



# Army Corps Supplemental Appropriations: Recent History, Trends, and Policy Issues

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## Summary

Under its civil works program, the U.S. Army Corps of Engineers plans, builds, operates, and maintains a wide range of water resource facilities. The Corps also plays a prominent role in responding to domestic natural disasters, in particular riverine and coastal flooding. The Corps can assist in flood fighting at the discretion of its Chief of Engineers in order to protect life and property, principally when state resources are overwhelmed. The Corps is also authorized to protect and repair its own facilities in the event of flooding, and to operate a program, the Rehabilitation and Inspection Program (RIP), that funds the repair of participating nonfederal flood control works (e.g., levees, dams, dunes) damaged by flooding events. Additionally, the Corps undertakes a variety of other activities at the request of Federal Emergency Management Agency (FEMA) under the National Response Framework, which are outside the scope of this report.

In recent years several natural disasters have required Corps response and repair activities with costs running into the billions. Congress provided most of these funds through supplemental appropriations. From 1987 to 2013, Congress appropriated \$32.2 billion in supplemental funding to the Corps. Of this funding, \$30.8 billion came through supplemental appropriations acts passed between 2003 and 2013. This funding was more than half of the amount that was provided to the Corps in regular appropriations over this same period (\$55 billion).

Of the \$30.8 billion, \$27.5 billion (89%) was for responding to flooding and other natural disasters, with the majority of this funding related to Hurricane Katrina and the 2005 storm season (\$16 billion) and, more recently, Hurricane Sandy's landfall in 2012 (\$5.3 billion). In addition to the disaster funding, Congress provided the Corps with non-disaster related supplemental funds, including \$4.6 billion under the American Recovery and Reinvestment Act (P.L. 111-5) and \$39 million for facility security and other expenditures.

Corps natural disaster supplemental appropriations have largely been funded through two Corps accounts: Flood Control and Coastal Emergencies (FCCE; i.e., flood fighting, repairs to damaged nonfederal flood control projects) and Operations and Maintenance (O&M; i.e., repairs to Corps projects). Nonfederal cost-sharing for FCCE and O&M typically has not been required with some exceptions. Congress also has provided some funding for other Corps accounts, such as Construction and Mississippi Rivers and Tributaries. Local cost-sharing requirements for construction funding in particular have varied. Hurricane Katrina funding generally required local cost-sharing for construction investments, while funding to complete "ongoing" construction (but not new construction) after Hurricane Sandy received a waiver from local cost-sharing requirements.

When faced with natural disaster response costs and proposed supplemental expenditures, Congress may consider whether to provide these funds to the Corps and, if so, how much funding to include and for which Corps accounts and activities. In providing supplemental funding, Congress also may consider associated issues such as whether to maintain standard nonfederal cost-sharing requirements, whether to include reporting and transparency requirements for this funding, and what type of flood damage reduction efforts to support.

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## Introduction

Under its civil works program, the U.S. Army Corps of Engineers (Corps) plans, builds, operates, and maintains a wide range of water resource facilities. The Corps also undertakes flood fighting activities and other natural disaster response activities at its water resource facilities and for other flooded areas and flood-damaged structures. These emergency activities have been authorized by Congress, and have generally been funded by supplemental appropriations, which in the last decade have been significant relative to annual Corps appropriations.

Since 1987, Congress has appropriated approximately \$32.2 billion in Corps supplemental appropriations. Of this total, Congress provided \$30.8 billion since 2003, which is significant relative to the agency's \$55 billion in regular annual appropriations over the same period. While the majority of the Corps supplemental appropriations funded its flood fighting activities and repairs to damaged nonfederal flood control and federal water resources projects, Congress also provided \$5.0 billion for post-Katrina improvements and provided \$4.6 billion as part of the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5). In P.L. 113-2, signed into law on January 29, 2013, Congress appropriated \$5.3 billion in supplemental funding to the Corps for response and recovery efforts related to Hurricane Sandy.

The majority of Corps natural disaster supplemental appropriations have been for activities funded by two Corps accounts: Flood Control and Coastal Emergencies (FCCE; i.e., flood fighting, repairs to damaged nonfederal flood control projects) and Operations and Maintenance (O&M; i.e., repairs to Corps projects). Nonfederal cost-sharing for FCCE and O&M typically has not been required with some exceptions. Congress also has provided supplemental funding for other Corps accounts, such as the Mississippi River and Tributaries account and the Construction account.

In the wake of major flooding and other natural disasters, Congress often considers whether to provide supplemental appropriations to the Corps and other agencies. Proponents of this supplemental funding often argue that these investments are significant for recovery efforts and should be given special consideration by Congress (e.g., designated as emergency funding and not requiring budgetary offsets). Others argue that the annual appropriations process is the more appropriate forum for deciding on federal flood damage reduction investments, and that post-disaster investments should be subject to the same project development and cost-share requirements as other similar Corps projects, and should compete in the Corps annual budget development process.

This report provides analysis of Corps supplemental funding. Its focus is recent decades of supplemental funding provided directly to the Corps, and it does not include extensive analysis of regular Corps appropriations. Apart from Corps disaster response, the Federal Emergency Management Agency (FEMA) has extensive authority to assist and coordinate disaster response actions under the National Response Framework, and receives significant regular and supplemental appropriations for this work.<sup>1</sup> While the Corps performs work under some mission assignments for FEMA (i.e., funded by FEMA, under FEMA's direction), that work is not considered in this report.

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<sup>1</sup> For more on FEMA's coordinating role, see CRS Report R41981, *Congressional Primer on Responding to Major Disasters and Emergencies*, by Francis X. McCarthy and Jared T. Brown.

## **Funding of Corps Emergency Activities**

Congress authorized the Corps in the Flood Control Act of 1941 (33 U.S.C. §701n) to assist in flood fighting and flood response. The Corps can assist in flood fighting at the discretion of its Chief of Engineers in order to protect life and property, principally when state resources are overwhelmed. Congress also authorized the Corps to operate the Rehabilitation and Inspection Program (RIP, also known as the P.L. 84-99 program) to fund the repair of participating nonfederal flood control works (e.g., levees, dams, dunes) damaged by natural events. Repairs under this program are funded by the Corps' Flood Control and Coastal Emergencies (FCCE) account. Congress also has directed the Corps to use supplemental funds to repair and rebuild federally owned flood control and other projects (e.g., navigation projects) through the agency's Operation and Maintenance (O&M) and Construction accounts.

In the event of an emergency, Congress has given the Secretary of the Army (generally delegated to the Assistant Secretary of the Army (Civil Works)) discretion to transfer from existing appropriations the monies necessary for the emergency work referenced above, until funds become available in the applicable account through supplemental appropriations or other avenues.<sup>2</sup> In recent floods, the Corps has exercised this authority to transfer regular annual appropriations from ongoing projects (i.e., projects funded by regular appropriations) to pay for emergency actions. The Corps then internally reimburses itself for this funding once supplemental appropriations are available.

The majority of natural disaster-related supplemental appropriations generally are placed into one of the following four Corps budget accounts based on the type of activity funded.

### **Flood Control and Coastal Emergencies (FCCE) Account**

The FCCE account is the primary account through which the Corps funds disaster-related activities. The primary activities funded under FCCE are flood fighting (e.g., sandbagging) and emergency preparedness and response, and repair of damaged nonfederal flood and hurricane protection projects (i.e., RIP activities).<sup>3</sup>

### **Operation and Maintenance (O&M) Account**

The O&M account funds activities related to existing Corps projects, including upkeep of physical infrastructure and other activities (i.e., dredging of ports and waterways). Common disaster activities funded under this account include repair of damaged federally operated flood and hurricane protection projects (e.g., dams, levees, floodwalls), dredging of federal waters, and navigation infrastructure projects.

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<sup>2</sup> 33 U.S.C. §701n

<sup>3</sup> The Corps may receive annual appropriations in the FCCE account in anticipation of natural disasters. However, Congress generally has not provided funding for the Corps in advance of major disasters; instead the majority of FCCE funding has instead come through supplemental appropriations. Since 2003, the FCCE account received a total of \$68 million in regular annual appropriations. In 8 of the last 11 years, Congress provided the Corps no funding for the FCCE account in regular appropriations, despite the Administration's request for FCCE funding of emergency training and preparedness in each of those years, which ranged from \$30 million to \$81 million.

## Mississippi River and Tributaries (MR&T) Account

The Mississippi Rivers and Tributaries account consists of flood control and navigation projects for the lower Mississippi River Valley. Supplemental expenditures under this account primarily consist of repair to damaged MR&T levees, floodways, and other project features.

## Construction Account

The Construction account funds new project construction and major upgrades to existing projects. Supplemental construction funding has been used at times to improve flood protection provided by existing projects and for new construction projects to increase protection.

## Analysis of Corps Supplemental Appropriations

As noted above, Congress has provided the Corps with approximately \$32.2 billion in supplemental funding in 26 acts from 1987-2013.<sup>4</sup> Of this total, \$30.8 billion was provided in 13 appropriations acts from 2003 to 2013. Adjusting prior-year appropriations for inflation, Congress provided the Corps with approximately \$35 billion (in 2012 dollars) in supplemental appropriations over the 1987-2013 period, and 94% of this total was provided between 2003 and 2013.

Individual supplemental appropriations acts over the last 26 years that provided funding to the Corps are shown below in **Table 1**. Supplemental appropriations are also shown by year in **Figure 1** and broken down by account for three major events in **Figure 2**.

The discussion below differentiates between four types of supplemental funding that the Corps received:

- funding for the 2005 hurricanes;
- funding for Hurricane Sandy response and recovery;
- funding for “all other” hurricanes and other natural disasters; and
- funding for other non-disaster purposes, such as economic recovery and facility security.

Separately, the **Appendix** to this report further denotes the disaster events that enacted supplemental appropriations have explicitly referenced since 2003.

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<sup>4</sup> CRS analysis using enacted supplemental appropriations bills and data provided by the Corps.

**Table I. Corps Supplemental Appropriations, 1987-2012**  
(nominal \$ in millions)

<b>Public Law (Year Enacted)</b>	<b>General Expenses</b>	<b>Investigations</b>	<b>Construction</b>	<b>MR&amp;T</b>	<b>O&amp;M</b>	<b>FCCE</b>	<b>FUSRAP</b>	<b>Total</b>
P.L. 113-2 (2013)	10	50	3,461	—	821	1,008	—	<b>5,350</b>
P.L. 112-77 (2011)	—	—	—	802	534	388	—	<b>1,724</b>
P.L. 111-212 (2010)	—	5	—	19	173	20	—	<b>217</b>
P.L. 111-32 (2009)	—	—	—	—	43	754	—	<b>797</b>
<i>P.L. 111-5 (2009)</i>	—	25	2,000	375	2,075	—	100	<b>4,575</b>
P.L. 110-329 (2009)	—	—	1,539	82	740	416	—	<b>2,777</b>
P.L. 110-252 (2008)	2	—	2,897	18	298	3,153	—	<b>6,367</b>
P.L. 110-28 (2006)	—	8	36	—	3	1,562	—	<b>1,609</b>
P.L. 109-234 (2006)	—	3	549	—	3	3,145	—	<b>3,700</b>
P.L. 109-148 (2006)	2	37	101	154	328	2,278	—	<b>2,899</b>
P.L. 109-62 (2005)	—	—	—	—	200	200	—	<b>400</b>
P.L. 108-324 (2004)	—	—	63	6	145	148	—	<b>362</b>
P.L. 108-83 (2003)	—	—	—	—	—	60	—	<b>60</b>
<i>P.L. 108-11 (2003)</i>	—	—	—	—	39	—	—	<b>39</b>
P.L. 107-206 (2002)	—	—	—	—	108	—	—	<b>108</b>
P.L. 107-20 (2001)	—	—	—	—	87	50	—	<b>146</b>
P.L. 106-246 (2000)	4	3	—	—	—	—	—	<b>7</b>
P.L. 105-174 (1998)	—	—	—	—	105	—	—	<b>105</b>
P.L. 105-18 (1997)	—	—	—	20	150	415	—	<b>585</b>
P.L. 104-134 (1996)	—	—	—	—	30	135	—	<b>165</b>
P.L. 104-208 (1996)	—	—	—	—	19	—	—	<b>19</b>
P.L. 103-211 (1994)	—	—	—	—	—	70	—	<b>70</b>

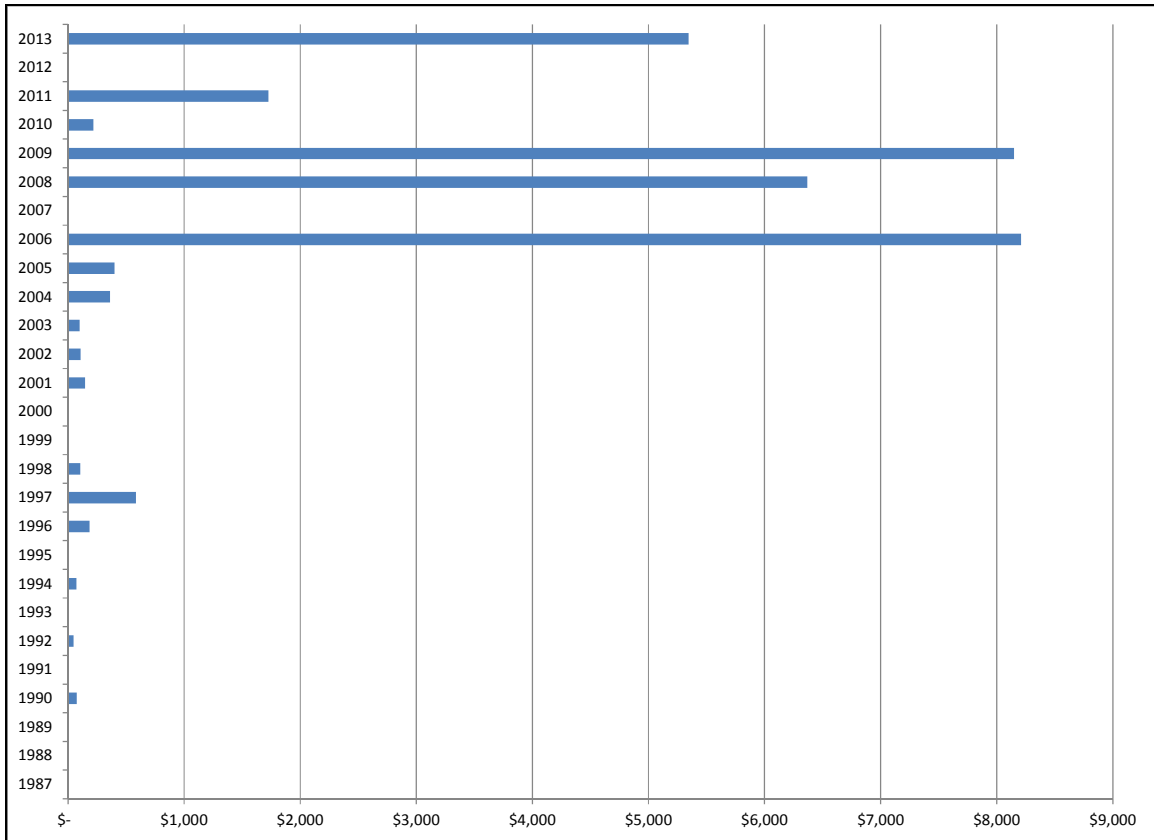
<b>Public Law (Year Enacted)</b>	<b>General Expenses</b>	<b>Investigations</b>	<b>Construction</b>	<b>MR&amp;T</b>	<b>O&amp;M</b>	<b>FCCE</b>	<b>FUSRAP</b>	<b>Total</b>
P.L. 103-50 (1993)	—	—	1	—	—	—	—	1
P.L. 102-368 (1992)	—	—	—	3	3	40	—	46
P.L. 101-302 (1990)	15	—	—	—	40	20	—	75
<b>Total Supplementals</b>	<b>28</b>	<b>133</b>	<b>10,650</b>	<b>1,487</b>	<b>5,944</b>	<b>13,861</b>	<b>100</b>	<b>32,204</b>

**Source:** Multiple appropriations bills (as shown in table), compiled by CRS.

**Notes:** FUSRAP = Formerly Utilized Sites Remedial Action Program (FUSRAP). Amounts do not include rescissions, transfers, or other reductions. Italicized lines indicate supplemental funding for purposes other than natural disaster response (P.L. 111-5, or ARRA, was provided for economic recovery, and P.L. 108-11 was provided for facility security upgrades). A summary of individual locations receiving disaster funding is provided in the **Appendix** to this report.



**Figure I. Corps Supplemental Appropriations Since 1987**  
(nominal \$ in millions)



**Source:** CRS analysis of enacted supplemental appropriations bills.

**Notes:** Amounts do not include rescissions, transfers or other reductions. Amounts include both natural disaster and other supplemental appropriations (e.g., ARRA in 2009).

## 2005 Hurricanes

As noted above, the 2005 hurricanes (primarily Hurricane Katrina) accounted for the majority of Corps supplemental appropriations since 2003. The \$16 billion received for these storms is more than three times the size of the Corps annual civil works budget in a single year. These appropriations were provided in six separate supplemental appropriations bills passed between 2005 and 2009, and most of these funds were designated for rebuilding and in some cases significant strengthening of Corps facilities, principally in Southeast Louisiana. Approximately 94% of the supplemental funds appropriated for Corps hurricane response and recovery went to activities in Louisiana,<sup>5</sup> and \$14.5 billion was for protective measures in Southeast Louisiana. These funds were used for significant repair and strengthening of 350 miles of levees and floodwalls in New Orleans and new surge protection barriers, including the Inner Harbor Navigation Canal Surge Barrier, which is one of the largest surge barriers in the world.

<sup>5</sup> CRS analysis of data provided by the Corps of Engineers, July 2009.

While the federal government funded 100% of the costs of FCCE and O&M infrastructure in Southeast Louisiana, most of the supplemental funds for construction projects were subject to federal/nonfederal cost-sharing requirements (generally a 65/35 federal/nonfederal split). That is, the State of Louisiana is contributing \$1.7 billion, consisting of \$0.2 billion for real estate acquisition and \$1.5 billion for the state's cash-share contribution, for its share of the \$5.0 billion in improvements funded through supplemental appropriations to the Corps construction account. Under a specially negotiated arrangement, the cash contribution was initially provided through federal appropriations and is being repaid over 30 years.<sup>6</sup>

Hurricane Katrina significantly damaged the Mississippi coast. In contrast to the congressional response to fund hurricane protection construction through supplemental appropriations for Southeast Louisiana, Congress directed the Corps to develop a plan for how to protect coastal Mississippi. As part of a supplemental appropriations bill for the Corps (P.L. 109-148), Congress directed the Corps to design comprehensive improvements and modifications to Mississippi coastal counties to provide hurricane protection, prevent erosion, preserve fish and wildlife habitat, and other purposes. This effort is known as the Mississippi Coastal Improvements Program (MsCIP). In a 2009 supplemental bill (P.L. 111-32), Congress authorized and funded \$439 million in Corps FCCE activities under this program. The Corps' final MsCIP plan was submitted to Congress for authorization in January 2010, and is awaiting authorization and subsequent funding of an additional \$1.2 billion in projects.<sup>7</sup> These projects were planned in compliance with the standard 65% federal and 35% nonfederal cost-share for this type of Corps construction project.

As of the end of FY2012, a portion of the Hurricane Katrina funds remained unobligated.<sup>8</sup> Since Congress designated most of these funds for Hurricane Katrina recovery, they are typically not available to other projects or emergencies.<sup>9</sup>

## **Hurricane Sandy, 2012**

Other than the 2005 hurricanes, the largest supplemental appropriation for the Corps was under the Disaster Relief Appropriations Act of 2013 (P.L. 113-2), for response and recovery related to Hurricane Sandy's 2012 landfall. The act provided \$5.35 billion supplemental appropriations both to address damages caused by Hurricane Sandy and to reduce future flood risks in the areas impacted by the storm. Generally, funding under the O&M and FCCE accounts (\$821 million and \$1.008 billion, respectively) was to "address the consequences" of Hurricane Sandy, while the majority of funding appropriated to the Construction account (\$2.9 billion of \$3.4 billion in this account) was set aside to "reduce future flood risks in ways that will support the long-term

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<sup>6</sup> Testimony by L.G. Robert Van Antwerp, Chief of Engineers, before U.S. Congress, Senate Committee on Homeland Security and Governmental Affairs, Ad Hoc Subcommittee on Disaster Recovery, *Five Years Later: Examination of Lessons Learned, Progress Made, and Work Remaining from Hurricane Katrina*, 111<sup>th</sup> Cong., 2<sup>nd</sup> sess., August 26, 2010.

<sup>7</sup> For more on the status of the bill that generally includes Corps authorizations (the Water Resources Development Act, or WRDA), see CRS Report R41243, *Army Corps of Engineers: Water Resources Authorizations, Appropriations, and Activities*, by Nicole T. Carter and Charles V. Stern.

<sup>8</sup> As of the end of FY2012, \$2.85 billion was still unobligated. CRS communication with Corps of Engineers, November 8, 2012. Approximately \$9.9 billion was appropriated to the FCCE account for Hurricane Katrina.

<sup>9</sup> Ongoing work in the region includes projects to reduce urban flood damage, nonfederal levee improvements, and work on the outfall canals into Lake Pontchartrain.

sustainability of the coastal ecosystem and communities and reduce the economic costs and risks associated with large-scale flood and storm events ... within the boundaries of the North Atlantic Division of the Corps that were affected by Hurricane Sandy.”<sup>10</sup>

The supplemental appropriation received by the Corps for Hurricane Sandy included terms that were unique in a number of ways. Under P.L. 113-2, cost-share requirements were waived for Construction account appropriations that were used for the completion of “ongoing “construction projects (but not for new construction projects).<sup>11</sup> Additionally, Congress made the release of certain funds in the Construction account dependent on the Corps releasing certain interim reports also required under the legislation.<sup>12</sup>

## **Other Flooding/Natural Disasters**

Outside of the aforementioned funding for response and repair related to the 2005 hurricane season, from 1987-2012 Congress provided the Corps with approximately \$6 billion to respond to flooding and other natural disasters (e.g., riverine and coastal flooding). The vast majority (approximately 95%) of this funding was provided over the last decade.

Some of this funding was provided in bills that had also designated funds for expenditures related to the 2005 hurricanes (e.g., P.L. 110-252, P.L. 110-329). A considerable portion of the funding for these other flood events was for Corps actions under the O&M account and the FCCE account (64% and 48%, respectively); the Mississippi River & Tributaries account received roughly 16% of these appropriations, as shown in **Figure 2**. Outside of funding for Hurricane Sandy, the other most recent supplemental appropriation for the Corps (P.L. 112-77, passed in December 2011) is included in this category. It focused on repair to Corps facilities in response to flooding on the Mississippi and Missouri Rivers; the majority of these funds were for the MR&T and O&M accounts. These disaster response activities were primarily for Corps-owned and -operated facilities and waterways.

## **Other Supplementals: ARRA and Facility Security**

The Corps has also received supplemental funds for maintenance and facility upgrades. Specifically, the Corps received funding for facility security upgrades in 2002 and 2003 following the terrorist attacks of 2001. It also received funding for facility upgrades (including more than \$2 billion in the O&M account) and new project construction (\$2 billion in the construction account) under the American Recovery and Reinvestment Act of 2009. A combined breakdown of this non-natural disaster related supplemental funding is provided in **Figure 2**.

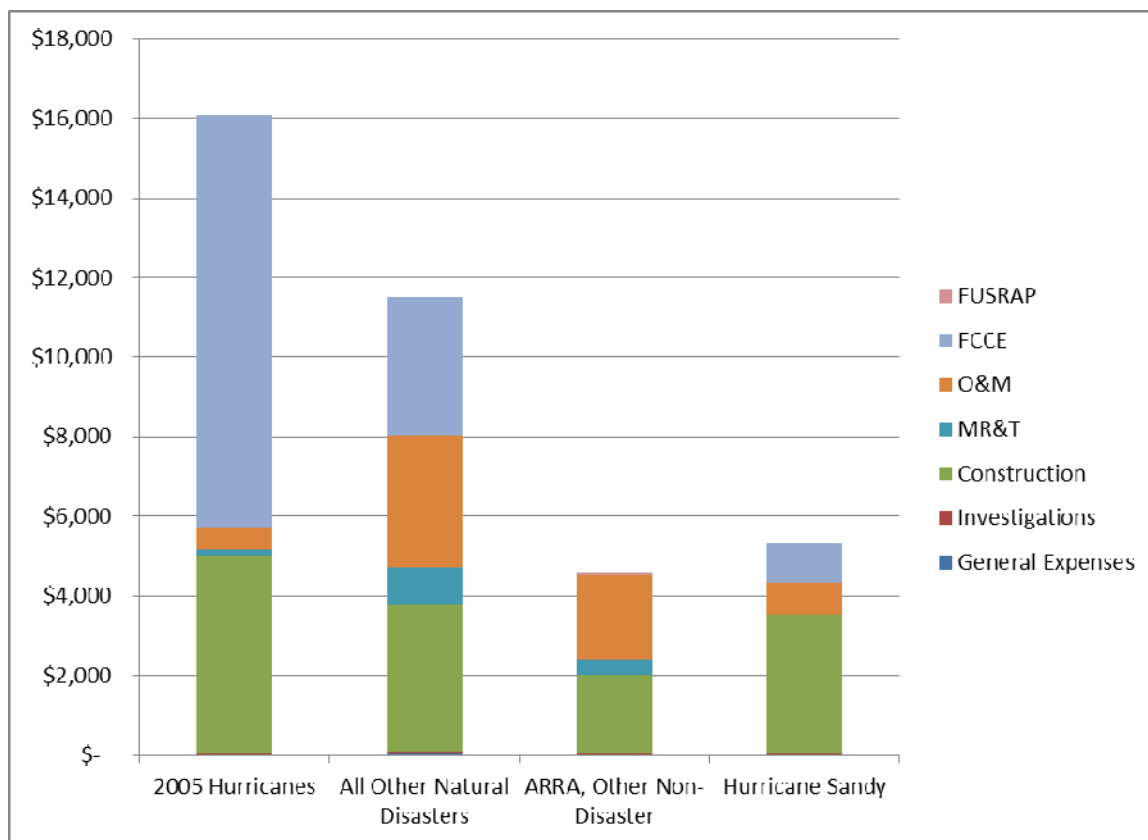
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<sup>10</sup> See P.L. 113-2, Title II.

<sup>11</sup> Similar to construction appropriations for the 2005 storms, those projects which do not have their local cost share requirements waived are eligible to finance these requirements under a 30-year term.

<sup>12</sup> These reports are available at [http://www.nan.usace.army.mil/About/Hurricane\\_Sandy/SandyRelatedUSACEReportstoCongress.aspx](http://www.nan.usace.army.mil/About/Hurricane_Sandy/SandyRelatedUSACEReportstoCongress.aspx).

**Figure 2. Corps Supplemental Appropriations: Distribution by Account**  
(1987-2013, \$ in millions)



**Source:** CRS estimates based on various appropriations acts and data from the Corps.

## Observations on Corps Supplemental Funding

Given current federal fiscal constraints and the multiple natural disasters which have occurred in recent years, the enactment and reliance on emergency supplemental funding is receiving more attention. For Corps natural disaster supplemental funding, some of the topics receiving attention include:

- regularity of natural disaster activities;
- transparency of natural disaster funding;
- use of supplemental bills for post-disaster infrastructure improvements; and
- nonfederal cost-sharing of natural disaster repair and recovery.

Each of these topics is discussed below.

### Regularity of Natural Disaster Activities

Natural disaster emergency supplemental funding for the Corps for the last decade, excluding the 2005 Hurricanes, totaled roughly \$10.1 billion. Congress is faced with deciding whether to address the funding needs for the fairly regular Corps natural disaster activities through

emergency supplemental bills or to build these expenses into the regular appropriations process. As previously noted, Congress generally has not provided the Corps with appropriations in advance of natural disasters through the FCCE account in regular appropriations. Covering the Corps' natural disaster-related activities within the regular appropriations process would make a competitive annual Corps appropriations process even more competitive, but potentially would more accurately reflect the regularity of Corps' natural disaster spending.<sup>13</sup>

### **Transparency of Natural Disaster Funding**

Many of the bills containing supplemental appropriations during the FY2003-FY2013 period were not stand-alone bills for natural disaster response; instead they were bills that combined natural disaster supplemental funding with appropriations for other agencies, often for other purposes (e.g., troop readiness/military supplementals or annual appropriations). For instance, one of the larger supplemental appropriations to the Corps was made in P.L. 109-234, the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006. Other Corps supplemental appropriations were provided in combination with other disaster or emergency expenditures for events different than the disaster for which the Corps was receiving funding.

After the initial appropriation, public reporting on Corps expenditure of supplemental funding has generally been limited. There are very few overarching reporting requirements for reporting on Corps supplemental expenditures, including the amount and extent of transfers from regular appropriations to initially cover emergency response and repairs, the actual expenditures of supplemental appropriations, and the projects/areas which benefited from them. In some of the early post-Katrina supplemental bills and the most recent Sandy supplemental appropriations bill, Congress set reporting requirements for Corps appropriations, including regular reports to the Committee on Appropriations.<sup>14</sup> Additionally, as noted above, Congress made release of some of the Corps construction funding in the Sandy supplemental bill dependent on the Corps completing and releasing information on projects that qualified for these funds. However, outside these reports and ARRA spending (which was tracked through a public website), detailed data on Corps expenditures of supplemental appropriations has not been required or widely available in the same manner as the annual budget.

### **Post-Disaster Infrastructure Improvements**

Congress also is faced with deciding whether to use Corps supplemental funding for improving flood protection in impacted areas to reduce future flood risk. Congress funded Corps infrastructure investments to improved hurricane storm protection infrastructure for Southeast Louisiana in post-Katrina supplemental bills, while it did not use supplemental Corps construction funds for such improvement for the 2008 Hurricane Ike-impacted Texas coast, the Midwest areas impacted by the 2011 and 1993 floods, or the 1992 Hurricane Andrew-impacted areas. Most recently, more than half of the \$5.3 billion in supplemental funding provided to the

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<sup>13</sup> CRS Report R41961, *Army Corps Fiscal Challenges: Frequently Asked Questions*, by Nicole T. Carter and Charles V. Stern.

<sup>14</sup> Monthly status reports on all supplemental funds appropriated for Hurricane Sandy response (i.e., obligations and appropriations) are available at <http://portal.hud.gov/hudportal/HUD?src=/sandyrebuilding/recoveryprogress>. As of September 2013, the Corps had obligated about 6% of its total appropriation and outlaid roughly 2% of this amount.

Corps for Hurricane Sandy recovery was designated for new or ongoing construction to reduce flood risks.

The proponents of supplemental construction funds for flood impacted areas argue that these investments are significant to the recovery effort and that flooding events often bring to light flood risks warranting attention. Others argue that the annual appropriations process is the more appropriate forum for identifying nation-wide flood infrastructure investment priorities. The argument is that there may be other Corps flood damage reduction activities in other parts of the country that are of a higher national priority because they protect more lives and have a higher benefit-to-cost ratio. The Corps has a backlog of more than \$10 billion of authorized flood and storm damage reduction projects across the country, which compete for the roughly \$1 billion typically provided for flood damage reduction activities in the annual budget process.

### **Nonfederal Cost Sharing of Natural Disaster Repair and Recovery**

While many Corps civil works activities are cost shared with nonfederal sponsors, supplemental appropriations for flood fighting and repair of damaged infrastructure and projects has not been subject to significant cost sharing. In addition to these activities, Congress has occasionally provided funding for upgrades and construction of new infrastructure in supplemental appropriations. Congress provided supplemental appropriations for construction activities for improving infrastructure in areas affected by Hurricane Katrina, particularly in Louisiana. These construction activities generally have been cost shared either at the standard 65% federal/35% nonfederal split or consistent with the cost sharing arrangement for the original Corps project.<sup>15</sup> Most recently, for supplemental appropriations related to Hurricane Sandy, cost-share requirements were waived for ongoing construction projects, but not for new construction.

The appropriate cost share for Corps construction activities has been the subject of debate, with a wide range of cost shares proposed, ranging from standard cost shares (65% federal/35% nonfederal) to requirements for the federal government to handle most, or all of a project's costs. Some have also proposed relaxing cost-share requirements for specific project types (e.g., cost-share waivers for ongoing construction projects, as noted above) and changes to what costs should be counted towards the nonfederal share.

Various justifications for altering the standard 65/35 arrangement have been noted, including the potentially limited ability of many communities impacted by disasters to pay the standard nonfederal share. Assuming some sort of nonfederal cost share is required, another issue is who is responsible for the nonfederal share and the time period over which it will be repaid. In the case of Louisiana, Congress required that it create a single state or quasi-state entity to act as its nonfederal construction partner for post-Katrina Corps repairs and improvements, and allowed the entity 30 years to repay its share of the construction costs (which was covered by the federal government with funds provided in P.L. 109-148).

The status of other existing cost-share requirements as they relate to supplemental funding is another ongoing issue. While certain categories of funding for federal navigation projects normally require cost sharing from the Harbor Maintenance Trust Fund (HMTF) and the Inland Waterway Trust Fund (IWTF), similar cost-sharing arrangements have generally not been

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<sup>15</sup> The standard split for these projects in regular appropriations is 65/35, with the nonfederal share including costs for lands, easements, rights-of-way, relocations, and disposal areas (known collectively as LEERDs (33 U.S.C. §221).

required for supplemental funding for natural disasters.<sup>16</sup> That is, neither of these two trust funds has been responsible for navigation-related natural disaster response and recovery costs funded in supplemental appropriations over the last decade. However, there were a few supplemental appropriations bills that required cost sharing from the HMTF in the late 1990s.<sup>17</sup>

Similarly, the Corps Rehabilitation and Inspection Program essentially functions as an insurance program for many nonfederal flood control and coastal protection projects. There is no cost or premium for participating in the RIP program beyond maintaining the project to RIP standards, and post-storm repairs to this infrastructure are fully funded by the federal government.

## **Concluding Remarks**

The rate at which Congress is providing supplemental funding to the Corps has increased in the last decade. At issue for Congress is the ideal amount and allocation of funding for Corps flood-fighting and response activities going forward, and what requirements should accompany these appropriations. One question for Congress to consider when making supplemental funding available to the Corps to respond to riverine and coastal flooding events is the extent to which response funding will provide for the construction of new, potentially more resilient infrastructure to reduce flood risk (in contrast to repairs to pre-existing conditions and levels of protection). Supplemental appropriations in response to Hurricane Katrina in 2005 and Hurricane Sandy in 2013 did this to a greater extent than did funding for other flooding events over the last 25 years. Also at issue is the status of nonfederal cost sharing for activities receiving supplemental appropriations. Another longer term issue is whether to shift from the dominant use of supplemental appropriations for funding emergency flood response to incorporating of the Corps emergency expenses into the annual appropriations process.

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<sup>16</sup> Cost sharing requirements for the IWTF were also waived for non-disaster supplemental appropriations provided in ARRA (P.L. 111-5).

<sup>17</sup> P.L. 105-174 (1998) and P.L. 105-18 (1997) both required applicable costs be shared with the Harbor Maintenance Trust Fund, in accordance with existing statute. This made the supplemental appropriation cost sharing consistent with the annual appropriations process.

## Appendix. Natural Disaster Allocations by Location

**Table A-1. Selected Supplemental Appropriations Allocations by Location, 2003-2012**  
(events or locations receiving Corps supplemental appropriations)

P.L. Number (enacted date)	Event Type or Location	Funding Allocation (\$ in millions)
P.L. 108-324 (2004)	West Virginia Floods	10
P.L. 109-62 (2005)	Hurricane Katrina	400
P.L. 109-148 (2005)	Hurricane Katrina	2,143
	Hurricane Ophelia	69
	Hurricane Rita	91
	Hurricane Wilma	57
P.L. 109-234 (2006)	Hurricane Katrina	3,651
	Hurricane Rita	2
	California	30
	Hawaii	2
	Pennsylvania	16
P.L. 110-28 (2007)	Hurricane Katrina	1,325
	Mississippi	108
	Missouri River Flood	12
	Alabama-Coosa River	3
	Nor'easter Flood	23
	Texas	3
	Drought Assistance	7
P.L. 110-252 (2008)	Midwest Flooding	302
	Hurricane Katrina	5,900
P.L. 110-329 (2008)	Hurricane Katrina	1,500
P.L. 111-32 (2009)	Hurricane Katrina	439
P.L. 113-2 (2013)	Hurricane Sandy	5,350

**Source:** CRS using Corps data.

**Notes:** Table only includes legislation referencing specific locations and/or events. As previously noted, the funding provided under P.L. 110-329 was appropriated to cover the nonfederal share of certain construction costs related to Hurricane Katrina and is being repaid by the State of Louisiana over 30 years.



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