Flood Damage Related to Army Corps of Engineers Projects: Selected Legal Issues

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June 7, 2011
Summary

Over the past century, the federal government has undertaken a number of civil works projects to prevent widespread damage from flooding of various waterways. These flood control projects generally have been designed and constructed by the U.S. Army Corps of Engineers (Corps). Despite the existence of these flood control structures, floods have caused major damage to various regions of the country. Hurricane Katrina was the most costly natural disaster ever to hit the United States. Striking land in August 2005 as a Category 3 hurricane, Hurricane Katrina left 80% of New Orleans under water. Since Katrina, a number of major floods in the midwestern states have caused significant damage. In particular, heightened flows of the Mississippi River in 2011 have resulted in historic flooding and controversy over the use of floodways to redirect floodwaters. In the wake of these floods, the issue of federal liability for flood damage is receiving attention in the media and in Congress.

The costly and unprecedented nature of recent flood damage has led to an upsurge in litigation over flood damage liability. Some lawsuits filed against the federal government, particularly after Katrina, assert government liability for damages resulting from the failure of levees and floodwalls designed and constructed by the Corps. Other lawsuits claim federal liability for damages resulting from the Corps’ decision to activate floodways during the 2011 Mississippi River flooding.

The Federal Tort Claims Act (FTCA) and the Flood Control Act of 1928 (FCA) may protect the government from liability for some flood-related claims. Under the FTCA, the federal government is exempt from liability for discretionary actions. Under the FCA, the government cannot be sued for damages resulting from federally supported damage reduction projects or floodwaters.

This report examines federal liability for flood damage and analyzes legal defenses available to the federal government. Specifically, it provides an overview of the discretionary function exemption under the FTCA and immunity under the FCA as applied to Corps projects. The report also considers the Corps’ potential liability for damages caused by levee failure during Hurricane Katrina and the activation of floodways during the 2011 Mississippi flooding.
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When the Mississippi River rose to near record levels in 2011, the U.S. Army Corps of Engineers (Corps) intentionally broke several levees along the river, thereby flooding normally protected areas in order to prevent greater damage elsewhere.\(^1\) The decision to detonate levees has been controversial, with opponents arguing that levee detonation combined with the resulting flooding may render extensive amounts of farmland unproductive for a generation.\(^2\) The 2011 Mississippi River floods brought renewed attention to federal liability for floods, which has been the subject of ongoing litigation since Hurricane Katrina.

Hurricane Katrina struck the Gulf Coast in August 2005, bringing with it rain, high-velocity winds, and a large storm surge, and leaving behind a massive path of destruction. Much of the extensive damage that occurred resulted when the storm surge breached levees and floodwalls protecting New Orleans. Some of these structures were part of the federally authorized Lake Pontchartrain and Vicinity Project (LPV), constructed by the Corps and maintained by local levee districts. By August 31, 2005, 80% of New Orleans was underwater.\(^3\) While some flooding was expected in New Orleans, primarily because the city sits below sea level and lacks natural drainage, the extent of inundation was unprecedented.

In many instances, like that of Katrina, floods occur when natural conditions prove too extreme for flood control structures or those structures fail. In other instances, like that of the 2011 Mississippi River flooding, the Corps may flood certain lands in order to reduce damage to other areas. This report examines the legal issues resulting from flood damage in both instances. It analyzes the general framework of liability claims for flood damage and federal government immunity under the Federal Tort Claims Act (FTCA) and the Flood Control Act of 1928 (FCA). The report specifically analyzes claims for federal liability for damage caused by Katrina. Finally, it examines the legal issues surrounding the Corps’ decision to activate floodways along the Mississippi River in 2011.

Theories of Liability and Sources of Immunity

As a threshold issue, any suit against the federal government (including the Corps) must overcome the doctrine of sovereign immunity. Sovereign immunity means that the government cannot be sued. Congress, however, may waive sovereign immunity and allow the federal government to be sued in specific circumstances.\(^4\) The plaintiff bears the burden of proving that it has the right to sue the government. The FTCA\(^5\) and the FCA\(^6\) govern when lawsuits may be filed against the federal government for flood damages.

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\(^1\) *Flood Warnings: Mississippi River Forecast to Swell to Historic Levels Across the Deep South*, *Washington Post*, April 28, 2011, online.


\(^4\) See, e.g., Federal Housing Administration v. Burr, 309 U.S. 242, 244 (1940) (“the United States cannot be sued without its consent”); Rothe Development Corp. v. United States, 194 F.3d 622, 624 (5th Cir. 1999).


\(^6\) 28 U.S.C. §§ 702a *et seq.*
The FTCA and the FCA frequently appear as defenses to the same claim. One federal circuit court has held that the FTCA does not overrule or invalidate the immunity provision of the FCA.\(^7\) Courts generally consider the underlying liability claim only after determining that the immunity provisions do not apply.

### Federal Tort Claims Act

The FTCA waives the federal government’s sovereign immunity if a harmful act of a federal employee causes damage.\(^8\) Specifically, the FTCA creates liability for the following:

- injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the government while acting within the scope of his office or employment, under circumstances where the United States, if a private person would be liable to the claimant in accordance with the law of the place where the act of omission occurred.\(^9\)

### Discretionary Function Exception

The FTCA contains a number of exceptions under which the United States may not be held liable even if negligent. Among these, the discretionary function exception prevents the government from being sued for

- any claim ... based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the government, whether or not the discretion involved be abused.\(^10\)

The Supreme Court has provided clarification on the discretionary function exception of the FTCA. In Dalehite v. United States, the Court described discretion as being “more than the initiation of programs and activities. It also includes determinations made by executives or administrators in establishing plans, specifications or schedules of operations. Where there is room for policy judgment and decision there is discretion.”\(^11\) In United States v. Varig, the Supreme Court found that an agency’s execution of a decided-upon action is also a discretionary action.\(^12\) In United States v. Gaubert, the Court stated a two-part test for applying the discretionary function exception. Under the test, (1) the challenged conduct must involve an element of judgment or choice, and (2) the judgment or choice must be based on considerations of public policy.\(^13\)

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\(^7\) National Manufacturing Co. v. United States, 210 F.2d 263 (8th Cir. 1954).

\(^8\) A tort is a harmful act, other than breach of contract, for which relief may be sought in civil court. To win a negligence claim under the FTCA, a plaintiff must demonstrate four things: (1) that the defendant, that is, the government, owed a duty to the plaintiff, (2) that the duty was breached by the defendant, (3) that the breach was the cause of the plaintiff’s injury, and (4) that the plaintiff was actually injured. All of these elements must be shown in order to have a valid claim.


\(^12\) United States v. Varig, 467 U.S. 797 (1984) (holding that the Federal Aviation Administration had immunity from failing to find a problem with an aircraft during its spot-checking, because that inspection process was discretionary).

\(^13\) United States v. Gaubert, 499 U.S. 315, 322-23 (1991), refining the test developed in Berkovitz v. United States, 486 (continued...)
Claims arising from the performance (or non-performance) of mandatory functions required by statute are actionable under the FTCA. Thus, if the government fails to comply with an action required by Congress, the government is not protected from liability. If an action includes both mandatory and discretionary elements, the court must determine which part of the government action Congress specifically required, and which part involved discretion. For example, although Congress specifically required construction of the New Orleans Hurricane Protection System, how it was constructed was discretionary.

Immunity for Corps of Engineers Projects Under the Discretionary Function Exception

Courts typically interpret the discretionary function exception broadly. Generally, the discretionary function exception has prevented claims against the United States for water damage to real property resulting from negligent design or construction of flood control or irrigation projects. In Vaizburd v. United States, plaintiffs alleged that a Corps project to reduce storm damage and protect the shoreline damaged their property because of negligent design and implementation. The court used the Gaubert two-part test to find that the Corps exercised discretion in the design, planning, and implementation of the project. The court found that the Corps chose from several different project plan designs in light of a number of policy considerations, including cost, reliability, resource allocation, environmental protection, and political implications. The court also found that even though the project was required by statute, the actual implementation of the project was not dictated by any plan, regulation, or statute, and thus, the Corps had discretion in how to implement the project. Accordingly, even if there has been negligent design or implementation, the presence of choice and judgment may allow the discretionary function exception to preclude any claim against the United States.

A discretionary function can exist in the choice of materials for a required project. In United States v. Ure, the plaintiff argued that the government was negligent in constructing an irrigation canal that burst and flooded the plaintiff’s property. The plaintiff claimed the government’s duty to ensure against breaks was breached because the canal had not been constructed with a stronger (and more expensive) material. Ultimately, the court found that the government’s cost-based decision not to use stronger material was subject to the discretionary function exception.

Similarly, when the government builds infrastructure to withstand a certain level of storm, although recognizing that more powerful storms are possible, courts have held that the discretionary function exception applies. In Valley Cattle Co. v. United States, the plaintiff

(...continued)

U.S. 531 (1988). The Gaubert Court stated:

[If a regulation mandates particular conduct, and the employee obeys the direction, the Government will be protected because the action will be deemed in furtherance of the policies which led to the promulgation of the regulation. If the employee violates the mandatory regulation, there will be no shelter from liability because there is no room for choice and the action will be contrary to policy. On the other hand, if a regulation allows the employee discretion, the very existence of the regulation creates a strong presumption that a discretionary act authorized by the regulation involves consideration of the same policies which led to the promulgation of the regulations. (internal citations omitted).

15 Id.
16 See U.S. v. Ure, 225 F.2d 709, 712-13 (9th Cir. 1955).
contended that the government was negligent and liable for damages because its flood
preparations could handle only a “two-year storm” despite knowledge that much stronger storms
hit the area. The court found that the government made decisions at the planning level to prepare
only for a two-year storm based on policy factors, and was immune from liability because of the
discretionary function exception. 17

Even deciding to delay project improvements can excuse liability under the discretionary function
exception. In National Union Fire Insurance v. United States, the court held the Corps’ decision
to delay a small improvement to a breakwater while planning for a larger improvement was a
choice immune from liability. Despite the Corps’ awareness of problems with the breakwater
protection prior to the plaintiff’s property being damaged, the court held that the FTCA’s
discretionary function exception applied because the Corps had made a decision regarding timing
of the improvements. 18 The court also found that considering the cost of greater safety is a
discretionary function.

Under some circumstances, maintenance has been found not to be a discretionary action. In E.
Ritter & Co. v. U.S. Army Corps of Engineers, the court found the government liable for failing to
maintain a flood control project. 19 Although the Corps had decided not to maintain the banks of
the project, the court found that the discretionary function exception did not automatically apply
whenever a decision was involved. Relying on the second prong of the Gaubert test, the court
found that only government decisions based on considerations of public policy are protected by
the exception. The court found the discretionary function exception did not apply because
operating the project incorrectly was not part of the Corps’ mandated policy to prevent flooding. 20

In more recent cases, courts have found that the level of maintenance of a government project
involved considerations of public policy. In a case based on the National Park Service’s (NPS’s)
failure to maintain a road, the court looked at whether a decision had been made regarding
maintenance. It considered that the NPS had developed a maintenance task list, and that
maintaining that particular road was to occur following other projects. 21 According to the court,
scheduling was discretionary, since agencies are allowed to establish priorities “by balancing the
objectives sought to be obtained against such practical considerations as staffing and funding.”
22 In a similar case, NPS trail maintenance was held to be a discretionary action. In that case, the
court reviewed the policy-prong of the Gaubert test to find that agencies are allowed to balance
public policy against “the constraints of resources available to them.” 23

17 Valley Cattle Co. v. United States, 258 F. Supp. 12, 19-20 (D. Haw. 1966) (finding that the FTCA allowed claims for
only one of the two floods at issue).
18 See National Union Fire Ins. v. United States, 115 F.3d 1415 (9th Cir. 1997). The Corps had to make the decision as to
improvements by weighing a wide variety of factors, including (1) how much commerce benefits from the project;
(2) what kind of commerce benefits from the project; (3) how much the project will cost; (4) how necessary the work
is; and (5) whether the work should be built, continued, or maintained by the federal government or some other entity.
Id.
19 874 F.2d 1236 (8th Cir. 1989).
20 Id. A similar result occurred in a case where a court decided that the failure not to maintain a road in a National Park
was not “a decision grounded in social, economic, or political policies.” ARA Leisure Services v. United States, 831
F.2d 193 (9th Cir. 1987).
21 Cope v. United States, 45 F.3d 445 (D.C. Cir. 1995).
22 Id. at 451, quoting from United States v. Varig, 467 U.S. at 820.
23 Childers v. United States, 40 F.3d 973 (9th Cir. 1994).
Flood Control Act of 1928

Even if litigants are able to refute the discretionary function exception and sue the government under the FTCA, the FCA offers additional immunity to the federal government. Section 702c of the FCA provides that “no liability of any kind shall attach to or rest upon the United States from any damage from or by floods or flood waters.” Section 702c immunity is not available exclusively to the Corps, but rather may also be available to the Bureau of Reclamation within the Department of the Interior. The overall breadth and scope of FCA immunity from liability is the subject of considerable controversy and litigation. Despite the Supreme Court’s comment that “it is difficult to imagine broader language,” the case history of the FCA evidences a more nuanced application.

In response to a large flood that devastated the Mississippi River Valley in 1927, Congress enacted the FCA in order to fund large flood control projects while limiting government liability for those projects. Essentially, the FCA’s immunity provision allowed the government to assist in preventing flood damage without simultaneously subjecting itself to liability if its efforts could not control all damage.

United States v. James: Immunity for Flood Project Waters

The Supreme Court applied Section 702c immunity broadly in United States v. James. In that case, the petitioners filed wrongful death claims against the government after two recreational boaters drowned in the reservoirs of federal flood control projects. The Court wrote that the language of Section 702c was unambiguous and should be given its “plain meaning.” Damage under the act included both personal and property damage. In reaching its conclusion, the court looked at the purpose of the act, which was to limit federal liability for flood control projects. In dicta, the court reasoned that the terms flood or floodwaters applied to “all waters contained in or carried through a federal flood control project for purposes of or related to flood control, as well as to waters that such projects cannot control.” This holding was interpreted by most courts to mean that if a public works project has flood control as one of its purposes, Section 702c immunity would apply.

Following the James decision, the courts disagreed on the relationship a federal project must have to flood control in order for the government to have immunity. While all circuits agreed that federally funded public works projects “wholly unrelated” to flood protection purposes are not

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24 33 U.S.C. § 702c. Section 702c is sometimes referred as “Section 3 of the act,” based on where it appears in the public law.
25 See Morici Corp. v. United States, 491 F. Supp. 466 (E.D. Cal. 1980), aff’d, 681 F.2d 645 (9th Cir. 1982).
27 69 Cong. Rec. 6641 (1928) (remarks of Rep. Snell). See also James, 478 U.S. at 608 ("Congress clearly sought to ensure beyond doubt that sovereign immunity would protect the Government from ‘any’ liability associated with flood control.").
28 478 U.S. 597.
29 Id.
30 Id. at 604-606.
31 Id. at 604.
entitled to Section 702c immunity, confusion arose among the circuits regarding exactly how connected the project must be to flood control in order to invoke Section 702c immunity.  

The U.S. Supreme Court declined to address this issue in 1992 when it denied review in *Hiersche v. United States*.

In *Hiersche*, the family of a diver under contract with the federal government to inspect fish screens on the Columbia River sued the government for wrongful death after the diver was fatally injured. The family alleged that the death was caused by the government employees’ failure to shut off water flow to the fish bypass system according to plan. The Court declined to review the case, and Justice Stevens issued a concurring memorandum explaining that while it is generally the Court’s “duty to resolve conflicts among the courts of appeals,” some conflicts, including issues presented in *Hiersche*, “can be resolved more effectively by Congress.”

Justice Stevens further discussed Section 702c immunity, stating:

> The statute at issue here is an anachronism. It was enacted 18 years before the [FTCA] waived the Federal Government’s sovereign immunity from liability for personal injuries. At the time of its enactment, no consideration was given to the power generation, recreational, and conservation purposes of flood-control projects, or to their possible impact on the then nonexistent federal liability for personal injury and death caused by negligent operation of such projects. Today this obsolete legislative remnant is nothing more than an engine of injustice. Congress, not this Court, has the primary duty to confront the question whether any part of this harsh immunity doctrine should be retained.

Congress remains able to reconsider issues of federal immunity related to flood damage and flood control projects legislatively. As statutory provisions of immunity, it is within Congress’s authority to define the scope of the protections offered by both the FTCA and FCA.

**Central Green Company v. United States: Immunity for Floods and Floodwaters**

In 2001 the Supreme Court revisited its interpretation of Section 702 immunity in *Central Green Company v. United States*. The Court held that the portion of the *James* decision that referred to flood control projects was dicta, rendering the bulk of litigation following *James* of little precedential value. In *Central Green*, the Court did not focus on the character of the federal project or the purpose it served, but looked at the waters that caused the damage and the purpose for their release. The unanimous Court held that “in determining whether § 702c immunity attaches, courts should consider the character of the waters that cause the relevant damage rather than the relation between that damage and a flood control project.”

Like the discretionary function exception, Section 702c immunity had been claimed in a broad range of cases. A federal district court refused to grant Section 702c immunity for a wrongful death claim in which the victim died after driving into a lake that was created by a flood control project.

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34 *Id.* at 1305.
35 *Id.*
37 *Id.* at 437.
project. The victim’s family argued that the government negligently designed the road such that drivers were led into the lake. The court explained that “simply because waters are in some way related to a flood control project is insufficient” to satisfy immunity requirements under Central Green and noted that there was “no evidence that the lake overflowed or that [the victim] drowned because flood waters engulfed her car.” Without such a link to floods or floodwaters, the court reasoned that the government could not claim Section 702c immunity.

However, when floodwaters released during the operation of a flood control project cause injury or death, Section 702c immunity applies under Central Green. When federal operators opened spillway gates at Fort Loudoun Dam in 2003 to discharge water in order to maintain flood control capacity in lakes upstream from the dam, boaters were pulled by undercurrents and ultimately drowned. A federal district court held that the government was immune from liability because the operation of the spillway gates was a flood control activity.

Levee Failure and Hurricane Katrina Flooding

In the aftermath of Katrina, numerous legal claims were filed against the government for flood damage. A fundamental question has been whether the breaches occurred because the storm surge was greater than the hurricane protection system was designed to contain, or whether faulty design, construction, or maintenance of the system caused the breaches. Studies indicate that both problems may have played a part. According to a National Hurricane Center (NHC) report, most of the breaches resulted from overtopping, where the water exceeded the protective structures, but some New Orleans floodwall breaches occurred before the surge exceeded the structures’ design, meaning the floodwalls failed. Litigation against the federal government and some contractors is ongoing and has been consolidated under the heading In re Katrina Canal Breaches Consolidated Litigation, in the federal District Court for the Eastern District of Louisiana. The legal defenses available to the federal government depend on the facts underlying the specific flooding incident. Therefore, some background regarding Hurricane Katrina’s flooding of New Orleans is necessary to analyze the legal issues.

New Orleans Hurricane Protection System

New Orleans is situated below sea level and is virtually surrounded by water, with Lake Pontchartrain to its north and the Mississippi River to the south. Not far to the east is the Gulf of Mexico. The city faces flooding risks from the Mississippi River, coastal storms, and heavy

39 Id.
41 Trillions of dollars in liability claims reportedly have been filed against the United States for damages from Hurricane Katrina. Brad Heath, Katrina Victims Swamp Corps for Trillions in Claims, USA Today, January 7, 2008, at 1A. According to the article, more than 489,000 claims have been filed against the Corps, including 247 claims that seek $1 billion or more.
43 Nos. 05-4182, 05-5237, 05-6314, 05-4181, 05-6073, 06-2545, 05-4191, 06-2268 (E.D. La.). A summary of the developments in the consolidated litigation can be found on the court’s website, available at http://www.laed.uscourts.gov/CanalCases/CanalCases.htm.
A system of levees and floodwalls was designed to protect the city from the river and coastal storms. Levees are typically broad, earthen structures, while floodwalls are made of concrete and steel, built atop a levee or in place of a levee. The infrastructure around New Orleans represented a combination of federal and local investments and responsibilities, and is referred to in this report as the Hurricane Protection System. Like most of the nation’s flood and storm damage reduction infrastructure, many of the levees and floodwalls in New Orleans were built by the federal government but are maintained by local governments and local levee districts once they are completed. Some portions of the Lake Pontchartrain and Vicinity Hurricane Protection Project (LPV), the project most relevant to the Katrina failures, were under construction when Katrina struck. Consequently, while some portions of the system were managed by the levee districts, other portions were still under the Corps’ jurisdiction.

Since the 1965 Lake Pontchartrain Act, more than 20,000 acres of coastal wetlands have been lost because of some storm damage reduction projects in Louisiana. Because marshlands may slow storm surges, a finding that storm reduction projects reduced protective wetlands may affect the Corps’ liability. Moreover, some media reports asserted that the Corps was planning “an array of hurricane-protection projects” in the region surrounding New Orleans in 2002. Such plans might indicate a decision by the Corps to design a new system rather than improve an existing one, and could affect the Corps’ liability.

**Failure of the Hurricane Protection System**

With respect to the failure of the Hurricane Protection System in New Orleans, a central question has been whether the design of the levees and floodwalls was exceeded or whether they were poorly designed, constructed, or maintained. A significant amount of flooding in New Orleans resulted from structural failure of levees and floodwalls, allowing waters from Lake Pontchartrain, Lake Borgne, and other stormwaters to flow into the low-lying city. Although the protection system was designed to withstand a Category 3 hurricane and Hurricane Katrina was a Category 3 storm at the time of landfall, its storm surges were higher than normal for such a storm. In addition, Katrina dumped more than five inches of rainfall on New Orleans in eight hours.

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45 The Corps is the principal federal agency responsible for constructing flood and storm damage reduction infrastructure. For more on the Corps’ water resources activities, see CRS Report RS20866, *The Civil Works Program of the Army Corps of Engineers: A Primer*, by Nicole T. Carter and Betsy A. Cody.
49 The Lake Pontchartrain act required the system to withstand a “standard” storm, which is roughly equivalent to what is now called a Category 3 storm.
50 The height of storm surges for Hurricane Katrina reportedly ranged between 5 and 19 feet in New Orleans, whereas storm surges for Category 3 hurricanes generally range between 9 and 12 feet. See Richard Knabb, *et al.*, *Tropical Cyclone Report: Hurricane Katrina*, National Hurricane Center, supra note 3.
The Hurricane Protection System failed in approximately 50 locations and for a variety of reasons. The vast majority of those failures occurred because waters that exceeded the design capacity of the system flowed over the floodwalls. However, evidence gathered by a panel of experts commissioned by the Corps suggests that at least four levees/floodwalls were breached before they exceeded their design capacity.51

Following Katrina, the Corps commissioned an extensive report via a multiparty task force known as the Interagency Performance Evaluation Task Force (IPET). The IPET report did not identify one failure, but a series of failures, noting that if one part of the city’s flood protection system failed, the risk of failure to the others consequently increased.52 IPET found “differences in the quality of materials used in levees, differences in the conservativeness of floodwall designs, and variations in structure protective elevations due to subsidence and construction below the design intent due to error in interpretation of datums” all contributed to inconsistent protection within the system. The IPET report states that the 17th Street and London Avenue levees experienced foundation failures prior to water levels reaching the design levels of protection. The storm surges in the Inner Harbor Navigation Canal (IHNC) exceeded design levels, but IPET also found that the walls had subsided by more than 2 feet, contributing to the amount of overtopping that occurred.

Another theory is that the levees were overtopped or breached because the storm surge was enhanced by the Mississippi River Gulf Outlet (MRGO). MRGO (also known as Mr. Go) is a 76-mile navigational channel between the Port of New Orleans and the Gulf of Mexico. It is designed as a shortcut for ships.53 Studies have reviewed whether MRGO became a hurricane highway, or a funnel, accelerating the movement of water from the Gulf into the IHNC. While IPET found that MRGO did not accelerate the movement of the water, it did find that a portion of MRGO allowed Lake Borgne waters to be pushed into the interior of New Orleans. IPET found that this connection amplified the surge level and velocity through the interior of the city and raised the level of Lake Pontchartrain.54 In turn, that increased the pressure on the levees throughout the area, according to IPET.

**Hurricane Katrina Liability**

**Federal Tort Claims Act**

To determine whether FTCA's discretionary function exception applies to the various claims in the Katrina litigation, the court would apply the *Gaubert* test: (1) the challenged conduct must involve an element of judgment or choice, and (2) the judgment or choice must be based on considerations of public policy.55 Hence, to be successful, a suit based on the FTCA would have to show that policy decisions and government discretion did not play any part in building the

Hurricane Protection System. The resolution of these questions should be independent of any decision regarding negligence or fault.

Congress authorized and delegated primary design and construction responsibility to the Corps for the Hurricane Protection System in the Flood Control Act of 1965. The construction of the system was ongoing when Hurricane Katrina hit the city in 2005. In the decades preceding Katrina, the Corps had revised the design and construction of the Hurricane Protection System for a number of reasons, including cost, environmental factors, technical issues, additional land requirements, and aesthetic issues. Thus, the overall design and construction required balancing many different policy factors, supporting the government’s invocation of immunity under the discretionary function exception.

A more difficult issue may be liability related to maintenance of the system. As discussed earlier, the courts are inconsistent as to whether maintenance is a discretionary action. Courts tend to find that decisions contrary to public policy and unsupported by documentation of the public policy considerations are not discretionary. The Corps’ ongoing evaluation of a new Hurricane Protection System could bolster the argument that the Corps was considering public policy when it chose to work on a new system, rather than expend funds on an existing system. It also is not clear who was responsible for maintaining the various levees and floodwalls, because local levee districts managed them only after they were completed, and not all were completed. Discretionary immunity would not apply if persons at the operational level failed to maintain the system according to a prescribed protocol. For example, if inspections had to meet specific guidelines, or if various assessments were strictly prescribed, there may be little or no discretion involved. However, any documented choice involving prioritization would likely be considered a discretionary action, exempting the government from liability.

Thus far, the district court has recognized that the FTCA's discretionary function exception applied to alleged negligence related to dredging of the 17th Street Canal. The court explained that the decision to issue a dredging permit “was a policy judgment left to the Corps to balance a

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56 P.L. 89-298, Title II.
57 See New Orleans Hurricane Protection Projects Data at https://ipet.wes.army.mil/. Construction was temporarily halted in December 1977 when a court decision enjoined the Corps from continued building until an environmental impact study could be completed. After the study was accepted, the Corps changed significant portions of the design in response to environmental and cost concerns.
58 It should be noted, however, that the statute authorizing construction of the Hurricane Protection System mandated that the levees and floodwalls be constructed to withstand a standard hurricane for the region, which was roughly equivalent to a Category 3 hurricane, the rated strength of Katrina. P.L. 89-298, § 204. It may be argued that the decision to design to that standard would be a non-discretionary action. For more information about the process of authorizing and designing these structures, see CRS Report RL33188, Protecting New Orleans: From Hurricane Barriers to Floodwalls, by Nicole T. Carter.
59 The Corps has issued a report describing 50 years of decision making behind the Hurricane Protection System. See Douglas Woolley and Leonard Shabman, Draft Final Report: Decision-making Chronology for the Lake Pontchartrain & Vicinity Hurricane Protection Project (June 2007), available at http://www.iwr.usace.army.mil/inside/products/pub/hpdc/hpdc.cfm. The report appears to relate directly to the discretionary function exception and addresses three main issues: selection of the overall approach; treatment of new information, including surge modeling and land subsidence; and the design of I-wall parallel protection structures. It also considers the number of decision makers during the project’s history, including local levee districts.
60 Id. The “pre-Katrina” section has several examples of studies that were done prior to the storm.
61 In re Katrina Canal Breaches Consolidated Litigation, 533 F. Supp. 2d 615 (E.D. La. 2008).
myriad of factors, including flood hazards as opposed to the needs and welfare of the people.”
Accordingly, challenges related to those particular Corps actions have been barred under the FTCA.

On the other hand, the court held that the Corps could not invoke discretionary function immunity with respect to the maintenance and operation of MRGO. In that case, the court explained that the Corps’ actions “were in direct contravention of professional engineering and safety standards” and that such actions “are not policy.” Furthermore, the court found that the government did not meet the Gaubert test, citing the Corps’ failure to comply with its mandatory duty under the National Environmental Policy Act when it did not report that “MRGO was causing significant changes in the environment” and the effects that such changes may have on the surrounding community. The application of FTCA’s discretionary function exception to other claims, including those relating to the actions of contractors engaged by the Corps to prepare for lock replacement on the Industrial Canal, remain to be determined.

Flood Control Act of 1928

Even if the government cannot invoke discretionary function immunity, a plaintiff would have to overcome the broad Section 702c immunity of the FCA. To the extent courts find that the waters causing damage were floodwaters released because of the Hurricane Protection System, a flood control project, the Corps would likely be immune with respect to claims based on that system’s failure. The district court has found that the Corps was immune from liability for damages associated with the levee breaches of various canals in New Orleans. Although the court rejected the government’s contention that Section 702c immunity attached so long as the damages were caused by floodwaters, it noted that immunity under the FCA was broad. Accordingly, the court explained that “immunity arises where damage is caused by flood waters emanating from a flood control project” and barred challenges related to the breaches of certain levees in the LPV.

However, the court has indicated in a number of its decisions that Section 702c immunity does not apply to the extent that “the United States may be found liable for damages caused by negligence that is extrinsic to the LPV.” The court has held that damages caused by the Corps’ operation and maintenance of MRGO fall into this category and do not qualify for immunity under the FCA. The decision was based on the court’s understanding of the requirements of

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62 Id. at 641-42.
63 In re Katrina Canal Breaches Consolidated Litigation (Robinson), 647 F. Supp. 2d 644 (E.D. La. 2009).
64 Id. at 705.
65 Id. at 725.
67 See In re Katrina Canal Breaches Consolidated Litigation, 533 F. Supp. 2d 615.
68 Id. at 637.
70 See In re Katrina Canal Breaches Consolidated Litigation (Robinson), 577 F. Supp. 2d 802. Some plaintiffs have alleged that their claims are based not on the levee and floodwall failures, but on MRGO, which they argued is solely a navigational project. The government has argued that MRGO serves some flood control purposes. In re Katrina Canal Breaches Consolidated Litigation (Robinson), 471 F. Supp. 2d at 695-97.
Central Green and Graci v. United States, a 1971 decision from the U.S. Court of Appeals for the Fifth Circuit, which found that Section 702c immunity did not apply to MRGO. In Graci, which followed Hurricane Betsy, litigants argued the construction of MRGO caused their properties to flood. The circuit court refused to find Section 702c immunity applied to all flood damage actions, explaining that such an absolute immunity would be contrary to the government’s intent to waive immunity for negligent acts of its employees under the FTCA. According to the district court in In re Katrina Canal Breaches, damages caused by floodwater unrelated to a flood control project cannot qualify for immunity under the FCA. Rather, the court reiterated its requirement that Section 702c immunity applies only if the water responsible for the damages is floodwaters and has a nexus to a flood control project. Because the court determined that MRGO was unrelated to the LPV flood control project, it did not meet the requirements for FCA immunity.

Negligence

Only after a court determines that the government is not immune under the FTCA and the FCA would it consider the negligence of the federal government. To prove that the government was negligent, the plaintiffs must show that the federal government owed them a duty when it built a particular project, that the government breached its duty, that the breach caused harm, and that the plaintiffs were injured as a result of that breach.

In claims in which the court finds that no immunity applies, the government may still avoid a finding of liability. A common defense for negligence claims is that the damage was caused by an act of God, in this case, a hurricane. The act of God defense appears to apply the most easily to those levees and floodwalls that were overtopped by the waters. They essentially failed because their design capacity was exceeded by the unusually high storm surges brought on by Katrina. However, as was discussed earlier, some of the overtopping occurred because some levees and floodwalls had subsided by as much as 2 feet. Also, plaintiffs may argue that the storm surge was extreme because of MRGO. Furthermore, the government’s liability may be diminished if the court finds that it is not solely responsible for the damages incurred.

Thus far, the court has reached the merits of the negligence claim in only one instance—a set of claims involving the maintenance and operation of MRGO. After reviewing the facts of the case, the court found that MRGO was “a substantial cause” for the breaching of part of the levee

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71 Graci v. United States, 456 F.2d 20, 27 (5th Cir. 1971).
72 Id. But cf. Kennedy v. Texas Utilities, 179 F.3d 258, 263 (5th Cir. 1999) (finding FCA immunity did not apply where an action was neither “associated with flood control” nor “clearly related to flood control,” seemingly establishing immunity for projects that are associated with or clearly related to flood control).
73 In re Katrina Canal Breaches Consolidated Litigation (Robinson), 577 F. Supp. 2d at 821.
74 Id. at 824-25 (internal quotations and citations omitted).
75 The district court would follow state law when reviewing for negligence. Louisiana is a comparative fault state, meaning if multiple actors are negligent, they are each responsible only for that portion of the harm that they caused, even if all of the actors are not parties to the suit. See La. C.C. art. 2323. See also La. R.S. 9:2800.68. In this case, if it is found that negligent design, construction, or maintenance of the levees caused the flooding, the Corps would be responsible only for that portion of the blame attributed to it, but not the negligence attributed to local levee boards, or contractors that may have worked on the project.
76 The court has noted that “the Corps is only exposed to liability for negligent operation and maintenance of the MRGO and is not liable for any negligence relating to the original design and construction of the channel.” In re Katrina Canal Breaches Consolidated Litigation (Robinson), 647 F. Supp. 2d at 697.
system and the subsequent flooding that occurred. The court cited the Corps’ duty under Louisiana law for landowners “to discover any unreasonably dangerous condition and either correct that condition or warn of its existence,” which it found the Corps failed to do. Upon finding that the Corps had been negligent in maintaining MRGO, the court held the Corps liable for the resulting damages.

**Floodway Activation and Mississippi River Basin Flooding of 2011**

Beginning in April 2011, a series of severe storm systems combined with increased water levels due to snowmelt caused some of the largest floods in the Mississippi River Basin area in the last century. Simultaneous flooding of the Mississippi and Ohio Rivers in late April threatened the safety of Cairo, IL, a town located at the confluence of the two rivers. As river levels continued to rise, the Corps prepared to activate the floodway system of the Mississippi River and Tributaries Project (MRTP). The floodway system allows the Corps to artificially crevasse or open certain levees along the Mississippi River to flood areas normally protected by the levees in order to alleviate flood damage to other areas. After activating the Birds Point-New Madrid Floodway near Cairo, the Corps subsequently activated floodways downstream as the river’s crest travelled south, raising questions of the Corps’ liability and potential remedies for affected landowners.

**Corps’ Authority to Activate Floodways**

Congress authorized the MRTP pursuant to the FCA in response to a flood that devastated the Mississippi River Basin in 1927. In order to prevent such damage in the future, the MRTP was designed as a system of civil works to protect against flooding and to maintain navigation of the river channel. The MRTP included a series of floodways that were designed to divert floodwaters in order to provide relief to other segments of the levee system when the river’s waters reached certain levels.

The MRTP includes four floodways: the Birds Point-New Madrid floodway (Missouri); the Morganza floodway (Louisiana); the West Atchafalaya floodway (Louisiana); and the Bonnet Carre floodway (Louisiana). In May 2011, the Corps intentionally breached the levee protecting the Bird’s Point-New Madrid floodway by detonating a hole in the levee to divert floodwaters to protect Cairo, IL, a town located at the confluence of the flooding Mississippi and Ohio rivers.

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77 Id.
78 Id. at 733.
79 Id.
81 The operation plans for the floodways of the MRTP have been modified since the system was created. See, e.g., Flood Control Act of 1965, P.L. 89-298, 79 Stat. at 1076-77.
The Corps also opened floodgates on the Morganza floodway to alleviate pressure on the levees protecting Baton Rouge and New Orleans and opened the Bonnet-Carré floodway to prevent floodwaters from reaching New Orleans. The Corps’ activation of the Bird’s Point-New Madrid and Morganza floodways was only the second use of each since their respective completion in 1933 and 1953, and the activation of the Bonnet-Carré floodway was the ninth use since its completion in 1932.

The Corps’ initial decision to activate the floodway system at Bird’s Point-New Madrid raised questions about the agency’s authority to purposely flood some lands to save others. In the case of Bird’s Point-New Madrid, detonation of the levee according to the floodway operation plan was expected to flood 130,000 acres in Missouri, an area about 35 miles long and between 3 and 10 miles wide. The decision was particularly controversial because the Corps’ decision would protect either an Illinois town or Missouri farmland and residences. Accordingly, Missouri filed a lawsuit challenging the Corps’ authority to operate the floodway at the expense of Missouri residents’ homes and farms.

A federal district court rejected Missouri’s challenge to the Corps’ authority to operate the floodway system at Bird’s-Point-New Madrid. The court relied on precedent from a 1984 case from the U.S. Court of Appeals for the Eighth Circuit to find that the Corps’ decision to operate the floodway could not be reviewed by courts. In that case, the Eighth Circuit reviewed the legislative history of the floodway system and noted that Congress authorized both the construction of the levees and the artificial breaching of those levees when water exceeded certain levels set by the operations plan. The Eighth Circuit explained that because Congress broadly delegated authority to operate the levee, providing “no additional standards for determining whether and where to crevasse the levee,” courts must afford the Corps’ decision a “high degree of deference” since it required highly technical expertise. Accordingly, the district court refused to bar the Corps from artificially crevassing the levee in response to the 2011 floods.

Flowage Easements

The Corps’ decisions to divert floodwaters through the MRTP floodway system meant that property owners that typically were protected by the levee and floodway structures instead suffered flooding to their land, homes, farms, or other property. The government generally cannot

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84 The West Atchafayala floodway operates as a secondary floodway to the Morganza floodway. Each diverts floodwaters along opposite sides of the Atchafalaya River and eventually merges. The West Atchafayala floodway is operated only after the Morganza floodway and does not appear to have been activated in the 2011 floods. For more information on the operation of the floodways, see U.S. Army Corps of Engineers, Mississippi River and Tributaries Project—Floodways, available at http://www.mvd.usace.army.mil/mrc/mrt/index.php.


86 Id.


88 Story v. Marsh, 732 F.2d 1375, 1380-81 (8th Cir. 1984).

89 Id. at 1381.

deprive a property owner of the possession or use of his property without compensating the owner for the loss caused by the government’s action.91 In the case of the MRTP’s floodway system, Congress had provided for the acquisition of “flowage rights for additional destructive flood waters that will pass by reason of diversions from the main channel of the Mississippi River.”92 The acquisition of these rights could occur through a variety of legal methods, including acquiring title to the property itself or acquiring a right-of-way. For the purposes of this report, such a right will be referred to generally as a flowage easement.

Acquisition of flowage easements from property owners of potentially affected land allows the government to operate levees without risk of liability for the resulting damages from operating the floodways. As the district court explained in Missouri v. U.S. Army Corps of Engineers, “under those easements, the landowners released and held harmless the United States for any and all damages that occur as the result of flooding.”93 By selling flowage easements to the government, property owners were compensated for damage resulting from the operation of the floodway at any future time. Flowage easements are a property right and as such are transferred in the same manner as the title to property is transferred. If the original owner of property assumed the risk of future flooding and agreed to not hold the government liable for damages resulting from operation of the floodway, subsequent owners would be bound by that promise as well. Although the subsequent owner would not consent to such risk directly, the attachment of the easement to the property means that the subsequent owner had notice of the risk as part of his or her purchase of the property.94

Some questions of liability regarding the sufficiency of the flowage easements have been raised since the Corps initiated floodway operations. The Corps has not acquired such easements to all lands affected by operation of the various floodways.95 For example, with respect to the Bird’s Point-New Madrid floodway, the Corps has asserted that it “obtained all flowage easements necessary to legally operate the Floodway.”96 Although there has been public debate regarding the Corps’ failure to obtain easements for all affected property, the Eighth Circuit has held that such a failure does not justify barring the operation of the floodway.97 Rather, the court noted that landowners had other adequate legal remedies, including seeking compensation from the government in courts for the resulting damage.98

91 U.S. CONST. amend. V. A legal analysis of takings issues under the Fifth Amendment is beyond the scope of this report.
94 See also Story, 732 F.2d at 1383 (explaining that property owners could not claim ignorance of the implications of the flowage easements because “the language of the easements was clear, unambiguous, and comprehensible to the landowners”).
96 Story, 732 F.2d at 1384. The Corps may not have acquired easements to all land affected by the floodways. If the land would be affected by flooding regardless of whether the floodway was operated, the Corps may not need to compensate the owners. See Missouri v. U.S. Army Corps of Engineers, No. 1:11CV00067 (E.D. Mo. Apr. 29, 2011).
97 Story, 732 F.2d at 1384.
98 Id. Landowners who do not wish to seek compensation from the government may be able to obtain financial relief through other means, such as insurance. After the activation of the Bird’s Point-New Madrid floodway, the U.S. Department of Agriculture indicated that crop insurance programs would be available to parties affected by the operation of the floodway. See USDA Bulletin No. MGR-11-004, Flooding of the Birds Point-New Madrid Floodway (May 4, 2011), available at http://www.rma.usda.gov/bulletins/managers/2011/mgr-11-004.pdf.
In addition to challenging whether the Corps had acquired the necessary easements, some of the landowners affected by the operation of the MRTP have claimed that “to the extent any easements existed, they were insufficient to allow the flowage of water and debris over the plaintiffs’ land and property in the force and magnitudes that existed during the flood.”

The landowners argue that the scope of the easements was exceeded by the damage caused by the Corps’ operations. Specifically, concerns have been raised about the amount of sediment that would cover the floodway after the waters recede and whether the Corps would owe additional compensation for excess sand and gravel that might be deposited on the land by floodwaters.

**Floodway Operation and Immunity Under the FTCA and FCA**

The focus of legal challenges related to the 2011 Mississippi floods has focused on the Corps’ authority with respect to the MRTP and the sufficiency of floodway easements. No claims related to the FTCA appear to have been filed alleging negligence in the operation of the floodways. In legal challenges to previous decisions to operate the floodways, however, courts have emphasized the degree to which Congress deferred to the Corps’ discretion in MRTP operations.

Therefore, if an FTCA claim is filed, parties may find it difficult to challenge the Corps’ actions under the *Gaubert* test. Given the recognition of the role of the Corps’ judgment in how to operate the system and the policy considerations involving the impacts of flooding on the natural and human environment, it appears that the Corps would be able to defend such challenges under the discretionary function exception of the FTCA.

In addition to authorizing the MRTP, as discussed above, the FCA also granted immunity to the government, including the Corps, for damages caused by floods or floodwaters. Under the *Central Green* analysis, the Corps could avoid liability for damage caused by its operation of the floodways depending on the character of the waters causing damage and the purpose of their release. In the case of the 2011 floods, the waters causing damage are clearly floodwaters that were diverted through the floodway as a primary facet of the MRTP, one of the nation’s largest flood control projects. Therefore, it appears likely that Section 702c immunity would apply.

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99 Complaint at 6, Big Oak Farms v. United States (Fed. Cl. May 3, 2011).

100 *See Story*, 732 F.2d 1375.