NEW ORLEANS, LA, DISTRICT

This district comprises a portion of Louisiana that is embraced in drainage basins that are tributary to the Mississippi River and Gulf of Mexico, except the Mississippi River above mile 325.5 above Head of Passes (AHP), the drainage area of Ouachita-Black River Basin, and small eastern and western portions of Louisiana that are tributary to Pearl River and Sabine River and Lake. The New Orleans District territory encompasses 30,000 square miles.

It includes sections of the Gulf Intracoastal Waterway from Lake Borgne Light 29 at the mouth of Pearl River to Sabine River, and the Passes of the Mississippi River. It exercises jurisdiction over flood control work on the Mississippi River from mile 325.5 AHP to the Gulf of Mexico; the Atchafalaya River; the Atchafalaya Basin; and maintenance of the project navigation channel of the Mississippi River below mile 325.5 AHP, under supervision of the President, Mississippi River Commission (MRC), and the Division Engineer, Mississippi Valley Division.

IMPROVEMENTS

1. INNER HARBOR NAVIGATION CANAL LOCK, LA

Location. The project is located within the city of New Orleans, Louisiana. It is a deep and shallow draft canal extending northward from the Mississippi River to Lake Pontchartrain.

Existing project. The existing Inner Harbor Navigation Canal Lock, completed in 1921 by the Port of New Orleans, has dimensions of 31.5 feet deep, 75 feet wide, and 640 feet long (usable length). It passes barge traffic between the Mississippi River and the Gulf Intracoastal Waterway and is a vital link in the nation's Inland Waterway System. Delays to the navigation traffic since 2004 average 12.5 hours. The latest 5-year average (2000-2005) yearly tonnage through the lock is almost 19 million tons. Major commodities include coal, petroleum products, and crude petroleum. Two major vehicular roadway bridges (Claiborne and St. Claude Avenues) and one railroad/roadway bridge (Florida Avenue) cross the canal in the vicinity of the existing lock. The Corps of Engineers bought the lock from the Port of New Orleans in 1985.

Local cooperation. The cost sharing for the replacement lock is specified in the Water Resources Development Act of 1986. The costs of the new lock were apportioned between general cargo navigation and inland navigation. Costs assigned to inland navigation are shared 50 percent from the Inland Waterway Trust Fund and 50 percent from regular Corps of Engineer's appropriations. Those costs assigned to general cargo navigation will be cost shared 65 percent Federal and 35 percent non-Federal with the Port of New Orleans, who signed a non-Federal Project Cooperation Agreement (PCA) in Sep 2001. The Recommended Plan is 40 feet deep by 110 feet wide by 1,200 feet long (usable length) and is estimated to cost $1,264,000,000.

Terminal facilities. Two container ship berths and one other ship wharf are located on the canal in the vicinity of the existing lock.

Operations and results during the fiscal year. Replacement lock construction methods were being examined when the U.S. Federal District Court enjoined the project in FY 07. In May 2009, the Record of Decision was signed completing the Supplemental Environmental Impact Statement (SEIS) and lifting the Federal enjoinment.

Condition as of Sep 30. Design of the Lock structure has resumed since the SEIS was completed.

2. MISSISSIPPI RIVER-GULF OUTLET, LA

Location. In State of Louisiana and the territorial waters of the United States and extends from existing Inner Harbor Navigation Canal at a point 7,500 feet north of existing IHNC lock and about 11,000 feet from Mississippi River, to a turning basin south of Michoud, LA, and then as a land and water cut from turning basin south of Michoud, LA, southeasterly to and along south shore of Lake Borgne and through marshes to and through Chandeleur Sound to 38-foot contour in Gulf of Mexico. (Refer to NOAA Coast Charts Nos. 11340, 11360, 11363, 11369, 11371, and 11373. Also, see MRC 1989 (57th edition) folio of maps, Mississippi River-Cairo, IL, to Gulf of Mexico, LA.) The portion of the navigation channel between the Gulf Intracoastal Waterway and the Gulf of Mexico was deauthorized by Congress in June 2008 in accordance with a Report of the Chief of Engineers.

Existing project. Provided for a seaway canal, 36 by 500 feet, extending from the Inner Harbor Navigation Canal to 6 miles eastward contiguously with the GIWW to Michoud. It also provides for an inner tidewater harbor consisting of 1,000- by 2,000-foot turning basin 36 feet deep at landward end of seaway canal (completed), and a connecting channel 36 by 500 feet wide extending easterly along GIWW from turning basin (completed), including construction of a suitable highway bridge with approaches to carry Louisiana State Highway 47 (formerly 61) over channel. Construction was initiated March 1958. The channel unit was 90 percent complete at the time of deauthorization, and the ship lock unit is 8 percent complete. The channel was opened to navigation July 25, 1963, and completed Jan. 20, 1968. Paris Road Bridge was completed Nov. 14, 1967. The plan further provides for future construction of a channel and lock in the vicinity of the existing lock to furnish an additional connection between the tidewater harbor and Mississippi River (construction started). (See "Inner Harbor Navigation Canal Lock, LA" for more details). The project was deauthorized in 2008 (see details below).

A reevaluation study to determine the economic feasibility of continuing to maintain the 36-foot depth in the channel was initiated in FY 99, at Federal expense. Concerns about increased maintenance dredging costs and ecosystem deterioration prompted the study. Hurricane Katrina struck Louisiana in Aug 2005 prior to completion of the reevaluation effort. Katrina significantly impacted the economic factors used in developing the economic analysis portion of the reevaluation study.

In June 2006, Congress passed P.L. 109-234 directing the Secretary of the Army, acting through the Chief of Engineers, to plan for deauthorization of the Mississippi River Gulf Outlet (MRGO) from GIWW to the Gulf of Mexico. The plan was developed in consultation with St. Bernard Parish, the State of Louisiana, and affected Federal Agencies. The goals of the study were to develop a comprehensive plan to de-authorize deep–draft navigation, evaluate any navigation functions that should be maintained, identify measures for hurricane and storm damage reduction, and refine the plan to be fully integrated and consistent with the Louisiana Coastal Protection and Restoration Plan (LACPR) Final Report to Congress.

As directed by Congress, USACE submitted an interim report in December 2006 highlighting a viable plan to completely close the MRGO to all navigation from the GIWW to the Gulf. The report indicated that both the deep-draft and shallow-draft navigation channels are not cost effective and recommended an earthen closure constructed at the Bayou LaLoutre Ridge.

In January 2008, the Chief of Engineers signed a report recommending deauthorization of the MRGO channel, construction of a closure structure across the channel at Bayou La Loutre, and development of a supplemental report to provide an ecosystem restoration plan for the areas affected by the MRGO. On June 5, 2008, the Assistant Secretary of the Army for Civil Works forwarded the Final MRGO Deep-Draft De-authorization Report to Congress, officially de-authorizing the MRGO from the GIWW to the Gulf of Mexico as a Federal navigation project. The recommended plan deauthorized the channel from mile 60 to 9.4 (GIWW to Gulf); authorized a total channel closure structure at Bayou LaLoutre; and called for removing relic aids to navigation and deauthorizing in-place jetties and bank protection. A contract to close the channel at Bayou La Loutre was awarded in August 2008 in the amount of $13,616,500. Construction of the rock closure was completed in July 2009.

P.L. 109-148 (the 3rd Supplemental), as modified by P.L. 109-234, provided $75,000,000 to be used for the repair, construction, or provision of measures or structures necessary to protect, restore, or increase wetlands and prevent saltwater intrusion or storm surge. A plan was developed to utilize this funding to create more than 3,345 acres of wetland fronting protection levees and 9.3 miles of shoreline protection on the thin land bridge separating Lake Borgne and MRGO. To date, projects have been constructed along the southeast shoreline of Lake Borgne and multiple sites along the north bank of the MRGO near Shell Beach, Hopedale, Bayou Dupre, and Bayou Bienvenue.

The MRGO Ecosystem Restoration Plan is being developed by the U.S. Army Corps of Engineers (USACE) as a supplement to the MRGO Deep-Draft De-Authorization Report. Currently, the USACE is conducting a feasibility study that will result in a comprehensive ecosystem restoration plan to restore the Lake Borgne ecosystem and areas affected by the MRGO channel. This restoration plan is being developed in accordance with Section 7013 of the Water Resources Development Act (WRDA) of 2007. It is fully funded by the Federal Government. The purpose of the study is to address systematic ecosystem restoration with consideration of measures to reduce or prevent damages from storm surge.

The study area includes portions of the Mississippi River Deltaic Plain within coastal southeast Louisiana and parts of southwest Mississippi. The study area encompasses approximately 3.8 million acres (over 6,000 square miles) of land and open water. In Louisiana, the study area includes the Upper, Middle, and Lower Lake Pontchartrain Sub-basins. In Mississippi, the study area includes the Western Mississippi Sound, its bordering wetlands, and Cat Island. These areas include portions of the Pearl River and the Coastal Stream hydrologic basins in Mississippi. The study area was developed to encompass the Lake Borgne ecosystem and areas that may have been affected by the MRGO navigation channel. The MRGO channel may have affected salinities as far west as Lake Maurepas. To the east, the MRGO channel was dredged through open water between the Breton and Grand Gossier Islands. The MRGO channel affected portions of the Lake Borgne ecosystem to the north and altered hydrology potentially as far south as the River Aux Chenes ridge.

Louisiana parishes in the study area include Ascension, Jefferson, Livingston, Orleans, Plaquemines, St. Bernard, St. Tammany, St. Charles, St. James, St. John the Baptist, and Tangipahoa. Mississippi counties in the study area include Hancock and Harrison.

The study will evaluate the following issues: decreased freshwater, sediment, and nutrient inputs; hydrologic modifications; saltwater intrusion; wetland loss; ridge habitat degradation and destruction; retreating and eroding barrier islands; bank and shoreline erosion; human development susceptible to storm surge; subsidence; sea level rise; altered circulation and water quality; and loss of shallow ponds. Alternative plan components for the ecosystem restoration plan may include shoreline protection, marsh creation, cypress reforestation, barrier island rebuilding, ridge restoration, and freshwater diversion from the Mississippi River at Violet, LA.

Local cooperation. Requirements of local cooperation are fully described on page 11-4 of FY 1986 Annual Report. A new Memorandum of Agreement between USACE and the State of Louisiana covering the closure and ecosystem restoration projects was executed in October 2008.

Terminal facilities. Most of the terminal facilities located on the MRGO are no longer in operation since Hurricane Katrina. The local sponsor and private wharf tenants are relocating some business to the Mississippi River.

Operations and results during fiscal year. No dredging contracts were awarded in FY 09. Funds provided in Public Law 109-62 (commonly referred to as the 2nd Supplemental) were used to award one bank stabilization and two foreshore protection contracts in FY 2006 at a total cost of $27,854,000 and one foreshore protection contract in FY 07 in the amount of $4,765,000. Public Law 109-234 (commonly referred to as the 4th Supplemental) provided $3,300,000 to develop a comprehensive plan to deauthorize deep draft navigation.

Condition as of Sep 30. The foreshore protection, south bank, Chalmette Area, Station 367+00 to 1007+00 is complete. The foreshore protection, north bank, Mile 56 to 50.5, is complete. Shoreline protection on the southeast shoreline of Lake Borgne and multiple sites along the north bank of the MRGO near Shell Beach, Hopedale, Bayou Dupre, and Bayou Bienvenue are complete.

3. MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA

Location. The project is located in the southeastern portion of Louisiana below Baton Rouge, and consists of the Mississippi River and its major outlet to the Gulf of Mexico, Southwest Pass.

Existing project. Provides more efficient deep-draft navigation access to the New Orleans and Baton Rouge reaches of the Mississippi River via Southwest Pass by enlarging the existing channel to a project depth of 55 feet and enlarging the adjacent channel along the left descending bank in New Orleans Harbor to a 40-foot depth, a turning basin at Baton Rouge, and training works in the passes to reduce maintenance.

The cost of the existing project is $196,200,000 Federal and $492,000,000 non-Federal. In addition, the Coast Guard provides navigation aids at an estimated cost of $1,200,000.

Local cooperation. Requirements are described in full on pages 11-2 and 11-3 of the FY 92 Annual Report.

A third supplement to the LCA addressing the Permanent Saltwater Intrusion Mitigation Plan was executed on May 28, 1993.

A Project Cooperation Agreement (PCA) between the Government and the State of Louisiana was executed on Sep. 3, 1993 which provides for the dredging of a 45-foot channel from Mile 181 AHP to Baton Rouge.

Operations and results during fiscal year. Construction is underway on the permanent mitigation plan. The permanent mitigation plan consists of constructing an underwater sill, when needed, at Mile 64 AHP to prevent the intrusion of saltwater into water supplies of the metropolitan New Orleans area. The plan also provided for upgrading the Plaquemines Parish water distribution system which has been completed, providing fresh water to water treatment plants impacted by increased saltwater intrusion caused by the

deeper channel. The underwater sill was constructed during FY 99 due to extremely low flows in the river which allowed salt water to threaten up river water supplies. The sill was successful in preventing impacts to these facilities.

Work has been initiated on the General Design Memorandum for the remaining authorized features of the project. This includes the deepening of the Mississippi River to 55 feet from the Gulf of Mexico to Baton Rouge. The State of Louisiana requested that the Corps not complete the report until clarifying language relative to cost sharing is included in a future Water Resources Development Act.

Condition as of Sep. 30. The 45-foot channel is completed from the Gulf to Baton Rouge. Construction of the permanent mitigation plan is underway. Work on the General Design Memorandum for the remaining authorized features continues.

Flood Control

4. COMITE RIVER (DIVERSION), LA

Location. In East Baton Rouge Parish, LA, between the Comite River and the Profit Island Chute of the Mississippi River, north of the town of Baker, LA, and south of the town of Zachary, LA.

Existing project. The project will provide protection for residents of the Comite River Basin by reducing stages in the river below the diversion point for events up to the 100-year flood event, and containing within-banks events up to the 10-year flood event. The authorized project consists of construction of an 8-mile diversion channel from the Comite River to an outfall into Lilly Bayou, and then a 4-mile diversion along Lilly and Cooper Bayous to the Profit Island Chute of the Mississippi River. The project also includes a diversion structure in the new channel near the diversion point, and an outfall structure near and at the outfall into Lilly Bayou, and four control structures at the intersections of Whites, Cypress and Baton Rouge Bayous, the fourth near McHugh Road. Disposal areas will be constructed along both banks of the new channel to retain the flood waters from the Comite River along both side of the new channel, and clearing and snagging of White, Cypress and Baton Rouge Bayous north of the diversion channel will also be done. Mitigation for the project includes the planting of trees on cleared land near the diversion point and on portions of the disposal area, the protection and management of existing forested lands near the diversion point. Upgrading two gauging stations and installing six new gauging stations to assist in flood prediction is also included in the project. The current approved cost of the project is $188,000,000, including $134,000,000 Federal cost and $54,000,000 non-Federal cost. The Water Resources Development Act of 1999 authorized the Secretary to include the costs of highway relocations to be cost shared as project construction features.

Local cooperation. The cost-sharing provisions contained in the Water Resources Development Act of 1986 require that local interests shall: (a) Provide to the Federal Government all lands, easements, rights-of-way, and dredged material disposal areas, and perform the necessary relocations required for construction, operation, and maintenance of the project (Current estimate is $44,345,000); and (b) Provide to the Federal Government a cash contribution equal to 5 percent of the total cost of the project, excluding cultural resources (Current estimate is $9,655,000). The total cost of items (a) and (b) mentioned above is limited to 50 percent of the total cost of the project.

Operations and results during the fiscal year. In FY 04, the Lilly Bayou Control Structure contract was awarded to a small business contractor in the amount of $27.6 million for duration of three years. Federal funding restraints slowed construction, however, advancing Non-Federal funds allowed the contract to continue in FY 06. Funds received in FY 07 allowed for the completion of the Lilly Bayou Control Structure contract.

Condition as of Sep. 30. Construction for the Lilly Bayou Control Structure, Phase II, is in the final phases of completion. Plans and specifications to award Highway 67 and 964 bridge contracts are ongoing. There has been a significant population increase in the lower part of the Comite River Basin which is benefited by the project.

5. GRAND ISLE AND VICINITY, LA

Location. In south Jefferson Parish, LA, along the Gulf of Mexico, about 50 miles south of New Orleans and 45 miles northwest of Southwest Pass (Mississippi River).

Existing project. The project provides protection from waves driven by hurricanes that have a frequency of recurrence of up to once in every 50 years. The plan consists of a berm and vegetated dune extending the length of Grand Isle's gulf shore and a jetty to stabilize the western end of the island at Caminada Pass. The dune has a 10-foot-wide crown at an elevation of 11.5 feet National Geodetic Vertical Datum (NGVD), 1 on 5 side slopes, and protective vegetation. The sandfill berm slopes from an elevation of 8.5 feet NGVD at the toe of the dune 180 feet gulfward to an elevation of 3 feet NGVD and, from this point, assumes its natural slope to the offshore bottom. The jetty provided by the plan has a top width of 6 feet at an elevation of 4 feet mean sea level, 1 on 2 side slopes, and extends approximately 3,600 feet along the western end of the island at Caminada Pass. Estimated cost of project (October 1991) is $20,933,000 Federal and $12,567,000 non-Federal, including $7,157,484 contributed funds. The repair and restoration of Grand Isle were accomplished by two separate contracts. The jetty extensions and sand bar removal contract (partial fix), was completed in early 1988. The dune repair and structural reinforcement contract was physically completed Sep. 4, 1991. The project has been turned over to the State of Louisiana for operation and maintenance.

The 1992 Dire Emergency Supplemental Appropriations Act provided funds to repair damage to the wave berm and dune caused by Hurricane Andrew and to add offshore breakwaters to the project as an integral part of the repair. The original plan was to construct 27 breakwater segments; however, only 23 breakwater segments were constructed due to limited federal funds. 19 additional breakwater segments were built in the summer of 1999 by the local sponsor.

Local cooperation. The existing sand and beach dune have been damaged as a result of a series of storms between 1998 and 2002. PL-99 Federal assistance was approved to repair the damages caused by Hurricane Lili and Tropical Storm Isadora. A sponsor's contractor accomplished the renourishment and the Corps will reimburse the 12 percent cost share. Renourishment was completed in March 2005. On August 29, 2005, Hurricane Katrina caused extensive damage to the island. Funding to repair the storm damage to the sand and beach dune, breakwaters, and other island features has been approved.

Emergency supplemental funding. Supplemental (P.L. 109-148) funding in the amount of $6,435,000 was expended for emergency repairs in FY 09.

North Shore Project. The Water Resources Development Act of 1996 authorized construction of $17 million of additional improvements to the region subject to approval of a report justifying the improvements. The District received $250,000 to initiate the study. The study is considering improvements, building breakwaters along the north side of the island, and the north side of Fifi Island. The Water Resources Development Act of 1999 authorized the Secretary to consider shore protection benefits that the project provides to the main land coast of Louisiana. The study was continued in FY 05 with a Congressional add of $75,000**.**

Operations and results during fiscal year. Emergency supplemental funding in the amount of $14,767,000 was expended on the overall project in FY 09. During FY 09 one contract was awarded and one contract was completed. Expenditures included $8,332,000 for repairs to damages caused by Hurricanes Gustav and Ike.

Condition as of Sep. 30. The North Shore Project is on hold, awaiting further information from the local sponsor. Storm repair work will continue in FY 10.

6. LAKE PONTCHARTRAIN AND VICINITY, LA (HURRICANE PROTECTION)

Location. In southeastern Louisiana, vicinity of New Orleans, in St. Charles, Jefferson, Orleans, St. Bernard, and St. Tammany Parishes, comprising lower land and water area between the Mississippi River alluvial ridge and the Pleistocene escarpment to north and west. The dominant topographic feature is Lake Pontchartrain, a shallow tidal basin, about 640 square miles in area and averaging 12 feet deep, connecting with lesser Lake Maurepas to the west and through Lake Borgne and Mississippi Sound to the Gulf to the east. The lake drains about 4,700 square miles of tributary area. (Refer to Geological Survey quadrangles

Yscloskey and Malheureaux Point, Drum Bay, Door Point, Lake Eugenie, Oak Mound Bayou, Mitchell Keys, Lake Eloi, and Morgan Harbor; Engineer quadrangles Slidell, Covington, Ponchatoula, Springfield, Denham Springs, Donaldsonville, Mt. Airy, Bonnet Carre', Spanish Fort, Chef Menteur, Rigolets, St. Bernard, New Orleans, and Hahnville; and Coast and Geodetic Survey Charts Nos. 1115 and 1116.

Existing project. The project provides protection to that part of the greater New Orleans area east of the Mississippi River and other communities that border Lake Pontchartrain from the effects of hurricane-generated floods. The project is comprised of two major features: The Chalmette Area Plan and the High Level Plan. The Chalmette Area Plan consists of a levee and floodwall system around the Chalmette area and along the Mississippi River-Gulf Outlet, with connections to the Mississippi River levees. The High Level Plan provides for heightening and strengthening the existing hurricane protection levee systems in Orleans Parish and the east bank of Jefferson Parish, repairing and rehabilitating the Mandeville Seawall in St. Tammany Parish; building a new mainline hurricane levee on the east bank of the St. Charles Parish just north of U.S. Highway 61 (Airline Highway); raising and strengthening the existing levee which extends along the Jefferson-St. Charles Parish boundary between Lake Pontchartrain and Airline Highway; and deferring construction of the proposed navigation structure at Seabrook lock. Areas which will be enclosed by the levee and floodwall construction will be provided protection against tidal surge resulting from the Standard Project Hurricane (SPH). The estimated project cost for work (October 2005) is $533,000,000 Federal and $211,000,000 non-Federal.

Local cooperation. Requirements are described in full on page 11-5 of the FY 92 Annual Report.

Operations and results during fiscal year. Hurricane Katrina devastated the project on August 29, 2005. The storm surge resulted in numerous levee and floodwall failures. Investigations are continuing to determine the causes for these failures. Intensive efforts to reinstate the project protection by June 1, 2006 were completed. Additional efforts are underway to restore the project design elevation in undamaged portions of the project. Funding and authority have been provided to construct permanent closures of the outfall canals in Orleans Parish, new structures to close off the Inner Harbor Navigation Canal at Seabrook and on the MRGO, armoring at critical reaches, and increasing design elevations to provide 100-year level of protection, necessary because of wetland loss, subsidence and sea-level rise.

Emergency supplemental funding. Supplemental (P.L. 109-148) FCCE funding in the amount of $52,270,000 was expended in FY 09. Of that amount $23,371,000 was expended on repairs, including $7,239,000 on damages from Hurricane Gustav; $9,057,000 was used to rebuild the system to authorized design elevation; and $19,842,000 was expended on accelerate to complete work. In addition, $506,625,000 of Supplemental (P.L. 109-234) FCCE funds were expended on outfall canal closures and pumping stations, improvements to IHNC, armoring of levees, and reinforcing or replacing floodwalls. Supplemental (P.L. 109-234, P.L.110-252, P.L.110-329) Construction funds in the amount of $49,193,000 were also expended in FY 09 on efforts to provide 100-year flood protection. Supplemental (P.L. 110-28) FCCE funds in the amount of $46,734,000 were also expended in FY 09, of which $41,375,000 was used to rebuild the system to authorized design elevation; and $5,359,000 was expended on accelerate to complete work.

Condition as of Sep. 30. Major reconstruction of the project is underway. Repairs of damage caused by Hurricane Katrina have been completed. Construction is underway to provide 100-year level of protection. During FY 09, 24 contracts were awarded and 9 contracts were completed.

7. LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION)

Location. In coastal section of Louisiana, along Bayou Lafourche, and includes lands on both banks of the bayou from Larose to 2 miles south of Golden Meadow. (Refer to Geological Survey quadrangles Cutoff, Lake Felicity, Bay Dosgris, Golden Meadow Farms, Bay Tambour, Mink Bayou, Caminada Pass, Leeville, Belle Pass, Pelican Pass, and Calumet Island; Engineer quadrangles New Orleans, Hahnville, Point a la Hache, Barataria, and Fort Livingston; and Coast and Geodetic Survey Charts Nos. 1115 and 1116.)

Existing project. Provides a loop levee about 45 miles long along both banks of Bayou Lafourche from Larose to South Golden Meadow; enlargement of

3 miles of existing levee at Golden Meadow; floodgates for navigation and hurricane risk reduction along Bayou Lafourche at upper and lower bayou crossings; and about 8 miles of low interior levees to regulate intercepted drainage. The non-Federal sponsor constructed pump stations in lieu of the gravity drainage structures that were included in the original project authorization. The Leon Theriot Lock evaluation report was approved by the ASA (CW) in August 2005 and is now an authorized feature of the project. The Leon Theriot Lock will replace the Golden Meadow floodgate.

Local cooperation. Requirements are described in full on page 11-6 of the FY 92 Annual Report.

Operations and results during fiscal year. The South Lafourche Levee District finalized construction of the Leon Theriot Lock. All damages are repaired from Hurricane Katrina. Hurricanes Gustav and Ike made landfall on September 1 and 12, 2008, respectively. The Larose to Golden Meadow project sustained damages at Section D-South, D-North, E-North, LOOP Floodgate, and the Point Au Chene mitigation levee. A PIR was initiated in FY 08 and approved in FY 09 to repair these damages.

FY 09 work also consisted of designing and constructing Section C-North from Highway 1 to the Larose Floodgate. Design of a remedial measure at South Lafourche Crawfish Farms was performed and construction began in FY 09 to bring the project feature to authorized design grade. Due to the post Katrina design criteria and associated costs escalation, a PAC Report is being developed. American Recovery and Reinvestment Act (ARRA) funds were received in the amount of $6,200,000. Funds are being used for borings and for A-E structural engineering and design.

Emergency supplemental funding. Emergency supplemental funding in the amount of $3,200,000 was expended in FY 09. Of that, $334,000 was used for repairs, including $197,000 of Hurricane Gustav funds; $107,000 was used for accelerate to complete work; $2,759,000 was used in data collection and analysis for preparation of the PAC Report; additionally, these funds were used to analyze the levee system's structures for stability, and to design and initiate construction of South Lafourche Crawfish Farms and C-North between Highway 1 and the Larose Floodgate.

Condition as of Sep 30. The South Lafourche Levee District continued their construction efforts to convert the existing Leon Theriot floodgate into a lock using non-Federal funds and completed the lock in FY 09. All damages were repaired from Hurricane Katrina, and the damages caused by Hurricanes Gustav and Ike will be repaired in FY 10. The Golden Meadow Pumping Station Discharge Pipe Floodwall is currently 3.5 feet below authorized elevations and a remedial measure will replace the existing wall and provide the authorized elevation. The Louisiana Offshore Oil Platform Floodgate and Floodwall is currently below authorized elevation and will be replaced.

8. NEW ORLEANS TO VENICE, LA, (HURRICANE PROTECTION)

Location. Includes land subject to inundation by hurricane tides extending along both banks of the Mississippi River below New Orleans from vicinity of Phoenix to Venice, LA.

Existing project. Provides for improvements along Mississippi River below New Orleans, LA, for prevention of hurricane tidal flood damages by increasing heights of existing back levees and modifying existing drainage facilities where necessary in three separate reaches: Reach A, on the west bank from St. Jude to Tropical Bend, 18 miles, 4,340 acres protected; Reach B, on the west bank from Tropical Bend to Venice, 21 miles, 4,900 acres protected; and Reach C, on the east bank from Phoenix to Bohemia 16 miles, 5,470 acres protected, and raising the river levee on the west bank (MR&T levee) from City Price to Venice, to a grade high enough to prevent overtopping by tidal surges from the east, generally called the West Bank River Plan. Reach B was later divided into two units, Reach B-1 from Tropical Bend to Fort Jackson and Reach B-2 from Fort Jackson to Venice, LA, as a result of a request made by the local agency.

Local cooperation. Provide all lands, easements, and rights-of-way including borrow areas and spoil disposal areas necessary for the construction of the project; accomplish all necessary alterations and relocations to roads, pipelines, cables, wharves, and other facilities required by the construction of the project; bear 30 percent of the first cost, and cash contribution or equivalent work to be paid either in a lump sum prior to initiation of construction or in installments prior to start of pertinent work items.

The local sponsor has requested that an area extending from the upstream limits of Reach A at City Price to St. Jude, Louisiana be incorporated into the project. This work involves upgrading 3.3 miles of existing non-Federal levees to project standards. The local sponsor has elected to pay all of the costs of this reach of levee. While the sponsor will not receive credit for these costs, the increased protected area is eligible for Federally subsidized flood insurance. Savings to the project achieved by a portion of levee no longer being required at the upstream end of Reach A are creditable to the local sponsor. A Post Authorization Change report was prepared for this reach and was approved by the Lower Mississippi Valley Division on Mar. 6, 1992. Supplemental assurances for the City Price to St. Jude reach were accepted on Feb. 18, 1993.

Assuring Agency: Plaquemines Parish Government. Assurances for all reaches of the project have been furnished.

Operations and results during fiscal year. Hurricane Katrina devastated the project on August 29, 2005. The storm surge overtopped the protection and resulted in numerous levee and floodwall failures. Intensive efforts to reinstate the project protection are underway funded under Flood Control and Coastal Emergencies Appropriation, PL-109-148, which provided full Federal funding with no local share required.

Emergency supplemental funding. Emergency supplemental funding in the amount of $44,424,000 was expended in FY 09. Of that, $14,517,000, including $2,995,000 of Hurricane Gustav funds, funded repairs. Approximately $24,227,000 was used for rebuild existing system to design and accelerate to complete and armoring work. The remaining $5,680,000 was expended on incorporating non-Federal west bank levees in Plaquemines Parish into the New Orleans to Venice project.

Condition as of Sep. 30. All repair work was completed except for closeout work required on several reaches. Restoration and accelerate to complete work will continue, along with incorporating non-Federal levees in Plaquemines Parish.

9. SOUTHEAST LOUISIANA URBAN FLOOD CONTROL PROJECT (FLOOD CONTROL)

Location. The authorized project is located in Orleans, Jefferson, and St. Tammany Parishes. Features in Orleans Parish (city of New Orleans) are located on the east bank of the Mississippi River. Work in Jefferson Parish is located on the east and west banks of the Mississippi River in the vicinity of New Orleans, LA. St. Tammany Parish features are located in the southern portion of the parish, near Lake Pontchartrain, in and around the communities of Slidell, Mandeville, Madisonville, Abita Springs, and Lacomb, LA.

Project features. The work in Orleans Parish consists of enlargement of a major pumping station, construction of 2 new stations, and improvements to 12 drainage canals and underground drainage lines. Jefferson Parish features include improvements to 5 pumping stations, construction of 2 new pump stations, and improvements to approximately 30 drainage canals. Work in St. Tammany includes: channel improvements, retention ponds, levees, and structure raising.

Local cooperation. The project requires that the local sponsor(s) provide all lands, easements, rights-of-way, relocations, and disposal areas (LERRD) needed for project construction, as well as a minimum 5 percent cash contribution. The total (value) of the locals share must be a minimum of 25 percent of the project total, but not exceed 50 percent of the project total. Jefferson Parish and the Sewerage and Water Board of New Orleans executed the Project Cost-sharing Agreements (PCAs) in January 1997. No agreement has yet been executed for St. Tammany Parish work.

Operations and results during fiscal year. Federal construction began in March 1997. Since then, 51 construction contracts have been awarded and 45 have been completed.

In March 2005, a PCA amendment was executed with Jefferson Parish incorporating the East Bank Basin project and the East of Harvey Canal project on the basis of studies done under Sec. 533(d) of the WRDA

of 1996. The Uptown Sec. 533(d) report was approved in October 2006. A Project Partnership Agreement (PPA) for all authorized and approved SELA work was executed with the State of Louisiana in January 2009. Additional Sec. 533 (d) investigations continue in an attempt to determine whether there are more Federally justified plans for improving drainage in Orleans and St. Tammany Parishes.

Emergency supplemental funding. Emergency supplemental (P.L. 109-148) funding in the amount of $36,074,000, of which $5,000 was used for repairs and $36,069,000 was expended for accelerate to complete contracts. In addition, $14,218,000 of Construction funds (P.L. 110-28, P.L. 110-252, P.L. 110-329) were expended in FY 09.

Condition as of Sep 30. In FY 09, emergency supplemental funds were used to complete two contracts and award one new contract.

10. WEST BANK AND VICINITY, NEW ORLEANS, LA (HURRICANE PROTECTION)

Location. The project is located in Jefferson, Orleans and Plaquemines parishes on the West Bank of the Mississippi River in the vicinity of New Orleans, Louisiana.

The project area generally extends from the Jefferson-St. Charles Parish line to the community of Oakville in Plaquemines Parish and is bounded by the Mississippi River on the north and east and Lakes Cataouatche and Salvador and the GIWW on the south and west. The original project was from Westwego to Harvey Canal and was authorized by WRDA 86. WRDA 96 modified the project by adding the Lake Cataouatche area to the project and also authorized the East of Harvey Canal Hurricane Protection Project. WRDA 99 combined the three projects under the current name.

Existing project prior to the emergency funding supplement of 2006. The total project consists of about 57 miles of new and enlarged earthen levee, 9 miles of floodwall, a navigable floodgate in the Harvey Canal below Lapalco Boulevard, a discharge channel and 1,000 cfs capacity increase at the Cousins pump station. The protection was originally designed to protect against tidal floodwaters resulting from the Standard Project Hurricane (SPH) storm used at the time of original authorization.

The elevation of the SPH protection varies from 9 to 12 feet NGVD. The project plan includes mitigation which consists of the construction of a timber pile and tire breakwater on the west bank of Lake Cataouatche adjacent to the Salvador Wildlife Management Area and the acquisition of approximately 1,300 acres of forested wetlands which will be managed to improve habitat quality.

Local cooperation. The project requires that the local sponsor provide all LERRDs needed for project construction. The total (value) of the sponsors share must be a minimum 35 percent of the total project costs, in cash or creditable work.

Funds provided by non-Federal interests for interim hurricane protection on the Westwego to Harvey Canal area may be considered beneficial expenditures and may be credited as part of the non-Federal contribution of the project pursuant to the WRDA of 1986.

The Louisiana Department of Transportation and Development and West Jefferson Levee District executed amendment number 1 of the local cooperation agreement in April 1999. Amendment 2 to the PCA was executed on March 30, 2007.

Operations and results during fiscal year. Flood Control and Coastal Emergency (PL 109-148) funds were received in FY 06 in the wake of Hurricane Katrina. The funds will be used to accelerate the original project completion and restore original design elevations. Supplemental (P.L. 109-234, P.L. 110-252, P.L. 110-329) Construction funds will be used to increase design elevations to provide a minimum of 100-year level of protection required because of wetlands loss, subsidence, and sea level change.

Emergency supplemental funding. Supplemental funding (P.L. 109-148, P.L. 109-234, P.L. 110-28, P.L. 110-252) in the amount of $316,735,000 was expended in FY 09. Of that, $9,304,000 was expended on restoration to authorized design elevations. In addition, $276,868,000 was expended on accelerate to complete and $30,568,000 was expended on armoring and floodwall reinforcing or replacement. Supplemental (P.L. 109-234, P.L. 110-252, P.L. 110-329) Construction funds in the amount of $117,019,000 were expended on efforts to provide 100-year flood protection.

Conditions as of September 30. Major design and construction efforts continue to support the advance completion of all features of the project. A total of 17 contracts were awarded in FY 09, and 7 contracts were completed in FY 09.

11. AMITE RIVER AND TRIBUTARIES, EAST BATON ROUGE PARISH, LA (FLOOD DAMAGE REDUCTION)

Location. The project lies between the Mississippi River and Amite Rivers and the area is approximately 66 miles of channels in five sub-basins within East Baton Rouge Parish, LA. The five sub-basins are Blackwater Bayou and tributaries; Beaver Bayou; Jones Creek and tributaries; Ward Creek and tributaries; and Bayou Fountain. The project was authorized by PL 101-21, the Water Resources Development Act of 1999, and modified by P.L. 108-116.

Existing project. The project purpose is to reduce flooding by channel modifications within five watersheds, including the Baton Rouge and city of Central, LA, metropolitan area. The current approved cost of the project is $187,000,000, including $140,000,000 Federal cost and $47,000,000 non-Federal cost.

Local Cooperation. A 75/25 cost share and the "looking back" work-in-kind have been authorized in WRDA 2007. Since the city of Central incorporated and is outside the jurisdictional limits of East Baton Rouge Parish government, two of the five channels (Blackwater and Beaver Bayous) are located entirely within the city limits of Central. Therefore, two PPAs will be prepared for signature. One PPA will be signed with East Baton Rouge Parish to include Jones Creek, Ward Creek, and Bayou Fountain at a total project cost of $130,000,000. The second PPA will be signed with the city of Central to include Beaver and Blackwater Bayous for a total project cost of $57,000,000. A PAC report was prepared as the basis for reauthorization with a revision to the work-in-kind features. Work-in-kind will be in accordance with EC 1165-2-208.

Operations and results during fiscal year. Negotiations for the PPA with East Baton Rouge Parish and the design of Weiner Creek, a tributary of Jones Creek, are ongoing. ARRA funds were received in the amount of $674,544 for force main restoration.

Condition as of Sep 30. Construction of the project has not yet begun.

12. INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Various hurricane protection projects, as well as small flood control projects, were inspected during FY 09. Also, periodic inspection and continuing evaluation of completed Civil Works structures was conducted in accordance with ER 1110-2-100, at various times during the year on an as needed basis.

Fiscal year costs for 2009 were $835,588. Total costs to Sep. 30, 2009, were $10,139,010.

13. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Emergency flood control activities—repair, flood fighting, and rescue work. Public Law 109-62, Public Law 109-148 and Public Law 109-234.)

During FY 09, the following funds were provided for Emergency Management at the New Orleans District: $116,000 for Emergency Preparedness Operations.

In addition, $149,614,000 was expended in FY 09 Supplemental funding to continue restoration from major damages sustained from Hurricanes Katrina and Rita to the Greater New Orleans Storm Hurricane Reduction System (Lake Pontchartrain and Vicinity, LA (HPP); Southeast Louisiana, LA: New Orleans to Venice, LA (HPP); Larose to Golden Meadow, LA; and Grand Isle and Vicinity, LA). The FY 09 funds were utilized for repair and restoration of projects to pre-Katrina levels and improvements to the Hurricane and Storm Damage Risk Reduction System.

Condition as of Sep. 30. Contract awards for repairs began in FY 05 and were completed in FY 06. Ongoing and future work includes: additional levee lifts and construction of new floodwalls to 100-year level of protection, construction of additional pump plants, storm proofing of existing pump plants, armoring of levees, and installation of gated structures.

As of September 2009, 156 construction contracts were awarded for approximately $4.2 billion. The repairs and rehabilitation of the catastrophic damaged areas within the 220 miles of levees and floodwalls, to close the gaps in the perimeter protection, were complete as of June 1, 2006. Additional repairs and rehabilitation have continued to lesser damaged areas.

14. PROTECTION OF NAVIGATION

During FY 09, $38,726 was expended on operation and maintenance for Project Condition Surveys.

15. CATASTROPHIC DISASTER PREPAREDNESS PROGRAM

During FY 09, $483,841 was expended for Emergency Management at the New Orleans District.

16. COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT

Location. The coastal parishes of Louisiana.

Authority. Activities were authorized by the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) (Title III of Public Law 101-646, dated Nov. 29, 1990), which established the Louisiana Coastal Wetlands Conservation and Restoration Task Force. The Task Force consists of the Secretary of the Army as chairman, the Administrator of the Environmental Protection Agency, the Governor of the State of Louisiana, the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce.

Local cooperation. The conditions of local cooperation were established by PL 101-646, as amended.

Project features. The Task Force approves projects to be developed for the long-term conservation of Louisiana's coastal wetlands. Projects are added to Priority Project lists (PPLs) on an annual basis. Projects approved on previous PPLs can be found in the 2006 Annual Report (pages 11-9 through 11-11). The Task Force approved the 18th PPL on January 21, 2009. Funds in the amount of $11,183,461 were made available for construction of the following projects: Bertrandville Siphon, Cameron-Creole Freshwater Introduction, Central Terrebonne Freshwater Enhancement, and Grand Lirad Marsh and Ridge Restoration.

Operations and Results during fiscal year. See Table 11-I for projects completed, continued, and initiated in FY 09.

17. REGULATORY PROGRAM

Permit Evaluation	$6,838,400
Enforcement	396,328
Environmental Inspection Statement	0
Appeals	5,253
Compliance	161,532
Total Regulatory Program	$7,446,513

TABLE 11-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY05	FY06	FY07	FY08	FY09	Total Funds to Sep 30, 2009
1	IHNC	New Work						
		Approp	5,618,000	3,829,000	7,750,000	964,000	965,536	70,959,536
		Cost	5,637,025	2,744,632	5,118,695	655,923	292,814	67,078,064
	IWWTF	Maint						
		Approp	7,261,000	3,829,000	7,750,000	0	0	67,427,500
		Cost	6,071,859	1,823,871	5,118,695	2,419,325	826,132	67,583,217
2	MRGO	New Work						
		Approp	-8,536	0	0	0	0	83,355,464
		Cost	1,401	15,640	0	0	0	82,896,576
3	MRSC	New Work						
		Approp	0	170,001	-85,000	0	0	27,760,001
		Cost	18,203	0	0	0	0	27,673,000
4	Comite River	New Work						
		Approp	8,070,000	6,191,000	12,385,000	7,872,000	9,091,000	59,042,000
		Cost	8,051,500	5,428,759	2,573,800	4,052,657	5,987,444	54,394,720
							4,052,657	
	Contrib	New Work						
	Funds	Contrib	500,000	4,600,000	0	0	400,000	6,815,000
		Cost	348,202	520,247	1,211,449	585,500	613,284	4,332,966
5	Grand Isle	New Work						
	Reevaluation	Approp	60,000	688,000	0	0	0	3,200,000
		Cost	23,809	416,642	77,481	65,457	140	2,704,191
6	Lake	New Work						
	Pontchartrain	Approp	4,600,000	3,960,000	0	0	0	521,417,000
		Cost	9,274,120	1,451,755	4,130,134	-5,877	348,353	466,329,582
	Contrib	New Work						
	Funds	Contrib	4,600,000	0	0	0	0	157,557,237
		Cost	9,274,120	410,468	0	0	0	157,965,985
7	Larose to	New Work						
	Golden	Approp	448,000	742,000	0	964,000	957,000	81,353,000
	Meadow	Cost	377,508	151,081	430,229	655,923	546,869	80,401,223
		ARRA						
		New Work	0	0	0	0	6,200,000	6,200,000
		Approp					1,196,767	1,196,767
		Cost						
	Contrib	New Work						
	Funds	Contrib	909,000	0	0	0	0	33,265,000
		Cost	428,000	0	4,316	3,694	21,982	33,,294,992

TABLE 11-A (Continued) **COST AND FINANCIAL STATEMENT**

See Section in Text	Project	Funding	FY05	FY06	FY07	FY08	FY09	Total Funds to Sep 30, 2009
8	N.O. to Venice	New Work	0	2,673,000	0	0	0	156,534,000
		Approp	0	28,704	563	0	0	153,729,742
		Cost						
	Contrib Funds	New Work	1,924,000	0	0	0	0	666,652,000
		Contrib	1,924,000	0	0	0	118,620	662,770,620
		Cost						
	Dredge Mat'l Disposal Facility	New Work	0	0	200,000	1,968,000	0	2,168,000
		Approp	0	0	2,000	10,768	0	12,760
		Cost						
	Barataria Bay Land Bridge	New Work		10,100,000	0	0	0	10,100,000
		Approp		12,027	403,713	302,928	302,928	718,668
		Cost						
9	SELA	New Work	32,426,000	26,730,000	0	0	0	441,933,000
		Approp	32,398,237	9,188,990	8,719,243	3,440,990	3,522,185	440,074,313
		Cost						
	Contrib Funds	New Work	720,000	0	885,372	0	0	103,890,372
		Contrib	5,661,572	0	900	768,201	117,170	103,890,271
		Cost						
10	West Bank	New Work	25,753,000	27,720,000	0	0	0	156,845,000
		Approp	25,727,680	15,298,904	11,662,913	343,545	343,545	156,343,470
		Cost						
	Contrib Funds	New Work	3,213,000	0	0	0	0	50,738,000
		Contrib	3,213,000	0	0	0	0	50,308,587
		Cost						
11	E. Baton Rouge Parish	New Work	421,000	742,000	300,000	936,000	957,000	5,298,000
		Approp	428,000	477,047	472,560	304,521	461,005	4,078,133
		Cost						
		ARRA New Work						
		Approp	0	0	0	0	674,544	674,544
		Cost					0	0

TABLE 11-A (Continued) **COST AND FINANCIAL STATEMENT**

See Section in Text	Project	Funding	FY05	FY06	FY07	FY08	FY09	Total Funds to Sep 30, 2009
13	Hurricane Protection System	New Work Approp	45,625,479	2,186,966,50	4,827,585,00	26,806,000	7,376,000,000	14,442,282,979
			980,177	0	0	702,596,825	1,328,580,928	3,409,199,364
		Cost		650,501,976	726,539,458			
16	CWPPRA	New Wk Approp	58,054,072	63,059,645	76,402,872	88,286,685	89,916,488	972,645,672
		Cost	41,376,756	40,167,600	62,989,172	55,471,903	94,463,471	150,351,318
	Contrib Funds	New Wk Contrib	1,723,178	0	1,929,156	4,287,887	9,190,377	41,913,737
		Cost	489,633	2,542,186	3,698,516	3,125,613	6,653,041	32,173,325

TABLE 11-B AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	LAKE CHARLES, LA	
Water Resources Development Act, 1986	The project for deepening of the project for navigation, Lake Charles, Louisiana, to a depth of 45 feet, at a total cost of $1,070,000.	Public Law 99-662, Nov. 17, 1986
	MISSISSIPPI RIVER, BATON ROUGE TO GULF OF MEXICO, LA	
Mar. 2, 1945	Combines projects of Mississippi River, Baton Rouge to New Orleans, Mississippi River, South Pass, and Southwest Pass, adding thereto project for Mississippi River from New Orleans to Head of Passes, to provide a single project, "Mississippi River, Baton Rouge to the Gulf of Mexico," with channel dimensions as follows: Baton Rouge to New Orleans, 35 by 500 feet; port limits of New Orleans, 35 by 1,500 feet; New Orleans to Head of Passes, 40 by 1,000 feet; Southwest Pass, 40 by 800 feet; Southwest Pass Bar Channel, 40 by 600 feet; South Pass, 30 by 450 feet; South Pass Bar Channel, 30 by 600 feet.	H. Doc. 215, 76th Cong., 1st sess.
Oct. 23, 1962	Deepen existing channel from 35 to 40 feet by 500 feet wide from one-tenth mile below Louisiana Highway Commission bridge at Baton Rouge to upper limits of Port of New Orleans, and also 40 by 500 feet within presently authorized 35- by 1,500-foot channel in port limits of New Orleans.	S. Doc. 36, 87th Cong., 1st sess.
	MISSISSIPPI RIVER-GULF OUTLET, LA (See Sec. 2 of Text)	
Mar. 29, 1956	Construct a seaway canal 36 feet deep and 500 feet wide from Michoud to 38-foot contour in gulf and an inner tidewater harbor consisting of a 1,000- by 2,000-foot turning basin 36 feet deep and a connecting channel 36 feet deep and 500 feet wide to Inner Harbor Navigation Canal and provides, when economically justified, for construction of a lock to Mississippi River in the vicinity of Meraux, LA.	H. Doc. 245, 82d Cong., 1st sess.
Oct. 22, 1976	Amends above Act making the construction of bridge relocations a Federal responsibility when required by the the construction of the Mississippi River-Gulf Outlet channel.	Sec. 186, Water Resources Development Act of 1976 (PL 94-587) 2d sess.
Water Resources Development Act, 1986	The Mississippi River-Gulf Outlet feature is modified to provide that the replacement and expansion of the existing industrial canal lock and connecting channels or the construction of an additional lock and connecting channels shall be in the area of the existing lock or at the Violet site.	Public Law 99-662, Nov. 17, 1986
Water Resources Development Act, 1996	Amends above Act of 1986 to include a Community Impact Mitigation Plan as an authorized feature of the project to replace the Inner Harbor Navigation Canal Lock.	Public Law 104-303 Oct. 12, 1996

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA (See Sec. 3 of Text)	
Approp. Act of 1985, dated Jul. 2, 1986 (PL 99-88)	Will provide more efficient deep-draft navigation access to the New Orleans and Baton Rouge reaches of the Mississippi River via Southwest Pass by enlarging the existing channel to a project depth of 55 feet and enlarging the adjacent channel along the left descending bank in New Orleans Harbor to a 40-foot depth, a turning basin at Baton Rouge, and training works in the passes to reduce maintenance.	H. Doc. 2577, 99th Cong., 1st sess.
Nov. 17, 1986 (PL 99-662)	Formalizes the cost sharing provisions of the project, permits the State of Louisiana to enact user fees to defray their portion of the project costs, and implements harbor maintenance fees to help pay for the Federal cost of the project. It also provides an option to the local sponsor to defer their initial payment for one year following initiation of construction. In terms of channel depths up to 45 feet, the cost sharing requirements are 75 percent Federal and 25 percent non-Federal for construction and 100 percent Federal for maintenance. For channels deeper than 45 feet, the cost sharing requirements are 50 percent Federal and 50 percent non-Federal for both construction and maintenance.	Water Resources Development Act of 1986, 99th Cong., 2d sess.
	PORT FOURCHON, LA	
Water Resources Development Act, 1996	Provides a Federal navigation channel with a project depth of 24 feet MLLW in Bayou Lafourche, Belle Pass, and the Gulf of Mexico to improve navigation access to Port Fourchon at a total cost of $4,440,000, with an estimated Federal cost of $2,300,000 and an estimated non-Federal cost of $2,140,000.	Public Law 104-303, 104th Congress (See Section 101) Oct. 12, 1996
	WATERWAY FROM INTRACOASTAL WATERWAY TO BAYOU DULAC, LA (Bayous Grand Caillou and LeCarpe, LA)	
Aug. 30, 1985	Channel 5 by 40 feet from Intracoastal Waterway at Houma through Bayou LeCarpe, Bayou Pelton, and Bayou Grand Caillou to Bayou Dulac, about 16.3 miles.	H. Doc. 206, 72d Cong., 1st sess.
Oct. 23, 1962	Channel 10 by 45 feet in Bayou LeCarpe from Gulf Intracoastal Waterway to Houma navigation canal.	
	BAYOU RIGOLETTE, LA	
Water Resources Development Act, 1986	A project to construct six additional floodgates at Bayou Rigolette, LA, adjacent to the existing drainage structure, at a total cost of $2,300,000.	Public Law 99-662, Nov. 17, 1986
	AMITE RIVER AND TRIBUTARIES, LOUISIANA, EAST BATON ROUGE PARISH WATERSHED	
Water Resources Development Act, 1999 August 17, 1999	Amite River and Tributaries, Louisiana, East Baton Rouge Parish Watershed. The project for flood damage reduction and recreation, Amite River and tributaries, Louisiana, East Baton Rouge Parish Watershed.	Public Law 106-53 August 17, 1999

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	COMITE RIVER, LA (Diversion) (See Sec. 4 of Text)	
Water Resources Development Act, 1992	Construct an eight-mile diversion channel from the Comite River to an outfall into Lilly Bayou, and then a four-mile diversion along Lilly and Cooper Bayous to the Profit Island Chute of the Mississippi River. Also included a diversion structure in the new channel near the diversion point, and an outfall structure near and at the outfall into Lilly Bayou, and three control structures at the intersections of Whites, Cypress and Baton Rouge Bayous.	Public Law 102-580 Section 101 (11) Oct. 31, 1992
Water Resources Development Act, 1996		Public Law 104-305 Section 301(b)(5) Oct. 12, 1996
Energy and Water Development Appropriations Act, FY 1999	Provided funding authority in the amount of $930,000 to initiate construction.	Public Law 105-245 Oct. 7, 1998
	GRAND ISLE AND VICINITY, LA (See Sec. 5 of Text)	
Adopted by Committee Resolutions Sep. 23, 1976, and Oct. 1, 1976[2]	To provide hurricane protection by placement of a berm and vegetated dune extending the length of Grand Isle's gulf shore and a jetty to stabilize the western end of the island at Caminada Pass.	H. Doc. 639, 94th Cong., 2d sess.
	LAKE PONTCHARTRAIN AND VICINITY, LA (HURRICANE PROTECTION) (See Sec. 6 of Text)	
Oct. 27, 1965	Control of hurricane tides by construction of two independent units, the Lake Pontchartrain Barrier plan and the Chalmette Area plan.	H. Doc. 231, 89th Cong., 1st sess.
	NORTH PASS - PASS MANCHAC, LA	
Section 107, Rivers and Harbors Act of 1960, as amended	The Corps of Engineers may construct small river and harbor improvement projects not specifically authorized by Congress when they will result in substantial benefits to navigation.	Public Law 86-645 Jul. 14, 1960
	LAKE PONTCHARTRAIN, NORTH SHORE, LA	
Water Resources Development Act, 1986 Nov. 17, 1988	The project for navigation, Lake Pontchartrain North Shore, LA: Report of the Chief of Engineers, dated February 14, 1979, at a total cost of $1,310,000, with an estimated first Federal cost of $655,000 and an estimated first non-Federal cost of $655,000.	Public Law 99-662, Nov. 17, 1986, 99th Cong., 2d sess.
	LAKE PONTCHARTRAIN STORMWATER DISCHARGE, LA (See Section 9 of Text)	
Water Resources Development Act, 1992	Provides for design and construction of project to to address water quality problems associated with stormwater discharges.	Public Law 102-580

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION) (See Sec. 7 of Text)	
Oct. 27, 1965	A loop levee about 40 miles long along both banks of Bayou Lafourche from Golden Meadow to Larose; enlargement of 3 miles of existing levee at Golden Meadow; floodgates for navigation and hurricane protection in Bayou Lafourche at upper and lower bayou crossings; about 8 miles of low interior levees to regulate intercepted drainage; and seven multibarreled culverts controlled by flapgates.	H. Doc. 184, 89th Cong., 1st sess.[1]
	MORGAN CITY AND VICINITY, LA, HURRICANE PROTECTION	
Oct. 27, 1965	Construction of new levees along Lake Palourde and Bayou Ramos, levee to tie-in with Bayou Boeuf lock levee and three gravity drainage structures in Morgan City unit and enlargement of bank levee, construction of new levee, and construction of one floodgate and five gravity drainage structures in Franklin and vicinity unit. The Franklin Area separable element was de-authorized on 1 May 1997.	H. Doc. 167, 89th Cong., 1st sess.
	MERMENTAU RIVER - GRAND CHENIER, LA	
Section 14, Flood Control Act of 1946	Construction of emergency bank-protection works to prevent flood damage to highways, bridge approaches and public works.	Public Law 526, 79th Cong, 2d sess. Jul. 24, 1946
	NEW ORLEANS TO VENICE, LA, HURRICANE PROTECTION (See Sec. 8 of Text)	
Oct. 23, 1962	Improvements along Mississippi River below New Orleans, LA, for prevention of hurricane tidal flood damages by increasing heights of existing back levees and modifying existing drainage facilities where necessary in five separate reaches.	H. Doc. 550, 87th Cong., 2d sess.
	SOUTHEAST LOUISIANA, LA (See Section 9 of text)	
Energy and Water Development Appropriations Act, FY 1996	Provides for drainage canal and pump station improvements in Orleans and Jefferson Parishes, and drainage improvements, flood protection and structure raising in St. Tammany Parish.	Public Law 104-46 (Sec 108)
Water Resources Development Act, 1996		Public Law 104-303 (Sec 533)
	WEST BANK AND VICINITY, NEW ORLEANS, LA HURRICANE PROTECTION	
Water Resources Development Act, 1999	**Combination of Projects - Section 328(b) of WRDA 99 states:** The Secretary shall carry out work authorized as part of the Westwego to Harvey Canal project, the East of Harvey Canal project, and the Lake Cataouatche modifications as a single project, to be known as the “West Bank and Vicinity, New Orleans, Louisiana, Hurricane Protection”, with a combined total cost of $280,300,000.	Public Law 106-53, Aug. 17, 1999

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Water Resources Development Act, 1986	**Westwego to Harvey Canal - Section 401(b) of WRDA 86 states:** Structural and nonstructural measures to prevent flood damage to those areas identified in the Feb. 1984 draft Environmental Impact Statement for the West Bank Hurricane Protection Levee, Jefferson Parish, LA at a total cost of $61,500,000, with an estimated first Federal cost of $40,000,000 and as estimated first non-Federal Cost of $21,500,000. Funds provided by non-Federal interest for interim hurricane protection may be considered beneficial expenditures and may be credited as part of the non-Federal contribution of the project pursuant to Section 104 of this Act.	Public Law 99-662, Nov 17, 1986
Water Resources Development Act, 1996	**East of Harvey Canal - Section 101(a)(17) of WRDA96 states:** The project for hurricane damage reduction, West Bank of the Mississippi River in the vicinity of New Orleans (East of Harvey Canal), Louisiana: Report of the Chief of Engineers, dated May 1, 1995, at a total cost of $126,000,000, with an estimated Federal cost of 82,200,000 and an estimated non-Federal cost of $43,800,000.	Public Law 104-303
Water Resources Development Act, 1996	**Lake Cataouatche - Section 101(b)(11) of WRDA 96 states:** The project for hurricane damage prevention and flood control, West Bank Hurricane Protection (Lake Cataouatche Area), Jefferson Parish, Louisiana, at a total cost of $14,375,000 with an estimated Federal cost of $9,344,000 and an estimated non-Federal cost of $5,031,000.	Public Law 104-303
Coastal Wetlands Planning, Protection and Restoration Act	**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT** (See Section 16 of Text) Directed the Secretary of the Army to convene the Louisiana Coastal Wetlands Conservation and Restoration Task Force to initiate a process to identify and prepare a list of coastal wetlands restoration projects in Louisiana to provide for the the long-term conservation of such wetlands and dependent fish and wildlife populations in order of priority in creating, restoring, protecting, and enhancing coastal wetlands, taking into account the quality of such coastal wetlands, with due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration.	Public Law 101-64 Nov. 24, 1990 Section 301-306
Second Emergency Supplemental Appropriations Act To Meet Immediate Needs Arising from the Consequences of Hurricane Katrina, 2005	**Emergency Supplemental appropriations to meet immediate needs arising from the consequences of Hurricane Katrina**. Provided $200 million in O&M, General funds for emergency expenses for repair of storm damage to authorized projects; Provided $200 million in FC&CE funds for emergency expenses for repair of damage to flood control and hurricane shore protection projects.	Public Law 109-62 September 8, 2005

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Emergency Supplemental Appropriations to Address Hurricanes in The Gulf of Mexico, And Pandemic Influenza Act, 2006	**Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico and Pandemic Influenza Act** Provided GI funds to expedite studies of flood and storm damage; Additional amounts for CG to rehabilitate and repair Corps projects; provided MR&T funds for repairs; provided $75 million in O&M General funds for authorized maintenance activities along the MRGO Channel; provided FC&CE funds to accelerate completion of unconstructed portions of certain authorized projects.	Public Law 109-148 December 30, 2005 Div B, Title I, Chap. 3
Emergency Supplemental Appropriations Act For Defense, Global War on Terror and Hurricane Recovery	**Emergency Supplemental Appropriations Act for Defense, Global War on Terror and Hurricane Recovery** Directed the Secretary of the Army to use the funds appropriated to modify certain authorized projects in southeast Louisiana to provide hurricane and storm damage reduction and flood damage reduction in the greater New Orleans and surrounding areas; provided GI, CG, and FC&CE funds.	Public Law 109-234 June 15, 2006 Title II, Chapter 3
Emergency Supplemental Appropriations to Address U.S. Troops Readiness, Veterans' Care, Katrina Recovery and Iraq Accountability Appropriations Act, 2007	**Emergency Supplemental Appropriations to Address U.S. Troops Readiness, Veterans' Care, Katrina Recovery and Iraq Accountability Appropriations Act, 2007** Provided $25.3 million of CG funds for continued construction of projects related to interior drainage for the Greater New Orleans Metropolitan areas and $1.3 billion to accelerate completion of unconstructed portions of certain authorized projects.	Public Law 110-28 May 25, 2007 Title II, Chapter 3
Emergency Supplemental Appropriations for Military Construction, the Department of Veterans Affairs, and related agencies for the fiscal year ending September 30, 2008, and for other purposes (The War Supplemental)	**Emergency Supplemental Appropriations for Military Construction, The Department of Veteran Affairs, and related agencies for the fiscal year ending September 30, 2008, and for other purposes (The War Supplemental)** Directed the Secretary of the Army to use funds appropriated to continue to modify certain authorized projects in southeast Louisiana to provide hurricane and storm damage reduction and flood damage reduction in the greater New Orleans and surrounding areas. Provided CG, and FC&CE funds.	Public Law 110-252 June 30, 2008 Title III, Chapter 3

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Emergency Supplemental Appropriations for Consolidated Security Disaster Assistance and Appropriations Act, 2009	**Emergency Supplemental Appropriations for Consolidated Security Disaster Assistance, and Continuing Appropriations Act, 2009** Directed the Secretary to use $1.5 billion of funds appropriated to fund the estimated amount of the non-Federal cash contribution for projects in southeast Louisiana and $115 million for repairs for damage caused by Hurricane Gustav.	Public Law 110-329 September 30, 2008 Title I, Chapter 3
Water Resources Development Act, 2007	**Bayou Sorrel Lock, LA - Section 1001(23) states:** The project for navigation, Bayou Sorrel Lock, Louisiana: Report of the Chief of Engineers dated January 3, 2005, at a total cost of $9,600,000. The costs of construction of the project are to be paid ½ from amounts appropriated from the general fund of the Treasury and ½ from amounts appropriated from the Inland Waterways Trust Fund.	Public Law 110-114, November 8, 2007
Water Resources Development Act, 2007	**Port of Iberia, LA – Section 1001(25) states:** The project for navigation, Port of Iberia, Louisiana: Report of the Chief of Engineers dated December 31, 2006, at a total cost of $131,250,000 with an estimated Federal cost of $105,315,000 and an estimated non-Federal cost of $25,935,000: except that the Secretary, in consultation with Vermillion and Iberia Parishes, Louisiana, and consistent with the mitigation plan in the report, shall use available dredged material and rock placement on the south bank of the Gulf Intracoastal Waterway and the west bank of the Freshwater Bayou Channel to provide incidental storm surge protection that does not adversely affect the mitigation plan.	Public Law 110-114 November 8, 2007
Water Resources Development Act, 2007	**Violet, Louisiana** The Secretary shall design and implement a project for a diversion of freshwater at or near Violet, Louisiana, for the purposes of reducing salinity in the western Mississippi Sound, enhancing oyster production, and promoting the sustainability of coastal wetlands.	Public Law 110-114 November 8, 2007 Sec. 3083
Water Resources Development Act, 2007	**Sec. 8080, Baton Rouge, Louisiana** Section 219(f)(21) of WRDA of 1992 (113 Stat. 336; 114 Stat. 2763A-220) is amended by striking “$20,000,000” and inserting “35,000,000.”	Public Law 110-114 November 8, 2007
Water Resources Development Act, 2007	**Sec. 5081, Calcasieu Ship Channel, Louisiana** The Secretary shall expedite completion of a dredged material management plan for the Calcasieu Ship Channel, LA, and may take interim measures to increase the capacity of existing disposal areas or to construct new confined or beneficial use disposal areas, for the channel.	Public Law 110-114 November 8, 2007

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Water Resources Development Act, 2007	**Sec. 5082, East Atchafalaya Basin And Amite River Basin Region, Louisiana** In this section, the term "East Atchafalaya Basin and Amite River Basin Region" means the following parishes and municipalities in the State of LA: Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, Point Coupee, St. Helena, West Baton Rouge, and West Feliciana. The Secretary may establish a program to provide environmental assistance to the Non-Federal interests in the East Atchafalaya Basin and Amite River Basin Region.	Public Law 110-114 November 8, 2007
Water Resources Development Act, 2007	**Sec. 5083, Inner Harbor Navigation Canal, Lock Project, LA** The Secretary shall, not later than July1, 2008, issue a final Environmental Impact Statement relating to the Inner Harbor Navigation Canal Lock project, LA, and develop and maintain a transportation mitigation program relating to that project in coordination with – (A) St. Bernard Parish; (B) Orleans Parish; (C) the Old Arabi Neighborhood Association; and (D) other interested parties.	Public Law 110-114 November 8, 2007
Water Resources Development Act, 2007	**Sec. 5085, Southeast Louisiana Region, Louisiana** Definition of "Southeast Louisiana Region" means any of the following parishes in the State of Louisiana: (1) Orleans; (2) Jefferson; (3) St. Tammany; (4) Tangipahoa; (5) St. Bernard; (6) St. Charles; (7) St. John; and (8) Plaquemines. Assistance provided under this section may be in the form of design and construction assistance for water-related environmental infrastructure. Authorization to carryout this Section is $17,000,000.	Public Law 110-114 November 8, 2007
Water Resources Development Act, 2007	**Sec. 5086, West Baton Rouge Parish, Louisiana** West Baton Rouge Parish, LA, being carried out under Committee Resolution 2570 of the Committee on Transportation of the House of Representatives is modified to add West Feliciana Parish and East Baton Rouge Parish to the geographic scope of the study. Amount authorized to carry out this Section is $10,000,000.	Public Law 110-114 November 8, 2007
Water Resources Development Act, 2007	**Sec. 5158, Additional Assistance For Critical Projects** Amend Section 219 of WRDA 1992 (106 Stat. 4835; 110 Stat. 3757; 113 Stat. 334; 113 Stat. 1494; 114 Stat. 2763A-219; 119 Stat. 2255). (145) **Lafayette, Louisiana** - $1,200,000 for water and wastewater improvements. (146) **LaFourche Parish, Louisiana** - $2,300,000 for measures to prevent the intrusion of saltwater into the freshwater system, Lafourche Parish, LA. (147) **Lake Charles, Louisiana** - $1,000,000 for water and wastewater improvements, Lake Charles, LA. (150) **Plaquemines, Louisiana** - $7,000,000 for sanitary sewer and wastewater Infrastructure, Plaquemine, LA. (151) **Rapides Area Planning Commission, Louisiana** - $1,000,000 for wastewater and water improvements, Rapides, LA. (153) **South Central Planning and Development Commission, Louisiana** - $2,500,000 for water and wastewater improvements, South Central Planning and Development Commission, LA.	Public Law 110-114 November 8, 2007

TABLE 11-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Water Resources Development Act, 2007	**TITLE VII – Louisiana Coastal Area** **Sec 7001 – Definitions** **Sec 7002 – Comprehensive Plan** **Sec 7003 – LCA** in General the Secretary may carry out a program for ecosystem restoration, Louisiana Coastal Area, LA, substantially in accordance with the report of the Chief of Engineers, dated January 31, 2005. **Sec. 7004 - Coastal La Ecosystem Protection and Restoration Task Force** **Sec. 7005 – Project Modifications** – Authorized appropriation to carry out this section $1,000,000. **Sec. 2006** – (a) **Science and Technology** - $100,000,000; (b) **Demonstration Projects** – (1) In General (A) total cost $100,000,000; (B) Cost of any single project under this subsection shell not exceed $25,000,000.; (c) **Initial Projects** – (A) Mississippi River Gulf Outlet, $105,300,000; (B) Small Diversion at Hope Canal, $68,600,000; (C) Barataria Basin Barrier Shoreline, $242,600,000; (D) Small Bayou Lafourche, $133,500,000; (E) Myrtle Grove, $278,300,000; (d) **Beneficial Use of Dredged Material** - $100,000,000; (e) **Additional Projects** – (A) Land Bridge between Caillou Lake and the Gulf of Mexico, $56,300,000; (B) Point Au Fer Island, $43,400,000; (C) Modification of Caernarvon Diversion, $20,700,000; (D) Modification of Davis Pond Diversion, $64,200,000. (2) Reports – Feasibility Reports: (i) Multipurpose Operation of Houma Navigation Lock, $18,100,000 (ii) Terrebonne Basin Barrier Shoreline Restoration, $124,600,000 (iii) Small Diversion at Convent/Blind River, $88,000,000 (iv) Amite River Diversion Canal Modification, $5,600,000 (v) Medium Diversion at White's Ditch, $86,100,000 (vi) Convey Atchafalaya River Water to Northern Terrebonne Marshes, $221,200,000	Public Law 110-114 November 8, 2007

1. Contains latest published map.
2. Permanent Appropriation Repeal Act.

TABLE 11-C OTHER AUTHORIZED NAVIGATION PROJECTS

Project	Status	For Last Full Report See Annual Report For	Cost To September 30, 2009		Mo. and Yr. Completed Deauthorized or Reclassified
			Construction	Operation and Maintenance	
Alteration of Berwick Bay Bridge[1]	--	1967	$ --	$ --	--
Amite River and Bayou Manchac, LA	Complete	1978	28,234	69,087	1928
Aquatic Plant Control Program, LA	Complete	1984	17,098,851	--	
Atchafalaya River Bayous Chene Boeuf, and Black, LA	Complete	1984	30,356,691	320,968,179	
Atchafalaya River, Morgan City to Gulf of Mexico, LA	Complete	1981	501,963	37,167,654	1914
Barataria Bay Waterway, LA	Complete	1984	1,572,685	40,553,003	Nov. 1963
Bayou Bonfouca, LA	Complete	1974	30,997	320,758	1931
Bayou Dorcheat, Loggy Bayou and Lake Bisteneau, LA[2,3,4,5]	--	1887	5,000	--	--
Bayou Dupre, LA	Complete	1968	38,915	104,187	1939
Bayou Lacombe, LA	Complete	1967	4,716	343,563	1938
Bayou Lafourche and Lafourche Jump Waterway, LA		1984	1,624,424	16,213,899	
Bayou La Lautre, St. Malo, and Yscolskey, LA	Complete	1970	96,916	223,616	May 1956
Bayou Plaquemine Brule, LA	Complete	1950	33,410	36,780	1915
Bayou Queue de Tortue, LA	Complete	1970	33,355	28,315	Mar. 1923
Bayou Segnette Waterway, LA	--	1958	238,828	3,035,032	--
Bayou Teche, LA		1984	754,330	20,660,913	
Bayou Teche & Vermilion River, LA	Complete	1983	2,891,822	2,873,577	Mar. 1957
Bayou Terrebonne, LA[3,6]	Complete	1961	120,089	251,691	1916
Bayou Vermilion, LA[3]	Complete	1947	34,900	200,169	1896
Big Pigeon and Little Pigeon Bayous, LA	Complete	1936	--	37,169	[2]
Calcasieu River and Pass, LA	Complete	1984	27,830,835	353,570,565	Oct. 1968
Calcasieu River at Coon Island, LA[7]	Complete	1976	1,015,814[9]	--	Apr. 1974
Calcasieu River at Devil's Elbow, LA	Complete	1981	5,856,200	--	Sep. 1978
Cascasieu River Salt Water Barrier, LA[8]	Complete	1973	4,197,262	--	Jan. 1968
Cane River, LA[2,5]	--	1910	2,500	2,000	--
Chefuncte River and Bogue Falia, LA	Complete	1967	58,342	584,440	1959
Cypress Bayou and Waterway between Jefferson, TX, and Shreveport, LA[9]	Complete	1971	202,817	452,611	Dec. 1914
Freshwater Bayou, LA	Complete	1984	7,116,224	64,014,563	Aug. 1968
Grand Bayou Pass, LA	Complete	1950	7,676	14,480[9]	1939
Gulf Intracoastal Waterway between Apalachee Bay, FL, & Mexican Border	Complete	1985	63,284,470	772,881,582	--
Houma Navigation Canal, LA		1984	--	70,224,306	
Inland Waterway from Franklin to Mermentau River, LA[1,10]	Complete	1960	249,052	552,780	[2]
Intracoastal Waterway from the Mississippi River to Bayou Teche, LA[11]	--	1956	--	11,699	--
Lake Charles Deep Water Channel, LA[12]	--	1950	--	241,896	--
Leland Bowman Lock, LA	Complete	1987	32,200,010	--	Mar. 1985
Little Caillou Bayou, LA	Complete	1973	77,761	751,485	1929
Mermentau River, Bayou Nezpique, and Bay Des Cannes, LA	Complete	1977	5,197,975[13]	114,519	--

TABLE 11-C OTHER AUTHORIZED NAVIGATION PROJECTS (Continued)

Project	Status	For Last Full Report See Annual Report For	Cost To September 30, 2009		Mo. and Yr. Completed Deauthorized or Reclassified
			Construction	Operation and Maintenance	
Mermentau River, LA	Complete	1985	4,672,579	72,809,910	Jul. 1952
Mississippi River Baton Rouge to Gulf of Mexico, LA	--	1991	84,568,128[15]	1,618,865,095.67[16]	--
Mississippi River-Gulf Outlet, Michoud Canal, LA	Complete	1976	2,499,555	14,410,404	Nov. 1974
Mississippi River Outlets, Venice, LA	Complete	1986	10,014,012	75,682,803	Complete
Navigation work under special authorization (Calcasieu Pass channel in Old River Bend at Cameron, LA)[14]	--	1957	--	139,755	--
North Pass-Pass Manchac, LA	Complete	1996	533,492	--	May 1995
Pass Manchac, LA	Complete	1950	79,845	124,681	1912
Petite Anse, Tigre, and Carlin Bayous, LA	Complete	1981	--	1,453,172	Nov. 1980
Removal of Aquatic Growth, LA		1984	--	57,161,138	
Sulphur River, AR and TX[2,5]	--	1919	45,989	--	--
Tangipahoa River, LA	--	1985	--	2,903,990[17]	--
Tickfaw, Natalbany, Ponchatoula, and Blood Rivers, LA[3]	Complete	1973	8,115	94,164	1921
Waterway from White Lake to Pecan Island, LA[10]	--	1948	10,904	742	--
Waterway from Empire, LA, to Gulf of Mexico	Complete	1981	1,068,142	1,860,608	Jun. 1950
Waterway from Intracoastal Waterway to Bayou Dulac, LA	Complete	1990	641,608	2,704,028	Aug. 1964

1. Transferred to Department of Transportation. Authorized under Truman-Hobbs Act.
2. Completed. Date will be furnished when available.
3. Includes previous project costs.
4. No commerce reported.
5. Abandonment recommended in H. Doc. 467, 69th Cong., 1st sess.
6. By Public Law 88-404, that portion of Bayou Terrebonne between point where Barrow Street crosses said stream and a line determined by prolonging and extending eastern right-of-way line of New Orleans Boulevard southerly to south bank of said stream was declared nonnavigable.
7. Includes $66,000 contributed funds.
8. Operation and maintenance of the structure reported under project “Calcasieu River and Pass, LA.”
9. Excludes $50,000 contributed funds.
10. Not completed; incorporated in navigation project “Mermentau River, LA.”
11. Not completed; superseded for most of it length by present 12- by 125-foot Gulf Intracoastal Waterway, which coincides with or parallels it.
12. Maintenance project; no future work schedules.
13. Includes $57,555 ($29,974 of which was from Public Works funds) for new work on previous project. Includes $114,519 for maintenance of previous project.
14. Work is under continuing authority.
15. Includes $1,729,989 for previous project.
16. Does not include expenditures of $8,431,066 for Dredge *WHEELER* Ready Reserve for 2008. Does not include expenditures of $10,100,780 in FC&CE funds received to respond to dredging needs resulting from the FY 08 Spring High Water Emergency.
17. Zero expenditures in FY 08.

TABLE 11-D OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Amite River and Tributaries, LA	1964	3,034,255[1]	--	Feb. 1964
Bayou Choupique, LA[2]	1954	129,930	--	Mar. 1954
Bayou Rapides, LA[2]	1952	95,179	--	Dec. 1951
Harvey Canal, Bayou Barataria Levee, LA	1979	1,018,005	--	--
Morgan City and Vicinity, LA	1992	1,975,628	--	--

1. In addition, the following was expended from contributed funds:
   Amite River and tributaries $ 430
   Harvey Canal, Bayou Barataria Levee, LA 425,209
2. Authorized by Chief of Engineers (Sec. 205, 1948 Flood Control Act, as amended)

TABLE 11-E DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report for	Date and Authority	Federal Funds Expended	Contributed Funds Expended
Baton Rouge Harbor Segment Between Mi 2.5 and 5.0	1946	Nov. 2, 1979 Section 12, Public Law 93-251 (WRDA 74)	--	--
Bayou Grosse Tete, LA	1969	May 6, 1981 DAEN-CWP-A Letter Subj: Completed Action on 5th Deauthorization Rpt, dated Jun. 17, 1981	--	--
Lake Borgne and Chef Menteur Bulkheads and Jetties	1942	Nov 1979	--	--
Vinton Waterway, LA	1950	Nov. 2, 1979 Section 12, Public Law 93-251 (WRDA of 1974)		

TABLE 11-F FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Flood control activities pursuant to Section 205, P.L. 858 80th Congress, as amended (preauthorization)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Section 205 Coordination	10,910	0	10,910
Bayou Choupique, LA	0	0	0
Coushatta Indian Reservation, Vermilion	0	0	0
Town of Carencro	148,903	6,087	154,990
Jean Lafitte, LA	482,234	8,518	490,752
Lockport to Larose, LA	0	0	0
Pailet Basin, Jeff Parish, LA	0	0	0
Total Section 205	642,047	14,605	656,652

Emergency Streambank & Shoreline Protection (Section 14 of 1946 Flood Control Act, P.L. 526) (Section 27 of the 1974 Water Resources Development Act)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Section 14 Coordination	10,263	0	10,263
LA State Hwy 75	6,481	0	6,481
Southern University Campus Rd	23,129	0	23,129
Tucker Rd Comite River	20,867	0	20,867
Total Section 14	60,740	0	60,744

Clearing and Snagging For Flood Control (Section 208, 1954 Flood Control, as amended)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Section 208 Coordination	1,101	0	1,101
Snagging & Clearing Upper Bayou Boeuf	54,016	0	54,016
Total	55,117	0	55,117

Shoreline Protection of Publicly Owned Property (Section 103 River and Harbor Act of 1962, PL 87-874, as amended)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Bayou Teche Shoreline Protection	18,062	0	18,062
Section 103 Coordination	22,471	0	22,471
Total	40,533	0	40,533

TABLE 11-G ENVIRONMENTAL WORK UNDER SPECIAL AUTHORIZATION

Wetland/Other Aquatic Habitat Creation
(Section 204, Public Law 102-560)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Barataria Bay Waterway	36,124	0	36,124
Atchafalaya River - Shell Island	151,541	0	151,541
Calcasieu River Mi 5.0-14.0	62,999	0	62,999
Sec 104 Coordination	15,000	0	15,000
Total Section 204	265,664	0	265,6640

Aquatic Ecosystem Restoration
(Section 206, Public Law 102-560)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Zemuarry Park Tangipahoa Parish	5,305	0	0
LA State Penitentiary – Lake Killarney	4,232	0	0
Section 206 Coordination	0	0	0
University Lakes Baton Rouge	57,149	0	57,149
Total Section 206	66,686	0	66,686

Project Modifications to Improve Environment
(Section 1135, Public Law 99-662)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Section 1135 Coordination	70		70
Gulf Intracoastal Waterway, Plaquemines Lock, LA	41,411	27,920	69,331
Ecosystem Restoration, LA	25,724	0	25,724
Morganza Forebay Restoration, Pointe Coupee	26,248	0	26,248
Houma Navigation Canal Lock	10,422	0	10,422
Total Section 1135	103,875	27,920	131,795

NAVIGATION WORK UNDER SPECIAL AUTHORIZATION

Navigation
(Section 107, River and Harbor Act of 1960, as amended)

Project	FISCAL YEAR COST Federal	Non-Federal	Total
Sec 107 Coordination	0	0	0
Short Cut Canal	2,739	0	2,739
Port Fourchon Extension	0	0	0
Total	2,739	0	2,739

TABLE 11-H ACTIVE INVESTIGATIONS (96×3121)

Item and CWIS Number	FY 09 Costs Federal	Non-Federal	Total
SURVEYS (Category 100)			
Navigation (110)			
Atchafalaya River and Bayous Chene, Boeuf, and Black, LA was transferred to MVK	0	0	0
Calcasieu River and Pass Navigation, LA	289,435	0	289,435
Calcasieu Lock, LA	364,390	0	364,390
Port of Iberia, LA	-1,420	0	-1,420
Subtotal	$652,405	$0	$652,405
Flood Damage Prevention Studies (120)			
Hurricane Protection, LA	19,534		
Calcasieu River Basin, LA	336,289	631,051	967,340
Lafayette Parish, LA	(82,587)	82,587	0
West Shore, Lake Pontchartrain	374,529	14,5179	519,708
LA Coastal Protection & Restoration, LA (LACPR)	1,061,066	0	1,061,066
Amite River and Tributaries, Bayou Manchac	138,974	0	138,974
St. Charles Parish Urban Flood Control, LA	85,211	0	85,211
Plaquemines Parish Urban Flood Control, LA	(58,620)	63,273	121,893
Southwest Coastal	461,756		461,756
St. Bernard Parish Urban Flood Control, LA	0	0	0
Subtotal	$2,336,152	$922,090	$3,258,242
Ecosystem Restoration Studies (144)			
Amite River & Tributaries, Ecosystem Restoration, LA	104,507	112	104,619
LCA Ecosystem Restoration	5,196,676	298,271	5,494,947
LCA Ecosystem Restoration – Science Program	297,654	0	297,654
Subtotal	$5,598,837	$298,383	$5,897,220
Special Studies (140)			
West Baton Rouge Parish, LA	37,900	0	37,900
Subtotal	$37,900	$0	$37,900
Miscellaneous Activities (170)			
Interagency Water Resources Development	32,139	0	32,139
Special Investigations	30,426	0	30,426
Gulf of Mexico Program	67,136	0	67,136
National Estuary Program	2,932	0	2,932
North American Waterfowl Management Plan	0	0	0
Subtotal	$132,633	$0	$132,633

TABLE 11-H (Continued) **ACTIVE INVESTIGATIONS (96×3121)**

Item and CWIS Number	FY 09 Costs Federal	Non-Federal	Total
Planning Assistance to States (186)			
PAS-LA-Jefferson Parish Long Term Wastewater	185,400	7,612	193,012
PAS-LA-State Haz Mitigation Plan	(38)	38	0
PAS-LA-FLood Wrng/Prep Reg Plan	495	(495)	0
PAS-LA-St. Gabriel GIS Mapping	5,225	(5,225)	0
PAS-LA-Laf. Flood Prep	3,488	(3,488)	0
PAS-LA-E. Baton Rouge Data	9,998	(9,998)	0
PAS-LA-St. Charles Water Resources	(17)	17	0
PAS-LA- Orleans Par Data	5,005	(5,005)	0
PAS-LA-Evangeline Par Environmental	6,994	(6,994)	0
PAS-LA-Ascension Wr Data Mgmt	7,059	(7,059)	0
Planning Assistance to States	5,996	(5,996)	0
PAS-LA-St. Tammany Wr Data Mgmt	7,483	(7,783)	0
PAS-LA-St. James Water Resources Data Mgmt	7,498	(7,498)	0
PAS-LA-Amite Basin Flood Haz Mitigation	2,504	(2,504)	0
PAS-LA-Jefferson Parish	33	(33)	0
PAS-LA-Lower St. Martin Parish Master Pl	2,507	(2,507)	0
PAS-LA-Catahoula Basin Hydro Model	10,560	(10,560)	0
PAS-LA- Baton Rouge Park & Recreation Co	32	(32)	0
PAS-LA-Iberia Parish Master Pl	2,065	(2,065)	0
PAS-LA-Town of Henderson Parish Master	2,500	(2,500)	0
PAS-LA-Tunica Master Plan	2	(2)	0
PAS-LA-Tunica Restoration Master Plan	0	165,004	165,004
PAS-LA-Grand Isle Res Invest	18,263	0	18,263
PAS-LA-St. Charles Master Plan	49,997	22,001	71,998
PAS-IT-Chitimacha Master Plan	0	16,613	16,613
PAS-LA-St. Charles West Bank Recreation	266	13,845	14,111
PAS-LA-St. Charles East Bank Recreation	66	0	66
PAS-LA-Plaquemines Master Plan	4,243	(4,243)	0
PAS-LA-Calcasieu Parish Data Mgmt	0	19,776	19,776
PAS-LA-City of Donaldsonville	0	0	0
PAS-LA-Opelousas Master Planning	0	0	0
PAS-LA-city of EBR/Par of EBR, Dalrymple	9,423	(9,423)	0
PAS-LA-DOT State Water Plan	0	0	0
PAS-LA-Gretna Levee Top Plan	0	0	0
PAS-LA-Washington Master Plan	0	0	0
PAS-LA-New Orleans Riverfront – TPL	0	2,627	2,627
PAS-IT-Chitimacha Raintree Village	(7)	7	0

TABLE 11-H (Continued) ACTIVE INVESTIGATIONS (96×3121)

Item and CWIS Number	FY 09 Costs Federal	Non-Federal	Total
PAS –LA State Penitentiary	0	(2,109)	(-2,109)
PAS-LA-City of Lake Charles Riverfront	(-8,972)	8,972	0
PAS-LA-Alexandria GIS	(1)	1	0
PAS-LA- Ascension Parish H&H Modeling	49,541	(41,541)	0
PAS-LA-Ascension Par Mon	20,924	174,021	194,945
Subtotal	$16,260	$294,674	$310,934
Total (Category 100)	$223,058	$287,652	$510,710
COLLECTION AND STUDY OF BASIC DATA (Category 200)			
SS – East Baton Rouge Parish GIS	0	0	0
SS - Livingston Parish GIS	467,314	0	467,314
Flood Plain Management Services	0	0	0
SS-GIS, LA	297,705	0	297,705
FPM-Quick Responses	0	0	0
NFPC	0	0	0
Technical Services, General	6,470	0	6,470
Southeast LA Hurr Evac	0	0	0
City of Gretna	128,016	0	128,016
Total (Category 200)	$899,505	$0	$899,505

TABLE 11-H (Continued) **ACTIVE INVESTIGATIONS (96×3121)**

Item and CWIS Number	FY 09 Costs Federal	Non-Federal	Total
Navigation			
Bayou Sorrel Lock	218,470	0	218,470
Port of Iberia, LA	501,133	481,123	982,256
Total (Category 420)	$719,603	$481,123	$1,200,726
EMERGENCY SUPPLEMENTAL (700)			
LA Coastal Area Ecosystem Restoration	1,664,053	0	1,664,053
Plaquemines Parish Urban Flood Control, LA	168,555	0	168,555
St. Charles Parish Urban Flood Control, LA	243,576	0	243,576
St. Bernard Parish, LA	6,794	0	6,794
LA Coastal Protection & Restoration, LA (LACPR)	585,267	0	585,267
Southwest Coastal LA Hurricane Protection	2,076	0	2,076
Mississippi River, Gulf Outlet, LA	68,148	0	68,148
Total (Category (706)	$2,738,470	0	$2,738,469
GRAND TOTAL INVESTIGATIONS	**$13,338,562**	**$1,989,248**	**$15,327,810**

TABLE 11-I COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION

Project Name	PPL	PPL Approved	Agency Assigned	Construction Started	Construction Completed
Barataria Basin Land Bridge Shoreline Protection, Phase 1 and 2	7	1/16/98	NRCS	12/1/00	
Coastwide Nutria Control Program	11	1/16/02	NRCS	11/20/02	
North Lake Mechant Landbridge Restoration	10	1/10/01	FWS	4/1/03	
Barataria Basin Landbridge Shoreline Protection, Phase 3	9	1/11/00	NRCS	10/20/03	
Timbalier Island Dune and Marsh Restoration	9	1/11/00	EPA	6/1/04	
Freshwater Floating Marsh Creation Demonstration (DEMO)	12	1/16/03	NRCS	6/1/04	
East Sabine Lake Hydrologic Restoration	10	1/10/01	FWS	12/1/04	
Black Bayou Culverts Hydrologic Restoration	9	1/11/00	NRCS	5/25/05	
Raccoon Island Shoreline Protection/Marsh Creation, Ph 2	11	1/16/02	NRCS	12/13/05	
Barataria Barrier Island: Pelican Island and Pass La Mer to Chaland Pass	11	1/16/02	NMFS	3/25/06	
New Cut Dune and Marsh Restoration	9	1/11/00	EPA	10/1/06	
Sabine Refuge Marsh Creation, Cycle 3	8	1/20/99	COE	10/25/06	
West Lake Boudreaux Shoreline Protection and Marsh Creation	11	1/16/02	FWS	7/24/07	
Lake Borgne Shoreline Protection	10	1/10/01	EPA	8/1/07	
Goose Point/Point Platte Marsh Creation	13	1/28/04	FWS	4/2/08	
Pass Chaland to Grand Bayou	11	1/16/02	NMFS	6/6/08	
Dedicated Dredging on Barataria Basin Landbridge	11	1/16/02	FWS	9/11/08	
Bayou Dupont Sediment Delivery System	12	1/16/03	EPA	2/4/09	
Whiskey Island Back Barrier Marsh Creation	13	1/28/04	EPA	2/11/09	
Sabine Refuge Marsh Creation, Cycle 2	8	1/20/99	COE	4/28/09	

VICKSBURG, MS, DISTRICT

This district comprises western and central Mississippi, southern Arkansas, northern Louisiana, and a very small portion of southwestern Tennessee, embraced in drainage basins of eastern tributaries of Mississippi River south of Horn Lake Creek to and including Buffalo River; Pearl River Basin in Mississippi; independent tributaries of the Gulf of Mexico south of the Buffalo River Basin to the Mississippi-Louisiana state line; western tributaries of Mississippi River between White and Atchafalaya Rivers including Arkansas River Basin below a point 3 miles upstream from Pine Bluff and Arkansas River below mile 36.1 near Pendleton, AR; Ouachita and Black Rivers in Arkansas and Louisiana; and Red River in Louisiana and Arkansas to the Texas-Arkansas state line. The Vicksburg District territory encompasses 68,000 square miles.

IMPROVEMENTS

Navigation

1. J. BENNETT JOHNSTON WATERWAY, LA (FORMERLY RED RIVER WATERWAY PROJECT)

Location. From east-central to northwest Louisiana along the Red and Old Rivers between the Mississippi River and Shreveport, LA.

Existing project. Provides a navigation route from the Mississippi River at the junction with Old River via Old and Red Rivers to Shreveport, LA, developing a channel approximately 236 miles long, 9 feet deep, and 200 feet wide. The development includes five locks and dams, realignment, and contraction of the river as necessary to develop an efficient navigation channel. Facilities to provide recreation and fish and wildlife development are an integral part of the project.

Local cooperation. For details, see page 11-21, Annual Report, FY 80. The Red River Waterway Commission is the non-Federal sponsor. The Red River Waterway Commission, governing body of the Red River Waterway District, executed an act of assurance for all project features in Louisiana on Feb. 26, 1969, supported by resolution dated Jan. 30, 1969. The assurances were accepted for, and on behalf of, the United States on Apr. 15, 1969. The Commission furnished amended assurances covering the provisions of Public Laws 91-646 and 91-611 on May 23, 1973, for the portion of the project within Louisiana. These were accepted for, and on behalf of, the United States on Nov. 14, 1973. A Local Cooperation Agreement between the Department of the Army and the Red River Waterway Commission for the acquisition of mitigation lands in the vicinity of Loggy Bayou Wildlife Management Area was executed on Jun. 16, 1993, and a Project Cooperation Agreement (PCA) between the same agencies for the acquisition of mitigation lands in the vicinity of Bayou Bodcau was executed on July 17, 1996.

Terminal facilities. Local interests are to provide adequate terminal facilities along the waterway. Construction of the realignment and port fill is complete. Construction of the Alexandria, Shreveport—Bossier, Natchitoches Parish, and Red River Parish Ports is complete. Avoyelles Parish Port is under construction.

Operations and results during fiscal year. Construction was initiated in July 1973, and the project opened for navigation in 1995. The project is 94 percent complete and provides navigation for a six-barge tow (two abreast) as far upstream as Shreveport, LA. All five lock and dam facilities are complete and in operation. During FY 09, one revetment and one reinforcement were completed. Initiated one reinforcement and one revetment to refine the reliability and safety in the navigation channel.

Maintenance dredging was performed along the waterway by the contract Dredge *BUTCHER* during FY 09; 1,080,000 cubic yards of material were removed from the navigation channel. Supplemental funding in the amount of $800,000 was expended in FY 09 for dredging of shoaling below Lindy C. Boggs Lock and Dam. **American Recovery and Reinvestment Act (ARRA) of 2009, Public Law 111-5**. ARRA funding in the amount of $2,738,776 was expended in FY 09 for dredging of shoaling areas and construction of backlog maintenance items on locks and dams and recreation sites.

2. OUACHITA AND BLACK RIVERS BELOW CAMDEN, AR

Location. Ouachita River rises in Polk County, AR, and flows southeasterly and southerly about 600 miles. Below its confluence with the Tensas and Little Rivers at Jonesville, LA, it is called Black River, which enters Red River 34.5 miles from the Mississippi River.

Previous projects. See page 683 of Annual Report for 1962 for details.

Existing project. See page 684 of Annual Report for 1962 for details of the old 6.5-foot navigation project. Modified project and project for Red River below Fulton, AR, provide for a channel 9 feet deep and 100 feet wide in Red River between Old River and mouth of Black River, and in Black and Ouachita Rivers from mouth of Black River to Camden, AR. Authorized features for the modified project include four new locks and dams, in-river construction dredging to achieve a 9-foot navigation channel depth, and channel realignment. All 4 locks and dams are complete and in operation and initial channel dredging is

complete providing 9-foot navigation depth. Remaining work consists of realignment of 25 restricted bendway sites between river miles 195 at Sterlington, LA, and river mile 335 at Camden, AR, on the Ouachita River. With these improvements in place the river system will be navigable by a four-barge tow (two abreast) to Crossett, AR, river mile 237, and a two-barge tow (abreast) to Camden, AR. Mitigation features include the 65,000-acre Felsenthal National Wildlife Refuge in Arkansas, the 18,000-acre D'Arbonne National Wildlife Refuge in Louisiana, a series of recreation facilities along the waterway, and improvements to Catahoula Lake to preserve it for migratory waterfowl.

Local cooperation. Local interests are required to furnish the construction rights-of-way for the realignment work. Seven of the 25 sites are within the Felsenthal National Wildlife Refuge and are already owned by the Federal Government. However, there have been no indications that the land for the remaining 18 sites will be forthcoming because of strong opposition to the realignment work by local environmental groups. The six remaining recreation facilities are unscheduled at this time due to the lack of required cost sharing agreements.

Terminal facilities. Public loading docks are at Columbia, LA, and Camden and Crossett, AR. Privately owned docks and loading and unloading facilities are at Columbia, Monroe, and Sterlington, LA, and El Dorado, Calion, and Camden, AR. Two grain-handling facilities and a petroleum-loading facility are in the vicinity of Jonesville, LA, a grain-handling facility is in the vicinity of Acme, LA, and a petroleum-loading facility is in the vicinity of Smackover, AR.

Operations and results during fiscal year. The project is 92 percent complete and provides limited navigation as far north as Camden, AR. All four locks and dams associated with the project are complete and in operation. Design and construction of the remaining features are on hold pending a consensus between the States of Arkansas and Louisiana concerning the type of development desired or the additional studies needed to reach a decision. In FY 09, maintenance dredging was performed from Felsenthal Lock & Dam to the mouth of the Black River by the contract Dredges *BUTCHER AND INTEGRITY,* removing 1,500,000 cubic yards of material from the navigation channel. Supplemental funding in the amount of $1,200,000 was expended in FY 09 for dredging on the Ouachita/Black Navigation project to remove shoaling that was not dredged due to minimal maintenance dredging funds received. ARRA funding in the amount of $119,470 was expended in FY 09 for construction of backlog maintenance items on the locks and dams and recreation areas to include a construction contract at Felsenthal Lock and Dam for cutting lock stoplog slots.

3. RED RIVER EMERGENCY BANK PROTECTION

Location. In northwest Louisiana, southwest Arkansas, and northeast Texas, along the Red and Old Rivers between the Mississippi River and the head of the levee system above Index, AR.

Existing project. Provides for realigning the banks by means of cutoffs and training works and for stabilizing banks by means of revetments, dikes, and other methods as emergency conditions may require in advance of developing the design for the entire Red River Waterway project.

Local cooperation. Fully complied with. For details see pages 11-19 to 11-20, Annual Report FY 80.

Operations and results during fiscal year. Construction was completed on one revetment item and initiated on another revetment item both in Arkansas.

4. NAVIGATION WORK UNDER SPECIAL AUTHORIZATION

Navigation activities pursuant to Sec. 107, Public Law 87-645, as amended.

In FY 09, $4,992 was expended on Section 107 Coordination Accounts. $253,817 Non-Federal on Yazoo Diversion Canal, MS.

Flood Control

5. OUACHITA RIVER LEVEES, LA

Location. East bank of Ouachita River between Bastrop, LA, and Sandy Bayou. Loop levees on the west bank at West Monroe, Columbia, and Bawcomville.

Existing project. There are 105.8 miles of levee on the east bank and 11.6 miles of levee in the three loops on the west bank. A Summary Report authorized

gravel surfacing 117.4 miles of levee, and enlarging 36.6 miles of levee. Estimated Federal cost is $36,500,000. Estimated non-Federal cost is $1,766,000.

Local cooperation. Requirements and assurances of local cooperation are fully described on page 12-6 of FY 1980 Annual Report.

The 1991 Water and Energy Appropriations Act gave the Federal government responsibility for the repair and/or replacement of the deteriorated drainage structures. The Assurances Agreement for Local Cooperation was supplemented to reflect this change in responsibility. The supplemental agreement covered work performed since Fiscal Year 1992 with follow on agreements for additional levee work.

Operations and results during fiscal year. Item 2 was awarded on 2 Dec 03 and designated complete 3 Oct 06. A contract for Phase I gravel surfacing from Monroe to Sandy Bayou was awarded 29 Aug 06 and designated complete 10 Oct 06. A contract for Phase II gravel surfacing was awarded on 16 Jun 08 and completed 4 Aug 08. A contract for Phase III gravel surfacing was awarded on 28 Jul 09.

6. RED RIVER BELOW DENISON DAM, AR, LA, TX (VICKSBURG DISTRICT)

Location. On Red River and its tributaries below Denison Dam, in Oklahoma, Arkansas, Texas, and Louisiana. (Refer to Geological Survey State maps and folio "Maps of Red River" - 1958 edition.) Along the main stem of the Red River from the head of the levee system immediately above Index, AR, through the southwest corner of Arkansas to the vicinity of Boyce, LA, on the right bank, and Pineville, LA, on the left bank.

Existing project. Raising and strengthening existing and authorized Red River levees to provide protection against flooding and bank protection works at locations where levee setbacks are impossible or uneconomical. The plan consists of raising and strengthening existing and authorized Red River levees to provide against a flood approximately 20 percent greater than the flood of 1945, the flood of record, as modified by authorized reservoirs. Bank protection works are to be constructed at locations where levee setbacks are impossible or uneconomical.

Local cooperation. Requirements of local cooperation are fully described on page 12-10 of FY 1984 Annual Report.

Operations and results during fiscal year. Construction was initiated in February 1948, and the levee and bank stabilization are complete with the exception of levee rehabilitation within the State of Arkansas and gravel surfacing on the levees in Louisiana. Gravel surfacing of levees in the vicinity of Natchitoches, LA, continued.

INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Inspection of completed work was accomplished at a cost of $861,490 for the fiscal year. Total cost as of 30 Sep 09 is $9,147,198.

8. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Emergency flood control activities—repair, flood fighting, and rescue work. (Public Law 99, 84th Cong., and antecedent legislation.)

FY 09 Federal costs for the period were $706,095 for disaster preparedness, emergency operations, and operational support and $7,305,874 reimbursable Work for Others.

Snagging and clearing of navigable streams and tributaries in the interest of flood control (Sec. 208 of 1954 Flood Control Act, Public Law 780, 83rd Cong.)

In FY 09, $0 was expended on Section 208 coordination account.

Emergency bank protection (Sec. 14 of 1956 Flood Control Act, Public Law 780, 83rd Cong.)

In FY 09, $9,003 was expended on Section 14 coordination account; $-135,754 Federal and $135,754 Non-Federal completion on Bayou Macon, Poverty Point, LA; $1,276 on West Madison Utility District, Canton, MS; $60 termination on Hwy 71 Bridge, Sulphur River, Doddridge, AR; and $19,062 on Hwy 237, Sulphur River, Miller County, AR.

Flood control activities pursuant to Sec. 205, Public Law 858, 80th Cong., as amended (preauthorization).

In FY 09, $14,998 was expended on Section 205 coordination account; $-18,234 Federal and $18,234 Non-Federal completion of Canal 43, AR; $31,374 Federal and $2,648 Non-Federal on Red Chute Bayou Levee, Bossier City, LA; $-15,213 Federal and $15,213 Non-Federal completion of Kings Point, Warren County, MS; and $70,519 Federal and $36,439 Non-Federal on McKinney Bayou, Tunica County, MS.

Environmental

9. MISSISSIPPI ENVIRONMENTAL SECTION 592

Location: The Mississippi (Section 592) project provides environmental infrastructure assistance to communities throughout the State of Mississippi.

Existing project: The Mississippi (Section 592) project provides environmental infrastructure assistance to communities throughout the State of Mississippi. This includes project design and construction assistance for wastewater treatment and related facilities, combined sewer overflows, water supply and storage and related facilities, environmental restoration, and surface water resource protection and development.

Local cooperation. Local sponsors are reimbursed 75 percent of their costs.

Operations and results during fiscal year. Six projects have been completed, one terminated, and 20 are ongoing. Two new Project Partnership Agreements (PPA) (previously Project Cooperation Agreements) were executed, and coordination is ongoing with 11 additional communities. ARRA funding in the amount of $17,408,000 was received in FY 09 and is being used for two ongoing projects and seven new projects.

10. PEARL RIVER WALKIAH BLUFF, MS AND LA

Location. The Lower Pearl River Basin lies within the States of Mississippi and Louisiana with the Pearl River forming part of the boundary between the two states. The Basin extends from near Bogalusa, LA, to the mouth--a linear distance of approximately 45 miles. The Pearl and West Pearl Rivers are distinct river systems connected by numerous sloughs, bayous, and distributaries.

Existing project. The project consists of a rock weir in the old bendway of the Pearl River above the inlet of Wilson Slough to provide a 50/50 low-flow distribution between that bendway and the Pearl River and other improvements. The primary purpose of this project was to restore low flows in an 18-mile reach of the Pearl River and Holmes Bayou, thus providing a net gain in the wetland resource value. Prior to this project, essentially all flows in the Pearl River eventually entered the West Pearl River during low-flow periods. This reach extends along the Pearl River from near the head of Wilson Slough, down the Pearl River and Holmes Bayou, to the confluence of Holmes Bayou and the West Pearl River. The project was designed to restore low flows in the Pearl River system to the nearly equal distribution that existed between the Pearl River and Wilson Slough in the late 1970s. The last construction on the project was accomplished in December 1999. In October 2001, approximately 30 percent of the low flows were going down the Pearl River (as opposed to 5 to 10 percent prior to the project).

Operations and results during fiscal year. The rock weir portion of the project was damaged by high flows and was further damaged by Hurricane Katrina to the extent that the percentage of low flows going down the Pearl River dropped to approximately 20 percent. Repairs were needed to ensure the project continues to develop as originally planned. The needed repair work was funded in PL 109-148 (FY 2006 Supplemental Appropriations). Repairs are complete. Funds of $7,000 were expended in FY 09 to monitor the division of flows between the Pearl River and Wilson Slough.

11. ECOSYSTEM RESTORATION WORK UNDER SPECIAL AUTHORIZATION

Project modifications for improvement of environment pursuant to Sec. 1135, Public Law 99-662, as amended (preauthorization).

In FY 09, $14,984 was expended on Section 1135 coordination account; $58,782 on Bayou DeSiard, Monroe, LA; $10,956 on Lake St. Joseph, Tensas Parish, LA; and $255,038 Federal and $49,000 Non-Federal regular appropriations and $152,835 supplemental funds on Sulphur River Wildlife Management Area, AR.

Aquatic Restoration pursuant to Section 206, P.L. 104-303.

In FY 09, $14,993 was expended on Section 206 coordination account.

Ecosystem Restoration in Connection with Dredging pursuant to Section 204, P.L. 102-560.

In FY 09, $6,984 was expended on Section 204 coordination account.

Miscellaneous

12. DAM SAFETY ASSURANCE AND SEEPAGE/STABILITY CORRECTION PROGRAM

During FY 09, $2,033,836 was expended on Blakely Mountain Dam-Lake Ouachita Seepage Instability Correction Study.

13. EMPLOYEE COMPENSATION FUND

During FY 09, $994,327 was expended on Employee Compensation Fraud Investigation.

14. CATASTROPHIC DISASTER PREPARED-NESS PROGRAM

During FY 09, $0 was expended on continuity of Government, $0 on EOC Support and Facilities, $8,207 on Catastrophic Disaster Preparedness, and $0 Anti-Terrorism/Force Protection. Total costs for FY 09 were $8,207.

15. REGULATORY PROGRAM

During FY 09, $2,915,589 was expended on Permit Evaluation; $249,487 on Enforcement; $392,830 on Compliance-Authorized Activities and Mitigation; and $0 on appeals. A total of $3,557,906 was expended in FY 09.

TABLE 12-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds to Sep. 30, 2009
1.	J. Bennett Johnson Waterway, LA (formerly Red River Waterway Mississippi River to Shreveport, LA)	New Work					
		Approp.	13,000,000	1,500,000	6,888,000	7,656,000	1,807,504,000
		Cost	7,531,712	7,002,320	2,007,545	7,705,906	1,812,944,451
		Maint.					
		Approp.	11,804,000	11,000,000	11,620,000	9,797,000	173,000,101
		Cost	8,404,925	12,628,599	11,712,936	8,823,054	168,357,376
		Supplemental				5,600,300	5,600,300
		Cost				2,738,776	2,738,776
		ARRA				1,050,000	1,050,000
		Cost				800,000	800,000
	(Contrib. Funds)	New Work					
		Contrib.					4,916,659
		Cost					4,879,967
2.	Ouachita and Black Rivers below Camden, AR (6.5-foot navigation project)	New Work					
		Approp.					9,506,792 [1]
		Cost					9,506,792 [1]
	Ouachita and Black Rivers below Camden, AR (9-foot navigation project)	New Work					
		Approp.					230,759,251
		Cost					230,223,172[2]
		Maint.					
		Approp.	13,353,000	9,910,000	11,651,000	7,898,000	204,656,421
		Cost	12,064,386	10,956,919	11,506,087	8,014,712	204,172,712
		Supplemental				1,200,000	1,200,000
		Cost				1,200,000	1,200,000
		ARRA				6,647,950	6,647,950
		Cost				119,470	119,470
3.	Red River Emergency Bank Protection	New Work					
		Approp.	3,200,000	100,000	3,277,000	2,871,000	121,550,000
		Cost	198,888	3,119,730	314,727	3,598,602	140,022,396
	(Contrib. Funds)	New Work					
		Contrib.					6,825
		Cost					6,825

TABLE 12-A (Continued) COST AND FINANCIAL STATEMENT

See Section In Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds To Sep. 30, 2009
5.	Ouachita River Levees, LA	New Work					
		Approp.	750,000	75,000	1,363,000	957,000	27,465,000
		Cost	160,064	626,709	1,357,410	341,093	29,962,500
6.	Red River below Denison Dam, AR, LA, TX (Vicksburg District)	New Work					
		Approp.	3,000,000	200,000	2,060,000	2,105,000	93,380,000
		Cost	133,781	2,343,048	110,197	2,212,782	87,379,979
9.	Mississippi Environmental Section 592	New Work					
		Approp.	25,000,000	2,121,000	18,696,000	18,000,000	84,467,000
		Cost	20,935,691	4,460,582	5,757,479	4,075,634	50,067,807
		ARRA				17,408,000	17,408,000
		Cost				0	0
10.	Pearl River Walkiah Bluff	New Work					
		Approp.	1,000,000	0	0	0	8,619,000[3]
		Cost	917,694	56,059	11,142	7,000	8,554,492
		Maint.					
		Approp.					2,760,900
		Cost					2,667,808
	(Contrib. Funds)	New Work					
		Approp.					2,050,054
		Cost					2,020,788
12.	Blakely Mountain Dam-Lake Ouachita Safety Seepage	New Work					
		Approp.			1,000,000	200,000	1,200,000
		Cost			212,653	2,033,836	2,246,489

1. Includes $674,068 for new work on previous projects.
2. Includes $3,312,000 PL 98-8 Jobs Bill. Excludes $47,854,000 previously allocated to New Orleans District.
3. Includes $1,000,000 supplemental funds (PL 109-148).

TABLE 12-B AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	OUACHITA AND BLACK RIVERS BELOW CAMDEN, AR (See Section 1 of Text)	
May 17, 1950	Modification of existing project to provide for 9-foot channel and deepening canal to Felsenthal, AR.	S. Doc. 117, 81st Cong., 1st sess.
Jul. 14, 1960	Modification of 9-foot project to provide four new locks and dams and channel improvements.	S. Doc. 112, 86th Cong., 2d sess.
Dec. 31, 1970	Migratory waterfowl refuges on Bayou D'Arbonne in connection with the pool of the Columbia Lock and Dam and in the pool of the Felsenthal Lock and Dam.	Report of the Chief of Engineers dated Nov. 25, 1970, and H. Doc. 92-109, 92d Cong., 1st sess.
	RED RIVER EMERGENCY BANK PROTECTION (See Section 2 of Text).	
Aug. 13, 1968	Realigning the banks by dredging cut-offs and training works and stabilizing banks by means of revetments and dikes.	H. Doc. 304, 90th Cong., 2d sess.
	ALOHA-RIGOLETTE AREA, LA (See Section 5 of Text)	
Aug. 18, 1941	Original authorization incorporated into RRBW Protection FCA 1946 project modified to provide Bayou Darrow outlet.	Public Law 101-101 Cong., 2nd sess.
	BAYOU BODCAU AND TRIBUTARIES, AR AND LA	
Oct. 27, 1965	Extend Cypress Bayou-Red Chute Bayou levee, construct stream closure landside drainage channel and three culverts on Red Chute Bayou and clearing and snagging channel; extend Flat River-Loggy Bayou levee, close Flat River near junction with Cutoff Bayou, and construct control structures on Flat River near junction with Red Chute Bayou; and enlarge Flat River channel to 20 to 35 feet, a distance of 11.6 miles.	H. Doc. 203, 89th Cong., 1st sess.
	CANAL 43, AR	
Jun. 30, 1948	Channel enlargement	Sec. 205 of the Flood Control Act of 1948, as amended Authorized by Chief of Engineers, October 31, 1988.
	CANEY CREEK, MS	
Nov. 17,1986	Authorizes construction of such bank stabilization measures for Caney Creek in the vicinity of Jackson, MS, between McDowell Road and Raymond Road as the Secretary determines necessary for flood damage prevention and erosion control along approximately 3,000 feet of the creek.	Public Law 99-662, 99th Cong., 2d sess.

TABLE 12-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	NATCHEZ BLUFFS, MS	
Water Resources Development Act of 1996	Authorizes bluff stabilization in accordance with the Natchez Bluff study at a total cost of $17,200,000, estimated federal cost of $12,900,000 and non federal cost of $4,300,000.	Public Law 104-303
	CHAUVIN BAYOU, LA	
Jun. 30, 1948, as amended	Construction of a 250-cfs pumping plant located adjacent to Chauvin Bayou at the Ouachita River levee and a water control structure in Canal L-11.	Sec. 205 of the Flood Control Act of 1948, as amended. Authorized by the Chief of Engineers Feb. 6, 1990.
	LEAD BAYOU, MS	
Jun. 30, 1948, as amended	Channel enlargement.	Sec. 205 of the Flood Control Act of 1948, as amended. Authorized by Chief of Engineers Jun. 10, 1980.
	MCKINNEY BAYOU, AR AND TX (See Section 6 of text)	
Jul. 29, 1983	Authorizes a comprehensive study and recommendations for development and efficient utilization of water and related resources for the McKinney Bayou area, a tributary of Red River.	Public Law 98-63 98th Cong., 1st sess.
	MONROE AND WEST MONROE, LA, AND OUACHITA PARISH, LA	
Nov. 17, 1986	Authorizes such structural and nonstructural measures as the Secretary deems feasible to prevent flood damage to the cities of Monroe and West Monroe, LA, and Ouachita Parish, LA.	Public Law 99-662, 99th Cong., 2d sess.
	OUACHITA RIVER AND TRIBUTARIES, AR AND LA	
May 17, 1950	Authorized DeGray Lake; Murfreesboro Lake; extension of floodwall at Monroe to partially close the existing gap; local protection at Bawcomville, LA (subsequently constructed under Sec. 6, Act of May 15, 1928, with local interests contributing one third of cost); Bayou Bartholomew channel improvement, including Deep Bayou and Overflow Creek; Pine Bluff local protection; local protection at Calion, AR; and incorporation, into the Ouachita River and Tributaries project, of all existing projects and portions thereof in the basin above the lower end of the levees on the east bank of the Ouachita River. In addition, the Chief of Engineers authorized on Nov. 14, 1966, additional work on the levees.	S. Doc. 117, 81st Cong., 1st sess.
Water Resources Development Act of 2007	WRDA 2007 modifies the portion of Ouachita River Levees project authorized by Section 1 of Flood Control Act of 15 May 1928 to be reinstated as part of Mississippi River and Tributaries project with major maintenance. Includes levees and associated drainage on east bank from Bastrop, LA, to below Monroe, LA, and west bank at West Monroe.	Section 3013, Public Law 110-114

TABLE 12-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	PEARL RIVER, MS AND LA (See Section 9 of Text)	
Jul. 14, 1960	Construction of levee system and channel rectification, Pearl River, vicinity of Jackson, MS.	H. Doc. 441, 86th Cong., 1st sess.
Jun. 13, 1983	Accomplish the clearing and channel improvements at Hwy 25 bridge on the Pearl River in the vicinity of Jackson, MS.	S. Doc. 153, 98th Cong., 1st sess.
Jul. 29, 1983	Design and construct protection to prevent flooding along the Pearl River in the vicinity of Jackson, MS.	Public Law 98-63, 98th Cong., 1st sess.
Aug. 15, 1985	Planning, design, engineering, and construction of a levee system for Slidell, LA, pending binding cost-sharing arrangements acceptable to the Secretary of the Army or under terms and conditions provided in subsequent legislation when enacted into law.	Public Law 99-88, 99th Cong., 2d sess.
Nov. 17, 1986	Authorizes the Pearl River Basin, including Shoccoe, MS, for the construction of the Shoccoe Dam plus upstream flood control measures at east-central Leake County, south part of Carthage, MS, Highway 35 vicinity, upstream reservoirs on the Pearl River and upstream channels on the Pearl River and elsewhere in Leake County.	Public Law 99-662, 99th Cong., 2d sess.
Water Resources Development Act of 2007	WRDA 2007 modifies the Pearl River Basin project authorized by WRDA 1986 to allow the construction of the National Economic Development Plan (NED), the Locally Preferred Plan (LPP), or some combination thereof subject to a determination that the LPP provides the same level of flood protection as the NED plan and that the LPP is environmentally acceptable and technically feasible. Total cost of $205,800,000 with estimated Federal cost of $133,700,000 and estimated non-Federal cost of $72,030,000.	Section 3104, Public Law 110-114
	PEARL RIVER, SLIDELL, ST. TAMMANY PARISH, LA	
Nov. 17, 1986	Authorizes flood control improvements for Pearl River Basin, St. Tammany, LA, subject to a favorable Chief's report and approval by the Secretary of the Army for Civil Works.	Public Law 99-662 99th Cong., 2d sess.
	PORTER BAYOU, MS	
Jun. 30, 1948, as amended	Selective snagging and clearing of Porter Bayou, MS, from mile 12.5 to mile 32.3.	Sec. 205 of the Flood Control Act of 1948, as amended. Authorized by Chief of Engineers, Feb. 18, 1982.
	RED RIVER WATERWAY-MISSISSIPPI RIVER TO SHREVEPORT, LA (See Section 3 of Text)	
Aug. 13, 1968	Develop a 9- by 200- foot channel, approximately 236 miles long from Mississippi River at junction of Old River via Old River and Red River to Shreveport, LA, consisting of realignment, bank stabilization, and construction of five locks and dams.	H. Doc. 304, 90th Cong., 2d sess.

TABLE 12-B AUTHORIZING LEGISLATION (Continued)

Acts	Work Authorized	Documents
Dec. 1, 1983	Provide replacement bridge for Louisiana and Arkansas Railway Company. Federal Limit: $24.3 million.	Public Law 98-181 98th Cong., 2d sess.
Nov. 17, 1986	Water Resources Development Act of 1986 authorized for construction the project for mitigation of wildlife losses, Red River Waterway, LA, which may include all or such portion of any land adjacent to the Loggy Bayou Wildlife Management Area.	Public Law 99-662, 99th Cong., 2d sess.
Nov. 17, 1988	Water Resources Development Act of 1988 modified the mitigation project to authorize the Secretary to acquire up to 300 acres in the area of Stumpy Lake.	Public Law 100-676 100th Cong., 2d sess.
Sep. 7, 1989	Provide for acquisition of up to 5,000 acres of land in the vicinity of Stumpy Lake/Swan Lake/Loggy Bayou Wildlife Management Area at a cost not to exceed $2.5 million. Also increased L&A Railroad Bridge ceiling to $25.8 million.	Public Law 101-101 101st Cong., 2d sess
Nov. 28, 1990	Water Resources Development Act of 1990 modified the mitigation project to authorize the Secretary to acquire an additional 12,000 acres adjacent to or close to the Bayou Bodcau Wildlife Management Area.	Public Law 101-640, 101st Cong., 2d sess.
Dec. 18, 1991	Lock and Dam 1 designated as Lindy Claiborne Boggs Lock and Dam	Public Law 102-240 102nd Cong.
Oct. 31, 1992	Lock and Dam 5 designated as Joe D. Waggoner, Jr. Lock and Dam	Public Law 102-580 102nd Cong
Water Resources Development Act of 1996	WRDA 96 modified the mitigation project to authorize the Secretary to acquire lands adjacent to Loggy Bayou Wildlife Management Area in Caddo and Red River Parishes and increasing the authorized cost to $10,500,000.	Section 301, Public Law 104-303
Water Resources Development Act of 1996	WRDA 96 modified the project to include dredging of the entrance to the Oxbow Lakes designated for preservation in project documentation and stated that the cost sharing for this dredging should be the same as the general navigation features.	Section 301, Public Law 104-303
Water Resources Development Act of 2000	WRDA 2000 modified the mitigation project to authorize the acquisition of lands in any of the parishes that comprise the Red River Waterway District, consisting of Avoyelles, Bossier, Caddo, Grant, Natchitoches, Rapides, and Red River Parishes.	
Water Resources Development Act of 2007	WRDA 2007 modified the mitigation project to increase the cost to $33,912,000, authorized the purchase and reforestation of lands that have been cleared or converted to agricultural uses and incorporate wildlife and forestry management practices to improve species diversity on mitigation lands.	Section 3080, Public Law 110-114
	RED RIVER BELOW DENISON DAM LEVEES AND BANK STABILIZATION (VICKSBURG DIST.) (See Section 10 of Text)	
Jul. 24, 1946	Levee and bank stabilization.	H. Doc. 602, 79th Cong., 2d sess.

TABLE 12-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Aug. 13, 1968	Deauthorization of Morringsport Dam and Reservoir on Cypress Creek; realigning and stabilizing the banks of the Red River; and recreational facilities from the Mississippi River to Denison Dam, OK and TX.	H. Doc. 304, 90th Cong., 2d sess.
	RED RIVER WATERWAY-SHREVEPORT, LA, TO INDEX, AR	
Aug. 13, 1968	Provides for realignment of the channels of the Red River from Shreveport, LA, to Index, AR.	H. Doc. 304, 90th Cong., 2d sess.
Aug. 17, 1999	**MISSISSIPPI ENVIRONMENTAL PROGRAM** Established program to provide environmental assistance to non-Federal interests in Mississippi with a ceiling amount of $100 million.	Sec. 592, Public Law 106-53
Water Resources Development Act of 2007	WRDA 2007 increases Sec 592 authorized appropriation to $110 million.	Sec. 5097, Public Law 110-114
Energy and Water Development Appropriations Act of 2010	Increased Sec 592 authorized appropriation to $200 million.	Sec 110, Public Law 111-85

TABLE 12-C

OUACHITA AND BLACK RIVERS, AR AND LA (9-FOOT PROJECT), LOCKS AND DAMS (See Section 2 of Text)

Location	Miles from Nearest Town	Miles Above Mouth of Black River	Width of Lock Chamber (feet)	Greatest Available Length for Full Width of Lock Chamber (feet)	Max. Lift at Low Water (feet)	Elev. Normal Pool Surface (feet msl)	Min. Depth on Lower Miter Still at Normal Pool Level (feet)	Character or Foundation	Kind of Dam	Type of Construction	Per-cent Com-plete	Total Estimated Project Cost
Jonesville, LA	10	25	84	600	30	34	14	Piling	Moving	Tainter gated dam; bascule gated navigation pass; steel mitering lock gates	100[2]	$ 43,585,000
Columbia, LA	5	117	84	600	18	52	13	do	do	Tainter gated dam; Fixed crest navigation pass; steel mitering lock gates	95[2]	46,235,000
Felsenthal, AR	1	227	84	600	18	70[1]	13	Earth	do	Tainter gated dam; hinged crest gated navigation pass; steel mitering lock gates.	88[2]	102,161,000
Calion, AR (H. K. Thatcher)	7	283	84	600	12	77	13	do	do	Tainter gated dam; hinged crest gated navigation pass; steel mitering lock gates.	88[2]	71,019,000
	Estimated Federal Cost											$263,000,000
	Estimated Non-Federal Cost											18,009,000
	Total Estimated Cost											$281,009,000

1. Fish and wildlife impoundment level. Navigation pool elevation 65.
2. The percent complete reflects all work within the pool.

TABLE 12-D

J. BENNETT JOHNSTON WATERWAY, LA (9-FOOT PROJECT), LOCKS AND DAMS (See Section 1 of Text)

Location	Miles from Nearest Town	Miles Above Mouth of Black River	Width of Lock Chamber (feet)	Greatest Available Length for Full Width of Lock Chamber (feet)	Max. Lift at Low Water (feet)	Elev. Normal Pool Surface (feet msl)	Min. Depth on Lower Miter Still at Normal Pool Level (feet)	Character or Foundation	Kind of Dam	Type of Construction	Per-cent Com-plete	Total Estimated Project Cost
Lindy C. Boggs Lock & Dam #1	31	44	84	705	36	40	13	Piling	Moving	Tainter gated dam; Fixed crest spillway Steel mitering lock gates		
John H. Overton Lock & Dam #2	18	74	84	705	24	64	14	Piling	Moving	Tainter gated dam; Fixed crest spillway Steel mitering lock gates		
Lock & Dam #3	1	116	84	705	31	95	18	Earth	Moving	Tainter gated dam; Fixed crest spillway Steel mitering lock gates		
Russell B. Long Lock & Dam #4	7	168	84	705	25	120	18	Earth	Moving	Tainter gated dam; Hinged crest gate Steel mitering lock gates		
Joe D. Waggoner, Jr. Lock & Dam #5	7	200	84	705	25	145	18	Earth	Moving	Tainter gated dam; Hinged crest gate Steel mitering lock gates		
	Estimated Federal Cost										93%	$1,923,975,000
	Estimated Non-Federal Cost											103,632,000
	Total Estimated Cost											$2,027,607,,000

TABLE 12-E OTHER AUTHORIZED NAVIGATION PROJECTS

Project	Status	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Bayou Bartholomew, LA and AR[1,2,3,4]	--	1931	$ 45,874	$ 42,857	[1]
Bayous D'Arbonne and Corney, LA[1,2,4]	--	1941	19,000	37,804	[1]
Big Black River, MS[1,4,5]	--	1895	15,000	--	[1]
Boeuf River, LA[1,3,4,7,8,9]	--	1949	30,000	103,737	[1]
Claiborne County Port, MS	--	1985	2,000,000	966,086	Dec. 1983
Claiborne ARRA Funds [20]	--			59,000	
Cypress Bayou and Waterway between Jefferson, TX, and Shreveport, LA[15]	Complete	1971	202,817	895,611	Dec. 1914
Greenville Harbor, MS	--		--	196,000	
Homochitto River, MS[4]	--	1910	15,482	8,518	[1]
Lake Providence Harbor, LA	--	1985	208,537	4,512,195	Nov. 1963
Lake Providence ARRA Funds [20]	--			423,000	
Little Missouri River, AR[1,4,5]	--	1873	19,992	--	Dec. 1956
Little River, LA[1,4,5,10]	--	1890	1,500	--	[1]
Little Tallahatchie River, MS[1,7]	--	1913	19,000	--	[1]
Madison Parish Port, LA	--	1985	656,000	1,675,137	Dec. 1980
Madison Parish ARRA Funds [20]	--			79,991	
Mouth of Yazoo River, MS[1,7,11]	--	1953	1,179,211	11,474,002	[1]
Mouth of Yazoo ARRA Funds [20]	--			54,989	
Ouachita and Black Rivers, AR and LA, Felsenthal Canal	--	1937[12]	--	4,387,192	[1]
Overton-Red River Waterway, LA	--	1985	--	--	[1]
Pearl River, MS	--	1985	8,562,908	4,776,079	1956
Red River below Fulton, AR[1,16,17,18]	--	1978	1,963,806	2,147,890	[1]
Red River Waterway LA, AR, OK, and TX[1,17,18]	--	1969	1,752,402	--	[1]
Red River Waterway, Shreveport, LA to Daingerfield, TX[1]	--	1976	150,800	--	[1]
Removing snags and wrecks from Mississippi River below mouth of Missouri River and from Old and Atchafalaya Rivers[11]	--	1948	--	272,500	[1]
Rosedale Harbor, MS	--	1985	2,000,000	9,892,722	Sep. 1978
Rosedale Harbor ARRA Funds [20]	--			580,996	

TABLE 12-E OTHER AUTHORIZED NAVIGATION PROJECTS (Continued)

Project	Status	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Saline River, AR[1,3,4,5]	--	1931	26,900	12,792	[1]
Tallahatchie and Coldwater Rivers, MS[1,4,5]	--	1939	43,481	173,066	[1]
Tensas River and Bayou Macon, LA[1,8,13]	--	1949	38,367	85,352	[1]
Yalobusha River, MS[1,4,5,14]	--	1937	7,000	15,936	[1]
Yazoo River, MS	--	1987	9,341,826	1,498,972	[1]
Yazoo River ARRA Funds [20]	--			98,995	
Yellow Bend Port, AR	Complete	1991	3,793,069	1,802,864	Aug. 1991
Yellow Bend ARRA Funds [20]	--			159,987	

1. Status and Date unavailable.
2. Abandonment recommended in H. Doc. 1962, 64th Cong., 2d sess., and H. Doc. 467, 69th Cong., 1st sess.
3. Channels adequate for existing commerce.
4. Inactive project. No commerce.
5. Abandonment recommended in H. Doc. 467, 69th Cong., 1st sess.
6. Project curtailment recommended by elimination of work between Pentecost and mouth of Hushpuckena River. (Abandonment of entire project erroneously recommended in H. Doc. 467, 69th Cong., 1st sess.)
7. See report of Mississippi River Commission for operations in connection with Yazoo Basin.
8. Report of New Orleans District, pp. 919-920 for Fiscal Year 1949.
9. Project curtailment recommended by elimination of work above Girard, LA. (Abandonment of entire project recommended erroneously in H. Doc. 467, 69th Cong., 1st sess.)
10. Due to decline of traffic, local interests not sufficiently interested to provide rights-of-way and dumping privileges.
11. No additional funds available under this project. Work is being carried out under Flood Control, Mississippi River and Tributaries appropriation.
12. Year authorized.
13. Inactive. Channel adequate for commerce.
14. See report of Mississippi River Commission for operations in connection with Yazoo Basin flood control project including channel clearing and rectification and Grenada Lake on Yalobusha River.
15. Excludes $50,000 contributed funds.
16. Includes $1,553,878 for previous projects.
17. Incorporated in the project “Red River Waterway-Mississippi River to Shreveport, LA” Sept. 30, 1976.
18. Emergency bank protection on this project is reported separately as “Red River Emergency Bank Protection.” Two reaches, “Red River Waterway-Mississippi River to Shreveport, LA” and “Red River Waterway-Shreveport, LA, Daingerfield, TX,” are also reported separately.
19. Includes $674,068 for new work on previous projects.
20. ARRA - The American Recovery and Reinvestment Act of 2009, Public Law 111-5.

TABLE 12-F OTHER AUTHORIZED MULTIPURPOSE PROJECTS

Project	Status	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Blakely Mt. Dam - Lake Ouachita, Ouachita River, AR [1]		1985	34,023,108	158,357,757	Oct. 1955
Supplemental				992,719	
ARRA				183,302	
DeGray Lake Caddo River, AR [2]		1985	72,033,992	114,257,938	Dec. 1971
Supplemental				0	
ARRA				132,930	
Narrows Dam-Lake Greeson, Little Missouri River, AR [3]		1985	16,516,689	109,448,709	May 1950
Supplemental				432,954	
ARRA				232,684	

1. Received $2,500,000 Supplemental Funds FY 08 and $954,000 ARRA Funds FY 09.
2. Received $565,000 Supplemental Funds and $7,300 ARRA Funds FY 09.
3. Received $670,000 Supplemental Funds and $2,063,950 ARRA Funds FY 09.

TABLE 12-G OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Aloha-Rigolette Area, Grant and Rapides Parishes, LA[1]	1956	$ 1,896,826	$ --	Apr. 1955
Bayou Bodcau and Tributaries AR and LA	1995	1,037,952	3,221,699	Jan. 1948
Bayou Bodcau ARRA Funds [10]			184,026	
Bayou Bodcau, Red Chute, and Loggy Bayou, LA[1]	1948	319,200	353,298	Jan. 1948
Bayou Bodcau Reservoir, LA	1985	--	11,107,975	Apr. 1961
Bayou Pierre, LA	1985	--	513,262	FY 1939
Bayou Pierre in vicinity of Shreveport, LA[1,2]	1951	243,336[2]	--	Jun. 1939
Big Black River, MS[3]	1956	910,185	670,750	[3]
Big Choctaw Bayou, LA[3,4]	1966	248,823	--	Oct 1965
Black Bayou Reservoir, LA[1,5,6]	1945	--	--	--
Caddo Lake Dam, LA	1986	--	3,482,085	Jun 1971
Caddo Lake ARRA Funds [10]			26,210	
Campti-Clarence Area in Natchitoches Parish, LA	1978	1,655,700	--	Jul. 1978
Canal 43, AR	1997	898,061	--	Aug. 1990
Chauvin Bayou, LA	1995	4,245,863	--	--
Colfax, Grant Parish, LA[1,7]	1938	70,348	--	--
East Point, LA	1969	286,069	3,051,536	Aug. 1968
Garland City, AR	1976	1,335,841	--	Jul. 1974
Grant Parish below Colfax, LA[1,3]	1941	38,809	--	[3]
Hempstead County Levee District No. 1, AR[1,3]	1941	88,006	--	[3]
Homochitto River, MS[3]	1956	205,000	144,650	[3]
Lead Bayou, MS	1991	1,961,089	--	Nov. 1988
Maniece Bayou, AR[1,2]	1970	970,932[2]	--	Aug. 1969
Monroe Floodwall, LA	1984	2,560,000	--	--
Murfreesboro Dam and Lake[4]	1951	--	--	--
Natchez Port Area, MS[3,4]	1969	538,000	--	[5]

TABLE 12-G (Continued) OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Natchitoches Parish, LA[1,2]	1956	1,529,478	--	Aug. 1955
Ouachita River and Tribs, AR & LA	2005	5,422,172		Feb. 2001
Pearl River, Jackson-East Jackson, MS	1986	2,790,127	--	1987
Pearl River, Slidell, St. Tammany Parish, LA	2005	--	--	[5]
Pineville, Red River, LA[3,4]	1953	232,426	--	Dec. 1951
Porter Bayou, MS	1995	1,049,278	--	Sep. 1993
Posten Bayou, AR[8]	1973	--	--	--
Poverty Point, LA	1986	250,000	--	Oct. 1985
Red River Parish, LA[1,3]	1939	149,435	--	[3]
Red River in vicinity of Shreveport, LA[1]	1953	3,908,000	--	Mar. 1953
Red River Waterway, Shreveport, LA to Index, LA[9]	1994	855,497	--	--
Saline Point, LA[1,3]	1945	124,111	--	--
Twelvemile Bayou, LA[4]	1966	335,433	--	May 1965
Wallace Lake, LA	1985	--	3,641,664	Dec. 1946
Wallace Lake ARRA Funds [10]			95,522	
Calion, AR	1960	1,068,996		Aug 1959
Columbia, LA	1941	204,740[3]		
Little Missouri River below Murfreesboro, AR	1957	354,802		1956
Ozan Creek, AR	1957	57,742		1956
Terre Noire Creek, AR	1948	123,700		1948
Pine Bluff, AR, local protection	1954	172,582[3]		1966

TABLE 12-G (Continued) OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
McKinney Bayou, AR[7,8]	--	1,617,781		[3]
West Agurs, LA	1976	0		2005

1. Authorized under project "Red River Below Denison Dam."
2. In addition, the following was expended from contributed funds:
   - Amite River and tributaries ..... $ 430
   - Bayou Pierre in vicinity of Shreveport, LA 89,047
   - Choctaw Bayou and Tributaries, LA 170,799
   - Harvey Canal, Bayou Barataria Levee, LA 425,209
   - Maniece Bayou, AR 39,293
   - Natchitoches Parish, LA 250,000
3. Completion Date Unavailable.
4. Authorized by Chief of Engineers under authority of Sec. 205, Flood Control Act of 1948, as amended.
5. Construction not initiated.
6. Inactive.
7. Completed under provisions of Sec. 7 Flood Control Act of 1928, as amended by Sec. 9, Flood Control Act 1936, and included in 1939 Annual Report of President, Mississippi River Commission, p. 2214.
8. Posten Bayou Project, authorized by Senate and House Resolutions, Dec. 17 and 15, 1970, deleted the plan authorized by the Flood Control Act dated Aug. 3, 1955.
9. Excludes New Orleans District allocation and cost.
10. ARRA, The American Recovery and Reinvestment Act of 2009, Public Law 111-5.

TABLE 12-H DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report For	Date And Authority	Federal Funds Expended	Contrib. Funds Exp
Bayou Bartholomew and Tributaries, AR and LA	1990	May 17, 1950 S. Doc. 117, 81st Cong., 1st sess.	974,000	--
Buffalo River, MS[1]	1940	Nov 1986	--	--
McKinney Bayou, Finn Bayou Segment, AR	1963[2]	Aug 1977	--	--
Murfreesboro Reservoir, Pike County	1951			
Overton-Red River Waterway Above Mile 31	1985	Jul 24, 1946 [4]		
Black Bayou Reservoir, LA	1945	Jun 22, 1936 [3]		

1. Deauthorized by Sec. 1002, Water Resources Development Act of 1986.
2. Date Authorized.
3. Incorporated into Red River Below Denison Dam, OK, AR, and LA..
4. Incorporated into J. Bennett Johnston Waterway, LA.

TABLE 12-I ACTIVE INVESTIGATIONS (96X3121)

Item and CWIS Number	FY 09 COSTS Federal	Non-Federal	Total
SURVEYS (Category 100)			
Navigation Studies (110)			
Red River Navigation Study, S.W. Ark. – 010436	18,653		18,653
Subtotal	18,653	0	18,653
Feasibility (122)			
Bossier Parish, Louisiana - 081541	189,274	105,570	294,844
Pearl River Watershed – 012742	25,337	60	25,397
Subtotal	214,611	105,630	320,241
Special Studies (140)			
Cross Lake, LA Water Supply Improvement (142) – 081542	157,861		157,861
Subtotal	157,861		157,861
Miscellaneous Activities (170)			
Special Investigations (171) – 17250	9,020		9,020
Interagency Water Resources (173) - 14713	19,702		19,702
North American Waterfowl Mgmt Plan (176) - 053904	1,285		1,285
Subtotal	30,007		30,007
COORDINATION WITH OTHER AGENCIES AND NON-FEDERAL INTERAGENCIES (180)			
COOP With Other Water Agencies (181) - 053907	4,998		4,998
PAS – Negotiation Funds (186) – 014800	7,776		7,776
PAS – Band of Choctaw Indian (186) – 152884	21,893	0	21,893
Subtotal	34,667	0	34,667
TOTAL (Category 100)	**455,799**	**105,630**	**561,429**
COLLECTION AND STUDY OF BASIC DATA (Category 200)			
Flood Plain Management Services (250)			
Flood Plain Management Services – 82030	29,803		29,803
Quick Response – 82045	4,944		4,944
Technical Services – 82040	28,825	416	29,241
Subtotal	63,572	416	63,988
TOTAL (Category 200)	**63,572**	**416**	**63,988**
GRAND TOTAL INVESTIGATIONS	**$519,371**	**$106,046**	**$625,417**

MEMPHIS, TN, DISTRICT

This district comprises a portion of southeastern Missouri and southern Illinois, western portions of Kentucky and Tennessee, a small portion of northern Mississippi, and the northeastern portion of Arkansas; includes area embraced in drainage basins of eastern tributaries of the Mississippi River south of Ohio River Basin to Nonconnah and Horn Lake Creeks, inclusive, and those of western tributaries south of Castor River diversion channel and Commerce, MO, including St. Francis River Basin and White River and tributaries below Peach Orchard Bluff, AR, on the right bank and below Augusta, AR, on the left bank; also includes left bank Mississippi River levee from vicinity of Memphis south to about mile 620, and right bank levees from Cape Girardeau, MO, to about mile 605.

IMPROVEMENTS

Environmental Infrastructure

1. DE SOTO COUNTY, MS

Location. De Soto County is located in north Mississippi, just south of Memphis, TN. The county's rapid growth demands expansion of existing sewer systems and the development of new systems into one unified county–wide system.

Existing project. Section 219 of WRDA 1992, as amended in Section 502 of WRDA 1999 and Section 108 of the Consolidated Appropriations Act, 2001; Section 6006 of the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror and Tsunami, 2005; and Section 501, to amend the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users to make technical corrections, and for other purposes (Public Law 110-244), 2008 authorized $75,000,000 for the design and construction of a regional wastewater system in De Soto County, Mississippi, and Section 123 of the Energy and Water Development Appropriations Act of 2006 amended project authorization so as to allow future work to be carried out primarily by the non-Federal sponsor with the 75% Federal share to be in the form of grants or reimbursements.

Local cooperation. De Soto County Regional Utility Authority (DCRUA) is the local sponsor for the project. On 29 September 2006 a new PCA was executed for future work. Under the new PCA the sponsor assumes primary responsibility for all phases of work and the Corps' role is to provide general oversight. The Federal cost share is being provided to the sponsor on a cost reimbursable basis. The September 2006 PCA was amended on 17 December 2008 to reflect the increase in authorization.

Operations during fiscal year. All work accomplished was completed by the sponsor under the Corps general oversight. The local sponsor was reimbursed $2,782,238 for the Federal share of work

they completed, and $69,727 was used for administrative oversight. Total Federal cost was $2,851,966 for De Soto County Wastewater Treatment, MS.

Other Activities

2. EMERGENCY RESPONSE ACTIVITIES

Emergency flood control activities, Public Law 99, 84th Cong.

During this period, Federal cost was $391,951 for disaster preparedness.

Catastrophic Disaster Preparedness Program

National Emergency Preparedness Prog	$ 6,340
National Preparedness	112,369
National Emergency Facilities Readiness Training & Exercise	0
Total	$ 118,709

Total	$118,709

3. REGULATORY PROGRAM

Permit Evaluation	$ 1,688,458
Enforcement	129,665
Appeals	0
Compliance Authorized Activities and Mitigation	42,954
Total	$ 1,861,077

4. INSPECTION OF COMPLETED WORKS

Completed projects were inspected at a cost of $923,891 during this period. Total cost as of Sep. 30, 2008, was $6,350,827. This included in-depth inspection of projects.

TABLE 13-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 07	FY 08	FY 09	Total Funds to Sep 30, 2009
1.	De Soto County, MS	Approp.	0	9,840,000	4,860,000	55,000,000
		Cost	91,944,804	1,177,502	2,851,966	35,520,619

TABLE 13-B AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
Section 219 of WRDA 1992, as amended in Section 502 of WRDA 1999, and Section 108 of the Consolidated Appropriations Act, 2001. Section 6006 of the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror and Tsunami, 2005; Section 123 of the Energy and Water Development Appropriations Act of 2006. Section 501, To amend the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users to make technical corrections, and for other purposes.	**De Soto County Wastewater Treatment, MS** De Soto County is located in north Mississippi, just south of Memphis, TN. The county's rapid growth demands expansion of existing sewer systems and the development of new systems into one unified county–wide system.	Public Law 106-53, 106th Congress Aug. 17, 1999; Public Law 109–103 109th Congress Nov. 19, 2005, Public Law 110-244 110th Congress
WRDA 1992	**New Madrid Harbor, Missouri** Directed the Secretary of the Army to assume responsibility for maintenance of the New Madrid County Harbor constructed by non-Federal interests before that date of the enactment of this Act in lieu of maintaining the existing Federal channel.	Public Law 102-580 Oct 31, 1992
WRDA 1996	**White River, Arkansas** The project for navigation, White river Navigation to Batesville, Arkansas, authorized by Section 601(a) of WRDA 1986 (100 Stat 4139) and deauthorized by Section 52(b) of WRDA 1988 (102 Stat. 4044), is authorized to be carried out by the Secretary.	Public Law 104-303 Oct 12, 1996
WRDA 1999	**Memphis Harbor, Memphis, Tennessee** Authorized to be carried out by the Secretary if the Secretary determines that the project is technically sound, environmentally acceptable, and economically justified, as appropriate.	Public Law 106-53 Aug 17, 1999

TABLE 13-C OTHER AUTHORIZED NAVIGATION PROJECTS

Project	Status	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009	
			Construction	Operation and Maintenance
Caruthersville Habor, MO	Annual Dredging	1984	$768,992	$ 58,243 $944,259 ARRA [3]
Helena Harbor, AR	Annual Dredging	1984	90,847	$24,583 $144,220 ARRA[3]
Elvis Stahr Harbor, Hickman, KY	Annual Dredging	1984	149,827	$1,332,804 $1,513,525 ARRA [3]
New Madrid Harbor, MO [1]	Annual Dredging	1984		$531,683 $94,000 ARRA [3]
New Madrid Harbor, MO (mile 889) [2]	Annual Dredging	2008	824,267	$312,506 $400,000 ARRA [3]
Osceola Harbor, AR	Annual Dredging	1984	269,115	$773,321 $404,292 ARRA [3]
White River, AR (below Newport)	Annual Dredging	1984	169,994	$788,768 $267,911 ARRA [3]
Wolf River Harbor, TN	Annual Dredging	1984	586,50	$40,817 $584,053 ARRA [3]
Northwest Tennessee Regional Harbor	Annual Dredging	2009	3,691,000	$0 $819,654 ARRA [3]

1. WRDA 92 (Section 102) modified authorization by directing the Secretary to assume responsibility for maintenance of New Madrid County Harbor constructed by non-Federal interest.
2. Existing project is for maintenance only.
3. American Recovery and Reinvestment Act of 2009.

TABLE 13-G DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009		
		Date Deauthorized	Federal Funds Expended	Contributed Funds Expended
Big Creek and L'Anguille River, White River Basin, AR	1977	May 6, 81	$ --	$ --
Clarendon to Laconia Circle White River Basin, AR	1937	May 6, 81	--	--
Memphis Harbor, Memphis, TN	--	Nov 29, 95	--	--

TABLE 13-H ACTIVE INVESTIGATIONS (96X3121)

Item and CWIS Number	Federal Cost ($) FY 09	Totals by Categories ($)
SURVEYS (Category 100)		
Watershed/Comprehensive Studies (150)		
White River Basin – 010641	355,752	
Subtotal	355,752	
Miscellaneous Activities (170)		
Special Investigations (171) -17250	0	
Intra Agency Water Resources Development-14713	2,140	
Subtotal	2,140	
Coordination Studies with Other Agencies (180)		
Coop with Other Water Agencies (181) - 53907	4,866	
PAS Negotiation Funds(186) - 014800	5,644	
PAS – TN – West Tennessee River Basin, TN(186) – 125528	0	
Subtotal	10,510	
TOTAL (Category 100)		**368,402**
COLLECTIONS AND STUDY OF BASIC DATA (Category 200)		
Flood Plain Management Services (250)		
Flood Plain Mgmt Special Studies - 082030	6,490	
Technical Services - 082040	10,923	
Quick Responses - 082045	3,149	
Jackson, TN GIS - 134528	0	
TOTAL (Category 200)		**20,562**
Preconstruction Engineering and Design (Category 600)		
White River to Batesville, AR (621) - 060740	232,442	
TOTAL (Category 600)		232,442
GRAND TOTAL INVESTIGATIONS		**621,406**

TABLE 13-I SPECIAL AUTHORITIES-CAP COST AND FINANCIAL STATEMENT

Project	Federal Cost ($) FY 09	Totals by Section ($)
(Navigation activities pursuant to Sec. 107, Public Law 87-645, as amended.)		
Northwest Tennessee Regional Harbor, TN - 150101	1,317,763	
TOTAL (Section 107)		**1,317,763**
(Flood control activities pursuant to Sec. 205, Public Law 858, 80th Cong., as amended)		
Section 205 Coordination Account	19,764	
Little River Diversion, Dutchtown, MO – 094520	3,913	
TOTAL (Section 205)		**23,677**
Aquatic Ecosystem Restoration, Public Law 104-303, Sec. 206		
Section 206 Coordination Account	-	
TOTAL (Section 206)		**-**
Flood Control Act, as amended by the 1974 Water Resources Development Act of the 1954, Sec.208, Snagging and Clearing		
Section 208 Coordination Account	0	
TOTAL (Section 208)		**0**
Emergency bank stabilization activities pursuant to Sec. 14, Public Law 526, 79th Cong., as amended		
Section 14 Coordination Account	5,050	
Germantown, Lateral D, TN - 143277	33,449	
Finley, TN - 145856	10,014	
Augusta, AR - 145858	4,742	
Mount Moriah Culvert, TN - 171617	3,929	
Red Duck - Ninth Street, KY -	8,569	
TOTAL (Section 14)		**57,338**
Project Modifications for improvement of environment pursuant to Sec. 1135, Public Law 99-662, as amended		
Section 1135 Coordination Account	18,907	
Lower Cache River, AR - 130022	290,105	
Lower Obion River and Vicinity, Dyer, County, TN - 167369	1,454,408	
TOTAL		**1,763,420**
GRAND TOTAL SPECIAL AUTHORITIES-CAP		**2,917,503**

ST. LOUIS, MO, DISTRICT

This district comprises those portions of southwestern Illinois and eastern Missouri which lie in the drainage basin of Mississippi River and its western tributaries, exclusive of the Missouri River, from the mouth of the Ohio River to mile 300, and of its eastern tributaries to Hamburg Bay at mile 261 on the left bank, exclusive of tributary basin of Illinois Waterway upstream of new La Grange Lock and Dam at mile 80.15 above confluence of the Illinois and Mississippi Rivers. The St. Louis District territory encompasses 27,000 square miles. The District also includes a drainage basin in Missouri tributary to the Little River diversion channel. The Mississippi River between the Missouri River and mile 300 is included in a separate report on the Mississippi River between the Missouri River and Minneapolis, MN. The portion of the Illinois River downstream of new La Grange Lock and Dam is included in the report of the Chicago District on the Illinois Waterway, Illinois and Indiana.

IMPROVEMENTS

Navigation

1. ILLINOIS WATERWAY, IL (ST. LOUIS DISTRICT)

See report on Illinois Waterway, IL and IN, under Rock Island District.

2. KASKASKIA RIVER, IL

Location. The Kaskaskia River rises in Champaign County, IL, about 5 miles northwest of Urbana, in the east-central part of the state. It flows southwesterly about 325 miles and empties into the Mississippi River about 8 miles above Chester, IL, or about 118 miles above the mouth of the Ohio River. (See Cincinnati sheet of maps of United States published by Army Map Service, scale 1:500,00.)

Previous project. For details, see Annual Report for 1986.

Existing project. Improvement for navigation provides a channel 9 feet deep and 225 feet wide from the mouth to Fayetteville, IL. Improvements included channel enlargement and a dam at mile 0.8 with a single lock 84 feet wide and 600 feet long. Federal cost totaled $147,387,000; non-Federal cost totaled $7,665,000, which included $1,118,160 local contributions. Fish and wildlife and habitat restoration added in 1996 and recreation in 2000 as project purposes.

Local cooperation. State of Illinois passed legislation authorizing Illinois Department of Public Works and Buildings to enter into assurances of local cooperation with the United States. These assurances have been furnished and were accepted on behalf of the United States on Sep. 10, 1965; these assurances were supplemented on Aug. 7, 1972, to incorporate the provisions of Public Law 91-646.

Operations and results during fiscal year. Operation and maintenance costs totaled $4,445,570 (includes $1,209,579 for FY 08 War Supplemental funds used for side channel cleanout/habitat maintenance, bulkhead repairs, and relief/drainage system repairs and $420,930 in American Recovery and Re-investment Act (ARRA) funds used to award contracts for dredging of main channel, oxbows, road surfacing, two new comfort stations, and repair of miscellaneous items)..

3. MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS, MN (ST. LOUIS DISTRICT)

See separate chapter entitled "Mississippi River between Missouri River and Minneapolis, MN," printed in the Annual Report of the Chief of Engineers. This section includes Lock & Dam 24 Major Rehabilitation, Lock & Dam 25 Major Rehabilitation, and Melvin Price Locks & Dam.

4. MISSISSIPPI RIVER BETWEEN OHIO AND MISSOURI RIVERS, MO AND IL

Location. The Mississippi River rises in Lake Itasca, MN, and from there flows southerly about 2,340 miles and empties into the Gulf of Mexico. This portion of the river is the 195-mile section known as "Middle Mississippi," between tributaries Ohio and Missouri Rivers about 974 to 1,169 miles from the gulf. (See folder by Corps of Engineers Navigation Charts, Middle and Upper Mississippi River, Cairo, IL, to Minneapolis, MN.)

Previous projects. For details, see page 1879 of Annual Report for 1915 and page 1014 of Annual Report for 1938.

Existing project. The existing project provides for dredging and maintaining a minimum channel depth of not less than 9 feet, a minimum width of not less than 300 feet at low water, with additional widths in bends from mouth of Ohio River (about 974 miles from gulf) to northern boundary of city of St. Louis, mile 191, thence 200 feet wide, with additional width in bends to mouth of Missouri River, mile 195; to be obtained: (1) by regulating works, for closing secondary channels, contracting river by building new banks where river width is excessive and protecting new and old banks from erosion where necessary to secure permanency at an estimated total Federal cost (Oct 09) price level) of $350,000,000; (2) by dredging to maintain project channels; (3) by construction of works for Chain of Rocks reach authorized in 1945 River and Harbor Act, which approved a comprehensive plan for development of the river at Chain of Rocks to provide for construction of a lateral canal at a cost of $59,720,600; and (4) by construction of a fixed-crest rock-fill dam about 900 feet below Chain of Rocks Bridge, authorized by 1958 River and Harbor Act, at a

cost of $4,353,000, excluding $7,000 costs to Coast Guard for aids to navigation. A small boat harbor opposite Chester, IL, was deauthorized and excluded from foregoing cost estimate. See H. Doc. 669 (76th Cong., 3rd sess.) for report of Chief of Engineers dated Feb. 27, 1940, containing a general plan for improvement of Mississippi River between Coon Rapids Dam and mouth of Ohio River for purposes of navigation, power development, flood control, and needs of irrigation.

Local cooperation. None required.

Terminal facilities. Existing facilities are considered adequate for existing commerce.

Operations and results during fiscal year. Regulating Works: continued tree planting contract for the Thompson Bend riparian corridor; completed Mosenthein Reach/Ivory Landing Dike and Revetment (Phase 2) contract; initiated Dike and Revetment River Mile (RM) 195-0 contract (Merchant's Bridge scour protection); purchased 119 acres of easements; initiated Eliza Point/Greenfield Bend Dike and Revetment (Phase 2) contract; initiated Grand Tower Dike and Revetment (Phase 4) contract; initiated Dogtooth Bend Dike and Revetment (Phase 3, ARRA funds) contract; and initiated rock removal (Phases 2-4) contract, engineering and design, and supervision and administration. Construction on existing project began in 1881 and project has been in beneficial use practically from its inception. Projects on Dam 27 and Chain of Rocks are complete. Channel as a whole has been greatly improved by the work completed to date. Dredging is required at low stages to remove temporary shoals and maintain required channel depths. River is generally above 10-foot stage, St. Louis gage, from latter part of February to the latter part of August, during which time project channel depths generally prevail without dredging.

Following the great Mississippi River flood of 1993, it became apparent that the Chain of Rocks, East Canal Levee, was not performing as intended. Sand boils developed within a sizeable reach at flood elevations considerably below design height. Emergency repairs were completed in FY 97. Deficiency corrections (additional berms, relief wells, and a pump station) are estimated at $53,400,000 (Oct 08 price level). These corrections were initiated in FY 99 and continued in FY 09 with the award of a task order for continuing work on the construction of the north seepage berms. ARRA funds were used to award a task order to complete the dredging requirements for the north seepage berms and a task order for development of land purchased for project mitigation requirements.

Maintenance. Work consists of approximately 2,000 feet of dike repair and 5,000 feet of revetment repair annually. U.S. plant and hired labor plus contract dredging perform channel maintenance by dredging 5,000,000 to 10,000,000 cubic yards of material (average year) from main channel. Condition and operation studies, recreation planning, engineering and design, and operation and maintenance of Lock and Dam 27 continued. During FY 09, the following funds were expended: $4,625,091 Regulating Works; $2,191,916 Chain of Rocks; and $2,929,626 L&D 27, Rehabilitation for a total cost of $9,746,633. FY 08 War Supplemental funds of $6,412,824 were used for repair to existing dike and revetment and dredging.

5. NAVIGATION WORK UNDER SPECIAL AUTHORIZATION

Projects not specifically authorized by Congress pursuant to Sec. 107, 1960 Act and Modifications.

During FY 09, funds were expended as follows: $4,992 CAP Section 107.

Mitigation of Shore Damages Attributable to Navigation Projects (Sec. 111).

In FY 09, funds were expended as follows: $11,680 CAP Section 111 Coordination Account.

Flood Control

6. ALTON TO GALE ORGANIZED LEVEE DISTRICTS, IL and MO

Location. The levee system is located adjacent to the Mississippi River between Alton and Gale, Illinois.

Existing project. The project is authorized by the Flood Control Acts of 1936, 1938 and 1946. Construction of the Alton to Gale levee system was completed in 1977. Some reaches of this levee system have, for many

years, been experiencing a significant number of slides associated with design deficiencies increasing the probability of levee failure during flood events.

Local cooperation. The cost sharing applicable for the Alton to Gale Levee Slide repairs is in accordance with policies established for the Water Resources Development Act (WRDA) of 1986, PL 99-662. The local sponsor is required to operate and maintain all works after completion. In Nov 2000, ASA(CW) granted an exception to the policy requiring non-Federal cost sharing for deficiency corrections. As a result, 44 levee slides were repaired at 100 percent Federal cost. This portion of work was completed in 2002.

Operations and results during fiscal year. Work continued on a Letter Report to address design deficiencies. A value engineering study was conducted to develop alternative solutions to be considered in the letter report with the potential for significant cost savings. The Letter Report, when completed, will address a long-term solution for levee slides over the entire levee system.

7. BOIS BRULE, MO

Location. The Bois Brule project is located on the right descending bank of the Mississippi River, and is predominately in Perry County, Missouri, but has a small part in Randolph County, Illinois.

Existing project. The existing project was authorized by the Flood Control Acts of 1936 and 1965. It consists of 33.1 miles of levee, 341 relief wells, and 4 pump stations. The Energy and Water Development Appropriations Act of 2002 provided authority and funding to undertake design deficiency repairs with cost sharing consistent with the original project authorization. The deficiency correction project consists of 297 relief wells, seepage berms, a seepage cutoff trench, ditching, 3 pump stations, and restoration of 4.2 miles of the back levee to its design grade. The deficiency correction project is approximately 49 percent complete.

Local cooperation. The Bois Brule Levee and Drainage District is the local sponsor and is responsible for land acquisition and relocations. The design and construction will be 100 percent Federal. The Project Cooperation Agreement (PCA) was executed in April 2004.

Operations and results during fiscal year. Construction continues on the two seepage berms and cutoff trench/north berm contracts. Contract for mechanical equipment continues. Design was completed and construction contract was awarded in Aug 09 for the Missouri Chute pump station.

8. CAPE GIRARDEAU FLOODWALL PROTECTION SYSTEM RECONSTRUCTION PROJECT

Location. Missouri, along the right descending bank of the Mississippi River flood plain between RMs 51.6 and 52.8 above the Ohio River.

Existing project. The area protected by the Cape Girardeau flood protection project lies within the corporate limits of the city of Cape Girardeau, Missouri. The overall length of the project is 8,240 feet consisting of 2,175 feet of levee; 6,065 feet of floodwall; 2 pumping stations; 5 closure structures; and other appurtenant structures. The reconstruction includes rock berm to stabilize existing retaining wall; floodwall work (joint repairs, toe drain replacement, soil stabilization and closure gate seal replacement); and pump stations (mechanical, electrical, and miscellaneous structural and culvert work).

Local cooperation. The city of Cape Girardeau assumed sponsorship for the project in June 2008 from the previous sponsors, the Main Street Levee District and the North Main Street Levee District. A Project Partnership Agreement (PPA) was executed on 18 September 2008.

Operations and results during fiscal year. Initiated rock berm construction and repaired damaged pumps at the Merriwether pump station. Awarded contract for remaining reconstruction work at Merriwether and Mill Street pump stations. Prepared plans and specifications for the Phase 1 floodwall repairs.

9. CHESTERFIELD, MO

Location. The Chesterfield, Missouri project includes the Monarch-Chesterfield Levee, which is located in St. Louis County along the right descending bank of the Missouri River between RMs 46 and 38.5.

Existing project. The project was authorized by Section 101(b)(18) of WRDA 2000 (PL 106-541), and amended by Sec. 3107 of WRDA 2007 (PL 110-114). The project includes a 5- to 7-foot levee raise, approximately 12 miles long; seepage berms; relief wells; closure structures; floodwalls, pump stations; and several gravity drains.

Local cooperation. The Monarch-Chesterfield Levee District and the Corps signed a PPA on 1 February 2008..

Operations and results during fiscal year. The first construction contract to initiate Phase 1 construction of the floodwall closure structure west of Baxter Road was awarded in September 2008. Continued design for the next construction locations, east of Baxter Road and the closure structure at Long Road (a floodwall around the Walnut Grove complex and railroad closure gate) and the railroad closure structure at Centaur Road. ARRA funds were used in construction of the Baxter Road Phase 1 floodwall project and to award A-E design contracts for Centaur and Walnut Grove.

10. EAST ST. LOUIS, IL

Location. Project is in St. Clair and Madison Counties, IL, on the left descending bank of the Mississippi River between RMs 175 and 195 above the Ohio River. Project includes all bottom lands between bluffs on the east and Mississippi River and Chain of Rocks Canal on the west, and extends from Cahokia diversion channel on the north to Prairie du Pont Creek on the south. (See Corps of Engineers Navigation Charts, Middle and Upper Mississippi River, Cairo, IL, to Minneapolis, MN.)

Existing project. The 1936 Flood Control Act authorized raising and enlarging existing levee systems by construction or reconstruction of 19.8 miles of levee, including 3.1 miles of floodwall, together with necessary appurtenant works consisting of gravity drainage structures, highway and railroad closure structures, alterations and reconstruction of existing pumping plants, alterations to railroad bridges and approaches at levee crossings, service roads on levee crown, and seepage control measures. The completed 10 miles of levee along Chain of Rocks Canal and Lock 27 provide flood protection on the landward side integral with and to the same degree as the East St. Louis levee. Final cost of work under this authorization is $22,550,100. The Flood Control Act of 1965 modified existing project to provide for channel improvements, diversion ditches, flood plain detention areas, a reservoir on Little Canteen Creek, and a pumping plant to considerably reduce damages resulting from interior flooding. This act also authorized reconstruction of a channel stabilization dam in Cahokia Creek diversion channel to provide protection to adjacent levees and bridges from scour and eventual loss. Post authorization studies in the early 1980's justified a project that was constructed for the Blue Waters Ditch area, which included channel improvements and a pumping station with a final project cost of $11,530,000 Federal and $2,950,000 non-Federal. However, flood plain detention areas, the reservoir on Little Canteen Creek and other related flood control measures in the Cahokia-Harding Ditch Area are not economically feasible.

The 1988 Energy and Water Development Appropriations Act authorized repair and rehabilitation of pump stations and appurtenant works, channels and bridge structures. The estimated total cost of this work (Oct 08 price level) is $40,651,000 Federal and $17,367,000 Non-Federal.

Local cooperation. For work under the Energy and Water Development Appropriations Act of 1988, PL 100-202, local interests have entered into three Local Cooperation Agreements (LCA) which cover all of the work in the Flood Protection Rehabilitation project. Construction work under the first two LCAs is complete, and construction work under the third LCA is underway. In May 1998, a PED agreement was executed by the local interests to cover costs associated with the reevaluation of the Cahokia-Harding Ditch area.

Operations and results during fiscal year. Continued grouting under and adjacent to the North Pump Station Triple Box Culvert. Continued the Limited Reevaluation Report to identify courses of action for design deficiencies in the existing system identified during flooding in 1993, 1995, and 2008.

11. EAST ST. LOUIS AND VICINITY, IL (ECOSYSTEM RESTORATION AND FLOOD DAMAGE REDUCTION)

Location. Project is in St. Clair and Madison Counties, IL, on the left descending bank of the Mississippi River between RMs 175 and 195 above the

Ohio River. Project includes all bottom lands between bluffs on the east and Mississippi River and Chain of Rocks Canal on the west, including the tributary watershed, and extends from Cahokia diversion channel on the north to Prairie du Pont Creek on the south. (See Corps of Engineers Navigation Charts, Middle and Upper Mississippi River, Cairo, IL, to Minneapolis, MN.)

Existing project. The 1936 Flood Control Act authorized raising and enlarging existing levee systems by construction or reconstruction of 19.8 miles of levee, including 3.1 miles of floodwall, together with necessary appurtenant works consisting of gravity drainage structures, highway and railroad closure structures, alterations and reconstruction of existing pumping plants, alterations to railroad bridges and approaches at levee crossings, service roads on levee crown, and seepage control measures. The completed 10 miles of levee along Chain of Rocks Canal and Lock 27 provide flood protection on the landward side integral with and to the same degree as the East St. Louis levee. Final cost of work under this authorization is $22,550,100. The Flood Control Act of 1965 modified existing project to provide for channel improvements, diversion ditches, flood plain detention areas, a reservoir on Little Canteen Creek, and a pumping plant to considerably reduce damages resulting from interior flooding. This act also authorized reconstruction of a channel stabilization dam in Cahokia Creek diversion channel to provide protection to adjacent levees and bridges from scour and eventual loss. Postauthorization studies in the early 1980's justified a project that was constructed for the Blue Waters Ditch area, which included channel improvements and a pumping station with a final project cost of $11,530,000 Federal and $2,950,000 non-Federal. However, flood plain detention areas, the reservoir on Little Canteen Creek and other related flood control measures in the Cahokia-Harding Ditch Area are not economically feasible.

Severe flooding, which has resulted in National Disaster Declarations each year from 1993 to 1996, resulted in a new Congressional appropriation in FY 1997 to restart a cost-shared general reevaluation of the interior area. Congress added funds each year since FY 1997 to continue this effort. The project has been reformulated as an ecosystem restoration project that provides incidental flood damage reduction. Chief's Report was signed on December 22, 2004. The General Reevaluation Report was reviewed by the Office of the Assistant Secretary of the Army for Civil Works in 2006 and was returned for revision in September 2006.

The project described by the Chief's Report was authorized by the WRDA of 2007.

Local cooperation. In May 1998, a Preconstruction Engineering and Design agreement was executed by the local interests to cover costs associated with the reevaluation.

Operations and results during fiscal year. Plans and specifications were prepared for the Miner Park Riffles and design efforts continued for the Elm Slough Action area. Project costs are estimated to be $210 million.

12. LAKE SHELBYVILLE DAM SAFETY, MO

Location. The lake extends northeastward to approximately RM 275 through Shelby, Moultrie, Douglas, and Cole Counties, IL.

Existing project. The project was authorized for construction by the Flood Control Acts of 1944 and 1958. It provides flood control, water supply, recreation, conservation of fish and wildlife, and water quality control and augments navigation flows downstream on the Kaskaskia River. The Shelbyville Lake Dam is currently assessed as a DSAC II dam in the Screening Portfolio Risk Assessment (SPRA). Significant concerns include reoccurring sinkholes and a slide condition during original construction.

Local cooperation. The project is 100 percent Federally funded. For the sewer connection, the city of Sullivan, IL, is a local partner.

Operations and results during fiscal year. Funding was used for the initial geotechnical work in the dam safety study. An exploration program was developed and implemented, with the goals of better characterizing the extent of the underseepage issues and installing instrumentation to better characterize the stability of the dam. Review and analysis of subsurface information and installation of instrumentation to monitor embankments began in 2008 under the SPRA program.

13. MERAMEC RIVER BASIN (VALLEY PARK), MO

Location. The project is located in St. Louis County, Missouri, adjacent to the left descending bank of the Meramec River between miles 20.7 and 22.1 above the confluence with the Mississippi River.

Existing project. The project was authorized for construction by Section 2(h), Public Law 97-128, Dec. 29, 1981, and the WRDAs of 1986 and 1999. It protects Valley Park from the 100-year flood on the Meramec River. The project includes 3.2 miles of earthen levee with six gravity drains, three closure structures, interior ponding areas and 41 relief wells required for under-seepage control. Estimated total project cost (Oct 07) $50,211,000; $37,484,000 Federal, and $12,727,000 non-Federal.

Local cooperation. The city of Valley Park, Missouri is the local sponsor. A Local Cooperation Agreement was executed on August 12, 1992.

Operations and results during fiscal year. Developed plans and specifications for a contract to protect the left descending bank of Fishpot Creek using an articulated concrete mattress. Fishpot Creek was relocated as part of the levee project, and riprap has washed off the bank leaving an exposed erodible earthen creek bank that is only 13 feet from the toe of the levee at the closest location. In March 2008, the levee protected Valley Park from a major flood and prevented damages to properties valued at $94.7 million, including homes, businesses, industry and all buildings in the Valley Park school district. Seepage entered the protected area through a railroad embankment during the flood, and erosion occurred along the toe of the east flank of the levee. These problems and the Fishpot Creek erosion problem will be addressed by future construction contracts.

14. NUTWOOD DRAINAGE AND LEVEE DISTRICT, IL

Location. The levee district is in Green and Jersey Counties, IL, on the left descending bank of the Illinois River between miles 15.2 and 23.7 above the Mississippi River. (See Quincy, IL-MO, sheet of maps of the United States, published by Army Map Service, scale 1:250,000.)

Existing project. Project was authorized by the 1962 Flood Control Act (H. Doc. 472, 87th Cong., 2d sess.). Project provides for raising and enlarging 11.4 miles of levee, construction of 1.0 miles of new levee, altering a pumping station and construction of seepage control measures. This project would provide protection to 10,360 acres of land, 9,365 of which are highly productive agricultural lands. A General Design Memorandum (GDM), completed in 1986, indicated that the plan was not economically justified at the interest rate used at the time. The project was declared inactive on Jun. 3, 1987. As a result of the Great Flood of 1993 and the inundation of Illinois State Highway 16/100 within the project area, the 1995 Energy and Water Development Appropriations Bill included funding to perform a flood damage reduction study.

Local cooperation. Requirements of local cooperation are described on page 14-11 of FY 1980 Annual Report except that cost sharing policies established by the WRDA of 1986, PL-99-662, will also apply. The Nutwood Drainage and Levee District is the local sponsor. The cost-sharing agreement for Preconstruction Engineering and Design (PED) was executed in July 1997.

Operations and results during fiscal year. Construction funding was received in FY 2002. Work efforts in FY 09 resulted in the acquisition of the necessary Illinois Department of Natural Resource permits. The present total Federal project cost (Oct 03) is $12,043,000; non-Federal cost is $4,015,000.

15. RIVER DES PERES, MO

Location. River des Peres drains a 111-square mile area in the city of St. Louis and St. Louis County, Missouri, and empties into the Mississippi River.

Existing project. The project was authorized by the Water Resources and Development Act of 1990 (PL 101-640). The authorized project consists of two subprojects, Deer Creek and University City. The Deer Creek portion consists of 2.5 miles of channel widening and stabilization improvements through the cities of Rock Hill, Webster Groves, Brentwood, and Maplewood. The University City portion consists of channel enlargement and stabilization along about

2.5 miles of the University City branch of upper River des Peres, a 2.53-mile recreation trail, and a small recreation park to be constructed by non-Federal interests on nonproject lands.

Local cooperation. The Metropolitan St. Louis Sewer District (MSD) and the mayors of Brentwood Rock Hill, Webster Groves, and Maplewood signed a Design Agreement on May 17, 2001, to serve as the local sponsors for the Deer Creek portion of the project. The Deer Creek portion is currently deferred as the cities of Rock Hill and Brentwood withdrew their support in FY 03. The city of University City signed a Design Agreement on June 30, 2004.

Operation and results during fiscal year. Continued the General Reevaluation for the University City portion of the project; the focus of the study shifted from a structural approach to a nonstructural approach including buy outs and flood-proofing. FY 09 activities included development of a real estate plan for potential buyouts and other nonstructural solutions, economic analysis of potential alternatives, and study of potential recreational benefits of nonstructural alternatives.

16. ST. LOUIS FLOOD PROTECTION, MO

Location. The St. Louis Flood Protection project is located in St. Louis, Missouri, on the right descending bank of the Mississippi River between miles 176.3 and 187.2 above the mouth of the Ohio River.

Existing project. The project was authorized by PL 84-256, Aug. 9, 1955, and was completed in 1974. The reevaluation of the project consists of analyzing possible structural deficiencies and geotechnical concerns and the enhancement of recreation features within the project area.

Local cooperation. The city of St. Louis signed the Design Agreement on Feb. 2, 2000. The PPA was executed on February 29, 2008.

Operations and results during fiscal year. ARRA funds were used to award the first closure structure contract and continue design for remaining closure structures. Plans and specifications for new relief wells were continued; a task order for 29 wells was awarded; and an 8a contract for an additional 54 wells was negotiated.

17. STE. GENEVIEVE, MO

Location. The City of Ste. Genevieve is located in Ste. Genevieve County at the edge of the Mississippi River flood plain about 54 miles south of St. Louis, MO.

Existing project. The project was authorized by the WRDA of 1986 (PL 99-662). The authorizing language states "Congress finds that, in view of the historic preservation benefits resulting from the project, the overall benefits of the project exceed the costs of the project." The overall project consists of a major levee and associated features that will protect the town from the Urban Design Flood on the Mississippi River channel improvements on tributary streams that flow through the town and recreation features on flood control lands. Estimated total project cost (2005) is $49,374,000; $35,967,000 Federal, and $13,407,000 is non-Federal.

Local cooperation. The project sponsor for the Urban Design Levee is the Ste. Genevieve Joint Levee Commission. The city of Ste. Genevieve, Ste. Genevieve County Levee District Number 2, and Ste. Genevieve County Levee District Number 3 hold membership on the Commission. In May 2005, a design agreement was executed with the city of Ste. Genevieve for the tributary and recreation features.

Operations and results during fiscal year. Continued general reevaluation of the headwater flooding along North and South Gabouri Creeks and continued design efforts for North Gabouri Creek features.

18. WOOD RIVER DRAINAGE AND LEVEE DISTRICT, IL

Location. The Wood River Drainage and Levee District project, "the Grassy Lake Pump Station," is located in the Mississippi River flood plain of Madison County, IL, near the intersection of Route 111 and Canal Road in Roxana, IL, just upstream of the city of St. Louis between RMs 195 and 203 above the Ohio River.

Existing project. The project was authorized by the Flood Control Act of 1938 and modified by the Flood Control Act of 1965. The original project provided for local flood protection works. The modified project provides for construction of a new 45-cfs pump station with collector ditches and necessary appurtenant

facilities for removal of water impounded by the existing levees in the southern area of the D&LD known as Grassy Lake.

Local cooperation. The Wood River Drainage and Levee District signed a Project Cooperation Agreement on October 28, 2005, with cost sharing being 25 percent non-Federal and 75 percent Federal. The Project Cooperation Agreement was amended on June 29, 2006.

Operations and results during fiscal year. Construction of the pump station and relief wells was completed in November 2007. Preparation of the draft O&M manual for the Grassy Lake pump station and coordination with the sponsor continued.

19. WOOD RIVER LEVEE, IL

Location. The Wood River Levee project is located in the Mississippi River flood plain of Madison County, IL, just upstream of the city of St. Louis.

Existing project. The project was authorized by the Flood Control Act of 1938 and constructed in the 1950s. The reconstruction portion of the project was authorized by WRDA 2007. The existing project provides urban level protection for the 500-year Mississippi River flood stage. A reconstruction evaluation report to address the aging infrastructure and determine Federal interest was completed. The recommended project includes the rehabilitation of the levee system to bring it into original performance compliance.

Local cooperation. The Wood River Drainage and Levee District signed a Design Agreement on April 6, 2000. The PPA was executed on June 30, 2008.

Operations and result during fiscal year. Performed subsurface soil investigations for relief well design and completed underseepage analysis. Developed plans and specifications and awarded contracts for emergency gravity drain repair and Phase 1 gravity drain repairs. Awarded contract for relief well construction.

20. INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Inspection of completed work was accomplished at a cost of $1,396,535 for FY 09. Total cost as of end of fiscal year is $16,355,559**.**

21. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Flood control activities pursuant to Sec. 205, PL 858, 80th Cong., as amended (preauthorization).

See Table 14-F.

Emergency bank stabilization activities pursuant to Sec. 14, Public Law 526, 79th Cong., as amended.

See Table 14-F.

Emergency flood control activities - repair flood fighting, and rescue work (Public Law 99, 84th Cong., and antecedent legislation).

Federal costs for FY 09 were $313,094 for Disaster Preparedness; $112,841 for Emergency Operations; and $31,414,470 for Rehabilitation.

Environmental

22. MADISON AND ST. CLAIR COUNTIES, IL

Location. The environmental infrastructure project is located in Madison and St. Clair Counties, Illinois.

Existing project. The project was authorized by the WRDAs of 1992, 1996, and 1999 and the Consolidated Appropriations Act of 2001. The project consists of providing water-related environmental infrastructure and resource protection. Projects include separating out combined sanitary and stormwater sewers and design and construction of sewer systems to improve quality and reduce sewer backups into homes. Some of the systems exceed 100 years of performance. Problems created by this compromised infrastructure impact the health, water quality, and economic development potential of the area. Completed rehabilitation includes a portion of the combined sewer system in the downtown area of East St. Louis, Illinois. Belleville is upgrading its infrastructure in order to remain in compliance with environmental regulations regarding the overflow of combined sewers. Future work is planned for Madison County, including Eagle Park Acres, Glen Carbon, and Maryville.

Local cooperation. Project cooperation agreements have been executed for sewer rehabilitation work in East St. Louis, Belleville, Eagle Park Acres, and Glen Carbon.

Awarded a task order to begin design of the Glen Carbon sewer project. Prepared for award of construction contracts for Belleville and Eagle Park with ARRA funds.

23. ST. LOUIS, MO (COMBINED SEWER OVERFLOWS)

Location. The project is limited to work within the city of St. Louis, MO.

Existing project. The project was authorized by the WRDAs of 1992, 1999, and 2007. The purpose is to eliminate or control combined sewer overflows in the city of St. Louis.

Local cooperation. Project cooperation agreements have been executed with the Metropolitan St. Louis Sewer District for work on the Old Mill Creek sewer.

Operation and results during fiscal year. Phase 1 of Old Mill Creek sewer (located from Ranken Avenue to Ohio Street) was awarded in Feb 09. An amended letter report and amended PCA were completed for Phases 2 and 3 of Old Mill Creek sewer. In addition, pre-award activities were initiated for Phase 2 of Old Mill Creek sewer (located from Ohio Street to 14th Street).

Miscellaneous

24. MISSOURI & MIDDLE MISSISSIPPI RIVER ENHANCEMENT (CHOUTEAU ISLAND PROJECT)

Location. The study area includes 1,500 acres on Chouteau and Gabaret Islands in Madison County, IL.

Existing project. The project is authorized under Section 514 of WRDA 1999. The purpose is to restore flood plain ecosystems within the Missouri and Middle Mississippi River Watersheds.

Local cooperation. The Illinois Department of Natural Resources will sponsor the project after the study is completed.

Operation and results during fiscal year. FY 09 funds were used to conceptualize alternatives and begin screening for acceptability.

25. ECOSYSTEM RESTORATION WORK UNDER SPECIAL AUTHORIZATION

Project Modifications for improvement of environment pursuant to Sec. 1135, Public Law 99-662, as amended (preauthorization).

See Table 14G.

Aquatic Ecosystem Restoration Public Law 104-303, Sec. 206.

See Table 14G.

Wetland and Other Aquatic Habit Creation Public Law 102-580, Sec 204.

See Table 14G.

26. REGULATORY PROGRAM

Permit Evaluations	$1,939,354
Enforcement	113,677
Studies	0
Environmental Impact Statement	0
Appeals	0
Compliance and Mitigation	92,599
Total Regulatory	**$2,145,630**

FY 09 ARRA funds of $41,756 were expended on processing permits.

27. CATASTROPHIC DISASTER PREPAREDNESS PROGRAM

Local Preparedness	$ 7,020
National Preparedness	33,710
National Emergency Facilities	0
Readiness Training	0
Total	**$40,730**

28. OTHER PROGRAMS AND ACTIVITIES

In FY 09, $3,663,123 ($2,108,574 ARRA funds) was expended on Native American Grave Protection for operation, maintenance, and compliance. USACE is now 97 percent complete with Section 6 compliance. Additionally, Districts continued Section 5 compliance activities, consulted with Federally recognized Native American tribes, conducted cultural affiliation studies, and repatriated NAGPRA materials to culturally affiliated Native American tribes.

St. Louis was selected to lead the management of the National Levee Safety Program for the periodic inspection of levees. In FY 09, ARRA funds of $3,022,962 were expended.

29. UPPER MISSISSIPPI RIVER RESTORATION (UMRR)

Location. The portion of the Upper Mississippi River within the boundaries of the St. Louis District extends from the mouth of the Ohio River (RM 0) to RM 300, downstream of Lock and Dam 22.

Existing project. The project is composed of five elements: Habitat Rehabilitation and Enhancement Projects, Long-term Resource Monitoring, Recreation Projects, Studies of Recreation Impacts and Navigation Traffic Monitoring. (The St. Louis District's involvement has been limited to Habitat Rehabilitation and Enhancement Projects and Long-Term Resource Monitoring.) The overall program, involving five states and three engineer districts, is administered by the Mississippi Valley Division. In the St. Louis District, seven habitat rehabilitation projects have been completed. These are Clarksville Management Area, Dresser Island, Pharrs Island, Stag Island, and Cuivre Island in Missouri and Stump Lake and Swan Lake in Illinois. Through FY 2009, funds allocated to the St. Louis District have amounted to $54,716,000 for design and construction of Habitat Rehabilitation and Enhancement Projects (HREP), $2,674,716 for Long Term Resource Monitoring (LTRM), $2,991,385 for Program Management; and $967,800 for Habitat Needs Assessment.

During FY 09, expenditures of $4,994,4481 included the following:

Baseline Monitoring	$ 130,588
Batchtown	3,702,613
Calhoun Point	9,196
Pools 25/26	13,990
Program Management	199,292
Project Evaluation and Monitoring	103,448
Riprap Landing	159,302
Swan Lake	73,912
Ted Shanks	427,708
Wilkinson Island	174,432

Local cooperation. The terms of local cooperation, as established by PL 99-662, will vary according to the nature of the project, land ownership and pre-existing management responsibilities. The local sponsor for Habitat Rehabilitation and Enhancement projects is usually the U.S. Fish and Wildlife Service in coordination with the state of Missouri or the state of Illinois. A Project Cost Sharing Agreement with the state of Missouri was completed in FY 97 for the Cuivre Island project.

Operations and results during the fiscal year. During FY 09, continued design on Batchtown Phase III, IL; Pools 25 and 26 Islands, MO; Wilkinson Island, IL; Ted Shanks, Missouri and Riprap Landing, IL. Continued construction on Calhoun Point Phase III, IL, and Batchtown Phases III and IV, IL. ARRA funds of $1,220,605 were used for continued construction of Batchtown Phase III water control and spillway closure structures. Also awarded construction contract for Batchtown Phase III-B, IL, for floating pump station. Habitat and biological response monitoring activities continued on numerous projects in Missouri and Illinois.

30. FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)

On October 13, 1997, Congress transferred the management of the Formerly Utilized Sites Remedial Action Program (FUSRAP) to the Corps of Engineers, via the Energy and Water Development Appropriations

Act, 1998. The St. Louis District was chosen to remediate low-level radioactive contamination, which resulted from activities conducted by the Manhattan Engineer District/Atomic Energy Commission, at the five St. Louis area sites. These sites include the Madison Site in Madison, Illinois, Hazelwood Interim Storage Site (HISS)/Latty Avenue Vicinity Properties (VPs), St. Louis Airport Site (SLAPS), St. Louis Airport Site Vicinity Properties (SLAPS VPs), and St. Louis Downtown (SLDS), in St. Louis, Missouri. A sixth site, the Iowa Army Ammunition Plant (IAAAP), was declared eligible for inclusion in FUSRAP in FY 01. Cleanup will follow the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act.

In FY 09, 64,302 cubic yards of material were disposed of from the sites. The Corps of Engineers continued its remediation efforts at both SLDS and the North County sites under approved Records of Decision. The Corps completed remedial activity at the St. Louis Airport Site in North County during FY 07 and issued the final Post-Remedial Action Report during FY 09. At IAAAP, funds were used to begin remediation at Line 1 and West Burn Pad South and to issue a draft feasibility report for other areas at the Iowa Plant.

TABLE 14-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds to Sep. 30, 2009
4.	Mississippi River Between Ohio and Missouri Rivers (Includes Chain of Rocks original project and deficiency corrections)	New Work					
		Approp.	10,760,000	14,360,000	6,046,000	7,186,698	322,142,972[1]
		Cost	3,959,160	5,722,945	11,771,629	6,026,879	311,206,706[1]
		New Work (ARRA)					
		Approp.	0	0	0	32,456,783	32,456,783
		Cost	0	0	0	790,128	790,128
		Maint.					
		Approp.	29,679,000	24,842,000	30,288,000	29,025,115	626,711,144[2,6]
		Cost	27,640,994	20,557,120	22,722,203	35,133,918	618,858,427[2,7]
		Maint. (ARRA)					
		Approp.	0	0	0	7,060,200	7,060,200
		Cost	0	0	0	1,922,208	1,922,208
6.	Alton to Gale Organized Levee Districts, IL & MO	New Work					
		Approp.	0	0	93,000	287,000	12,288,200
		Cost	0	-1,520	25,026	95,475	12,027,030
	(Contrib. Funds)	New Work					
		Approp.	0	0	-22,520	0	121.230
		Cost	0	1,520	2,991	0	121,230
7.	Bois Brule, MO (Design Deficiency)	New Work					
		Approp.	1,792,000	1,560,000	3,219,000	2,130,000	12,340,500
		Cost	1,681,452	280,856	720,815	1,919,096	8,201,286
8.	Cape Girardeau Floodwall Protection System	New Work					
		Approp.	297,000	300,000	2,692,000	2,575,000	7,106.000
		Cost	619,414	166,683	118,315	1,816,128	3,595,149
		New Work (ARRA)					
		Approp.	0	0	0	2,770,000	2,770,000
		Cost	0	0	0	0	0
9.	Chesterfield, MO	New Work					
		Approp.	891,000	0	1,096,000	3,349,000	6,788,900
		Cost	144,768	453,099	529,583	2,869,678	5,445,000
		New Work (ARRA)					
		Approp.	0	0	0	2,243,150	2,243,150
		Cost	0	0	0	535,419	535,419

TABLE 14-A (Continued) COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds to Sep. 30, 2009
	(Contrib. Funds)	New Work					
		Approp.	56,000	341,066	590,000	228,650	1,653,716
		Cost	54,760	14,089	268,500	596,208	1,350,509
10.	East St. Louis, IL	New Work					
		Approp.	990,000	2,801,500	2,266,000	718,000	63,742,862[3]
		Cost	654,244	1,242,189	952,848	1,699,285	61,491,433[6]
	(Contrib. Funds)	New Work					
		Approp.	953,297	0	343,017	240,000	9,851,514
		Cost	0	198,862	30,953	712,300	9,223,876
11.	East St. Louis and Vicinity, IL (Ecosystem Restoration and Flood Damage Reduction)	New Work					
		Approp.	297,000	290,000	258,000	191,000	19,745,025
		Cost	133,680	162,806	342,398	203,199	19,546,384
	(Contrib. Funds)	New Work					
		Approp.	43,000	47,000	161,000	33,700	2,185,450
		Cost	489	45,678	124,678	74,579	2,145,543
12.	Lake Shelbyville Dam Safety	New Work					
		Approp.	0	0	500,000	300,000	800,300
		Cost	0	0	423,457	309,553	733,010
13.	Meramec R. Basin, Valley Park, MO	New Work					
		Approp.	7,120,000	0	500,000	0	37,649,600
		Cost	6,345,746	470,080	311,244	46,237	37,181,576
	(Contrib. Funds)	New Work					
		Approp.	477,000	36,000	3,930	26,000	2,773,722
		Cost	477,255	2,709,100	8,784	9,281	5,436,265
14.	Nutwood Drainage and Levee District, IL	New Work					
		Approp.	118,000	150,000	280,000	144,000	1,143,300
		Cost	100,953	81,938	169,285	40,030	843,474

TABLE 14-A (Continued) COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds to Sep. 30, 2009
16.	St. Louis Flood Protection, MO	New Work					
		Approp.	0	0	1,968,000	3,500,000	5,468,000
		Cost	0	0	313,540	1,795,320	2,108,860
		New Work (ARRA)					
		Approp.	0	0	0	2,712,950	2,712,950
		Cost	0	0	0	0	0
	(Contrib. Funds)	New Work					
		Approp.	0	0	1,380,308	2,692,308	4,072,615
		Cost	0	0	28,700	1,277,255	1,305,955
17.	Ste. Genevieve, MO	New Work					
		Approp.	544,000	25,000	410,000	100,000	27,230,600
		Cost	161,668	259,977	19,746	156,021	26,746,548
	(Contrib. Funds)	New Work					
		Approp.	0	0	23,355	77,500	7,266,517
		Cost	127,241	29,354	112,249	62,821	7,204,843
18.	Wood River, IL D&LD	New Work					
		Approp.	0	300,000	0	0	353,000
		Cost	0	726,820	210,771	10,814	999,612
	(Contrib. Funds)	New Work					
		Approp.	0	90,455	0	0	90,455
		Cost	0	267,339	18,515	3,204	289,058
19.	Wood River Levee, IL	New Work					
		Approp.	0	0	321,000	2.632,000	2,953,000
		Cost	0	0	124,038	1,574,993	1,699,030
		New Work (ARRA)					
		Approp.	0	0	0	12,979,350	12,979,350
		Cost	0	0	0	0	0
	(Contrib. Funds	New Work					
		Approp.	0	0	425,338	2,728,929	3,154,268
		Cost	0	0	64,894	797,460	862,354

TABLE 14-A (Continued) COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds to Sep. 30, 2009
22.	Madison and St. Clair Counties, IL	New Work					
		Approp.	742,000	897,000	468,000	335,000	5,178,700
		Cost	801,220	113,982	773,460	169,800	4,475,758
		New Work (ARRA)					
		Approp.	0	0	0	3,029,800	3,029,800
		Cost	0	0	0	19,746	19,746
	(Contrib. Funds)	New Work					
		Approp.	48,000	266,000	0	1,070,207	2,501,250
		Cost	382,199	18,871	218,369	8,790	1,410,040
23.	St. Louis, MO (Combined Sewer Overflows)	New Work					
		Approp.	0	0	4,380,000	0	9,576,000
		Cost	45,659	9,357	76,675	731,202	5,987,099
		New Work (ARRA)					
		Approp.	0	0	0	350,000	350,000
		Cost	0	0	0	0	0
	(Contrib. Funds)	New Work					
		Approp.	-140,627	30,000	1,420,304	0	3,135,677
		Cost	5,847	0	0	363,595	2,048,968
24.	Missouri & Middle Mississippi River Enhancement (Chouteau Project)	New Work					
		Approp.	250,000	0	0	100,000	350,000
		Cost	0	103,179	108,842	43,137	255,158
30.	FUSRAP (Total)	New Work					
		Approp.	47,348,000	44,700,000	41,200,000	48,400,000	699,384,000
		Cost	45,136,180	43,432,774	40,820,559	40,893,417	686,969,044
	Madison	New Work					
		Approp.	-39,000	0	0	0	2,245,000
		Cost	13,472	149	0	0	2,245,000
	Latty Avenue	New Work					
		Approp.	1,873,000	16,700,000	17,539,000	22,462,000	124,829,000
		Cost	1,918,189	14,951,288	18,415,000	19,232,434	120,544,868

TABLE 14-A (Continued) COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Funds to Sep. 30, 2009
	St. Louis Airport	New Work					
		Approp.	30,180,000	6,945,000	199,000	138,000	305,518,000
		Cost	28,953,870	7,724,026	893,870	156,474	305,468,368
	St. Louis Airport & Vic. Properties	New Work					
		Approp.	1,634,000	4,655,000	5,977,000	4,000,000	57,905,000
		Cost	1,759,198	4,332,752	5,130,186	3,185,288	55,875,425
	St. Louis Downtown	New Work					
		Approp.	13,300,000	15,400,000	15,600,000	15,600,000	198,277,000
		Cost	12,282,635	15,346,685	15,378,510	14,121,082	195,277,245
	Iowa Army Ammunition Plant	New Work					
		Approp.	400,000	1,000,000	1,885,000	6,200,000	10,410,000
		Cost	208,816	1,077,874	1,002,967	4,198,138	7,358,138
	Oakridge Transition	New Work					
		Approp.	0	0	0	0	200,000
		Cost	0	0	0	0	200,000

1. Excludes previous project cost of $1,416,620.
2. In addition $1,139,000 was expended for rehabilitation.
3. Includes $8,072,326 for work authorized by Flood Control Act of 1965.
4. Includes $7,921,939 for work authorized by Flood Control Act of 1965.
5. Excludes previous project cost (prior to FY97) of $15,632,925.
6. Includes $6,658,000 FY 08 War Supplemental funds.
7. Includes $1,098,283 FY 08 War Supplemental costs.

TABLE 14-B AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	KASKASKIA RIVER, IL (See Section 2 of Text)	
Oct. 23, 1962	Construct canal, lock, and dam to provide a 9-foot navigation channel from mouth to Fayetteville, IL.	S. Doc. 44, 87th Cong., 1st sess.
Oct. 12, 1996	Modified to add fish and wildlife and habitat restoration as project purpose.	Public Law 104-303
Dec. 11, 2000	Modified to include recreation as a project purpose.	Public Law 106-541, Section 311
Nov. 8, 2007	Develop a comprehensive plan for the purpose of restoring, preserving, and protecting the Kaskaskia River Basin. If a project or initiative will produce independent, immediate, and substantial benefits, the Secretary may proceed with the implementation of the project.	Public Law 110-113, Section 5073
	MISSISSIPPI RIVER BETWEEN OHIO AND MISSOURI RIVERS (See Section 4 of Text)	
	Project for regulating works in 1881. (To obtain a minimum depth of 8 feet.)	Annual Report, 1881, p. 1536.
Jun. 3, 1896	Dredging introduced as part of the project.	
Jun. 13, 1902 Mar. 2, 1907[1] Mar. 3, 1905[1]	These acts practically abrogated that part of project for middle Mississippi which proposed regulating works.	
Jun. 25, 1910	Regulating works restored to project and appropriations begun with a view to completion of improvement between Ohio and Missouri Rivers within 12 years at an estimated cost of $21 million, exclusive of amounts previously expended.	
Jan. 21, 1927	For 9 feet deep and 300 feet wide from Ohio River to northern Rivers and Harbors boundary of city of St. Louis.	Committee Doc. 9, 69th Cong., 2d sess.
Jul. 3, 1930	Project between northern boundary of St. Louis and Grafton (mouth of Illinois River) modified to provide a channel 9 feet deep and generally 200 feet wide with additional width around bends.	Rivers and Harbors Committee Doc. 12, 70th Cong., 1st sess.
Mar. 2, 1945	Modified to provide construction of a lateral canal with lock at Chain of Rocks.	H. Doc. 231, 76th Cong., 1st sess.
Sep. 3, 1954[2]	Modified to provide construction of a small-boat harbor opposite Chester, IL.	H. Doc. 230, 83d Cong., 1st sess.
Jul. 3, 1958[3]	Modified to provide construction of a fixed crest rockfill dam 900 feet below Chain of Rocks Bridge.	

TABLE 14-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	MELVIN PRICE LOCKS & DAM (FORMERLY LOCK AND DAM NO. 26 (REPLACEMENT))	
Oct. 21, 1978	Construct new dam and a 1,200-foot lock approximately 2 miles downstream of the existing structure.	Public Law 95-502, 95th Cong.
Dec. 29, 1981	Change name from "Lock and Dam No. 26" to "Melvin Price Lock and Dam" upon termination of service in U.S. Congress.	Public Law 97-118, 97th Cong.
Aug. 15, 1985 and Nov. 17, 1986	Construct a second lock, 600 feet long at the Lock and Dam No. 26. (Replacement) Project.	Public Law 99-88 and Public Law 99-662, 99th Cong.
Nov. 28, 1990	Modified to provide construction of cost-shared recreation facilities within the state of Illinois	Public Law 101-640, 101st Cong.
Oct. 31, 1992	Modified to allow cost-shared recreation with other non-Federal interests and authorized a 24,000 square foot visitor center.	Public Law 102-580, 102nd Cong.
Oct. 12, 1996	Amended project for recreation to include other contiguous nonproject lands, including those referred to as the Alton Commons.	Public Law 104-303
	SOUTHEAST MISSOURI PORT, MO	
1960 River and Harbor Act as amended. Section 107	Construct harbor channel with adjacent landfill.	
	ST. LOUIS HARBOR, MO & IL	
Nov. 26, 1986	As outlined in the Report of the Chief of Engineers, dated Apr. 30, 1984, the Water Resources Development Act of 1986 authorizes navigation improvements.	Public Law 99-662 99th Cong., 2d sess.
Oct. 12, 1996	The Secretary shall complete a limited reevaluation of the authorized St. Louis Harbor Project in the vicinity of the Chain of Rocks Canal, Illinois, consistent with the authorized purposes of that project, to include evacuation of waters collecting on the land side of the Chain of Rocks Canal East Levee	Public Law 104-303
	ALTON TO GALE ORGANIZED LEVEE DISTRICTS, IL & MO (See Section 6 of Text)	
Jun. 22, 1936 Jun. 28, 1938 1946	Authorized construction of levees to protect area from flooding from the Mississippi River.	Special report on record in HQUSACE Flood Control Committee Doc. 1, 75th Cong., 1st sess.

TABLE 14-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	BOIS BRULE, MO (See Section 7 of Text)	
Jun. 22, 1936	Raising and enlarging existing levee system to improve protection.	
Oct. 27, 1965	Amended Flood Control Act of 1936, Section 3.	Public Law 89-298
	CAPE GIRARDEAU, JACKSON METROPOLITAN AREA, MO	
Nov. 17, 1986	As outlined in the Report of the Chief of Engineers dated Dec. 8, 1984, the Water Resources Development Act of 1986 authorizes flood control and related recreational improvements in the Cape La Croix Creek Watershed.	Public Law 99-662, 99th Cong., 2d sess.
Oct. 12, 1996	As outlined in the Report of the Chief of Engineers, dated July 18, 1994, the Water Resources and Development Act of 1996 authorizes construction, including nonstructural measures, at a total cost of $45,414,000 ($33,030,000 Federal; $12,384,000 non-Federal)	Public Law 104-303, 104th Congress
May 17, 1950	**CAPE GIRARDEAU FLOOD PROTECTION, MO** (See Section 8 of Text) The project for flood protection at Cape Girardeau, Missouri, substantially in accordance with recommendations of the Chief of Engineers in House Document Numbered 204, Eighty-first Congress, first session.	Public Law 516-81st Congress, Chapter 188-2nd Session, H.R. 5472
Dec. 1, 2003	Plan, design, and initiate reconstruction of the Cape Girardeau MO project, originally authorized by the FCA of 1950, at an estimated total cost of $9,000,000, with cost sharing on the same basis as cost sharing of the project as originally authorized, if the Secretary determines that the reconstruction is technically sound and environmentally acceptable; Provided further, That the planned reconstruction shall be based on the most cost-effective Engineering solution and shall require no further economic justification.	Public Law 108-137 Energy and Water Development Approp. Act, 2004
	CHESTERFIELD, MO (See Section 9 of Text)	
Dec. 11, 2000	Authorized for construction, subject to completion of a favorable Chief of Engineers Report by Dec. 31, 2000. (Report was signed Dec. 29, 2000.)	Public Law 106-541 106th Congress
Nov. 8, 2007	Credit toward the non-Federal share of the cost of the project the cost of the planning, design, and construction work carried out by the non-Federal interest for the project before the date of the partnership agreement for the project.	Public Law 110-114 Section 3107

TABLE 14-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	COLDWATER CREEK, MO	
Nov. 28, 1990	As outlined in the report of the Chief of Engineers dated Aug 9, 1988, the Water Resources Development Act of 1990 authorizes flood control.	Public Law 101-640 101st Cong.
	EAST ST. LOUIS AND VICINITY, IL (See Sections 10 and 11 of Text)	
Jun. 22, 1936	Raise and enlarge existing levee.	Special report on record in OCE.
Oct. 27, 1965	Construct pumping plant and other modifications to reduce interior flooding.	H. Doc 329, 88th Cong., 2d sess.
Oct. 22, 1976	Construct Blue Waters Ditch as independent section.	Public Law 94-587, 94th Cong.
Dec. 22, 1987	Repair and rehabilitate pump stations and appurtenant works, channels, and bridges.	Public Law 100-202, 100th Cong.
Nov. 8, 2007	Authorized for environmental restoration and recreation (Report of the Chief of Engineers dated December 22, 2004).	Public Law 110-114 Section 1001(18)
	ELDRED AND SPANKEY DRAINAGE AND LEVEE DISTRICT, IL	
Oct. 23, 1962	Raise and enlarge existing levee and other modifications.	H. Doc. 472, 87th Cong., 2d sess.
	HARTWELL DRAINAGE AND LEVEE DISTRICT, IL	
Oct. 23, 1962	Raise and enlarge existing levee and other modifications.	H. Doc. 472, 87th Cong., 2d sess.
	HILLVIEW DRAINAGE AND LEVEE DISTRICT, IL	
Oct. 23, 1962	Raise and enlarge existing levee and other modifications.	H. Doc. 472, 87th Cong., 2d sess.
	KASKASKIA ISLAND DRAINAGE AND LEVEE DISTRICT, IL	
Oct. 23, 1962	Raise and enlarge existing levee.	H. Doc. 519, 87th Cong., 2d sess.
	MALINE CREEK, MO	
Nov. 17, 1986	As outlined in the Report of the Chief of Engineers dated Nov. 2, 1982, the Water Resources Development Act of 1986 authorizes flood control, recreation, and environmental improvements.	Public Law 99-662, 99th Cong., 2d sess.
	MAUVAISE TERRE DRAINAGE AND LEVEE DISTRICT, IL	
Jul. 14, 1984	Raise and enlarge existing levee and other modifications.	Energy and Water Development Approp. Act of 1985, 98th Cong., 2nd sess.

TABLE 14-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	MERAMEC RIVER BASIN, MO (See Section 13 of Text)	
Jun. 28, 1938	Construct reservoirs and local protection project.	Flood Control Committee, Doc. 1, 75th Cong., 1st sess.
Nov. 7, 1966	Construct Pine Ford, Irondale, and I-38 dams and 19 Angler-use sites.	H. Doc. 525, 89th Cong., 2d sess.
Dec. 29, 1981	Undertake structural and nonstructural flood control measures.	Public Law 97-128, 97th Cong. Amended Section 1128, Public Law 99-662, 99th Cong.
Aug. 17, 1999	Modified to authorize construction at a maximum Federal expenditure of $35,000,000	Public Law 106-53, 106th Cong., 1st sess.
Dec. 1, 2003	Modified to authorize construction at a maximum Federal expenditure of $50,000,000.	Public Law 108-137 108th Cong., 1st sess.
	MCGEE CREEK DRAINAGE AND LEVEE DISTRICT, IL	
Oct. 23, 1962	Reconstruct existing levee and construct pumping plant to reduce flooding.	H. Doc. 472, 87th Cong., 2d sess.
	MEREDOSIA LAKE AND WILLOW CREEK DRAINAGE AND LEVEE DISTRICT, IL	
Oct. 23, 1962	Raise and enlarge existing levee and other modifications.	H. Doc. 472, 87th Cong., 2d sess.
	NUTWOOD DRAINAGE AND LEVEE DISTRICT, IL (See Section 14 of Text)	
Oct. 23, 1962	Raise and enlarge existing levee and other modifications.	H. Doc. 472, 87th Cong., 2d sess.
	REND LAKE, BIG MUDDY RIVER, IL	
Oct. 23, 1962	Construct dam at Benton, IL, and subimpoundment dams on upper arms of reservoir.	H. Doc 541, 87th Cong., 2d sess.
	RIVER DES PERES, MO (See Section 15 of Text)	
Nov. 28, 1990	As outlined in the report of the Chief Engineers dated May 23, 1989, the Water Resources Development Act of 1990 authorizes flood control.	Public Law 101-640 101st Cong.
Nov. 8, 2007	Credit toward the non-Federal share of the cost of the project the cost of work carried out by the non-Federal interest for the project before the date of the partnership agreement for the project.	Public Law 110-114 Section 3108

TABLE 14-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	ST. LOUIS FLOOD PROTECTION, MO (See Section 16 of Text)	
Aug. 9, 1955	Construct flood control improvements.	Public Law 84-256 84th Cong.
	STE. GENEVIEVE, MO (See Section 17 of Text)	
Nov. 17, 1986	As outlined in the Report of the Board of Engineers for Rivers and Harbors dated Apr. 16, 1985, the Water Resources Development Act of 1986 authorizes construction of a levee and a pumping plant to protect the city from Mississippi River and Gabouri Creek floods.	Public Law 99-662, 99th Cong., 2d sess.
	WOOD RIVER DRAINAGE AND LEVEE DISTRICT, IL (See Section 18 of Text)	
Jun. 28, 1938	Construct reservoirs and local protection projects.	Flood Control Committee Doc. 1, 75th Cong., 1st sess.
Oct. 27, 1965	Authorized substantially as recommended by the Chief of Engineers.	H. Doc 150 88th Cong.
	WOOD RIVER LEVEE, IL (See Section 19 of Text)	
Jun. 28, 1938	Construct reservoirs and local protection projects.	Flood Control Committee Doc. 1, 75th Cong, 1st sess.
Nov. 8, 2007	Authorized reconstruction for flood damage reduction (Report of the Chief of Engineers dated July 18, 2006).	Public Law 110-114 Section 1001(20)
	MADISON AND ST. CLAIR COUNTIES, IL (See Section 22 of Text)	
Oct. 31, 1992	Authorized assistance to non-Federal interests for carrying out water-related environmental infrastructure and resource protection and development projects.	Public Law 102-580 102d Cong.
Dec. 21, 2000	Amended WRDA 1992 to include $10,000,000 for water and wastewater assistance for Madison and St. Clair Counties.	Public Law 106-554 106th Cong.
	ST. LOUIS, MO (COMBINED SEWER OVERFLOWS) (See Section 23 of Text)	
Oct. 31, 1992	Authorized assistance to non-Federal interests for carrying out water-related environmental infrastructure and resource protection and development projects.	Public Law 102-580 102d Cong.
Aug. 17, 1999	Amended WRDA 1992 to include $15,000,000 for a project to eliminate or control combined sewer overflows in the city of St. Louis, Missouri.	Public Law 106-53 106th Cong.
Nov 8, 2007	Amended WRDA 2007 to increase federal limit from $15,000,000 To $35,000,000.	Public Law 110-114 Section 5100

TABLE 14-B (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	CLARENCE CANNON DAM AND RESERVOIR, SALT RIVER, MO	
Oct. 23, 1962	Modified act of Jun. 28, 1938 by deleting the reservoir therefrom and reauthorizing it as a separate multiple-purpose project.	H. Doc. 507, 87th Cong., 2d sess.
Oct. 27, 1965	Changes name of project from Joanna Dam to present designation.	Public Law 89-298, 89th Cong.
Aug. 17, 1999	**MISSOURI AND MIDDLE MISSISSIPPI RIVERS ENHANCEMENT PROJECT (CHOUTEAU ISLAND)** (See Section 24 of Text) Develop a plan to protect and enhance fish and wildlife habitat.	Section 514, Public Law 106-53
Oct. 13, 1997	**FORMERLY UTILIZED SITES REMEDIAL ACTION (FUSRAP)** (See Section 30 of Text) Carry out remediation at five St. Louis Area sites - Madison, Illinois, Latty Avenue, St. Louis Airport, St. Louis Airport and Vicinity Properties, and St. Louis Downtown, MO.	Energy and Water Development Approp. Act of 1998

1. Also joint resolution, Jun. 29, 1906.
2. Inactive.
3. All work completed.

TABLE 14-C OTHER AUTHORIZED NAVIGATION PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Cuivre River, MO[1]	1883	$ 12,000	$ --	--
Kaskaskia River, IL[2]	1989	147,387,000	54,580,610[4,6]	1988
Moccasin Springs, MO	1969	76,436[3]	--	--
Southeast Missouri Port, MO	1993	3,466,522	4,151,888[5]	Apr. 89
Wabash Railroad Bridges, Illinois River, Meredosia, and Valley City, IL	1961	2,653,194	1961	--
St. Louis Harbor, MO	2005			Not constructed

1. Inactive. River declared nonnavigable by act of Mar. 23, 1900.
2. Excludes $10,461 expended on previous project.
3. Excludes $56,605 contributed funds.
4. Includes $1,229,904 FY 08 War Supplemental funds.
5. Includes $126,000 FY 08 War Supplemental funds.
6. Includes ARRA funds of $420,930.

TABLE 14-D OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Clarence Cannon Dam and Reservoir, Salt River, MO	1996	313,180,128	142,558,975[8,11]	--
Cache River Diversion, IL	1953	2,837,114	--	1953
Cape Girardeau, MO, No. 2	1965	5,157,805	--	1964
Cape Girardeau, Jackson, MO	2006	35,315,987	--	2003
Carlyle Lake, IL	1981	42,819,400	144,431,722[9,12]	Oct. 1976
Chouteau, Nameoki, and Venice Drainage and Levee District, IL	1955	185,700	--	1955
Columbia Drainage and Levee District No. 3, IL	1981	2,818,000	--	Aug. 1981
Degognia and Fountain Bluff Levee and Drainage District, IL	1959	5,889,500	--	1959
Dively Drainage & Levee District, IL	1976	1,720,000	--	1976
Emergency bank protection for certain highway and railroad facilities at Price Landing, MO (see Flood Control Act of 1944)[1]	1950	55,415	--	Oct. 1949
Emergency repairs to levees on Mississippi, Illinois, and Kaskaskia Rivers and flood fighting and rescue work (Sec. 5, Flood Control Act of 1941, as amended)[1]	1953	--	--	1951
Emergency protection for certain highway and railroad facilities at Chester, IL, bridge (Sec. 12, Flood Control Act of 1944)	1952	50,000	--	Jan. 1952
Emergency protection for Illinois approach, Chain of Rocks Bridge (Sec. 12, Flood Control Act of 1944)	1946	25,000	--	Aug. 1945
Fort Chartres and Ivy Landing Drainage District No. 5, IL	1970	1,154,800	--	1958
Grand Tower Drainage and Levee District, IL	1959	4,677,900	--	1959
Harrisonville Levee and Drainage District, IL	1981	6,829,069	--	Mar. 1981
Kaskaskia Island Drainage and Levee District, IL	1959	297,460	--	1949
Lake Shelbyville, IL	1981	44,000,000	147,715,568[13]	Sep. 1978
Mauvaise Terre Drainage and Levee District, IL	1989	589,000	--	1988
McGee Creek Drainage and Levee District, IL	1989	25,043,300	--	1989
Meredosia Lake and Willow Creek Drainage and Levee District, IL	1944	249,738	--	1944
Miller Pond Drainage District, IL	1955	164,183	--	1955

TABLE 14-D (Continued) OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For:	Cost to Sep. 30, 2009 Construction	Cost to Sep. 30, 2009 Operation and Maintenance	Mo. and Yr. Completed
Mississippi River Agricultural Area 8, MO	1987	2,137,000	--	--
Mississippi River at St. Louis, MO	1980	79,265,166	--	Jan. 1980
Mississippi River, Alton to Gale, IL, underseepage measures	--	85,422	--	Oct. 1962
North Alexander Drainage and Levee District, IL	1957	939,569	--	1957
Nutwood Drainage and Levee District, IL	1989	670,000	--	1984
Perry County Drainage and Levee[2] District Nos. 1, 2, and 3, MO	1987	7,968,700	--	1986
Pine Ford Lake, MO	1996	3,644,000	--	-
Prairie du Pont Levee and Sanitary District, IL[3]	1970	6,005,127	--	1970
Prairie du Rocher and vicinity, IL	1959	3,882,600	--	1959
Preston Drainage and Levee District, IL	1959	1,866,910	--	1959
Rend Lake, Big Muddy River, IL[4,5]	1989	43,700,900	118,522,587[10,14]	1988
Strington, Ft. Chartres, and Ivy Landing, IL	1957	2,123,700	--	Aug. 1956
Urban areas at Alton, IL	1960	192,000	--	--
Village of New Athens, IL	1981	1,983,000	--	Sep. 1981
Valley City Drainage & Levee District, IL[6]	1967	91,952	--	1967
Wood River Drainage and Levee District, IL[7]	1989	17,163,821	--	1988

1. Work complete, now performed under Public Law 99.
2. Excludes $6,800,700 for previous project.
3. Includes $5,235,927 for previous project.
4. Excludes $550,000 Area Development Administration Funds allotted to the State of Illinois for increased construction costs of Interstate Highway 57 to meet project requirements, and excludes $449,093 Area Redevelopment Administration Funds allotted to the Corps.
5. Includes $6,103,711 credit to State of Illinois for work in kind.
6. Authorized by Chief of Engineers (Sec. 205, 1948 Flood Control Act, as amended).
7. Funds are for work authorized by Flood Control Act of 1938.
8. Includes $2,247,334 of FY 08 War Supplemental funds.
9. Includes $899,968 of FY 08 War Supplemental funds.
10. Includes $809,983 of FY 08 War Supplemental funds.
11. Includes ARRA funds of $1,151,988 expended for bankline stabilization, repairing the stilling basin concrete slab, and constructing a cofferdam within the exit channel.
12. ARRA funds of $2,308,909 expended for contracts awarded for properly sized riprap, main dam, saddle dam, and Keyesport Levy; replacement and consolidation of 21 comfort stations; new pedestrian bridge; and other operation and maintenance items.
13. ARRA funds of $704,488 expended for contracts awarded for new administration building and visitor center, repair to recreation areas and other flood damaged facilities and work on main dam gallery spiral stairway.
14. Includes ARRA funds of $1,721,686 expended for repairs to flood damaged shoreline revetment and breakwaters and increase level of environmental stewardship, and maintenance and operation of facilities to meet public needs and improving health and safety conditions.

TABLE 14-E DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report For	Date And Authority	Federal Funds Expended	Contrib Funds Exp
Angler-use sites, Meramec Basin, MO	1967	WRDA 1986 Oct 86	--	--
Big Swan D&L District Illinois River, IL	--	WRDA 1986 Oct 86	--	--
Cape Girardeau, MO Reaches Nos 1, 3, and 4	1959	Oct 78	$ 22,000	--
Clear Creek Drainage and Levee District, IL	1964	PL 100-676 Jan 90	4,984,500	--
East Cape Girardeau and Clear Creek D&L District, IL	1963	PL 100-676 Jan 90	1,920,600	--
Eldred, IL	1962	Nov 79	--	--
Fort Chartres & Ivy Landing D&L District No. 5 and Stringtown Drainage and Levee District No. 4, IL	1971	WRDA 1986 Oct 86	--	--
Grafton Small Boat Harbor, IL	1962[1]	Nov 77	--	--
I-38 Lake, MO		PL 100-676 1 Jan 1990	--	--
Indian Creek Area Illinois River, IL	--	Nov 81	--	--
Irondale Lake, MO		PL 100-676 1 Jan 1990		
Keach Drainage and Levee District, IL	--	WRDA 1986 Oct 86	--	--
Levee Districts between Carlyle and New Athens, IL, Nos. 2, 5, 6 and 7	1979	Nov 79	--	--
Levee Districts between Carlyle and New Athens, IL Nos. 3, 4, 8, 10 and 13	1979	Nov 79	--	--
Levee Districts between Cowden and Vandalia, IL	1978	Oct 78	496,000	--
Meramec Park Lake, MO		Dec 81	37,682,514	--
Mississippi River Agricultural Area No. 10, MO	1967	Nov 79	--	--
Mississippi River Agricultural Area No. 12, MO	1967	WRDA 1986 Oct 86	--	--
Mississippi River at Alton, IL Small Boat Harbor	1958[1]	Nov 77	--	--
Preston Drainage and Levee District, IL	1959	PL 100-676 1 Jan 1990	1,866,910	--
Richland Creek, IL	1969	PL 100-676 10 Aug 89	401,000	--
Riverland Levee District, MO	1936	Aug 77	--	--
Scott County D&L District Illinois River, IL	--	WRDA 1986 Oct 86	--	--
Small Boat Harbor opposite Chester, IL	1954[1]	Nov 77	--	--
Small Boat Harbor opposite Hamburg, IL	1950[1]	Nov 77	--	--
Ste. Genevieve County Drainage and Levee District No. 1, MO	1936	Nov 77	--	--

TABLE 14-E (Continued) DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report For	Date And Authority	Federal Funds Expended	Contrib Funds Exp
St. Louis County Drainage and Levee District No. 1, MO	1936	Nov 77	--	--
Union Lake, MO	1979	PL 100-676 Jan 90	4,951,671[2]	--
Wiedmer Chemical Drainage and Levee District, MO	1936	Nov 77	--	--

[1] Year authorized.
[2] Reflects periodic funding for housing of archeological collections at Illinois State Museum.

TABLE 14-F FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Project	FISCAL YEAR COST		
	Federal Cost	Non-Federal	Total
Flood Control (Section 205, P. L. 858, preauthorization)			
Festus and Crystal City, MO	$1,194,863	$364,159	$1,559,022
Meredosia, IL	-367	0	-367
Modoc Levee & Drainage District, Prairie, IL	-149	542	393
Section 205 Coordination Account	10,333	0	10,333
Total Section 205	**$1,204,680**	**$364,701**	**$1,569,381**
Emergency Stream Bank & Shoreline Protection (Section 14 of 1946 Flood Control Act, PL 526)			
Cape La Croix, MO	$ 9,181	$ 0	$ 9,181
County Road 228 Bridge, Hubble Creek	-9,100	9,100	0
Salt River Knox County	-18,481	18,481	0
Section 14 Coordination Account	3,970	0	3,9700
Shotwell Creek, Wildwood, MO	1,806	0	1,806
Total Section 14	**-$12,624**	**$27,581**	**$14,957**

TABLE 14-G ECOSYSTEM RESTORATION WORK UNDER SPECIAL AUTHORIZATION

Project	FISCAL YEAR COST		
	Federal Cost	Non-Federal	Total
Project Modifications for Improvement of Environment (Section 1135, Public Law 99-662			
Rend City Wetlands Restoration	$ 14,342	$2,393	$16,735
Spunky Bottoms	30,238	0	30,238
Shelbyville Wildlife Management Area	366	0	366
Section 1135 Coordination	11,444	0	11,444
Total Section 1135	**$56,390**	**$2,393**	**$58,783**
Aquatic Ecosystem Restoration (Section 206, Public Law 104-303)			
Section 206 Coordination	$5,476	$0	$5,476
Total Section 206	**$5,476**	**$0**	**$5,476**
Wetland and Other Aquatic Habit Creation (Section 204, Public Law 102-580)			
Section 204 Coordination	$4,080	$0	$4,080
Total Section 204	**$4,080**	**$0**	**$4,080**

TABLE 14-H ACTIVE INVESTIGATIONS (96x3121)

Project	FISCAL YEAR COST		
	Federal Cost	Non-Federal	Total
SURVEYS (Category 100)			
Miscellaneous Activities (170)			
American Heritage Rivers Initiative–014410	$22,678	$0	$22,678
Interagency Water Resources Development-014713	8,188	0	8,188
Review of FERC Licences-053857	1,966	0	1,966
Special Investigations-017250	5,205	0	5,205
Subtotal	$38,037	$0	$38,037
Coordination Studies with Other Agencies (180)			
Coordination with Other Water Agencies	782	0	782
PAS – Negotiations	4,160	0	4,160
PAS-IL-Alton Micro Model	-4,420	4,815	395
PAS-MO-Big River Watershed	981	0	981
Upper Kaskaskia Study	30,062	15,104	45,166
Cape La Croix Sinkhole Study	1,102	0	1,102
Subtotal	$32,667	$19,919	$52,586
TOTAL (Category 100)	**$70,704**	**$19,919**	**$90,623**
COLLECTION AND STUDY OF BASIN DATA (Category 200)			
Flood Plain Management Services (250)			
Flood Plain Management Services - 082030, 082040 and 082045	$42,250	$0	$42,250
TOTAL (Category 200)	**$42,250**	**$0**	**$42,250**
PRECONSTRUCTION ENGINEERING AND DESIGN (Category 600)			
Flood Control Projects (650)			
River des Peres, MO-012638	$ 90,054	$ 37,765	$127,819
Prairie Du Pont and Fish Lake-171823	356,125	71,104	427,229
TOTAL (Category 600)	**$446,179**	**$108,869**	**$555,048**
GRAND TOTAL INVESTIGATIONS	**$559,133**	**$128,788**	**$687,921**

ROCK ISLAND, IL, DISTRICT

This district comprises most of the northern half of Illinois, portions of southern Wisconsin, southern and southwestern Minnesota, eastern and central Iowa, and northeastern Missouri, embraced in drainage basin of Mississippi River and its eastern and western tributaries between mile 300 (above mouth of Ohio River) and 614, and of its eastern tributaries only, between Hamburg Bay, at mile 261 and 300. This district also includes the Illinois Waterway above mile 80 with its tributaries and drainage basins. The section of the Mississippi River between river miles 300 and 614 is included in the report on Mississippi River between Missouri River and Minneapolis, MN.

IMPROVEMENTS

Navigation

1. ILLINOIS AND MISSISSIPPI CANAL, IL

Location. This canal extends for 75 miles from the Illinois River near LaSalle, IL, to the Mississippi River at Rock Island, IL. A feeder canal, 29 miles in length, extends from the summit level of the canal to the Rock River at Rock Falls, IL.

Existing project. See pages 1306-1308 of Annual Report for 1962 for details regarding project. The canal was constructed in the period 1892-1918. The canal has not been operated for navigation since June 1951 in accordance with Corps policy to discontinue operation of waterways affording little or no benefit to navigation. The River and Harbor Act of 1958 authorized the appropriation of $2,000,000 for the purpose of placing the canal in proper condition for public recreational use and to convey and transfer the canal to the State of Illinois as part of the State park system.

The repair and modification program was initiated in 1961, and a number of canal features have been repaired or modified. In connection with this program, fee title of 1,062 acres and recreational flowage easements over 309 acres of land in Rock River at Rock Falls, formerly under navigation flowage easement, have been acquired. The State of Illinois accepted title to the canal as of August 1, 1970. The River and Harbor Act of 1970 authorized the additional appropriation of $6,528,000 to be expended for the repair, modification, and maintenance of bridges, title transfer, modification or rehabilitation of hydraulic structures, fencing, clearing auxiliary ditches, and for the repair and modification of other canal property appurtenances.

The repair and modification work was underway until a suit was filed by three Illinois counties and their Commissioners of Highway against the Federal Government and the State in 1974 over maintenance of highway bridges crossing the canal. After the lawsuit was filed, further rehabilitation work by the Federal Government on the canal was suspended.

On November 4, 1981, the Corps of Engineers deposited $3,722,572 with the Clerk of the U.S. District Court in Chicago in full satisfaction of the Court's judgment. These funds were used by the counties to complete rehabilitation work as directed in the court order. Rehabilitation work by the Federal Government in coordination with the state was resumed in 1984 with the remaining authorization expended in 1987.

The Water Resources Development Act (WRDA) of 1986 authorized an additional appropriation of $8,472,000 to accomplish the work described in the 1970 River and Harbor Act.

The State of Illinois filed an additional lawsuit against the United States on July 6, 1987 in the U.S. Claims Court in the amount of $8,472,572. In a preliminary decision on September 22, 1988, the court dismissed the claim for $3,722,572. A settlement agreement between the State of Illinois and the United States was signed on November 14, 1991. The agreement provided that Illinois release all claims against the United States as stipulated in the claims court and that the United States provide $4,750,000 to Illinois as reimbursement for previous repair work performed upon the canal bridges by Illinois. On December 16, 1991, the U.S. Claims Court entered a judgment for $4,750,000 in favor of the State of Illinois. This judgment was paid in FY 92.

Once funds are received, principal work features to restore the canal to acceptable conditions consist of the repair or reconstruction of retaining walls, embankments, portions of the lock and dam structures, culverts, drainage ditches, and other related work features which the United States has maintained or has been obligated to maintain under previous agreements. These features are consistent with a Master Management Plan prepared by the Illinois Department of Conservation. NEPA documentation to assess remaining work items must be completed prior to initiation of construction.

Local cooperation. A revised Supplemental Agreement with all work items remaining was executed between the state of Illinois and the Federal Government in April 1996.

Operations during fiscal year. Operations and maintenance during fiscal year. There were no programmed dollars allotted for this project in FY 09.

2. ILLINOIS WATERWAY, IL AND IN

Location. Illinois River (entirely within State of Illinois), formed by confluence of Kankakee and Des Plaines River, flows southwesterly and enters the Mississippi River at Grafton, IL, about 38 miles above St. Louis. Illinois Waterway comprises Illinois River from its mouth to confluence of Kankakee and

Des Plaines Rivers (273 miles), Des Plaines River to Lockport (18.1 miles) and Chicago Sanitary and Ship Canal and South Branch of Chicago River to Lake Street, Chicago (34.5 miles). Also from a point 12.4 miles above Lockport, Il, waterway comprises Calumet-Sag Channel and Little Calumet and Calumet Rivers to turning basin 5, near entrance to Lake Calumet (23.8 miles); and Grand Calumet River from junction to 141st Street, deep (lake) draft navigation (9 miles) and to Clark Street, Gary, IN (4.2 miles).

Previous projects. For details, see page 1945 of Annual Report for 1915 and page 1172 of Annual Report for 1932.

Existing project. See Table 23-K and page 1255 of Annual Report for 1963. Cost of new work was $124,041,436 and includes $445,000 for Recreation Facilities under Code 711. Calumet-Sag Modification, Part III, placed in the deferred-for-restudy category in March 1972, cost of $33,000,000 (July 1971) Federal and $20,700,000 (July 1971) non Federal; is excluded from present cost estimate. Land acquired for the project consisted 909.407 acres in fee and 701.48 acres in easement. See Table 23-B for authorizing legislation.

(See Table 15-J through 15-N on existing locks and dams; lock and dam construction, foundations, cost; additional features entering into cost of project; existing project and total cost of existing project.)

Local cooperation. Complied with for completed modifications and Part I of Calumet-Sag Modification.

All pools above Alton Pool:

Maintenance: Channel dredging by Government cutter head pipeline Dredge *WILLIAM L. GOETZ* occurred at Briggs Landing in LaGrange Pool for a total of 36,391 cubic yards of material removed. A hydraulic dredge provided by the contractor, Bayshore, performed channel dredging at various locations in LaGrange, Peoria, and Starvede Rock Pools for a total of 406,561 cubic yards of material removed. Mechanical dredging was performed in Peoria, Starved Rock, and Marseilles Pools for a total of 57,383 cubic yards of material being removed. Nonroutine maintenance contract repairs include Peoria Hydraulics, Brandon Road Head Gates, Dam Bulkheads, Starved Rock Steam Line Repair, and Bulkhead Recesses.

Operation and Care: Locks and dams were operated as required, and necessary repairs were made to those and appurtenance structures. Other studies, reports, and miscellaneous engineering work were also accomplished. In June 2008, extraordinary flooding occurred at various locations along the Illinois Waterway, and flood recovery work continued, funded by FY 08 War Supplemental with costs of $891,448 and FY 09 CRA Supplemental with costs of $3,276. American Recovery and Reinvestment Act (ARRA) funds were received to install high mast lighting and procure work barges for the lock and dam sites, with costs of $208. Routine operation and maintenance, dredging, and nonroutine maintenance contract costs to Rock Island District were $31,893,518.

Rehabilitation Project: The Lockport Upper Pool, on the Illinois Waterway just southwest of Chicago, is a perched pool (38 feet above surrounding area). On the right descending bank, a roughly 45-foot-high embankment is the Stage 1 approach dike recently completed, and Stage 3 canal walls that serve as concrete guide wall on the left descending bank. Both embankments require significant rehabilitation to ensure continued structural integrity, retention of navigation pool, and continued safe use of the Stage 2 Controlling Works that regulate water levels in the canal. In FY 09, this project expended $11,960,199 completing Stage 1, and preparing plans and specifications for Stages 2 and 3. The project received $27,369,000 CG funding to continue plans and specifications of Stages 2 and 3 and contract award for Stage 3 construction contract. The project also received $89,009,657 of ARRA funds for a construction contract for Stage 3. No ARRA funds were expended in FY 09. A total of $31,983,518 CG funds were received through FY 09.

Alton Pool Operation: Costs for the year were $156,029 for management of natural resources; $128,944 for water control management; and $206,143 for studies and surveys. Total operation costs were $491,116.

Alton Pool Maintenance: Maintenance costs for the year included $2,756,079 for dredging ($374,615 FY 08 War Supplemental funds and $973,217 FY 09 Supplemental funds used for dredging) ($70,942 ARRA funds used for dredging and to initiate the development and fabrication of a physical hydraulic sediment response model to evaluate alternatives to

address a repetitive maintenance dredging area) and $45,423 for dredge surveys. Total maintenance costs were $2,801,502.

Total operation and maintenance costs for all pools above Alton Pool were $31,983,518. Alton Pool operation and maintenance costs were $3,292,618. Total costs incurred were $32,441,343.

3. MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS, MN

For report on this improvement, see chapter on "Mississippi River between Missouri River and Minneapolis, MN."

4. UPPER MISSISSIPPI RIVER – ILLINOIS WATERWAY SYSTEM, IL, IA, MN, MO, AND WI

Location. The program area comprises the Upper Mississippi River System, as defined by Congress in the WRDA of 1986, which includes the Upper Mississippi River from Minneapolis, Minnesota, to Cairo, Illinois; the Illinois Waterway from Chicago to Grafton, Illinois; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers. This multi-use resource supports an extensive navigation system (made up of 1200 miles of 9-foot channel and 37 lock and dam sites), a diverse ecosystem (2.7 million acres of habitat supporting hundreds of fish and wildlife species), flood plain agriculture, recreation and tourism.

Existing project. The Upper Mississippi River-Illinois Waterway System Navigation Study was completed in Sept 2004 after more than 14 years of intensive study and evaluation of the navigation improvement and ecological restoration needs for the UMR-IWW system for the years 2000-2050. The system is a vital part of our national economy and a valuable ecological resource. The 1,200 miles of 9-foot channel created by the 37 lock and dam sites allow waterway traffic to move from one pool to another providing an integral regional, national, and international transportation network. The system is significant for certain key exports and the Nation's balance of trade. The UMRS ecosystem consists of 2.7 million acres of bottom-land forest, islands, backwaters, side channels and wetlands—all of which support more than 300 species of birds, 57 species of mammals, 45 species of amphibians and reptiles, 150 species of fish, and nearly 50 species of mussels. More than 40 percent of North America's migratory waterfowl and shorebirds depend on the food resources and other life requisites (shelter, nesting habitats, etc.) that the system provides. It also provides boating, camping, hunting, trapping, and other recreational opportunities. The study final recommendation included a program of incremental implementation and comprehensive adaptive management to achieve the dual purposes of ensuring a sustainable natural ecosystem and navigation system. The WRDA of 2007, Title VIII, authorized the project for construction as recommended in the UMR-IWWS: Report of the Chief of Engineers, December 15, 2004.

Local cooperation. None required.

Operations during fiscal year. FY 09 activities continued design on 28 projects started in 2005, which were selected to support the broad based implementation specified in the Final Recommended Plan, including: design of mooring cells and switchboats; design for new 1200' locks at Lock and Dam 25, Lock and Dam 22, and Lagrange; conducting environmental mitigation studies; research into nonstructural improvements and demand forecasting tools; develop plans for ecosystem restoration adaptive management; fish passage project design; Lock and Dam 25 dam point control planning; and design for several habitat restoration and flood plain restoration projects. Expenditures during FY 09 were $6,648,572. Construction on large scale navigation and ecosystem projects is scheduled in 2010, given optimal funding levels in 2009.

5. OTHER AUTHORIZED NAVIGATION PROJECTS

See Table 15-C.

Ecosystem Restoration

6. ILLINOIS RIVER BASIN RESTORATION

Location: The project area is the Illinois River Basin defined as the Illinois River, Illinois, its backwaters, its side channels, and all tributaries, including their watersheds, draining into the Illinois River.

Existing project: The purpose of the Illinois River Basin Restoration project is to restore and protect the Illinois River Basin through the development of a restoration program, long-term resource monitoring program, computerized inventory and analysis system, and innovative dredging technology and beneficial use of sediments. These efforts are part of the State's Illinois Rivers 2020 initiative, a proposed 20-year, $2.5 billion, Federal-state effort to restore and enhance the Illinois River Basin. The project involves four districts (Rock Island, St. Louis, Chicago and Detroit).

A major initial focus is work on Critical Restoration Projects. Restoration of the Illinois River Basin requires the identification and implementation of projects, within the watershed and along the course of the river that repair past and ongoing ecological damage so that a more highly functioning, self-regulating ecosystem can be sustained within the existing basin context. Critical Restoration Projects will produce immediate habitat and sediment reduction benefits; will help evaluate the effectiveness of various restoration methods prior to application system wide; and make best use of the current strong local and State interest in ecosystem restoration within the basin. The Corps of Engineers will implement these Critical Restoration Projects in collaboration with the non-Federal sponsor and other Federal and local agencies. Currently sixteen Critical Restoration Projects are in various states of completion. These projects include: Peoria Riverfront Upper Island, Pekin Lake Northern Unit, Pekin Lake Southern Unit, Waubonsie Creek, Blackberry Creek, Kankakee River, Iroquois River, McKee Creek, Starved Rock Pool, Alton Pool, LaGrange Pool, Senachwine Creek, Tenmile Creek, Crow Creek West, Fox River-Batavia Dam, and Yellow River.

Critical Restoration Projects: Projects have been initiated at 16 locations in the river basin.

Operations during fiscal year: The Illinois River Basin Restoration Comprehensive Plan was approved by HQUSACE in May 2007 and culminates a multiagency collaborative planning process that led to a restoration recommendation to be implemented across numerous agencies and authorities. Feasibility work has continued on the 16 critical restoration projects. The Blackberry Creek, Starved Rock Pool, Senachwine Creek, and Alton Pool projects have all made significant progress and are currently evaluating restoration alternatives and developing costs. The Illinois River Basin encompasses four Corps Districts and two Divisions. Critical restoration project work is being conducted by these Districts and in particular, Yellow River, which is in Indiana, represents an opportunity to broaden the sponsorship of the program to another state. Expenditures during FY 09 were $704,042.

7. UPPER MISSISSIPPI RIVER RESTORATION (UMRR)

Location. The project is authorized for those river reaches having commercial navigation channels on the Upper Mississippi River, Illinois River, Minnesota River, St. Croix River, and Kaskaskia River in the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin.

Existing project. The purpose of the UMRR as stated in the authorizing legislation is to ensure the coordinated development and enhancement of the Upper Mississippi River system, recognizing its several purposes. The program includes habitat rehabilitation and enhancement projects (HREP) and long-term resource monitoring (LTRMP). HREPs improve habitat through site-specific modifications of the natural landscape, and LTRMP monitors certain natural resource changes and conducts research as a means for more informed management of the UMRS. Also authorized was a study of the economic impacts of completed recreation, completed navigation traffic monitoring, and recreation projects (currently unfunded). The program was initiated in 1986 utilizing funds provided by PL 99-88, FY 1985 Supplemental Appropriation Act. PL 99-662, WRDA

of 1986, further defined the program and provided for a 10 year implementation period and was extended to 15 years by PL 101-640, WRDA of 1990. The WRDA of 1999, P.L. 106-53, amended the previous authority by deleting recreation as a project purpose; removing the sunset provision; increasing annual appropriation limits available to the program; authorizing an independent technical advisory committee; and requiring submission of a report to Congress on a 6 year cycle that evaluates programs, accomplishments, assesses systemic habitat needs, and identifies any needed changes to the Program authorization.

Local cooperation: Local cooperation agreements are obtained for habitat projects for such projects not located on lands managed as a national wildlife refuge, within the meaning of Section 906(e) of the 1986 WRDA. WRDA 1999 establishes a cost sharing percentage of 35 percent for such projects.

Operations during fiscal year. Expenditures during the year totaled $15,109,076. The majority of funds was expended on two primary program elements: habitat projects and long-term resource monitoring. FY 09 funds were used for construction on 7 habitat projects and for design activities on 16 additional habitat projects, as well as applied research and long-term resource monitoring. Construction has essentially been completed on a total of 50 projects (with multiple phases) since the program was initiated. Data collection, analysis of data and production of technical and special reports was continued by contract with the Upper Midwest Environmental Sciences Center in Lake Onalaska, WI. The first and second reports to Congress detailing the programs activities since the programs inception was completed and was submitted to Congress in 1998 and 2004. A Habitat Needs Assessment was submitted to Congress in Sep. 2000. This assessment addressed the ecosystem needs along the UMRR's reaches of the Upper Mississippi River.

Flood Control

8. CORALVILLE LAKE, IA

Location. Coralville Lake is formed by the Coralville Dam on the Iowa River, several miles upstream from Iowa City, Johnson County, IA, about 83 miles above the confluence of the Iowa River with the Mississippi River.

Existing project. See page 28-4, Annual Report for 1981, for project details. Construction began in July 1949 and the project has been in operation since February 1958. About 25,035.76 acres in fee of land were acquired and 3,673.113 acres in flowage easements. The project was modified to provide for construction of a highway bridge crossing the lake at the Mehaffey site, which was begun in June 1964 and completed in October 1966. See Table 15-B for authorizing legislation.

Operations during fiscal year. Total FY 09 operation and maintenance costs at Coralville Lake were $4,124,017. In June 2008, extraordinary flooding occurred in the State of Iowa, and flood recovery work continued, funded by FY 08 War Supplemental and FY 09 CRA Supplemental. Routine O&M costs for FY 09 were $2,848,399. FY 08 War Supplemental costs were $922,576; FY 09 CRA Supplemental costs were $253,042. The flood-related work included repairs to the main dam, spillway, roads, campgrounds, and Amana Levee. ARRA funds were received to replace sanitary buildings, procure equipment, and construct a maintenance storage building, and costs were $100,000.

9. DAVENPORT, IA

Location: The flood control project will be located at Davenport, IA, in Scott County, on the right descending bank of the Mississippi River and will protect a local water treatment facility from a 200-year flood event..

Existing Project: Plans were developed in the 1970s and the early 1980s for structural flood control for the city. The project was deferred at the request of the city. After experiencing three significant flood events over an 8-year period (1993, 1997, and 2001), the city of Davenport officials requested that the project be restudied to evaluate current alternatives and benefits for flood damage reduction. A Limited Reevaluation Report (LRR) was developed and approved in June 2002 and determined that flood protection for Reach 1 was economically justified. An Engineering Documentation Report (EDR) was developed and approved in January 2006. The project will consist of approximately 2,200 feet of floodwall, approximately 200 feet of earthen levee, stormwater sewer gatewells, two railroad closure structures at gates, a road closure structure and gate, and an access road.

Operations during fiscal year. Construction funding was initially appropriated in FY 08. Appropriations for FY 09 were $4,850,000. Expenditures for FY 09 were $162,210. The Project Partnership Agreement (PPA) was executed with the city of Davenport on November 17, 2008. Plans and specifications are under preparation and real estate activities are underway.

10. DES MOINES RECREATIONAL RIVER AND GREENBELT, IA

Location. The Greenbelt Project area is located along the Des Moines, Boone, and Raccoon Rivers in central Iowa. Fort Dodge, IA, marks the upstream limit of the project area; the downstream terminus of the project area is Harvey, IA, a total distance of 170 river miles. The boundary includes portions of nine counties and many other communities, along with a number of Federal, state, county, and local parks. Two major Corps of Engineers reservoirs, Saylorville Lake and Lake Red Rock, are located within the Greenbelt Project area. The boundary encompasses an area of roughly 410,000 acres.

Existing project. The Des Moines Recreational River and Greenbelt Project was authorized on August 15, 1985, by Public Law 99-88, the 1985 Supplemental Appropriations Act. Legislation pertaining to the Greenbelt project has been contained in numerous other pieces of legislation culminating most recently in the 2005 Energy and Water Development Appropriations Act, Public Law 108-137.

As authorized by Public Law 99-88, the project will include: (1) the construction, operation, and maintenance of recreational facilities and streambank stabilization structures; (2) maintenance of all structures constructed before the date of authorization of this project; (3) tree plantings, trails, vegetation, and wildlife protection and development for recreational purposes; and (4) the prohibition or limitation by the Secretary of the killing, wounding, or capturing at any time of any wild bird or animal in such areas as may be directed by the Secretary.

The authorization further requires that an Advisory Committee be established for consultation with the Department of the Army consisting of 47 members. The composition of the Advisory Committee is as follows: three Corps of Engineers appointees, one person from each incorporated municipality, two from each of the nine counties, and five from the State of Iowa. See Table 15-B for authorizing legislation. Twelve Federally funded projects were completed under the Greenbelt authority prior to FY 02, and the total number of projects completed to date are 16. Congress has appropriated funds in FY 03 through FY 09 to develop priority Greenbelt projects. The Greenbelt Advisory Committee has recommended development of the following priority projects: Fort Dodge Riverfront, Des Moines Riverwalk, Marion County Cordova Center at Lake Red Rock and Red Rock Multipurpose Trail Segment 4B.

Local cooperation. Cost-sharing agreements were executed for all Greenbelt projects. Letters of Assurance have been received for the cost-shared projects recommended for inclusion in the Greenbelt by the 2008 Annual Program Management Report. The Greenbelt authority is currently operating under a Design Agreement (DA) with the city of Fort Dodge and a PPA with the city of Des Moines.

Operations during fiscal year. FY 09 funds were used to continue coordination with the Advisory Committee; prepare Engineering Documentation Report for the Fort Dodge Riverfront project, continue preliminary design and cost estimating for the Marion County Cordova Center at Lake Red Rock; complete plans and specifications for Trail Segment 4B at Lake Red Rock; and complete plans and specifications for the Des Moines Riverwalk. Federal costs incurred in FY 09 were $676,653.

11. RED ROCK DAM AND LAKE RED ROCK, IA

Location. The site of this project is on the Des Moines River, chiefly in Marion County, but extending into Jasper, Warren, and Polk Counties. The dam is 142.9 miles above the mouth of the Des Moines River, which empties into the Mississippi River at mile 361.4 above the mouth of the Ohio River. The city of Des Moines lies northwesterly from the site, about 60 miles upstream.

Existing project. See page 28-6, Annual Report for 1981 for description of the project. Construction began in May 1960, and the dam was placed in beneficial use for storage of flood water in January 1969. Land acquired for the project consisted of 50,207.860 acres in fee and 26,353.645 acres in flowage easement. Landowner complaints, that lake operation have flooded their lands more frequently than what they were told to expect when flowage easements were initially acquired, led Congress to modify the project authorization. Language in PL 99-190 authorizes acquisition from willing sellers fee simple title in real property, which is subject to periodic flooding in connection with the operation of the project. Potentially there are approximately 1,000 tracts consisting of about 30,000 acres. Estimated Federal cost is $43,500,000. See Table 15-B for authorizing legislation.

Local cooperation. None required.

Operations during fiscal year. Total operations and maintenance costs during FY 09 were $5,439,491. In June 2008, extraordinary flooding occurred in the State of Iowa, and flood recovery work continued, funded by the FY 08 War Supplemental and the FY 09 CRA Supplemental. Routine O&M costs for FY 09 were $3,421,946; FY 08 War Supplemental costs were $664,150; and FY 09 CRA Supplemental costs were $1,108,651. The flood-related work included repairs to the levee, roads, sewage utilities, dam boundary maintenance, and reconstruction of a portion of the Red Rock bike trail, procurement of equipment, and measures to control invasive species. Costs were $244,744.

12. SAYLORVILLE LAKE, IA

Location. The project site is chiefly in Polk County, IA, but portions extend into Dallas and Boone Counties. The dam is about 213.7 miles above the mouth of the Des Moines River and about 5 miles upstream from the city of Des Moines, IA.

Existing project. The dam is an earth embankment 6,750 feet long at crest with a height of 120 feet. Outlet works are a single circular concrete conduit, 22 feet in diameter, located at the toe of the west bluff. Control structure is at upstream end of conduit and uses three gates. A stilling basin is provided to dissipate energy of discharge from outlet conduit. Spillway is in the west bluff, weir 430 feet long. Water flows over the spillway which discharges into a paved chute and thence into an excavated earth channel to the Des Moines River. Top of spillway is about 31 feet below top of earth embankment section, and flow over weir is uncontrolled when water in reservoir reaches its crest. Watershed area above dam site is 5,823 square miles. With pool at spillway crest elevation, lake area is 16,700 acres and contains about 676,000 acre-feet of water at that height (602,000 for flood control and 74,000 for a conservation pool to maintain minimum flows at downstream points). Lake supplements capacity of downstream Lake Red Rock at river mile 142.9. The two lakes provide a high degree of flood protection to the lower Des Moines River Valley. Reach along the Mississippi River downstream from the mouth of the Des Moines River are also benefited.

A project modification plan to minimize the adverse environmental effects at Ledges State Park, located upstream from the dam, was authorized in 1976. The project modification included relocation of affected park facilities, acquisition of additional park land, and the development of a floodway corridor, with recreational facilities, from the dam downstream to Sixth Avenue in Des Moines. Improvements to Highway 415, the main access road to existing facilities on the east side of the reservoir, were added to the project by Congress in 1984. Segments A and B of Highway 415 have been completed. Segment C of Highway 415 was completed in 1994.

Construction began in June 1965, and the dam was placed in operation for the storage of flood water in April 1977. Remedial work in Big Creek Valley, consisting of diversion dam and channel and a barrier dam, for the protection of the town of Polk City was completed in December 1974. The land acquisition program involved 25,529.397 acres in fee and 1,498.444 acres in flowage easements. The estimated project cost is $116,470,000 including $2,820,000 in non-Federal costs from the State of Iowa and the City of Des Moines, for recreational development. See Table 15-B for authorizing legislation.

Local cooperation. Fully complied with.

Operations during fiscal year. Total operations and maintenance costs during FY 09 were $5,894,018. In June 2008, extraordinary flooding occurred in the State of Iowa, and flood recovery work continued, funded by FY 08 War Supplemental and FY 09 CRA Supplemental. Routine O&M costs for FY 09 were $3,738,353; FY 08 War Supplemental costs were $778,760; and FY 09 CRA Supplemental costs were $844,324. Flood-related work included repairs to the main dam, control tower, roads, barrier dam pump station, diversion dam, and campgrounds. ARRA funds were received to perform boundary maintenance, repair portions of the Neal Smith Trail, procure equipment, and repair campgrounds; and costs were $532,581.

13. INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Federal flood control regulations (part 208 of title 33, Code of Federal Regulations) provide that the structures and facilities constructed by the United States for local flood protection shall be continuously maintained in such a manner and operated at such times and for such periods as may be necessary to obtain the maximum benefits. Costs during the period for inspections of projects turned over to local interests to ascertain compliance with Federal requirements were $391,876. (See Table 15-H for list of completed flood control projects inspected.)

14. OTHER AUTHORIZED FLOOD CONTROL PROJECTS

See Table 15-E.

15. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION – CONTINUING AUTHORITIES PROGRAM

Emergency Bank Protection (Section 14 of the 1946 Flood Control Act, Public Law 526.) See Table 15-I.

Flood Control Activities (Section 205, Public Law 84-685.) See Table 15-I.

Snagging and Clearing of Navigable Streams and Tributaries in Interest of Flood Control (Section 208, Public Law 83-780.) See Table 15-I.

Miscellaneous

16. ECOSYSTEM RESTORATION WORK UNDER SPECIAL AUTHORIZATION

Project Modifications for Improvement of Environment Pursuant to Sec. 1135, P.L. 99-662, as amended (preauthorization). See Table 15-I.

Aquatic Ecosystem Restoration Pursuant to Sec. 206, P.L. 104-303. See Table 15-I.

Wetland/Other Aquatic Habitat Section 204, P.L. 102-560. See Table 15-I.

17. REGULATORY PROGRAM

Enforcement	$ 77,437
Permit Evaluations	2,390,663
Administrative Appeals	2,787
Compliance Authorized Activities and Mitigation	222,465
Total	$2,693,352

18. OPERATIONS AND MAINTENANCE CATASTROPHIC DISASTER PREPAREDNESS PROGRAM

National Preparedness	$29,863
National Emergency Preparedness Program	1,726
Total	$31,589

19. OTHER PROGRAMS AND ACTIVITIES

Other Activities	$30,712

20. MISCELLANEOUS

FY 09 War Supplemental – Recent Natural Disaster	$14,617,043

21. FLOOD CONTROL AND COASTAL EMERGENCY (FC&CE)

	Received	Expenditures
Disaster Preparedness Program	$ 281,889	$ 459,832
Emergency Operations	420,985	2,696,469
Rehabilitation/Inspection	17,832,000	48,819,353
Rehabilitation/Midwest Floods	$-3,824,000	$ 36,600,742
Total	$14,710,874	$88,576,396

22. ACTIVE INVESTIGATIONS

See Table 15-O.

23. COLLECTION AND STUDY OF BASIC DATA

See Table 15-O.

24. PRECONSTRUCTION ENGINEERING AND DESIGN

There were two PED projects in progress during FY 09 at a cost of $222,927 for Des Moines and Raccoon, and $6,648,572 for Upper Mississippi River – IL Waterway System Navigation Study, IL, IA, MN, MO, and WI, .Non-Federal cost to Des Moines and Raccoon were $439,213.

TABLE 15-A COST AND FINANCIAL STATEMENT

Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Cost to Sep. 30, 09
Illinois and Mississippi Canal, IL	New Work:					
	Approp.	0	0	0	0	7,605,143
	Cost	0	0	0	0	7,605,143
	Maint:					
	Approp.	0	0	0	0	24,154,167
	Cost	0	0	0	0	24,154,257
Illinois Waterway IL and IN	New Work:					
	Approp.	0	4,200,000	0	2,000,000	132,907,751
	Cost	0	814,498	3,385,229	894,724	131,800,870
	Maint: [1]					
	Approp.[5]	27,753,000	24,969,000	33,229,000	38,033,520	630,602,134
	Cost	20,141,596	31,258,923	24,130,247	32,788,450	614,330,073
	Rehab: [2]					
	Approp.	500,000		20,418,000	31,983,726	219,016,595
	Cost	98,832	305,396	8,877,779	11,960,199	197,028,329
	Inland Water Trust Fund:					
	Approp.	0	0	0	0	15,160,249
	Cost	0	0	0	0	14,291,599
Upper Mississippi River – Illinois Waterway System IL, IA, MO, MN & WI	New Work:					
	Approp.	0	0	-1,280	0	108,849,070
	Cost	-1,280	0	0	0	68,964,566
	PED:					
	Approp.	9,900,000	14,0001,280	14,001,280	0	34,299,830
	Cost-Ped	9,328,888	12,808,927	12,808,927	0	32,359,098
Illinois River Basin Restoration	New Work: [3]					
	Approp.	0	0	0	3,751,900	4,357,900
	Cost	30,828	0	0	2,006,030	2,611,370
	Contributed Funds					
	Approp.	2,500,000	0	-2,200,000	69	5,200,069
	Cost	0	189,206	12,084	518,420	1,126,935
Upper Mississippi River Restoration (UMRR) IL, IA, MN, MO, WI 1/	New Work:					
	Approp. [4]	19,799,000	21,894,000	23,851,000	34,560,350	377,486,078
	Cost	15,078,247	14,439,477	19,151,903	19,869,303	345,792,565
	Contributed Funds:					
	Approp.	77,269	0	-38,846	-1,450	2,305,533
	Cost	49,872	27,397	0	0	2,286,771

TABLE 15-A (Continued) COST AND FINANCIAL STATEMENT

Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Cost to Sep. 30, 09
	Maint: [2]					
	Approp.	2,242,000	3,179,872	4,456,000	9,758,000	89,102,713
	Cost	2,305,492	3,132,883	3,206,213	8,146,332	86,128,448
Coralville Lake, IA	New Work:					
	Approp.	0	0	0	0	37,079,488
	Cost	0	0	0	0	31,349,320
	Maint: [5]					
	Approp.	2,242,000	3,179,872	4,456,000	11,426,000	90,771,113
	Cost	2,305,492	3,132,883	3,206,213	4,124,017	82,106,133
Davenport, IA	New Work:					
	Approp.[6]	0	0	653,000	4,849,949	5,502,949
	Cost	0	0	32,342	129,868	162,210
	Contributed Funds:					
	Approp.	0	0	0	0	0
	Cost	0	0	0	33,327	33,327
Des Moines Recreational River and Greenbelt, IA	New Work:					
	Approp.	4,950,000	1,190,000	4,114,849	3,828,000	28,834,000
	Cost	3,016,791	2,942,830	586,158	596,628	24,699,089
	Contributed Funds:					
	Approp.	165,360	0	0	0	2,113,886
	Cost	390,477	0	0	0	2,001,714
Mill Creek and South Slough Milan, IL	Maint:					
	Approp.	0	0	148,000	0	148,000
	Cost	0	0	6,697	26,406	33,103
Red Rock Dam and Lake Red Rock, IA	New Work:					
	Approp.	0	0	0	0	13,712,500
	Cost	0	0	0	0	11,098,746
	Maint: [7]					
	Approp.	3,199,000	3,992,500	4,968,500	29,991,327	138,819,107
	Cost	2,952,528	4,044,386	3,701,169	5,439,491	112,735,957
	Contributed Funds:					
	Approp.	0	0	0	0	36,561
	Cost	0	0	0	0	35,133

TABLE 15-A (Continued) COST AND FINANCIAL STATEMENT

Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Cost to Sep. 30, 09
Saylorville Lake, IA	New Work:					
	Approp.	0	0	0	0	128,067,887
	Cost	0	0	0	0	127,872,466
	Maint: [4,8]					
	Approp.	4,012,000	4,182,578	11,796,000	25,928,937	141,197,291
	Cost	4,035,624	4,120,524	4,516,753	5,894,018	113,701,843
	Contributed Funds:					
	Approp.	0	0	0	0	3,642,891
	Cost	0	0	0	2,839	3,392,820

1. Illinois Waterway, IL and IN, Maintenance includes war supplemental costs of $891,576 and CRA supplemental appropriations of $2,000,000 and costs of $3,276, and ARRA costs of $208.
2. Illiniois Waterway, IL and IN, Rehab includes ARRA appropriations of $89,009,657.
3. Illinois River Basin Restoration includes ARRA appropriations of $3,304,900 and costs of $20,167.
4. Upper Mississippi River Restoration (UMRR) includes $2,000,000 supplemental appropriations and $735,832 supplemental costs.
5. Coralville Maintenance includes $6,900,000 supplemental appropriation funds and $1,175,618 supplemental cost, and ARRA costs of $100,000.
6. Davenport, IA, includes $(51.35) PED appropriations.
7. Red Rock Maintenance includes $21,400,000 supplemental appropriation funds and $1,772,801 supplemental costs.
8. Saylorville Maintenance includes $17,700,000 supplemental appropriation funds and $1,623,084 supplemental costs and ARRA costs of $532,581. .

TABLE 15-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		ILLINOIS WATERWAY, IL AND IN	
2	January 21, 1927	Channel 9 feet deep and 200 feet wide from mouth of Illinois River to Utica, 231 miles, modification of 2 U.S. locks and dams, removal of 2 State dams. (Act authorized appropriation of not to exceed $3,500,000 for carrying on work.)	Rivers and Harbors Committee Doc. 69th Cong., 1st sess., and S. Doc. 130, 69th Cong., 1st sess.
	July 3, 1930	Channel 9 feet deep from Utica, IL, to heads of present Federal projects on Chicago and Calumet Rivers 94.6 miles to Lake Street, and 96.3 miles to turning basin 5, respectively, to be secured by means of completed dams, locks, lateral canals, and dredging begun by State of Illinois in general accordance with present plans of State for that work. Act adopting project authorized appropriation of not to exceed $7,500,000 for carrying on work.	S. Doc. 126, 71st Cong., 2nd sess.
	June 26, 1934[1]	Operation and care of locks and dams provided for with funds from War Department appropriation for rivers and harbors.	
	August 30, 1935	Construct modern locks and dams at LaGrange and Peoria and a channel 9 feet deep and 300 feet wide below Lockport, exact location and details of design of all structures to be left to discretion of Chief of Engineers, and for time being, that no change be made in water authorized for navigation of Illinois River by act of July 3, 1930.	H. Doc. 184, 73rd Cong., 2nd sess.[2]
	August 30, 1935[3]	Also provides for 3 passing places along Sag Channel and authorized channel in Calumet-Sag route to turning basin 5, and dredging at entrance of Lake Calumet.	H. Doc. 180, 73rd Cong., 2nd sess.
	June 14, 1937	Realign portion of Calumet River and abandonment of bypassed section of Calumet River.	Rivers and Harbors Committee Doc. 19, 75th Cong., 1st sess.
	June 20, 1938	Modifies local cooperation requirements in 1935 act.	
	October 23, 1943	Pay damages to levee and drainage districts due to seepage and other factors, not to exceed $503,500.	H. Doc. 711, 77th Cong., 2nd sess.
	March 2, 1945	Enlarge Calumet-Sag Channel to 160 feet wide and a usable depth of 9 feet. Dredge a barge channel 160 feet wide with a usable depth of 9 feet in Grand Calumet and Little Calumet River Branch of Indiana Harbor Canal to deep (lake) draft through 141st St., East Chicago, IN. Construct in Little Calumet River a lock of suitable dimensions for large navigation. Rebuild or otherwise alter at Federal expense all obstructive railroad bridges across Calumet-Sag Channel, Little Calumet River, Calumet River, Grand Calumet River, and Indiana Harbor Canal, so as to provide suitable clearance, except that no Federal funds shall be expended for removal or alteration of Illinois Central RR bridge at mile 11.20 of Little Calumet River.	H. Doc. 145, 76th Cong., 1st sess.

TABLE 15-B (Continued) AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
	July 24, 1946	Substitute following work for that authorized by act of March 2, 1945; replace emergency dam in Chicago Sanitary and Ship Canal; enlargement of that canal thence to Sag Junction and of Calumet-Sag Channel to afford channels 225 feet wide and usable depth of 9 feet; construct along general route depth of 9 feet to 225 feet wide between Little Calumet River and junction with Indiana Harbor Canal and 160 feet wide thence to Clark St., Gary, IN, with a turning basin at Clark St., enlarge Indiana Harbor Canal to 225 feet wide and usable depth of 9 feet between Grand Calumet River and vicinity of 141st St., inclusive; remove Blue Island lock and construct a lock and control works in Calumet River near its head, and similar structures in proposed Grand Calumet Channel west of Indiana Harbor Canal; alter or eliminate railroad bridges across three channels lakeward of Chicago Sanitary and Ship Canal, or construct new railroad bridges to provide suitable clearance.	H. Doc. 677, 79th Cong., 2nd sess.
	July 24, 1946	Muscooten Bay, a small-boat harbor in vicinity of Peoria, IL, by construction of a basin 510 by 250 feet, dredged to 7 feet deep.	H. Doc. 698, 79th Cong., 2nd sess.
	July 17, 1953	$48,933 to reimburse Nutwood Drainage and Levee District for additional pumping operation; supplementing $58,750 authorized in October 1943 act.	H. Doc. 144, 81st Cong., 1st sess.
	July 3, 1958	Federal participation in alteration of highway bridges, Calumet-Sag Modification, Part I, which constitute unreasonable obstructions to navigation, in accordance with Public Law 647, 76th Cong., as amended.	H. Doc. 45, 85th Cong., 1st sess.[4]
	August 18, 1968	Federal participation in alteration of highway bridges, Calumet-Sag Modification, Part II, which constitute unreasonable obstructions to navigation, in accordance with the Public Law 647, 76th Cong., as amended.	Specified in Act. Also H. Doc. 45, 85th Cong., 1st sess.
	November 17, 1986	Illinois River at Peoria, IL modification of navigation project to include an adjacent downstream water area.	Sec. 857, H.R.6, Water Resources Development Act of 1986.
	October 5, 1992	The project for inland navigation, Illinois River, Illinois, authorized by the Rivers and Harbors Act of 1935 (49 Stat. 1035), is modified to direct the Secretary to acquire dredge material disposal areas for such project, at a total Federal cost of not to exceed $70,000,000.	Sec. 102, Water Resources Development Act of 1992.

TABLE 15-B (Continued) AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
7		**UPPER MISSISSIPPI RIVER RESTORATION (UPPER MISSISSIPPI RIVER SYSTEM ENVIRONMENTAL MANAGEMENT PROGRAM), IL, IA, MN, MO, WI**	
	August 15, 1985 (P.L. 99-88)	Provide for a 10-year environmental program to include habitat rehabilitation and enhancement; long-term resource monitoring with computerized inventory and analysis; recreational development; assessment of economic benefits from recreational activities; and navigation system traffic monitoring.	H. Doc. 2577, 99th Cong., 1st sess.
	November 17, 1986	Approves 1982 Upper Mississippi River Master Plan, authorizes interstate agreements between Upper Mississippi River states, directs Secretary to implement GREAT II recommendations for disposal of dredged material and facilitate the productive use of dredge material, directs an interagency agreement with the Department of Interior for its participation in the plan, authorizes second lock at Lock and Dam No. 6.	Sec. 1103, H.R. 6, Water Resources Development Act of 1986.
	November 28, 1990 (P.L. 101-640)	Extending authorization for EMP program an additional 5 years.	Sec. 405, Water Resources Development Act of 1990.
	October 31, 1992 (P.L. 102-580)	Increase the HREP appropriation authority to a total of $189,600,000. Sets limits on amounts which could be transferred between authorities. Operations and Maintenance costs were specified to be the responsibility of the State/Federal/ or local agency responsible for fish and wildlife management.	Sec. 102, Water Resources Development Act of 1992.
	August 17, 1999 (P.L. 106-53)	Extended the program until perpetuity. Increase authorization limits and established a 20% transfer limit. Established an Advisory Committee for independent technical review that requires a Report to Congress NLT 31 Dec 04, and every subsequent 6 years.	Sec. 509, Water Resources Development Act of 1999.
	November 8, 2007 (P.L. 110-114)	Expanded the project purpose to include water quality issues.	Sec. 3177, Water Resources Development Act of 2007
6		**IL RIVER BASIN RESTORATION (519)**	
	October 2000 (P.L. 106-541)	Provide for a 4-year, $100 million IL River Basin Restoration Program to include habitat rehabilitation and enhancement; development of long-term resource monitoring with computerized inventory and analysis; complete a comprehensive plan, evaluate new technologies and innovative approaches, and evaluate and complete critical restoration projects.	Sec. 519, Water Resources Development Act of 2000.

TABLE 15-B (Continued) AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
8		**CORALVILLE LAKE, IA**	
	June 28, 1938	Reservoir for flood control and recreation.	Flood Control Committee Doc. 1, 75th Cong., 1st sess.
	July 14, 1960	Highway bridge across Coralville Lake at or near the Mehaffey site.	None
9		**DAVENPORT, IA**	
	December 31, 1970	Levee, floodwall, and pumping plants.	H. Doc. 161, 92nd Cong., 1st Session
	November 17, 1986	Davenport (Nahant Marsh), IA Land Acquisition	Sec. 601, H.R.6, Water Resources Development Act of 1986
		Local Protection Flood Control	Sec. 201, Flood Control Act of 1970.
10		**DES MOINES RECREATIONAL RIVER AND GREENBELT, IA**	
	August 15, 1985 (P.L. 99-88)	Recreational development; environmental enhancement; and related streambank stabilization.	H. Doc. 2577, 99th Cong., 1st sess.
	November 17, 1986	Defines area of work.	Sec. 604, H.R. 6, Water Resources Development Act of 1986.
	February 13, 2003	The non-Federal sponsor shall receive credit in an amount not to exceed $10,000,000 toward their share of the cost of Des Moines Recreational River and Greenbelt, Iowa, projects for work performed by the sponsor, or others on behalf of the sponsor, including planning, design, and construction performed after October 1, 2002, provided the Secretary of the Army, acting through the Chief of Engineers, determines that such work is completed in accordance with U.S. Army Corps of Engineers standards and procedures and is integral to the Des Moines Recreational River and Greenbelt project.	108th Congress, H.R. 108-10, Sec. 122
	November 8, 2007 (P.L. 110-114)	The project for the Des Moines Recreational River and Greenbelt, IA, authorized by P.L. 99-98 and modified by section 604 of the Water Resources Development Act of 1986 (100 Stat. 4153), is modified to authorize the Secretary to carry out ecosystem restoration and flood damage reduction components of the project, at a Federal cost of $10,000,000.	110th Congress, H.R. 110-280. Sec. 3068.

TABLE 15-B (Continued) AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
	March 25, 2008	Section 3068 of WRDA 2007 was rescinded. Implementation of the Des Moines Recreational River and Greenbelt project can proceed.	Sec. 14221 of Food, Conservation, and Energy Act of 2008
	1944 Flood Control Act	**FARM CREEK, IL** Two flood detention dams and channel improvements.	H.Doc. 802, 78th Cong., 2nd Session
	November 17, 1986	**LOVES PARK, IL** Improved channel, diversion structures, pipes, and pond storage.	108th Congress, H.R. 108-10, Sec. 122
11		**RED ROCK DAM AND LAKE RED ROCK, IA**	
	June 28, 1938	Reservoir for flood control and recreation.	Flood Control Committee Doc. 1, 75th Cong., 1st sess.
	December 19, 1985	Land Acquisition	PL 99-190
12		**SAYLORVILLE LAKE, IA**	
	July 3, 1958	Reservoir for flood control and recreation.	S. Doc. 9, 85th Cong., 1st sess.
	October 22, 1976	Modification to minimize adverse project impact on Ledges State Park.	H. Doc. 487, 94th Cong., 2nd sess.
	November 17, 1986	**MUSCATINE ISLAND LEVEE DISTRICT AND MUSCATINE-LOUISA COUNTY DRAINAGE DISTRICT, NO. 13, IA** Raise existing levees.	Sec. 401, H.R. 6, Water Resources Development Act of 1986.
4	November 8, 2007	**UPPER MISSISSIPPI RIVER – ILLINOIS WATERWAY SYSTEM , IL, IA, MN, MO, AND WI** Project for navigation and ecosystem improvements for the Upper Mississippi River and Illinois Waterway System. Small scale and nonstructural measures at a total cost of $256,00,000 cost shared with IWTF. New 1200-foot locks at Locks 20, 21, 22, 24, and 25 on Upper Mississippi River and at LaGrange Lock and Peoria Lock on the Illinois Waterway at total cost of $1,948,000,000 cost shared with IWTF. Ecosystem restoration projects to attain and maintain the sustainability of the ecosystem of the Upper Mississippi River and Illinois River. Total authorized to be appropriated $1,717,000,000. Cost shared at 65% Federal/ 35% non-Federal (certain projects defined 100% Federal).	Title VIII, Water Resources Development Act of 2007

TABLE 15-B (Continued) AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
	November 17, 1986	**WEST DES MOINES, IA** Construct levees and floodwall.	Sec. 401, H.R. 6, Water Resources Development Act of 1986

1. Permanent Appropriations Repeal Act.
2. Contains latest published map of Illinois and Des Plaines Rivers.
3. Included, in part, in Public Works Administrative Program October 31, 1934, and February 28, 1935.
4. Contains latest published maps of Calumet – Sny portion.

TABLE 15-C OTHER AUTHORIZED NAVIGATION PROJECTS
(See Section 5 of Text)

Project	Status	For Last Full Report See Annual Report For	Cost To September 30, 2009	
			Construction	Operation and Maintenance
Hannibal SBH, MO	Completed	1958	$ 108,700	$201,685
Fort Madison, IA SBH	Active	2004	0	48,600
Squaw Chute at Quincy, IL	Completed	1967	70,979[1]	9,345
Muscooten Bay, Illinois River, IL	Completed	1985	265,499	171,000
Quincy, IL, Harbor Access Channel	Completed	1970	35,477[2]	37,700
Rock Island Small Boat Harbor	Completed			$ 9,722

1. Excludes $25,851 contributed funds.
2. Excludes $35,350 contributed funds.

TABLE 15-E OTHER AUTHORIZED FLOOD CONTROL PROJECTS
(See Section 14 of Text)

Project	For Last Full Report See Annual Report For	Cost To September 30, 2009 Construction	Operation and Maintenance	Contributed Funds Expended
Completed Projects				
Banner Special Drainage and Levee Districts, IL	1943	$ 247,822	--	--
Bear Creek Dam (City of Hannibal, MO)	1962	1,679,056	--	--
Bettendorf, IA	1987	14,930,085	--	$ 228,073
Big Lake Drainage and Levee District, IL	1943	144,910	--	--
Canton, MO[1]	1964	1,496,555	--	--
Clinton, IA	1991	26,237,690	--	839,615
Coal Creek Drainage and Levee District, IL	1954	1,923,145	--	--
Crane Creek Drainage and Levee District, IL	1941	68,898	--	--
Des Moines and Mississippi Levee District No. 1, MO	1969	1,492,016	--	--
Des Moines, IA	1972	4,993,224	--	23,323
Drury Drainage District, IL	1964	1,144,875	--	--
Dubuque, IA	1974	10,861,170	--	145,415
East Liverpool Drainage and Levee District, IL	1941	207,826	--	--
East Moline, IL	1984	9,692,097	--	--
East Peoria Drainage and Levee District, IL	1946	279,963	--	--
Elkport, IA	1951	34,200	--	--
Evansdale, IA	1983	4,409,088	--	--
Fabius River Drainage District, MO	1941	60,500	--	--
Fabius River Drainage District, MO	1963	1,621,841	--	--
Farm Creek, IL [3]	1997	9,859,020	16,245,895	--
Farmers Levee and Drainage District, IL	1942	155,562	--	--
Fulton, IL	1984	18,017,200	--	--
Galena, IL	1952	844,100	--	118,000
Green Bay Levee and Drainage District No. 2, IA	1949	299,000	--	--
Green Bay Levee and Drainage District No. 2, IA	1967	1,727,711	--	--
Gregory Drainage District, MO	1940	77,100	--	--
Gregory Drainage District, MO	1972	1,538,963	--	20,626
Hannibal, MO	1993	6,082,733	--	600,000
Henderson County Drainage District No. 1, IL	1968	1,453,217	--	--
Henderson County Drainage District No. 2, IL	1968	1,043,902	--	--
Henderson County Drainage District No. 3, IL	1949	42,700	--	--
Hennepin Drainage and Levee District, IL	1940	109,593	--	--
Hunt Drainage District and Lima Lake Drainage District, IL	1972	4,772,498	--	--
Indian Grave Drainage District, IL	1972	3,551,961	--	--
Iowa River-Flint Creek Levee District No. 16, IA	1972	6,044,693	--	--
Kishwaukee River at DeKalb, IL[1]	1957	123,300	--	--
Lacey Langellier, West Mantanzas and Kerton Valley Drainage and Levee District, IL	1954	1,290,000	--	--
Liverpool Drainage and Levee District, IL	1943	117,731	--	--
Louisa County Drainage District No. 13, IA	1970	3,293,276	--	220,000
Loves Park, IL	2006	21,762,286	--	1,852
Lost Creek Drainage and Levee District, IL	1938	152,000	--	--
Marengo, IA[1]	1981	2,447,001	--	--
Marion County Drainage District, MO	1967	873,748	--	--
Marshalltown, IA	1978	8,437,511	--	252,136
Mason and Menard Drainage District, IL	1940	93,808	--	--
Meredosia Levee and Drainage District, IL[1]	1977	1,995,322	--	269,739
Milan, IL	1988	13,437,663	--	213,554

TABLE 15-E OTHER AUTHORIZED FLOOD CONTROL PROJECTS (Continued) (See Section 14 of Text)

Project	For Last Full Report See Annual Report For	Cost To September 30, 2009 Construction	Operation and Maintenance	Contributed Funds Expended
Mill Creek South Slough Milan, IL [4]			6,697	
Muscatine, Mad Creek, IA[1]	1983	1,129,800	--	305,747
Muscatine Island Levee District and Muscatine	2004	5,199,140		748,348
Near Springfield on Sangamon River, IL	1941	--	--	--
Oakford Special Drainage District, IL	1940	38,417	--	--
Okabena Creek at Worthington, MN[1]	1957	72,432	--	--
Ottumwa, IA	1977	233,145	--	--
Pekin and La Marsh Drainage and Levee District, IL	1955	158,383	--	--
Penny Slough, Rock River, IL	1940	85,800	--	--
Rock Island, IL	1979	7,582,373	--	--
Rockford, IL	1989	10,032,496	--	514,188
Rocky Ford Drainage and Levee District, IL	1941	108,797	--	--
Sabula, IA	1958	411,915	--	--
Sangamon River (Mouth), IL	1980	1,048,990	272,848	15,122
Seahorn Drainage and Levee District, IL	1945	32,281	--	--
Sid Simpson Project, IL	1968	5,789,800	--	--
Sny Basin, IL	1972	14,003,560	--	--
Sny Island Levee Drainage District, IL	1942	61,400	--	--
Sny Island Levee Drainage District, IL	1968	4,956,749	--	--
South Beardstown and Valley Drainage and Levee District, IL	1942	220,729	--	--
South Beardstown Drainage and Levee District, IL	1942	171,839	--	--
South Quincy Drainage and Levee District, IL	1940	61,200	--	--
South Quincy Drainage and Levee District, IL	1968	1,231,243	--	--
South Quincy Drainage and Levee District, IL	1991	7,066,437	--	2,355,479
South River Drainage District, MO	1941	55,300	--	--
South River Drainage District, MO	1966	1,106,056	--	--
Spring Lake Drainage and Levee District, IL	1941	185,980	--	--
Subdistrict No. 1 of Drainage Union No. 1 and Bay Island Drainage and Levee District No. 1, IL	1967	3,306,695	--	--
Union Township Drainage District, MO	1947	116,576	--	--
Van Meter, IA[1]	1965	113,842	--	--
Waterloo, IA	1987	48,620,099	--	83,300
Waterloo Bridges, IA	1991	1,125,000	--	1,108,787
Authorized Projects Not Constructed				
Davenport, IA	1987	--	--	--
Moline, IL[2]	1987	--	--	--
Peoria, IL	1973	534,580	--	--

1. Authorized by Chief of Engineers (Sec. 205, 1948 Flood Control Act).
2. FY 89 funds of $5,639 were expended to close out project.
3. Farm Creek O&M funds appropriated thru FY 08 is $16,279,471.
4. FY 08 funds to prepare appraisal report.

TABLE 15-G DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report For	Date Deauthorized	Federal Funds Expended	Contributed Funds Expended
Ames Dam and Reservoir, Skunk River, IA	1987	2002	1,400,800	--
Cal.-Sag Channel, Part II Illinois Waterway, IL and IN	1986	1986	--	--
Campbells Island Mississippi River, IL	1969	1979	$76,664	--
Carroll County Levee and Drainage District, IL	1938	1977	--	--
Central City Lake, Wapsipinicon River, IA	1970	1977	55,664	--
Farmers Drainage and Levee District (Sangamon River), IL	1942	1986	--	--
Green Island Levee and Drainage District, IA	1938	1977	--	--
Henderson River, IL	1964	1977	102,310	--
Illinois Waterway, IL and IN Duplicate Locks	1982	1981	--	--
Illinois Waterway Navigation Project (Pekin, IL)	1986	1986	--	--
Janesville and Indian Ford Dams, WI	1938	1977	--	--
Keithsburg Drainage District, IL	1938	1977	--	--
Muscatine Harbor	1964	2008	709,061	---
Pecatonica River at Darlington, WI	--	1977	--	--
Rochester Lake, Cedar River, IA	--	1977	--	--
Rock River Agricultural Levees, IL	1984	1999	858,000	--
South Beloit, IL	1979	1986	270,000	--

TABLE 15-G **DEAUTHORIZED PROJECTS**
(Continued)

Project	For Last Full Report See Annual Report For	Date Deauthorized	Federal Funds Expended	Contributed Funds Expended
William L. Springer Lake Decatur, IL	1979	1986	--	--
Illinois Waterway, Marseilles Canal, IL	1989	1990	--	--
Peoria Levees, IL	--	1990	--	--
Savanna Small Boat Harbor	--	1999	--	--

TABLE 15-H INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS (See Section 13 of Text)

Project	Date Inspected
2 River Des Moines Co DD 7 & 8	November 07
Andalusia	December 07
Avon Lake	January 06
Banner Special Drainage and Levee District, IL	October 08
Bay Island Drainage and Levee District, IL	November 07
Bettendorf, IA	November 08
Big Lake Drainage and Levee District, IL	January 09
Burlington, IA	December 03
Burlington Northern Bott. LFT	November 07
Canton, MO	November 07
Carlisle	July 02
Cascade Levee	November 07
Cedar Falls, LF PP	November 08
Chandlerville, Village of	April 08
Cincinnati D & LD	January 09
City of Streator Municipal Levee	October 08
Clear Lake D & LD	November 08
Clinton, IA	October 07
Coal Creek Drainage and Levee District, IL	November 08
Crane Creek Drainage and Levee District, IL	December 08
DeKalb, IL	February 09
Des Moines, IA	November 07
Des Moines LFP	October 07
Des Moines and Mississippi Levee District No. 1, MO	November 07
Des Moines County DD7, IA	November 07
Des Moines County DD8, IA	November 07
Des Moines, Southeast – Southwest Pleasant Hill	January 06
Don Morrissey Levee	October 07
Doyle and Pottorf Levee	October 05
Drury Drainage District, IL	December 07
Dubuque, IA	November 07
East Dubuque	December 07
East Liverpool Drainage and Levee District, IL	December08
East Moline, IL	November08
East Peoria Drainage and Levee District, IL	February 09
East Peoria Sanitary District, IL	December 08
Effland D & LD	November 08
Elkader	November 07
Elkport, IA	November 07
Evansdale, IA	November 08
Fabius River Drainage District, MO	November 07
Farmdale-Farm Creek	March 06
Farmers Drainage and Levee District, IL	February 09
Fayette, City of Flood Protection Project	August 06
Fulton, IL	December 07
Galena, IL	December 07
Greater Peoria Sanitary District	April 08
Green Bay Levee and Drainage District No. 2, IA	November 07
Green Island LD Roger Tarr	November 07
Gregory Drainage District, MO	November 07

TABLE 15-H (Continued)

INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS (See Section 13 of Text)

Project	Date Inspected
Hager Slough Special DD	January 08
Hamilton, IL	May 01
Hannibal, MO	November 07
Henderson County Drainage District No. 1, IL	November 07
Henderson County Drainage District No. 2, IL	November 07
Henderson County Drainage District No. 3	June 03
Herget Drainage and Levee District, IL	February 09
Hunt Drainage District & Lima Lake Drainage District, IL	November 07
Indian Grave Drainage District, IL	November 07
Indian Creek Levee District No. 2	September 03
Iowa River-Flint Creek Levee District No. 8, IA	July 01
Iowa River-Flint Creek Levee District No. 16, IA	November 07
Jackson, MN West Fork DM River	November 08
Keithsburg, IL	June 03
Kent Creek LFP	November 07
Keokuk Levee	November 07
Kerton Valley Drainage and Levee District, IL	November 08
Lacey Drainage and Levee District, IL	November 08
Langellier Drainage and Levee District, IL	November 08
Levings Lake Dam, IL	November 07
Lima DD, IL	November 07
Liverpool Drainage and Levee District, IL	December 08
Lost Creek Drainage and Levee District, IL	November 08
Louisa County LD No. 11	November 07
Louisa Drainage District No. 13	July 86
Loves Park Creek	November 08
Lower Pleasant Valley D & LD	October 08
Mackinaw River & DD No. 1	November 08
Muscatine, Mad Creek, IA	January 07
Marengo, IA	November 08
Marion County Drainage District, MO	November 07
Marshalltown, IA	November 08
Mason and Manard D & LD	January 09
Meredosia Levee and Drainage District, IL	December 07
Milan, IL	April 09
Mississippi – Fox DD	November 07
Moline, IL LFPP	August 03
Morrissey Levee	October 07
Mount Pleasant	January 07
Munzlinger, Elmer Levee	May 01
Murphy Levee	August 99
Muscatine Island LD & D	November 07
Niota, IL	June 01
North Sangamon Lattimore Creek	April 08
Okabena Creek Worthington	November 08
Oakford Special Drainage and Levee District, IL	January 09
Oelwein	November 07
Old River D & LD	December 07
Ottawa Township H.S. Levee	November 08
Ottumwa/Des Moines River	November 07
Page Park Dam, IL	November 07
Pekin-LaMarsh Drainage and Levee District, IL	February 09

TABLE 15-H (Continued)

INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS (See Section 13 of Text)

Project	Date Inspected
Penny Slough Drainage and Levee District, IL	November 08
Quincy, City of	May 01
River View Street, Bellevue, IA	December 95
Rock Island, IL	November 07
Roddis	December 04
Sabula, IA	November 07
Sanitary District of Beardstown, IL	October 08
Savana Ordnance	July 98
Seahorn Drainage and Levee District, IL	January 09
Sny Basin	April 60
Sny Island Levee Drainage District, IL	November 07
Snyder Levee	February 81
South Beardstown Drainage and Levee District, IL	December 08
South Branch Diversion Channel	November 07
South Quincy Drainage and Levee District, IL	November 07
South River Drainage District, MO	November 07
South Sangamon D & LD West	January 08
South Sangamon D & LD East	January 08
Spoon River No. 1	April 09
Spoon River Ranch & Roddis	March 09
Spring Lake Drainage and Levee District, IL	December 08
Subdistrict No. 1 of Drainage District Union No. 1 and Bay Island Levee and Drainage District No. 1, IL	November 07
Tama, IA	November 08
Tarr, Roger Levee	January 04
Thompson Drainage and Levee District	June 03
Union Township D & LD	November 07
Union Township Levee (Skunk River)	December 05
Valley Drainage and Levee District, IL	December08
Van Meter, IA	November 08
Village of Liverpool Levee	November 08
Volga, IA	November 07
Waterloo, IA	November 08
West Des Moines RR/WC	November 07
West Matanzas Drainage and Levee District, IL	November 08
Wolf Creek	March 83
Zempel Mutual DD	November 08
Zuma-Canoe Special	December 08

TABLE 15-I FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Project	Fiscal Year Costs		
	Federal Cost	**Non-Federal**	**Total**
Navigation Projects (Section 107, 1960 RHA, P.L. 86-645) (216)			
Coordination Account Section 107 – 062216	$3,271		$3,271
Total	**$3,271**		**$3,271**
Flood Control (Section 205, 1948 Flood Control Act, P. L. 858) (516)			
Coordination Account Section 205 – 062516	$ 17,093		$ 17093
East Peoria, IL – 091606	(147,324)	$(22,978)	(170,302)
Indian Creek, Cedar Rapids, IA – 181244	192		192
Little Maquoketa River, IA 185082	0		0
Mad Creek, Muscatine, IA – 150096	555,089		555,089
Manchester, IA – 176996	0		0
Maquoketa, IA – 181230	0		0
Time Check Levee, IA 185004	2,005,462	1,217,268	3,222,730
Winnebago River, Mason City, IA- 184999	2,678		2,678
Wolf Creek, La Porte City, IA - 180457	0		0
Total	**$2,433,190**	**$1,194,290**	**$3,627,480**
Emergency Bank Protection (Section 14 of 1946 Flood Control Act, P.L. 526) (517)			
Bear Creek – 145520	**$30,510**		**$30,510**
City of Panora, Raccoon River , IA – 182500	0	0	0
Coal Creek, Albia, Monroe CO, IA – 185023	11,780	20,038	31,818
Coats Sewage Lagoon, IA – 160224	0		0
Coordination Account Section 14 – 062517	6,770		6,770
Highway 61, Fox River, MO – 182501	0	0	0
IA River, Iowa City, IA – 185021	46,180		46,180
Kiser Creek, New Canton, IL – 178113	0		0
Rock River Highway 64, IL – 167360	0		0
Sac & Fox Settlement, Tama, IA – 167361	0		0
Keosauqua, IA – 145518	27,135		27,135
Springdale Creek, - 145524	9,731		9,731
Fox River, Kahoka, MO – 145538	30,166		30,166
Skunk River – 145558	13,798		13,798
CAP Sec 14, N Raccoon Rvr – 145642	12,751		12,751
Total	**$188,829**	**$20,038**	**$208,859**
Snagging and Clearing (Section 208, 1954 Flood Control Act, P.L. 780) (518)			
Coordination Account Section 208 – 163815	$5,457		$5,457
Spoon River, IL 184977	0		0
Total	**$5,457**		**$5,457**

TABLE 15-I (Continued) FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Project	Fiscal Year Costs		
	Federal Cost	**Non-Federal**	**Total**
Project Modification to Improve Environment (Section 1135 P.L. 99-662) (722)			
Big Creek Lake Spillway Mod – 175183	$0		$0
Coordination Account Section 1135-062092	15,990		15,990
Oquawka Refuge Habitat Rest-096182	0	0	0
Total	**$15,990**	**$0**	**$15,990**
Aquatic Ecosystem Restoration (Section 206, P.L. 104-303) (732)			
Coordination Account (Sec 206) – 062091	$16,223		$16,223
Clear Lake, IA – 180778	270,063		270,063
Duck Creek/Fairmount Rest – 167364	1,180		1,180
Emiquon Flood Plain Restoration- 171808	167,867		167,867
Freeborn County Eco Restor – 173832	0		0
Iowa River and Clear Creek, IA – 167430	0		0
Kankakee River, IL – 167429	0		0
Lake Belle View – 164774	0		0
Lake Koshkonong – 167368	0		0
Storm Lake Water Quality – 185046	16,517		16,517
Quincy Bay, IL -182211	0		0
Total	**$471,850**	**$0**	**$471,850**
Wetland/Other Aquatic Habitat (Section 204, 1992 Flood Control Act, P.L. 102-560) (792)			
Blackhawk Bottoms Miss. River – 169021	$120,723		$120,723
Coordination Acct Section 204 – 163816	26,923		26,923
Total	**$147,646**		**$147,646**
TOTAL	**$3,266,233**	**$1,214,328**	**$4,480,561**

TABLE 15-J ILLINOIS WATERWAY: EXISTING LOCKS AND DAMS (See Section 2 of Text)

Lock	Miles Above Mouth	Miles to Nearest Town	Dimensions			Depth on Miter Sills at Low Water	
			Width of Chamber (feet)	Available Length for Full Width (feet)	Lift at Low Water[1] (feet)	Lower (feet)	Upper (feet)
LaGrange Lock	80.2	7.8 below Beardstown, IL	110	600	10.0	13.0	15.5
Peoria Lock	157.7	4.1 below Peoria, IL	110	600	11.0	12.0	15.5
Starved Rock Lock	231.0	Utica, IL	110	600	18.5	14.0	16.8
Marseilles Lock	244.6	Marseilles, IL	110	600	24.45	14.0	18.6
Dresden Island Lock	271.5	8 above Morris, IL	110	600	21.75	12.25	16.85
Brandon Road Lock	286.0	Joliet, IL	110	600	34.0	13.8	17.85
Lockport Lock	291.1	Lockport, IL	110		600	30.5-39.5[2]	15.0 11.0-20.2[2]
T.J. O'Brien Lock	326.5	Chicago, IL	110	1,000	--	14.0	14.0

1. Lifts and depth on miter sills are those obtained with flat pools.
2. Variation in lift and depth on upper miter sill at Lockport is due to fluctuation of water surface in the sanitary district canal.

TABLE 15-K ILLINOIS WATERWAY, IL AND IN LOCK AND DAM CONSTRUCTION, FOUNDATIONS, COST (See Section 2 of Text)

	Lock		Dam				Estimated Federal Cost Under Existing Project
Name	Type of Construction	Character of Foundation	Kind	Type of Construction	Character of Foundation	Year Complete	
Illinois River, mouth to Utica; channel improvement by dredging in Illinois River below Starved Rock modification of two U.S. locks and dams, and removal of two State dams.	--	--	--	--	--	--	$2,733,499[1]
LaGrange	Concrete	Piles in sand	Movable (wicket with A-frame-crest)	Concrete and timber	Piles in sand	1939	$ 2,744,592[1]
Peoria	Concrete	Piles in sand	Movable (wicket type)	Concrete and timber	Piles in sand	1939	3,381,030[1]
Starved Rock	Concrete	Rock	Movable (tainter gates)	Concrete and structural steel	Rock	1933	885,315[1]
Marseilles	Concrete	Rock	Movable (tainter gates)	Concrete and structural steel	Rock	1933	1,853,725[1]
Dresden Island	Concrete	Rock	Movable (tainter gates)	Concrete and structural steel	Rock	1933	2,503,376[1]
Brandon Road	Concrete	Rock	Movable (tainter gates)	Concrete and structural steel	Rock	1933	2,031,683[1]
Lockport	Concrete	Rock	Movable (Bear trap) (Bear trap)	Concrete and structural steel	Rock	1933	133,608[1]
T.J. O'Brien	Concrete and sheet piling	Piles in clay	Fixed	Concrete and sheet piling	Piles in clay	1960	6,954,700[1]

TABLE 15-K (Continued)

ILLINOIS WATERWAY, IL AND IN LOCK AND DAM CONSTRUCTION, FOUNDATIONS, COST (See Section 2 of Text)

	Lock		Dam				
Name	Type of Construction	Character of Foundation	Kind	Type of Construction	Character of Foundation	Year Complete	Estimated Federal Cost Under Existing Project
Lock and dam equipment	--	--	--	--	--	--	1,250,304[1]
Total locks and dams	--	--	--	--	--	--	$ 24,471,832

1. Actual cost.

TABLE 15-L ILLINOIS WATERWAY, IL AND IN ADDITIONAL FEATURES ENTERING INTO COST (See Section 2 of Text)

Dredging:	
Little Calumet and Calumet Rivers	$ 2,135,358[1]
Calumet-Sag, 3 passing places	813,318[1]
Starved Rock to Lockport	6,007,335
Starved Rock to Grafton	2,917,607
Calumet-Sag Channel	19,238,200
Peoria small boat harbor	24,937[1]
Protection piers at all locks	77,613[1]
Calumet-Sag modification engineering and design	5,141,474
Calumet-Sag modification, supervision and administration	5,466,804
Rebuild highway bridges	19,327,850
Rebuild railway bridges:	
Calumet-Sag Channel	20,828,435[1]
Little Calumet and Calumet Rivers	18,362,041[1]
Recreation Facilities, Code 711	445,000
Removal of Blue Island lock	288,600[1]
Grand Calumet River controlling works[2]	
St. Louis District	1,081,600[1]
Total additional features	$100,442,142
Total existing project	$124,913,974

1. Actual cost.
2. Placed in inactive status November 19, 1974.

TABLE 15-M ILLINOIS WATERWAY, IL AND IN EXISTING PROJECT

See Section in Text	Project	Item	Length (feet)	Width (feet)	Depth (feet)
2.	Illinois Waterway, IL and IN	Nine locks and six dams		----	--
		Grafton to Lockport, IL	291.1 miles	300	9
		Lockport to controlling works	2.0 miles	200-300	9
		Controlling works to junction with Calumet-Sag Channel	10.0 miles	225	9
		Calumet-Sag Channel to lock in Blue Island	16.0 miles	225	9
		Calumet and Little Calumet Channel, from Blue Island to turning basin 5	7.7 miles	300	9
		Grand Calumet River Channel from junction with Little Calumet River to and in Indiana Harbor Canal to 141st, East Chicago, IN	9.0 miles	9	--
		Also, Grand Calumet River Channel from junction of Indiana Harbor Canal and Grand Calumet River to Clark St. in Gary, IN, with a turning basin at Clark St.	4.2 miles	160	9
		A channel in Chicago Sanitary and Ship Canal and South Branch Chicago River from Sag-Junction to Lake St. in Chicago, IL	22.1 miles	175-300	9

TABLE 15-N ILLINOIS WATERWAY, IL AND IN TOTAL COST OF EXISTING PROJECT TO SEPTEMBER 30, 2009 (See Section 2 of Text)

	New Work	Maintenance	Rehabilitation	Total
Regular Funds	$120,886,748	$643,416,188	$156,685,126	$800,101,314
Public Works Funds	3,960,735	--	--	3,960,735
Emergency Relief Funds	2,753,660			2,753,660
ARRA Funds	208	--	--	208
Total	$127,601,351	$643,416,188	$156,685,126	$806,815,917[1]

1. Includes $1,735,890 expended between 1927 and 1936 on the operation and care of the works of improvement under the provisions of the permanent indefinite appropriation for such purposes.

TABLE 15-O ACTIVE INVESTIGATIONS (96X3121)

Item and CWIS Number	FISCAL YEAR COSTS Federal Cost	Non-Federal	Total
SURVEYS (Category 100)			
Nav Studies (110)			
ILWW Cal Sag – 151355	$63,673		$63,673
Subtotal	$63,673		$63,673
Flood Damage Prevention (120)			
Des Moines & Racoon River, IA – 013490	$343,088	$439,213	$782,301
Keith Creek, Rockford, IL – 013840	74,495	79,081	153,576
Cedar River Time Check, IA – 185004	522,929	1,195,469	1,718,398
Subtotal	$940,512	$1,713,763	$2,654,275
Special Studies (140)			
Illinois River Basin Restoration – 013818	$620,337	$518,420	$1,138,757
Illinois River Ecosystem Restoration – 014293	0	0	0
Peoria Riverfront Dev. – 013410	2,087	0	2,087
Rock River, IL & WI – 012949	0	0	0
Upper Miss. River Flow Freq Study – 013414	0		0
Humboldt, IA – 145496	55,590		55,590
Subtotal	$678,014	$518,420	$1,196,434
Watershed/Comprehensive Studies (150)			
Upper Miss River Comprehensive Study – 010565	$111,540		$111,540
Subtotal	$111,540		$111,540
Review of Authorized Projects (160)			
Miss River Nav Study 010315	-1,374		-1,374
Subtotal	-1,374		-1,374
Miscellaneous Activities (170)			
Interagency Water Resources Dev. – 014713	$ 17,237		$17,237
N. American Waterfowl – 053904	960		960
Review of FERC Licenses – 053857	9,001		9,001
Special Investigations – 017250	17,503		17,503
Subtotal	$44,701		$44,701
Coordination Studies with other Agencies (180)			
Cooperation w/other Water Agencies – 053907	$6,373		$6,373
Subtotal	$6,373		$6,373
Planning Assistance to States (180)			
PAS-IL-Coon Creek – 017029	618		618
PAS Negotiation Funds – 014800	17,467		17,467
PAS-IL-LaSalle I&M Canal – 017027	0	0	0
PAS-Mapping, Macomb, IL - 142725	2,147	4,373	6,520
PAS-Mapping, Marion, IA – 121758	860	224	1,084
PAS-Perry, IA – 144886	15,608	-4,972	10,636
PAS-Sac and Fox, IA 144884	1,390		1,390
Lake Sinissippi – 153660	21,044	10,744	31,788
Subtotal	$ 59,134	$10,369	$69,503
TOTAL (Category 100)	**$1,902,573**	**$2,242,552**	**$4,145,125**

TABLE 15-O (Continued) **ACTIVE INVESTIGATIONS (96X3121)**

Item and CWIS Number	FISCAL YEAR COSTS Federal Cost	Non-Federal	Total
COLLECTION AND STUDY OF BASIC DATA (Category 200)			
Flood Plain Management Services (250)			
Flood Plain Mgmt Services – 082030	$ 32,917		$32,917
Jack Oak Slough – 133932	4,773		4,773
Technical Services – 082040	21,743		21,743
Quick Responses – 082045	2,958		2,958
Study IA River Wapello, IA – 141920	22,471		22,471
IA Res Dam Safety – 150938	42,553		42,553
State of IA Levee Cert – 150955	69,057		69,507
Mon Maq Dam, Monticello, IA 150941	4,629		4,629
Maquoketa FPMS Study, IA 151359	8,053		8,053
Subtotal	$209,154		$209,154
Hydrologic Studies (260)			
General Hydrologic Studies – 053820	$ 13,912		$13,912
Subtotal	$ 13,912		$13,912
TOTAL (Category 200)	**$236,978**		**$236,978**
GRAND TOTAL INVESTIGATIONS	**$2,139,551**	**$2,242,552**	**$4,382,103**
PED Total	**$6,874,961**	**0**	**$6,874,961**
TOTAL (all non-reimbursable)	**$9,251,490**	**$2,242,552**	**$11,257,064**

ST. PAUL, MN, DISTRICT

District comprises western Wisconsin, major portion of Minnesota, northern and eastern North Dakota, and small portions of northeastern South Dakota, and northern and northeastern Iowa embracing drainage basins of Mississippi River and tributaries from its source to mile 614 above mouth of Ohio River; Red River of the North and tributaries; those streams north of Missouri River Basin in North Dakota; and U.S. waters of Lake of the Woods and its tributaries. That section of Mississippi River above mile 614 is included in the report on the Mississippi River between the Missouri River and Minneapolis, Minnesota.

IMPROVEMENTS

Navigation

1. MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS, MN

For report on this improvement see chapter on Mississippi River between Missouri River and Minneapolis, Minnesota.

2. RESERVOIRS AT HEADWATERS OF MISSISSIPPI RIVER, MN

Location. Reservoirs are on the Mississippi River and several of its tributaries in Itasca, Beltrami, Hubbard, Aitkin, Cass and Crow Wing Counties, MN. (See Table 16-H on reservoirs.)

Previous projects. For details see page 1888 of Annual Report for 1915, and page 1098 of Annual Report for 1938.

Existing project. Provides for reconstruction from timber to concrete at Winnibigoshish, Leech Lake, Pokegama, Sandy Lake and Pine River Dams, and construction of a concrete dam at Gull Lake. Pokegama was built on bedrock and the others on pile foundations. A portion of Leech Lake Dam from piers 26 to 39 was replaced with an earth fill. Constructed three dikes at Winnibigoshish, four at Pokegama, two at Sandy Lake, and 16 at Pine River. Sandy Lake Dam includes a lock 160 feet long, 30 feet wide, with a maximum lift of 9.5 feet and a depth of 2.5 feet on lower sill at low water which was converted to use as a spillway. (See Table 16-B for authorizing legislation.) The Pine River Dam main embankment consists of a timber diaphragm core and earth fill. The Pine River Dam control structure is made of reinforced concrete with a steel sheet pile cutoff and is supported on a timber substructure. Pine River Dam was modified during the period 1999-2002 to pass 70% of the Probable Maximum Flood. During this period, the 13 gate openings were enlarged and outfitted with new gates; the wing walls were modified; the existing dam and embankment was raised via addition of a parapet wall and a concrete-capped sheet pile wall, to provide 5 ft. of freeboard over the design flood; the foundation was grouted to stop seepage and fill voids; and the perimeter dikes were improved. Total Federal cost to the United States for new Dam Safety Assurance work at the Pine River Dam is $11,058,967.

Local cooperation. Fully complied with.

Terminal facilities. None.

Operation and results during fiscal year. Reservoirs were operated as required, recreation facilities and equipment maintained, and surveys, repairs, reports and data collection cost $2,881,580 Federal, including $175,430 in costs associated with the American Recovery and Reinvestment Act (ARRA) and $0 non-Federal.

Condition at end of fiscal year. Existing project was completed in 1937. Flowage rights were acquired on all lands affected by construction, maintenance, and operation of reservoirs. A total of 1,672.26 acres in fee are owned by the United States. The United States has easements, flowage rights, and other rights of use on another 296,334.44 acres. Structures are in fair condition. Recreation facilities for public use are being constructed intermittently at all reservoir areas. (See Table 16-H for capacities and costs by reservoir.) The Corps operated control structures at Lake Winnibigoshish, Leech Lake, and Pokegama are classified as significant hazard dams under the national Dam Safety Program and require substantial investments to reduce the associated risks. Construction of dam safety modifications is substantially complete at Lake Winnibigoshish Dam. Work on the remaining two sites is unscheduled due to funding constraints.

3. UPPER MISSISSIPPI RIVER RESTORATION (UMRR) (Formerly EMP)

Location. The program is authorized for the commercially navigable portions of the Upper Mississippi River System. In the St. Paul District, this includes the Mississippi, Minnesota, Black, and St. Croix Rivers in the states of Minnesota, Wisconsin and Iowa.

Existing project. The purpose of the UMRR as stated in the authorizing legislation is to ensure the coordinated development and enhancement of the Upper Mississippi River System, recognizing its several purposes. It is intended to protect and/or enhance the river resources and guide future river management. The primary emphasis of the program is on habitat rehabilitation and enhancement projects. The other primary component, long-term resource monitoring, provides the means for more informed management of the UMRS. The program was initiated by WRDA in 1986 and the 1999 WRDA extended the UMRR on a continuing basis with higher authorized funding levels. The execution of the program is closely coordinated with the Upper Mississippi River Basin Association, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and the three affected states (MN, WI, and IA) in the St. Paul District. See Rock Island District Tables 15-A and 15-B for total program costs and authorizing legislation.

Local cooperation. Local cooperation agreements are obtained for habitat project features not located on lands managed as a national wildlife refuge, as specified in Section 906(e) of the 1986 WRDA. Cost sharing is 65% Federal and 35% non-Federal for those projects.

Operations and results during fiscal year. In the St. Paul District, costs during the year totaled $6,701,996 Federal and $0 non-Federal. Funds were expended on the planning, design, construction and monitoring of habitat projects. Construction was completed at Pool 8 Islands Phase III Stage 2B, WI, and Clear Lake, MN. Construction was initiated and continued at Pool 8 Islands Phase III Stage 3A, WI. Planning and design continued on Pool 8 Islands Phase III Stage 3B, Harpers Slough, IA, and Capoli Slough, WI.

Condition at end of fiscal year. In the St. Paul District, construction of 25 habitat projects has been completed. These are the Guttenberg Waterfowl Ponds (IA), Island 42 (MN), Lake Onalaska (WI), Blackhawk Park (WI), Pool 8 Islands Phases I and II (WI), Indian Slough (WI), Finger Lakes (MN), Lansing Big Lake (IA), Cold Springs (WI), Pool 9 Island (WI), Spring Lake Peninsula (WI), Bussey Lake (IA), Peterson Lake (MN), Polander Lake (MN), East Channel (WI/MN), Rice Lake (MN), Small Scale Drawdown (WI), Trempealeau (WI), Bank Stabilization (IA, WI, MN), Long Lake (WI), Ambrough Slough (WI), Spring Lake Islands (WI), Long Meadow Lake (MN), Pool Slough (IA), and Clear Lake (MN). Most of the projects are operated and maintained by the U.S. Fish and Wildlife Service. However, projects not located on lands managed as a national wildlife refuge are maintained by the applicable state department of natural resources. Through FY 2009, funds expended by the St. Paul District have amounted to $59,752,373 for planning, design, construction and monitoring of habitat rehabilitation and enhancement projects; $970,000 for long term resource monitoring; $768,000 for economic impacts of recreation study; and $3,919,623 for program management. The annual authorized funding level for the overall program is about $33 million.

4. NAVIGATION WORK UNDER SPECIAL AUTHORIZATION

Navigation activities pursuant to Sec. 107, Public Law 87-645, as amended.

In FY 09, $4,705 was expended on Section 107.

Flood Control

5. BRECKENRIDGE, MN

Location. Breckenridge, Minnesota, is located in Wilkin County in western Minnesota, approximately 200 miles north and west of the Minneapolis-St. Paul metropolitan area. The city is bounded on the west by the Red River of the North and the Bois de Sioux River. The Ottertail River flows from the east, bisecting the city. The city of Wahpeton, ND, lies across the Red River from Breckenridge.

Existing project. A feasibility study recommended implementation of a flood damage reduction project consisting of a high-flow diversion channel located to the north of the Ottertail River and entering into the Red River and two separable permanent levee reaches that would protect all of Breckenridge. The project was authorized by WRDA 2000.

Local cooperation. A Feasibility Cost Sharing Agreement was executed between the Federal Government and the city of Breckenridge on June 29, 1999. This agreement required the city to provide 50 percent of the costs of performing the feasibility study. A Project Cooperation Agreement (PCA), negotiated between the Federal Government and the city was signed on 15 August 2002.

Operations and results during fiscal year. A construction contract for the first two phases of in-town levees was awarded in April. Continued plans and specifications for the third, and fourth phases of levee construction. Total FY 09 Federal costs were $2,455,340 and $0 non-Federal.

Condition at end of fiscal year. The project is divided into five stages: Stage 1 – the diversion channel, and Stages 2b1, 2b2, 2b3 and 2a – the levee work in the city. The Stage 1 construction contract was awarded in May 2003 and completed in June 2005; the diversion channel was used for the first time in summer 2005. During the 2006 and 2009 floods, the diversion channel prevented $72 million in damages. Construction of Stages 2b1 and 2b2, the first phases of in-town levees, were awarded. Stages 2b3 and 2a plans and specifications are underway.

6. CHIPPEWA RIVER AT MONTEVIDEO, MN

Location. Montevideo, MN, is located in western Minnesota in Chippewa County. The city is located at the confluence of the Chippewa and Minnesota Rivers.

Existing project. Overland flooding from the main stem Minnesota River and Chippewa River causes frequent flood-related problems for the city. A feasibility study evaluated structural and nonstructural alternatives for resolving the flood-related problems. The recommended plan includes construction of a new levee along Highway 7/29, an upgrade of an existing levee along the western edge of the city, a closure structure, and a new levee/road raise at Highway 212 along the southern edge of the city. The project is authorized by Section 205 of the 1948 Flood Control Act, as amended.

Local cooperation. See Annual Report for 2007 for requirements. A PCA was executed between the Federal Government and the city of Montevideo on 17 August 2007.

Operations and results during fiscal year. New Work: Total Federal costs were $984,577 and $300,000 non-Federal for Stage 1 construction and completion of Stage 2 design work.

Condition at end of fiscal year. Stage 1 construction completed, Stage 2 design work completed.

7. ELK RIVER, SHERBURNE COUNTY, MN

Location. The project is located approximately 1 mile west of the city of Elk River, MN, approximately 25 miles northwest of Minneapolis, MN.

Existing project. The emergency streambank protection project involves protection of County Road 35 that is adjacent to the north bank of Elk River in Sherburne County approximately 0.5 mile east of the intersection with County State Aid Highway 15 and approximately 1 mile north of U.S. Highway 10. The project is authorized by Section 14 of the 1946 Flood Control Act, as amended.

Local cooperation. See Annual Report for 2008 for requirements. The Project Partnership Agreement (PPA) is scheduled to be executed in the first quarter of FY 2010.

Operations and results during fiscal year. Total Federal costs were $22,184 for preparing the initial appraisal documentation.

Condition at end of fiscal year. The PPA is nearly complete.

8. FARGO – RIDGEWOOD ADDITION, ND

Location. Fargo, ND, is located in eastern North Dakota in Cass County. The project is located in the Ridgewood Addition of the city adjacent to the Red River of the North.

Existing project. Overland flooding from the Red River of the North causes frequent flood-related problems for the city. A feasibility study evaluated structural and nonstructural alternatives for resolving the flood-related problems. The recommended plan includes construction of a new levee and floodwall system starting at the south edge of the VA Medical Center property, continuing along Woodland Drive, Elm Street, and 15th Avenue; a closure structure at Elm Street; and a new pump station and other interior drainage features. The project is authorized by Section 205 of the 1948 Flood Control Act, as amended.

Local cooperation. See Annual Report for 2008 for requirements. A Project Partnership Agreement was executed between the Federal Government and the city of Fargo on April 2, 2008.

Operations and results during fiscal year. New Work: Completed design and awarded the construction contract. Total Federal costs were $3,344,479.

Condition at end of fiscal year. Initiated construction.

9. GRAND FORKS, ND, AND EAST GRAND FORKS, MN

Location. Grand Forks, North Dakota, is located in Grand Forks County in eastern North Dakota about 70 miles south of the Canadian border. East Grand Forks, Minnesota, is located at the outlet of the Red Lake River to the Red River of the North, immediately across the river from Grand Forks. (For General Location see Geological Survey map of either North Dakota or Minnesota.)

Existing project. Project was authorized by P.L. 105-277, Omnibus Appropriation Bill FY 99. Estimated cost (2009) of the entire flood damage reduction project is $412,451,000 total cost to the United States is estimated at $227,050,000 and total cost to the non-Federal sponsors (cities of Grand Forks and East Grand Forks) is estimated at $185,401,000. The flood damage reduction project consists of 30 miles of levees, floodwalls and road raises in and around both communities providing protection against a flood equivalent to the peak discharge that occurred during the devastating flood of 1997 (136,900 cubic feet per second). A secondary purpose of recreation is also included in the authorized project.

Local cooperation. A PCA was signed with both communities in January 2000.

Operations and results during fiscal year. Completed remainder of construction except for remaining minor corrections. All contracts are substantially complete. Total Federal construction costs for FY 09 were $847,896 and non-Federal costs were $344,553.

Condition at end of fiscal year. The project was certified to the 100-year level of protection in January 2007 (Grand Forks) and June 2007 (East Grand Forks). The final lift of the East Grand Forks bank stabilization was completed in September 2008, which completes the project to the 250-year level of protection.

10. HOMME LAKE AND DAM, ND

Location. The dam is on the South Branch of Park River approximately 4 miles upstream from Park River, ND, and 62.1 miles above mouth of Park River. South, Middle, and North Branches, headwater streams of Park River, rise in Cavalier County in northeastern North Dakota and flow easterly 35 miles to join Red River of the North approximately 35 miles south of the international boundary. (For general location , see Geological Survey map of North Dakota.)

Existing project. See Annual Report for 1962. Project was authorized as Park River Reservoir by 1944 Flood Control Act (S. Doc. 194, 78th Cong., 2d sess.) and redesignated Homme Reservoir and Dam by Public Law 435, 80th Congress, 2d session. Project restoration of wetland habitat conditions is taking place under the authority contained in Section 1135 of the 1986 Water Resources Development Act (WRDA), as amended. Latest published maps are in the project document. A reconnaissance report was completed in 1994 under the Dam Safety Assurance Program. The report recommended adding a new spillway to increase the dam's discharge capacity to the Probable Maximum flood level. Estimated cost to the United States for new Dam Safety Assurance work is $11,600,000 and $77,000 is to be contributed by local interests.

Local cooperation. Fully complied with. Total costs for all requirements of local cooperation under terms of project authorization, including required non-Federal contributions, were $62,800. In addition, local interests contributed $16,220 for construction of a water supply outlet through dam and incurred other costs of $19,600. The North Dakota Game and Fish Department has agreed to serve as the non-Federal sponsor for the environmental improvement to the project.

According to current dam safety cost sharing guidance, local sponsors are required to fund 15 percent of the dam safety improvement costs in the same proportion as the original construction was cost shared. The local sponsors would therefore pay for 4.5 percent of 15 percent or 0.68 percent of the dam safety costs. The North Dakota Office of the State Engineer has supported the proposed modifications identified in the Reconnaissance Report.

Operations and results during fiscal year. Maintenance: Structure was operated, maintained, inspected and evaluations were performed at a cost of $152,408, including $6,278 associated with ARRA. Dam Safety: Total Federal costs of $55,697 and non-Federal costs of $0.

Condition at end of fiscal year. Project completed in June 1956 except for additional recreational facilities which have been done intermittently since that time. Construction began in April 1948 and major structures were completed in May 1951. Structures are in good condition. Government has acquired 395 acres of land in fee and easements over 7.8 acres of land for project. An additional 6.3 acres of land have been donated for recreational development and 3.75 acres have been acquired due to bank erosion bordering the project. Construction of a habitat improvement project (under Section 1135

authority) was completed, and the project was turned over to the local sponsor, the North Dakota Fish and Game Department. Homme Dam has been classified as a high hazard dam under the National Dam Safety Program due to inadequate spillway capacity which could lead to dam failure during a flood event. Engineering and design of dam safety modifications has been completed, and construction of a new concrete spillway was completed in October 2003.

11. LAC QUI PARLE RIVER, DAWSON, MN

Location. The project is located in the city of Dawson, MN, in Lac qui Parle County in west-central Minnesota, approximately 150 miles west of Minneapolis, MN.

Existing project. A large segment of Dawson would be protected against a 200-year flood on the West Branch by a levee constructed across the southeastern portion of the community. This levee would prevent flows from the West Branch from backing up into the county ditch. Interior runoff would be collected and pumped into the West Branch via a pump station. The project is authorized by Section 205 of the 1948 Flood Control Act, Public Law 80-858, as amended (33 U.S.C. 701s).

Local cooperation. See Annual Report for 2008 for requirements. The PCA was executed with the city of Dawson on 26 October 2007.

Operations and results during fiscal year. Total Federal costs were $1,185,604 and $1,087,885 non-Federal. Principal work features of a construction contract awarded in September 2008 included demolition, approximately 1,845 feet of levee, a combination pump station/gravity outlet structure, road raises, ramps, culverts, ditch excavation, removal of an abandoned sanitary line, riprap, top soil, and seeding and associated items. Work also included the provision of pumps and a trailerable emergency generator.

Condition at end of fiscal year. Progress of construction was about 90% complete.

12. MINNEHAHA CREEK WALLS, MINNEAPOLIS, MN

Location. The project is located on Minnehaha Creek in Minneapolis, MN, in Hennepin County just upstream and downstream of Minnehaha Falls.

Existing project. The emergency streambank protection project involves protection of the historic Works Progress Administration (WPA) walls that run parallel to Minnehaha Creek, both upstream and downstream of the falls. The project is authorized by Section 14 of the 1946 Flood Control Act, as amended.

Local cooperation. See Annual Report for 2008 for requirements. The PPA was executed on 19 August 2008.

Operations and results during fiscal year. Design of the project was completed in December 2008 and construction began in January 2009. Construction was completed ahead of schedule in May 2009. Federal costs were $983,788 and non-Federal were $768,018.

Condition at end of fiscal year. Project is complete.

13. ROSEAU, MN

Location. Roseau, MN, is located in Roseau County in northwestern Minnesota approximately 10 miles south of the Canadian border and 65 miles east of the North Dakota border.

Existing project. The city was devastated by a major flood in 2002 that had a duration of several weeks and heavily impacted 80 percent of the town. The recommended locally preferred plan consists of a 150-foot-wide east side diversion channel, three bridges, a restriction structure, and two storage areas designed to reduce flood stages in the city with stage decreases upstream of Roseau to Malung. This plan will remove almost the entire city from the 100-year regulatory flood plain and reduces future flood damages by nearly 86 percent. Project was authorized by the Water Resources Development Act of 2007 (Public Law 110-114).

Local cooperation. A PPA, executed between the Federal Government and the city of Roseau, on June 15, 2009, required the city to contribute a minimum of 35%, but not to exceed 50% of total National Economic Development (NED) flood risk management costs, contribute 50% of total recreation costs, contribute 100% of incremental costs, and upon notification of completion by the District Commander, to operate and maintain the project.

Operations and results during fiscal year. New Work: An A-E contract was awarded for preparation of construction contract plans and specifications. The local sponsor substantially completed one highway bridge and achieved significant progress on construction of a second. The local sponsor also initiated land acquisitions. Total Federal costs were $758,274 including $744,141 in ARRA funding.

Condition at end of fiscal year. Construction of this project is ongoing. Plans and specifications are being completed for remaining portions of the project.

14. SARTELL, MN

Location. The project is located in Sartell, MN, approximately 100 miles west of Minneapolis, MN.

Existing project. The emergency streambank protection project involves protection of a sanitary sewer line that runs parallel to the Mississippi River just downstream of Veterans Memorial Park. The project is authorized by Section 14 of the 1946 Flood Control Act, as amended.

Local cooperation. See Annual Report for 2007 for requirements. The PCA was approved by the MVD Commander for execution on 26 September 2007.

Operations and results during fiscal year. Total Federal costs were $-20,759 and non-Federal $25,882 for completion of project construction.

Condition at end of fiscal year. Construction is complete and project closeout is ongoing.

15. SHEYENNE RIVER, ND

Location. The Sheyenne River Basin is included in 16 counties in the southeastern portion of North Dakota and drains an area of 7,140 square miles into the Red River of the North near Fargo, North Dakota. The principal area of flood damages in the basin is located at the lower end within Cass County and the city of West Fargo. (For general location, see Geological Survey map of North Dakota.)

Existing project. The project as authorized by the 1986 WRDA consists of three major components for Federal implementation: 1) 11.9 miles of levee and a 6.7 mile flood diversion channel at West Fargo; 2) 7.5 miles of flood diversion channel from Horace to West Fargo; and 3) a five-foot raise of the Baldhill Dam flood control pool. The WRDA of 1986 stipulated that the project shall also include a dam and reservoir of approximately 35,000 acre-feet of storage for the purpose of flood protection on the Maple River. This component was deauthorized April 16, 2002. There are several items of local cooperation required to implement the plan, and several components identified for non-Federal implementation which would supplement the recommended plan. Estimated cost (2000) to the United States for new work is $31,130,000 and $12,470,000 is to be contributed by local interests.

Local cooperation. See Annual Report for 1988 for requirements. Project consists of three separable components each requiring a local cooperation agreement. The Southeast Cass Water Resource District is the local sponsor for the West Fargo Unit and the Horace to West Fargo Unit. The local cooperation agreement for the West Fargo Unit was executed on July 25, 1988 (amended on June 4, 2001), and for the Horace to West Fargo unit on Mar. 6, 1990. The Sheyenne River Joint Water Resource District is the local Sponsor for the Baldhill Pool Raise Unit. The Local Cooperation Agreement for the Baldhill Pool Raise Unit was executed on May 31, 2000. The Maple River Reservoir Unit was deleted from the project.

Operations and results during fiscal year. Preparation of draft Flood Insurance Rate Maps was completed. Work continued on acquisition of lands. Total Federal costs were $484,991 and non-Federal costs were $46,022.

Condition at end of fiscal year. Construction of the West Fargo Unit is essentially complete, including the installation of emergency generators for the two pump stations; and construction is complete on the Horace to West Fargo Unit. Both of these units were operated during the spring and summer floods of 1993 and the spring floods in 1994, 1995, 1996, and 1997 and performed very well although some erosion damage was sustained on both projects. Plans and specifications were completed to repair 6,000 feet of the failed slope sections of the Horace to West Fargo diversion channel. Construction repair began in June 2008 and will be complete in 2010. Construction of the Baldhill Pool Raise Unit is essentially complete, except for final surveying and monumentation.

16. ST. CROIX RIVER, STILLWATER, MN

Location. In Washington County in eastern Minnesota along the St. Croix River about 18 miles northeast of St. Paul, (For general location, see Geological Survey map of Minnesota).

Existing project. The project provided for Stage 1 repair and reconstruction of the existing 1,000-foot retaining wall system; Stage 2 for construction of a 1,000-foot extension to the wall and expansion of the wall system to include a new secondary landward floodwall to aid in erosion protection for the downtown area; and Stage 3 for expansion of the floodwall system by constructing a low floodwall / levee along the western side of Lowell Park. Estimated Federal cost for new work is $13,125,000 and $4,375,000 is to be contributed by local interests. Project was authorized by the WRDA of 1992 (Public Law 102-580) as amended by the WRDA of 1996 (Public Law 104-303). The Consolidated Appropriations Act of 2004 directed the Corps to proceed with design and initiate construction for Stage 3 of the Stillwater project using previously appropriated funds.

Local cooperation. See Annual Report for 1996 for requirements. A PCA was executed between the Federal Government and the city of Stillwater, MN, on 22 April 1996 which covered Stage 1 of the project. An amendment to the PCA to encompass Stage 2 was executed on 29 September 1998. A second amendment to the PCA to encompass Stage 3 will be required.

Operations and results during fiscal year. Continued Stage 3 Engineering Documentation Report (EDR). Total Federal costs were $15,307.

Condition at end of fiscal year. Construction of Stages 1 and 2 are complete. Work continued on the Engineering Documentation Report for the third stage of construction.

17. WAHPETON, ND

Location. Wahpeton, ND, is located in Richland County in eastern North Dakota, approximately 55 miles south of Fargo, ND. The Red River of the North and the Bois de Sioux River bound the city on the east. The confluence of the Ottertail River with the Red River of the North is located at Wahpeton. The city of Breckenridge, MN, lies across the Red River of the North from Wahpeton.

Existing project. A feasibility study recommended implementation of a flood reduction project that consists of a permanent levee system protecting most of the city and a flood easement to keep the breakout floodflows from being blocked in the future. The project is authorized by Section 205 of the 1948 Flood Control Act, as amended.

Local cooperation. See Annual Report for 2001 for requirements. The PCA was executed between the Federal Government and the city of Wahpeton on 18 June 2002. A PCA amendment was executed in FY 08 implementing WRDA 2007 which raised the Federal limit on the Wahpeton project from $7 to $12 million.

Operations and results during fiscal year. Completed construction of Stage 2, the first phase of levee construction, and started construction of Stage 3a levees. Total FY 09 Federal costs were $1,255,307 and non-Federal $833,409.

Condition at end of fiscal year. Project construction began in the summer of 2003 with award of the Stage 1 construction contract for interior flood control features; this construction stage is complete. Construction for Stage 2, the first stage of levees, is complete. Construction for Stage 3a is underway. Plans and specifications for Stage 3b, the third of three stages of in-town levees, have been initiated.

Environmental

18. MILLE LACS REGIONAL WASTEWATER, MN

Location: Project is located in the city of Garrison and the townships of Kathio and West Mille Lacs (GKWML). Existing development along the western shoreline of Mille Lacs Lake, one of the largest and most popular trophy fishing lakes in Minnesota, consists of a mixture of residential, commercial, and Mille Lacs Band of Ojibwe housing and casino structures. Most of the structures' wastewater is treated by individual unreliable septic systems.

Existing project: The GKWML Sanitary District and the Mille Lacs Band entered into an agreement to design, construct, and operate a regional wastewater treatment project. The Band completed construction of the Regional Sewage Treatment Plant. The GKWML

Sanitary District is constructing a sanitary sewer line to collect and transfer wastewater within its jurisdiction to the Band's Regional Sewage Treatment Plant.

Local cooperation: The estimated total cost of the GKWML portion of the project is $16,500,000. Section 219 funds will be used to assist the Sanitary District in the construction of a "functional" portion of the GKWML project. A Design Section 219 Project Cooperation Agreement was signed in April 2005, and the design of the project has been completed. A Construction PCA was signed on 16 December 2006 for construction of the project, and a construction contract was awarded on 17 June 2007.

Operations and results during fiscal year. The Corps awarded the base portion of the construction contract on June 15, 2007, for $1.4 million. During FY 08 three other contract options were exercised totaling an additional $4 million. The final contract option was awarded during FY 09 on May 11, 2009. Federal costs were $1,870,822 and non-Federal were $1,099,098.

Condition at end of fiscal year. Construction of all contracted areas was substantially complete at the end of the FY. The completion of the project is approximately 1 year ahead of schedule.

19. NORTHEASTERN MINNESOTA

Location. Northeastern Minnesota is defined as the counties of Aitkin, Beltrami, Carlton, Cass, Chisago, Cook, Crow Wing, Hubbard, Isanti, Itasca, Kanabec, Koochiching, Lake, Mille Lacs, Morrison, Pine, St. Louis, and Wadena, Minnesota. Areas within the 18 counties essentially comprise Minnesota Congressional District 8.

Existing project. Section 569 of the Water Resource Development Act of 1999 provided the Corps authority to assist Northeastern Minnesota communities with their environmental infrastructure projects. Over 64 projects have been selected in 44 communities. Omnibus funds available in FY 09 were used to support three projects in the Detroit District. FY 09 ARRA funds were used to support two projects in the Detroit District and 10 projects in the St. Paul District.

Local cooperation. The PCAs for the above listed projects require the local sponsor to provide lands, easements, and rights of way, as well as the required 25 percent local Sponsor cost share funding. The program is operated on a reimbursable basis. The government and local sponsor agree on Project cost and work. The Sponsor retains a contractor to perform the work. Upon receipt of proper invoice and Government construction inspector verification that the work was performed, the Government reimburses the Sponsor for 75 percent of the invoice billing.

Operations and results during fiscal year. Five new PCAs were signed within the St. Paul District in FY 09. Construction inspection activities and reimbursements were made to the non-Federal project sponsors as appropriate. Federal costs were $1,153,781, including $113,356 funded under the ARRA.

Condition at end of fiscal year. Five FY 09 ARRA funded projects will be pursued in FY 10 with the communities of Garrison, Willow River, Hackensack, Leech Lake Indian Reservation, and Coleraine-Bovey-Taconite. Construction is nearing completion with the FY 08 projects of Brook Park and Sturgeon Lake. A PCA was signed with Bois Forte October 19, 2009.

20. NORTHERN WISCONSIN

Location: Northern Wisconsin is defined as the Counties of Douglas, Bayfield, Ashland and Iron, Wisconsin. These four counties are located within Wisconsin Congressional District 7.

Existing project: Section 154 of the Consolidated Appropriations Act of 2001 (P.L. 106-554) provided authorization for the Corps of Engineers to assist northern Wisconsin communities with their environmental infrastructure and water resource projects. Fourteen projects were selected in FY 09 for implementation using Omnibus funds of which 3 projects were located in the St. Paul District. Two additional ARRA funded projects were also pursued in the St. Paul District.

Local cooperation. The PCAs require the local sponsor to provide lands, easements, and rights-of-way, as well as the required 25 percent local Sponsor cost share funding. The program is operated on a reimbursable basis. The government and local sponsor agree on Project cost and work. The Sponsor retains a contractor to perform the work. Upon receipt of proper invoice and Government construction inspector verification that the work was performed, the Government reimburses the Sponsor 75 percent of the invoice billing.

Operation and results during fiscal year. Two new PCAs were signed in FY 09 for projects with the villages of Butternut and Solon Springs, WI, using ARRA funds. In addition, three Omnibus projects were pursued with the town of Dairyland, the Upper St. Croix Lake Sanitary District, and the town of Gordon. Federal costs were $701,848, including $114,930 funded under the ARRA.

Condition at end of fiscal year. A PCA was signed with the Upper St. Croix Lake Sanitary District on October 14, 2009. The FY 08 Village of Butternut Water and Sewer Systems Improvements project is nearing the end of its project construction phase, and the FY 08 Upper St. Croix Lake Sanitary District project has been completed.

21. OHIO AND NORTH DAKOTA ENVIRONMENTAL INFRASTRUCTURE, ND

Location. The area from which potential projects may be initiated includes the entire State of North Dakota.

Existing project. Section 111 of the Consolidated Appropriations Act of 2008 amends the Water Resources Development Act of 1999 by striking "Sec. 594. Ohio." And inserting in lieu thereof "Sec. 594 Ohio and North Dakota." This Act established an authorization of $100,000,000 for North Dakota. It provided the Corps authority to assist North Dakota communities with their environmental infrastructure projects. Omnibus funds available in FY 09 were used to support the city of Devils Lake Water Supply project in the St. Paul District. In addition, ARRA funds in the amount of $7,050,000 were used to support the city of Valley City, Cass Rural Water Users District, and the Southeast Rural Water Users District within the St. Paul District.

Local cooperation. The PCAs for projects under this authority require the local sponsor to provide lands, easements, and rights-of-way, as well as the required 25 percent local Sponsor cost-share funding. The program is operated on a reimbursable basis. The Government and local sponsor agree on project cost and work. The Sponsor retains a contractor to perform the work. Upon receipt of proper invoice and Government construction inspector verification that the work was performed, the Government reimburses the Sponsor for 75 percent of the invoice billing.

Operations and results during fiscal year. A PCA was signed between the St. Paul District and the city of Valley City on July 24, 2009; with the Southeast Water Users District on July 24, 2009; and with the Cass Rural Water Users District on September 21, 2009. Additional Omnibus appropriated funds were added to the FY 08 PCA with the city of Devils Lake, ND. Federal costs were $2,384,731, including $412,856 funded under the ARRA.

Condition at end of fiscal year. Project design and/or construction work has been initiated on all projects. The city of Valley City Sewer and Water Systems Improvements project is already under construction and nearing completion of the most critical areas.

22. ST. CROIX FALLS, SEWAGE TREATMENT PLANT, WI

Location. The project is located in the city of St. Croix Falls, Polk County, WI, in the Wisconsin 7th Congressional District.

Existing project. Project was authorized by Section 120 of the Consolidated Appropriations Act (CAA) of 2005. Section 120 of the CAA, 2005, amended Section 219 of WRDA 1992 to include St. Croix Falls ($5,000,000 for wastewater infrastructure). The project was initially funded in the amount of $350,000 in the Emergency Appropriations Act of 2005. The city is in the process of replacing its aging wastewater treatment plant. The city's existing wastewater treatments plant (WWTP) is 50 years old. It currently discharges 350,000 gallons of treated wastewater to the St. Croix River daily. While technically the WWTP meets current discharge requirements, aging equipment and changing water quality standards seriously compromise its ability to perform. The city spent $700,000, in local funds in the year 2000 to make major repairs on the WWTP and keep it running until it can be reconstructed.

Local cooperation. A Design Agreement was signed between the Federal Government and the city of St. Croix Falls on 19 July 2005. The estimated total cost of the St. Croix Falls wastewater project is over $6,000,000. Congress has authorized and appropriated $5,000,000 of Federal funds for the project. The PCA for the Section 219 program requires 25 percent local Sponsor cost share funding. The Federal share under the agreement is not more than 75 percent.

Operations and results during fiscal year. Work was halted on a facility plan when the city gave the facility planning process to an outside engineering firm not under contract with the Corps. That firm submitted a facility plan amendment identifying re-modeling and expansion of the existing treatment plant as the preferred alternative. At this time, the Corps is negotiating the design of the project with the applicable engineering firms. Federal costs were $53,261 and non-Federal costs were $8,284.

Condition at end of fiscal year. The city of St. Croix Falls hired an outside engineering firm to pursue reconditioning of the existing WWTP. That firm's amendment to the draft facility plan was reviewed by the Corps and accepted. The plan was submitted to the Wisconsin Department of Natural Resources for approval. The Corps is pursuing a negotiated contract for the design of the project.

Miscellaneous

23. LOWER ST. ANTHONY FALLS RAPIDS RESTORATION, MN

Location. The project is located on the Mississippi River, within the city of Minneapolis, MN. The LSAF restoration would include development of a formal whitewater rapids channel and trail/park on the east bank of the Mississippi River, adjacent to the U.S. Army Corps of Engineers LSAF Lock and Dam.

Existing project. The project was authorized by Section 527 of WRDA 2000. The facility would include a recreational whitewater course for kayaking, canoeing, and rafting, as well as improved public access to the river and formal shore fishing opportunities. The facility would utilize the vertical drop created by the LSAF dam and include a new river channel approximately 2,000 feet long and 40 feet wide, with a vertical drop of 25 feet. The channel would flow parallel to the Mississippi River main stem in a park setting.

Local cooperation. A design agreement was executed between the Federal Government and the State of Minnesota Department of Natural Resources (MnDNR) on 28 February 2002. For much of FY 07, the project was on hold pending MnDNR resolution of key project design issues. Upon approval of the Engineering Documentation Report and NEPA documentation, the PCA will be prepared for execution with MnDNR.

Operation and results during fiscal year. Following the I-35 bridge collapse, the continued work with Local Sponsor on Engineering Documentation Report and validation of MnDNR report, including project definition, environmental compliance, and budget support was delayed. Federal costs were $42,584.

Condition at end of fiscal year. Finalizing Engineering Documentation Report.

24. INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Flood control projects turned over to local interests were inspected to determine that project channels are kept clean and unobstructed, dikes and revetments are in good condition, and structures are in good repair and operable. Deficiencies, if any, were minor unless noted. (See Table 16-J on inspection of completed flood control projects.)

Cost for the period was $573,391, including $458 ARRA costs. Total cost to Sep. 30, 2009, is $4,163,730.

25. PROTECTION OF NAVIGATION

During FY 09, operation and maintenance costs were $25,421 for Project Condition Surveys and $92,351 for Surveillance of Northern Boundary Waters.

26. OTHER WORK UNDER SPECIAL AUTHORITY

In the Sign Standards Programs (as described in Chapter 6, ER 1130-2-500), there were costs of $117,018.

27. FLOOD CONTROL AND COASTAL EMERGENCIES (FC&CE)

Disaster Preparedness	$ 333,044
Emergency Operations	24,556,660
Rehabilitation and Inspection Program	3,049,662
Advance Measures	18,886
Total FC&CE	$27,958,252

28. CATASTROPHIC DISASTER PREPAREDNESS PROGRAM (CDPP)

Continuity Disaster Response Planning	$ 8,990

29. REGULATORY PROGRAM

Permit Evaluation	$6,696,582[1]
Enforcement	513,077
Environmental Impact Statements	152,559
Compliance	332,251[2]
Total Regulatory	$6,718,181

[1] Includes $191,064 in costs attributed to ARRA of 2009.

[2] Includes $68,967 in costs attributed to ARRA.

Investigations

30. SURVEYS

Fiscal year cost was $3,057,677, including $153,482 in costs attributed to the ARRA of 2009. Also included were 12 feasibility studies, miscellaneous activities, and coordination with both Federal and non-Federal agencies. Table 16-N provides a specific list and respective fiscal year expenditures.

31. COLLECTION AND STUDY OF BASIC DATA

Fiscal year cost was $94,364 which included the items concerning international water studies, floodplain Management services and hydrologic studies. Table 16-N provides a specific list and respective fiscal year expenditures.

32. ADVANCE ENGINEERING AND DESIGN

Fiscal year cost was $13.381 which included one local protection project. Table 16-N provides a specific list and respective fiscal year expenditures.

TABLE 16-A COST AND FINANCIAL STATEMENT

See Section In Text	Project	Funding	FY06	FY07	FY08	FY09	Total Cost to Sep. 30, 2009
2.	Reservoirs at Headwaters of Mississippi River, MN	New Work:					
		Approp.	0	0	0	0	4,398,628
		Cost	0	0	0	0	4,398,628[1]
		Maint:					
		Approp.	2,867,000	2,864,000	3,423,000	2,884,140	97,966,889
		Cost	3,819,579	2,934,547	3,423,049	2,706,150	97,733,473[2]
		Maint: (ARRA)					
		Approp	0	0	0	3,512,950	3,512,950
		Cost	0	0	0	175,430	175,430
		Maj. Rehab:					
		Approp.	0	0	0	0	425,000
		Cost	0	0	0	0	425,000
		Dam Safety:					
		Approp.	0	0	0	0	11,059,000
		Cost	0	0	0	0	11,059,000
5.	Breckenridge, MN	New Work:					
		Approp.	1,114,000	2,400,000	3,936,000	4,000,000	20,123,140
		Cost	838,997	1,160,189	706,987	2,455,340	13,834,432
	(Contributed Funds)	New Work:					
		Contrib.	0	319,000	0	0	1,867,500
		Cost	68,265	42,355	88	0	1,572,285
6.	Chippewa River at Montevideo, MN	New Work:					
		Approp.	651,000	1,780,000	3,444,000	98,000	6,999,200
		Cost	220,446	75,500	383,097	984,577	2,687,646
	(Contributed Funds)	New Work:					
		Contrib.	0	515,000	0	0	764,175
		Cost	0	0	0	300,000	249,175
7.	Elk River, Sherburne County, MN	New Work:					
		Approp.	20,000	80,000	320,000	0	420,000
		Cost	3,792	23,906	48,353	22,184	98,235
8.	Fargo - Ridgewood Addition, ND	New Work:					
		Approp.	381,000	3,372,000	1,200,000	100,000	5,437,600
		Cost	150,678	390,284	273,042	3,344,479	4,525,885
	(Contributed Funds)	New Work:					
		Contrib.	0	0	1,050,000	0	1,317,500
		Cost	4,254	0	0	0	267,500
9.	Grand Forks, ND-East Grand Forks, MN	New Work:					
		Approp.	39,600,000	15,018,000	150,000	383,000	224,433,000
		Cost	35,490,852	14,746,359	3,947,041	847,896	224,313,183
	(Contributed Funds)	New Work:					
		Contrib.	6,988,281	0	0	0	46,754,356
		Cost	7,293,272	2,881,635	1,018,351	344,553	46,163,301

TABLE 16-A (Continued) COST AND FINANCIAL STATEMENT

See Section In Text	Project	Funding	FY06	FY07	FY08	FY09	Total Cost to Sep. 30, 2009
10.	Homme Lake and Dam, ND	New Work:					
		Approp.	0	0	0	0	1,419,097
		Cost	0	0	0	0	1,419,097[3]
		Maint:					
		Approp.	236,000	166,000	162,000	305,140	6,262,398
		Cost	245,318	215,680	148,744	146,130	6,089,854
		Maint: (ARRA)					
		Approp	0	0	0	90,000	90,000
		Cost	0	0	0	6,278	6,278
		Dam Safety:					
		Approp.	0	0	231,000	0	12,149,500
		Cost	2,844	0	121,937	55,697	12,096,008
11.	Lac qui Parle River , Dawson, MN	New Work:					
		Approp.	190,000	1,222,000	442,000	100,000	2,765,900
		Cost	141,986	292,698	67,092	1,185,604	2,499,226
	(Contributed Funds)	New Work:					
		Contrib.	0	0	884,695	342,305	1,403,383
		Cost	0	0	0	1,087,885	1,262,800
12.	Minnehaha Creek, Walls, MN	New Work:					
		Approp.	0	0	155,000	847,000	1,002,000
		Cost	0	0	15,147	983,788	998,935
	(Contributed Funds)	New Work:					
		Contrib.	0	0	73,300	456,950	530,250
		Cost	0	0	1,359	512,707	514,066
13.	Roseau, MN	New Work:					
		Approp	74,000	416,000	25,000	500,000	1,015,000
		Cost	14,368	437,573	49,678	14,133	515,752
		New Work: (ARRA)					
		Approp	0	0	0	4,480,000	4,480,000
		Cost	0	0	0	744,141	744,141
	(Contributed Funds)	New Work:					
		Contrib.	0	0	0	23,307	23,307
		Cost	0	0	0	0	0

TABLE 16-A (Continued) COST AND FINANCIAL STATEMENT

See Section In Text	Project	Funding	FY06	FY07	FY08	FY09	Total Cost to Sep. 30, 2009
14.	Sartell, MN	New Work:					
		Approp.	20,000	349,000	0	0	369,000
		Cost	5,454	69,105	214,101	-20,759	267,901
	(Contributed Funds)	New Work:					
		Contrib.	0	0	88,200	-3,922	84,278
		Cost	0	0	58,396	25,882	84,278
15.	Sheyenne River, ND	New Work:					
		Approp.	544,000	1,740,000	0	0	38,486,000
		Cost	119,857	445,882	556,584	484,991	37,807,426[4]
	(Contributed Funds)	New Work:					
	Horace to W. Fargo	Contrib.	0	0	0	0	424,318
		Cost	0	0	0	0	424,318
	(Contributed Funds)	New Work:					
	W. Fargo	Contrib.	37,500	0	85,000	0	3,018,500
		Cost	0	10,001	44,156	46,022	2,996.039
16.	St. Croix River,	New Work:					
	Stillwater, MN	Approp.	22,000	1,821,000	1,265,000	0	8,310,900
		Cost	35,074	29,837	566,151	15,307	5,832,190
	(Contributed Funds)	New Work:					
		Contrib.	0	200,000	0	0	1,595,000
		Cost	0	0	0	0	1,395,000
17.	Wahpeton, ND	New Work:					
		Approp.	0	0	2,558,000	2,442,000	12,000,000
		Cost	0	0	1,780,898	1,255,307	10,036,205
	(Contributed Funds)	New Work:					
		Contrib.	0	175,000	2,764,900	0	5,202,900
		Cost	37,727	199,091	208,374	833,409	3,478,566
18.	Mille Lacs	New Work:					
	Regional Wastewater,	Approp.	1,114,000	3,334,000	936,000	957,000	6,548,000
	MN	Cost	311,632	506,082	3,323,370	1,870,822	6,097,279
	(Contributed Funds)	New Work:					
		Contrib.	0	1,305,000	220,000	319,000	1,944,000
		Cost	2,365	41,539	768,018	1,099,098	1,911,602

TABLE 16-A (Continued) COST AND FINANCIAL STATEMENT

See Section In Text	Project	Funding	FY06	FY07	FY08	FY09	Total Cost to Sep. 30, 2009
19.	Northeastern MN	New Work:					
		Approp.	2,830,000	315,000	996,000	0	7,693,000
		Cost	987,635	1,121,384	775,377	1,040,425	7,244,048
		New Work: (ARRA)					
		Approp.	0	0	0	6,897,000	6,897,000
		Cost	0	0	0	113,356	113,356
20.	Northern WI	New Work:					
		Approp.	1,247,000	129,000	1,074,000	680,000	5,006,000
		Cost	1,030,922	709,384	264,627	586,918	3,768,094
		New Work: (ARRA)					
		Approp	0	0	0	1,309,500	1,309,500
		Cost	0	0	0	114,930	114,930
21.	Ohio and North Dakota Environmental Infrastructure, ND	New Work:					
		Approp.	0	0	5,904,000	1,600,000	7,504,000
		Cost	0	0	47,450	1,971,875	2,019,325
		New Work: (ARRA)					
		Approp	0	0	0	7,050,000	7,050,000
		Cost	0	0	0	412,856	412,856
22.	St. Croix Falls, Sewage Treatment Plant, WI	New Work:					
		Approp.	0	0	443,000	4,207,000	5,000,000
		Cost	107,730	6,980	41,884	53,261	237,448
	(Contributed Funds)	New Work:					
		Contrib.	0	0	147,700	0	255,700
		Cost	32,675	14,506	-23,591	8,284	34,672
23.	Lower St Anthony Falls, Rapids Restoration, MN	New Work:					
		Approp.	20,000	1,953,000	0	0	2,863,000
		Cost	3,504	21,887	20,623	42,584	975,091
	(Contributed Funds)	New Work:					
		Contrib.	0	0	0	150,000	483,000
		Cost	30,695	-19,244	0	0	291,894

1. Includes $681,805 for new work for previous project.
2. Includes $100,857 for maintenance for previous projects and Maintenance and Operation of Dams funds of $126,391. Also includes funding for Reservoir Operating Plan Evaluation (ROPE) study.
3. Excludes $56,220 contributed funds. Includes $23,000 expended during FY 91-95 under Section 1135, Public Law 99-662 authority.
4. Excludes $1,150,000 sunk costs for deauthorized Kindred Lake unit (see Table 16-G). Excludes $475,000 for costs associated with inactive Maple River unit.

TABLE 16-B AUTHORIZING LEGISLATION

See Sec. in Text	Date of Authorizing Act	Project and Work Authorized	Documents
2.		**RESERVOIRS AT HEADWATERS OF MISSISSIPPI RIVER, MN**	
	March 3, 1899	Reconstruct 4 of the 5 original dams and surveys to determine extent of lands overflowed by reservoirs.	
	March 2, 1907	Reconstruct Sandy Lake Dam and construct Gull Lake Reservoir.	
	June 25, 1910	Construct an equalizing canal between Winnibigoshish and Leech Lake Reservoirs (no work was done and this part of the project abandoned in Act of Mar. 4, 1915).	H. Doc. 363, 61st Cong., 2nd sess.
	July 27, 1916	Abandonment of ditches connecting Long Lake, Round Lake, and Gull Lake.	H. Doc. 413, 64th Cong., 1 sess.[1]
	June 26, 1934[2]	Operation and maintenance provided for with funds from War Department appropriations for rivers and harbors.	
5.		**BRECKENRIDGE, MN**	
	June 30, 1948		Sec 205 1948 Flood Control Act, as amended (Public Law 80-858)
	Dec. 11, 2000		WRDA 2000 – Public Law 106-541
6.		**CHIPPEWA RIVER AT MONTIVIDEO, MN**	
	June 30, 1948		Sec 205, 1948 Flood Control Act, as amended (Public Law 80-858)
7.		**ELK RIVER, SHERBURNE COUNTY, MN**	
	July 24, 1946		Sec 14, 1946 Flood Control Act, as amended (Public Law 79-526)
8.		**FARGO – RIDGEWOOD ADDITION, ND**	
	June 30, 1948		Sec 205, 1948 Flood Control Act, as amended (Public Law 80-858)
9.		**GRAND FORKS, ND AND EAST GRAND FORKS, MN**	
	October 21, 1998		Public Law 105-277, Omnibus Appropriation Bill, FY 99
10.		**HOMME LAKE AND DAM, ND**	
	December 22, 1944	Authorized as Park River Reservoir	1944 Flood Control Act (S. Doc. 194, 78th Cong., 2d sess.)
		Redesignated Homme Reservoir and Dam	Public Law 435 (80th Cong., 2d sess.)
	November 17, 1986	Project restoration of wetland habitat conditions	Sec 1135 1986 WRDA – Public Law 99-662
11.		**LAC QUI PARLE RIVER, DAWSON, MN**	
	June 30, 1948		Sec 205, 1948 Flood Control Act, as amended (Public Law 80-858)
12.		**MINNEHAHA CREEK WALLS, MN**	
	July 24, 1946		Sec 14, 1946 Flood Control Act, as amended (Public Law 79-526)
13.		**ROSEAU, MN**	
	November 8, 2007		WRDA 2007 (Public Law 110 114)

TABLE 16-B (Continued) AUTHORIZING LEGISLATION

See Sec. in Text	Date of Authorizing Act	Project and Work Authorized	Documents
14.		**SARTELL, MN**	
	July 24, 1946		Sec 14, 1946 Flood Control Act, as amended (Public Law 79-526)
15.		**SHEYENNE RIVER, ND**	
	November 17, 1986	Project shall include a dam and reservoir of approximately 35,000 acre-feet of storage for the purpose of flood protection Maple River.	WRDA 1986 – Public Law 99-662
16.		**ST. CROIX RIVER, STILLWATER, MN**	
	October 31, 1992		Sec 363, WRDA 1992 (Public Law 102-580)
	October 12, 1996		Sec 301, WRDA 1996 (Public Law 104-303)
	January 31, 2004	Secretary of the Army, acting through the Chief of Engineers, is directed to use previously appropriated funds to proceed with design and initiate construction to complete the Stillwater, Minnesota, Levee and Flood control project**.**	Sec 124, Consolidated Appropriations Act of 2004 (Public Law 108-199)
17.		**WAHPETON, ND**	
	June 30, 1948		Sec 205 1948 Flood Control Act, as amended (Public Law 80-858)
18.		**MILLE LACS REGIONAL WASTEWATER, MN**	
	October 31, 1992		WRDA 1992, as amended by Sec 108(d) of the Consolidated Approp. Act of 2001 (Public Law 106-554)
19.		**NORTHEASTERN, MN**	
	August 17, 1999		WRDA 1999 – (Public Law 106–53, Sec. 569)
20.		**NORTHERN, WI**	
	December 15, 2000		Sec 154 2001 Consolidated Appropriations Act (Public Law 106-554)
21.		**OHIO AND NORTH DAKOTA ENVIRONMENTAL INFRASTRUCTURE, OH AND ND**	
	August 17, 1999		WRDA 1999, as amended by Sec 111 of the Consolidated Approp. Act of 2008 (Public Law 110-161)
22.		**ST. CROIX FALLS, SEWAGE TREATMENT PLANT, WI**	
	October 31, 1992		WRDA 1992, as amended by Sec 120 of the Consolidated Approp. Act of 2005 (Public Law 108-447)
	May 11, 2005		Supplemental Emergency Approp. Act (Public Law 109-13

TABLE 16-B (Continued) AUTHORIZING LEGISLATION

See Sec. in Text	Date of Authorizing Act	Project and Work Authorized	Documents
23.		**LOWER ST. ANTHONY FALLS, RAPIDS RESTORATION, MN.**	
	December 11, 2000	Authorizes design and construction of a Whitewater Park in Minneapolis in accordance with June 1999 DNR feasibility report. $10 million authorization with 65/35 cost sharing.	WRDA 2000 – Public Law 106-541, Sec 527

1. Contains latest published map.
2. Permanent Appropriations Repeal Act.

TABLE 16-C OTHER AUTHORIZED NAVIGATION PROJECTS

Project	Status	For Last Full Report See Annual Report for	Cost To September 30, 2009	
			Construction	Operation and Maintenance
Baudette Harbor, MN	Completed	1961	$36,415	57,768
Black River, WI	[1]	1950	67,585	--
Lake Traverse, MN and SD	[3,4]	1921	92	--
Minnesota River, MN	Completed	1996	2,057,722[8]	1,671,667
Mississippi and Leech Rivers, MN	Completed[3]	1929	277,615	40,251
Mississippi River between Brainerd and Grand Rapids, MN	[5]	1925	47,794	3,891
Pine Creek, Angle Inlet, MN	Completed	1978	38,700	102,196
Red Lake and Red Lake River, MN	Completed[3]	1923	9,070	--
Red River of the North, MN and ND	[3,6]	1921	293,344	76,209
St. Croix River, MN and WI	Completed	1991	150,410	1,185,011
Warroad Harbor and River, MN	Completed	1996	86,105	2,359,594
Wisconsin River, WI	[2,3]	1888	--	--
Zippel Bay Harbor, MN	Inactive	1928	27,941	11,139
Zippel Bay, Lake of the Woods County, MN	Completed	1996	515,000	63,941

1. Existing channel adequate for commerce (see Table 16-G for deauthorized portion of project.)
2. Originally included in project `Fox and Wisconsin River, WI'. Abandonment of improvement of Wisconsin River by channel contraction works recommended in 1886 and 1887 (H. Doc. 65, 49th Cong., 2nd sess.) Expenditures included under `Fox and Wisconsin Rivers, WI'. No breakdown available.
3. No commerce reported.
4. Abandonment recommended in 1915 (H. Doc. 439, 64th Cong., 1st sess.) and June 24, 1926 (H. Doc. 467, 69th Cong., 1st sess.)
5. Abandonment recommended June 24, 1926 (H. Doc. 467, 69th Cong., 1st sess.)
6. Abandonment recommended in 1915 (H. Doc. 1666, 63d Cong., 3d sess.)
7. Abandonment recommended June 24, 1926 (H. Doc., 69th Cong., 1st sess.)
8. Includes $117,542 for new work for previous project.

TABLE 16-E OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	Status	For Last Full Report See Annual Report for	Cost To September 30, 2009	
			Construction	Operation and Maintenance
Aitkin County, CSAH 10, MN	Completed	1998	$ 363,700[55]	--
Bassett Creek, MN	Completed	2002	29,535,200[57]	---
Big Fork River, MN[2]	Completed	1998	294,600[6]	--
Big Stone Lake and Whetstone River, MN and SD	Completed	1996	12,174,600[1]	$7,370,651
Black Bear & Miller Lakes, Crow Wing City, MN[3]	Completed	1988	471,000	--
Black River at North Bend, WI[2]	Completed	--	74,500	--
Brooklyn Center Sewer Line Mississippi River, MN	Completed	2004	610,646[61]	--
Bonnes Coulee, Velva, ND[2]	Completed	1985	58,500	--
Cannon River at Faribault, MN[2]	Completed	1991	62,585[7]	--
Chaska, MN	Completed	2004	31,571,499[65]	--
Cochrane Drainage Ditch, WI	Completed	--	37,182	--
Crookston, MN	Completed	2005	7,037,856[67]	--
Devils Lake, ND[3]	Completed	1992	2,732,000	--
Dry Run, IA	Completed	1966	1,790,759[8]	--
Eau Galle River, WI	Completed	1996	9,039,250	19,875,917[70]
Elk River, MN	Completed	1970	259,700[9]	--
Emerson Manitoba-Noyes, MN[3]	Completed	1992	343,000[10]	--
Enderlin, Maple River, ND[3]	Completed	1990	4,000,000[11]	--
Gilmore Creek, Winona, MN[3]	Completed	1997	2,351,553[12]	--
Grafton, Park River, ND	Active	2005	1,122,919[68]	--
Grafton Pumping Station, ND[2]	Completed	1990	92,865[13]	--
Grand Mound, State Historic Site, MN[2]	Completed	1992	242,000[14]	--
Guttenberg, IA	Completed	1974	2,361,915	--
Hanover, Hennepin County, MN[2]	Completed	1988	259,500	--
Houston, MN	Completed	1999	5,003,300[53]	--
Irving Township, Jackson County, WI[2]	Completed	1984	189,600	--
Irving Township at Nicols Road, Jackson County, WI[2]	Completed	1986	158,500	--
Kickapoo River, Gays Mills, WI[2]	Completed	1987	33,000	--
Lac qui Parle Lakes, MN	Completed	1996	964,873[52]	18,188,696[71]
LaFarge Lake and Channel Improvement, WI	Completed	2003	35,642,000	--
Lake Andrusia, Mississippi River, MN[2]	Completed	1989	61,326[15]	--
Lake Ashtabula and Baldhill Dam, ND	Completed	2002	26,160,461[58]	40,187,152[72]
Lake Pulaski, Wright County, MN[3]	Completed	1991	1,353,478[17]	--
Lake Traverse and Bois De Sioux River, SD	Completed	2007	1,488,965	17,379,872[73]
LeSueur River, CSAH 28, MN	Completed	2001	261,400[56]	--
Lost River, MN	Completed	1967	517,519[18]	--
Lower Branch Rush River, ND[3]	Completed	1974	1,000,000[19]	--
Mahnomen, Wild Rice River, MN[2]	Completed	--	85,400	--
Mankato and North Mankato, MN	Completed	1997	97,013,675[20]	--
Mankato Township, MN[9]	Completed	1998	215,200[21]	--
Marshall, MN	Completed	2004	9,013,544[66]	--
Melrose, WI[2]	Completed	1998	219,600[22]	--
Middle River at Argyle, MN[3]	Completed	1993	2,360,000	--
Minnesota River, Belgrade Township, MN[2]	Completed	1995	261,000[23]	--
Minnesota River at Henderson, MN[3]	Completed	1997	1,969,800[24]	---
Minnesota River at LeSueur,MN[2]	Completed	1986	250,000[25]	--
Minneota, MN[3]	Completed	1963	161,545	--
Minot, ND	Completed	1983	21,479,500[26]	--

TABLE 16-E (Continued) OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	Status	For Last Full Report See Annual Report for	Cost To September 30, 2009 Construction	Cost To September 30, 2009 Operation and Maintenance
Mississippi River near Aitkin, MN	Completed	1957	1,675,835	--
Pembina River, ND	Active[5]	1983	--	--
Pettibone Park, La Crosse, WI[2]	Completed	1989	62,762[27]	--
Plum Creek, New Haven Township, MN[4]	Completed	--	31,100	--
Portage, WI	Completed	2005	9,036,907[69]	--
Prairie du Chien, WI	Completed	1991	3,529,000	--
Red Lake River at Gentilly, MN	Completed	1991	311,000[28]	--
Red Lake River at Huot, MN[2]	Completed	1984	64,500	--
Red Lake River at Red Lake Falls, MN[2]	Completed	1984	131,000	--
Red Lake River, MN including Clearwater River, MN	Completed	1996	3,120,079[29]	5,111,558[74]
Red Lake River, Polk County, Crookston, MN[2]	Completed	1997	166,400[30]	--
Red Lake River, State Hwy 32, MN[2]	Completed	1993	151,665[31]	--
Red River of the North at Argusville, ND[3]	Completed	1990	1,534,000	--
Red River of the North at Breckenridge, MN[2]	Completed	1990	85,665[32]	--
Red River of the North at Breckenridge, MN[2]	Completed	--	27,500	--
Red River of the North Drainage Basin, MN SD, & ND	Completed	1997	8,322,112[33]	18,169,748[75]
Red River of the North at Fargo, ND-Moorhead, MN[4]	Completed	1992	226,500[34]	--
Red River of the North, Fargo Public Facilities, ND	Completed	2002	1,342,821[59]	--
Red River of the North at Halstad, MN[3]	Completed	1986	2,012,000	--
Red River of the North at Oslo, MN[3]	Completed	1984	1,960,200	--
Red River of the North at Pembina, ND[3]	Completed	1979	2,000,000	--
Redwood River below Marshall, MN[3]	Completed	1960	202,400	--
Rochester, MN	Completed	1997	67,523,438[54]	--
Root River at Hokah, MN[2]	Completed	1992	239,627[35]	--
Roseau River, MN	Completed	1996	2,341,000[36]	--
Rushford, MN	Completed	1980	3,192,333	--
Sanders Creek, Boscobel, WI[3]	Completed	1998	1,441,500[37]	--
Shepard Road, Mississippi River, St. Paul, MN[2]	Completed	1985	250,000[38]	--
Sheyenne River, Valley City, ND[2]	Completed	1988	111,000	--
Snake River, Alvarado, MN[3]	Completed	1997	1,761,000[39]	--
Sogn, MN	Completed	1996	47,400[40]	--
Souris River Basin, ND	Completed	2003	109,260,000[64]	4,389,201[76]
Souris River, Velva, ND[2]	Completed	1988	137,500	--
State Hwy 7 Bridge, Pomme de Terre River, Appleton, MN	Completed	2002	239,903[63]	--
State Road and Ebner Coulees, WI	Completed	1996	21,435,000[41]	
Sterling Center, MN[2]	Completed	1997	160,900[42]	--
St. Cloud, MN	Completed	2002	998,814[60]	--
St. Hilaire, MN	Completed	1996	141,100[43]	--
St. Paul, MN	Completed	2002	13,897,500[62]	--
St. Paul and South St. Paul, MN	Completed	1974	8,476,012[44]	--
Upper Iowa River, IA	Completed	1964	888,445	--
Velva, ND[3]	Completed	1970	334,628	--
Vermillion River, Hastings, MN[3]	Completed	1980	999,900	--

TABLE 16-E (Continued) OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	Status	For Last Full Report See Annual Report for	Cost To September 30, 2009 Construction	Cost To September 30, 2009 Operation and Maintenance
Veteran's Memorial Levee, Mississippi River, Hastings, MN[2]	Completed	1985	182,000	--
Wabasha County, County Hwy 11, MN[2]	Completed	1995	273,000[45]	--
Wabasha, Mississippi River, MN[2]	Completed	1993	113,700[46]	--
Warner Road, Mississippi River, St. Paul, MN[2]	Completed	1987	250,000	--
Warner Road, Sibley Street, Mississippi River, St. Paul MN	Completed	1992	500,000[47]	--
Wild Rice River, Hendrum/Lee, MN[3]	Completed	1997	383,300[48]	
Wild Rice River, Mahnomen County, MN[2]	Completed	1986	58,500	--
Wild Rice River, Mahnomen, MN[4]	Completed	--	86,568	--
Wild Rice River, South Branch and Felton Ditch, MN	Completed	1989	5,620,700	--
Winona, MN	Completed	1989	32,741,131[49]	--
Zumbro River at Genoa, MN[2]	Completed	1992	34,500[50]	--
Zumbro River, MN	Completed	1975	1,284,100	--
Zumbro River at Jarrett and Millville, MN[2]	Completed	1990	141,440[51]	--

1. Excludes $152,492 contributed funds. In addition, $487,491 in other contributed funds have been expended for work under Government contract paid for by the Ottertail Power Company.
2. Project authorized by Chief of Engineers under small project authority, Section 14, Flood Control Act of 1946, as amended.
3. Project authorized by Chief of Engineers under small project authority, Section 205, Flood Control Act of 1948, as amended.
4. Project authorized by Chief of Engineers under small project authority, Section 208, Flood Control Act of 1954, as amended.
5. Preconstruction planning has not started. Phase I completed under General Investigations.
6. Excludes $56,453 contributed funds.
7. Excludes $18,362 contributed funds.
8. Excludes $42,766 contributed funds.
9. In addition $87,878 was expended from Public Law 99 funds in the spring of 1969 for emergency protection and incorporation into the permanent project.
10. Excludes $201,544 contributed funds.
11. Excludes $150,191 contributed funds.
12. Excludes $12,749 contributed funds.
13. Excludes $27,583 contributed funds.
14. Excludes $77,290 contributed funds.
15. Excludes $20,441 contributed funds.
16. Advance engineering and design costs only. Project deferred with authorization of Souris River Basin Project (see Section 25 and Table 16-A for costs for active project.
17. Excludes $74,225 contributed funds.
18. Excludes $46,034 for the Ruffy Brook unit for which authorization expired in April 1966 (see Table 16-G). Excludes $246,911 contributed funds.
19. Excludes $35,000 contributed funds.
20. Excludes $79,749 contributed funds.
21. Excludes $91,218 contributed funds.
22. Excludes $59,855 contributed funds.
23. Excludes $68,421 contributed funds.
24. Excludes $307,239 contributed funds.
25. Excludes $130,300 contributed funds.
26. Excludes $4,167 contributed funds.
27. Excludes $20,920 contributed funds.

TABLE 16-E (Continued) **OTHER AUTHORIZED FLOOD CONTROL PROJECTS**

28. Excludes $92,402 contributed funds.
29. Excludes $30,020 contributed funds.
30. Excludes $33,000 contributed funds.
31. Excludes $35,430 contributed funds.
32. Excludes $26,055 contributed funds.
33. Includes cost of the Wahpeton-Breckenridge unit $11,239, which is classed as "deferred" and the units on which authorization has expired: Maple River, $1,241; Moorehead, $27,700; which Sheyenne, $37,956. In addition, $203,874 special deposit funds and $146,160 in other contributed funds have been expended for work under government contract paid for by local interests. Includes $184,352 expended on Orwell Lake between FY 91 - FY 96 under Section 1135, Public Law 99-662 authority. Excludes $64,775 contributed funds under Section 1135, PL 99-662 authority.
34. Excludes $61,895 contributed funds.
35. Excludes $67,014 contributed funds.
36. Excludes $65,902 contributed funds.
37. Excludes $175,357 contributed funds.
38. Excludes $62,620 contributed funds.
39. Excludes $100,000 contributed funds.
40. Excludes $5,253 contributed funds.
41. Excludes $225,000 sunk costs for inactive Ebner Coulee unit (see Table 16-E) and $4,206,836 contributed funds.
42. Excludes $39,815 contributed funds.
43. Excludes $31,064 contributed funds.
44. Excludes $545,637 contributed funds for new work and $38,000 expended by South St. Paul for work in lieu of required cash contribution. Excludes an additional $206,629 expended for work done at request of local interests.
45. Excludes $73,619 contributed funds.
46. Excludes $37,631 contributed funds.
47. Excludes $184,709 contributed funds.
48. Excludes $97,800 contributed funds.
49. Excludes $589,316 contributed funds. In addition, $717,809 in other contributed funds have been expended for work under Government contract paid for by local interests.
50. Excludes $11,066 contributed funds.
51. Excludes $38,173 contributed funds.
52. Excludes $20,000 contributed funds.
53. Excludes $777,070 contributed funds.
54. Excludes $7,628,650 contributed funds.
55. Excludes $177,500 contributed funds.
56. Excludes $114,000 contributed funds.
57. Excludes $2,083,373 contributed funds.
58. Excludes $460,800 contributed funds.
59. Excludes $674,000 contributed funds.
60. Excludes $670,000 contributed funds.
61. Excludes $53,233 contributed funds.
62. Excludes $3,418,460 contributed funds.
63. Excludes $106,800 contributed funds.
64. Excludes $8,180,000 contributed funds.
65. Excludes $3,968,267 contributed funds.
66. Excludes $1,719,613 contributed funds.
67. Excludes $1,858,000 contributed funds.
68. Excludes $351,000 contributed funds
69. Excludes $2,373,000 contributed funds.
70. Includes ARRA of 2009 costs of $81,094.
71. Includes ARRA of 2009 costs of $16,474.
72. Includes ARRA of 2009 costs of $256,456.
73. Includes ARRA of 2009 costs of $5,251.
74. Includes ARRA of 2009 costs of $18,912.
75. Includes ARRA of 2009 costs of $32,781.
76. Includes ARRA of 2009 costs of $34,479.

TABLE 16-G DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report for	Date Deauthorized	Federal Funds Expended	Contributed Funds Expended
Black River, WI[1]	1950	Aug. 5, 1977	--	--
Black River Lake, WI	1950	Aug. 5, 1977	--	--
Bois de Sioux and Red River, Wahpeton, MN—Breckenridge, MN[8]	1981	Apr. 16, 2002	$ 11,239	--
Burlington Dam, Souris River, ND	1983	Mar. 10, 1995	5,568,600[2]	--
Grafton, ND[3]	1983	Nov. 18, 1991	--	--
Hudson Harbor, WI[4]	1986	Nov. 17, 1986	--	--
Kindred Lake, ND[5]	1987	Nov. 17, 1986	1,150,000	--
La Crosse, WI[6]	1983	Nov. 17, 1986	--	--
Lake Darling Dam, ND	1987	Sep. 13, 1994	4,919,000[7]	--
Maple River, ND[8]	1981	Oct. 6, 1961	1,241	--
Moorhead, MN[8]	1981	Oct. 30, 1961	27,700	--
Pembina River Lake, ND	1950	Jan. 1, 1990	50,000	--
Ruffy Brook, MN	1967	Apr. 1966	46,034	--
Sheyenne River, ND[8]	1981	Dec. 31, 1970	37,956	--
Sheyenne River, Maple River Reservoir, ND	1988	Apr. 16, 2002	475,000	--
State Road and Ebner Coulees (Ebner Coulee Unit)	1981	Jul. 9, 1995	225,000	--
Tongue River Lake, ND	1950	Jan. 1, 1990	23,695	--
Twin Valley Lake, Wild Rice River, MN	1988	Apr. 16, 2002	2,115,700	--
Warroad River and Bulldog Creek, MN	1974	Nov. 17, 1986	182,000	--
Warroad Harbor and River, MN[9]	1981	Aug. 5, 1977	--	--

1. Portion of project for removal of obstructions at various points outside the dredged area to clear channel to full project width (see Table 16-C for costs for completed portion of the project).
2. Advance engineering and design costs only. The Senate Report 97-256 states that the Corps is to take no further action to construct Burlington Dam until directed to do so by Congress.
3. Grafton, ND, was reauthorized by Section 364 of WRDA in 1999.
4. Part of the St. Croix River, Minnesota and Wisconsin project.
5. Previously part of Sheyenne River, ND project (see Section 23 and Table 16-A for costs for active project).
6. Authorized for further study by a House Committee on Public Works Resolution dated March 15, 1988.
7. Advance engineering and design costs only. (See Section 25 and Table 16-A for costs for active project).
8. Part of Red River of the North Drainage Basin (see Section 20 in text and Table 16-I for costs for active units of project).
9. Portion of dredging of entrance channel and turning basin to complete project width and depth (see Table 16-C for costs for completed portion of project).

TABLE 16-H RESERVOIRS AT HEADWATERS OF MISSISSIPPI RIVER
See Section 2 of Text)

Reservoir	Minimum Stages (feet)[1]	Outlet River	Watershed Area (Square miles) Above St. Paul (miles)	Watershed (Square miles)	Original Lake	Reservoir	Capacity at Maximum Stage (acre-feet)	Previous Projects Completed	Previous Projects Cost	Existing Projects Completed	Existing Projects Cost	Total Cost
Winnibigoshish	6	Mississippi	408	1442	117	179.4	967,930	1884	$214,000	1900	$173,470	$387,470
Leech Lake	0	Leech	410	1163	173	205.9	743,320	1884	171,805	1902	84,380	256,185
Pokegama	6	Mississippi	344	660[2]	24	35.0	120,750	1884	85,000	1904	126,030	211,030
Sandy Lake	7	Sandy	267	421	8	16.6	72,500	1895	114,000	1909	117,020	231,020
Pine River	9	Pine	199	562	18	23.7	177,520	1886	97,000	1907	133,320	230,320
Gull Lake	5	Gull	168	287	20	20.5	70,820	--	--	1913	86,826	86,826
						Surveys and flowage rights	--	--	--	--	160,939	160,939
						Recreational facilities	--	--	--	--	2,834,838	2,834,838
						Total new work	--	--	681,805	--	3,716,823	4,398,628
						Total operating and care	--	--	100,857	--	96,840,849[3]	96,941,706
						Permanent indefinite appropriation for operation and care, Feb. 1, 1895 to end of fiscal year 1936	--	--	--	--	967,197	967,197
						Rehabilitation	--	--	--	--	425,000	425,000
						Dam Safety	--	--	--	--	11,059,000	11,059,000
						Total	2,152,840	--	$782,662	--	$113,008,869	$113,791,531

1. Lower operating limits by regulations approved February 4, 1936, as modified December 29, 1944.
2. Exclusive of area controlled by Winnibigoshish and Leech Lake Dams.
3. Includes $126,391 from Approp. 96X5125, M&O Dams and $175,430 costs from FY 09 ARRA funding.

TABLE 16-I RED RIVER OF THE NORTH DRAINAGE BASIN: ACTIVE UNITS IN COMPREHENSIVE BASIN PLAN

	State	Type	Cost to Sep. 30, 2008	Total Estimated Federal Cost
Orwell River (Otter Tail River)	Minnesota	Reservoir	$1,916,753	$1,916,700[1]
Wild Rice and Marsh Rivers	Minnesota	Channel improvement	405,056	405,100
Rush River	North Dakota	Channel improvement	287,686	287,700
Sand Hill River	Minnesota	Channel improvement	548,778	548,800
Mustinka River	Minnesota	Channel improvement	440,788	440,800
Otter Tail River	Minnesota	Channel improvement	174,768	174,800
Red River at Grand Forks	North Dakota	Levees and floodwall	948,895	948,900
Red River at East Grand Forks	Minnesota	Levees, floodwall, pumping plants	1,698,200[2]	1,698,200[3]
Red River at Fargo	North Dakota	Channel improvement	1,639,924	1,639,900[4]
Total Cost to Date			$8,060,848[5]	
Total Estimate Cost				$8,060,900[6]

1. Includes $181,713 for lands and $25,045 for recreation facilities.
2. Excludes cost for current planning, engineering and design work.
3. The East Grand Forks unit was reclassified from active to inactive on August 19, 1988; the project was reactivated in June 1997. The cost of this unit was last revised in 1987. A new flood control plan for a combined Grand Forks-East Grand Forks project was authorized in 1999. See Section 9 and Table 16-A for project description and costs.
4. Includes $67,900 for lands.
5. Costs of $11,239 for the Wahpeton-Breckenridge deauthorized unit not included. Authorization of the Sheyenne River, Moorhead, and Maple River units has expired. Cost of these units also not included total $66,897.
6. The Wahpeton-Breckenridge unit of the project is classed as deauthorized and is excluded from the estimate. The cost of this unit, last revised in 1955, was estimated to be $666,000. The Flood Control Act approved December 31, 1970 (H. Doc. 330-91-2) provided for deletion of the Sheyenne River unit, and authorization of the Maple River and Moorhead units expired at the end of the 5-year period within which local interests were required to furnish assurances of local cooperation. Authorization of these units, not included, expired on the dates indicated in Table 16-G. In FY 89, the Wahpeton-Breckenridge unit was included as part of the General Investigation program under Restudy of Deferred projects.

TABLE 16-J INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS (See Section 23 of Text)

Project	Date Inspected
Bigstone Lake & Whetstone River, MN and SD	September 2009
Black Bear & Miller Lake, Crow Wing Co. - MN	August 2009
Bonnes Coulee, Velva, ND	September 2009
Boscobel, WI	September 2009
Chaska, MN	August 2009
Dry Run, Decorah, IA	August 2009
Elk River, MN	August 2009
Emerson, Manitoba - Noyes, MN	September 2009
Enderlin, Maple River, ND	September 2009
Middle River at Argyle, MN	August 2009
Mines Creek, Spring Valley, WI	August 2009
Minneota, MN	September 2009
Minnesota River at Guttenberg, IA	August 2009
Minnesota River at Henderson, MN	August 2009
Minnesota River at Lehillier, MN	September 2009
Minnesota River at Mankato, MN	September 2009
Minnesota River at North Mankato, MN	September 2009
Mississippi River, near Aitkin, MN	August 2009
Mississippi River at St. Paul, MN	September 2009
Mississippi River at South St. Paul, MN	September 2009
Mississippi River at Winona, MN	September 2009
Red River of the North at Argusville, ND	August 2009
Red River of the North at East Grand Forks, MN	September 2009
Red River of the North at Fargo, ND - Moorhead, MN	September 2009
Red River of the North at Grand Forks, ND	September 2009
Red River of the North at Halstad, MN	August 2009
Red River of the North at Oslo, MN	August 2009
Red River of the North at Pembina, ND	August 2009
Redwood River at Marshall, MN	September 2009
Root River, Houston, MN	September 2009
Root River – Rush Creek, Rushford, MN	September 2009
Snake River at Alvarado, MN	August 2009
Souris River, Burlington to Minot, ND	September 2009
Souris River, Minot, ND	September 2009
Souris River, Renville County Park, ND	September 2009
Souris River, Sawyer, ND	September 2009
Souris River, Velva, ND	September 2009
South Branch Zumbro River, Rochester, MN	September 2009
Trempealeau River, Arcadia, WI	September 2009
Vermillion River, Hastings, MN	August 2009
Zumbro River at Kellogg, MN	September 2009

TABLE 16-K FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Flood control activities pursuant to Section 205, Public Law 858, 80th Congress, as amended (preauthorization)

Study/Project and Location	Fiscal Year Costs
Delano, MN	$ 551
Minnesota River, Jordan, MN	23,909
Mississippi River, Newport, MN	7,368
Section 205 Coordination	20,346
Wild Rice and Marsh Rivers, Ada, MN	64,821

Emergency Bank Protection
(Section 14 of the 1946 Flood Control Act, Public Law 526, 79th Congress)

Study/Project and Location	Fiscal Year Costs
Barnes County, Kathryn, ND	$ 2,106
Crow River CR 50, MN	11,136
Ft. Abercrombie, ND	12,589
Ho Chunk Nation, WI	24,121
Pug Hole Lake, MN	4,786
Red Lake River, MN	5,305
Red River of the North, Fargo FA, ND	-4,813
Section 14 Coordination	6,224

TABLE 16-L PROJECT MODIFICATIONS FOR IMPROVEMENT OF ENVIRONMENT

Modifications of projects for the purpose of improving the quality of the environment in the public interest (Section 1135, Public Law 99-662, 99th Congress, as amended)

Study/Project and Location	Fiscal Year Costs
Coordination account funds	$14,565

TABLE 16-M AQUATIC ECOSYSTEM RESTORATION

Restorations of Aquatic Ecosystems pursuant to Section 206, Public Law 104-303

Study/Project and Location	Fiscal Year Costs
Coordination account funds	$ 16,456
Drayton Dam, ND	44,023
Christine and Hickson Dams, MN	4,685
Painters Creek, MN	40,593

TABLE 16-N ACTIVE INVESTIGATIONS

Study/Project and Location	Fiscal Year Costs
Studies	
Flood Damage Prevention	
Fargo – Moorhead - Metro, ND (RRN Authority)[1]	$ 1,374,107[2]
Ecosystem Restoration	
St. Croix River, WI, Relocation of Endangered Mussels	276,009
Marsh Lake, MN[3] (MN River Authority)	88,364
Blue Earth River, MN[4] (MN River Authority)	913
Watershed / Comprehensive Reconnaissance Studies	14,790
Watershed / Comprehensive Feasibility Studies	
Fargo, ND – Moorhead, MN[5] and Upstream	54,807
Minnesota River Basin, MN and SD	-294
Minnesota River Watershed Study, MN	32,218
Red River of the North, MN and ND	664,352
Wild Rice River, MN[6]	129,553
Minnehaha Creek Watershed, MN (UMR Watershed Management, Lake Itasca to L/D 2, MN)	84,895
St. Croix Headwaters, MN	49,946
Sunrise River Watershed Study, MN	103,759
Miscellaneous Activities	
Special Investigations	34,590
FERC Licensing Activities	28,925
Inter Agency Water Resources Development	33,660
Coordination with Other Agencies	
Cooperation with Other Water Resource Agencies	3,770
Planning Assistance to States[5]:	
Minnesota	75,405
North Dakota	7,748
Wisconsin	160
TOTAL SURVEYS	$3,057,677[2]
COLLECTION AND STUDY OF BASIC DATA	
International Water Studies	$ 41,395
Flood Plain Management Services	
FPMS Unit	40,377
Technical Services, General	4,896
Quick Responses	1,931
Hydrologic Studies	5,765
TOTAL COLLECTION AND STUDY OF BASIC DATA	$94,364
PRECONSTRUCTION ENGINEERING AND DESIGN	
Roseau River, MN (RRN Authority)	$ 13,381

1. Excludes $1,107,980 contributed funds.
2. Includes American Recovery and Reinvestment Act of 2009 costs of $153,482.
3. Excludes $35,796 contributed funds.
4. Excludes $11,619 contributed funds.
5. Excludes $317 contributed funds.
6. Excludes $1,782 contributed funds.
7. Excludes $48,686 contributed funds.

MISSISSIPPI RIVER BETWEEN THE MISSOURI RIVER AND MINNEAPOLIS, MN

Section of river covered in this report is divided into three reaches, under supervision and direction of District Engineers at St. Louis, Rock Island, and St. Paul. Section in St. Louis District extends 105 miles from Mouth of Missouri River to Upper Mississippi River mile 300 above Ohio River; Rock Island District extends about 314 miles from mile 300 to 614; and St. Paul District extends about 244 miles from mile 614 to Soo Line Railroad bridge, Minneapolis (mile 857.6).

Location. Mississippi River rises in northern Minnesota, flows about 2,360 miles southerly and empties into Gulf of Mexico. Portion included in this report extends about 663 miles from mouth of Missouri River to Soo Line Railroad bridge, Minneapolis. The latest map and profile showing this section of river are in House Document 669, 76th Congress, 3d session. A map showing Lake Pepin is in House Document 511, 79th Congress, 2d session. A map of section Minneapolis to Dubuque is in House Document 515, 79th Congress, 2d session. A map showing location of drainage districts (Bellevue, Iowa, to Missouri River) is in River and Harbors Committee Document 34, 75th Congress, 1st session.

Previous projects. See page 1199 of Annual Report for 1963.

Existing project. Provides a channel of 9-foot depth and adequate width between mouth of Missouri River (1,179 miles from the gulf) and Soo Line Railroad at Minneapolis, by construction of a system of locks and dams, supplemented by dredging. Project also provides for further improvements at St. Paul to provide a 2.7 mile basin extending downstream from Robert Street Bridge, and at Minneapolis to provide adequate terminal facilities, and for other harbor improvements and miscellaneous work. Pertinent data on locks and dams, harbor improvements, additional features entering into cost of project, and authorizing legislation are given in Tables 17-C, 17-D, 17-E, and 17-G. All dams are concrete. Three dams (Upper St. Anthony Falls, 1 and 19) are fixed, remainder are movable. See House Document 669, 76th Congress, 3d session, for a report of Chief of Engineers dated February 27, 1940, containing a general plan for improvement of Mississippi River between Coon Rapids Dam and mouth of Ohio River for purposes of navigation, power development, flood control, and irrigation needs.

Local cooperation. Small-boat harbors authorized in the River and Harbor Act of 1962 are subject to conditions that local interests make a cash contribution toward cost of construction (except in case of Quincy Harbor which involves maintenance only of an existing harbor); furnish lands and rights-of-way for construction and future maintenance; hold the United States free from damages; provide and maintain mooring facilities and utilities; reserve accommodations for transient small boats; accomplish all necessary relocations and alterations; and establish public bodies empowered to regulate use, growth and development of the harbors.

Rectification of seepage damages to privately owned lands in the Sny Island Levee Drainage District, IL, was contingent upon the conditions that local interests acquire all lands, easements, and rights-of-way necessary for construction and maintenance of the project; comply with applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970; accept, operate, and maintain the project upon its completion; and hold and save the United States free from damages arising from the construction and operation of the completed project; provided further that the local public entity shall be reimbursed by the Government in the amounts actually expended by it in the acquisition of real estate and for payments required under Public Law 91-646 if said amounts have been previously submitted to and approved by the Government.

Local cooperation requirements have been complied with for improvement of commercial harbor at Dubuque, IA; for improvement of Beaver Slough at Clinton, IA, for navigation; and for general navigation facilities at small-boat harbors at Rock Island, IL; Hannibal, MO; Fort Madison, IA; Davenport (Lindsay Park), IA; Muscatine, IA (including freight terminal approach channel); Andalusia, IL; Warsaw, IL; Moline, IL; Clinton, IA; and Savanna, IL.

Licenses. Federal Energy Regulatory Commission collects from non-Federal licensees annually to recompensate the United States for use of government dams for generation of hydroelectric power. Amounts collected are returned to U.S. Treasury. (See Table 17-F for license fees collected for the fiscal year.)

St. Paul District:

New Work: None.

Maintenance: During FY 2009, the Government pipeline Dredge *WILLIAM L. GOETZ* removed 276,801 cubic yards of material at eight sites. Government Derrick Barge *HAUSER/WADE* removed 35,083 cubic yards of material at four sites. Mechanical dredging contractor removed 632,692 cubic yards of material from the main channel at 27 sites. Maintenance of temporary dredge material placement sites included the relocation of 460,912 cubic yards to permanent placement sites for beneficial use. Major maintenance projects included central control building and electrical controls at Locks 10 and stop log slots at Lock 9.

Operations and Care: Locks and Dams were operated as required and necessary repairs were made to those and appurtenant structures. Other studies, reports, and miscellaneous engineering work were also accomplished.

Rehabilitation: The rehabilitation of the District's central control buildings was completed.

The related navigation safety and embankments problems at Lock and Dam 3 were examined in separate reports in 1995 with recommended structural fixes for these problems. The proposed projects were approved by Corps Headquarters, but have not been implemented for a number of reasons including the presence of a diverse mussel bed with state-listed endangered species in the tailwater area. Construction of the first stage of the embankment project was completed in the summer of 1999. The St. Paul District decided to re-evaluate these related problems in an effort to find more optimal solutions. A Notice of Intent to Prepare an Environmental Impact Statement for the Lock and Dam 3 navigation safety and embankments re-evaluation was published in the Federal Register in August 2000. Stakeholders helped the District set objectives, identify alternative measures and formulate alternative plans. Alternative plans have been evaluated and compared using a risk and benefit cost assessment. An effective and environmentally acceptable combination plan to improve navigation safety and to strengthen the Wisconsin embankments was identified. A Record of Decision was signed in April 2007 that identified a recommended plan that includes an extended landward guidewall with channel modifications to improve navigation safety and to strengthen the Wisconsin embankments employing phased construction. The recommended plan was approved by the ASA(CW) and endorsed by OMB in May 2008.

In 2009, the L/D 3 project received $70.23 million in American Recovery and Reinvestment Act funding. The Upper Embankments project design-bid-build plans and specifications were ready for advertisement in September 2009. The Navigation Improvements project and Lower Embankments were designated as design-build procurements. Request for Qualifications for both projects were issued in July 2009. A short list of contractors was developed for both projects, and the Request for Proposals was issued in September 2009. Contract award for all three projects is scheduled for December 2009.

Costs to St. Paul District were $41,892,100 for operation and maintenance including $685,219 in costs funded under the American Recovery and Reinvestment Act (ARRA) and $1,334,091 for rehabilitation including ARRA costs of $919,906; for a total of $43,226,191.

St. Paul District. Work completed: Locks and Dams at St. Anthony Falls and 1 to 10, inclusive, except for relatively minor appurtenant work; major improvements of channels and harbors at St. Paul and Minneapolis; small boat harbors and commercial harbors at Lake City, Red Wing, and Winona, MN; and Prairie du Chien, WI; small-boat harbors at St. Paul, Hastings, Red Wing, Wabasha, Lake City and Winona, MN; Lansing, IA; and Bay City, Alma, Pepin, and Prairie du Chien, WI; a remedial drainage ditch at Cochrane, WI; miscellaneous channel dredging and realignment; channel markers; pool clearing; and construction of various facilities for recreation use.

Status of land and flowage acquisition: Approximately 50,832.976 acres of land are held in fee, including 47,305 acres used by the Department of the Interior in accordance with a Cooperative Agreement that establishes the Upper Mississippi River Fish and Wildlife Refuge.

Easements for various access rights and flowage inundation are held over 13,460,379 acres. Additionally, the district holds perpetual easements over 244.43 acres of land for small boat/commercial harbors. All land interests lie between Upper St. Anthony Falls Lock and Dam located in Minneapolis, Minnesota, and Lock and Dam 10 in Guttenberg, Iowa. The Department of the Army also holds special rights to over 62,954.74 acres of land owned by Department of the Interior in pools 3 to 10, inclusive.

Work remaining to complete portion of project in St. Paul District: Dredged material site acquisitions anticipated for FY 2010 are four permitted sites and two easement sites. Lock and Dam 3 projects require acquisition of an additional 397 acres for mitigation and 70.6 acres for easement/fee acquisition on the embankments and access road. During FY 2009, 147.64 acres were acquired in fee for the mitigation requirement. Approximately 161.79 acres are still required for mitigation purposes.

Condition of channel at end of fiscal year: The controlling depths of 9 feet at lower water and minimum depths for long-haul common carrier service were maintained in all pools.

Rock Island District:

New Work: None.

Maintenance: Channel dredging by Government cutter head pipeline Dredge *WILLIAM L GOETZ* was performed at various locations in Pools 13, 14, 16, 17, 18, and 22, for a total of 197,924 cubic yards of material removed. Mechanical dredging was performed in Pools 11, 12, 13, 15, 16, 21, 22, and 28, for a total of 103,848 cubic yards of material being removed. Non-routine maintenance contract repairs include Lock and Dam 11 Major Maintenance, Bulkhead Recesses, Miter Gates, and L/D 22 Monolith Concrete.

Operations and Care: Locks and Dams were operated as required and necessary repairs were made to those and appurtenant structures. Other studies, reports and miscellaneous engineering work were also accomplished. In June 2008, extraordinary flooding occurred at various locations along the Mississippi River and flood recovery work continued, funded by FY 08 War Supplemental with costs of $11,360,108. Flood-related work included repairs to storage yards, roads, control stands, spillways, and strike removal electrical were initiated and included Storage Yard Repairs at L/Ds 20, 21, and 22. American Recovery and Reinvestment Act funds were received to repair Thomson and Grant River Recreation Areas, repair L/D 15 hydropower turbine, replace trunnion bearings at L/D 11, and procure equipment.

Operations and Maintenance: Total FY 09 Operations and Maintenance costs to Rock Island District were $57,054,717.

Rehabilitation: Rehabilitation work was continued at Locks and Dams 11 and 19 with costs of $3,145,387 and $330,708, respectively. Inland Waterway Trust Fund costs were $3,476,096. Total rehabilitation and Inland Waterway Trust Fund (IWTF) costs were $6,952,191.

Costs to the Rock Island District were $57,054,717 for operation and maintenance and $6,952,191 for major rehabilitation (including IWTF) for a total cost of $64,006,908.

Rock Island District. Work completed: Major construction items including all locks and dams, are completed and in operation. The following related work has also been completed: construction of small-boat harbors at Rock Island, IL; Moline, IL; Andalusia, IL; Warsaw, IL; Fort Madison, IA; Davenport (Lindsay Park), IA; Muscatine, IA; Clinton, IA; and Hannibal, MO; improvement of Beaver Slough at Clinton, IA, for navigation; improvement of commercial harbor at Dubuque, IA; rehabilitation of old auxiliary lock at Lock and Dam 14; permanent closure of old Lock 19 and dry dock; rock and conglomerate excavation in Pools 15 and 16; rectification of seepage damage in the Sny Island Levee Drainage District, IL; recreational facilities; and construction of visitor center at Lock and Dam 15.

Status of land and easement acquisition: Acquisition of land in Pools 11 to 22, inclusive consisting of 93,658.174 acres in fee and 11,694.94 acres in easement, has been completed.

Work remaining to complete portion of project in Rock Island District: None.

St. Louis District:

New Work: Costs incurred for Melvin Price Locks and Dam, formerly L/D 26 replacement, were $99,310 for lock; $53 for recreation; and $466,666 for engineering. Cost for Melvin Price totaled $566,029. ARRA funds were used for Mel Price engineering. Costs incurred for the second lock totaled $0. Total cost for new work was $566,029.

Rehabilitation: Major rehabilitation is complete at L/D 25, except for project closeout. Costs for L/D 24 totaled $5,046 and Inland Waterways Trust Fund (IWTF) costs were $4,583. For L/D 24, total major rehabilitation continued at a cost of $9,629 for engineering.

Under the L/D 25 Dam Safety program, costs of $4,758,390 were expended to award a contract to repair the scour at L/D 25 – Phase I, which was partially funded with ARRA funds ($106,889) and for Phase II of the dam safety study to continue soil exploration ($511,259). An A-E contract was awarded to complete a seismic study.

Operations and Care: The locks and dams were operated as required and necessary repairs were made thereto. Other work accomplished was management of natural resources; operations of recreation areas; condition and operating studies; water control management; channel maintenance to include surveys, dredging, training structures; and other studies and reports for a total cost of $13,063,239, of which $767,121 was ARRA funds and $580,771 was FY 08 War Supplemental funds.

Maintenance: Total maintenance cost is $19,266,844, of which $3,642,435 was the FY 08 War Supplemental funds used for shoreline repair and debris/silt cleanup and $3,642,435 ARRA funds used to accomplish backlog dredging, maintenance to recreational access areas, replace gaging stations, remove damaged outgrant cabins, and perform critical backlog forest management work.

Costs to the St. Louis District were $566,029 for new work on the Melvin Price Locks and Dam; $4,768,019 for major rehabilitation (includes $4,758,390 for Dam Safety); and $32,330,083 for operation and maintenance for a total cost of $37,664,130.

St. Louis District. Work completed: Major construction items, including all locks and dams, are completed and in operation, with the exception of the remaining work at Melvin Price.

Status of land and flowage acquisition: Acquisitions of land in Pools 24, 25, and 26, involving 4,448 acres of land in fee and flowage easements over 6,600 acres, is complete. A total of 4,201 acres has been acquired for the Melvin Price Locks and Dam project.

Work remaining to complete portion of project in St. Louis District: Work remaining at the Melvin Price Locks and Dam project includes punch list items and the implementation of remaining required fish and wildlife mitigation measures for the second lock. Completed portions of scour repairs under Dam 25 Dam Safety program, $8 million WEDGE funds and $3 million ARRA.

Total Project:

Total Federal costs of existing project to the end of the fiscal year for the three Districts were $566,029 for new work, $119,917,001 regular and ARRA funds for operation and maintenance and $5,401,641 regular and ARRA funds for rehabilitation, $4,651,501 for L&D 25 Dam Safety work, and $3,612,596 for IWTF. Total costs for FY 2009 were $ 134,148,768.

Condition of channel at end of fiscal year: The controlling depth of 9 feet at low water and minimum depths for long-haul common carrier service were maintained in all pools.

TABLE 17-A COST AND FINANCIAL STATEMENT

Project	Funding	FY 06	FY 07	FY 08	FY 09	Total Cost to Sep 30, 2009
Mississippi River between Missouri River and Minneapolis, Minnesota (Federal Funds)	New Work:[1,13,14]					
	Approp.[2]	$ 723,000	$ 4,341,000	$ 468,000	$1,212,700	$ 1,308,477,929
	Cost[3]	634,993	3,209,045	1,186,343	566,029	1,266,402,227
	Maint:[4,9,8,10]					
	Approp.	113,068,251	115,208,153	197,209,624	156,432,226	4,338,428,688
	Cost	99,905,637	104,923,993	123,827,691	119,917,001	4,159,627,995
	Rehab:[5,11,12]					
	Approp.	15,264,309	18,219,976	11,289,346	76,125,364	402,260,911
	Cost	12,142,403	8,796,918	10,971,107	5,401,641	319,263,425
Lock and Dam 25 Dam Safety [5]	Approp.	0	0	10,000	9,000,000	9,010,000
	Cost	0	0	271	4,651,501	4,651,772
(Contributed Funds)	New Work:[6]					
	Approp.	0	0	3,099,195	511,259	3,610,454
	Cost	0	0	3,099,195	511,259	3,610,454
(Inland Waterway Trust Fund)	Rehab.[7]					
	Approp.	15,269,640	18,132,600	11,984,380	3,855,548	134,546,025
	Cost:	11,424,871	7,335,521	11,487,230	3,612,596	114,057,622

1. Includes $15,476,259 for new work on previous projects.
2. Includes Melvin Price Locks and Dam funds $951,879,500.
3. Includes Melvin Price Locks and Dam funds $951,377,265.
4. Includes $1,949,301 for maintenance on previous project.
5. Lock and Dam 25 Dam Safety initiated in FY 2008
6. Funds from Inland Waterway Trust Fund were included in with Contributed Funds up to 1998.
7. All Inland Waterway Trust Fund.
8. Accumulative for Rock Island reviewed and corrected.
9. Includes FY 2009 ARRA appropriation fund of $47,392,580.
10. Includes FY 2009 ARRA costs of $5,181,477.
11. Includes FY 2009 ARRA appropriation fund of $70,869,500.
12. Includes FY 2009 ARRA costs of $1,026,795.
13. Includes FY 2009 ARRA appropriation fund of $1,212,700.
14. Includes FY 2009 ARRA appropriation fund of $78,779.

TABLE 17-B TOTAL COSTS OF EXISTING PROJECT TO SEPTEMBER 30, 2009

District	Cost	Regular Funds	Public Work Funds	Emergency Relief Funds	Total
St. Paul	New Work[1]	$ 60,184,246[2]	$24,210,071	$9,071,214	$ 93,465,531
	Maintenance[3]	1,204,172,595	--	--	1,204,172,595
	Rehabilitation [12]	110,044,431	--	--	110,044,431
	Total	1,374,401,272	24,210,071	9,071,214	1,407,682,557
Rock Island	New Work[4]	71,307,945[5]	17,403,322	11,338,865	100,050,132
	Maintenance[6]	575,244,082[7]	--	--	575,244,082
	Rehabilitation	171,940,820	--	--	171,940,820
	Total	747,184,902	17,403,322	11,383,865	847,235,034
St. Louis	New Work[8]	981,048,109	10,282,566	2,440,266	993,770,941
	Maintenance[9,11]	514,307,544	--	--	514,307,544
	Rehabilitation	98,566,539	--	--	98,566,539
	Total	$1,593,922,192[10]	$10,282,566	$2,440,266	$1,606,645,024

1. Excludes $2,041,140 contributed funds. Includes $7,673 expended in pool No. 11.
2. Includes $159,359 transferred from Rock Island District covering pro rata share of cost of derrick boat Hercules.
3. Includes $762,196 expended between 1930 and 1936 on operating and care of works of improvement under provisions of permanent indefinite appropriation for such purposes. Excludes $797,670 contributed funds.
4. Excludes $58,999 contributed funds.
5. $687,709 was transferred to St. Louis District in fiscal year 1958. Excludes $201,167 transferred to St. Paul and St. Louis Districts covering their pro rata share of cost of derrick boat Hercules.
6. Cost subsequent to FY 1953 included with operating and care. Includes the sum of $395,442, expended between 1930 and 1934 on the operating and care of the works of improvement under the provisions of the permanent indefinite appropriation for such purposes.
7. Includes $47,800 transferred from Rock Island District covering pro rata cost of derrick boat Hercules and $687,709 transferred from Rock Island District.
8. Includes $951,377,265 for Melvin Price Locks and Dam.
9. FY 2008 Maintenance for Rock Island includes supplemental funds of $4,916,119.
10. Rock Island Total Regular Funds should have been $697,933,912 in the 2007 annual report.
11. Includes $1,451,394 of FY 2008 War Supplemental.
12. Includes $919,906 of ARRA costs.

TABLE 17-C LOCKS AND DAMS

Lock and Dam	Miles Above Ohio River	Miles from Nearest Town	Lock Dimensions: Width of Chamber (feet)	Lock Dimensions: Greatest Length Available for Full Width (feet)	Lock Dimensions: Lift (feet)	Lock Dimensions: Upper Normal Pool Elevation[1]	Depth on Miter Sill: Upper (feet)	Depth on Miter Sill: Lower (feet)	Character of Foundation: Lock	Character of Foundation: Dam	Percent Complete Locks, Dams, and Work in Pool	Year Opened to Navigation	Estimated Cost of Each Lock and Dam Including Work in Pool
St. Anthony Falls, upper Lock	853.9	In city of Minneapolis, MN	56	400	49.2	799.2	15.7	13.7	Some limestone, mainly sandstone. No piles.	Limestone.	100[2]	--	$ 18,203,000[3]
St. Anthony Falls, lower Lock and dam	853.3	In city of Minneapolis, MN	56	400	26.9[4]	750.0	13.7	10.3	Sandstone. No piles	Sandstone.	100	1959	12,382,000[5]
Lock and dam 1	847.6	Minneapolis-St. Paul, MN	56 56	400 400	35.9[4] 35.9	725.1 --	13.5[4] 12.5[7]	10.1 7.6	Rock and piles in gravel.	Piles in gravel.	100	1917	2,358,000[6]
Lock and dam 2	815.2	1.3 above Hastings, MN	110 110[8]	500 600[8]	12.2 12.2	-- 687.2	16.0 22.2	15.1 13.0	Piles in sand, silt and clay.	Piles in sand, silt and clay.	100 100	1930 1948	6,492,000[9]
Lock and dam 3	796.9	6.1 above Red Wing, MN	110	600	8.0	675.0	17.0	14.0	Piles in sand, silt and clay.	Piles in sand.	100	1938	5,596,000
Lock and dam 4	752.8	Alma, WI	110	600	7.0	667.0	17.0	13.0	Piles in sand and gravel.	Piles in sand and gravel.	100	1935	4,865,000
Lock and dam 5	738.1	Minneiska, MN	110	600	9.0	660.0	18.0	12.0	Piles in sand and gravel.	Piles in sand.	100	1935	5,081,000
Lock and dam 5A	728.5	3 above Winona, MN	110	600	5.5	651.0	18.0	12.5	Piles in sand.	Piles in sand.	100	1936	4,549,000
Lock and dam 6	714.3	Trempealeau, WI	110	600	6.5	645.5	17.0	12.5	Piles in sand, gravel and silt.	Piles in sand and clay.	100	1936	4,874,000
Lock and dam 7	702.5	Dresbach, MN	110	600	8.0	639.0	18.0	12.0	Piles in sand and gravel.	Piles in sand.	100	1937	5,574,000
Lock and dam 8	679.2	Genoa, WI	110	600	11.0	631.0	22.0	14.0	Piles in sand, gravel and broken rock.	Piles in sand and gravel.	100	1937	6,061,000
Lock and dam 9	647.9	3.3 below Lynxville, WI	110	600	9.0	620.0	16.0	13.0	Piles in sand.	Piles in sand.	100	1938	6,539,000
Lock and dam 10	615.1	Guttenberg, IA	110	600	8.0	611.0	15.0	12.0	Piles in sand.	Piles in sand.	100	1936	4,750,000
Lock and dam 11	583.0	3.7 above Dubuque, IA	110	600	11.0	603.0	18.5	12.5	Piles in sand, gravel and silt.	Piles in sand.	99	1937	7,428,000
Lock and dam 12	556.7	Bellevue, IA	110	600	9.0	592.0	17.0	13.0	Piles in sand and gravel.	Piles in sand and gravel.	99	1938	5,580,000

TABLE 17-C
(Continued)

LOCKS AND DAMS

Lock and Dam	Miles Above Ohio River	Miles from Nearest Town	Lock Dimensions: Width of Chamber (feet)	Lock Dimensions: Greatest Length Available for Full Width (feet)	Lock Dimensions: Lift (feet)	Lock Dimensions: Upper Normal Pool Elevation[1]	Depth on Miter Sill: Upper (feet)	Depth on Miter Sill: Lower (feet)	Character of Foundation: Lock	Character of Foundation: Dam	Percent Complete Locks, Dams, and Work in Pool	Year Opened to Navigation	Estimated Cost of Each Lock and Dam Including Work in Pool
Lock and dam 13	522.5	4.3 above Clinton, IA	110	600	11.0	583.0	19.0	13.0	Piles in sand, clay and gravel.	Piles in sand and gravel.	100	1938	7,502,000
Lock and dam 14	493.3	3.7 below Le Claire, IA	110	600	11.0	527.0	20.5	13.5	Rock.	Rock.	92	1939	6,284,000
Le Claire Lock (Canal)	493.1	3.9 below Le Claire, IA	80	320	11.0	--	17.6	10.9	Rock.	Rock.	100	1922	--[10]
Lock and dam 15	482.9	Foot of Arsenal Island, Rock Island, IL	110	600	16.0	561.0	24.0[11]	11.0	Rock.	Rock.	100	1934	14,201,000
			110	360	16.0	--	17.0[11]	11.0					
Lock and dam 16	457.2	1.8 above Muscatine, IA	110	600	9.0	545.0	17.0	12.0	Piles in sand and gravel.	Piles in sand and gravel.	98	1937	9,788,000
Lock and dam 17	437.1	4.2 above New Boston, IL	110	600	8.0	536.0	16.0	13.0	Piles in sand and gravel.	Piles in sand.	99	1939	5,843,000
Lock and dam 18	410.5	6.5 above Burlington, IA	110	600	9.8	528.0	16.5	13.7	Piles in sand.	Piles in sand.	90	1937	10,308,000
Lock and dam 19	364.2	Keokuk, IA	110	358	38.2	518.2	4.5	9.2	Rock.	Rock.	100	1913	
			110	1,200			5.0	13.0			99	1957	14,813,000[12]
Lock and dam 20	343.2	0.9 above Canton, MO	110	600	10.0	480.0	15.0	12.0	Rock.	Rock and piles in sand and gravel.	97	1936	6,281,000
Lock and dam 21	324.9	2.1 below Quincy, IL	110	600	10.5	470.0	16.5	12.0	Piles in sand and gravel.	Piles in sand and gravel.	95	1938	8,065,000
Lock and dam 22	301.2	1.5 below Saverton, MO	110	600	10.2	459.5	18.0	13.8	Rock.	Rock.	99	1938	5,275,000
Lock and dam 24	273.4	Clarksville, MO	110	600	15.0	449.0	19.0	12.0	Rock and piles.	Piles in sand.	99[13]	1940	10,337,000
Lock and dam 25	241.4	Cap Au Gris, MO	110	600	15.0	434.0	19.0	12.0	Piles in sand and gravel.	Piles in sand and gravel.	99[13]	1939	13,694,000
Lock and dam 26 (Henry T. Rainey Dam)[14]	202.9	Alton, IL	110	600	24.0	419.0	19.0	10.0	Piles in sand.	Piles and sand.	100	1938	12,824,000
			110	360	24.0	--	16.0	10.0					

TABLE 17-C
(Continued)

LOCKS AND DAMS

Lock and Dam	Miles Above Ohio River	Miles from Nearest Town	Lock Dimensions: Width of Chamber (feet)	Lock Dimensions: Greatest Length Available for Full Width (feet)	Lock Dimensions: Lift (feet)	Lock Dimensions: Upper Normal Pool Elevation[1]	Depth on Miter Sill: Upper (feet)	Depth on Miter Sill: Lower (feet)	Character of Foundation: Lock	Character of Foundation: Dam	Percent Complete Locks, Dams, and Work in Pool	Year Opened to Navigation	Estimated Cost of Each Lock and Dam Including Work in Pool
Melvin Price Locks and Dam	200.8	Alton, IL	110	1,200	24.0	419.0	23.0	18.0	Piles to bedrock.	Piles to bedrock.	98	1990	752,841,000
Melvin Price Locks and Dam (2nd Lock)	200.8	Alton, IL	110	600	24.0	419.0	42.0	18.0	Piles to bedrock.	Piles to bedrock.	99[15]	1994	211,550,000
Total, Locks and dams													$1,196,556,000

1. Elevation of Pools 1 to 22 and at St. Anthony Falls are mean sea level 1912 adjustment: Pools 24, 26 are mean sea level 1929 adjustment.
2. Includes existing dam, owned by Northern States Power Co.
3. Includes dredging above upper lock. (Federal cost only.)
4. Based on pool elevation 723.1 in Pool 1 which is crest of dam. Pool is normally maintained at elevation 725.1 by flashboards.
5. Includes lower approach dredging and dredging between upper and lower rock. (Federal cost only.)
6. In addition $1,948,000 expended from previous projects and $1,349,600 from O & M appropriation for first of twin locks. Excludes lock and dam rehabilitation program.
7. Old upper guard sill.
8. Landward lock.
9. In addition, $1,965,300 expended from previous projects.
10. Existing Le Claire Canal lock is used as auxiliary to lock 14; previous project cost $540,000.
11. Depth over upper poiree sill. Depth over upper miter sill is 27 feet, at lock 15.
12. $640,868 for first lock was reported by Mississippi River Power Company, transferred to Government free in lieu of improvements destroyed. (Annual Report, 1928, pp. 1118-1119.) Present estimate includes $13,132,600 for main lock and appurtenant work.
13. Complete except for guidewall extensions.
14. Lock and Dam 26 has been replaced by the Melvin Price Locks and Dam at which full pool was raised 1 February 1990. Lock and Dam 26 has been removed.
15. Melvin Price Locks and Dam (2nd Lock) is complete except for the mitigation plan which is required to finalize environmental documentation. Actual cost to date is $211,446,000. Present estimate includes $104,000 for mitigation plan.

TABLE 17-D HARBOR IMPROVEMENTS

Name	Miles above Ohio River	Location	Type	Project depth (feet)	Approximate size (feet) Width	Approximate size (feet) Length	Percent Complete	
St. Paul Harbor, MN	836.5-839.2	In city of St. Paul, MN	Commercial	9	400-1,000	2.7(mile)	100	$ 217,100
	839.7	Channel improvement, Small-boat harbor and channel enlargement.	Small-boat	5	300	400	100	230,200
Hastings Harbor, MN	813.2	Lower end of city of Hastings, MN	Small-boat	5	200	500	100	74,300
Red Wing Harbor, MN	791.4	In city of Red Wing, MN	Commercial	9	300	1,200	100	146,800[1]
Red Wing Harbor, MN	791.1	In city of Red Wing, MN	Small-boat	5	450	800	100	8,700
Bay City Harbor, WI	785.9	Upper end of Bay City, WI	Small-boat	5	50-100	5,990	100	39,400[2]
Lake City Harbor, MN	773.0	In city of Lake City, MN	Small-boat	5	400	600	100	93,500
			Commercial[3]	9	500	1,000	100	
			Small-boat[3]	9	500	850	100	1,077,000[4]
Pepin Harbor, WI	767.1	In city of Pepin, WI	Small-boat	5	50	600	100	205,500[5]
Wabasha Harbor, MN	760.0	Upper end of city of Wabasha, MN	Small-boat	5	175-400	800	100	41,700
Alma Harbor, WI	751.3	Upper end of Alma, WI	Small-boat	5	300	500	100	56,300
Winona Harbors, MN	726.0	In city of Winona, MN Latsch Island	Small-boat	5	200	1,000	100	89,800
	726.2	Crooked Slough	Commercial	9	200	6,000	100	84,700
Lansing Harbor, IA	663.3	Upper end of city of Lansing, IA	Small-boat	5	170	500	100	95,300
Prairie du Chien Harbor, WI	635.5	Upper end of city of Prairie du Chien, WI	Small-boat	5	400	800	100	85,500
	635.0	In Marais de St. Friol East Channel below Hwy bridges.	Commercial	9	--	1,000 frontage	100	93,100
Dubuque Harbor, IA	579.4	At Dubuque, IA	Commercial	12	340	1,500	100	55,200
Savanna Harbor, IL	537.3	At Savanna, IL	Small-boat	5	280	910	0	310,000
Clinton Harbor, IA	519.0	At Clinton, IA	Small-boat	5	400	1,400	78	101,912
Moline Harbor, IL	488.0	At Moline, IL	Small-boat	5	230	660	100	110,328
Davenport Harbor, IA (Lindsay Park)	484.2	At Lindsay Park	Small-boat	5	200	1,150	--	262,100
Rock Island Harbor, IL	479.8	At Rock Island, IL	Entrance channel small-boat harbor	6	100	1,100	100	31,000
Andalusia Harbor, IL	473.0	Andalusia Slough	Small-boat	5	40	435	100	21,000
Muscatine Harbor, IA	455.5	At Muscatine, IA	Small-boat	5	150	950	100	353,000
	455.6		Freight terminal approach channel	9	200	1,890	100	
Fort Madison Harbor, IA	383.7	At Fort Madison, IA	Small-boat	5	250	900	100	184,200

TABLE 17-D (Continued)

HARBOR IMPROVEMENTS

Name	Miles above Ohio River	Location	Type	Project depth (feet)	Approximate size (feet) Width	Approximate size (feet) Length	Percent Complete	
Warsaw Harbor, IL	359.1	At Warsaw, IL	Small-boat	5	100	600	100	73,000
Quincy Harbor, IL	327.3	In Quincy Bay, IL	Small-boat	5	200-300	9,000	0	--[6]
Hannibal Harbor, MO	308.8	At Hannibal, MO	Small-boat	5	180-260	600	100	129,000
Total								$4,269,640

1. In addition, local interests contributed $3,455.
2. In addition, local interests contributed $9,533.
3. Commercial harbor converted to small-boat harbor under authority of Section 107 of 1960 River and Harbor Act, as amended. Primary use is small-boat, although some commercial activity exists.
4. In addition, local interests contributed $812,599.
5. In addition, local interests contributed $32,344.
6. Maintenance only, estimated at $5,000 annually.

TABLE 17-E ADDITIONAL FEATURES ENTERING INTO COST OF PROJECT

Facilities for public use, convenience and safety	$ 3,348,200
Rectification of damages caused by seepage and backwater	7,049,700[1]
Regulating works between Melvin Price Locks and Dam and Missouri River	545,000
Improvement of Beaver Slough at Clinton, Iowa, for navigation	193,600
Miscellaneous	1,312,900[2]
Total additional features	12,449,400[3]
Total existing project (new work)	$1,186,720,233

1. Includes a lump-sum payment of $2,146,800 (O&M appropriation) paid to the Sny Island Levee Drainage District, IL, for rectification of seepage damages. Also includes $140,000 Construction General funds for project studies, evaluation, and report preparation.
2. Includes $686,500 for repairs to Stone Arch Bridge, Minneapolis, MN. (FY 1969)
3. Excludes $227,000 (1965) for inactive remedial measures at Sandy Slough, MO.

TABLE 17-F LICENSE FEES COLLECTED FOR FISCAL YEAR 2009

Dam	Licensee	Annual Charge
St. Anthony Falls Lower Lock and Dam	Northern States Power Co. (No. 2056) (Xcel Energy)	$ 3,300
Lock and Dam No. 1	Ford Motor Co.	51,892
Lock and Dam No. 2	City of Hastings, MN.	$22,049

TABLE 17-G AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
	MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS, MN	
Sep. 22, 1922	Dredging channels to landing places.	None
July 3, 1930 as amended by P.R. No. 10, Feb. 24, 1932	Project adopted from Illinois River to Minneapolis; Chief of Engineers granted discretionary authority to make such modification in plan as may be deemed advisable.[4]	H. Doc. 290, 71st Cong., 2d sess.
June 26, 1934	Operation of snag boats and operation and care of locks and dams to be provided for with funds from Department of the Army appropriations for rivers and harbors.	None
Aug. 30, 1935	Missouri River established as lower limit of project.	H. Doc. 137, 72nd Cong., 1st sess.
Aug. 26, 1937	Extension of 9-foot channel above St. Anthony Falls, MN, including adequate terminal facilities for Minneapolis, MN	H. Doc. 137, 72nd Cong. 1st sess.
Aug. 30, 1935	St. Paul, MN harbor.	Rivers and Harbors Committee Doc. 44, 74th Cong., 1st sess.
Aug. 26, 1937	Determine damages to drainage and levee districts caused by seepage and backwater, and cost of making rectification thereof.	Rivers and Harbors Committee Doc. 34, 75th Cong., 1st sess.
Dec. 22, 1944	Public park and recreational facilities.	None
Mar. 2, 1945	Red Wing, MN harbor.	H. Doc. 103, 76th Cong., 1st sess.
Mar. 2, 1945	Remedial works to correct damages caused by seepage and backwater at Cochrane, WI	H. Doc. 137, 76th Cong., 1st sess.
Mar. 2, 1945	Such changes or additions to payments, remedial works, or land acquisitions authorized by River and Harbor Act of Aug. 26, 1937 (River and Harbor Committee Doc. 34, 75th Cong., 1st sess.), as Chief of Engineers deems advisable.	None
Mar. 2, 1945	St. Paul, MN channel enlargements, small boat harbor, and roadway.	H. Doc. 547, 76th Cong., 3rd sess.
None	Vertical bridge clearance at Minneapolis to 26 feet above estimated stage for discharge of 40,000 cfs	S. Doc. 54, 77th Cong., 1st sess.
Mar. 2, 1945	Winona, MN basin.	H. Doc. 263, 77th Cong., 1st sess.
Mar. 2, 1945	Future modification of lock and dam No. 2 for power development.	H. Doc. 432, 77th Cong., 1st sess.
Mar. 2, 1945	Provides for cash contribution by local interests in lieu of alteration of privately owned bridges and utilities for St. Anthony Falls project.	H. Doc. 449, 78th Cong., 2d sess.
July 24, 1946	Lake City, MN harbor.	H. Doc. 511, 79th Cong., 2d sess.
July 24, 1946	Wabasha, MN harbor.	H. Doc. 514, 79th Cong., 2d sess.
July 24, 1946	Payment of damages caused by backwater and seepage, Pools 3 to 11.	H. Doc. 515, 79th Cong., 2d sess.
July 24, 1946	Hastings, MN harbor.	H. Doc. 559, 79th Cong., 2d sess.
July 24, 1946	Lansing, IA harbor.	S. Doc. 192, 79th Cong., 2d sess.
June 30, 1948	Fort Madison, IA harbor.	H. Doc. 661, 80th Cong., 2d sess.
May 17, 1950	Payment of damages caused by pool No. 14 at Clinton, IA.	S. Doc. 197, 80th Cong., 2d sess.
May 17, 1950	Davenport, IA harbor.	H. Doc. 642, 80th Cong., 2d sess.
May 17, 1950	Muscatine, IA harbor.	H. Doc. 733, 80th Cong., 2d sess.
May 17, 1950	Alma, WI harbor.	H. Doc. 66, 81st Cong., 1st sess.

TABLE 17-G (Continued) AUTHORIZING LEGISLATION

Acts	Work Authorized	Documents
May 17, 1950	Hannibal, MO harbor.	H. Doc. 67, 81st Cong., 1st sess.
May 17, 1950	Prairie du Chien, WI harbors.	H. Doc. 71, 81st Cong., 1st sess.
May 17, 1950	Opposite Hamburg, IL harbor.[1]	H. Doc. 254, 81st Cong., 1st sess.
May 17, 1950	Permits such change in location of Winona, MN small boat basin authorized by River and Harbor Act of Mar. 2, 1945 (H. Doc. 263, 77th Cong., 1st sess.), as Chief of Engineers deems advisable.	None
Sep. 3, 1954	Construction of Crooked Slough Harbor at Winona, MN, in lieu of previously authorized commercial harbor.	H. Doc. 347, 83rd Cong., 2d sess.
Sep. 3, 1954	Payment of damages caused by pool No. 24 at Louisiana, MO.	H. Doc. 251, 82nd Cong., 1st sess.
July 3, 1958	Permits modification of vertical bridge clearances and authorizes completion of St. Anthony Falls project.	H. Doc. 33, 85th Cong., 1st sess.
July 3, 1958	Small boat and commercial harbors at Alton, IL.[2]	H. Doc. 136, 84th Cong., 1st sess.
July 3, 1958	Payment of lump sum amounts for damages to drainage and levee districts caused by operation of navigation pools.	H. Doc. 135, 84th Cong., 1st sess.
July 3, 1958	Improvement and maintenance of Beaver Slough at Clinton, IA.	H. Doc. 345, 84th Cong., 2d sess.
Mar. 3, 1959	Reconstruction of structures as may be necessary to provide adequate facilities for existing navigation.	None
July 14, 1960	Construction of Industrial Harbor at Red Wing, MN.	H. Doc. 32, 86th Cong., 1st sess.
Oct. 23, 1962	Construction of small-boat harbors at Savanna[2], Moline, Andalusia, New Boston[5], Warsaw, Quincy, and Grafton, IL; Bellevue[1], Clinton, Davenport, and Keokuk[3], IA; St. Paul (Harriet Island), MN[5]; and Bay City, Pepin, and Cassville[5], WI.	H. Doc. 513, 87th Cong., 2d sess.
Oct. 23, 1962	Payment of damages caused by Pool 24 at Clarksville, MO.	H. Doc. 552, 87th Cong., 2d sess.
Oct. 23, 1962	Remedial works at Sandy Slough, MO.	H. Doc. 419, 87th Cong., 2d sess.
Nov. 7, 1966	Repair of Stone Arch Bridge at Minneapolis, MN.	None
Oct. 21, 1978	Replacement of Lock and Dam 26	Public Law 95-502
Dec. 29, 1981	Change name of Lock and Dam 26 to Melvin Price Locks and Dam effective on the date of Melvin Price's death. (Apr. 22, 1988 - date of death)	Public Law 97-118
Nov. 17, 1986	Authorized a second lock at Locks and Dam 26, Alton, Illinois and Missouri	Public Law 99-662
Nov. 28, 1990	Modified PL 95-502 to authorize recreational development at Melvin Price Locks and Dam, requiring no separable project lands and cost sharing.	Public Law 101-640
Oct. 31, 1992	Authorized the construction of a 24,000 square foot regional visitor center at Melvin Price Locks and Dam.	Public Law 102-580
Oct. 12, 1996	Amended PL 101-640 to allow the use of project lands and other contiguous non-project lands.	Public Law 104-303

1. Deauthorized FY 75.
2. Inactive.
3. Deauthorized FY 87 (WRDA of 1986).
4. Guidewalls at Locks 3, 4, 5, 5A, 7, 8, 9, and 10 deauthorized FY 87 (WRDA of 1986).
5. Deauthorized FY 90 (WRDA of 1986).
6. Guidewall extensions at Locks 16, 18, and 21; construction of mooring facilities at Locks and Dams 11, 12, 14, 15, 16, 17, and 18; upper approach improvement at Lock 19 and Lock and Dam 20; and rock and/or conglomerate excavation in Pools 14, 18, and 21 deauthorized FY 90 (WRDA of 1986).