ACT OF 1996

[As Amended Through P.L. 105–153, December 17, 1997]

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Water Resources Development Act of 1996".

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SEC. 101. PROJECT AUTHORIZATIONS.

(a) PROJECTS WITH CHIEF'S REPORTS.— * * *

* * * * * * *

(5) SAN LORENZO RIVER, CALIFORNIA.—The project for flood control, San Lorenzo River, California: Report of the Chief of Engineers, dated June 30, 1994, at a total cost of $21,800,000, with an estimated Federal cost of $10,900,000 and an estimated non-Federal cost of $10,900,000 and habitat restoration, at a total cost of $4,050,000, with an estimated Federal cost of $3,040,000 and an estimated non-Federal cost of $1,010,000; *is modified to authorize the Secretary to include as a part of the project streambank erosion control measures to be undertaken substantially in accordance with the report entitled "Bank Stabilization Concept, Laurel Street Extension", dated April 23, 1998, at a total cost of $4,000,000, with an estimated Federal cost of $2,600,000 and an estimated non-Federal cost of $1,400,000.*

* * * * * * *

(19) WOOD RIVER, GRAND ISLAND, NEBRASKA.—The project for flood control, Wood River, Grand Island, Nebraska: Report of the Chief of Engineers, dated May 3, 1994, at a total cost of $11,800,000, with an estimated Federal cost of $6,040,000 and an estimated non-Federal cost of $5,760,000; *is modified to authorize the Secretary to construct the project in accordance with the Corps of Engineers report dated June 29, 1998, at a total cost of $16,632,000, with an estimated Federal cost of $9,508,000 and an estimated non-Federal cost of $7,124,000.*

* * * * * * *

SEC. 102. SMALL FLOOD CONTROL PROJECTS.

The Secretary shall conduct a study for each of the following projects and, if the Secretary determines that the project is feasible, may carry out the project under section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s):

(1) SOUTH UPLAND, SAN BERNADINO COUNTY, CALIFORNIA.—* * *

* * * * * * *

(15) REPAUPO CREEK AND DELAWARE RIVER, GLOUCESTER COUNTY, NEW JERSEY.—Project for tidegate and levee improvements for Repaupo Creek and the Delaware River, Gloucester County, New Jersey.

[(15)**]** *(16)* BUFFALO CREEK, ERIE COUNTY, NEW YORK.—Project for flood control, Buffalo Creek, Erie County, New York.

[(16)**]** *(17)* CAZENOVIA CREEK, ERIE COUNTY, NEW YORK.—Project for flood control, Cazenovia Creek, Erie County, New York.

[(17)**]** *(18)* CHEEKTOWAGA, ERIE COUNTY, NEW YORK.—Project for flood control, Cheektowaga, Erie County, New York.

[(18)**]** *(19)* FULMER CREEK, VILLAGE OF MOHAWK, NEW YORK.—Project for flood control, Fulmer Creek, village of Mohawk, New York.

[(19)**]** *(20)* MOYER CREEK, VILLAGE OF FRANKFORT, NEW YORK.—Project for flood control, Moyer Creek, village of Frankfort, New York.

[(20)**]** *(21)* SAUQUOIT CREEK, WHITESBORO, NEW YORK.—Project for flood control, Sauquoit Creek, Whitesboro, New York.

[(21)**]** *(22)* STEELE CREEK, VILLAGE OF ILION, NEW YORK.—Project for flood control, Steele Creek, village of Ilion, New York.

[(22)**]** *(23)* WILLAMETTE RIVER, OREGON.—Project for nonstructural flood control, Willamette River, Oregon, including floodplain and ecosystem restoration.

(24) IRONDEQUOIT CREEK, NEW YORK.—Project for flood control, Irondequoit Creek watershed, New York.

(25) TIOGA COUNTY, PENNSYLVANIA.—Project for flood control, Tioga River and Cowanesque River and their tributaries, Tioga County, Pennsylvania.

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SEC. 104. SMALL NAVIGATION PROJECTS.

The Secretary shall conduct a study for each of the following projects and, if the Secretary determines that the project is feasible, may carry out the project under section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577):

(1) AKUTAN, ALASKA.— * * *

* * * * * * *

(9) FORTESCUE INLET, DELAWARE BAY, NEW JERSEY.—Project for navigation for Fortesque Inlet, Delaware Bay, New Jersey.

(10) BRADDOCK BAY, GREECE, NEW YORK.—Project for navigation, Braddock Bay, Greece, New York.

[(9)**]** *(11)* BROOKLYN, NEW YORK.—Project for navigation, Brooklyn, New York, including restoration of the pier and related navigation support structures, at the Sixty-Ninth Street Pier.

[(10))**]** *(12)* BUFFALO INNER HARBOR, BUFFALO, NEW YORK.—Project for navigation, Buffalo Inner Harbor, Buffalo, New York, including enlargement of the existing harbor and bank stabilization measures.

[(11))**]** *(13)* GLENN COVE CREEK, NEW YORK.—Project for navigation, Glenn Cove Creek, New York, including bulkheading.

[(12))**]** *(14)* UNION SHIP CANAL, BUFFALO AND LACKAWANNA, NEW YORK.— Project for navigation, Union Ship Canal, Buffalo and Lackawanna, New York.

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SEC. 206. AQUATIC ECOSYSTEM RESTORATION.

(a) GENERAL AUTHORITY.— * * *

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(c) AGREEMENTS.—**[**Construction**]**

(1) IN GENERAL.—Construction of a project under this section shall be initiated only after a non-Federal interest has entered into a binding agreement with the Secretary to pay the non-Federal share of the costs of construction required by this section and to pay 100 percent of any operation, maintenance, and replacement and rehabilitation costs with respect to the project in accordance with regulations prescribed by the Secretary.

(2) NONPROFIT ENTITIES.—Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(b)), for any project carried out under this section, a non-Federal interest may include a nonprofit entity with the consent of the affected local government.

* * * * * * *

SEC. 301. PROJECT MODIFICATIONS.

(a) PROJECTS WITH REPORTS.— * * *

(b) PROJECTS SUBJECT TO REPORTS.—The following projects are modified as follows, except that no funds may be obligated to carry

out work under such modifications until completion of a report by the Corps of Engineers finding that such work is technically sound, environmentally acceptable, and economic, as applicable:

(1) ALAMO DAM, ARIZONA.— * * *

* * * * * * *

(3) GLENN-COLUSA, CALIFORNIA.—The project for flood control, Sacramento River, California, authorized by section 2 of the Act entitled "An Act to provide for the control of the floods of the Mississippi River and of the Sacramento River, California, and for other purposes", approved March 1, 1917 (39 Stat. 949), and modified by section 102 of the Energy and Water Development Appropriations Act, 1990 (103 Stat. 649), *and further modified by section 301(b)(3) of the Water Resources Development Act of 1996 (110 Stat. 3709)*, [is further modified to authorize the Secretary to carry out the portion of the project at Glenn-Colusa, California, at a total cost of $14,200,000] *is further modified to authorize the Secretary to carry out the portion of the project in Glenn-Colusa, California in accordance with the Corps of Engineers report dated May 22, 1998, at a total cost of $20,700,000, with an estimated Federal cost of $15,570,000 and an estimated non-Federal cost of $5,130,000.*

* * * * * * *

SEC. 364. PROJECT DEAUTHORIZATIONS.

The following projects are not authorized after the date of the enactment of this Act:

(1) BRANFORD HARBOR, CONNECTICUT.— * * *

* * * * * * *

[(9) EAST BOOTHBAY HARBOR, MAINE.—The following portion of the navigation project for East Boothbay Harbor, Maine, authorized by the 1st section of the Act entitled "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes", approved June 25, 1910 (36 Stat. 657), containing approximately 1.15 acres and described in accordance with the Maine State Coordinate System, West Zone: Beginning at a point noted as point number 6 and shown as having plan coordinates of North 9, 722, East 9, 909, on the plan entitled, "East Boothbay Harbor, Maine, examination, 8- foot area", and dated August 9, 1955, Drawing Number F1251 D-6- 2, that point having Maine State Coordinate System, West Zone coordinates of Northing 74514, Easting 698381. Thence, North 58 degrees, 12 minutes, 30 seconds East a distance of 120.9 feet to a point. Thence, South 72 degrees, 21 minutes, 50 seconds East a distance of 106.2 feet to a point. Thence, South 32 degrees, 04 minutes, 55 seconds East a distance of 218.9 feet to a point. Thence, South 61 degrees, 29 minutes, 40 seconds West a distance of 148.9 feet to a point. Thence, North 35 degrees, 14 minutes, 12 seconds West a distance of 87.5 feet to a point. Thence, North 78 degrees, 30 minutes, 58 seconds West a distance of 68.4 feet to a point. Thence, North 27 de-

grees, 11 minutes, 39 seconds West a distance of 157.3 feet to the point of beginning.]

(9) EAST BOOTHBAY HARBOR, MAINE.—The project for navigation, East Boothbay Harbor, Maine, authorized by the first section of the Act entitled "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes", approved June 25, 1910 (36 Stat. 657).

* * * * * * *

SEC. 444. PACIFIC REGION.

The Secretary may conduct studies in the [interest of navigation] *interests of water resources development (including navigation, flood damage reduction, and environmental restoration)* in that part of the Pacific region that includes American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

* * * * * * *

SEC. 503. WATERSHED MANAGEMENT, RESTORATION, AND DEVELOPMENT.

(a) IN GENERAL.—* * *

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(d) PROJECT LOCATIONS.— * * *

* * * * * * *

[(10) Nancy Creek, Utoy Creek, and North Peachtree Creek and South Peachtree Creek basin, Georgia.]

(10) Regional Atlanta Watershed, Atlanta, Georgia, and Lake Lanier of Forsyth and Hall Counties, Georgia.

(11) Lower Platte River watershed, Nebraska.

(12) Juniata River watershed, Pennsylvania, including Raystown Lake.

(13) Upper Potomac River watershed, Grant and Mineral Counties, West Virginia.

(14) Clear Lake watershed, California.

(15) Fresno Slough watershed, California.

(16) Hayward Marsh, Southern San Francisco Bay watershed, California.

(17) Kaweah River watershed, California.

(18) Lake Tahoe watershed, California and Nevada.

(19) Malibu Creek watershed, California.

(20) Truckee River basin, Nevada.

(21) Walker River basin, Nevada.

(22) Bronx River watershed, New York.

(23) Catawba River watershed, North Carolina.

(e) NONPROFIT ENTITIES.—Notwithstanding section 221(b) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(b)), for any project undertaken under this section, with the consent of the affected local government, a non-Federal interest may include a nonprofit entity.

[(e)] *(f)* AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $15,000,000.

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SEC. 511. RESEARCH AND DEVELOPMENT PROGRAM TO IMPROVE SALMON SURVIVAL.

[(a) SALMON SURVIVAL ACTIVITIES.—

[(1) IN GENERAL.—The Secretary shall accelerate ongoing research and development activities, and may carry out or participate in additional research and development activities, for the purpose of developing innovative methods and technologies for improving the survival of salmon, especially salmon in the Columbia River Basin.

[(2) ACCELERATED ACTIVITIES.—Accelerated research and development activities referred to in paragraph (1) may include research and development related to—

[(A) impacts from water resources projects and other impacts on salmon life cycles;

[(B) juvenile and adult salmon passage;

[(C) light and sound guidance systems;

[(D) surface-oriented collector systems;

[(E) transportation mechanisms; and

[(F) dissolved gas monitoring and abatement.

[(3) ADDITIONAL ACTIVITIES.—Additional research and development activities referred to in paragraph (1) may include research and development related to—

[(A) marine mammal predation on salmon;

[(B) studies of juvenile salmon survival in spawning and rearing areas;

[(C) estuary and near-ocean juvenile and adult salmon survival;

[(D) impacts on salmon life cycles from sources other than water resources projects; and

[(E) other innovative technologies and actions intended to improve fish survival, including the survival of resident fish.

[(4) COORDINATION.—The Secretary shall coordinate any activities carried out under this subsection with appropriate Federal, State, and local agencies, affected Indian tribes, and the Northwest Power Planning Council.

[(5) REPORT.—Not later than 3 years after the date of the enactment of this Act, the Secretary shall transmit to Congress a report on the research and development activities carried out under this subsection, including any recommendations of the Secretary concerning the research and development activities.

[(6) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $10,000,000 to carry out research and development activities under paragraph (3).

[(b) ADVANCED TURBINE DEVELOPMENT.—

[(1) IN GENERAL.—In conjunction with the Secretary of Energy, the Secretary shall accelerate efforts toward developing innovative, efficient, and environmentally safe hydropower tur

bines, including design of "fish-friendly" turbines, for use on the Columbia River hydrosystem.

[(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $12,000,000 to carry out this subsection.

[(c) Implementation.—Nothing in this section affects the authority of the Secretary to implement the results of the research and development carried out under this section or any other law.]

(a) SALMON SURVIVAL ACTIVITIES.—

(1) IN GENERAL.—In conjunction with the Secretary of Commerce and Secretary of the Interior, the Secretary shall accelerate ongoing research and development activities, and may carry out or participate in additional research and development activities, for the purpose of developing innovative methods and technologies for improving the survival of salmon, especially salmon in the Columbia/Snake River Basin.

(2) ACCELERATED ACTIVITIES.—Accelerated research and development activities referred to in paragraph (1) may include research and development related to—

(A) impacts from water resources projects and other impacts on salmon life cycles;

(B) juvenile and adult salmon passage;

(C) light and sound guidance systems;

(D) surface-oriented collector systems;

(E) transportation mechanisms; and

(F) dissolved gas monitoring and abatement.

(3) ADDITIONAL ACTIVITIES.—Additional research and development activities referred to in paragraph (1) may include research and development related to—

(A) studies of juvenile salmon survival in spawning and rearing areas;

(B) estuary and near-ocean juvenile and adult salmon survival;

(C) impacts on salmon life cycles from sources other than water resources projects;

(D) cryopreservation of fish gametes and formation of a germ plasm repository for threatened and endangered populations of native fish; and

(E) other innovative technologies and actions intended to improve fish survival, including the survival of resident fish.

(4) COORDINATION.—The Secretary shall coordinate any activities carried out under this subsection with appropriate Federal, State, and local agencies, affected Indian tribes, and the Northwest Power Planning Council.

(5) REPORT.—Not later than 3 years after the date of enactment of this section, the Secretary shall submit to Congress a report on the research and development activities carried out under this subsection, including any recommendations of the Secretary concerning the research and development activities.

(6) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $10,000,000 to carry out research and development activities under paragraph (3).

(b) ADVANCED TURBINE DEVELOPMENT.—

(1) IN GENERAL.—In conjunction with the Secretary of Energy, the Secretary shall accelerate efforts toward developing and installing in Corps of Engineers operated dams innovative, efficient, and environmentally safe hydropower turbines, including design of "fish friendly" turbines, for use on the Columbia/Snake River hydrosystem.

(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $35,000,000 to carry out this subsection.

(c) MANAGEMENT OF PREDATION ON COLUMBIA/SNAKE RIVER SYSTEM NATIVE FISHES.—

(1) NESTING AVIAN PREDATORS.—In conjunction with the Secretary of Commerce and the Secretary of the Interior, and consistent with a management plan to be developed by the United States Fish and Wildlife Service, the Secretary shall carry out methods to reduce nesting populations of avian predators on dredge spoil islands in the Columbia River under the jurisdiction of the Secretary.

(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $1,000,000 to carry out research and development activities under this subsection.

(d) IMPLEMENTATION.—Nothing in this section affects the authority of the Secretary to implement the results of the research and development carried out under this section or any other law.

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SEC. 528. EVERGLADES AND SOUTH FLORIDA ECOSYSTEM RESTORATION.

(a) DEFINITIONS.— * * *

(b) RESTORATION ACTIVITIES.—

(1) COMPREHENSIVE PLAN.— * * *

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(3) CRITICAL RESTORATION PROJECTS.—

(A) IN GENERAL.—In addition to the activities described in paragraphs (1) and (2), if the Secretary, in cooperation with the non-Federal project sponsor and the Task Force, determines that a restoration project for the South Florida ecosystem will produce independent, immediate, and substantial restoration, preservation, and protection benefits, and will be generally consistent with the conceptual framework described in paragraph (1)(A)(ii)(II), the Secretary shall proceed expeditiously with the implementation of the restoration project.

(B) INITIATION OF PROJECTS.—After September 30, [1999] *2003*, no new projects may be initiated under subparagraph (A).

(C) AUTHORIZATION OF APPROPRIATIONS.—

(i) IN GENERAL.—There is authorized to be appropriated to the Department of the Army to pay the Federal share of the cost of carrying out projects under subparagraph (A) $75,000,000 for the period consisting of fiscal years 1997 through [1999] *2003*.

(ii) FEDERAL SHARE.—The Federal share of the cost of carrying out any 1 project under subparagraph (A) shall be not more than $25,000,000.

(D) CREDIT AND REIMBURSEMENT OF PAST AND FUTURE ACTIVITIES.—The Secretary may afford credit to or reimburse the non-Federal sponsors (using funds authorized by subparagraph (C)) for the reasonable costs of any work that has been performed or will be performed in connection with a study or activity meeting the requirements of subparagraph (A) if—

(i) the Secretary determines that—

(I) the work performed by the non-Federal sponsors will substantially expedite completion of a critical restoration project; and

(II) the work is necessary for a critical restoration project; and

(ii) the credit or reimbursement is granted pursuant to a project-specific agreement that prescribes the terms and conditions of the credit or reimbursement.

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(e) COST SHARING.—

(1) IN GENERAL.— * * *

(4) CREDIT.—Regardless of the date of acquisition, the value of lands or interests in land acquired by non-Federal interests for any activity described in subsection (b) shall be included in the total cost of the activity and credited against the non-Federal share of the cost of the activity*, including potential land acquisition in the Caloosahatchee River basin or other areas*. Such value shall be determined by the Secretary.

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SEC. 552. NEW YORK CITY WATERSHED.

(a) * * *

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(d) COOPERATION AGREEMENTS.—Before providing assistance under this section, the Secretary shall enter into a project cooperation agreement with the State director, [for the project to be carried out with such assistance] *.or a public entity designated by the State director, to carry out the project with such assistance, subject to the project's meeting the certification requirement of subsection (c)(1).*

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SEC. 567. UPPER SUSQUEHANNA RIVER BASIN, PENNSYLVANIA AND NEW YORK.

(a) STUDY AND STRATEGY DEVELOPMENT.—The Secretary, in cooperation with the Secretary of Agriculture, the State of Pennsylvania, and the State of New York, shall conduct a study, and develop a strategy, for using wetland restoration, soil and water conservation practices, and nonstructural measures to reduce flood damage, improve water quality, and create wildlife habitat in the following portions of the Upper Susquehanna River basin:

(1) The Juniata River watershed, Pennsylvania, at an estimated Federal cost of $8,000,000.

(2) The Susquehanna River watershed upstream of the Chemung River, New York, at an estimated Federal cost of $5,000,000.

(3) The Chemung River watershed, New York, at an estimated Federal cost of $5,000,000.

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SEC. 585. OVERFLOW MANAGEMENT FACILITY.

(a) ASSISTANCE.—The Secretary shall provide assistance to the Narragansett Bay Commission for the construction of a combined [river] *sewer* overflow management facility in Rhode Island.

(b) FUNDING.—There is authorized to be appropriated to carry out this section $30,000,000.

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