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THE HURRICANE KATRINA LITIGATION AGAINST THE CORPS OF ENGINEERS: IS DENIAL OF GEOLOGY AND CLIMATE CHANGE THE WAY TO SAVE NEW ORLEANS?

*Edward P. Richards, III**

I. INTRODUCTION

The movie *Rashomon* presents the story of an event from the perspective of four storytellers. Depending on the point of view, the event could be a murder and rape or a battle of honor over a woman.¹ Legal scholars have made much of the *Rashomon* Effect as an example of the ambiguity of truth and the effect of a person's involvement in an event on the person's view of the event.² The story of Hurricane Katrina echoes *Rashomon* but includes many more unreliable narrators. The media story is of failed emergency response by a feckless Federal Emergency Management Agency (FEMA) director and an uninvolved president. Social justice advocates tell of race discrimination and the right to return. New Orleans politicians and land developers tell of a city-owned endless federal support and protection because it has been sacrificed for navigation on the Mississippi River. Environmentalists tell of a paradise destroyed by the oil and gas industry,³ a paradise which can be restored if someone will just give Louisiana enough money.⁴ This article analyzes the story told by plaintiffs'

* This article is an expansion of the essay, Edward P. Richards, *The Hurricane Katrina Levee Breach Litigation: Getting the First Geoengineering Liability Case Right*, 160 U. PA. L. REV. PENNUMBRA 267 (2012); For additional information on climate change, the Mississippi Delta, and the Katrina litigation, see LSU LAW CENTER: CLIMATE CHANGE LAW & POLICY PROJECT, <https://sites.law.lsu.edu/coast/>.

1. *Rashomon* (Daiei Motion Picture Co. Ltd. 1950).

2. David Simon Sokolow, *From Kurosawa to (Duncan) Kennedy: The Lessons of Rashomon for Current Legal Education*, 1991 WIS. L. REV. 969, 981 (1991); see also Orit Kamir, *Judgment by Film: Socio-Legal Functions of Rashomon*, 12 YALE J.L. & HUMAN. 39 (2000); Anthony Fassano, *The Rashomon Effect, Jury Instructions, and Peremptory Challenges: Rethinking Hernandez v. New York*, 41 RUTGERS L.J. 783 (2009).

3. Oliver A. Houck, *The Reckoning: Oil and Gas Development in the Louisiana Coastal Zone*, 28 TUL. ENVTL. L.J. 185 (2015). This cri de cœur is a brilliant history of Louisiana as a third world petro state, dominated by oil companies and corrupt politicians, resulting in stunted public institutions and a weak educational system.

4. See generally COASTAL PROT. & RESTORATION AUTH. OF LA., LOUISIANA'S COMPREHENSIVE MASTER PLAN FOR A SUSTAINABLE COAST (2012), <http://coastal.la.gov/2012-coastal-master-plan/>; David Batker et al., *The Importance of Mississippi Delta Restoration on the Local and National Economies*, in PERSPECTIVES ON THE RESTORATION OF THE MISSISSIPPI DELTA 141 (2014), <http://www.springer.com/us/book/9789401787321>.

lawyers and federal judges in three litigation threads against the United States Army Corps of Engineers (Corps). In this story, New Orleans was flooded by the Corps through its knowingly negligent levee construction.⁵

Each Katrina story has a grain of truth. All stories are variations on the myth that New Orleans can be restored to a cultural and environmental golden age. In each story, the golden age was stolen by a boogeyman who owes reparations because New Orleans cannot be expected to pay its own way.⁶ The boogeyman can be the oil industry,⁷ the Corps, FEMA, or an uncaring Congress. Each story is fatally incomplete. For example, it is true that if the levees had held and been tall enough, Hurricane Katrina would have caused much less damage. But long-term studies of levees show that they are never strong enough and tall enough to eliminate all risk.⁸ Levees are always a compromise between money, land to build them on, and aesthetics.⁹ They trade high frequency, low severity events for low frequency, high severity events.¹⁰ The result is a public surprised by catastrophic losses because people become convinced that the levees

5. See *St. Bernard Par. Gov't v. United States*, 126 Fed. Cl. 707 (2016), where a fourth litigation thread awarded damages based on a temporary taking by flooding as recognized in *Arkansas Game & Fish Comm'n v. United States*, 568 U.S. 23 (2012). *St. Bernard (Fed. Cl.)* accepted the record in the *Robinson* case, thus incorporating the same junk science on the effects of the MRGO. The Federal Circuit reversed this takings finding in *St. Bernard Par. Gov't v. United States*, 887 F.3d 1354 (Fed. Cir. 2018), finding that, had there been a taking, the damages would have had to have been set off against the value of the flood control system. Since most of the plaintiffs would be underwater without the flood control system, and the rest also benefited from the flood control system, there were no damages and thus no taking.

6. One might argue that Blanche DuBois stands in for New Orleans: "I have always depended on the kindness of strangers." Blanche DuBois, *TENNESSEE WILLIAMS, A STREETCAR NAMED DESIRE* sc. 11, 165 (New Directions ed., 1947); "I don't want realism. I want magic!" Blanche DuBois, *TENNESSEE WILLIAMS, A STREETCAR NAMED DESIRE* sc. 9, 135 (New Directions ed., 1947).

7. There are two threads of litigation against the oil and gas industry for destroying wetlands, with the prayer for relief asking for huge restoration projects: *Bd. of Comm'rs of Se. La. Flood Prot. Auth. E. v. Tenn. Gas Pipeline Co., LLC*, No. CA 13-5410, 2015 WL 631348 (E.D. La. Feb. 13, 2015) and *Parish of Plaquemines v. Total Petrochemical & Ref. USA, Inc.*, 64 F. Supp. 3d 872 (E.D. La. 2014) (one of many identical suits against different defendant oil exploration companies).

8. *AM. SOC'Y OF CIVIL ENG'RS, SO, YOU LIVE BEHIND A LEVEE!: WHAT YOU SHOULD KNOW TO PROTECT YOUR HOME AND LOVED ONES FROM FLOODS 18* (2009) (The post-Katrina levees around New Orleans are designed to protect against a 100-year storm. That means there is a 26% change that they will fail during a 30-year mortgage.).

9. Even if the federal government was willing to put up the money, would New Orleans have tolerated having the city cut into sections by levees hundreds of feet wide and 40 feet tall, making the city look like a series of isolated prison camps?

10. See *Flood Control Act of 1928*, 33 U.S.C. § 702c (2018). The reports that lead to the *Flood Control Act of 1928* stressed this tradeoff of risks, which was recognized in the Act by Section 702, the immunity provision that is at the heart of all the cases against the Corps.

eliminate all risk and thus attract more development. This is called the “levee effect.”¹¹ If there truly are boogeymen, it is the local officials who allow risky development and do not properly prepare for disasters.¹² Congress is also complicit by providing the funds to build the levees and to subsidize flood insurance that allows flooded properties to be rebuilt in the same place.

The false premise that underlies all the stories is the assumption that New Orleans is on a steady state earth, unaffected by geology and climate change. Both climate change and geology have a common path to disaster for New Orleans: increasing relative sea level, i.e., the combination of sea level rising from global warming and the loss of elevation from the subsiding delta.¹³ Small changes in sea level are critical because the Mississippi delta is very flat.¹⁴ Areas inside levees sink even faster—50% of New Orleans is already below sea level. Elevation, or the lack of it, is fatal because Louisiana is hit by a hurricane on average every 2.8 years.¹⁵ Global warming will make these storms stronger.¹⁶ These risks make New Orleans an interesting story in itself, but it is also an exemplar of other high-risk delta cities.¹⁷ Many Asian population centers are on deltas, and they face the same deadly mix of sea level rise, subsidence, and deadly tropical cyclones.¹⁸ How the United States manages the long-term threat to New

11. Byron Newberry, *Katrina: Macro-ethical issues for engineers*, 16 *SCI. & ENGINEERING ETHICS* 535, 557–58 (2010) (This is a special case of the general “safe development paradox.”); see also Raymond J. Burby, *Hurricane Katrina and the paradoxes of government disaster policy: Bringing about wise governmental decisions for hazardous areas*, 604 *ANNALS AM. ACAD. POL. & SOC. SCI.* 171, 173 (2006).

12. Burby, *supra* note 11, at 171 (“The local government paradox is that while their citizens bear the brunt of human suffering and financial loss in disasters, local officials pay insufficient attention to policies to limit vulnerability.”).

13. Large hurricanes just ride on top of relative sea level rise (RSLR) because they put everything underwater. But the effect in smaller storms is dramatic: “In wetland or wetland-fronted areas of moderate peak surges (2–3m), the surge levels were increased by as much as 1–3m (above the RSLR) for the RSLR simulation. The water level increases are as much as double and triple the RSLR over broad areas and as much as five times the RSLR in isolated areas.” Jane McKee Smith et al., *Potential impact of sea level rise on coastal surges in southeast Louisiana*, 37 *OCEAN ENGINEERING* 37, 46 (2010).

14. James P.M. Syvitski, *Deltas at risk*, 3 *SUSTAINABILITY SCI.* 23 (2008).

15. DAVID ROTH, NAT’L WEATHER SERV., *LOUISIANA HURRICANE HISTORY* 7 (2010), <http://biotech.law.lsu.edu/climate/noaa/lahurricanehistory.pdf>.

16. Jeffrey P. Donnelly et al., *Climate forcing of unprecedented intense-hurricane activity in the last 2000 years*, 3 *EARTH’S FUTURE* 49, 50 (2015).

17. DELTARES, *SINKING CITIES: AN INTEGRATED APPROACH TOWARDS SOLUTIONS* (Oct. 2013), <https://www.deltares.nl/app/uploads/2015/09/Sinking-cities.pdf>.

18. See generally Laura E. Erban et al., *Groundwater extraction, land subsidence, and sea-level rise in the Mekong Delta, Vietnam*, 9 *ENVTL. RES. LETTERS* 084010 (2014); Steve Brown & Robert J. Nicholls, *Subsidence and human influences in mega deltas: The case of the Ganges-Brahmaputra-Meghna*, 527 *SCI. TOTAL ENV’T* 362, 374 (2015).

Orleans and the Mississippi delta will provide an example for other high-risk delta cities.

This article takes a deep look into the law in the levee breach cases because levees are a major risk in many places across the United States. A congressionally created study panel found that there are perhaps 100,000 miles of levees in the United States, and most have not been properly maintained.¹⁹ As climate change exacerbates flooding events, levee breach litigation is likely to increase.²⁰ The plaintiffs in the Katrina cases built a story around a steady state New Orleans that blamed the Corps for all of the changes over the past fifty years that have made the city ever more vulnerable to flooding.²¹ They had the same sympathetic federal district court judge for three of the sets of cases.²² He made his position clear early in the proceedings:

The cruel irony here is that the Corps cast a blind eye, either as a result of executive directives or bureaucratic parsimony, to flooding caused by drainage needs and until otherwise directed by Congress, solely focused on flooding caused by storm surge. Nonetheless, damage caused by either type of flooding is ultimately borne by the same public fisc. Such egregious myopia is a caricature of bureaucratic inefficiency.²³

19. NAT'L COMM. ON LEVEE SAFETY, RECOMMENDATIONS FOR A NATIONAL LEVEE SAFETY PROGRAM, A REPORT TO CONGRESS FROM THE NATIONAL COMMITTEE ON LEVEE SAFETY 13 (2009), <http://cdm16021.contentdm.oclc.org/utils/getfile/collection/p16021coll2/id/444>.

20. Thomas Wahl et al., *Increasing risk of compound flooding from storm surge and rainfall for major US cities*, (Advance online publication) NATURE CLIMATE CHANGE (2015), <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2736.html>; Iman Mallakpour & Gabriele Villarini, *The changing nature of flooding across the central United States*, 5 NATURE CLIMATE CHANGE 250 (2015).

21. While not considered in this paper, there were numerous claims by individuals and businesses without separate flood insurance policies asking the court to find that their general property insurance covered their flood losses. The Louisiana Supreme Court rejected these claims, finding that it was not against public policy to exclude flood damage by explicit policy language, and that the standard form policy was not ambiguous as to the definition of a flood. *See Sher v. Lafayette Ins. Co.*, 988 So. 2d 186 (2008); *Landry v. La. Citizens Property Ins.*, 983 So. 2d 66 (2008).

22. Local federal judges are loath to rule against their neighbors in mass tort cases against the federal government. *See Dalehite v. United States*, 346 U.S. 15 (1953); *Allen v. United States*, 816 F.2d 1417 (10th Cir. 1987), *cert. denied by Allen v. United States*, 484 U.S. 1004 (1988).

23. *In re Katrina Canal Breaches Consol. Litig.*, 533 F. Supp. 2d 615, 643 (E.D. La. 2008) (*17th Street Canal*) *judgment entered sub nom*, *In re Katrina Canal Breaches Consol. Litig.*, No. 05-4181, 2010 WL 4068739 (E.D. La. Oct. 14, 2010) *aff'd sub nom*, *In re Katrina Canal Breaches Litig.*, 673 F.3d 381 (5th Cir. 2012) (*Robinson 5th Circuit I*), *opinion withdrawn on reh'g*, *In re Katrina Canal Breaches Litig.*, 696 F.3d 436 (5th Cir. 2012) (*Robinson 5th Circuit II*). For clarity, the parenthetical references will be used at the end of the footnote in which each case appears.

This attitude drove the court's attempt to convert the administrative Federal Tort Claim Act (FTCA) process into a typical mass tort case.

A. Topography of New Orleans

The topography of New Orleans makes it uniquely dangerous during hurricanes. Hurricane Katrina hit the Mississippi Coast with higher winds and surge than New Orleans, but within a few hours of the storm passing through, most of the water had drained back into the ocean and recovery could begin. In contrast, people in New Orleans were trapped in their houses and in shelters for days, with many dying of exposure before they could be rescued. This is because nearly 50% of New Orleans is below sea level, up to ten feet below sea level. St. Bernard Parish, east of New Orleans and between New Orleans and Hurricane Katrina, has significant land as much as six feet below sea level.

Even the areas that are not below sea level are only slightly above. The coastal Mississippi delta is very flat and low. The only high ground is on the natural levees of the current and abandoned Mississippi River channels. These ridges are as high as twenty feet in New Orleans, but the highest natural elevation in St. Bernard parish to the east of New Orleans is twelve feet.²⁴ Even at normal sea level, a large part of the New Orleans area is not hydrologically stable. It requires levees and constant pumping to prevent the bowl formed by areas below sea level from filling with water. The city is cut through with drainage canals that are used to channel this water north to Lake Pontchartrain.

At the time of Hurricane Katrina, these drainage canals were open canals with gravity flow to Lake Pontchartrain. The pumps are in the lowest spots in the city to collect the rain water, well below sea level, and the lake end of the canal is above sea level to prevent the lake from flowing back into the city. This requires that the canal be elevated above sea level as it cuts through the parts of the city that are below sea level. The canal flows through high levees and concrete flood walls. Even on dry days, the level of water in the canal is at roof level in many places. This is also true of the Inner Harbor Navigation Canal (IHNC) between the river and the lake²⁵ (See

24. Paul V. Heinrich, *Review of the Engineering Geology of St. Bernard Parish, Louisiana*, 15 LA. GEOLOGICAL SURV. 6 (2005), <http://biotech.law.lsu.edu/la/geology/18650587-Engineering-Geology-of-St-Bernard-Parish-Louisiana.pdf>.

25. This canal was constructed by the City of New Orleans and the state between 1918 and 1923 to provide a connection between the river, Lake Pontchartrain, and Intracoastal Canal which provides shipping east to Florida. The canal connects through the Mississippi through the Inner Harbor Navigation Canal Lock, which was built in 1921. LYNN M. ALPERIN, ARMY CORPS OF ENGINEERS WATER RES. SUPPORT CTR., HISTORY OF THE GULF INTRACOASTAL WATERWAY, NATIONAL WATERWAYS STUDY NWS-83-9, at 32 (1983), http://biotech.law.lsu.edu/climate/mississippi/NWS_83-9.pdf.

Figure 1). A breach in the levees or flood walls, or a torrential rain storm that gets ahead of the pumps will rapidly flood tens of thousands of homes during times of normal sea level.

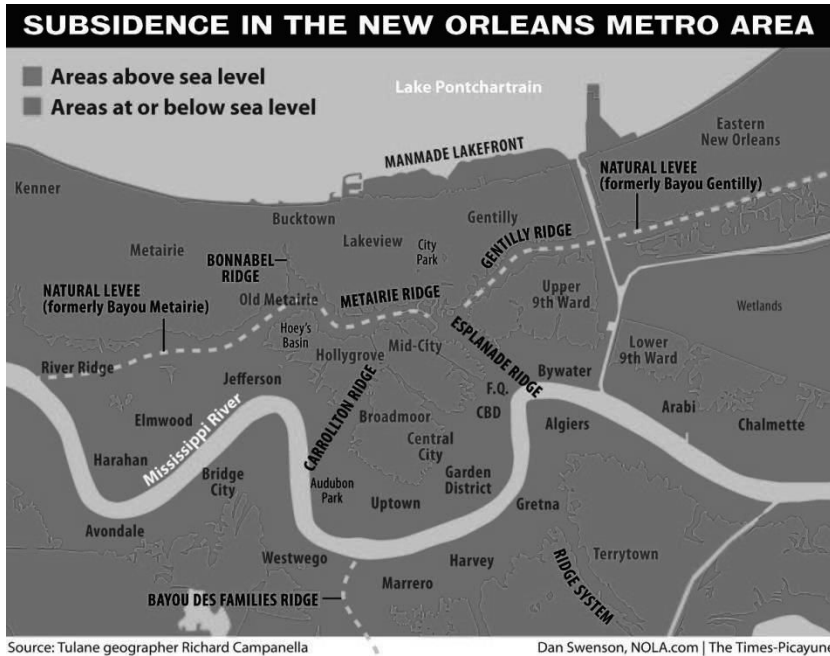


Figure 1²⁶

The IHNC forks before it reaches Lake Pontchartrain. The left fork continues to the lake, and the right goes east to connect with the Intracoastal Waterway, which then continues east to Florida and up the East Coast. The Mississippi River Gulf Outlet (MRGO), at the heart of all the litigation in this article, goes from the right fork of the IHNC and to the Gulf of Mexico. As early as 1921, New Orleans started lobbying Congress to build this shortcut to connect the Inner Harbor—being built along the fork of IHNC going to Lake Pontchartrain—to the Gulf of Mexico. This would allow ships to move from the Mississippi River through the IHNC Lock to the MRGO and to the Gulf of Mexico, cutting nearly 100 miles off the route through the river's mouth south of New Orleans. Joined by eleven governors of states using Mississippi River shipping, New Orleans succeeded in 1956, and Congress authorized the construction of the MRGO.²⁷

26. Provided by Richard Campanella, with permission.

27. ALBERT E. COWDREY, *LAND'S END* 72 (1977), <http://biotech.law.lsu.edu/climate/mississippi/Lands-End.pdf>.

The MRGO skirts the edge of Lake Borgne (an arm of the Gulf of Mexico) and then cuts southeast through wetlands in St. Bernard Parish to the Gulf of Mexico. Some of this area was slightly above sea level and supported cypress trees at the time the MRGO was built. Much of the area the canal was cut through was marsh at sea level. The original IHNC Lock, which connects the MRGO to the Mississippi River, was too small for ocean shipping vessels. Congress authorized the expansion of the lock along with the construction of the MRGO but this expansion was never built, so the MRGO was never a useful connection between the river and the Gulf.²⁸

Shortly after the MRGO was completed, St. Bernard Parish and east New Orleans, including the Ninth Ward, were flooded by Hurricane Betsy.²⁹ Plaintiffs who had been flooded claimed that the MRGO funneled water into the city and caused their properties to be flooded.³⁰ The historic record belies this claim. Long before there were any Corps projects in this area, when the old growth cypress was intact as a buffer, St. Bernard Parish and the east side of New Orleans were catastrophically flooded by hurricanes several times.³¹ During the forty years between Hurricane Betsy and Hurricane Katrina, the risk of flooding increased substantially because St. Bernard Parish is on an abandoned lobe of the Mississippi River delta and is subsiding into the Gulf of Mexico as sea level rises.³²

28. *Inner Harbor Navigation Canal (IHNC) Lock Replacement*, U.S. ARMY CORPS OF ENGINEERS, <https://www.mvn.usace.army.mil/About/Projects/IHNC-Lock-Replacement/> (last visited Jan. 27, 2019). For a discussion of the limited economic utility of the MRGO, see William R. Freudenburg et al., *Disproportionality and Disaster: Hurricane Katrina and the Mississippi River-Gulf Outlet*, 90 SOC. SCI. Q. 497 (2009).

29. Andy Horowitz, *Hurricane Betsy and the Politics of Disaster in New Orleans's Lower Ninth Ward, 1965-1967*, 80 J. S. HIST. 893, 894 (2014).

30. *Graci v. United States*, 456 F.2d 20, 22 (5th Cir. 1971); claims dismissed for failure to show any negligence by the government and no evidence of increased flooding caused by the MRGO: *Graci v. United States*, 435 F. Supp. 189, 193, 196 (E.D. La. 1977).

31. The worst storm of the early years was "The Great Louisiana Hurricane" of August 9, 1812. It rolled over the barrier islands and drowned Plaquemines and St. Bernard Parishes and the area around Barataria Bay under 15 feet of water. The parade ground at Fort St. Phillip was inundated by 8 feet of water and the shoreline along Lake Pontchartrain was similarly inundated, though this was far enough below the French Quarter to spare any flooding of the City. J. David Rogers, CHAPTER FOUR: HISTORY OF THE NEW ORLEANS FLOOD PROTECTION SYSTEM 4-14 (2006), https://www.researchgate.net/publication/237543570_CHAPTER_FOUR_HISTORY_OF_THE_NEW_ORLEANS_FLOOD_PROTECTION_SYSTEM.

32. Heinrich, *supra* note 24, at 10. ("Ongoing regional and semi-regional subsidence also has implications for St. Bernard Parish. Subsidence not only accentuates the magnitude of flooding created by hurricane storm surge by physically lowering the land's surface with time, it also reduces the effectiveness of existing levees and other flood control structures by reducing their height. In addition, subsidence further exacerbates the damage caused by storm surges by significantly contributing to land loss that reduces the moderating affect that marshes have on them.").

After Katrina, two class action cases resurrected the idea that the MRGO exacerbates the flooding on the east side by acting as a funnel for storm surge.³³ In re Katrina Canal Breaches Litigation,³⁴ discussed in this article, is a Federal Tort Claims Act case claiming negligence in the maintenance of the MRGO. *St. Bernard Parish Government v. United States*,³⁵ is a takings case based on the MRGO increasing the flooding on the east side of New Orleans. Claims that the MRGO dramatically increases flooding defies common sense: MRGO was 2000 feet wide in places and 36 feet deep in 2005. The surge front of the storm was fifty miles wide and more than fifteen feet high as it approached St. Bernard Parish. This dwarfed any effect of the MRGO:

The calculated total volume entering the Funnel through the MRGO Reach 2 channel was 32 million cum. The total volume that entered through the GIWW channel was 6 million cum. The total volume entering through the Lake Borgne and the inundated wetlands segment was 632 million cum. The vast majority of water that moved into the Funnel, 94%, passed through Lake Borgne and over the inundated wetlands, not through the channels. Only 5% of the water volume entered through the MRGO channel, and only 1% entered through the GIWW channel.

The storm surge snap-shots show that the Funnel had little influence on amplification of the storm surge during Katrina. In response to the predominant momentum balance between wind stress and water surface slope, maximum surge was generated along the MRGO Reach 2 levee, perpendicular to the primary and persistent northeasterly winds. Peak surge did not occur at the apex of the Funnel.³⁶

These findings were echoed in several other studies that were done by independent experts, not affiliated with the plaintiffs in these cases.³⁷ There

33. Gary P. Shaffer et al., *The MRGO Navigation Project: a massive human-induced environmental, economic, and storm disaster*, 54 J. COASTAL RES. 206, 216 (2009) (note that some of the authors also participated in the plaintiffs' litigation).

34. 696 F.3d 436 (5th Cir. 2012) (*Robinson 5th Circuit II*).

35. 887 F.3d 1354 (Fed. Cir. 2018).

36. B.A. Ebersole et al., *Development of storm surge which led to flooding in St. Bernard Polder during Hurricane Katrina*, 37 OCEAN ENGINEERING 91, 99 (2010).

37. URS CORP., THE DIRECT IMPACT OF THE MISSISSIPPI RIVER GULF OUTLET ON HURRICANE STORM SURGE, at ES-2 ("The MRGO channel does not contribute significantly to peak surge during severe storms, when the conveyance of surge is dominated by flow across the entire surface of the coastal lakes and marsh. Nor does the channel contribute significantly to wave run-up"); see also JOANNES WESTERINK ET AL., NOTE ON THE INFLUENCE OF THE MISSISSIPPI RIVER GULF OUTLET ON HURRICANE INDUCED STORM SURGE IN NEW ORLEANS AND VICINITY 5 (2006), <http://www.columbia.edu/itc/journalism/cases/katrina/Army/Army%20Corps%20of%20Engineers/Influence%20of%20the%20MRGO%20on%20Storm%20Surge.pdf>; Pat J. Fitzpatrick et al., *Myths about the cause of Hurricane Katrina's storm*

is a funnel, but it is formed by the intersection of St. Bernard Parish and the land bridge that closes off Lake Pontchartrain, which is really a bay on the Gulf of Mexico that a previous lobe of the delta closed off to form what is now a lake. Surge from the east does pile up in this funnel, just as it did long before the MRGO was built.³⁸ Without levees in this area, the surge sweeps across the land bridge into Lake Pontchartrain and across St. Bernard Parish into east New Orleans. When the levees were added between the canals and the city, they provided a barrier that a slow-moving storm such as Hurricane Katrina could pile up surge against until the levees were overtopped and failed. This failure was not because they had been weakened by a poorly maintained MRGO, but because Hurricane Katrina had a storm surge and because they were as much as a meter lower than their design height because of unrecognized subsidence.³⁹

B. Hurricane Katrina

Hurricane Katrina formed off the Bahamas and skirted south Florida and the Keys as a minor hurricane. It strengthened as it entered Gulf of Mexico, becoming a category 5 storm on August 28th about 250 miles south of the Mississippi-Alabama border.⁴⁰ Its central pressure fell to 902 mb, which was the fourth lowest on record for the Atlantic Basin and the lowest measured inside the Gulf of Mexico. Hurricane Katrina moved across the tail of the Mississippi delta through lower Plaquemines Parish south of Buras as a category 4 storm with 140 mph winds at 6:10 AM on the 29th of August. It moved due north, to the east of New Orleans, and then made a second landfall near the mouth of the Pearl River at the Louisiana-Mississippi border at 10:00 AM. At landfall, it was a category 3 storm with maximum sustained winds near 125 mph.⁴¹ The strongest winds and highest surges are in the northeast quadrant of a hurricane, which passed far to the

surge, 29th Conference on Hurricanes and Tropical Meteorology, May 10–14 (2010), <http://biotech.law.lsu.edu/katrina/reports/Fitzpatrick2007.pdf>.

38. Joannes J. Westerink et al., *A basin-to channel-scale unstructured grid hurricane storm surge model applied to southern Louisiana*, 136 MONTHLY WEATHER REV. 833, 859–860 (2008).

39. Timothy H. Dixon et al., *Space geodesy: Subsidence and flooding in New Orleans*, 441 NATURE 587 (2006) (“Here we present a new subsidence map for the city, generated from space-based synthetic-aperture radar measurements, which reveals that parts of New Orleans underwent rapid subsidence in the three years before Hurricane Katrina struck in August 2005. One such area is next to the Mississippi River–Gulf Outlet (MRGO) canal, where levees failed during the peak storm surge: the map indicates that this weakness could be explained by subsidence of a metre or more since their construction.”).

40. RICHARD D. KNABB ET AL., NAT’L HURRICANE CTR., TROPICAL CYCLONE REPORT: HURRICANE KATRINA 23–30 AUGUST 2005, at 37 (Dec. 20, 2005), http://biotech.law.lsu.edu/katrina/govdocs/TCR-AL122005_Katrina.pdf.

41. ROTH, *supra* note 15, at 54.

east of New Orleans. The areas outside of the levees on the east and north of the city were flooded by up to nineteen feet of water, but there was only limited wind damage in the city and what at first appeared to be little water inside the levees. The city breathed a sigh of relief until it was recognized that water was pouring over and through the levees and flood walls into the city.⁴² What happened next was driven by the topography of New Orleans.

Hurricane Katrina effectively raised sea level on the east side of New Orleans by fifteen to nineteen feet and on the north side by ten to fourteen feet.⁴³ On the east side of the city, the surge washed over the levees and then breached them, flooding the low-lying land and pouring downhill into the areas below sea level. On the north side of the city, a flood wall on the 17th Street Canal failed, allowing surge from Lake Pontchartrain to flood the city from the north. Additional drainage canal flood walls were overtopped or failed and flooded other parts of the city. A floodwall on the International Harbor Navigation Canal, which is on the west side of the Ninth Ward and to the east of the French Quarter, failed, allowing flood waters into the Ninth Ward.⁴⁴

When the flood walls in the Ninth Ward and the Lakeview area failed, water rushed into the city. The surge was already waning, but since the areas inside the flood walls were as much as 10 feet below sea level, it was like a dam breaking with 20 feet or more of water behind it. The water flowed down hill into the city as a raging torrent. This was a major factor in the death rates, because the risk of death from flooding increases dramatically with the velocity of the water.⁴⁵ Near the breaches, houses were shattered

42. See Sheri Fink, *The Deadly Choices at Memorial*, N.Y. TIMES (Aug. 30, 2009), <https://www.nytimes.com/2009/08/30/magazine/30doctors.html> (describing the receding flood waters on the night of Aug. 29, 2005—the day Katrina made landfall—and explaining that a local hospital had “seemed to have weathered one more storm”); see also Bob Marshall, *City’s Fate Sealed in Hours*, TIMES-PICAYUNE, May 14, 2006, at A1 (“With Katrina already north of the city . . . the surge has begun to drop. For levees and floodwalls still standing, the overtopping is over. But the large sections of levees and floodwalls that have collapsed will keep bleeding water into the city for more than four days.”).

43. KNABB, *supra* note 40, at 37.

44. The iconic picture of a barge washed into the Ninth Ward was taken at the location of the break on the IHNC. See Analysis of the Transit of the Barge ING 4727 During Hurricane Katrina and Reasons Why it Did Not Cause the Failure of the Inner Harbor Navigation Canal Floodwall at 171, Figure 116, *In re Katrina Canal Breaches Consol. Litigation*, No. 05-4182, 2011 WL 1792542 (E.D. La. Jan. 20, 2011). In litigation involving the barge, the district court determined that the barge washed ashore after the break and that the barge company was not liable for causing the break. *In re Katrina Canal Breaches Consol. Litig.*, No. 05-4182, 2011 WL 1792542, at *1710 (E.D. La. Jan. 20, 2011).

45. S. N. Jonkman & J. K. Vrijling, *Loss of life due to floods*, 1 J. FLOOD RISK MGMT. 43, 50 (2008).

and some were swept off their foundations.⁴⁶ People had little time to get to safety in attics. Later analysis showed that “mortality rates were highest in areas near breaches and in areas with large water depths. The highest mortality fractions were observed near the severe breaches in Lower 9th Ward flood wall.”⁴⁷

The water level’s final equilibrium after the breach was only a few feet above ordinary sea level, but this was as much as fifteen feet above ground level in the lowest areas of the city.⁴⁸ It took several days to plug the holes in the flood walls and start the pumps to clear the water from the city. This delay made it difficult to rescue the injured and infirm and greatly increased the death toll.⁴⁹

The areas on the ridges did not flood, including most of the French Quarter. Lower areas that were still above sea level were flooded, but drained quickly. While there was some wind damage in the New Orleans metropolitan area, most of the property damage and deaths were due to flooding in the bowl areas below sea level.

The geologic and hydrologic factors that made Hurricane Katrina so deadly for New Orleans will increase over time.⁵⁰ The risk of catastrophic flooding from any given hurricane increases with relative sea level rise (subsidence plus sea level rise from climate change). For any given size storm in the future, the relative sea level rise since Hurricane Katrina will be added to the inherent surge of the storm.⁵¹ As relative sea level increases, the depth of the bowl formed by the floodwalls and levees increases. The water behind the dam formed by the flood walls and levees is higher, so more water will pour into the city, at a higher velocity, than with Hurricane

46. Aimilia K. Pistrika & Sebastiaan N. Jonkman, *Damage to residential buildings due to flooding of New Orleans after hurricane Katrina*, 54 NAT. HAZARDS 413, 422–423 (2010).

47. Sebastiaan N. Jonkman et al., *Loss of Life Caused by the Flooding of New Orleans After Hurricane Katrina: Analysis of the Relationship Between Flood Characteristics and Mortality*, 29 RISK ANALYSIS 676, 695 (2009).

48. *Pumps begin to drain New Orleans*, CNN (Sept. 6, 2005, 2:17 AM), <http://www.cnn.com/2005/US/09/05/neworleans.levees/>.

49. Joan Brunkard et al., *Hurricane Katrina Deaths, Louisiana, 2005*, 2 DISASTER MED. & PUB. HEALTH PREPAREDNESS 215–23 (2008) (“The mean age of Katrina victims was 69.0 years (95% confidence interval [CI], 67.8–70.2), and their age range was 0 to 102 years. Approximately 50% of the people who died as a result of Hurricane Katrina in Louisiana were 75 years old and older.”).

50. A. Miller et al., *Risk to life due to flooding in post-Katrina New Orleans*, 15 NAT. HAZARDS & EARTH SYS. SCI. 59 (2015).

51. Ning Lin & Eric Shullman, *Dealing with Hurricane Surge Flooding in a Changing Environment: Part I. Risk Assessment Considering Storm Climatology Change, Sea Level Rise, and Coastal Development*, 31 STOCHASTIC ENVTL. RES. & RISK ASSESSMENT 2379, 2379–2400 (2017), <https://link.springer.com/article/10.1007/s00477-016-1377-5> (as sea level rises, either because of direct sea level rise or because the land is sinking, the surge from the storm is added to the higher sea level).

Katrina.⁵² Concerns with social justice and preserving the demographics of New Orleans lead to adopting a “right of return” policy.⁵³ As a result, there were no limits on rebuilding in the lowest areas of the city.⁵⁴ An analysis of the risk of severe flooding and loss of life in New Orleans with the new levees and flood control structures in place found that New Orleans is still at risk of catastrophic flooding.⁵⁵

Despite the increasing risk of catastrophic flooding through time, people’s fear of flooding decreases as time passes since the last flooding event. This leads to more and higher value construction and more population in the high-risk zone. These are key issues in developing a long-term policy to manage the risk in New Orleans, but they are notably absent in the steady state world legal narrative embodied in the claims against the Corps.

II. HURRICANE KATRINA—THE FEDERAL TORT CLAIMS ACT CASES

When Hurricane Betsy flooded New Orleans in 1965, there were fewer than eighty-two deaths.⁵⁶ Hurricane Katrina was not a dramatically stronger storm when it hit New Orleans, but it killed between 986 and 1440 people in Louisiana, most of those in the greater New Orleans area.⁵⁷ Property damage was estimated at \$108 billion.⁵⁸ As discussed, almost all of the damage and mortality was due to flooding by storm surge getting through or over levees and floodwalls. The legal narrative is that the increase in deaths and destruction was due to the negligence—at best—of the Corps, and that the Corps should pay to make the injured whole. The hurricane protection

52. Jonkman et al., *supra* note 47, at 688–98 (the greater the produce of the amount water and its velocity, the deadlier the flood).

53. Lolita Buckner Inniss, *Domestic Right of Return: Race, Rights, and Residency in New Orleans in the Aftermath of Hurricane Katrina*, A, 27 BC THIRD WORLD L.J. 325 (2007); Chris Kromm & Sue Sturgis, *Hurricane Katrina and the guiding principles on internal displacement*, 36 INST. FOR S. STUD. 1, 23 (2008).

54. Marla Nelson et al., *Planning, plans, and people: professional expertise, local knowledge, and governmental action in post-hurricane Katrina New Orleans*, 9 CITYSCAPE 23, 29 (2007). By 2015, ten years later, the city had rejected any plans that required not rebuilding, even in the highest risk neighborhoods. Richard Campanella, *The Great Katrina Footprint Debate 10 years later*: TIMES-PICAYUNE, https://www.nola.com/katrina/index.ssf/2015/05/footprint_gentrification_katri.html (last updated May 29, 2015).

55. Miller, *supra* note 50, at 59–73 n.50. While this study predicts fewer deaths than occurred from Hurricane Katrina, it also assumes a 90% evacuation rate of the high-risk parts of the city. This is likely unrealistic.

56. Estimates range from 81 (Craig E. Colten & Amy R. Sumpter, *Social memory and resilience in New Orleans*, 48 NAT. HAZARDS 355, 358 (2009)) to 75 (Arnold L. Sugg, *The hurricane season of 1965*, 94 MONTHLY WEATHER REV. 183 (1966)). These are total deaths in Louisiana and the number for New Orleans is likely somewhat smaller.

57. Brunkard et al., *supra* note 49, at 2.

58. KNABB, *supra* note 40, at 13.

system design put in place after Hurricane Betsy that was breached by Hurricane Katrina was designed and constructed by the United States Army Corps of Engineers.⁵⁹ The Orleans levee board shared responsibility for the levees and floodwalls within New Orleans.⁶⁰ The initial class action lawsuit for damages due to Hurricane Katrina flooding included the Orleans Levee Board and the levee boards for other affected parishes as defendants.⁶¹ During the pendency of the litigation, the claims against the levee boards were settled for their aggregate insurance coverage, resulting in payouts of about \$21,000,000 in total.⁶² This left the Corps as the primary target of the litigation.⁶³

As a federal agency, the Corps has sovereign immunity from claims,⁶⁴ except to the extent that the immunity has been waived by the FTCA⁶⁵ or that the claim is a debt owned by the United States under the Constitution.⁶⁶ Cases were filed under the FTCA in the District Court of the Eastern District of Louisiana and as a takings claim under the Constitution in the Court of Claims. The takings claim case was stayed until after the proceeding in the FTCA cases, and relied on the evidence from the FTCA cases.⁶⁷ Those cases are not discussed as part of this paper.

The FTCA claims are a complex, interrelated set of cases with hundreds of orders on the docket.⁶⁸ All of the FTCA cases were dismissed eventually, either under the Flood Control Act of 1928 (FCA) or the FTCA. This made no new law. As will be discussed later, the only interesting legal point is that they were not dismissed on initial summary judgment. Their

59. J. David Rogers et al., *Interaction between the US Army Corps of Engineers and the Orleans Levee Board preceding the drainage canal wall failures and catastrophic flooding of New Orleans in 2005*, 17 WATER POL'Y 707, 709 (2015).

60. *Id.*

61. *In re Katrina Canal Breaches Consol. Litig.*, 263 F.R.D. 340, 343 (E.D. La. 2009), *rev'd sub nom.* *In re Katrina Canal Breaches Litig.*, 628 F.3d 185 (5th Cir. 2010).

62. *Id.* This initial settlement was rejected on appeal and was replaced by a final settlement: *Vodanovich v. BOH Bros. Const. Co., LLC*, No. CIV.A. 05-4191, 2014 WL 5603191, at *3 (E.D. La. Oct. 30, 2014).

63. All claims against the Corps have now been dismissed, leaving the settlement by the levee boards as the only claims paid through the Hurricane Katrina litigation.

64. *United States v. Sherwood*, 312 U.S. 584, 586 (1941).

65. 28 U.S.C. §1346(b) (2006); *see also* 28 U.S.C. §2680(h): Exemptions.

66. *United States v. Testan*, 424 U.S. 392, 398 (1976).

67. *See Tommaseo v. United States*, 75 Fed. Cl. 700, 802–03 (Fed. Cl. 2007). The stay was lifted in *St. Bernard Parish v. United States*, 99 Fed. Cl. 765, 771–72 (Fed. Cl. 2011), and the trial judgment was released in May 2015: *St. Bernard Par. Gov't v. United States*, No. 05-1119, 2015 WL 2058969 (Fed. Cl. May 1, 2015), and *St. Bernard Par. Gov't v. United States*, 126 Fed. Cl. 707 (2016).

68. 05-CV-4182 *Katrina Canal Breaches Litigation*, E.D. La., <http://www.laed.uscourts.gov/CanalCases/CanalCases.htm> (last visited Aug. 6, 2015).

significance is the steady state narrative about New Orleans that they embedded in the public's mind and in the record of the takings case.

The plaintiffs faced three legal hurdles in these cases. First, they had to get jurisdiction to sue the United States by satisfying the notice of claim requirements in the FTCA. Second, they had to survive the immunity provision of the FCA. After New Orleans was flooded by Hurricane Betsy in 1965, the Corps was directed to come up with a plan to protect the city. It eventually settled on a ring levee system around the city. While some parts of the system were still unfinished when Katrina hit, the ring was complete. With some very limited exceptions, every piece of property at issue in the litigation against the Corps was inside a levee. The flood waters had to get over or through a levee to cause damage.

Section 702c of the FCA provides immunity for flood damage: “No liability of any kind shall attach to or rest upon the United States for any damage from or by floods or flood waters at any place. . . .”⁶⁹ Hurricane Betsy flooding led to a case holding that a flood control project that does not block water still blocks liability.⁷⁰ The Supreme Court subsequently held that it is the “character of the waters that cause the relevant damage”⁷¹ that triggers immunity—if the damage is caused by flood waters, the United States is immune.

Anyone trying to recover from the Corps because Hurricane Katrina flooded New Orleans has to get the flood waters over or through the flood control projects without triggering § 702c. Finally, they had to avoid dismissal under the discretionary authority defense of the FTCA. Some failed to perfect their FTCA claim;⁷² some could not overcome FCA immunity;⁷³ and the narrative that was crafted to avoid FCA immunity ultimately lead to the dismissal of all of the surviving FTCA cases under the statutory discretionary authority defense.⁷⁴

A. Exhausting the Federal Torts Claims Act Notice Requirements

The FTCA is an administrative compensation system for persons injured by traditional negligent property and personal injury torts.⁷⁵ The

69. 33 U.S.C. § 702c (2018).

70. *Graci v. United States*, 456 F.2d 20, 25–26 (5th Cir. 1971).

71. *Cent. Green Co. v. United States*, 531 U.S. 425, 436 (2001).

72. *In re Katrina Canal Breaches Consol. Litig.*, No. Civ. A. 05-4182, 2008 WL 4449970 (E.D. La. Sept. 29, 2008) (*IHNC*). For clarity, the parenthetical reference will be used at the end of the footnotes in which this case appears.

73. *In re Katrina*, 533 F. Supp. 2d 615 (E.D. La. 2008) (*17th Street Canal*).

74. *In re Katrina Canal Breaches Litig.*, 696 F.3d 436, 444–45 (5th Cir. 2012) (*Robinson 5th Circuit II*).

75. The FTCA originally allowed plaintiffs to bring their claim directly in District Court. This clogged up the courts with claims that could have been settled before trial, so the notice

FTCA excludes intentional torts, except some committed by law enforcement officers.⁷⁶ After the administrative claims process has been exhausted, the plaintiff has jurisdiction to appeal the agency's offer of settlement or denial of the claim to the district court. This is a simple process for individual claims with a clear etiology. As the Katrina cases show, it is more difficult to satisfy with tens of thousands of claimants and shifting theories of liability. What would have been a straight forward class action against a private party becomes a complex procedural problem that was never resolved in the litigation.

The FTCA allows a claimant two years after the incident causing the injury to file a claim with the agency that caused the injury. The claim must state the name of the claimant and any necessary identifying information so that that agency can contact the person. The claim must state the facts supporting how the government caused the injury and a specific dollar demand.⁷⁷ The agency has six months to make an offer to settle the claim or to reject the claim. The claim can be amended and that restarts the six-month clock for agency review. Substantive amendments which postulate new injuries or different mechanisms of injury must be filed within the initial two-year period. Exhaustion is not complete until the agency acts on the claim or six months expires after the presentation of the claim. If the agency does not act on the claim by six months, it is deemed denied. Once the process is exhausted, the claimant has jurisdiction to contest the agency's ruling in federal district court.⁷⁸

The claimant has six months to appeal the agency's denial or inadequate award to the district court. The two-year statute of limitation on filing the initial claim and the six-month limitation on filing in court can be

provision was added in 1966. See Federal Tort Claims Act, Pub.L. No. 89-506, § 2, 80 Stat. (1966); see also *Adams v. United States*, 615 F.2d 284, 288-89 (5th Cir. 1980), *decision clarified on denial of reh'g*, 622 F.2d 197 (5th Cir. 1980).

76. As originally passed, intentional torts were completely excluded. There was speculation in a Senate Report that this was because of the inflammatory nature of potential beating claims against the FBI. *The Federal Tort Claims Act*, 56 YALE L.J. 534, 547 n.84 (1947). This left these claims to private bills and the discretion of Congress. But after *Bivens v. Six Unknown Named Agents of Fed. Bureau of Narcotics*, 403 U.S. 388, 422-23 (1971) allowed a direct, constitutionally-based action for intentional harm by federal officials, the FTCA was amended to its present form to keep these cases within the ambit of the FTCA limitations.

77. DOJ provides a Form 95 to use for filing claims. The courts have held that the form is not required as long as the agency received actual notice. DOJ has promulgated regulations that outline the necessary information for stating a claim. 28 C.F.R. § 14.4.

78. If the plaintiff files before receiving an offer or denial from the agency and before the 6-month "deemed denied" period, the action is premature because there is no jurisdiction. The United States can raise this at any point and the action must be dismissed. *McNeil v. United States*, 508 U.S. 106, 108 (1993).

equitably tolled for good cause.⁷⁹ If the claim is deemed denied—if the claimant gets no response from the United States—there is no limitations period for filing the claim. But if the agency acts on the deemed-denied claim at any point in the future, the six-month clock starts ticking.⁸⁰ While the Court has found that the time periods in the statute are not jurisdictional, perfecting the notice of claim is jurisdictional and cannot be waived by the courts.

The court cannot shorten the required timeframes. A complaint filed in district court before the agency claims process is complete and the agency has had the statutory time to respond is premature and must be dismissed for lack of jurisdiction. If the claimant has not filed a claim with the agency when the lawsuit is filed, the claim cannot be filed while the lawsuit is pending. If the two-year limitations period expires before the lawsuit is dismissed and the claim is filed, the claim will be barred. If the claim has been filed and the agency has not acted on it, the agency will not proceed until the lawsuit is dismissed. This becomes important in the Hurricane Katrina FTCA litigation because several lawyers were filing putative class actions covering the same potential classes, which potentially complicated exhausting the FTCA claims process.

1. *The Exhaustion Issues in the Hurricane Katrina Federal Torts Claims Act Litigation*

Hurricane Katrina flooded New Orleans on August 29, 2005, starting the two-year clock on FTCA claims. The ensuing FTCA cases posed variations of two exhaustion problems: adding additional theories of loss to proper claims, and determining if plaintiffs in putative class action lawsuits had individually exhausted the FTCA claims process. The original petition in what the Court styled the *Robinson*⁸¹ case was filed by six named plaintiffs on April 25, 2006.⁸² Each plaintiff provided proof that a proper claim under the FTCA had been filed with the Corps.⁸³ They stated a dollar demand for flooding damages and this statement of liability facts:

79. *United States v. Kwai Fun Wong*, 135 S. Ct. 1625, 1629 (2015).

80. *Barnes v. United States*, 776 F.3d 1134, 1140 (10th Cir. 2015).

81. Hurricane Katrina spawned a complex web of litigation. There are several different plaintiff groups with different claims against different defendants. The dispute that went to trial (*In re Katrina Canal Breaches Consol. Litig.*, 647 F. Supp. 2d 644 (E.D. La. 2009)) was characterized as the *Robinson* case by the court and this name was used for the multiple orders and preliminary holdings leading up to the final appeals court ruling (*In re Katrina Canal Breaches Litig.*, 696 F.3d 436 (5th Cir. 2012)).

82. *In re Katrina Canal Breaches Consol. Litig.*, No. Civ. A. 05-4182, 2008 WL 4449970, at *1 (E.D. La. Sept. 29, 2008) (*IHNC*).

83. *Id.*

[A]ll of the damage complained of herein were caused as a direct and proximate result of negligence of the United States Army Corps of Engineers in the design, construction, and maintenance of the Mississippi River Gulf Outlet navigational/shipping structure located in St. Bernard and Orleans Parishes in Louisiana.⁸⁴

In May 2008, plaintiffs made the court aware that they intended to make additional claims based on allegedly negligent work by a government contractor associated with the repair of a lock on the IHNC.⁸⁵ The Court found that this was not a logical extension of the original petition and ordered plaintiffs to file an amended petition.⁸⁶ The new Count 3 alleged that the Corps was negligent in overseeing a contractor working in “. . . the East Bank Industrial Area (“EBIA”) adjacent to the Inner Harbor Navigational Chanel (“IHNC”) or the Industrial Canal.”⁸⁷ The United States filed a motion to dismiss the new count based on failure to provide proper notice under the FTCA.⁸⁸

The United States argued that it was entitled to notice of the specific mechanism of injury that plaintiff intended to rely on and that it did not have a duty to look behind the notice and find unnamed negligent acts.⁸⁹ Plaintiffs argued that the statute only requires them to notify the agency of the nature of their injury and a proposed mechanism of injury.⁹⁰ It then becomes the agency’s duty to investigate the claim, including other possible mechanisms of injury: once the Corps was on notice that plaintiffs had been flooded by Hurricane Katrina, it was up to the Corps to find out how it happened.⁹¹

The Court looked to a medical malpractice case, *Portillo v. United States*,⁹² for guidance on necessary specificity of a claim.⁹³ In *Portillo*, plaintiff’s notice to the agency described an injury caused by negligent post-op monitoring and urinary catheterization, leading to a urinary tract infection and subsequent injury.⁹⁴ Plaintiff’s subsequent lawsuit alleged that the injury was due to negligent administration of spinal anesthesia leading to spinal nerve damage.⁹⁵ In determining whether the original notice was adequate, the *Portillo* court looked to the purpose of the administrative

84. *Id.*

85. *In re Katrina*, 2008 WL 4449970 at *2 (*IHNC*).

86. *Id.*

87. *Id.*

88. *Id.* at *3

89. *Id.* at *4.

90. *Id.* at *4

91. *In re Katrina*, 2008 WL 4449970 at *4 (*IHNC*).

92. 816 F. Supp. 444, 446 (W.D. Tex. 1993), *aff’d*, 29 F.3d 624 (5th Cir. 1994).

93. *In re Katrina*, 2008 WL 4449970 at *5–6 (*IHNC*).

94. *Portillo*, 816 F. Supp. at 445.

95. *Id.*

notice: facilitating the agency's investigation of the claim to determine if there was negligence and, if so, the appropriate compensation.⁹⁶ The court found the information about a post-surgical injury caused by nursing staff did not put the agency on notice of an in-surgery injury by anesthesia staff.⁹⁷

Based on this reading of the notice requirement, the *Robinson* court found that plaintiff's Form 95 notice, the form filed with the Corps, did not mention any negligence associated with areas described in Count 3: "There is simply no indication that the EBIA, and the work of WGI would be the subject of this lawsuit."⁹⁸ The court also rejected the plaintiffs' argument that since so many other parties had filed claims, someone must have put the Corps on notice.⁹⁹ The court found no case supporting this notion of vicarious notice and it was not prepared to find it in this case.¹⁰⁰ Since plaintiffs failed to perfect notice for the allegations in Count 3, the court dismissed it for lack of jurisdiction.¹⁰¹

2. *The Class Action Issue and Exhaustion*

The FTCA was meant to deal with individual injuries that occurred through pure negligence that is untainted by executive choice or planning—postal trucks running over dogs, for example—not mass disasters. Mass disasters would continue to be dealt with through legislation without regard to the fault of the government.¹⁰² The United States generally, and specifically in these cases, took the position that there cannot be an FTCA class action.¹⁰³ The precedent is not completely clear as to whether there can

96. *Id.* at 446.

97. *Id.* at 448. In looking at the medical issues, the court found that these are completely different injuries. *Id.* The only way the agency could have discovered that it was a spinal nerve problem would have been to physically examine the plaintiff. *Id.*

98. *In re Katrina*, 2008 WL 4449970 at *6 (*IHNC*).

99. *Id.* at *6.

100. *Id.*

101. *Id.* at *7 (finding that even if notice had been perfected, the plaintiffs were barred by the statute of limitations from adding a new count based on facts that did not relate back to the original filing).

102. The primary vehicle for this is the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121, et seq. "If the President declares a major disaster or emergency under the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1981 (the Stafford Act), then the community becomes eligible for significant federal assistance under programs of the Department of Homeland Security's Federal Emergency Management Agency (FEMA)." Ernest B. Abbott, *Representing Local Governments in Catastrophic Events: DHS/FEMA Response and Recovery Issues*, 37 URB. L. 467 (2005); see also FRANCIS X. MCCARTHY, CONG. RESEARCH SERV., RL 33053, FEDERAL STAFFORD ACT DISASTER ASSISTANCE: PRESIDENTIAL DECLARATIONS, ELIGIBLE ACTIVITIES, AND FUNDING (Summary) (2011).

103. United States of America's Reply in Supp. of Its Mot. to Dismiss & Resp. to the Mot's to Intervene and Consol., *In Re Katrina Canal Breaches Consol. Litig.* Pertains to:

be an FTCA class action. The cases that have not categorically ruled out FTCA class actions have said that every plaintiff must meet the notice requirement.¹⁰⁴ Most do not meet the standard, and the ones that met the standard look more like multi-party litigation. Thus, everyone who was going to be in the class to sue the Corps would have to file a claim that specified all the mechanisms of their injury, not just that they were flooded and that it was up to the Corps to find out why. The *Robinson* ruling showed there was a significant question as to the adequacy of the notice for many claims. The court in the *Class Certification Case* took the limited position that plaintiffs who had complied with the notice requirement could petition for a class certification, but that it was not granting class certification at this point.¹⁰⁵

The United States asked for three of the exemplar plaintiffs in the MRGO Master Consolidated Class Action Complaint to be dismissed over the same notice issue as in the *Robinson* ruling.¹⁰⁶ There was no certified class at this point.¹⁰⁷ The court's handling of the motion to dismiss highlights the problems of trying to fit FTCA claims into a class action structure. First is the confusion over whether notice from a single member of a class meets the standard of individualized notice required for an FTCA claim for all members of the class:

Perhaps one of the most confounding problems with the issues before the Court is the immensity of notice in general that the Corps certainly had

MRGO., 2009 WL 4068432, text accompanying n.43 (E.D. La.) [hereinafter Notice Case Memo Two] (“Throughout the course of this litigation, the United States has steadfastly maintained that Rule 23 class actions are incompatible with the FTCA, and that one set of plaintiffs cannot institute an action on behalf of other claimants without their express permission to do so.”); see also *In re Katrina Canal Breaches Consol. Litig.*, No. Civ. A. 05-4182, 2009 WL 1649501, at *2 (E.D. La. June 9, 2009) (*Class Certification Case*). For clarity, the parenthetical reference will be used at the end of the footnote in which this case appears.

104. *Lunsford v. United States*, 570 F.2d 221, 227 (8th Cir. 1977) held that a class could be certified if there was legal authority to represent all of the potential claimants and there was a specific settlement demand for the class. However, plaintiffs did not meet the standard, so this was dicta. A later case specifically denied to certify a class unless every claimant had complied with the statutory notice requirement. *In re Agent Orange Prod. Liab. Litig.*, 506 F. Supp. 757, 760 (E.D. N.Y. 1980). “Appellants FTCA claims therefore must be dismissed for failure to meet the statute’s stringent ‘file first with the agency’ instruction.” *Hohri v. United States*, 782 F.2d 227, 246 (D.C. Cir. 1986) *vacated on other grounds*, 482 U.S. 64, 75 (1987).

105. *In re Katrina*, 2009 WL 1649501 at *6 (*Class Certification Case*) (“To be clear, this Court’s opinion concludes only that (1) a class action can be maintained against the United States under the FTCA if that class is comprised of those who have complied with all of the FTCA’s administrative claim requirements. . . . This Court makes no intimation concerning the likelihood that Plaintiffs will succeed in certifying the class under Rule 23.”).

106. *In re Katrina Canal Breaches Consol. Litig.*, No. CA 05-4182, 2010 WL 487431, at *1 (E.D. La. Feb. 2, 2010) (*Notice Case*). For clarity, the parenthetical reference will be used at the end of the footnote in which this case appears.

107. *Id.* at *14.

with respect to these defalcations—that is the failure of the IHNC floodwalls allegedly caused by its activities at the EBIA. For example, a premature suit was filed by Fred Holmes and Alvin Livers on August 28, 2006 which states unequivocally the theory of negligence as to the Corps and WGI. C.A. 06–5161.¹⁰⁸

The court was clearly unhappy that the Corps wanted to hold each claimant to the law's requirements. The court went against the clear precedent that each claimant must meet the notice standard individually on the face of the claim filed with the agency. The Corps had no right to waive this requirement, but the Court seemed to imply that the Corps should effectively waive it at this point by not moving to dismiss. The court also expressed its frustration that the Corps did not move to dismiss the claims for prematurity and failure of notice when there would have been time for the plaintiffs to refile, as if the Corps was tricking the plaintiffs by waiting until it was too late to refile before moving to dismiss.¹⁰⁹

The Court's frustration was driven by the United States' fundamental objection to finding exhaustion for most of the FTCA claims, including the ones at issue in the *Notice Case*. The United States maintained that a comprehensive class action lawsuit had been pending since August 2006, and that this lawsuit prevented the plaintiffs involved from perfecting notice.¹¹⁰ This was based on *McNeil v. United States*, which looked at whether filing a premature lawsuit—a lawsuit filed before exhaustion of the FCTA claims process—prevented the claimant from completing the claims process.¹¹¹ Some lower courts had treated premature lawsuits as being on hold until the claims process was complete, with the lawsuit being instituted when the process was completed.¹¹² The *McNeil* court rejected this view, finding that filing of the lawsuit was the initiation date.¹¹³ If this was before the claim was presented, the claim had to be dismissed. The plaintiff would need to dismiss the lawsuit and refile it within the six-month window or the claim would be time barred.

Since the two-year clock had started on August 29, 2005, potential plaintiffs had to file their completed claims by the end of the two years, then

108. *Id.* at *18 n.4.

109. *Id.* at *6. It must be noted that never during any of these proceedings did the United States ever raise an issue with respect to the prematurity of the filing of the original MRGO Master Complaint or that the Form 95s were inadequate so as to deprive the Court of jurisdiction over the EBIA claim.

110. See Notice Case Memo Two, *supra* note 104, text accompanying n.103. There was more than one complaint filed, extending back to at least April 2006.

111. 508 U.S. 106 (1993).

112. *Id.* at 111.

113. *Id.* at 112 (“In its statutory context, we think the normal interpretation of the word ‘institute’ is synonymous with the words ‘begin’ and ‘commence.’”).

wait six months, or until the claim was denied by the agency, to file their lawsuit.¹¹⁴ Under the *American Pipe* standard, when the class action was filed, it stopped the administrative process for all the members of the class.¹¹⁵ If the potential class members had not individually exhausted the FTCA process for their claims before the filing of the class action, they could not do so as long as the lawsuit was pending. By August 29, 2007, the window had closed for filing or substantively amending the administrative claims.¹¹⁶ The *Notice Case* court does not address this argument directly, but rejects the notion that the class action prevented Entergy plaintiffs in this case from exhausting the FTCA process and does not dismiss their claims.¹¹⁷

The court never resolved most of the notice issues. It left a class action claim pending but no class certification.¹¹⁸ The court had refused to accept the plaintiffs' attorney's motion to join 30,000 unnamed plaintiffs, holding that there was no evidence that each had exhausted the administrative process.¹¹⁹ Had the ultimate *Robinson* court verdict survived the appeals process, the United States would have contested jurisdiction for every plaintiff, including some in the original exemplar trial. It would also have contested using an exemplar trial, demanding that every individual case be tried.

Once the court had accepted that at least some of the cases had exhausted the FTCA claims process and had jurisdiction to file suit, the court addressed the next hurdle: getting past the immunity provisions of the FCA.

114. 28 U.S.C.A. § 2675 (West, Westlaw through 2018) and 28 U.S.C.A. § 2401 (West, Westlaw through 2018).

115. *Am. Pipe & Const. Co. v. Utah*, 414 U.S. 538, 554 (1974) (“We are convinced that the rule most consistent with federal class action procedure must be that the commencement of a class action suspends the applicable statute of limitations as to all asserted members of the class who would have been parties had the suit been permitted to continue as a class action.”).

116. The window closed two years after the Hurricane Katrina flooding that is the subject of the litigation.

117. *In re Katrina Canal Breaches Consol. Litig.*, CA No. 05-4182, 2010 WL 487431, at *18 (E.D. La. Feb. 2, 2010) (*Notice Case*).

118. *Id.* at *14 (“The Court has deferred ruling on the certification issue in MRGO. As the causation and immunity issues were decided in the Robinson case, until that judgment is affirmed, a decision on the class certification is premature. It should be noted that plaintiffs’ have also filed a number of “mass joinder” suits which purport to bring individual suits on behalf of thousands of claimants.”) Since the appeals court dismissed all the claims, the class issues were never resolved, and record is very confusing.

119. *Id.* at *15.

B. The Flood Control Act of 1928

Once satisfied that the plaintiffs in the FTCA cases had exhausted their administrative remedies so the court had jurisdiction, the court turned to the immunity provisions of the FCA.¹²⁰ The FCA was passed after the 1927 Mississippi River flood. The Mississippi has always had major floods.¹²¹ As with the devastation in New Orleans, the floods became devastating to people and property as levees allowed people to live and farm and build cities in the river flood plain.¹²² The Corps laid out the basic framework for navigation and flood control for the Mississippi River in an 1861 report.¹²³ The Civil War began as the report was released and delayed action on the plan for several years.¹²⁴ On April 26, 1876, the Mississippi River changed course, stranding the important port of Vicksburg and the Corps's headquarters there.¹²⁵ Stabilizing the river and building a new channel to Vicksburg began the comprehensive control of the Mississippi River that continues to this day.¹²⁶ The FCA was one of a series of flood control acts passed to implement this plan.¹²⁷

Major river flood control projects share the levee effect problem with coastal flood control. It has the additional problem that the huge volume of water in a major flood—many cubic miles of water—cannot be contained with ever-higher levee walls. The system has to have safety valves called “fuse plug levees” and spillways that divert water from the river into floodways that allow water to flood areas where people will not be endangered and where there will be little property damage.¹²⁸ Keeping the

120. See 33 U.S.C. § 702c (2018).

121. Matthew D. Therrell & Margaret B. Bialecki, *A multi-century tree-ring record of spring flooding on the Mississippi River*, 529 J. HYDROLOGY 490, Table I (2015).

122. A. A. HUMPHREYS & H. L. ABBOT, REPORT UPON THE PHYSICS AND HYDRAULICS OF THE MISSISSIPPI RIVER: UPON THE PROTECTION OF THE ALLUVIAL REGION AGAINST OVERFLOW; AND UPON THE DEEPENING OF THE MOUTHS (JB Lippincott & Co., 1861), <https://archive.org/details/reportuponphysi00abbogoo/page/n9>.

123. *Id.*

124. JAMES M. WRIGHT, ASS'N OF STATE FLOODPLAIN MANAGERS, THE NATION'S RESPONSES TO FLOOD DISASTERS: A HISTORICAL ACCOUNT 5 (Wendy L. Hessler ed., 2000).

125. *Bedford v. United States*, 192 U.S. 217, 218 (1904).

126. Christopher Morris, *Reckoning with “the Crookedest River in the World”: The Maps of Harold Norman Fisk*, 52 S. Q. 30, 31–32 (2015).

127. See *Jackson v. United States*, 230 U.S. 1, 3–8 (1913) for a history of Mississippi flood control efforts before the passage of the FCA.

128. *United States v. Sponenbarger*, 308 U.S. 256, 261–62 (1939) (“The 1928 Act here involved accepted the conception—underlying the plan of General Jadwin of the Army Engineers—that levees alone would not protect the valley from floods. Upon the assumption that there might be floods of such proportions as to overtop the river’s banks and levees despite all the Government could do, this plan was designed to limit to predetermined points such escapes of floodwaters from the main channel. The height of the levees at these predetermined points was not to be raised to the general height of the levees along the river.

river from flooding one area often results in it flooding a different area.¹²⁹ For example, Mississippi River flood control started with levees on the main channel.¹³⁰ The levees allow the flooding river to get higher than the level of its tributaries, causing them to back up and flood upstream of where they enter the main river.¹³¹ Section 702c of the FCA makes it clear that if the government was going to spend federal money building a flood control system, it was not going to be subject to legal claims over the zero sum decisions involved in river flood control.¹³²

Section 702c of the FCA states, “No liability of any kind shall attach to or rest upon the United States for any damage from or by floods or flood waters at any place.”¹³³ At the time this was passed, it might be best seen as a policy statement, rather than an important legal limit on claims. Prior to the conditional waiver of sovereign immunity by the FTCA, the only claims allowed against the United States for flood related claims were takings cases under the Constitution. As constitutional claims, they were not affected by § 702c. The passage of the FTCA created a vehicle for bringing claims that implicated § 702c. The Eighth Circuit in *National Manufacturing Company v. United States* held that the FTCA did not abrogate § 702c, finding that the FTCA preempted only the specific list of laws that were part of its text.¹³⁴

Once the *National Manufacturing* court found that the § 702c immunity was still intact, it had to determine if immunity extended beyond flood control projects. The plaintiffs claimed that the United States was negligent by failing to provide adequate information about the flood levels of the river that subsequently flooded plaintiffs’ property. Plaintiffs attempted to avoid § 702c by not making any claims about the levees or the

These lower points for possible flood spillways were designated ‘fuse plug levees.’ Flood waters diverted over these lower ‘fuse plug levees’ were intended to relieve the main river channel and thereby prevent general flooding over the higher levees along the banks.”)

129. *Bedford v. United States*, 192 U.S. 217, 217–18 (1904). Stabilizing the river after Vicksburg was cut off led to litigation by land owners who argued that keeping the river from further advancing in its new course flooded their land. The court found that the Corps was not liable for a taking because their efforts to protect on part of the river bank increased the flooding on another part.

130. William Murray Black, *The Problem of the Mississippi*, 224 N. AM. REV. 630, 630 (1927).

131. This is known as backwater flooding.

132. *But cf. Stover v. United States*, 332 F.2d 204, 207 (9th Cir. 1964) (“It may be that morally and financially the plaintiffs have been grievously wronged by their government; that in protecting others it injured them. It is not committed to us to remake the statute. That the limitation should happen to be in the statute is understandable. Appropriations for flood control do not come automatically. Dozens of congressmen have no flood control problems. Perhaps, as a condition to their consent to flood control appropriations, they impose such limitations as § 702c.”).

133. 33 U.S.C. § 702c (2018).

134. 210 F.2d 263, 278 (8th Cir. 1954).

flood control program.¹³⁵ The court found that the FCA represented a core policy decision by Congress:

Undoubtedly that absolute freedom of the government from liability for flood damages is and has been a factor of the greatest importance in the extent to which congress has been and is willing to make appropriations for flood control and to engage in costly undertakings to reduce flood damage.¹³⁶

The *National Manufacturing* court held that the key to understanding § 702c is determining whether the damage is caused by flood waters, not the mechanism of the damage.¹³⁷ In this case, the alleged mechanism was faulty river stage reporting, but actual damage was caused by flood waters.¹³⁸ While the flood damages were only an indirect effect of the claimed negligence, the court found the only legal question is whether the damages were caused by flood waters.¹³⁹ If so, the United States is immune.¹⁴⁰ The court is clear that immunity extends to any damages caused directly or indirectly by flood waters, without regard to negligence or the presence or absence of flood control structures:

The language used shows Congressional anticipation that it will be claimed after the happening of floods that negligence of government employees was a proximate cause of damages where floods or flood waters have destroyed or damaged goods. But the section prohibits government liability of 'any kind' and at 'any place'. So that uniformly and throughout the country at any place where there is damage 'from' or 'by' a flood or flood waters in spite of and notwithstanding federal flood control works no liability of any kind may attach to or rest upon the United States therefor.¹⁴¹

135. *Id.* at 269.

136. *Id.* at 271.

137. *Id.*

138. *Id.* at 270.

139. *Id.* at 271.

140. *Nat'l Mfg.*, 210 F.2d at 271 ("The section does not limit the bar against such recovery to cases where floods or flood waters are the sole cause of damages. It does bar liability of any kind from damages 'by' floods or flood waters but it goes further and in addition it bars liability for damages that result (even indirectly) 'from' floods.").

141. *Id.*; see also *Stover v. United States*, 204 F. Supp. 477, 483 (N.D. Cal. 1962) ("[I]t is of no consequence how negligent the Government may (or may not) have been, if it be shown that the inundations, even in part, resulted from, and were *actually* caused by, such natural forces."); *Guy F. Atkinson Co. v. Merritt, Chapman & Scott Corp.*, 126 F. Supp. 406, 408 (N.D. Cal. 1954) ("[T]his Court is of the opinion that [§ 702c's] purpose was to prevent the Government from being held liable for the staggering amount of damage caused by natural floods, merely because the Government had embarked upon a vast program of flood control.").

1. *The New Orleans Flood Control Act Jurisprudence*

The first major hurricane to flood New Orleans after the FTCA was passed was the 1947 Hurricane.¹⁴² It caused severe flooding in New Orleans in many of the same areas as Katrina, in particular the Ninth Ward.¹⁴³ The next major flood was Hurricane Betsy in 1965: “Vast areas of Orleans, Plaquemines, and St. Bernard Parishes were inundated by the tidal surge that accompanied the storm. This surge either overtopped or breached the non-Federal levee protecting these areas.”¹⁴⁴ In *Graci v. United States*,¹⁴⁵ plaintiffs on the east side of New Orleans who had been flooded by Hurricane Betsy filed an FTCA complaint in the District Court of the Eastern District of Louisiana claiming that negligent construction of the MRGO caused their homes to flood.¹⁴⁶ Forty years later, effectively the same claims were made in the same court after Hurricane Katrina.

The district court in *Graci* recognized § 702c immunity for flood control projects, but drew a distinction between flood control projects and navigation projects. The court recognized the policy behind protecting the government from liability for flooding related to flood control programs, but reads navigation projects out of § 702c protection:

There may be a valid governmental interest in avoiding liability for floods in connection with navigation improvement projects; the great public interest served by these projects might be inhibited by a willingness of courts to permit what could well become an avalanche of suits in such cases. But we do not think that such an interest, absent its expression in positive law, warrants the complete and absolute prohibition of all suits against the government for floodwater damage in the face of the more liberal policy of the Federal Tort Claims Act. We think the public interest in navigation improvements and in the avoidance to that end of burdensome litigation is better served, consistent with the policy considerations of the FTCA, by an equitable approach which might severely inhibit suits for flood damage, but at the same time leave certain avenues open for action in cases of flagrant wrongdoing.¹⁴⁷

142. While hurricane naming was not formally adopted until late, this hurricane was also known as Hurricane George. H.C. Sumner, *North Atlantic hurricanes and tropical disturbances of 1947*, 75 MONTHLY WEATHER REV. 251, 252 (1947); see also ROTH, *supra* note 15, at 36.

143. Horowitz, *supra* note 29, at 901.

144. U.S. ARMY CORPS OF ENG'RS, REPORT ON HURRICANE BETSY 8 (1965), http://www.ivr.usace.army.mil/docs/hpdc/docs/19651100_Hurricane_Betsy.pdf.

145. 301 F. Supp. 947 (E.D. La. 1969) *aff'd and remanded*, 456 F.2d 20 (5th Cir. 1971).

146. *Id.* at 949.

147. *Graci*, 301 F. Supp. at 955.

This ignores the plain language of § 702c, “No liability of any kind shall attach to or rest upon the United States for any damage from or by floods or flood waters at any place,”¹⁴⁸ and substitutes immunity that is limited to flood control structures but not navigation projects. The Fifth Circuit in *Graci*¹⁴⁹ also assumed that the MRGO was a conduit that allowed storm surge from Hurricane Betsy to flood eastern New Orleans and St. Bernard Parish.¹⁵⁰ The appeals court asked “[w]hether it is reasonable to suppose that in exchange for its entry into flood control projects the United States demanded complete immunity from liability for the negligent and wrongful acts of its employees *unconnected with flood control projects*.”¹⁵¹

The court looked to *Peterson v. United States* for guidance.¹⁵² *Peterson* arose from dynamiting a natural ice dam on a river in Alaska by military personnel.¹⁵³ When the blasting broke up the dam, it caused a massive flood downstream, flooding plaintiffs’ property.¹⁵⁴ The lower court dismissed plaintiffs’ claims based on reading § 702c as barring all claims due to damage by flood waters.¹⁵⁵ The appeals court in *Peterson* looked to whether the damage was related to a congressional appropriation for flood control, rather than to the nature of the flood waters.¹⁵⁶ The court found that the flooding was not the result of a flood control plan done at the direction of Congress, but that it was a decision to “alleviate and control the flood waters in an attempt to prevent further damage in the Badger Road Area at Ladd Air Force Base, and in the Fairbanks area.”¹⁵⁷ Thus, the court found that despite being a flood control measure, the dynamiting was not covered by § 702c immunity.¹⁵⁸

Based on the *Peterson* holding, the appeals court in *Graci* concluded that it would be unreasonable to assume that Congress intended for FCA immunity to reach projects that were not designed for flood control.¹⁵⁹

148. 33 U.S.C. § 702c (2018).

149. *Graci v. United States*, 456 F.2d 20 (5th Cir. 1971).

150. *Id.* at 22.

151. *Id.* at 25–26 (emphasis added).

152. 367 F.2d 271 (9th Cir. 1966).

153. *Id.* at 272.

154. *Id.*

155. *Peterson v. United States*, 217 F. Supp. 867, 873 (D. Alaska 1963) (“The water and ice which damaged the plaintiff’s vessels on May 3, 1960, were a part of a flood, within the meaning of the terms ‘floods or flood waters’ as used in Title 33 U.S.C.A. § 702c. Section 702c of Title 33 U.S.C.A. therefore provides the defendant, United States of America, with a complete legal defense to this action.”).

156. *Peterson*, 367 F.2d at 275 (“The decision to dynamite the ice jam was wholly unrelated to any Act of Congress authorizing expenditures of federal funds for flood control, or any act undertaken pursuant to any such authorization.”).

157. *Id.*

158. *Id.* at 276.

159. *Graci v. United States*, 456 F.2d 20, 26–27 (5th Cir. 1971)..

Because MRGO was strictly a navigation canal, the court ruled that § 702c did not apply and remanded so that the FTCA case could go forward.¹⁶⁰ This ruling ignored the symmetry of flood control decisions: flood control plans are as much about which levees and structures are not built as those that are built. By abrogating immunity for flooding related to navigation systems, *Graci* opens the Corps to liability for flood damage associated with any Corps project not defined as a flood control project. This could force the Corps to build flood control systems on all Corps-constructed navigation systems that could flood land that would not otherwise have flooded.¹⁶¹ On remand, the district court found that the MRGO was properly constructed and dismissed the claims.¹⁶² Since the United States prevailed, no appeal was taken on the construction of the FCA.

2. *The Supreme Court Reviews § 702c after Graci*

While a number of cases cite *Graci*, none actually follow its holding, and all of them abrogate § 702c immunity for damages caused by flood waters in the absence of a flood control structure.¹⁶³ The United States Supreme Court first looked at § 702c in *United States v. James*.¹⁶⁴ This Louisiana case arose from recreational water users who were injured or killed when the Corps negligently operated floodgates.¹⁶⁵ *James* upheld a broad reading of § 702c, finding ample support in the legislative history for extending its reach beyond property claims and applying it to recreational

160. *Id.* at 27–28.

161. To protect against future flooding, the Corps built the flood control levees between the MRGO and all the populated areas of New Orleans and St. Bernard Parish. Mark Schleifstein, *Upgraded metro New Orleans levees will greatly reduce flooding, even in 500-year storms*, NOLA (Aug. 16, 2013), https://www.nola.com/hurricane/index.ssf/2013/08/upgraded_metro_new_orleans_lev.html.

162. *Graci v. United States*, 435 F. Supp. 189, 196 (E.D. La. 1977).

163. *See, e.g.*, *United States v. James*, 478 U.S. 597, 612 (1986) (following a “plain language” approach to interpreting § 702c); *Lunsford v. United States*, 570 F.2d 221, 229 (8th Cir. 1977) (discussing differences between *National Manufacturing* and *Graci*, but ultimately remanding because of ripeness considerations); *Fla. E. Coast Ry. Co. v. United States*, 519 F.2d 1184, 1191 (5th Cir. 1975) (applying § 702c to “floods or flood waters” in connection with flood control projects” (quoting *Graci*, 456 F.2d at 25–27)); *Britt v. United States*, 515 F. Supp. 1159, 1161 (M.D. Ala. 1981) (“The United States’ flood immunity is not limited to that resulting from its actions taken in connection with such physical flood control structures as dams, dikes and levees.”); for additional cases which distinguish *Graci*, *see Mocklin v. Orleans Levee Dist.*, 877 F.2d 427, 430 (5th Cir. 1989); *Callaway v. United States*, 568 F.2d 684, 686–87 (10th Cir. 1978); *Morici Corp. v. United States*, 491 F. Supp. 466, 473 (E.D. Cal. 1980); *Ledford v. United States*, 429 F. Supp. 204, 205 (W.D. Okla. 1977).

164. *James*, 478 U.S. at 597.

165. *Id.* at 599.

users of a flood control lake who were injured by flood waters.¹⁶⁶ Since *James* had both flood waters and a flood control structure, it did not need to clarify *Graci*.

The second, and most recent, United States Supreme Court case to look at § 702c is *Central Green Co. v. United States*.¹⁶⁷ *Central Green* deals with a regional irrigation system in California.¹⁶⁸ This was a combined flood control and irrigation system fed by natural streams.¹⁶⁹ When these streams were flooded, the system would function as a flood control system.¹⁷⁰ Thus, parts of the system might channel both flood and normal (irrigation) flow.¹⁷¹ The plaintiff was a pistachio grower who argued that seepage through the walls of the canal near his orchards led to subsurface flooding.¹⁷² This damaged his orchard and increased his operating costs.¹⁷³ He argued negligence in the design, construction, and maintenance of the canal, but made no claims that dams or flood control structures were at fault.¹⁷⁴

The government argued that it should be immune from damages if any part of the system was related to flood control.¹⁷⁵ The lower courts agreed, dismissing the claim.¹⁷⁶ The Supreme Court shared the discomfort of the lower courts in the breadth of the immunity claimed by the United States, quoting the Ninth Circuit's opinion that, under such a test, there would seem to be no "set of facts where the government is not immune from damage arising from water that at one time passed through part of the Central Valley or other flood control project."¹⁷⁷

Ignoring *Graci*, the Court looked at how other previous cases had used the nexus with a flood control structure to narrow the exceptions, noting that "some courts have focused on whether the damage relates in some, often tenuous, way to a flood control project, rather than whether it relates to

166. *Id.* at 612 ("It is true that during the debates on the Act, several Congressmen used the terms 'liability' and 'damage' to refer only to property damage caused by the construction of the flood control projects. But . . . there are numerous passages in the legislative history that emphasize the intention of Congress to protect the Federal Government from *any* damages liability that might arise out of flood control").

167. 531 U.S. 425 (2001).

168. *Id.* at 427.

169. *Id.* at 427; *see also id.* at 434.

170. *Id.* at 427–28, 436.

171. *Id.* at 427–28, 436.

172. *Id.* at 427.

173. *Central Green Co.*, 531 U.S. at 427.

174. *Id.*

175. *Id.* at 436.

176. *Id.* at 427–28.

177. *Id.* at 428 (quoting *Central Green Co. v. United States*, 177 F.3d 834, 839 (9th Cir. 1999)).

‘floods or flood waters.’”¹⁷⁸ The Court noted that while this distinction was used in *James*, it was dictum since the damages were caused by flood waters.¹⁷⁹ The Court then looked to the vast size of the Central Valley irrigation system and found that characterizing every drop of water that flowed through the system as flood water “unnecessarily dilutes the language of the statute.”¹⁸⁰ To narrow the scope of § 702c, the Court held:

Accordingly, the text of the statute directs us to determine the scope of the immunity conferred, not by the character of the federal project or the purposes it serves, but by the character of the waters that cause the relevant damage and the purposes behind their release.

. . . [I]n 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.¹⁸¹

The Court recognized that its analysis repudiated the broad dicta in *James*.¹⁸² The Court also recognized that while it is usually simple to tell if a single release of water is flood water, the damage in this case stretched over years.¹⁸³ During some of that time there might have been flood water in the canal, but most of the time the water would be irrigation water not subject to § 702c immunity.¹⁸⁴ The lower court’s dismissal was reversed, and the case was remanded to determine the character of the water that caused the damage.¹⁸⁵ *Central Green* appears to implicitly overrule *Graci*’s focus on flood control structures as a predicate to § 702c immunity, but it does not specifically address *Graci*. There is only limited additional construction of *Central Green* as applied to flood water damage before the Hurricane Katrina cases, and none by the Supreme Court.¹⁸⁶

178. *Id.* at 430 (quoting *Washington v. E. Columbia Basin Irrigation Dist.*, 105 F.3d 517, 519 (9th Cir. 1997)).

179. *Central Green Co.*, 531 U.S. at 431.

180. *Id.* at 433–34.

181. *Id.* at 434, 437.

182. *Id.* at 436.

183. *Id.*

184. *Id.*

185. *Central Green Co.*, 531 U.S. at 437.

186. *Downs v. United States*, No. 06-20861-CIV-HUCK, 2007 WL 842136, at *4 (S.D. Fla. Mar. 20, 2007) *rev’d on other grounds sub nom* (holding that beach renourishment projects are not flood control structures, and the ocean absent a storm is not flood water); *Downs v. U.S. Army Corps of Eng’rs*, 333 F. App’x 403 (11th Cir. 2009) (holding that TVA dams are entitled to § 702c immunity); *Fortner v. Tenn. Valley Auth.*, No. 3:04-CV-363, 2005 WL 2922190, at *4 (E.D. Tenn. Nov. 4, 2005) (case remanded to determine if the river was flooding); *Poindexter v. United States*, No. CIV.A.04-1035, 2005 WL 6169020, at *9 (W.D. La. Dec. 9, 2005), *rev’d*, 244 F. App’x 561 (5th Cir. 2007).

3. *Flood Control Act Immunity in Robinson*¹⁸⁷

The *Robinson* plaintiffs' complaint is structured to avoid § 702c immunity by building on *Graci*. They argued that the Corps was negligent in the construction and post-construction maintenance of the MRGO.¹⁸⁸ *Graci*—decided by the same court decades earlier—found that the MRGO had nothing to do with flood control; thus, § 702c did not apply. The plaintiffs in both cases argued that the MRGO funneled storm surge into the city, exacerbating flooding of the same areas, occupied in some cases by the same people. The difference is that the Corps built flood control levees between the city and the MRGO after the flooding in 1965.¹⁸⁹ Even reading *Central Green* to preserve *Graci*, it would seem that the confluence of flood waters from Hurricane Katrina breaching flood control structures should trigger § 702c immunity.

The United States moved to dismiss under Federal Rule of Civil Procedure 12(b)(1), arguing that § 702c preserved its sovereign immunity despite the FTCA and thus the court did not have jurisdiction because plaintiffs' claims were all rooted in damage caused by floodwaters.¹⁹⁰ The court analyzed this under *Graci*, its own decision from 1971, decided long before *Central Green* and its focus on flood waters rather than flood control.¹⁹¹ Mirroring *Graci*, the court found that since plaintiffs were only claiming damages from negligence related to MRGO, they were not barred by § 702c immunity.¹⁹² As for the problem of the damages being caused by flood waters going through or over flood control structures, the court analogized the flood waters to a Navy ship, breaking through the levee because it was negligently moored:

187. *In re Katrina Canal Breaches Consol. Litig.*, 471 F. Supp. 2d 684, 687 (E.D. La. 2007).

188. *Id.* at 686–87 (E.D. La. 2007) (“These pleadings have been lodged in *Robinson*, et al. v. United States, in which a Complaint for Damages Caused by the Design, Construction, Operation and Maintenance of the Mississippi River Gulf Outlet (“MRGO”)¹ (Doc. 1) was filed pursuant to the Federal Tort Claims Act (“FTCA”), 28 U.S.C. § 2671, et seq. against the United States of America and the United States Army Corps of Engineers (“Army Corps”) by six named plaintiffs living in New Orleans East, St. Bernard Parish, 687 and the Lower Ninth Ward in Louisiana arising from these areas’ inundation as a consequence of Hurricane Katrina.”); see also *In re Katrina Canal Breaches Consol. Litig.*, 647 F. Supp. 2d 644, 677 (E.D. La. 2009) (*Robinson*), *rev’d on other grounds*, 696 F.3d 436 (5th Cir. 2012) (*Robinson 5th Circuit II*).

189. *In re Katrina*, 647 F. Supp. 2d at 651–52 (*Robinson*). By 1962, these levees had been planned, but construction was not completed until after Hurricane Betsy flooded New Orleans in 1965.

190. *In re Katrina*, 471 F. Supp. 2d at 687.

191. *Id.* at 691.

192. *Id.* at 694.

For example, would the United States be immune for all damages if a Navy vessel lost control and broke through [a] levee where the sole cause of the failure of that levee was the Navy vessel's negligence? Thus, contrary to the Government's contention that *Central Green* broadens the immunity provided by [§] 702c, in reality *Central Green* requires the Court to identify *the cause of the damage* rather than base a decision on the mere fact that a flood control project was involved. *Central Green* does not directly answer the question of what nexus to a flood control project is required for floodwaters to trigger immunity.¹⁹³

The court goes on to say that the instant case is "very much like" *Central Green*: "while arguably the immediate cause of the damage was indeed 'floodwaters,' the caus[e] for such floodwaters['] force and breadth [is] alleged to have been the defalcations of the Government with respect to the MRGO."¹⁹⁴ It does not elaborate on why this case is like *Central Green*, whose factual question on remand was the characterization of the waters, not the defalcations of the Government in regard to the canal in that case.¹⁹⁵ By ignoring *Central Green*'s clear statement that the courts should look to the "character of the waters"¹⁹⁶ and looking instead at the nature of the damage, the court read the importance of the flood waters out of its § 702c analysis and denied summary judgment on the § 702c motion. By denying immunity, the court shifted the focus from the law to the Corps.

4. 17th Street Canal Cases

After rejecting the government's motion for summary judgment on FCA immunity in *Robinson*, the district court turned to *17th Street Canal*, a case dealing with damage claims from the failure of the flood wall on the 17th Street Canal, which is a drainage canal for pumping floodwater out of the city.¹⁹⁷ While called canals, these structures more closely resemble open aqueducts. The 17th Street Canal starts in the heart of New Orleans, where the land is down to ten feet below sea level.¹⁹⁸ The water in the canal flows by gravity to Lake Pontchartrain, so the bottom of the canal has to be high

193. *Id.* at 695.

194. *Id.* Reading this section of *Central Green* in light of *Nat'l Mfg. Co. v. United States*, 210 F.2d 263, 271 (8th Cir. 1954), one could conclude that the government would be immune from damages for just such a negligently moored Navy vessel if it was carried through the levee by flood waters.

195. *Central Green Co.*, 531 U.S. 425, 436 (2001).

196. *Id.* at 437.

197. *In re Katrina Canal Breaches Consol. Litig.*, 533 F. Supp. 2d 615, 618 (E.D. La. 2008) (*17th Street Canal*).

198. RICHARD P. MCCULLOH ET AL., GEOLOGY AND HURRICANE-PROTECTION STRATEGIES IN THE GREATER NEW ORLEANS AREA 13, Table 1, LSU (2006), https://www.lsu.edu/lgs/publications/products/Free_publications/Geo-Hurricane-Protection-StrategiesNO.pdf.

enough above sea level to slope to the outfall at Lake Pontchartrain and still be above sea level at the end. The water is pumped from the sump formed by the subsided land up a pipe into the overhead canal.¹⁹⁹ Since the bottom of the canal has to be above sea level, it will be more than 10 feet above ground level in the areas that are 10 feet below sea level, and the walls of the canal will be many feet higher.

The drainage canals are open to the Lake and did not have flood gates that could be closed during periods of elevated sea level from storms.²⁰⁰ When Hurricane Katrina's surge raised the level of Lake Pontchartrain several feet, the water backed up into the canals.²⁰¹ The pressure caused the concrete and sheet pile flood wall forming the New Orleans side of the canal to fail, flooding a large area of the northern part of the city.²⁰²

Much of the 17th *Street Canal* opinion recited the plaintiffs' detailed history of the New Orleans hurricane protection plan, which began after Hurricane Betsy in 1965.²⁰³ The plaintiffs presented various theories of negligence in the design and construction of the levees and flood walls, including decisions by the Corps to allow dredging near the canal, which might have weakened it.²⁰⁴ The government moved to dismiss, arguing that § 702c grants immunity for any damage caused by flood waters.²⁰⁵

The court reiterated its position from *Robinson* that *Graci* is the controlling law.²⁰⁶ The court made clear that it thought the Corps was negligent in the design of the hurricane protection system, noting that "the facts surrounding the [Hurricane Protection Plan] in relation to the outfall canals is checkered and replete with what appears to be errors in

199. CHRISTINE F. ANDERSEN ET AL., AM. SOC'Y CIV. ENG'RS, THE NEW ORLEANS HURRICANE PROTECTION SYSTEM: WHAT WENT WRONG AND WHY: A REPORT 22 (2007), <https://biotech.law.lsu.edu/katrina/reports/erpreport.pdf>.

200. *Id.* at 619–20. Since rainwater still needs to be pumped out when the lake is high, expensive pumps would be needed to raise the water over the floodgates and into the lake. These were added as part of the post-Katrina flood control updates.

201. *See generally* M. Rajabalinejad et al., *Probabilistic Assessment of the Flood Wall at 17th Street Canal, New Orleans*, in RISK, RELIABILITY AND SOCIETAL SAFETY 2227 (Terje Aven & Jan Erik Vinnem eds., 2007), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.189.1579&rep=rep1&type=pdf> (advocating a probabilistic method for estimating the failure of flood defenses).

202. *Id.*

203. *See In re Katrina Canal Breaches Consol. Litig.*, 533 F. Supp. 2d 615, 619–28 (E.D. La. 2008) (*17th Street Canal*).

204. *Id.* at 628.

205. *Id.* at 633.

206. *Id.* at 634 ("This Court has previously rejected the United States' contention that it is immune from damages for any floodwater regardless of its source in its ruling on a motion to dismiss before as seen in *Robinson* and will continue to do so until otherwise guided by a higher court.").

judgment.²⁰⁷ It then went on to find that Congress authorized and funded the Corps's plan, and that this made it clear that the 17th Street Canal was solely a flood control structure.²⁰⁸ With both conditions of *Graci* met for invoking § 702c immunity, the court had no choice but to grant the motion to dismiss plaintiffs' claims.²⁰⁹ Nonetheless, the judge expressed disapproval of the law:

When Congress grants immunity to the "sovereign" and that immunity is interpreted as it has been by the Supreme Court in *James* and *Central Green*, in essence, the King can do no wrong if the facts of the case compel the Court to apply that immunity. Here, the Court must apply this broad immunity based upon the facts of this case. Often, when the King can do no wrong, his subjects suffer the consequences. Such is the case here.²¹⁰

5. *The Discretionary Authority Exception*

The *Robinson* plaintiffs who exhausted their administrative notice under the FTCA and survived FCA immunity then filed a tort claim against the Corps, and, pursuant to the FTCA, the United States was substituted for the Corps as the defendant. Since there is no federal common law of torts, the FTCA specifies that the tort law of the state where the incident occurred is used to determine the prima facie case for a claim.²¹¹ There is no jury, which is consistent with the judicial review of agency adjudications. The courts use a preponderance of the evidence standard, rather than arbitrary and capricious standard from the Administrative Procedure Act for reviewing factual decisions by agencies.²¹² There is no deference to the agency on the record; the courts try the case like an ordinary tort case, with

207. *Id.* at 637.

208. *Id.* at 638. The judge apparently does not believe in discretionary authority, otherwise the approval of Congress would not be relevant to assessing the Corps' decision.

209. *In re Katrina*, 533 F. Supp. 2d at 643.

210. *Id.* at 638.

211. *Molzof v. United States*, 502 U.S. 301, 305 (1992).

212. *Universal Camera Corp. v. N.L.R.B.*, 340 U.S. 474, 482 (1951) ("(e) Scope of Review.—So far as necessary to decision and where presented the reviewing court shall . . . (B) hold unlawful and set aside agency action, findings, and conclusions found to be (1) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (2) contrary to constitutional right, power, privilege, or immunity; (3) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; (4) without observance of procedure required by law; (5) unsupported by substantial evidence in any case subject to the requirements of sections 7 and 8 or otherwise reviewed on the record of an agency hearing provided by statute; or (6) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court. In making the foregoing determinations the court shall review the whole record or such portions thereof as may be cited by any party, and due account shall be taken of the rule of prejudicial error.") (citing 5 U.S.C. s 1009(e)).

a de novo review of the facts.²¹³ The deference is manifested through the statutory discretionary authority exception to the waiver of sovereign immunity:

The provisions of this chapter and section 1346(b) of this title shall not apply to (a) Any claim based upon an act or omission of an employee of the Government, exercising due care, in the execution of a statute or regulation, whether or not such statute or regulation be valid, or 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.²¹⁴

The clearest limitation of this defense is that the agency cannot decide to violate applicable statutes or regulations. For example, a regulatory agency can choose to inspect a sample of regulated airplanes, rather than inspecting every airplane.²¹⁵ But if the agency requires that every item be inspected, as the FDA did with its rule that required testing every batch of polio vaccine, it cannot do spot-checking. It is not within the discretion of an agency to violate its own rules, even if the rule was not required by statute.²¹⁶

Dalehite v. United States,²¹⁷ the first United States Supreme Court decision to interpret discretionary function defense, was also about a massive Gulf Coast disaster. Two ships carrying fertilizer to Europe under the Marshall Plan exploded in the port, destroying the center of Texas City, Texas, and killing 500 to 600 people.²¹⁸ The United States was sued for negligence leading to the explosion.²¹⁹ The *Dalehite* court looked to the extensive legislative history of the FTCA to determine how far Congress intended to go with the waiver of sovereign immunity. It was clear that a prime objective was to find a better way to deal with paying damages for routine vehicle accident damage, which, prior to the FTCA, were paid by

213. Typically, the only record from the agency is a bare denial or a monetary offer, or, in these cases, no answer at all.

214. 28 U.S.C.A. § 2680 (West, Westlaw through 2018).

215. *United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines)*, 467 U.S. 797, 820 (1984) (“It follows that the acts of FAA employees in executing the “spot-check” program in accordance with agency directives are protected by the discretionary function exception as well.”)

216. *Berkovitz v. United States*, 486 U.S. 531, 548 (1988).

217. 346 U.S. 15, 17 (1953).

218. GAINES M. FOSTER, CENTER OF MILITARY HISTORY, U.S. ARMY, THE DEMANDS OF HUMANITY: ARMY MEDICAL DISASTER RELIEF 131 (1983), https://history.army.mil/html/books/040/40-3/CMH_Pub_40-3.pdf.

219. *Dalehite*, 346 U.S. 15, 23 (1953) (“The negligence charged was that the United States, without definitive investigation of FGAN properties, shipped or permitted shipment to a congested area without warning of the possibility of explosion under certain conditions.”).

passing private bills through Congress.²²⁰ The “due care” clause clearly ruled out the negligent operation of a vehicle under state law as subject to discretion. At the other extreme, Congress did not want to create an avenue for judicial review of executive policy decisions:

This paragraph characterizes the general exemption as ‘a highly important exception, intended to preclude any possibility that the bill might be construed to authorize suit for damages against the Government growing out of authorized activity, such as a flood control or irrigation project, where no negligence on the part of any government agent is shown, and the only ground for the suit is the contention that the same conduct by a private individual would be tortious The bill is not intended to authorize a suit for damages to test the validity of or provide a remedy on account of such discretionary acts even though negligently performed and involving an abuse of discretion.’²²¹

This paragraph captures the two core ideas of the discretionary function defense. The first is common sense—allowing the judiciary to second guess executive policy decisions where there is no negligence would fatally undermine separation of powers. The second, protecting negligent decisions, is more nuanced. The first reason that negligent decisions should not be subject to tort claims is that it would provide the courts a way to question all decisions, because every decision would be fair game for review until it was found to be non-negligent. The second reason is that decisionmakers should not be worrying about whether they will be questioned about the consequences of their actions in court. Even though the United States is substituted for the individual defendant and pays the damages, the individual would still have to be deposed and examined as a witness, and what bureaucrat would want to attract that level of scrutiny of his or her actions? (One of the ironies of Hurricane Katrina was that it was Mayor Nagin of New Orleans’s misunderstanding of the legal notion of discretionary immunity that delayed the evacuation order for New Orleans).²²²

The Congressional report noted an obvious consequence of this exception: the same actions protected by the exemption would be actionable if done by a private person. This is where litigating an FTCA claim diverges from litigating a private tort action. In private tort actions, the plaintiff wants to make the defendant appear as culpable as possible to sway the emotions

220. *Id.* at 28.

221. *Id.* at 30.

222. DOUGLAS BRINKLEY, *THE GREAT DELUGE: HURRICANE KATRINA, NEW ORLEANS, AND THE MISSISSIPPI GULF COAST* 22–23 (Morrow 2006) (“Nagin said late Saturday that he’s having his legal staff look into whether he can order a mandatory evacuation of the city,” Bruce Nolan reported in the *Times-Picayune*, “a step he’s been hesitant to do because of the potential liability on the part of the city for closing hotels and other businesses.”).

of the judge or jury, increasing the chance of a verdict for the plaintiff and a bigger award of damages. The more the plaintiff can show that the defendant knew about the danger of his actions, the more those actions appear intentionally harmful, the stronger the plaintiff's case.²²³ This same showing in an FTCA case assures a dismissal.

The next major case, another mass tort case, is *Allen*.²²⁴ In *Allen*, the Atomic Energy Commission (AEC) authorized above ground nuclear bomb testing in Nevada.²²⁵ Plaintiffs were exposed to significant radiation from nuclear fallout and suffered real and ongoing injuries.²²⁶ The plaintiffs proved that the government knowingly chose to do above ground nuclear weapons testing, knowing it would expose communities downwind to dangerous nuclear fallout, which did in fact cause injuries.²²⁷ The plaintiffs conceded that these high-level decisions were subject to the discretionary authority exception.²²⁸ Their claim was that the government was negligent in the lower-level decisions on whether to warn the public and to provide information about precautions against radiation injury.²²⁹

The district court looked to a list of Atomic Energy Commission recommendations for radiologic risk warnings, mitigation measures, and monitoring as evidence as setting a standard.²³⁰ It claimed it could not find any explicit decision to not follow these guidelines because of public policy or national security considerations.²³¹ It held that it was not whether the United States had made the decision to use these measures—which it clearly did since it knew about them and did not use them—but that the government had not provided some specific policy rationale for the decision.²³²

In dismissing the action under the discretionary function exception, the appeals court found that the discretionary function exception is strongest when the government knowingly puts people and property at risk. The appeals court was clear that this showing did not trigger liability:

223. The only situation where this is not advisable is when the plaintiff is depending on the defendant's insurance or a third party to pay the award and the indemnity contract or policy excludes intentional acts.

224. *Allen v. United States*, 588 F. Supp. 247 (D. Utah 1984) rev'd, 816 F.2d 1417 (10th Cir. 1987).

225. *Id.*

226. *Id.* at 257.

227. *Id.* at 372.

228. *Allen v. United States*, 816 F.2d 1417, 1420 (10th Cir. 1987), *cert. denied by Allen v. United States*, 484 U.S. 1004 (1988).

229. *Allen*, 588 F. Supp. at 338.

230. *Id.* at 338–39.

231. *Id.* at 338.

232. *Id.* at 339. "It is the nature of the specific decision, not the fact that some decision or choice was made, that is important."

It is irrelevant to the discretion issue whether the AEC or its employees were negligent in failing to adequately protect the public. . . . When the conduct at issue involves the exercise of discretion by a government agency or employee, §2680(a) preserves governmental immunity ‘whether or not the discretion involved be abused.’ For better or worse, plaintiffs here ‘obtain their ‘right to sue from Congress [and] necessarily must take it subject to such restrictions as have been imposed.’²³³

The context of *Allen* and this analysis together provide the clearest example in the precedent cases of the application of the discretionary function exception to specific decisions by the government that knowingly subject people to risk of harm, including death. If the government recognizes the risk and goes ahead with the action, it is immune under discretionary function immunity. It does not need to justify this decision, and there is no question of right or wrong because it is a knowing engagement of the risk. This is when the FTCA is in starkest contrast to private tort law.²³⁴

6. *The Federal Torts Claims Act Analysis in Graci*

Robinson basically relitigates *Graci*, suing the Corps for hurricane flooding allegedly caused by the MRGO funneling water into the city and increasing surge. Since the plaintiffs and the judge in *Robinson* based their arguments on *Graci*, it is instructive to look at what the trial judge in *Graci* decided about the plaintiffs’ factual and FTCA claims when he reviewed the case on remand.²³⁵

The *Graci* court found that under Louisiana law, the United States would be liable for its acts and negligence, if any, in the construction of the MRGO to the extent that they caused damages.²³⁶ He also found that Congress authorized the MRGO, that plaintiffs had not shown that the Corps deviated from the project Congress envisioned, and that the plaintiffs did not show any negligence in the “design, construction or functioning of said project.”²³⁷

These findings are relevant to *Robinson*, because the plaintiffs in *Robinson* allege that design decisions made in the 1950s, prior to *Graci*, showed that the Corps knew that the banks of the MRGO should have been

233. *Allen*, 816 F.2d at 1421–22 (quoting *Dalehite v. United States*, 346 U.S. 15, 31 (1953)).

234. It is ironic that *Allen* is not cited in any of the Hurricane Katrina litigation, despite being the most on point precedent on discretionary authority.

235. *Graci v. United States*, 435 F. Supp. 189 (E.D. La. 1977).

236. *Id.* at 195–96 (noting that the MRGO had no effect on the flooding).

237. *Id.* at 196.

armored.²³⁸ This argument is then bolstered by references to a 1963 report from the Board of Engineers for Rivers and Harbors that also called for riprap (i.e., rock used to armor the shoreline) along the MRGO.²³⁹ The court concludes that this is evidence that the negligent failure to use riprap was associated with the MRGO, and not with the flood control plan.²⁴⁰ Yet if these decisions were adjudged proper at the time they were made, it is hard to say that they were outside the Corps's discretion in subsequent litigation.

Most importantly, the *Graci* court finding that causation failed:

27. Hurricane Betsy, while unusually ferocious, was not the only hurricane to produce flooding in the areas occupied by plaintiffs' property. Since 1900, 88 hurricanes and tropical storms have traversed through or by the Louisiana coast. Three of these, in 1915, 1947, and 1956, prior to the construction of the MRGO, produced flooding similar to that experienced in Hurricane Betsy Within the inundated areas are those occupied by plaintiffs' properties.

28. While the damage caused by Hurricane Betsy was far more severe than that occasioned during prior hurricanes, the severity and track of Hurricane Betsy are responsible therefor as opposed to any man-made construction such as the MRGO. Betsy was so severe that all the Louisiana coastal lowlands experienced some inundation and following Betsy's occurrence the scientific parameters for calculating hurricane protection were, of necessity, recomputed.²⁴¹

The *Graci* court recognized the reality of hurricanes in southern Louisiana. The area flooded by Hurricane Betsy had flooded many times before the MRGO was built and the cypress forests disappeared. The court accepted the scientific findings that the MRGO was too small to affect surge in major hurricanes.²⁴² In the forty years after Hurricane Betsy, the area continues to subside, and sea level has increased, with relative sea level rise constantly increasing the flooding risk.

238. *In re Katrina Canal Breaches Consol. Litig.*, 647 F. Supp. 2d 644, 654 (E.D. La. 2009) (*Robinson*).

239. *Id.* at 656.

240. *Graci*, 435 F. Supp. at 195–96.

241. *Id.* at 193.

242. CHARLES L. BRETSCHNEIDER & J. IAN COLLINS, STORM SURGE EFFECTS OF THE MISSISSIPPI RIVER–GULF OUTLET: STUDY A (National Engineering Science Company) (1966) (“It is seen that the effect of the Mississippi River–Gulf Outlet is almost negligible for all large hurricanes accompanied by slow rising storm surges. It may be expected that once in a while a storm may occur which has a somewhat freakish, more rapidly rising surge in which case the Gulf Outlet Channel may have a very marked effect. However, such a storm will not produce tides which are as high as the more critical hurricane tracks such as Betsy or the synthetic hurricanes.”).

7. *The Robinson Trial*

We now return to *Robinson*, which went to trial following the court's decision in *17th Street Canal*.²⁴³ Recall that the *Robinson* court rejected the government's motion to dismiss under FCA immunity, comparing the hurricane to a Navy vessel as the phantom levee breaker, an analogy that persists throughout the judge's arguments.²⁴⁴ The district judge began by noting that nothing he had seen in all the motions and evidence before the court in the two years since the hearing for the motion to dismiss changed his reading of *Graci* and *Central Green*.²⁴⁵

The court then provided a history of the MRGO and the Lake Pontchartrain and Vicinity Hurricane Protection Plan (LVP), the plan set in motion by Congress in 1955 after a series of hurricanes flooded New Orleans.²⁴⁶ The presentation of this history reads like a traditional tort case against a private party:

Buried in various Corps' reports some of which are discussed, *infra*, are unequivocal, positive statements that underscore the Corps' knowledge that the MRGO would not be a static, unchanging waterway. It was clear from its inception that because of its location, degradation of the area would result unless proper, prophylactic measures were taken. In fact, some measures were included in the Corps' plans; they simply were not implemented in time to prevent immense environmental destruction.²⁴⁷

There are additional allegations about how the widening of the MRGO through wave action threatened the flood control levees outside the MRGO.²⁴⁸ The plaintiffs also argued that the improper maintenance of the MRGO and its subsequent widening required the Corps to file a supplementary environmental impact statement. In sum, the plaintiffs' case is that the Corps ignored the threat that the MRGO posed to the flood control levees, and that it was the MRGO that caused the levee failure. The Corps had notice and knowledge of the risk and made a decision not to act on the knowledge.²⁴⁹

243. *In re Katrina*, 647 F. Supp. 2d 644 (*Robinson*).

244. *See, e.g., id.* at 692; *see also supra* text accompanying note 194.

245. *See In Re Katrina*, 647 F. Supp. 2d at 648 (*Robinson*) (introducing the earlier reading of the two cases and beginning the analysis where the earlier opinion left off).

246. *Id.* at 649–53. For much of the history, the court relies on a Corps report: DOUGLAS WOOLLEY & LEONARD SHABMAN, U.S. ARMY CORPS OF ENG'RS, DECISION-MAKING CHRONOLOGY FOR THE LAKE PONTCHARTRAIN & VICINITY HURRICANE PROTECTION PROJECT (Mar. 2008), https://biotech.law.lsu.edu/katrina/hpdc/Final_HPDC_Apr3_2008.pdf.

247. *Id.* at 653.

248. *Id.* at 697–98.

249. *See id.* at 666 (“As to the north shore, the callous and/or myopic approach of the Corps to the obvious deleterious nature of the MRGO is beyond understanding.”).

The judge then proceeds to transform Hurricane Katrina's flood waters into his Navy vessel. He sees a major problem with the Corps's failure to armor the sides of the MRGO with rock to prevent erosion and widening.²⁵⁰ While the decision whether to armor a channel to protect a flood control levee would seem to fall directly under § 702c, in this court's view that decision was part of the (nonimmune) decision-making about the navigational aspects of the MRGO. In response to the government's evidence that the levee failed and was overtopped because it was not constructed at the design height, a pure § 702c decision, the court responded that if "the Navy vessel ran into a papier mâché levee, the vessel would still be a substantial factor in the damage."²⁵¹

The court concluded that the failure to prevent the natural widening of the MRGO hastened the destruction of the flood control levee during the hurricane.²⁵² Thus, the negligence in maintaining the MRGO becomes the equivalent of negligently mooring a Navy vessel.²⁵³ The Navy vessel—made of the Hurricane Katrina storm surge—then breaches the flood control levees. In the court's view, the negligence in maintaining the MRGO is not superseded by § 702c immunity.²⁵⁴

The FTCA discretionary authority defense was disposed of by finding that the Corps violated various questionable duties. These include a duty to ask Congress for money²⁵⁵ and a failure to properly assess the MRGO's risks to wetlands in a 1976 environmental impact statement under the National Environmental Policy Act (NEPA).²⁵⁶ The court ignores the pages

250. *See id.* at 697 ("This Court is utterly convinced that the Corps' failure to provide timely foreshore protection doomed the channel to grow to two to three times its design width and destroyed the banks which would have helped to protect the Reach 2 Levee from front-side wave attack as well as loss of height.").

251. *In re Katrina Canal Breaches Consol. Litig.*, 647 F. Supp. 2d 644, 692 (E.D. La. 2009) (*Robinson*).

252. *Id.* at 697–98.

253. *Id.* at 698 ("The Corps' 'Navy vessel' devastated this levee.").

254. Thus, the Corps' decisions were made in the context of the MRGO project, not within the context of the LPV. None of these decisions directly concerned the LPV or its construction. Foreshore protection and addressing salinity issues had to do with wave wash that was causing severe erosion of the banks of the MRGO and led to an exponential growth of the channel far beyond that which was approved by Congress. Thus, the failures at issue here are extrinsic to the LPV and are not subject to § 702c immunity. *Id.* at 699.

255. *Id.* at 663 ("Never was any direct funding approach taken even when the Corps knew it had triggered catastrophic erosion caused by the very channel it had created.").

256. *Id.* at 725 ("Plaintiffs have presented substantial, clear and convincing evidence outlined above that the Corps itself internally recognized that the MRGO was causing significant changes in the environment—that is the disappearance of the adjacent wetlands to the MRGO and the effects thereof on the human environment—which triggered reporting requirements. The Corps cannot ignore the dictates of NEPA and then claim the protection of the discretionary exception based on its own apparent self-deception.").

of evidence that the Corps knowingly and intentionally weighed the facts and chose its course of action.²⁵⁷ None of these alleged breaches of duty is relevant to the Corps's authority. *Allen* tells us that such knowing behavior is the strongest proof of discretionary action, yet *Allen* is never mentioned in this case.²⁵⁸

a. *Robinson*—the Fifth Circuit Round I

The case was appealed, and after oral argument, the appeals court rendered its first opinion, *In re Katrina Canal Breaches Litigation*.²⁵⁹ This opinion basically tracked the district court's opinion, finding no § 702c Act immunity other than for the 17th Street cases and for the NEPA claims.²⁶⁰ It accepted the finding that the Corps was negligent in its decisions about maintaining MRGO, and that this negligence was the cause of the levee failures and plaintiffs' damages. As with the district court case, this negligence was based on a showing that the Corps was aware of the erosion of MRGO and that this erosion led to the failure of the flood control levees between MRGO and the plaintiffs.²⁶¹

b. *Robinson*—the Fifth Circuit Round II

Six months later, the same panel of the court withdrew its opinion in response to a petition for rehearing and substituted a new opinion, *In re*

257. *In re Katrina*, 647 F. Supp. 2d at 705 (*Robinson*) ("Plaintiffs respond that the Corps's [sic] defalcations with respect to the maintenance and operation of the MRGO were in direct contravention of professional engineering and safety standards and thus the Corps is prohibited from seeking protection from this exception. Ignoring safety and poor engineering are not policy, and clearly the Corps engaged in such activities. The Court finds the latter argument more compelling in light of the facts and circumstances of this case.")

258. Inexplicably, the government did not mention *Allen* in its brief on appeal, and it does not appear in the *17th Street* opinion, so Judge Duval can perhaps be forgiven for not addressing it in this opinion. *Id.* at 705.

259. 673 F.3d 381 (5th Cir. 2012) (*Robinson 5th Circuit I*), opinion withdrawn on reh'g, 696 F.3d 436 (5th Cir. 2012) (*Robinson 5th Circuit II*).

260. *Id.* at 393. ("NEPA's procedural mandates require agencies to inform their discretion in decisionmaking. An agency that complies with NEPA gives outside influences (the public, lawmakers, other agencies) more information with which to put pressure on that agency, but the original agency retains substantive decisionmaking power regardless. At most, the Corps has abused its discretion—an abuse explicitly immunized by the DFE.")

261. *Id.* at 399 ("The district court's careful attention to the law and even more cautious scrutiny of complex facts allow us to uphold its expansive ruling in full, excepting our minor restatement of FCA immunity. Accordingly, we AFFIRM the judgments in *Robinson* and *Anderson*, leaving each party as he was before this appeal. Similarly, we DENY the government's petition for a writ of mandamus to stay the Armstrong trial.") (footnote omitted).

Katrina Canal Breaches Litigation.²⁶² The court still accepted the district court's rejection of § 702c immunity:

Thus, after *Central Green*, waters have the immune character of "flood waters" if the government's link to the waters is through flood-control activity. That is to say, the government's acting upon waters for the purpose of flood control is flood-control activity, and flood-control activity is what gives waters an immune "character." We therefore reject the government's interpretation of the scope of Section 702c and conclude, instead, that the United States enjoys immunity under that section only where damages result from waters released by flood-control activity or negligence therein.²⁶³

This appears to conflict with the "character of the waters" test from *Central Green*.²⁶⁴ The panel's substitute opinion revises its analysis of the discretionary function exception from the FTCA as applied to the critical question of whether the Corps's decision to not armor the MRGO to prevent erosion was analogous to an error in a scientific calculation.²⁶⁵ The court recognizes that while the decisions do include scientific calculations, if they also evidence policy considerations then they are immune under the discretionary authority exception.²⁶⁶

Recognizing that the discretionary function exception does not require the Government to make the "right" decision is an important change in the court's position. The district court focused on what the Corps knew about the risks of flooding to New Orleans. It treated this as guilty knowledge that demanded action, as if the Corps was a private tortfeasor knowingly putting its victims at risk. But the government is charged with making political decisions about risk in what are often zero-sum situations.

While not citing *Allen*, the new opinion is consistent with its reasoning: if the government is making a policy choice that is otherwise allowed by law, it is protected by the discretionary function exception. The government does not need to explore all possible risks and alternatives that might put

262. 696 F.3d 436 (5th Cir. 2012) (*Robinson 5th Circuit II*), cert. denied, Lattimore v. United States, 570 U.S. 926 (2013).

263. *Id.* at 446.

264. See *Central Green Co. v. United States*, 531 U.S. 425, 437 (2001).

265. BRETSCHNEIDER & COLLINS, *supra* note 243 and accompanying text.

266. *In Re Katrina*, 696 F.3d at 451 (*Robinson 5th Circuit II*) ("Although the Corps appears to have appreciated the benefit of foreshore protection as early as 1967, the record shows that it also had reason to consider alternatives (such as dredging and levee "lifts") and feasibility before committing to an armoring strategy that, in hindsight, may well have been optimal. The Corps's actual reasons for the delay are varied and sometimes unknown, but there can be little dispute that the decisions here were susceptible to policy considerations. Whatever the actual reasons for the delay, the Corps's failure to armor timely Reach 2 is shielded by the DFE.").

fewer people at risk. If the government's decision results in injuries, the proper remedy is compensation through the political process, not litigation. The court dismissed all of plaintiff's claims in *Robinson* and in the related cases.²⁶⁷

III. CONCLUSION

Even though the *Robinson* ruling did not stand, its reading of *Central Green* still stands and undermines § 702c immunity in the Fifth Circuit. This leaves the courts free to second guess the Corps for every failed levee or decision to not build a levee. While the discretionary authority exception is a powerful defense, as this case and others demonstrate, that will only come years after a hugely expensive litigation process and trial. In the process, plaintiffs can use the courts to undermine belief in the risks of climate change, attributing the damages from inherent geologic risk and sea level rise to bad planning by the Corps.

These cases fuel the national myth that New Orleans would have been fine but for the failures of the Corps. That myth is based on a steady state earth. It has driven tens of billions of dollars in new levee construction premised on the belief that the problem is bad levees and not an ever-increasing threat from subsidence and global warming-driven sea level rise. The steady state earth model also includes the redemption myth: if the Corps broke it, the Corps can fix it. This is already embodied in the Corps's Mississippi River Gulf Outlet Ecosystem Restoration Plan, a \$3 billion plan which depends on a steady state earth to succeed.²⁶⁸

The United States has tens of millions of people and trillions of dollars of infrastructure at risk from global warming-driven sea level rise, or the combination of sea level rise and subsidence. On the Atlantic and Gulf Coasts, hurricanes transform the risk of slow immersion into the existential risk of catastrophic hurricane damages. Despite the ultimate failure of all of the Hurricane Katrina claims against the federal government, the steady state earth view of the *Robinson* trial court has been accepted as the true

267. This included a group of cases refiled under admiralty law after being dismissed as FTCA claims: "Here, the appellants seek to distinguish their claims, now pled under the Suits in Admiralty Act ("SAA"), 46 U.S.C. § 30901 et seq., the Public Vessels Act ("PVA"), 46 U.S.C. § 31101 et seq., and the Extension of Admiralty Jurisdiction Act, 46 U.S.C. § 30101 et seq., on the theory that by dredging with a method called box-cutting, the government acted negligently and violated various federal and state statutes and regulations. We are not persuaded and affirm the judgment. The decision on the method of dredging is shielded by the discretionary function exception." *In re Katrina Canal Breaches Litig. v. United States* 616 F. App'x 659, 660 (5th Cir. 2015).

268. *Mississippi River Gulf Outlet (MRGO) Ecosystem Restoration*, U.S. ARMY CORPS OF ENGINEERS, <http://www.mvn.usace.army.mil/Missions/Environmental/MRGOEcosystemRestoration.aspx>.

story of Hurricane Katrina.²⁶⁹ The New Orleans levees have been rebuilt but the core threat of climate change and delta geology has not changed. Blaming the Corps will not keep New Orleans safe from flooding. It will only distract us from the real threats facing New Orleans and every other low lying coastal city.

269. The Federal Circuit did raise the issue of the government evidence on the limited impact of the MRGO. *St. Bernard Par. Gov't v. United States*, 887 F.3d 1354, 1363 n.9 (Fed. Cir. 2018).