

In the United States Court of Federal Claims

No. 05-1119L

Filed: August 3, 2009

ST. BERNARD PARISH AND OTHER
OWNERS OF REAL PROPERTY IN ST.
BERNARD PARISH OR THE LOWER
NINTH WARD OF THE CITY OF
NEW ORLEANS,*

Plaintiffs,

v.

UNITED STATES,

Defendant.

* Coastal Wetlands Planning Protection and
* Restoration Act of 1990,
* Pub. L. No. 101-646;
* Emergency Supplemental Appropriations
* Act for Defense, the Global War on
* Terror, and Hurricane Recovery,
* Pub. L. No. 109-234;
* Failure to State a Claim, RCFC 12(b)(6);
* Fish and Wildlife Coordination Act of 1946,
* Pub. L. No. 79-732;
* Just Compensation Clause,
* U.S. CONST. amend. V;
* River and Harbor Act of 1956,
* Pub. L. No. 84-455;
* River and Harbor Act of 1968,
* Pub. L. No. 90-483;
* Stabilization Doctrine;
* Statute of Limitations;
* Summary Judgment, RCFC 56;
* Tucker Act, 28 U.S.C. § 1491.
*

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MEMORANDUM OPINION AND ORDER REGARDING JURISDICTIONAL ISSUES RAISED BY THE COURT AND DEFENDANT'S NOVEMBER 7, 2008 MOTION FOR SUMMARY JUDGMENT.

BRADEN, *Judge*.

* On March 19, 2009, with the consent of the parties, the court re-captioned this case: *St. Bernard Parish Government And Other Owners Of Real Property In St. Bernard Parish Or The Lower Ninth Ward Of The City Of New Orleans v. United States*, No. 05-1119L.

On October 17, 2005, St. Bernard Parish, a governmental entity of the State of Louisiana and owner of real property, as well as private owners of real property in St. Bernard Parish and the lower Ninth Ward of the City of New Orleans, filed suit in the United States Court of Federal Claims, alleging that the United States Army Corps of Engineers (“Army Corps”) constructed, operated (expanded), and maintained (dredged) a 76-mile long navigational channel known as the Mississippi River-Gulf Outlet (“MR-GO”),¹ that caused severe flooding on their property in 2005 and intermittent reoccurring flooding thereafter for which the Fifth Amendment to the United States Constitution requires just compensation.

This Memorandum Opinion And Order addresses jurisdictional issues raised by the court and issues raised by Defendant (“the Government”)’s November 7, 2008 Motion For Summary Judgment. To facilitate review of this Memorandum Opinion And Final Order, the court has provided the following outline:

I. RELEVANT FACTS.

- A. Three Man-Made Navigational Projects Affect Storm Surge In The New Orleans Area.**
- B. Environmental Conditions In Southeastern Louisiana Prior To The Construction Of The Mississippi River-Gulf Outlet.**
- C. In 1956, Congress Authorized The Construction Of The Mississippi River-Gulf Outlet.**
- D. On September 23, 1957, The Department Of Interior Advised The Army Corps Of Engineers Of Environmental Concerns About The Construction Of The Mississippi River-Gulf Outlet.**
- E. In 1968, Congress Authorized Enlargement Of The Mississippi River-Gulf Outlet.**
- F. The Mississippi River-Gulf Outlet’s Effect On Storm Surge Prior To October 17, 1999.**
- G. The Mississippi River-Gulf Outlet’s Effect On Storm Surge After October 17, 1999.**

¹ For consistency herein, the court will use the acronym “MR-GO,” although the original text of some reference documents uses the acronym “MRGO.”

H. On October 31, 2008, The Army Corps Of Engineers And The State Of Louisiana's Coastal Protection And Restoration Agency Authorized The Closure Of The Mississippi River-Gulf Outlet And Ecosystem Restoration.

II. PROCEDURAL HISTORY.

III. DISCUSSION.

A. Jurisdictional Issues Raised By The Court.

1. Standing.

a. Standard Of Review.

b. Governing Precedent.

c. Plaintiffs' Property Interests.

i. The St. Bernard Parish Government.

ii. Rocco Tommaseo, Thomas Tommaseo, And Rocky And Carlo, Inc.

iii. Steven Bordelon And Cynthia Bordelon.

iv. Edward Robin, Brad Robin, Edward Robin, Jr., Robin Seafood Company, Inc., And Robin Yscloskey Developments 1, 2, 3, And 4.

v. Port Ship Service, Inc.

vi. Gwendolyn Adams And Henry Adams.

d. Plaintiffs In This Case Have Standing.

2. Paragraph 28 Of Count I Of The Second Amended Complaint Is Dismissed, In Part.

B. The Government's Motion For Summary Judgment On The Statute Of Limitations.

1. Parties' Arguments.

a. The Government's Argument.

A. Three Man-Made Navigational Projects Affect Storm Surge In The New Orleans Area.

The City of New Orleans lies below sea level between two large bodies of water: Lake Pontchartrain to the north and the Mississippi River to the south. *See generally* “Hurricane on the Bayou,” Educator’s Guide, Audubon Nature Institute at 1 (www.hurricaneonthebayou.com) (“AUDUBON EDUCATOR’S GUIDE”). During storms, “excess water is diverted into man-made drainage canals that intercut the city.” *Id.* Pumping stations move water from the canals into Lake Pontchartrain or Mississippi River. *Id.* Until 2005, this system protected the City from major flooding. *Id.*

The east bank of the Mississippi River, adjacent to the City of New Orleans, includes three “low-lying polders:³ Orleans Metro, Orleans East, and St. Bernard. The Orleans East and St. Bernard polders extend east from the [Inner Harbor Navigational Canal (“Inner Harbor Canal” or “Industrial Canal”)] on the north and south sides, respectively of the Intracoastal Waterway (“ICWW”) [Gulf Intracoastal Waterway (“GIWW”).” Pl. 11/2/06 Ex. 1 (Aug. 16, 2006 Decl. Dr. G. Paul Kemp ¶ 6 at 3). These three man-made navigational projects, *i.e.*, the Inner Harbor Canal, the GIWW, and the MR-GO, affect storm surge and flooding in the New Orleans area. *See* Court Maps 1, 3-6, 8.

The MR-GO is a navigational waterway that:

[e]xtends southeast to northwest from the Gulf of Mexico to a point where it first merges with the [GIWW], and then continues westward until it intersects the [Inner Harbor Canal.] . . . The first 9 miles, the bar channel, are in the open Gulf. The next 23 miles of the channel lie in the shallow open waters of Breton Sound. From there, the inland cut extends 14 miles to the northwest with open marsh on the northeast and a 4,000-ft wide dredged material placement bank on the southwest side. At this point the channel cuts across the ridge of a relict distributary of the Mississippi River, Bayou La Loutre. For nearly the next 24 miles, there is a hurricane protection levee atop a dredged material placement bank on the southwest side of the channel and Lake Borgne and open marsh lie to the northeast. A portion of the levee protecting St. Bernard Parish/Chalmette and the portion of the hurricane protection levee along the south side of Orleans East Parish, north of the GIWW, form the “funnel” that is often referenced. The point where the MR-GO and GIWW channels merge is just to the east of the Paris Road Bridge[.] . . . From this point, the merged GIWW/MR-GO channel continues west for about 6 miles to the point where it intersects the [Inner Harbor Canal]; this portion has hurricane protection levees on both banks. The [Inner Harbor Canal] extends from Lake Pontchartrain, to the north, to the Mississippi River to the south. The [Inner Harbor Canal] has levees or

³ A polder is “[a]n area of low-lying land . . . that has been reclaimed from a body of water and is protected by dikes.” WEBSTER’S II NEW COLLEGE DICTIONARY (2001) at 853.

floodwalls along both banks. The [Inner Harbor Canal] Lock, which connects the [Inner Harbor Canal] to the Mississippi River, is located at the southern limit of the [Inner Harbor Canal]. The MR-GO bar channel authorized depth is 38 ft; the authorized bottom width is 600 ft. The remainder of the channel has an authorized depth of 36 [feet] and an authorized bottom width of 400 or 450 [feet], depending on location. Due to ship wave erosion, the surface width of the channel has increased since its construction at a rate of up to 15 ft per year. The additional eroded open water typically has a depth of six feet or less. Therefore, even an additional 1000 feet of open water adds no more than 6000 square feet of conveyance, about a 21% increase over the authorized channel (assuming the channel is 40 feet deep, has a 600 ft wide dredged bottom and a 1 to 3 side slope).

Gov't S. J. Ex. E (Joannes Westerink, Bruce Ebersole, Harley Winter, NOTE ON THE INFLUENCE OF THE MISSISSIPPI RIVER GULF OUTLET ON INDUCED HURRICANE STORM SURGE IN NEW ORLEANS AND VICINITY (Feb. 21, 2006) ("2006 WESTERINK NOTE") at 1-2).

* * *

[The] combined GIWW/MR-GO and [Inner Harbor Canal] connection between Lake Borgne and Lake Pontchartrain as well as the funnel defined by the hurricane protection levees along the banks of the MR-GO and GIWW locally collect and focus surge in the region, influencing all hydraulically-connected regions as well as New Orleans proper. The degree of focusing by the levees which form the funnel is a function of the wind speed and direction. Strong winds from the east tend to maximize the local funneling effect.

Id. at 6.

B. Environmental Conditions In Southeastern Louisiana Prior To The Construction Of The Mississippi River-Gulf Outlet.

Wetlands are classified into two main categories: inland wetlands and coastal wetlands. Most of the wetlands in Louisiana are inland wetlands, *i.e.*, swamps comprised of flooded forests and marshes or freshwater marshes in inland flat open water areas with few trees, vegetated by sedges, reed, and grasses. AUDUBON EDUCATOR'S GUIDE at 2. In addition, Louisiana has many saltwater marshes, *i.e.*, coastal areas behind barrier islands or river estuaries, vegetated by grasses.
Id.

Wetlands play a critical role in reducing the power of storms and hurricanes:

When storms move over open water, there is nothing to slow the wind and wave action. This creates a storm surge – a gigantic wall of water pushed forward by the storm's winds. The vegetation of the wetlands helps minimize the storm surge.

When powerful waves from a hurricane crash into the land, wetland plants act as brakes, slowing down the waves and reducing their destructive power. For every 3 miles of marsh, the storm surge of a hurricane is reduced in height by 1 foot[.]

Id. at 3.

Professor John W. Day, Jr., Department of Oceanography and Coastal Sciences, Louisiana State University at Baton Rouge, Louisiana, and Professor Gary P. Shaffer, Department of Biological Sciences, Southern Louisiana University, issued an Expert Report for the Plaintiffs in *Robinson*, admitted as a Joint Exhibit (JX0199) (“DAY-SHAFFER REPORT”). This Report described the environmental conditions in southeastern Louisiana prior to the construction of the MR-GO as follows:

[T]here were extensive baldcypress - water tupelo swamps in the [Central Wetlands Unit]⁴ and adjacent to the Bayou La Loutre Ridge.⁵ The semi-enclosed and protected nature of this area – and the exclusion of deadly salt water – allowed the survival of these swamps[.] . . . Water budget analyses for southeastern Louisiana show that about one third of rainfall remains after evaporation. Thus there was sufficient fresh water to maintain the baldcypress – water tupelo swamps in the [Central Wetlands Unit], so long as the system did not have a direct input of salt water. Greater than 12,000 acres of the swamps in the [Central Wetlands Unit] were killed shortly after the opening of MR-GO when the U.S. Army Corps cut through the natural ridge at Bayou La Loutre and allowed salt water to move up the tidewater channel and into the Central Wetlands Unit.

Pl. Sec. Am. Compl. Ex. 2 (DAY-SHAFFER REPORT at 4) (internal citations omitted).

* * *

The lethal effects of salt water on freshwater wetland vegetation were known long before the initial construction of the MR-GO (citing Penfound, W. T. and E. S.

⁴ The “Central Wetlands Unit” is the geographic area “around Lake Borgne and north and south of the Bayou La Loutre natural levee ridge.” Pl. Sec. Am. Compl. Ex. 2 (DAY-SHAFFER REPORT at 4).

⁵ The Bayou La Loutre Ridge was a natural “basin boundary that limited the flow of saline water from the Breton Sound area into Lake Borgne.” Gov’t S. J. Ex. A (INTEGRATED FINAL REPORT TO CONGRESS AND LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT FOR THE MISSISSIPPI RIVER-GULF OUTLET DEEP-DRAFT DE-AUTHORIZATION STUDY, Vol. 1, Main Report, U.S. Army Corps of Engineers, New Orleans District (Nov. 2007) (revised June 2008) (“2008 ARMY CORPS REPORT”) at xiii).

Hathaway. 1938. Plant Communities in the Marshlands of Southeastern Louisiana. *Ecological Monographs* 8(1): 1-56).

Id. at 5; *see also* AUDUBON EDUCATOR'S GUIDE at 4 ("When saltwater reaches a freshwater habitat, it burns the freshwater plants which are intolerant of the saltwater. The saltwater kills the existing plants, causing the soils to become loose and wash away. This process can also convert what was once a freshwater swamp into a saltwater marsh.").

C. In 1956, Congress Authorized The Construction Of The Mississippi River-Gulf Outlet.

On March 29, 1956, Congress enacted Public Law 84-455 authorizing the Army Corps to construct the MR-GO. The purpose of the MR-GO was to provide a "shorter navigation route from the Gulf of Mexico to the Port of New Orleans tidewater facilities" than using the Mississippi River to "access the port." Gov't S. J. Ex. A (2008 ARMY CORPS REPORT at iv-v). Public Law 84-455 also authorized the Army Corps to construct: "(1) protective jetties at the entrance to the MR-GO from the Gulf of Mexico; (2) a permanent retention dike through the Chandeleur Sound and a wing dike along the islands[,] as required; (3) a turning basin with a project depth of 36 feet Mean Low Gulf (MLG), a width of 1,000 feet and a depth of 2,000 feet at the junction of the new channel and Inner Harbor Navigational Canal; and (4) a highway bridge to carry Louisiana State Highway 61 over the [MR-GO]." *Id.* at v.

D. On September 23, 1957, The Department Of Interior Advised The Army Corps Of Engineers Of Environmental Concerns About The Construction Of The Mississippi River-Gulf Outlet.

On September 23, 1957, the Secretary of Interior wrote a letter to the Secretary of the Army to express "great concern" about the proposed construction of the MR-GO. *Robinson* PX0161. In addition, the letter stated:

Dredging and deposition of spoil involved in the construction of this project may be highly destructive to important producing areas for shrimp and other shellfish, nursery areas for finfishes, and highly valuable water-fowl marshes.

The project plans have not been investigated by fish and wildlife conservation agencies as contemplated in the Wildlife Coordination Act of August 14, 1946 (60 Stat. 1050). The U.S. Fish and Wildlife Service of this Department is now initiating such investigations[.]

We urge that detailed planning for the project consider fully the effects of fish and wildlife resources of constructing the canal and that your department accept reasonable modifications in alignment of the canal and in the plan for deposition of spoil to hold to a minimum the destructive effects on those resources, even though this may increase project costs to some degree.

It will be apparent that the fish and wildlife investigations are far behind the stage reached in the engineering investigations. We trust, therefore, that the Corps of Engineers will take the necessary steps to bring the investigations of all phases of this project into balance.

Id.

No action appears to have been taken.

Both the U.S. Fish and Wildlife Service (USFWS) and the Louisiana Department of Wildlife and Fisheries warned [the Army Corps] that construction of the MR-GO could have catastrophic effects on the surrounding flora and fauna. In a report to [the Army Corps], the USFWS predicted that the MR-GO construction “particularly by breaching the natural east-west ridges between fresh/brackish and salt water” would introduce salt water into the wetlands and destroy tens of thousands of acres of marshes and mature baldcypress-water tupelo swamps[.] . . . Furthermore, the USFWS recognized the wetlands of coastal Louisiana as “perhaps the densest and richest wild fauna in the world . . . [with a] flora [that] has narrow salinity range; therefore, desirable production must result from exacting conditions . . . [and] the 36-foot-deep cut will result in direct changes of salinity[.]” The [Army Corps] ignored [these] concerns and began construction, or perhaps better put, massive wetlands destruction.

Pl. Sec. Am. Compl. Ex. 2 (DAY-SHAFFER REPORT at 5-6) (internal citations omitted).

The initial construction of the MR-GO was completed in 1965. Pl. S. J. Ex. 7 (2000 EPA REPORT at 3-14). Prior to the construction of the MR-GO, “typical tidal flow within the Breton Sound area was reduced as it moved across the marshes and wetlands towards Lake Borgne.” Gov’t S. J. Ex. A (2008 ARMY CORPS REPORT at xiii).

E. In 1968, Congress Authorized Enlargement Of The Mississippi River-Gulf Outlet.

In 1968, Congress enacted the River and Harbor Act, Public Law 90-483, to authorize “a modification of the MR-GO Project” to a depth of 36 feet over a bottom width of 250 feet “from the MR-GO channel to and including a turning basin 800 feet square at the north end of the Michoud Canal.” Gov’t S. J. Ex. A (2008 ARMY CORPS REPORT at v).

When this enlargement was completed, the MR-GO had two sections. The first east-west oriented section between the Inner Harbor Canal and the “confluence of the GIWW/MR-GO near the Paris Road Bridge,” was known as “Reach 1” - the “critical section” through which Lake Pontchartrain and Lake Borgne are “hydraulically connected.” Gov’t S. J. Ex. E (2006 WESTERINK NOTE at 2); *see also* Court Maps 3-7. Reach 1 originally was part of the GIWW, but the depth was increased by construction of the MR-GO. Gov’t S. J. Ex. E (2006 WESTERINK NOTE at 2). Because

of “this connectivity, the local storm surge and astronomical tide in the [Inner Harbor Canal] and in the section designated GIWW/MR-GO is influenced by the tide and storm surge in both Lake Pontchartrain and Lake Borgne. . . . The Reach 1 GIWW/MR-GO section of the channel is very important in determining the magnitude of storm surge that reaches the [Inner Harbor Canal] from Lake Borgne and Breton Sound.” *Id.*; *see also* 11/2/06 Pl. Ex. 1 ¶ 7a at 4.

The second section of the MR-GO, known as “Reach 2,” extends southeast-northwest from just east of the Paris Road Bridge down through Breton Sound for approximately twenty-four miles into the Gulf of Mexico and functions as a “hurricane protection levee [on top of] a dredged material placement bank on the southwest side of the channel and Lake Borgne and open marsh . . . to the northeast.” Gov’t S. J. Ex. E (2006 WESTERINK NOTE at 1-2). A portion of the levee protecting St. Bernard Parish/Chalmette and a portion of the levee along the southside of Orleans East Parish, north of the GIWW, meet to form a “funnel.” *Id.*; *see also* Pl. 11/2/06 Ex. 1 (Aug. 16, 2006 Decl. of Dr. G. Paul Kemp ¶ 7b at 4); Court Maps 1, 3-7.

Expansion of the MR-GO in 1968 adversely affected approximately 3,150 acres of marsh, 100 acres of wetland forest, and 830 acres of shallow open water that were “converted to the deep water navigational channel between the GIWW and the Gulf of Mexico.” Gov’t S. J. Ex. A (2008 ARMY CORPS REPORT at v). As a result of the additional construction, “bank stabilization” or “foreshore protection” was required at both the north and south banks of the GIWW and Inland Reaches “to prevent sloughing of the bank into the channel and to protect adjacent wetlands and levees” at the MR-GO’s north bank: *i.e.*, at Miles 66-60, 56-50.5, 43-41, 37.2-36.5, 26.1-35.6, 33.8-32.6; at the MR-GO south bank, *i.e.*, at Miles 66-60, 60-47, Articulated Concrete Mattress 38.9-38.5 and 37.3-36.5; and at the north and south jetties at miles 23.2 to 20.8. *Id.* at vi; *see also* Court Map 5.

The authorized depth of the MR-GO bar channel was 38 feet with a bottom width of 600 feet. Gov’t S. J. Ex. E (2006 WESTERINK NOTE at 2); *see also* Court Map 2. The remaining channel had an authorized depth of thirty-six feet with a bottom width of 400-450 feet. Gov’t S. J. Ex. E (2006 WESTERINK NOTE at 2). Ship-wave erosion, however, increased the surface width at a rate of up to fifteen feet in each year between 1968 and 2006. *Id.* The additional “eroded open water” had a depth of six feet or less. *Id.* It is estimated that an additional 1,000 feet of open water increased the authorized dimension of the channel by twenty-one percent. *Id.* This played an “important role in the propagation of the astronomical tides and in the influx of more saline water from Lake Borgne/Breton Sound into Lake Pontchartrain via the [Inner Harbor Navigational Canal].” *Id.* at 2-3. The role of the MR-GO was “significant . . . in the propagation of the low-amplitude tide[.]” *Id.* at 3.

F. The Mississippi River-Gulf Outlet’s Effect On Storm Surge Prior To October 17, 1999.

In 1966, the Army Corps commissioned a study to determine the effect of the MR-GO/Reach 2 on flooding in the New Orleans area. The study concluded that Hurricane Betsy, a 1965 Category 3 storm, would have produced “essentially the same surge elevations with or without the MR-GO.”

Gov't S. J. Ex. E (2006 WESTERINK NOTE at 3 (citing Bretschneider C. L. and J. Collins, 1966: Storm Surge Effects on the Mississippi River-Gulf Outlet, Study A. NESCO Report SN-326-A, National Engineering Science Company, Pasadena, California)).⁶

Prior to 1978, saline marsh was found only south of the Bayou La Loutre Ridge and in the outer Biloxi Marshes. *See* Gov't S. J. Ex. A (2008 ARMY CORPS REPORT at xiv); *see also* Court Maps 1, 3-5. By 1981, however, the MR-GO provided a “more direct flow of higher salinity, stratified water inland toward areas of St. Bernard and Orleans Parishes.” Gov't S. J. Ex. A (2008 ARMY CORPS REPORT at xiii); *see also* Court Maps 3, 4.

By 1990, estimated wetland loss from Region 1 of the Coastal Louisiana Hydrologic Basin Area, *i.e.*, St. Bernard Parish, Orleans Parish, and St. Charles Parish, was reported to be 74,800 acres, or an average of 1,290 acres per year between 1932 and 1990. Pl. S. J. Ex. 6 (Louisiana Department of Natural Resources, COASTAL RESTORATION DIVISION ANNUAL PROJECT REVIEW (Dec. 2001) at 4); *see also* Gov't S. J. Ex. A (2008 ARMY CORPS REPORT at xiv) (“Between 1956 and 1990, 68,600 acres of wetlands were lost in the study area [as a result of] subsidence, navigational channels, oil and gas exploration and production, development and storms[.] Approximately 67 percent of the swamp in the study area was lost while saline marsh gained 8 percent.”). Between 1997 and 1998, “saline marsh had encroached up the MR-GO to about the Bayou Dupre and into the Biloxi Marshes near the MR-GO.” Gov't S. J. Ex. A (2008 ARMY CORPS REPORT at xiv).

In response to the increased public awareness of the impact of the MR-GO on wetlands and the resulting concern about the effect of increased storm surge, Congress enacted the Coastal Wetlands Planning, Protection, and Restoration Act of 1990, Pub. L. No. 101-646, Title III, known as the “Breaux Act.” A central feature of this Act called for a comprehensive Louisiana Coastal Wetlands Restoration Plan. Recognizing the need for a single plan, the Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority brought together many of the affected and interested private, public, and institutional entities to author a comprehensive report. In 1998, that group issued “COAST 2050: TOWARD A SUSTAINABLE COASTAL LOUISIANA” (“1998 COAST 2050 REPORT”). This Report estimated that by the 1990's, the rate of coastal land loss was estimated to be between 25 and 35 square miles per year. Gov't S. J. Ex. G (1998 COAST 2050 REPORT at 1). The 1998 COAST 2050 REPORT concluded that the construction of the MR-GO in the early 1960s “caused loss of marsh from both its ‘footprint’ (area of impact) and the saline water it allowed to enter the basin once the La Loutre Ridge was breached. These events led to high loss in the areas surrounding the [MR-GO] and in areas more removed such as the Pontchartrain/Maurepas Land Bridge.” *Id.* at 47; *see also* Court Maps 1, 6. Consequently, by 1998, New Orleans and Ysclosky (St. Bernard Parish) were characterized as “Communities at Risk.” Gov't S. J. Ex. G (1998 COAST 2050 REPORT at 63-65).

⁶ The data on which this study was based, however, preceded the 1968 expansion of the MR-GO.

The 1998 COAST 2050 REPORT identified the critical issue:

The current hurricane protection system, to be completed in 2002, protects the city from a storm surge associated with a fast moving Category 3 hurricane. But what if the storm is more intense (Hurricane Camille in 1969 was a Category 5) or the storm moves slowly, allowing more time for the storm surge to build? Storm surge models show that a hurricane could produce an 18-foot storm surge in Lake Pontchartrain, which could be topped with 10 foot waves. None of the current or planned protection measures could be effective under those circumstances.

* * *

Unfortunately, storm surge heights will only increase as subsidence and sea-level rise continue and more wetlands are lost.

Id. at 64.

To remedy this situation, the 1998 COAST 2050 REPORT recommended implementation of seventeen specific “Regional Ecosystem Strategies,” including closing the MR-GO to deep-draft navigation:

[The MR-GO] is perceived as a major problem in the Pontchartrain Basin. Wave erosion causes a 15-foot per year loss along 37 miles of the north bank. When the [MR-GO] was completed in the 1960s salinity increased in the basin, causing massive environmental damage. . . . The *north bank of the [MR-GO] should be stabilized as soon as possible.*

Id. at 88, 90 (emphasis added).

“Stabilization” was recommended to be accomplished in the “Near Term (1-5 years),” *i.e.*, by 2003 at the latest. *Id.* In addition, within the “Long Term (16-50 years),” the 1998 COAST 2050 REPORT recommended that the MR-GO be closed to deep-draft navigation. *Id.* at 90.⁷

⁷ Since construction of the MR-GO commenced, the “direct costs” funded by the Government have exceeded \$580 million. *See* Gov’t S. J. Ex. A (2008 ARMY CORPS REPORT at vi). As a result of subsequent “tropical storms and hurricanes, supplemental expenditures have often been required to return the [MR-GO] to the authorized dimensions.” *Id.* at vi-vii. Since 1998, however, no funds have been spent to restore the MR-GO to its authorized dimensions. *Id.* at vii. The GIWW Reach has not been dredged since 1998. *Id.* The Inland Reach, however, was maintained until 2005, to a minimum 300-foot bottom width; the Sound Reach was maintained to a minimum 450-foot bottom width; and the Bar Channel to a minimum 500-foot bottom reach. *Id.* Since Hurricane Katrina in 2005, there has been no channel maintenance. *Id.*

On December 15, 1998, the Parish Council of the St. Bernard Parish Government unanimously moved to adopt the following resolution:

WHEREAS, the construction of the Mississippi River Gulf Outlet, which opened in 1963, destroyed a 4750 foot wide, 37 mile long strip of wetlands and swamps. Ship traffic has aggravated erosion of the banks and caused the channel to widen up to 2000 feet from suction that pulls on sediments in the outlet's banks. The ship's wake creates waves that batter the banks, causing them to fall apart; and

WHEREAS, *the MR-GO provides a superhighway for storm surges caused by hurricanes and winter cold fronts.* No longer blocked by natural levees formed by winding bayous, water from the Gulf of Mexico moves unimpeded and more quickly inland, and can *cause severe flooding in St. Bernard, Orleans and Plaquemines Parishes;* and

WHEREAS, salt water intrusion has virtually destroyed intermediate water marshes and freshwater swamps surrounding [L]ake Borgne, resulting from opening the MR-GO; and

WHEREAS, the hydrology, animal and plant life of the Lake Pontchartrain and Breton Sound Basins have dramatically altered, "dead zones" created, yields and species of seafood decreased and open water areas have appeared where intermediate once flourished; and

WHEREAS, the 1998 hurricane season destroyed over 50 percent of the Chandeleur Islands, a land mass that forms a natural storm barrier for southeastern Louisiana; and

WHEREAS, *the land loss from the MR-GO, combined with the hurricane damage* now makes residents from Planquemines, Orleans, and St. Bernard Parishes *more vulnerable to tropical storms than at any time in history;* and

* * *

WHEREAS, in September, 1998 Hurricane Georges swept mountains of silt into the MR-GO sealing the waterway to larger ships, thereby necessitating the U.S. Army Corps of Engineers to dredge the channel at a cost of \$35 million dollars, in addition to average annual dredging costs of \$7 - \$10 million dollars and \$3 million for rock retention annually, equating to \$72 thousand dollars per ship or \$143,000 dollars daily for two ships, such annual expenses obviously are not cost-effective; and

WHEREAS, the U.S. Army Corps of Engineers has proposed to spend \$35 million dollars to rock the channel's north face in addition to dredging a channel that 2 ships (1.8) per day use the channel; and

WHEREAS, the continuing deterioration of the ship channel and wetland loss has caused flooding in the lower portion of St. Bernard Parish to increase drastically and scientists have measured the tidal surges that flow with speeds of over 18 ft/second! Flooding is expected to increase; and

WHEREAS, the economic benefits derived from the MR-GO are not far outweighed by the increasing risk to lives and property; and

WHEREAS, the State of Louisiana's official coastal restoration plan, COAST 2050, calls for phasing out of the MR-GO; and

WHEREAS, St. Bernard Parish never evolved into the "Industrial Frontier of the Great Gulf South" as symbolized by the MR-GO nor has the MR-GO had any military strategic use as first legislated by Congressman F. Edward Herbert in the appropriation funding the channel.

THE ST. BERNARD PARISH COUNCIL DOES HEREBY RESOLVE

SECTION I. That this Council does hereby request Louisiana's Southeast Congressional Delegation establish a task force to develop a process that will result in the timely closure of the Mississippi River Gulf Outlet.

SECTION II. That the task force, consisting of a policy committee and a technical advisory committee (Addendum A) will, within the next twelve months, design and develop a cost effective program to phase out the MR-GO that will focus on: public safety, maintaining the Port's economic viability, mitigation and habitat preservation, protection and, where possible, restoration.

Gov't S. J. Ex. L (St. Bernard Parish Government Resolution SBPC# 1336-12-98, Resolution to Close the Mississippi River Gulf Outlet ("1998 ST. BERNARD PARISH RESOLUTION") at 2-3) (emphasis added).

G. The Mississippi River-Gulf Outlet's Effect On Storm Surge After October 17, 1999.

In response to the 1998 COAST 2050 REPORT and the 1998 ST. BERNARD PARISH RESOLUTION, on May 25, 1999, the U.S. Environmental Protection Agency ("EPA") established a Task Force to "develop alternative futures for the MR-GO, for identifying the various issues which must be resolved if the channel is to be closed to deep draft navigation, and to facilitate the

resolution of stakeholder issues, including related issues of navigational facilities, environmental restoration, and hurricane protection.” Pl. S. J. Ex. 7 (2000 EPA REPORT at 2-5).

On October 20, 2000, the EPA published a Status Report: Comprehensive Plan for the Timely Modification of the Mississippi River Outlet. Pl. S. J. Ex. 7 (2000 EPA REPORT). The 2000 EPA REPORT stated that:

The construction, operation and maintenance of the MR-GO have caused substantial environmental changes in the Pontchartrain and Breton Sound drainage basins of southeastern Louisiana east of the Mississippi River. The channel has breached major hydrologic boundaries and has extended marine conditions into formerly fresh, low energy swamp, marsh and lacustrine areas. More than 65,000 acres of natural habitat have been lost or modified as a result of the MR-GO[.]

Id. at 2-1 to 2-2.

Other issues of concern regarding the MR-GO included:

its potential role in creating an avenue for surge movement during storms; erosion of the wetlands that provide an apron benefitting flood protection levees; erosion caused by ships that commonly exceed unenforced speed limits and or that exceed depth limits; and breach of wetlands that buffer large lakes from the channel.

Id. at 2-1 to 2-2 (emphasis added).

Portions of the summary extract of the Environmental Subcommittee, the “most substantive public document generated,” stated:

This preliminary study does show there has been a tremendous loss to St. Bernard Parish as a result of salt water intrusion in land, trapping and forestry due to the change in the ecosystem.

After eighteen (18) years of meeting and public hearings held by the St. Bernard Coastal Zone Management Advisory Committee, and taking their advice into consideration, this subcommittee’s recommendations are:

1. A closure structure at the Bayou la Loutre Ridge incorporating a gated system to protect St. Bernard Parish from a hurricane surge from the MR-GO. Several structures need to be in place. This could be implemented at a relatively low cost. The rocks from the landmass into the sound should be removed and used for these additional structures.

2. Bank stabilization/marsh re-creation in Lake Borgne from Bayou Bienvenue to the Mississippi River Levee encompassing St. Bernard and Plaquemines Parishes. This is our number one concern and should be addressed as soon as possible.
3. Implementation of a ten (10) year program to restore and manage our resources that includes a freshwater diversion structure into the Central Wetlands area.
4. Land loss due to salt water intrusion and wave action along the MR-GO has been devastating. The right of way, purchased by the Federal Government for the construction and maintenance of the MR-GO, has long been out of their boundaries. The result is that the property of private landowners is being literally washed away. This committee feels that it is only fair these property owners be compensated at fair market value.

The total dollar figures for the projects necessary to mitigate the damages inflicted upon St. Bernard Parish has not been determined. This committee feels that the overall cost will be in the hundreds of millions of dollars.

Id. at 3-13 to 3-14.

The 2000 EPA REPORT also included the Army Corps' "first official estimate of the ecological impacts caused by the Navigation Channel it built and maintains." *Id.* at 3-14. An Executive Summary of the Army Corps' conclusion states:

The MR-GO is a 36-foot deep, 500-foot wide, 76-mile long navigation channel from the Gulf of Mexico to the city of New Orleans, completed in 1965. It has been controversial from the beginning since it destroyed several thousand acres of wetlands in St. Bernard Parish. Wave wash erodes the channel by about 15 feet per year. St. Bernard Parish has long requested the closure of the channel because, in addition to the environmental damage, they believe that the channel serves as a funnel for hurricane surges to enter the parish. In the fall of 1999, the Environmental Protection Agency convened a group to "facilitate and lend structure to the issues involved with the MR-GO."

The group formed an Environmental Subcommittee and tasked it with preparing a report on the environmental impacts of the MR-GO. The Corps of Engineers agreed to draft this report. There were three basic impacts caused by construction of the MR-GO: 1) habitat loss due to channel excavation, spoil disposal and erosion; 2) shifts in habitat type due to salinity brought in by the MR-GO, and 3) increased land loss due to hydrological changes caused by the MR-GO. The habitat loss due to construction was estimated by placing the MR-GO footprint on maps, superimposing the habitat types in the mid-1960's, and calculating the amounts of various habitat types that were destroyed. Habitat shifts were estimated using a

database from Louisiana Department of Natural Resources that consisted of the habitat composition of various mapping units in 1956 and 1990: Possible increased land loss due to the MR-GO was very roughly estimated by first calculating the “baseline” loss by mapping unit. Then the percent of this “baseline” loss that was caused by the hydrological change due to the MR-GO was estimated to determine the “without MR-GO” loss rate. This loss rate was applied to acres present in 1956; the resulting 1990 acres were compared to existing acres to calculate the possible increased loss.

All of these calculations represent best professional judgment since it is difficult to know the exact location of habitats 35 years ago. The estimate of increased land loss is especially speculative.

Construction of the MR-GO and subsequent erosion has caused extensive loss of land in St. Bernard Parish. Nearly 3,400 acres of fresh/intermediate marsh, over 10,300 acres of brackish marsh and over 4,200 acres of saline marsh have been converted to open water or spoil. Over 1,500 acres of cypress swamp and levee forest have become disposal area. A total of nearly 20,000 acres of wetlands have been lost and nearly 4,800 acres of shallow open water have been convened [sic] into deep water or disposal area. Habitat shifts caused by saline waters brought in by the MR-GO have caused 3,350 acres of fresh/intermediate marsh and 8,000 acres of cypress swamp to shift to brackish marsh. Approximately 7,500 acres of swamp have convened to intermediate marsh. Also, 19,170 acres of brackish marsh and swamp have shifted to saline marsh. If the roughly estimated amount of increased loss is considered, the area influenced by the MR-GO could have lost over 3,400 acres of wetlands due to increased tides and salinity.

Id. at 3-14 to 3-15.

The 2000 EPA REPORT noted that “there is no current consensus [on] the rate of ongoing environmental damage from the MR-GO” and concluded:

- Preliminary results of the Reevaluation Study indicate that MR-GO is a relatively minor factor impacting storm surge impacts. Small surges that do not overtop the Bayou La Loutre Ridge but do gain access via the MR-GO are too small to overtop flood protection levees, and thus only impact unprotected areas where development is limited. Larger surges (*e.g.* from hurricanes) are simulated as being negligibly impacted by a small topographic feature such as the MR-GO passage through the ridge.
- Assuming these results are confirmed, questions about the overall safety of the hurricane protection system have not been resolved to everyone’s satisfaction. For example, inquiries made during this study determined that there is no audit to confirm the level of protection afforded by the existing

(uncompleted) levee system. Annual monitoring addresses adequacy of maintenance, not the more fundamental issue of hydrologic competence. A fundamental problem is the need for reliable benchmarks to use in surveys of levee heights and marsh and channel elevations.

Id. at 3-15, 4-7 to 4-8.

Likewise 2003, another study concluded that:

for low-amplitude storm surges (peak surge having a magnitude of 4 feet or less), the presence of MR-GO/Reach 2 increased the storm surge . . . [but] did not cause a significant change or the increase was less than 0.3 feet. In a few situations, notably a slow moving weak storm, the presence of the MR-GO/Reach 2 channel actually led to a very small decrease in peak surge/level at the four locations. For higher amplitude storm surges, peak surges on the order of 7 to 12 feet (which included Hurricane Betsy [1965]), changes induced by MR-GO/Reach 2 were 0.3 ft or less for all situations.⁸ *The MR-GO did however considerably enhance drainage from Lake Pontchartrain through the [Inner Harbor Channel/Gulf Intracoastal Waterway] out to Breton Sound following passage of the storms.*

Gov't S. J. Ex. E (2006 WESTERINK NOTE at 3) (emphasis added); *see also* Court Maps 6, 7.

A year later, however, a November 2004 Army Corps Report warned that “[r]apid action is required to protect the integrity of the Southern Lake Borgne shoreline and to prevent continued erosion of the MR-GO channel banks from ocean-going vessel wakes. Additional ecosystem restoration features are required to address serious ecological problems[.]” Pl. S. J. Ex. 8 (2004 ARMY CORPS STUDY at MR-GO 31). In addition:

[c]ritical action points [on the MR-GO] . . . face significant risk of losing the integrity of bayou banks . . . [threatening] a potential major breach of the navigational channel into . . . [L]ake [Borgne] . . . [that will result] in rapid wetlands loss as storm waves from the [L]ake and ship wakes from the [MR-GO] channel impact sensitive interior wetlands[.]

Id. at MR-GO 32 (emphasis added); *see also* Court Maps 1-6.

In late August 2005, Hurricane Katrina devastated the Louisiana coast. The storm surge models discussed in the 1998 COAST 2050 REPORT became reality. “Storm surge exceeded 18 ft. along the southeast Louisiana coast, overtopping and breaching protection levees, and flooding New Orleans metropolitan area (22,000 acres), New Orleans East (18,000 acres), and virtually all of Plaquemines (37,999 acres) and St. Bernard Parishes (19,000 acres).” U.S. ARMY CORPS OF

⁸ Hurricane Betsy, however, occurred in 1965 prior to the expansion of the MR-GO in 1968.

ENGINEERS, 2006 LOUISIANA COASTAL PROTECTION AND RESTORATION: PRELIMINARY TECHNICAL REPORT TO UNITED STATES CONGRESS (July 2006), Enclosure B (History of Hurricane Occurrences) at B, 4, *available at* <http://lacpr.usace.army.mil/PreliminaryReport%20Preliminary%20Technical%20Report%20to%20United%20States%20Congress.pdf>; *see also* Pl. 2/21/07 Supp. Ex.

In 2006, the State of Louisiana's Department of Natural Resources commissioned a study to simulate the conditions of Hurricane Katrina with the MR-GO Reach 2 "as is" and "closed and filled." Gov't S. J. Ex. E (2006 WESTERINK NOTE at 4-5). The 2006 study concluded:

Reach 2 of the MR-GO does not significantly influence the development of surge in the region for large storm events, the presence of the critical Reach 1 combined with the GIWW/MR-GO and [the Inner Harbor Canal] connection between Lake Borge and Lake Pontchartrain as well as the funnel defined by hurricane protection levees along the banks of the MR-GO and GIWW locally collect and focus surge in the region, influencing all hydraulically-connected regions as well as New Orleans proper. The degree of focusing by the levees which form the funnel is a function of the wind speed and direction. Strong winds from the east tend to maximize the local funneling effect.

Id. at 6; *see also* Court Map 6.

On June 2, 2006, the Governor of the State of Louisiana wrote a letter to the Army Corps requesting five "urgent" projects, the first of which was closure of the MR-GO:

MR-GO has compromised the safety of countless communities and contributed to the loss of vital coastal marsh areas. Certain technical aspects must be determined and assistance to industry to maintain and even flow of commerce[.] However, the closure of the MR-GO must ensure that communities are safe and our ecosystems protected from further saltwater intrusion and coastal land loss. The State recommends that the Corps moves quickly to close the MR-GO . . . in Fiscal Year 2008[.]

Gov't S. J. Ex. A (2008 ARMY CORPS REPORT (Vol. 2, App. 1)).

On June 15, 2006, Congress enacted the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, Pub. L. No. 109-234. Funds appropriated therein were to be used for "the repair, construction or provision of measures or structures necessary *to protect, restore, or increase wetlands, to prevent saltwater intrusion or storm surge.*" Gov't S. J. Ex. A (2008 ARMY CORPS REPORT at vii) (emphasis added). The Army Corps was authorized to use funds "for shoreline protection and marsh creation in the vicinity of the MR-GO and Lake Borgne." *Id.* In addition, the Army Corps was "to develop a comprehensive plan, at full Federal expense, to de-authorize deep draft navigation on the [MR-GO]." *Id.* at ii.

In December 2006, the Army Corps issued an Interim Report to Congress confirming that approximately 3,150 acres of marsh, 100 acres of wetland forest, and 830 acres of shallow open water were “*converted*” to create the MR-GO navigational channel. *Id.* at v (emphasis added). This Report estimated that:

habitat shifts caused by saline waters brought in by the MR-GO might have caused the following in areas adjacent to the MR-GO: 3,350 acres of fresh/intermediate marsh and 8,000 acres of cypress swamp converted to brackish marsh and 19,170 acres of brackish marsh and swamp became saline marsh. Bank erosion along the MR-GO has been estimated to occur at rates of between 27 and 38 feet per year on the Inland Reach. Between 1964 and 1996, 5,324 acres of marsh have been lost adjacent to the MR-GO channel (mile 66-21).

Id. at vi (emphasis added); *see also* Court Maps 3-5.

The Army Corps also estimated that, between 1956 and 1990, “68,660 acres of wetlands were lost in the study area.” Gov’t S. J. Ex. A (2008 ARMY CORPS REPORT at xiv). Specifically, during this period:

67 percent of the swamp in the *study area* was lost while saline marsh gained 8 percent. Marsh type is dependent on salinity which is generally determined by rainfall and *man-induced changes such as channel and canal dredging*. . . . From 1949-1978 saline marsh was only found south of the Bayou La Loutre Ridge and in the outer Biloxi Marshes. In 1988[,] saline marsh had *encroached up the MR-GO to about Bayou Dupre and into the Biloxi Marshes near the MR-GO*. By 1997, it was found further north along the MR-GO, past Bayou Dupre.

Id. (emphasis added).

Consequently, the “preliminary analysis” of the Army Corps was to “close the MR-GO from the GIWW to the Gulf of Mexico to both deep- and shallow- draft navigation.” *Id.* at viii. Congress was informed that the “MR-GO comprehensive de-authorization plan is consistent with ongoing design and planning efforts *related to storm protection and coastal restoration*[.]” *Id.* (emphasis added).

In February 2007, the Assistant Secretary for the Department of the Army advised the Senate Environment and Public Works Committee:

Work is now underway to protect critical wetlands buffering some of the levee systems in the MR-GO area. This work will help maintain important natural wave

buffers and ecological habitats in the Lake Borgne estuary located east of New Orleans and in St. Bernard Parish. Residents of the area depend on these wetlands for storm damage reduction[.]

Pl. S. J. Ex. 5 (Testimony of John Paul Woodley, Jr., Assistant Secretary, Department of Army (Feb. 26, 2007) at 5).

H. On October 31, 2008, The Army Corps Of Engineers And The State Of Louisiana's Coastal Protection And Restoration Agency Authorized The Closure Of The Mississippi River-Gulf Outlet And Ecosystem Restoration.

On October 31, 2008, the Army Corps and the State of Louisiana's Coastal Protection and Restoration Authority signed an agreement authorizing the closure of the MR-GO:

ending more than 45 years of navigation on the de-authorized federal shipping channel. . . . The final engineering plans for the closure structure are complete and a contract for construction will be awarded shortly. The Federal [G]overnment will fund 100 percent [of] the construction costs.

The State of Louisiana will acquire the necessary property to build and maintain the MR-GO closure structure. Upon completion of structure construction, the State will assume responsibility for the operation, maintenance, repair, replacement and rehabilitation.

The 950-foot-long closure structure will require placement of more than 433,500 tons of rock on the gulfward side of Bayou La Loutre near Hopedale, La. The closure is designed to be 12 feet wide at the top and 450 feet wide at the bottom, at an elevation of + seven feet, covering nearly 10 acres of water bottom. The structure will stretch across the channel from bank to bank, completely blocking ship traffic.

The Corps is working closely with federal and state partners to produce a supplement to the MR-GO closure plan that will address ecosystem restoration in areas affected by the MR-GO channel. Potential plan features may include marsh creation, shoreline protection, barrier island rebuilding and freshwater diversions from the Mississippi River.

See U.S. Army Corps of Engineers, *MR-GO Closure Moves Forward*, available at <http://www.mvn.usace.army.mil/news/view.asp?ID=92> (last visited July 30, 2009).

On May 30, 2009, the Army Corps reported that “overall construction work at the Mississippi River Gulf Outlet closure site was at 87 percent complete . . . and is progressing according to schedule[.]” U.S. Army Corps of Engineers, *MR-GO Closure Structure Nearing Completion*, WDSU.com, May 30, 2009, available at <http://www.wdsu.com/print/19611278/detail.html> (last visited July 30, 2009).

II. PROCEDURAL HISTORY.

On October 17, 2005, a class action Complaint was filed in the United States Court of Federal Claims.⁹ On January 13, 2006, Plaintiffs filed a First Amended Complaint. On January 17, 2006, the Government filed an Answer. On March 17, 2006 and July 18, 2006, the court convened status conferences to discuss discovery.

On August 16, 2006, Plaintiffs filed a Motion To Compel Discovery Responses. On September 5, 2006, the Government filed a Response. On September 7, 2006, Plaintiffs filed a Reply. On that date, the court convened a telephone conference. On September 8, 2006, the court issued an Order denying Plaintiffs' August 16, 2006 Motion To Compel, as premature. The Government, however, was ordered to file any dispositive motions by October 2, 2006.

On October 4, 2006, the Government filed a Motion To Dismiss, pursuant to RCFC 12(b)(1), together with five exhibits. On November 2, 2006, Plaintiffs filed a Motion In Limine to exclude those exhibits, together with a Declaration and Statement Of Contested Material Facts and five exhibits in support. On November 2, 2006, Plaintiffs also filed a Response in Opposition to the Government's October 4, 2006 Motion To Dismiss, together with two additional exhibits ("Pl. 11/2/06 Exhibits"). On November 20, 2006, the Government filed a Reply to the Motion To Dismiss and a Response to Plaintiffs' November 2, 2006 Motion In Limine, that was modified on November 27, 2006. On December 6, 2006, Plaintiffs filed a Reply to the Government's November 2, 2006 Responses.

On January 27, 2007, Plaintiffs requested leave to file a Supplemental Memorandum, together with four exhibits. On February 2, 2007, the Government filed a Response. On February 7, 2007, the court granted Plaintiffs' January 27, 2007 request. On February 21, 2007, Plaintiffs filed a Supplemental Brief.

On March 29, 2007, the court issued a Memorandum Opinion And Order, granting-in-part and denying-in-part the Government's October 4, 2006 Motion To Dismiss and denying Plaintiffs' Motion In Limine. *See Rocco Tommaseo, et al. v. United States*, 75 Fed. Cl. 799, 802-05 (2007) ("*St. Bernard Parish I*"). On April 11, May 4, and June 11, 2007, the court convened telephone status conferences to discuss the progress of document discovery. On June 13, 2007, Plaintiffs requested leave to file a Declaration and 135 exhibits. The court granted that request on June 20, 2007, entered a Scheduling Order, and requested a Joint Status Report be filed on July 16, 2007. On that date, a Joint Status Report was filed, and on July 19, 2007, the court requested an updated Joint Status Report be filed on September 20, 2007.

On August 7, 2007, Plaintiffs filed a Motion To Compel, together with six exhibits. On September 13, 2007, the court convened a telephone status conference to hear argument on

⁹ At this juncture, the court has not determined whether to certify this case as a class action, pursuant to RCFC 23.

Plaintiffs' August 7, 2007 Motion To Compel. On September 17, 2007, the court issued an Order granting-in-part and denying-in-part Plaintiffs' August 7, 2007 Motion To Compel. On October 16, 2007, the court convened a telephone status conference to discuss the Government's September 27, 2007 Motion To Amend the court's September 17, 2007 Order. In response, the court issued a Discovery Protocol Order on October 16, 2007.

On November 30, 2007, Plaintiffs filed a Motion For Leave To File A Second Amended Class Action Complaint, together with 149 exhibits. On December 5, 2007, the court convened a telephone status conference. On December 17, 2007, the Government filed a Response And Opposition To Plaintiffs' November 30, 2007 Motion. On December 31, 2007, Plaintiffs filed a Reply, modified on January 2, 2008. On January 14, 2008, the court convened a telephone conference regarding the Plaintiffs' November 30, 2007 Motion.

On January 31, 2008, the court issued a Memorandum Opinion And Order granting Plaintiffs' November 30, 2007 Motion For Leave To File A Second Amended Complaint, pursuant to RCFC 15(a). *See Rocco Tommaseo, et al. v. United States*, 80 Fed. Cl. 366, 371-76 (2008) (“*St. Bernard Parish II*”). On February 29, 2008, the Government filed an Answer to Plaintiffs' November 30, 2007 Second Amended Complaint.

On April 9, 2008, the court, with counsel for both parties, conducted an airborne site evaluation of the MR-GO and related environs and subsequently met with both counsel at the Government's document repository to resolve issues regarding document production relevant to the statute of limitations.

On April 14, 2008, the court granted Plaintiffs' unopposed April 10, 2008 Motion To Correct Plaintiffs' Second Amended Complaint. On April 28, 2008, Plaintiffs re-filed the Second Amended Complaint to correct a typographical error. Count I of the Second Amended Complaint (Permanent Taking of Property) (“Count I”), as amended, alleges that:

[a]s a direct, natural or probable consequence of the MR-GO project, including the continued operation, maintenance, and dredging attendant [thereto] Plaintiffs have been deprived of the use, occupancy[,] and enjoyment of their immovable property (and the business and improvements), resulting in a permanent taking of their property for a public use, without payment of just compensation.

Sec. Am. Compl. ¶ 47.

Count III of the Second Amended Complaint (Taking of Flowage and Drainage Servitudes) (“Count III”), as corrected, alleges that: “the flooding of Plaintiffs' property is recurring and necessarily incident to, and an inevitable consequence of, the creation, dredging[,] and maintenance of the MR-GO[.]” *Id.* ¶ 55. Count III also alleges that these acts have “created permanent servitudes of flooding and drainage on Plaintiffs' property” that “has permanently [been] taken for a public purpose, without just compensation.” *Id.* ¶ 56. On May 12, 2008, the Government filed an Amended Answer.

On April 28, 2008 and May 5, 2008, the court convened telephone conferences to ascertain the Government's progress regarding document production. On July 23, 2008, the court convened a telephone status conference to discuss the status of the Government's document production and schedule a date for the Government to file a motion to dismiss or motion for summary judgment. On that date, the court entered an Order requiring the Government to file a Motion To Dismiss or Motion For Summary Judgment by September 30, 2008. The Government requested that the date be extended to November 7, 2008. On October 31, 2008, the court granted that request.

On November 7, 2008, the Government filed a Motion And Memorandum For Summary Judgment ("Gov't S. J. Mem."), together with Government Summary Judgment Exhibits A-M and Proposed Findings Of Uncontroverted Fact. On December 5, 2008, the court entered an Order allowing Plaintiffs to extend the time in which to file a Response. On February 9, 2009, Plaintiffs filed a Response to the Government's Motion For Summary Judgment ("Pl. S. J. Resp."), a Response to the Government's Proposed Findings Of Uncontroverted Fact, Plaintiffs' Proposed Findings Regarding Government Efforts To Mitigate Effects Of MR-GO, and Plaintiffs' Summary Judgment Exhibits 1-17. The Government orally requested an extension until March 31, 2009 to file a Reply, which the court granted on February 20, 2009. On April 3, 2009, the Government filed a Reply to Plaintiffs' February 9, 2009 Response ("Gov't S. J. Reply"), together with a Response To Plaintiffs' Proposed Findings Of Fact.

On May 6, 2009, the court held an oral argument on the Government's November 7, 2008 Motion For Summary Judgment at the United States District Court for the Eastern District of Louisiana in New Orleans. *See* 5/6/09 TR at 1-79. At the conclusion of the argument, both parties were afforded the opportunity to file Supplemental Memoranda. *Id.* at 78. After oral argument, the court and the parties met with the Honorable Stanwood R. Duval, Jr. of the Eastern District of Louisiana to discuss the status of *Robinson*, an action before that court alleging that the negligent design, construction, operation (expansion), or maintenance (dredging) of the MR-GO by the Army Corps violated the Federal Tort Claims Act, 28 U.S.C. § 2671, *et seq.*, caused flood damage in the Greater New Orleans area. In addition to monetary damages, injunctive relief is requested to require a remediation plan to prevent the MR-GO from causing flood damage in the future. To facilitate the prompt and just disposition of both actions, and in the interest of judicial economy, the parties in *St. Bernard Parish* were advised that, following the court's disposition of the November 7, 2008 Motion For Summary Judgment, this action would be stayed pending the entry of a final judgment in the *Robinson* case.

On May 26, 2009, the Government filed a Supplemental Memorandum ("Gov't Supp. S. J. Mem."), together with Exhibits A-E (excerpts of deposition testimony). On May 28, 2009, via e-mail, Plaintiffs requested additional time to file a supplemental brief. On May 29, 2009, the court held a status conference and denied Plaintiffs' request, because the parties had been instructed to file supplemental briefs simultaneously and no later than May 26, 2009.

III. DISCUSSION.

The court previously determined that it has subject-matter jurisdiction, pursuant to the Tucker Act, 28 U.S.C. § 1491(a)(1), to adjudicate the Just Compensation claims alleged in the January 13, 2006 First Amended Complaint “pursuant to Amendment V of the U.S. Constitution.” *St. Bernard Parish I*, 75 Fed. Cl. at 807. Since Counts I and III of the First Amended Complaint, however, did not allege the date the alleged takings claims accrued, Plaintiffs were ordered to show cause why Counts I and III, as pled, were not barred by the statute of limitations. *Id.* at 804-05 (“In this case, if Plaintiffs’ takings theory is premised on the creation of the MR-GO, to satisfy the statute of limitations, [then] Plaintiffs would have to establish that the effects from the ‘creation’ of the MR-GO were not ‘stabilized’ until on or after October 17, 1999, *i.e.*, six years prior to filing the October 17, 2005 Complaint. If Plaintiffs’ theory is premised on the expansion of the MR-GO by ‘continued operation, maintenance, and dredging,’ to satisfy the statute of limitations, Plaintiffs would have to establish that the ‘situation’ created by these activities was not ‘stabilized’ until on or after October 17, 1999.”).

The court also determined that the temporary taking alleged in Count II of the Complaint was not ripe for adjudication since the MR-GO was not closed. *Id.* at 803; *see also* First Am. Compl. ¶ 19 (“[I]n the event that the MR-GO is closed and [P]laintiffs’ real property can be redeveloped in the future, [P]laintiffs have been deprived of the use, occupancy, and enjoyment of their real property for the indefinite future and have suffered a temporary taking of their real property.”). The court, however, ruled that if and when the MR-GO is certified as closed, Plaintiffs may timely re-file this claim in the United States Court of Federal Claims, without prejudice. *St. Bernard Parish I*, 75 Fed. Cl. at 803.

A. Jurisdictional Issues Raised By The Court.

1. Standing.

a. Standard Of Review.

The United States Supreme Court has stated that “the question of standing is whether the litigant is entitled to have the court decide the merits of the dispute or of particular issues.” *Warth v. Seldin*, 422 U.S. 490, 498 (1975). The party invoking federal jurisdiction bears the burden of establishing standing. *See Summers v. Earth Island Inst.*, 129 S. Ct. 1142, 1149 (2009). Specifically, to establish standing, “a plaintiff must show that [it] is under threat of suffering ‘injury in fact’ that is concrete and particularized; the threat must be actual and imminent, not conjectural or hypothetical; it must be fairly traceable to the challenged action of the defendant; and it must be likely that a favorable judicial decision will prevent or redress the injury.” *Id.* (citing *Friends of the Earth, Inc. v. Laidlaw Envtl. Serv., Inc.*, 528 U.S. 167, 180-81 (2000)).

b. Governing Precedent.

The Takings Clause of the Fifth Amendment to the United States Constitution provides that “private property [shall not] be taken for public purpose, without just compensation.” U.S. CONST. amend V. Whether a compensable taking has occurred requires the court to resolve “a question of law based on factual underpinnings.” *Wyatt v. United States*, 271 F.3d 1090, 1096 (Fed. Cir. 2001) (citations omitted); *see also Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1005 (1984) (explaining that courts should perform “an ‘ad hoc, factual’ inquiry” in making this determination) (quoting *Kaiser Aetna v. United States*, 444 U.S. 164, 175 (1979)). In this case, Plaintiffs have the initial burden to establish the relevant “factual underpinnings” of their property interest by presenting “more convincing” evidence than “the evidence which is offered in opposition to it.” *Jazz Photo Corp. v. United States*, 439 F.3d 1344, 1350 (Fed. Cir. 2006) (quoting *Hale v. Dep’t of Transp., Fed. Aviation Admin.*, 772 F.2d 882, 885 (Fed. Cir. 1985)).

c. Plaintiffs’ Property Interests.

Although Plaintiffs’ standing was not challenged in the Government’s October 4, 2006 Motion To Dismiss, in denying that motion, the court ordered that the First Amended Complaint further be amended to allege *when* the named Plaintiffs became property owners and what specific property interest established their standing. *See St. Bernard Parish I*, 75 Fed. Cl. at 803 (citing *United States v. Dow*, 357 U.S. 17, 20-21 (1958) (holding that a plaintiff seeking just compensation for a taking under the Fifth Amendment must be the owner of the property at the time of the taking)); *see also Cavin v. United States*, 956 F.2d 1131, 1134 (Fed. Cir. 1992) (“Without undisputed ownership of the [] property [at issue] at the time of the takings, [the plaintiffs] cannot maintain a suit alleging that the Government took their property without just compensation.”).

On November 30, 2007, the initial Plaintiffs¹⁰ filed a Motion For Leave To File A Second Amended Complaint, adding twelve more Plaintiffs.¹¹ On December 17, 2007, the Government opposed that Motion, but again did not challenge either the standing of the initial Plaintiffs or those added to the Second Amended Complaint. Nevertheless, the court is obligated first to address this issue, because standing must be determined “as of the commencement of suit.” *Rothe Dev. Corp. v. Dep’t of Def.*, 413 F.3d 1327, 1334 (Fed. Cir. 2005).

¹⁰ The initial Plaintiffs include: Rocco Tommaseo; Thomas Tommaseo; Rocky and Carlo, Inc.; Steven Bordelon; Cynthia Bordelon; and Steve’s Mobile Home & R.V. Repair, Inc.

¹¹ The Plaintiffs added include: Henry “Junior” Rodriguez, Jr., in his capacity as the President and Legal Representative of St. Bernard Parish Government; Edward Robin; Brad Robin; Robin Yscloskey Development #1, L.L.C.; Robin Yscloskey Development #2, L.L.C.; Robin Yscloskey Development #3, L.L.C.; Robin Yscloskey Development #4, L.L.C.; Robin Seafood Company, Inc.; Edward “Pete” Robin, Jr.; Port Ship Service, Inc.; Gwendolyn Adams; and Henry Adams.

i. The St. Bernard Parish Government.

The Second Amended Complaint alleges that the St. Bernard Parish Government has standing because, prior to August 2005 and currently, the St. Bernard Parish Government owns at least ninety separate properties that have been adversely affected by the Government's "continuous operation, maintenance and dredging . . . of the MR-GO [that] requires owners of immovable property . . . to in effect surrender part of their full ownership of . . . properties to the flowage easement created by the federal MR-GO project." Sec. Am. Compl. ¶ 28; *see also id.* ¶¶ 1-14, 25-28; Pl. Sec. Am. Compl. Ex. 134-46; April 29, 2009 Maples Letter to the Court ("Maples Letter").

Accordingly, the Second Amended Complaint has alleged sufficient facts of a property interest and injury in fact traceable to the construction, operation (expansion), and maintenance (dredging) of the MR-GO. The Complaint has alleged an "injury in fact" that is "concrete and particularized" and a threat that is "actual and imminent, not conjectural or hypothetical[,] . . . fairly traceable to the challenged action of the defendant[,] . . . [and that it] is likely that a favorable judicial decision will prevent or redress the injury." *See Summers*, 129 S. Ct. at 1149 (citing *Friends of the Earth*, 528 U.S. at 180-81). In addition, as previously discussed, the Government has proffered no evidence opposing the standing of the St. Bernard Parish Government to have the claims alleged in Counts I and III of the Second Amended Complaint be adjudicated by the court.

ii. Rocco Tommaseo, Thomas Tommaseo, And Rocky And Carlo, Inc.

The Second Amended Complaint alleges that Rocco Tommaseo and/or Thomas Tommaseo and/or Rocky and Carlo, Inc. (the "Tommaseo Plaintiffs") have standing because, prior to August 2005 and currently, they own twenty-six separate properties in St. Bernard Parish that "have been and are currently subjected to increasingly disruptive effects [flooding and flowage easement] attendant to the continuous operation, maintenance and dredging of the federal MR-GO project." Sec. Am. Compl. ¶ 24; *see also id.* ¶¶ 1-17, 20-24; Pl. Sec. Am. Compl. Ex. 3-29.; Maples Letter.

Accordingly, the Second Amended Complaint has alleged sufficient facts of a property interest and injury in fact traceable to the construction, operation (expansion), and maintenance (dredging) of the MR-GO. The Complaint has alleged an "injury in fact" that is "concrete and particularized" and a threat that is "actual and imminent, not conjectural or hypothetical[,] . . . fairly traceable to the challenged action of the defendant[,] . . . [and that it] is likely that a favorable judicial decision will prevent or redress the injury." *See Summers*, 129 S. Ct. at 1149 (citing *Friends of the Earth*, 528 U.S. at 180-81). In addition, as previously discussed, the Government has proffered no evidence opposing the standing of the Tommaseo Plaintiffs to have the claims alleged in Counts I and III of the Second Amended Complaint be adjudicated by the court.

iii. Steven Bordelon And Cynthia Bordelon.

The Second Amended Complaint alleges that Steven Bordelon, Cynthia Bordelon, and Steven's Mobile Home & R.V. Repair, Inc. (the "Bordelon Plaintiffs") have standing because, prior

to August 2005 and currently, they own property in St. Bernard Parish that has “been and [is] currently subjected to increasingly disruptive effects of [flooding and flowage easement] attendant to the continuous operation, maintenance, and dredging of the federal MR-GO project.” Sec. Am. Compl. ¶ 24; *see also id.* ¶¶ 1-14, 18-24; Pl. Sec. Am. Compl. Ex. 30-33; Maples Letter.

Accordingly, the Second Amended Complaint has alleged sufficient facts of a property interest and injury in fact traceable to the construction, operation (expansion), and maintenance (dredging) of the MR-GO. The Complaint has alleged an “injury in fact” that is “concrete and particularized” and a threat that is “actual and imminent, not conjectural or hypothetical[,] . . . fairly traceable to the challenged action of the defendant[,] . . . [and that it] is likely that a favorable judicial decision will prevent or redress the injury.” *See Summers*, 129 S. Ct. at 1149 (citing *Friends of the Earth*, 528 U.S. at 180-81). In addition, as previously discussed, the Government has proffered no evidence opposing the standing of the Bordelon Plaintiffs to have the claims alleged in Counts I and III of the Second Amended Complaint be adjudicated by the court.

iv. Edward Robin, Brad Robin, Edward Robin, Jr., Robin Seafood Company, Inc., And Robin Yscloskey Developments 1, 2, 3, And 4.

The Second Amended Complaint alleges that Edward Robin, Brad Robin, Edward Robin, Jr., Robin Seafood Company, and Robin Yscloskey Developments 1, 2, 3, and 4 (the “Robin Plaintiffs”) have standing because, prior to August 2005 and currently, they own five separate properties in St. Bernard Parish that have experienced “increased occurrences of flooding as a result of the continuous operation, maintenance, and dredging . . . of the federal MR-GO project[.]” Sec. Am. Compl. ¶ 32; *see also id.* ¶¶ 1-14, 29-39; Pl. Sec. Am. Compl. Ex. 127-46; Maples Letter.

Accordingly, the Second Amended Complaint has alleged sufficient facts of a property interest and injury in fact traceable to the construction, operation (expansion), and maintenance (dredging) of the MR-GO. The Complaint has alleged an “injury in fact” that is “concrete and particularized” and a threat that is “actual and imminent, not conjectural or hypothetical[,] . . . fairly traceable to the challenged action of the defendant[,] . . . [and that it] is likely that a favorable judicial decision will prevent or redress the injury.” *See Summers*, 129 S. Ct. at 1149 (citing *Friends of the Earth*, 528 U.S. at 180-81). In addition, as previously discussed, the Government has proffered no evidence opposing the standing of the Robin Plaintiffs to have the claims alleged in Counts I and III of the Second Amended Complaint be adjudicated by the court.

v. Port Ship Service, Inc.

The Second Amended Complaint alleges that Port Ship Service, Inc., a Louisiana corporation, has standing because, prior to August 2005 and currently, its principal place of business is in St. Bernard Parish and it has experienced “property floods with ever-increasing frequency . . . caused by the continuous operation, maintenance and dredging of the federal MR-GO project[.]” Sec. Am. Compl. ¶¶ 41-42; *see also id.* ¶¶ 1-14, 40-42; Sec. Am. Compl. Ex. 147-48; Maples Letter.

Accordingly, the Second Amended Complaint has alleged sufficient facts of a property interest and injury in fact traceable to the construction, operation (expansion), and maintenance (dredging) of the MR-GO. The Complaint has alleged an “injury in fact” that is “concrete and particularized” and a threat that is “actual and imminent, not conjectural or hypothetical[,] . . . fairly traceable to the challenged action of the defendant[,] . . . [and that it] is likely that a favorable judicial decision will prevent or redress the injury.” *See Summers*, 129 S. Ct. at 1149 (citing *Friends of the Earth*, 528 U.S. at 180-81). In addition, as previously discussed, the Government has proffered no evidence opposing the standing of Port Ship Service, Inc. to have the claims alleged in Counts I and III of the Second Amended Complaint be adjudicated by the court.

vi. Gwendolyn Adams And Henry Adams.

The Second Amended Complaint alleges that Gwendolyn and Henry Adams (“Adams Plaintiffs”) have standing because, prior to August 2005 and currently, they own property in the Lower Ninth Ward that has been “appropriated by the MR-GO project.” Sec. Am. Compl. ¶ 2.13; *see also id.* ¶¶ 1-14, 20-24; Pl. Sec. Am. Compl Ex. 149; Maples Letter.

Accordingly, the Second Amended Complaint has alleged sufficient facts of a property interest and injury in fact traceable to the construction, operation (expansion), and maintenance (dredging) of the MR-GO. The Complaint has alleged an “injury in fact” that is “concrete and particularized” and a threat that is “actual and imminent, not conjectural or hypothetical[,] . . . fairly traceable to the challenged action of the defendant[,] . . . [and that it] is likely that a favorable judicial decision will prevent or redress the injury.” *See Summers*, 129 S. Ct. at 1149 (citing *Friends of the Earth*, 528 U.S. at 180-81). In addition, as previously discussed, the Government has proffered no evidence opposing the standing the Adams Plaintiffs to have the claims alleged in Counts I and III of the Second Amended Complaint be adjudicated by the court.¹²

¹² Pl. Sec. Am. Compl. Ex. 149, however, indicates that a grant *may* have been provided to the Adams Plaintiffs as “compensation for damages incurred by the Homeowners due to Hurricanes Katrina in August 2005 and/or Rita in September 2005.” This document bears no signatures, so the court does not know whether the Adams Plaintiffs accepted the terms of this grant. Other Plaintiffs also may have received such offers and/or accepted the terms of such a proposed grant. At present, the court has no evidence of whether such offers were made or whether any of the Plaintiffs accepted such terms. Upon further discovery, the record may establish that the Adams Plaintiffs and others may have received “just compensation” for part or all of the injury to their properties. In addition, a waiver of all causes of action against the Government may have been a term of any such grant. Further discovery will answer these questions and may affect the standing of the Adams Plaintiffs or others to pursue this case.

d. Plaintiffs In This Case Have Standing.

For these reasons, at this juncture, the court has determined that the January 31, 2008 Second Amended Complaint has alleged sufficient facts to establish standing, as each of these Plaintiffs owned property in St. Bernard Parish or the Ninth Ward of the City of New Orleans that has experienced severe flooding in 2005 and intermittent reoccurring flooding fairly traceable to the construction, operation (expansion), or maintenance (dredging) of the MR-GO, and a favorable decision will redress injury from the flooding.

2. Paragraph 48 Of Count I Of The Second Amended Complaint Is Dismissed, In Part.

Count I of the Second Amended Complaint alleges that “[P]laintiffs have been deprived of the benefits and profits attendant to the continued operation of their commercial ventures, all as a direct, natural or probable consequence of this federal project.” Sec. Am. Compl. ¶ 48. As a matter of law, however, the Just Compensation Clause of the Fifth Amendment does not afford Plaintiffs profits attendant to their commercial ventures. *See United States v. Gen. Motors Corp.*, 323 U.S. 373, 379 (1945) (“[Just] compensation for [the taking of property] does not include the future loss of profits, the expenses of moving removable fixtures and personal property from the premises, the loss of good-will which inheres in the location of the land, or other like consequential losses which would ensue from the sale of the property to someone other than the sovereign.”); *see also Mitchell v. United States*, 267 U.S. 341, 345 (1925) (“If the business was destroyed, the destruction was an unintended incident of the taking of land. There can be no recovery under the Tucker Act if the intention to take is lacking.”) (internal citations omitted).

The Just Compensation Clause only affords a financial remedy for property loss caused by the physical taking of private property. *See United States v. Reynolds*, 397 U.S. 14, 16 (1970) (“‘[J]ust compensation’ means the full monetary equivalent of the property taken[.] . . . In enforcing the constitutional mandate, the Court at an early date adopted the concept of market value: the owner is entitled to the fair market value of the property at the time of the taking.”); *see also Foster v. United States*, 2 Cl. Ct. 426, 445 (1983) (“As a general rule, there is no compensation for frustrated contracts or for loss of future income. The sovereign must pay only for what it takes, not for opportunities the owner loses.”). Accordingly, that portion of Paragraph 48 of Count I of the Second Amended Complaint requesting “lost benefits” and “profits” of Plaintiffs’ “commercial ventures” is dismissed.

B. The Government’s Motion For Summary Judgment On The Statute Of Limitations.

1. Parties’ Arguments.

a. The Government’s Argument.

The Government argues that, to maintain a cause of action under the Takings Clause of the Fifth Amendment, “[P]laintiffs must demonstrate that the geological changes alleged to have been caused by the MR-GO project in the Second Amended Complaint, occurred after October 17, 1999 or in the case of the new [P]laintiffs, after January 31, 2002 (since the [Second] [A]mended [C]omplaint was filed on [the later date]).” Gov’t S. J. Mem. at 15. First, undisputed evidence “demonstrates that the alleged impact of the MR-GO was present and *known to plaintiffs* more than six years before they filed suit.” *Id.* at 16-17 (emphasis added). The Government contends that since construction of the MR-GO was completed in 1968, “there has been no material change in the project to date,” and any claim arising from the construction thereof must be dismissed. *Id.* at 17. Likewise, any claim based on the operation of the MR-GO “that may have caused a loss of wetlands and bank created erosion,” increasing the risk of flooding, also “were well known by 1998 at the latest[.]” *Id.* Accordingly, Plaintiffs cannot meet their burden to show that “‘stabilization ha[d] not occurred’ prior to October 17, 1999.” *Id.* (quoting Sec. Am. Compl. ¶ 5).

Second, each of the named Plaintiffs has failed to establish that “the geographical changes of which [P]laintiffs now complain” were not present and not well-known before October 17, 1999. *Id.* at 19; *see also id.* at 17-21. To the extent that any flooding was caused by the construction, operation (expansion), or maintenance (dredging) of the MR-GO, it was “obvious and known” to Plaintiffs prior to October 17, 1999. *Id.* at 18.

b. Plaintiffs’ Response.

Plaintiffs concede that the Government is entitled to summary judgment, if it can establish “by undisputed evidence that every [P]laintiff’s parcels of land were manifestly subject to flooding before 1999.” Pl. S. J. Resp. at 11. The Government, however, has not established that “the effects of MR-GO on Plaintiffs’ property . . . stabilized prior to 1999,” much less that “the named [P]laintiffs’ claims that MR-GO’s destructive effects in their property are [not] continuing – [and not] accelerating.” *Id.* (citing Sec. Am. Compl. ¶¶ 11-12, 15-19, 24, 26, 32). Therefore, as a matter of fact and law, Plaintiffs’ claims have not accrued, because “the flooding situation has not stabilized[.]” *Id.* (citing Sec. Am. Compl. ¶ 6).

c. The Government’s Reply And Supplemental Memorandum.

The Government replies that “no taking of a flowage easement has occurred on any of the properties at issue.” Gov’t S. J. Reply at 2-3. Because Plaintiffs “have not presented any evidence establishing the element of inevitably recurring flooding,” such claims “are not ripe for decision at this time, and given the imminent closure of [MR-GO], it is extremely unlikely that such claims will

ever mature.” *Id.* at 3. In addition, “to the extent that Plaintiffs argue that there has been a taking at this time,” their claim depends entirely on the “MR-GO channel as a conveyance for storm surge to establish this claim.” *Id.* Since the MR-GO has remained virtually unchanged since it was completed and operational in 1968, any claim regarding a flowage easement accrued many years ago. *Id.* at 3-4. Moreover, Plaintiffs do not allege “any contact with waters of the MR-GO except in the presence of violent and catastrophic, but singular and ephemeral weather events. . . . Critically, Plaintiffs . . . make[] clear that they assert no ownership interest in the only lands that are subject to constant contact with the waters of the MR-GO – the wetlands adjacent to the channel.” *Id.* at 4-5 (internal citations omitted). Therefore, the statute of limitations requires the court to dismiss Plaintiffs’ claims. *Id.* at 5.

In addition, the stabilization doctrine has never been applied to a case where plaintiffs do not own the property that has been gradually lost. *See* Gov’t Supp. S. J. Mem. at 5-6. Assuming, however, that the stabilization doctrine is applicable, Plaintiffs’ claim is still time-barred, because it stabilized more than six years before the initial October 17, 2005 Complaint was filed. *Id.* at 7. Plaintiffs offer no evidence to support their assertion that the claim accrued some time in 2003. *Id.* at 8. In fact, the evidence shows that the “permanent nature of the disintegration of protective wetlands” was reasonably foreseeable and well-known to Plaintiffs more than six years before Plaintiffs filed the Complaint. *Id.* at 10; *see also id.* at 8 (citing *Banks v. United States*, 314 F.3d 1304, 1309 (Fed. Cir. 2003) (holding that the “critical element that delay[s] stabilization . . . is the justifiable uncertainty about the permanency of the taking.”)). Moreover, Plaintiffs recognize that the “MR-GO began to impact surrounding wetlands . . . from the time it was constructed. . . . [Thereafter, the] potential harm resulting from government action was not a matter of speculation, but a reality of which Plaintiffs were aware more than six years before filing their Complaint.” *Id.* at 11.

2. Standard Of Review.

The moving party bears the burden on a motion for summary judgment of demonstrating the absence of any genuine issue of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986) (holding that the moving party must meet its burden “by ‘showing’ – that is pointing out to the [trial court] that there is an absence of evidence to support the nonmoving party’s case.”); *see also* RCFC 56. Issues of genuine fact, and all reasonable inferences and presumptions, are to be resolved in favor of plaintiffs. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986); *see also Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587-88 (1986) (“Respondents correctly note that ‘[o]n summary judgment the inferences to be drawn from the underlying facts . . . must be viewed in the light most favorable to the party opposing the motion.’”) (quoting *United States v. Diebold, Inc.*, 369 U.S. 654, 655 (1962)).

On a motion for summary judgment, if there is no genuine issue as to any material fact, the moving party is entitled to judgment as a matter of law. *See Moden v. United States*, 404 F.3d 1335, 1342 (Fed. Cir. 2005) (“Summary judgment is only appropriate if the record shows that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law.”); *see also* RCFC 56(c). Genuine disputes of material facts that might affect the outcome

of the suit will preclude entry of summary judgment. *See Anderson*, 477 U.S. at 247-48 (“As to materiality, the substantive law will identify which facts are material. Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment. Factual disputes that are irrelevant or unnecessary will not be counted. . . . That is, while the materiality determination rests on the substantive law, it is the substantive law’s identification of which facts are critical and which facts are irrelevant that governs.”). The existence of “some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment[.]” *Id.* Therefore, to avoid summary judgment, the nonmoving party must put forth evidence sufficient for a reasonable factfinder to return a verdict for that party. *Id.* at 248-50.

3. Governing Substantive Precedent.

The United States Supreme Court has held that where “real estate is actually invaded by superinduced additions of water . . . so as to effectually destroy or impair its usefulness, it is a taking within the meaning of the Constitution.” *Pumpelly v. Green Bay Co.*, 80 U.S. 166, 181 (1871). Specifically, “[w]here the government by the construction of . . . public works so floods land belonging to an individual as to substantially destroy their value there is a taking within the scope of the Fifth Amendment.” *United States v. Lynah*, 188 U.S. 445, 470 (1903); *see also Nw. La. Fish & Game Pres. Comm’n v. United States*, No. 2005-5039, slip op. at 10 (Fed. Cir. July 31, 2009) (“This court has recognized that Government action with effects outside the [ordinary high-water mark] may amount to a compensable taking.”). The Fifth Amendment Takings Clause also applies to “independently held and controlled property of a state or a local subdivision[.]” *United States v. Carmack*, 329 U.S. 230, 242 (1946).

Where injury from the invasion of “superinduced additions of water” emerges gradually over time, such as “recurrent flooding,” the United States Supreme Court has held that a cause of action for a taking by a “*continuing process of physical events*” does not arise “*until the situation becomes stabilized.*” *United States v. Dickinson*, 331 U.S. 745, 749 (1947) (emphasis added). In that case, the Court explained:

[t]he *source of the entire claim*-the overflow due to rises in the level of the river-is not a single event; *it is continuous*. And as there is nothing in reason, so there is nothing in legal doctrine, to preclude the law from meeting such a process *by postponing suit until the situation becomes stabilized*. An owner of land flooded by the Government would not unnaturally postpone bringing a suit against the Government for the flooding *until the consequences of inundation* have so manifested themselves that a final account may be struck.

When dealing with a problem which arises under such diverse circumstances procedural rigidities should be avoided. All that we are here holding is that when the Government chooses not to condemn land but to bring about a taking by a *continuing*

process of physical events, the owner is not required to resort either to piecemeal or to premature litigation to ascertain the just compensation for what is really ‘taken.’

Id. (emphasis added).

For this reason, the United States Court of Appeals for the Federal Circuit has held that the correct standard for determining the accrual date of such a takings claim is when “all events which fix the government’s alleged liability have occurred,” and “the harmed party knows or should have known of their existence.” *Nw. La. Fish & Game Pres. Comm’n v. United States*, 446 F.3d 1285, 1290 (Fed. Cir. 2006) (“*Nw. La. Fish & Game I*”) (quoting *Boling v. United States*, 220 F.3d 1365, 1370 (Fed. Cir. 2000) (“Stabilization occurs when *it becomes clear that the gradual process set into motion* by the government has effected a permanent taking, not when the process has ceased or when the entire extent of damages is determined.”) (emphasis added)).

4. The Court’s Resolution.

The initial construction of the MR-GO was completed in 1965. Pl. S. J. Ex. 7 (2000 EPA REPORT at 3-14). The Government contends that no “substantive changes” were made to the MR-GO since that time. Gov’t S. J. Mem. at 17; *see also* 5/6/09 TR at 25. In fact, the MR-GO subsequently was enlarged, pursuant to the River and Harbor Act of 1968, Public Law 90-483, to a depth of 36 feet over a bottom width of 250 feet “to and including a turning basin 800 feet square at the north end of the Michoud Canal.” Gov’t S. J. Ex. A (2008 ARMY CORPS REPORT at v). In 1986, the MR-GO bar channel was further enlarged to a 38 foot depth and the bottom width was expanded from 250 feet to 600 feet. *Id.*; *see also* Court Map 2. The remainder of the channel had an authorized depth of 26 feet, with a bottom width of 400-450 feet. Gov’t S. J. Ex. E (2006 WESTERINK NOTE at 2); *but see* Court Map 2 (showing a depth of 500 feet).

The record also evidences that: “Greater than 12,000 acres of the swamps of the [Central Wetlands Unit (“CWS”)], *i.e.*, around Lake Borgne, and north and south of the Bayou La Loutre natural levee ridge], were killed shortly after the opening of MR-GO when the U.S. Army Corps cut through the natural ridge at Bayou La Loutre and allowed saltwater to move up the tidewater channel and into the Central Wetlands Unit.” Pl. Sec. Am. Compl. Ex. 2 (DAY-SHAFFER REPORT at 4). In addition, “[t]ens of thousands of wetland acres were subsequently destroyed by the MR-GO over the succeeding decades leading up to Hurricane Katrina.” *Id.* (emphasis added). Therefore, there were “substantive changes in the MR-GO” after 1965, as well as substantial adverse changes in the environs adjacent to the MR-GO. *Id.* at 4-5; *see also* Court Maps 3, 4.

The Government, however, is correct that the potential adverse effects of the MR-GO were present and known by 1998, at least to St. Bernard Parish. Gov’t S. J. Mem. at 16-17; *see also* Gov’t S. J. Ex. G (1998 COAST 2050 REPORT at 47, 63-65, 89-90); Gov’t S. J. Ex. L (1998 ST. BERNARD PARISH RESOLUTION). Although the effects of the MR-GO had caused prior “flooding in the lower portion of St. Bernard Parish to increase dramatically, prior to 1998,” the primary concern, in December 1998 when the St. Bernard Parish recommended closing the MR-GO, was the potential of “severe flooding in St. Bernard, Orleans, and Plaquemines Parishes.” Gov’t S. J. Ex. L (1998

ST. BERNARD PARISH RESOLUTION at 2) (emphasis added); *see also* Pl. S. J. Ex. 7 (2000 EPA REPORT at 3-14 to 3-15); *see also id.* at 2-1 (“warning of the MR-GO’s potential role in creating an avenue for surge movement during storms[.]”) (emphasis added).

Plaintiffs’ knowledge of the existence of past flooding and the *potential* for severe flooding, however, is only one of the elements of accrual. *See Nw. La. Fish & Game I*, 446 F.3d at 1290. The second element is “when *all events* which fix the government’s alleged liability have occurred.” *Id.* (quoting *Boling*, 200 F.3d at 1370) (emphasis added). To make that determination, the court first must identify “[t]he source of the entire [takings] claim.” *Dickinson*, 331 U.S. at 749 (emphasis added). When the “source” is “not a single event,” suit may be postponed “until the situation becomes stabilized.” *Id.*

In *Nw. La. Fish & Game I*, the Army Corps was alleged to have constructed a project that effected a taking of private property, by limiting the ability of the plaintiff-appellant in that case to draw down the level of Louisiana’s Black Lake to control the growth of vegetation. 446 F.3d at 1286. The source of the entire claim was determined to be the growth of vegetation in Black Lake, rendering the northern part “inaccessible, unmanageable, and virtually useless, resulting in a taking.” *Id.* The United States Court of Appeals for the Federal Circuit held that, “[b]ecause the growth of vegetation was a slow natural process that had not stabilized to cause the taking claim to accrue until at least 1997,” the takings claim alleged under the Tucker Act, 28 U.S.C. § 1491(a)(1), had not accrued. *Id.*

In this case, the record evidences that the north bank of the MR-GO was not “stabilized” in 1998. *See* Gov’t S. J. Ex. G (1998 COAST 2050 REPORT at 88-90). Nor did this situation stabilize thereafter. The Government’s proffered evidence alone estimates that between 1968 and 2006, the surface width of the MR-GO increased up to 15 feet each year. *Id.*; *see also* Pl. S. J. Ex. 7 (2000 EPA REPORT at 3-14 (“Wave wash erodes the [MR-GO] by about 15 feet per year.”)). Moreover, it was not until 2004 that the Army Corps acknowledged the urgency of the situation:

Rapid action is required to protect the integrity of the Southern Lake Borgne shoreline and to prevent continued erosion of the MR-GO channel banks from ocean going vessel wakes. . . . Critical action points [on the MR-GO] . . . face significant risk of losing the integrity of bayou banks . . . [threatening] a potential major breach of the navigational channel into [Lake Borgne.] A breach between the lake and the MR-GO navigation channel would result in rapid wetlands loss as storm waves from the lake and ship wakes from the channel impact sensitive interior wetlands[.]

Pl. S. J. Ex. 8 (2004 ARMY CORPS STUDY at MRGO 31-32)) (emphasis added).

Although the impending closure of the MR-GO will end the destruction of any remaining wetlands by saltwater intrusion, restoration of these wetlands to their pre-1968 condition will take some years. *See* Pl. S. J. Ex. 13 (DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE MISSISSIPPI RIVER-GULF OUTLET, LOUISIANA AND LAKE BORGNE-WETLAND CREATION AND SHORELINE PROTECTION PROJECT (Oct. 2008) at 1-2 (“Without intervention, [‘the problems of wetland loss,

shoreline erosion, saltwater intrusion, and storm surge threats in the MR-GO and Lake Borgne area'] will progressively worsen, especially once the land bridge between Lake Borgne and the MR-GO is eroded away. The [Army Corps] proposes to protect, restore, and increase wetlands in the MR-GO and Lake Borgne area.”)). Protecting this land bridge is “vital to prevent the exposure of the Hurricane Protection System (HPS) levees in Orleans Parish and St. Bernard Parish from the full effects of storm-driven waves and storm surge. . . . [T]he loss of wetland areas does increase storm surge and wave potential at the hurricane protection system[.]” *Id.* at 1-5.

The dissent in *Nw. La. Fish & Game* appropriately cautioned that *Dickinson* should be applied narrowly, *i.e.*, only to “the class of flooding cases . . . when *the landowner must wait* in asserting his claim, until he knows whether the subjection to flooding is so substantial and frequent as to constitute a taking.” 446 F.3d at 1292-93 (Lourie, J., dissenting) (quoting *Kabua v. United States*, 212 Ct. Cl. 160, 546 F.2d 381, 384 (1976) (emphasis added)). Those conditions, however, are present in this case. Since enlargement of the MR-GO was authorized in 1968, there have been only ten reported hurricanes that affected Area I, *i.e.*, Lake Pontchartrain and Vicinity, and Area II, *i.e.*, the Mississippi River Delta below New Orleans. See Court Exhibit D (attached hereto). The MR-GO is the dividing line between Area I and Area II. *Id.* Although Hurricane Camille in 1969 and Hurricane Andrew in 1992 had maximum wind speeds comparable to Hurricane Katrina, neither resulted in storm surge flooding comparable to that experienced during Katrina in 2005. *Id.* Nor did prior storm surges compromise the Army Corps’ flood control structures. *Id.* Therefore, prior to October 17, 1999, Plaintiffs had not experienced “flooding . . . so substantial and frequent as to constitute a taking.” *Nw. La. Fish & Game*, 446 F.3d at 1293; see also Gov’t S. J. Ex. L (1998 ST. BERNARD PARISH RESOLUTION at 3 (“Continuing deterioration of the [MR-GO] and wetland loss has caused flooding in the lower portion of St. Bernard Parish to increase dramatically. . . . *Flooding*, however, is expected in increase.”) (emphasis added)); Tommaseo Dep. at ¶¶ 32, 41, 51 (stating that there was no flooding on his properties prior to 2005); Pl. S. J. Ex. 1 (Bordelon Dep. at 14, 18 (same)); Pl. S. J. Ex. 3 (Adams Decl. at ¶ 5 (no flooding prior to Katrina)); Pl. S. J. Ex. 17 (Robin Decl. at ¶¶ 7-8 (stating that there was no flooding of his properties until 2002)).

The dissent in *Nw. La. Fish & Game* also did not consider the Government’s act of draining of water from Black Clear Creek to be a “gradual taking resulting from continuing flooding, but rather on gradual harm caused by a singular discrete act[.]” 446 F.3d at 1293. Likewise, in this case, the Government contends that the “source of the entire [takings] claim” is the one-time flooding caused primarily by Hurricane Katrina. Gov’t S. J. Reply at 8. This was a major theme of the Government’s oral argument:

GOVERNMENT COUNSEL:

And I think the other point we made there is that under *Dickinson*, you had a gradual but ongoing imperceptible taking of property in which the Plaintiffs had a comparable property interest. Here, *the allegations are not of an ongoing taking*. It’s a one-time, albeit catastrophic event, it’s an ephemeral event. It happened one time, and it's over.

So, we don't have that component of
Dickinson[,]

5/6/09 TR at 38 (emphasis added); *see also id.* at 17 (“The only flooding that we have evidence of in this case on any of these properties, maybe with one small exception, is Hurricane Katrina [August 2005].”).

The record does not support this argument. The ST BERNARD PARISH RESOLUTION complained of pre-December 1998 “flooding in the lower portion of St. Bernard Parish,” but also a concern about “increased flooding.” Gov’t S. J. Ex. L (1998 ST. BERNARD PARISH RESOLUTION at 3). Other public documents reflect that destruction of wetlands from the Government’s construction, operation (expansion), or maintenance (dredging) of the MR-GO was not a “single discrete act” nor was the resulting storm surge. Gov’t S. J. Ex. G (1998 COAST 2050 REPORT at 88, 90); Pl. S. J. Ex. 7 (2000 EPA REPORT at 2-5, 3-13, 3-14); Pl. S. J. Ex. 8 (2004 ARMY CORPS STUDY at MRGO 31); *see also* Pl. Sec. Am. Compl. Ex. 2 (DAY-SHAFFER REPORT at 5-6). Storm surge flooding also has occurred in southeastern Louisiana after Katrina. Court Exhibit E.

Another case of the United States Court of Appeals for the Federal Circuit requires further discussion. In *Goodrich v. United States*, the “source of the entire [takings] claim” was a Forest Service Record of Decision and Final Environmental Impact Statement. 434 F.3d 1329, 1331 (Fed. Cir. 2006). In deciding not to apply the stabilization doctrine in that case, the court explained that the Forest Service:

followed exhaustive statutory and regulatory requirements, including several years of investigations, analysis and involvement of affected parties before reaching its decision[.] It published formal documents providing all affected parties with notice of its decision. . . . [T]he fact that it took the [Government] several years to implement the [proposed action] does not change the nature of the decision. Indeed, the [G]overnment here followed the exact opposite approach compared to *Dickinson*. Moreover, [Plaintiff-Appellant] was extensively involved in each step of the pre-decision process.

Id. at 1334-35 (internal citations omitted).

The *Goodrich* court emphasized that *Dickinson*’s “main concern was the [G]overnment’s failure to provide affected parties with notice of its action. . . . [Accordingly, the United States Supreme] Court explicitly limited its holding to situations where, rather than undertake proper administrative procedures, the [G]overnment ‘bring[s] about a taking by a continuing process of physical events.’” *Id.* at 1334 (citing *Dickinson*, 331 U.S. at 749); *see also Moden*, 404 F.3d at 1342. In this case, the Army Corps did not undertake any condemnation proceedings of Plaintiffs’ properties when the MR-GO was constructed. In fact, in a September 23, 1957 letter, the Secretary of the Department of Interior complained that the Army Corps “had not followed the protocol put forth in the Wildlife Coordination Act of August 14, 1946 (60 Stat. 1080) and requested funds to model potential impacts of the MR-GO (Team Louisiana 2007).” Pl. Sec. Am. Compl. Ex. 2 (DAY-

SHAFFER REPORT at 5). Notably, the Government also did not proffer any evidence that the Army Corps initiated public proceedings when the MR-GO was expanded by Congress or subsequently enlarged by ship use and dredging. Therefore, there is no evidence in the record that Plaintiffs were “intensively involved” in the Army Corps’ construction, operation (expansion), or maintenance (dredging) of the MR-GO, although after Hurricane Katrina they were no doubt supportive of the decision of Congress to close the MR-GO.

For these reasons, the court has determined the stabilization doctrine applies in this case.¹³ The Government is not entitled to summary judgment on statute of limitation grounds.¹⁴

¹³ At oral argument, the court asked Government Counsel when stabilization occurred:

THE COURT: I want to know what your date [of stabilization] is and where the documents are that show that to me.

GOVERNMENT COUNSEL: I don’t think any of them address, quote, when did this project stabilize, because that, until this case, wasn’t even an issue as to stabilization. They didn’t have to address it, and *I don’t think any of the reports have specifically addressed, quote, when did this project stabilize.*

5/6/09 TR at 25-26 (emphasis added).

¹⁴ The court has not addressed Plaintiffs’ alternative argument that, even if the MR-GO stabilized before the statute of limitations accrued, Plaintiffs’ takings claims had not accrued, because of Government efforts to mitigate the effects of the MR-GO. See Pl. S. J. Resp. at 18-25. The United States Court of Appeals for the Federal Circuit in *Applegate v. United States* held that the Government’s “uncertainty [in building a sand transfer plant to mitigate beach erosion caused by “periodic dredging”] . . . stayed accrual of [a takings] claim.” 25 F.3d 1579, 1583 (Fed. Cir. 1994). Accordingly, “the landowners remain justifiably uncertain about the permanency of the erosion and taking.” *Id.* at 1583; see also *Banks v. United States*, 314 F.3d 1304, 1309 (Fed. Cir. 2003) (reaffirming *Applegate*). Because the court has determined that stabilization in this case did not occur prior to October 17, 1999, the court does not need to attempt to reconcile *Applegate* and *Banks* with *John R. Sand & Gravel Co. v. United States*, 128 S. Ct. 750, 753 (2008) (“forbidding a court to consider whether certain equitable considerations warrant extending [the 28 U.S.C. § 2501] limitations period.”).

C. The Government’s Motion To Dismiss For Failure To State A Claim.

1. Parties’ Arguments.

a. The Government’s Argument.

Although the Government’s November 7, 2008 Motion was captioned as one for summary judgment, the Government also asserts that, “[i]t is difficult to glean from the conclusory allegations of the Second Amended Complaint precisely what legal theory [P]laintiffs are asserting. Their claim of a Fifth Amendment Taking seems to be based, not only on past flooding *which will inevitably* reoccur, but on the fear of damage from future storm events.” Gov’t S. J. Mem. at 22. Therefore, the Government characterized the allegations in the Second Amended Complaint as “hypothetical” and concluded that they “cannot form the basis of a valid takings claim.” *Id.* Moreover, the Second Amended Complaint is defective, because it fails to allege that “past or future flooding is inevitably recurring.” *Id.* at 24.

b. Plaintiffs’ Response.

Plaintiffs respond that the Government’s characterization of Plaintiffs’ takings claim as “hypothetical” is refuted “by the [G]overnment’s own citations to the [Second Amended] Complaint.” Pl. S. J. Resp. at 26. For example, in the Government’s November 7, 2008 Motion, paragraph 12 of the Second Amended Complaint is cited as an example of deficient pleading of recurring flooding, although it alleges “massive flooding and the destruction of [P]laintiffs’ property” and that “such inundation has been recurrent and evident since 2002.” *Id.* (quoting Sec. Am. Compl. ¶ 12). In addition, paragraph 9 alleges takings that “are the direct, natural or probable consequence of the MR-GO project” and “repetitive” flooding that now reaches all of St. Bernard Parish and the Lower Ninth Ward. *Id.* (quoting Sec. Am. Compl. ¶ 9). Plaintiffs argue that “this theme of recurring, intermittent flooding permeates the [Second Amended] Complaint.” *Id.* Moreover, the Second Amended Complaint also repeatedly alleges that the construction, operation (expansion), or maintenance (dredging) of the MR-GO has caused *increased* flooding of Plaintiffs’ properties. *Id.* at 26-27 (citing Sec. Am. Compl. ¶¶ 9, 11, 13, 26, 32, 37, 38, 39, 41, 45, 55). Therefore, “because the [Second Amended] Complaint alleges, often *in haec verba*, the very elements that the [G]overnment says it lacks . . . the [G]overnment’s motion not only is wrong, it is wholly unfounded.” *Id.* at 27-28.

c. The Government’s Reply.

The Government replies that Plaintiffs have not put forth sufficient proof to support their claims of a “permanent taking of property,” (Count I) or of a “flowage and drainage” servitude (Count III). Gov’t S. J. Reply at 5-6. The claim of a permanent taking is insufficient as a matter of law, because “Plaintiffs have not offered evidence demonstrating any *causal relationship* between the MR-GO project and the alleged damages to their properties.” *Id.* at 5 (emphasis added). Likewise, the claim of a flowage and drainage servitude over Plaintiffs’ properties cannot survive,

because Plaintiffs have failed to offer adequate evidence that the Government's interference with any property rights was substantial and frequent enough to rise to the level of a taking. *Id.* at 6.

In addition, Plaintiffs have not overcome the two "hurdles" identified in *Moden v. United States*, 404 F.3d 1335 (Fed. Cir. 2005). *Id.* at 7. First, Plaintiffs must demonstrate that the Government intended to invade a protected property interest belonging to Plaintiffs or that the alleged invasion "is the direct, natural, or probable result of an authorized activity." *Moden*, 404 F.3d at 1342. In addition, Plaintiffs must demonstrate that the alleged invasion appropriated a benefit to the United States "at least by preempting [Plaintiffs'] right to enjoy [their property] for an extended period of time[.]" *Id.* Plaintiffs "have not attempted to show that the [G]overnment has appropriated any benefit from flooding of Plaintiffs' properties" or that the "purpose of the MR-GO project" was control of storm surge or that "the alleged flooding of their properties was foreseeable[.]" Gov't S. J. Reply at 7-8. Moreover, "[i]n the present case, the occurrence of natural events . . . such as Hurricanes Katrina and Rita . . . likewise preclude the finding of a taking. *Id.* at 8.

2. Standard Of Review.

On May 18, 2009, the United States Supreme Court issued *Ashcroft v. Iqbal*, 129 S. Ct. 1937 (2009), restating the pleading standard previously discussed in *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007). To survive a Fed. R. Civ. P. 12(b)(6) motion to dismiss, a complaint must "state a claim to relief that is plausible on its face," *i.e.*, sufficient factual content must be pled on which a court may "draw the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 129 S. Ct. at 1949 (citing *Twombly*, 550 U.S. at 556). The Court explained that the plausibility standard "asks for more than a sheer possibility that the defendant acted unlawfully." *Id.* "Plausibility of 'entitlement to relief'" requires more than pleading facts that are "merely consistent with" a defendant's liability. *Id.* (quoting *Twombly*, 550 U.S. at 557).

In *Iqbal*, the Court discussed, in detail, the "two working principles" of *Twombly's* heightened pleading requirements. First, although factual allegations alleged must be accepted true, the trial court is "not bound to accept as a true legal conclusion couched as a factual allegation." *Id.* (citing *Twombly*, 550 U.S. at 555). Accordingly, the Court advised trial courts to begin their analysis "by identifying allegations [of law] in the complaint that are not entitled to the assumption of truth." *Id.* at 1951. If the legal allegations are "conclusory in nature," they are not entitled to the presumption of truth. *Id.* Second, to survive a Fed. R. Civ. P. 12(b)(6) motion to dismiss a complaint also must state a "plausible claim for relief." *Id.* at 1950 (citing *Twombly*, 550 U.S. at 556). Here, factual allegations are examined to determine "if they plausibly suggest an entitlement to relief." *Id.* at 1951.

3. The Court's Resolution.

The Government's November 7, 2008 Motion For Summary Judgment avers that the Second Amended Complaint should be dismissed, because Plaintiffs' "Fifth Amendment Takings claim seems to be based, not on past flooding which will inevitably recur but, on the fear of damage from

future storm events.” Gov’t S. J. Mem. at 22; *see also id.* at 23-25. Although the Government couches this argument as a RCFC 12(b)(6)¹⁵ or 12(c)¹⁶ motion, the Government actually is arguing the *merits* as to whether Plaintiffs proffered sufficient evidence to establish causation. Gov’t S. J. Mem. at 23 n.10 (“Plaintiffs appear to claim that they face an increased risk of flooding from a loss of the protective wetlands. To prove such a *claim of causation*, they would need to provide specific factual proof that identified the wetland that provide flood protection for their properties, that [the] MR-GO caused the loss of those wetlands, and that the loss of those wetlands in fact will cause recurring flooding.”) (emphasis added).

The Government insists that the United States Court of Appeals for the Federal Circuit’s decision in *Cary v. United States*, 552 F.3d 1373 (Fed. Cir. 2009) requires dismissal of the Second Amended Complaint. Gov’t S. J. Reply at 6-8. In that case, plaintiffs-appellants alleged that the Forest Service’s management policies, allowing fires to run their natural course under certain conditions, assumed the risk that Plaintiff’s land would be taken in the event of a fire “originating in the Cleveland National Forest (California) . . . spread outside its boundaries.” *Cary*, 552 F.3d at 1375. The Government moved for judgment on the pleadings, “because the landowners failed to allege facts that the Forest Service management policies . . . effected a compensable taking of their property for public use under the Fifth Amendment.” *Id.* at 1376. The United States Court of Appeals for the Federal Circuit held that “the landowners must first show that the [G]overnment intended to invade a protected property interest. . . [and] the landowners must plausibly show that the consumption of their property by fire was the likely foreseeable result of Forest Service action.” *Id.* at 1377.

In this case, the Army Corps failed in 1957 to comply with the Fish and Wildlife Coordination Act of 1946. *See Robinson Ex. PX0161*. More importantly, other public documents subsequently expressed concern about and objected to, the continued operation (expansion) and maintenance (dredging) of the MR-GO. Sec. Am. Compl. Ex 2 (DAY-SHAFFER REPORT at 5-6); Gov’t S. J. Ex. G (1998 COAST 2050 REPORT at 88, 90); Gov’t S. J. Ex. L (1998 ST. BERNARD PARISH RESOLUTION); Pl. S. J. Ex. 7 (2000 EPA REPORT at 2-5, 3-13, 3-14); Pl. S. J. Ex. 8 (2004 ARMY CORPS STUDY at MRGO 31). The most probative evidence of intent, however, is the November 2004 Army Corps Study warning:

[c]ritical action points [on the MR-GO] . . . face significant risk of losing the integrity of bayou banks [threatening] a potential major breach of the navigational

¹⁵ Rule 12(b)(6) of the Rules of the United States Court of Federal Claims provides that: “Every defense to a claim for relief in any pleading must be asserted in the responsive pleading if one is required. But a party may assert the following defenses by motion: . . . (6) failure to state a claim upon which relief can be granted[.]” RCFC 12(b)(6).

¹⁶ Rule 12(c) of the Rules of the United States Court of Federal Claims provides that: “After the pleadings are closed - but early enough not to delay trial - a party may move for judgment on the pleadings.” RCFC 12(c).

channel into . . . [Lake Borgne] . . . [that will result] in rapid wetlands loss as strong waves from the [L]ake and ship wakes from the channel [MR-GO] impact sensitive interior wetlands[.]

Pl. S. J. Ex. 8 (2004 Army Corps Study at MRGO 3). As is evident from the Government's oral argument exhibit, Plaintiffs' properties are adjacent to those wetlands. *See* Court Map 8. Nevertheless, the Army Corps continued to operate (expand) and maintain (dredge) the MR-GO, as the Second Amended Complaint alleges. Sec. Am. Compl. ¶¶ 47, 54-56. Therefore, the Second Amended Complaint and record developed to date has alleged sufficient facts to establish plausibility that the Government acted with disregard of the consequences to Plaintiffs' properties, from which the court may infer the Government's intent "to invade a protected property interest." *Cary*, 552 F.3d at 1377; *see also Hughes v. State of Washington*, 389 U.S. 290, 298 (1967) (Stewart, J., concurring) ("But the Constitution measures a taking of property not by what a State says, or by what it intends, but by what it does."); *Yuba Goldfields, Inc. v. United States*, 723 F.2d 884, 889 (Fed. Cir. 1983) ("What counts [in a takings case] is what the government *did*.") (emphasis in original).¹⁷

In the alternative, the United States Court of Appeals for the Federal Circuit, however, has required that "[f]oreseeability and causation are separate elements that must both be shown (when intent is not alleged). . . . For an injury to be a compensable taking, the court must determine that no break in the chain of causation existed between the suspected government authorized action and the injury." *Cary*, 552 F.3d at 1379-80. But, the *Cary* court distinguished between an intervening cause created by a man-made fire from flooding cases "where the landowners' property was inundated, even though sporadically, [so that] the government was found to have acquired a flowage easement from the runoff created by its alternation of the area's storm drainage." 552 F.3d at 1380. That court further distinguished between floods that "visit once and then recede" from flooding where "the water stays on the property indefinitely or predictably returns[.]" *Id.* at 1381. In this case, the Second Amended Complaint and the record developed to date establish plausibility of the later claim. *Iqbal*, 129 S. Ct. at 1949.

Plaintiffs, however, must still establish causation in fact following the completion of discovery, either on summary judgment or following trial. *Ridge Line, Inc. v. United States*, 346 F.3d 1346, 1355 (Fed. Cir. 2003); *see also St. Bernard Parish I*, 75 Fed. Cl. at 804 (citing *Moden*, 404 F.3d at 1341-45 (*Ridge Line* inquiry conducted after jurisdictional issues were adjudicated)); *Ridge Line*, 346 F.3d at 1355-59 (inquiry on remand after trial); *Banks v. United States*, 69 Fed. Cl. 206, 212-14 (2006) (inquiry conducted on summary judgment). Therefore, the Government's substantive argument on the merits of causation is premature. *Robinson v. United States*, 2009 WL

¹⁷ On January 31, 2008, the court granted Plaintiffs' Motion To File A Second Amended Complaint. *Cary*, however, was not issued until January 16, 2009. Therefore, to the extent the Second Amended Complaint did not specifically plead specific intent, the interests of justice require that Plaintiffs have the opportunity again to amend their Complaint, following the completion of discovery.

1033783 *6 (E.D. La., April 15, 2009) (also denying Government motion for summary judgment as to “whether the MR-GO was a substantial factor in bringing about the catastrophic flooding at issue in this case.”).

Finally, the Second Amended Complaint states a “[p]lausibility of ‘entitlement to relief,’” because the pleading and exhibits proffered to date, evidence severe flooding in 2005 and intermittent reoccurring flooding. *Compare Twombly*, 550 U.S. at 557 with Sec. Am. Compl. ¶¶ 54-56; *see also e.g.*, Pl. Ex. 2 (2/6/09 DiFatta Decl. ¶¶ 2-6); Pl. Ex. 17 (2/9/08 Robin Decl. ¶¶ 8-11). The issue of whether damages are owned each Plaintiff and, if so, the appropriate amount of “just compensation” awaits the completion of discovery and further adjudication.

For these reasons, the Government’s November 7, 2008 Motion To Dismiss the Second Amended Complaint, pursuant to RCFC 12(b)(6), is denied.

IV. CONCLUSION.

For the reasons discussed herein:

the November 30, 2007 Second Amended Complaint and attached Exhibits have established that Plaintiffs have standing to pursue Count I and Count III, therein; and

that portion of Paragraph 48 of Count I of the Second Amended Complaint that pertains to “lost benefits” and “profits” of Plaintiffs’ “commercial ventures” is dismissed; and

the Government’s November 7, 2008 Motion For Summary Judgment is denied, without prejudice, to be reasserted following the completion of causation discovery, as required by *Ridge Line, Inc. v. United States*, 346 F.3d 1346 (Fed. Cir. 2003); and

the Government’s November 7, 2008 Motion To Dismiss, pursuant to RCFC 12(b)(6), for failure to state a claim upon which relief can be granted is denied.

In addition, this case is stayed, pending adjudication of claims before the Honorable Stanwood R. Duval, Jr., pursuant to the Federal Torts Claims Act, 28 U.S.C. § 2671, *et seq.*, in *Robinson v. United States*, C.A. No. 06-2268 (E.D. La.). Following the issuance of a decision on the merits and final judgment in that case, the court will contact the parties in this case to schedule a status conference to determine a schedule for further proceedings in this case.

IT IS SO ORDERED.

s/ Susan G. Braden
SUSAN G. BRADEN
Judge

COURT APPENDIX A

The Government's November 7, 2008 Summary Judgment Exhibits

- Gov't S. J. Exhibit A U.S. Army Corps of Engineers, New Orleans District, *Integrated Final Report to Congress and Legislative Environmental Impact Statement for the Mississippi River - Gulf Outlet Deep Draft De-authorization Study*, Vol. 1 (as revised June 2008).
- Gov't S. J. Exhibit B Greater New Orleans Community Data Center, *New Orleans Elevation by Neighborhood with Major Roads*, http://www.gnocdc.org/maps/pdfs/neworleans_elevation.pdf (last visited June 30, 2009) (labels for MRGO and Lake Borgne added).
- Gov't S. J. Exhibit C U.S. Army Corps of Engineers, *MR-GO Closure Moves Forward*, Press Release, Nov. 3, 2008, <http://www.mvn.usace.army.mil/news/view.asp?ID=92> (last visited June 30, 2009).
- Gov't S. J. Exhibit D Richard D. Knabb et al., *Tropical Cyclone Report: Hurricane Katrina 23-30 August 2005* (Dec. 20, 2005) (without Tables).
- Gov't S. J. Exhibit E Joannes Westerink et al., *Note on the Influence of the Mississippi River Gulf Outlet on Hurricane Induced Storm Surge in New Orleans and Vicinity* (Feb. 21, 2006).
- Gov't S. J. Exhibit F State of Louisiana, Department of Natural Resources, *The Direct Impact of the MR-GO on Hurricane Storm Surge* (Feb. 2006).
- Gov't S. J. Exhibit G Louisiana Coastal Wetlands Conservation and Restoration Task Force & Wetlands Conservation and Restoration Authority, *Coast 2050: Toward a Sustainable Coastal Louisiana* (1998).
- Gov't S. J. Exhibit H Deposition of Edward Robin, Sr. (June 13, 2007) (excerpts).
- Gov't S. J. Exhibit I Declaration of Louis D. Britsch III (Nov. 7, 2008).
- Gov't S. J. Exhibit J Federal Emergency Management Agency, *Louisiana Hurricane Katrina Surge Inundation and Advisory Base Flood Elevation Map Panel Index: St. Bernard Parish* (June 2006).
- Gov't S. J. Exhibit K Deposition of Tommoso G. Tommaseo (Aug. 28, 2007) (excerpts).
- Gov't S. J. Exhibit L Resolution to Close the Mississippi River Gulf Outlet, Res. SBPC# 1336-12-98 (Dec. 15, 1998).

COURT APPENDIX B

Plaintiffs' February 9, 2009 Response to Summary Judgment Exhibits

Pl. S. J. Exhibit 1	August 29, 2007, Deposition of Steven Bordelon.
Pl. S. J. Exhibit 2	February 6, 2009, Declaration of Joseph Difatta.
Pl. S. J. Exhibit 3	February 6, 2009, Declaration of Gwendolyn Adams.
Pl. S. J. Exhibit 4	February 9, 2009, Declaration of Michael Weitzer, Esq.
Pl. S. J. Exhibit 5	February 26, 2007, Testimony of John Paul Woodley, Jr., Assistant Secretary, Department of Army, before the Senate Committee on Environment and Public Works.
Pl. S. J. Exhibit 6	<i>Coastal Restoration Division Annual Project Review</i> , Louisiana Department of Natural Resources, Coastal Restoration Division, Restoration Technology Section (December 2001).
Pl. S. J. Exhibit 7	<i>Status Report: Comprehensive Plan For The Timely Modification of The Mississippi River Gulf Outlet</i> , Prepared for U.S. Environmental Protection Agency, Region 6 (October 20, 2000).
Pl. S. J. Exhibit 8	<i>Louisiana Coastal Area, Ecosystem Restoration Study</i> , U.S. Army Corps of Engineers, New Orleans District (November 2004).
Pl. S. J. Exhibit 9	<i>Lake Borgne - Mississippi River Gulf Outlet Shoreline Protection (PO-32), Final Design Report</i> , U.S. Army Corps of Engineers, New Orleans District (December 2004).
Pl. S. J. Exhibit 10	Intent to Prepare Draft Environmental Impact Statement for the Mississippi River-Gulf Outlet, Louisiana, Navigation Project - Bank Stabilization, 71 FED. REG. 74,490 (December 12, 2006).
Pl. S. J. Exhibit 11	<i>Draft Executive Summary of the Mississippi River Deep Draft De-Authorization Final Report to Congress</i> (May 2007).
Pl. S. J. Exhibit 12	U.S. Army Corps of Engineers, New Orleans District, Part One - <i>Integrated Final Report to Congress and Legislative Environmental Impact Statement for the Mississippi River-Gulf Outlet Deep Draft De-Authorization Study</i> , (Nov. 2007).

- Pl. S. J. Exhibit 13 U.S. Army Corps of Engineers, New Orleans District, Draft Environmental Impact Statement for the Mississippi River-Gulf Outlet (MR-GO) Louisiana and Lake Borgne - Wetland Creation and Shoreline Protection Project (October 2008).
- Pl. S. J. Exhibit 14 Congressional Research Service Report for Congress, *Mississippi River Gulf Outlet (MR-GO) Issues for Congress* (August 4, 2006).
- Pl. S. J. Exhibit 15 73 FED. REG. 57340.
- Pl. S. J. Exhibit 16 “MR-GO Blamed For Levee Failures-Scientist Says Channel Exacerbated Flooding” (Dec. 19, 2008).
- Pl. S. J. Exhibit 17 February 9, 2009, Declaration of Brad Robin.

Plaintiffs’ January 31, 2008 Second Amended Complaint Exhibits

- Pl. Sec. Am. Compl. Exhibit 1 Pub. L. No. 84-455 (March 29, 1956).
- Pl. Sec. Am. Compl. Exhibit 2 Professor John W. Day Jr. and Professor Gary P. Schaffer, *Effects of the Mississippi-River Gulf Outlet on Coastal Wetlands in Southeastern Louisiana*, Expert Report Prepared for Plaintiffs in *Robinson v. United States*, C.A. No. 06-2268 (E.D. La.) (Sept. 15, 2007).
- Pl. Sec. Am. Compl. Exhibit 3-148 Louisiana Property Records.
- Pl. Sec. Am. Compl. Exhibit 149 State of Louisiana Division of Administrative Office of Community Development - The Road Home Program Grant Agreement Homeowners-Grant No. 061HH121313 (partial form).

Plaintiffs’ November 2, 2006 Response to Motion to Dismiss Exhibits

- Pl. 11/2/06 Exhibit 1 August 16, 2006 Declaration of Dr. G. Paul Kemp, Associate Research Professor, School of the Coast and Environment, Louisiana State University.
- Pl. 11/2/06 Exhibit 2 “Close the Mississippi River Gulf Outlet Now!” <http://www.ccmrgo.org>.

Plaintiffs' February 21, 2007 Supplemental Response to Motion to Dismiss Exhibit

Pl. 2/21/07 Supp. Exhibit Ivor L. van Herden, G. Paul Kemp, Wes Shrum, Ezra Boyd and Hassan Mashriqui, "*Initial Assessment of the New Orleans' Flooding Event During the Passage of Hurricane Katrina.*"

COURT APPENDIX C

The court has attached the following eight maps, obtained from the public domain or provided by the parties, to provide visual content and context of issues discussed in the Memorandum Opinion And Order.

Court Map 1 - 1998 Map of St. Bernard Parish

This map shows the Intracoastal Waterway (“ICWW”), also known as the Gulf Intracoastal Waterway (“GIWW”), that extends east to west from Orleans Parish, adjacent to the northernmost part of Lake Borgne. This map also shows the entire length of the MR-GO from the northern intersection with the ICWW, southeast adjacent to Lake Borgne to Shell Beach past the Bayou La Loutre Ridge, (eliminated during the construction of the MR-GO), toward Breton Sound and the Gulf of Mexico. Mid-way along the MR-GO’s path along Lake Borgne and directly south lies Plaquemines Parish.

Court Map 2 - Pl. S. J. Ex. 12 at iv

The importance of this map is that it shows the initial depths of the MR-GO and that the deepest end is connected to Breton Sound / Gulf of Mexico. This was the source of the salt water that damaged the wetlands and marsh to the northeast.

Court Map 3 - 2009 Google Map

This map shows, from a larger perspective, the ICWW and its connection to the MR-GO. In addition to showing the relationship between these two man-made navigational waterways, this map shows their proximity to Lake Borgne, Lake Pontchartrain, and New Orleans. This map also shows the presence of the southern portion of the Mississippi River, left of center, running from New Orleans south past Port Sulfur to the Gulf of Mexico. Between the Mississippi River east and northeast to the MR-GO lie numerous lakes, rivers, and bayous.

Court Map 4 - 2009 Yahoo! Map

This map is a “close-up” of Court Map 3. The primary difference is that the “close up” more accurately differentiates land mass from wetland/marsh areas. This map shows the vulnerability of land to saltwater intrusion from the Gulf of Mexico.

Court Map 5 - Pl. S. J. Ex. 8 at Figure 1

This map shows the mile markers of the MR-GO from its connection with the GIWW down to Breton Sound/Gulf of Mexico. It also shows the nexus of the MR-GO with the Inner Harbor Navigational Canal. The slightly shaded (darker) areas represent land mass and water areas appear much lighter or white. Unfortunately, differentiation between land mass and water is difficult to discern.

Court Map 6 – Gov’t S. J. Ex. A at iv, Figure 2-1

This map shows the interconnection between Lake Pontchartrain, via the Inner Harbor Canal, the GIWW, and the MR-GO, as extended to Breton Sound. The proximity of Lake Borgne and the Mississippi River are evident. Although it is not labeled, the GIWW is evident.

Court Map 7 – Pl. S. J. Ex. 7 at Figure 2-1

This map provides an aerial view that shows the seamless interconnection between the MR-GO, GIWW, and Inner Harbor Canal. Remaining marsh and wetlands adjacent to the MR-GO, the GIWW, and adjacent populated areas are shown. Orleans Parish and St. Bernard Parish are marked.

Court Map 8 – Gov’t Oral Argument Exhibit (Revised April 29, 2009)

This map shows Plaintiffs’ properties in yellow. The property in the Lower Ninth Ward, at issue in this case, is located at the junction of the GIWW and the Inner Harbor Canal. Properties located in St. Bernard Parish are in two clusters: one along the Mississippi River and the MR-GO and a second near Shell Beach.

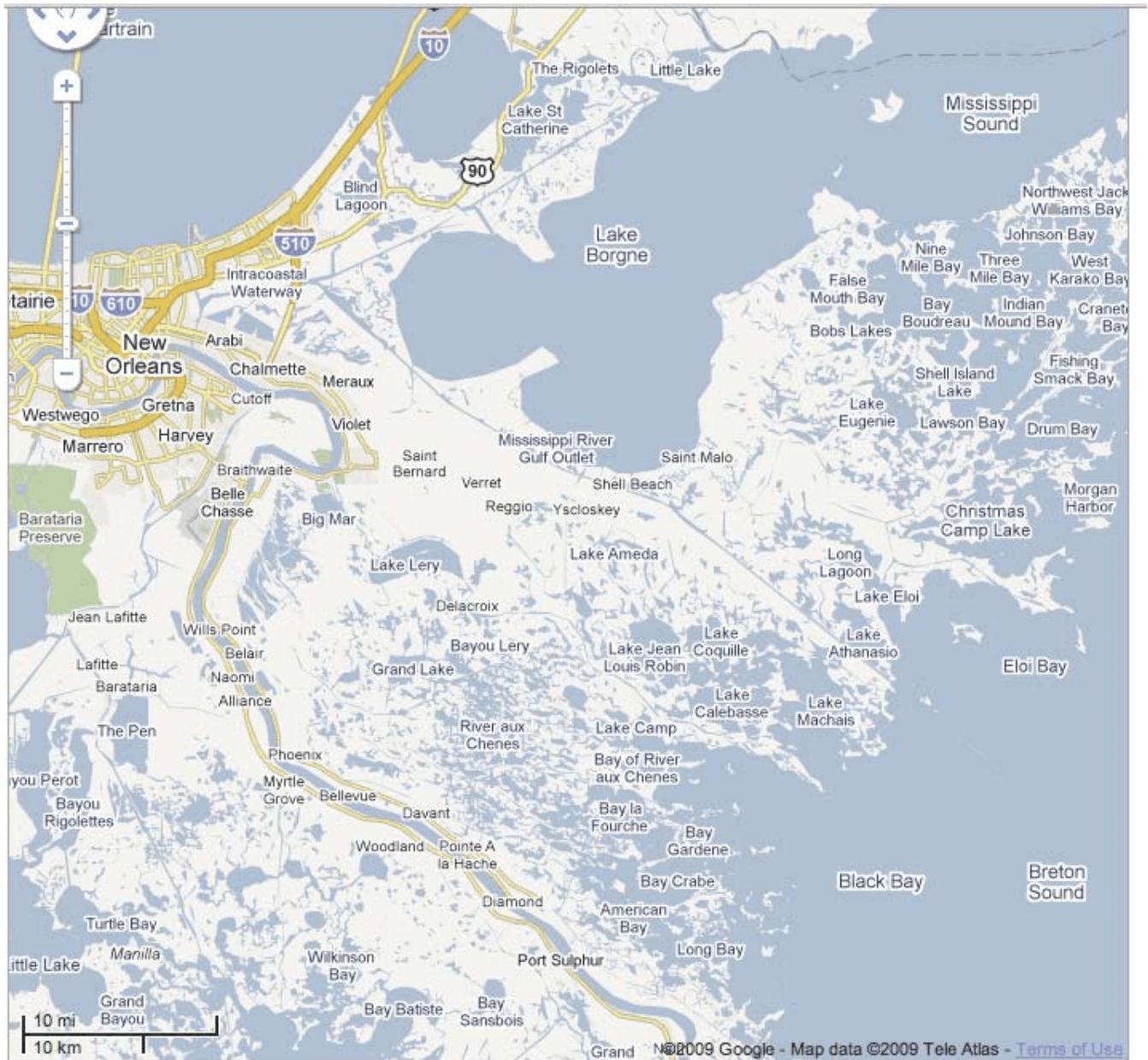
COURT MAP 1



COURT MAP 2



COURT MAP 3

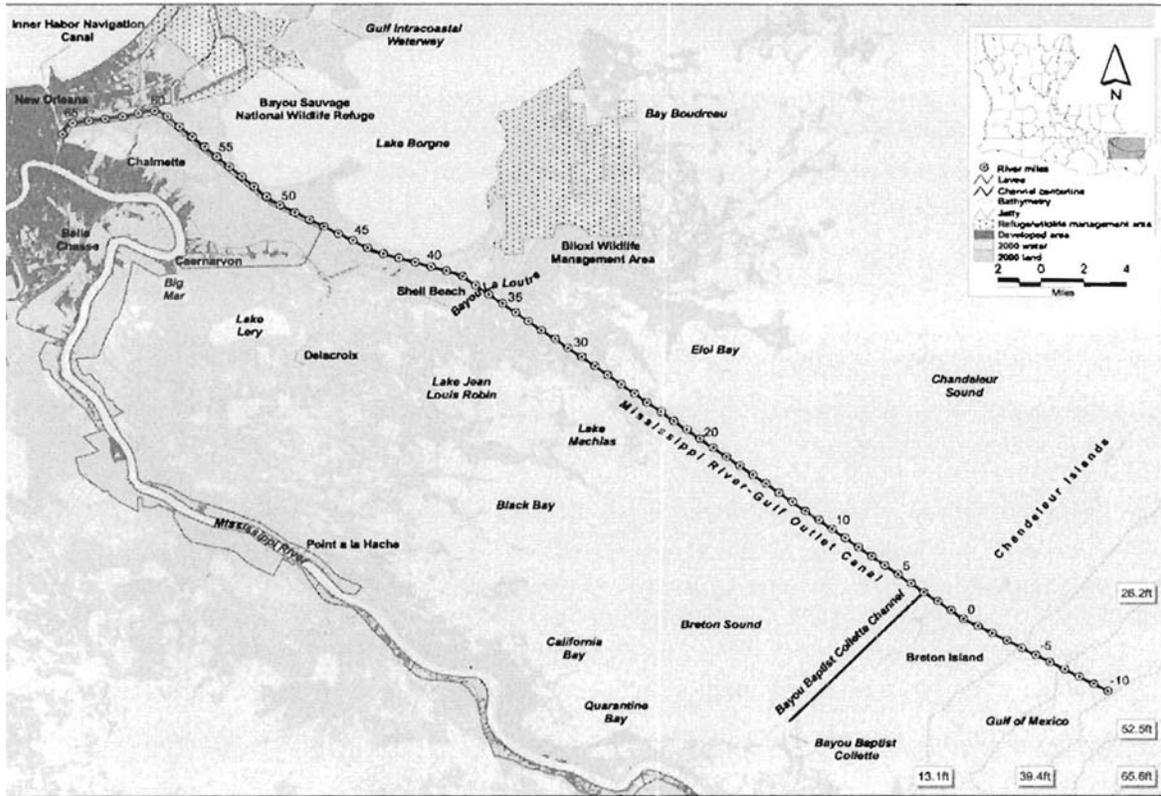


COURT MAP 4



When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

COURT MAP 5



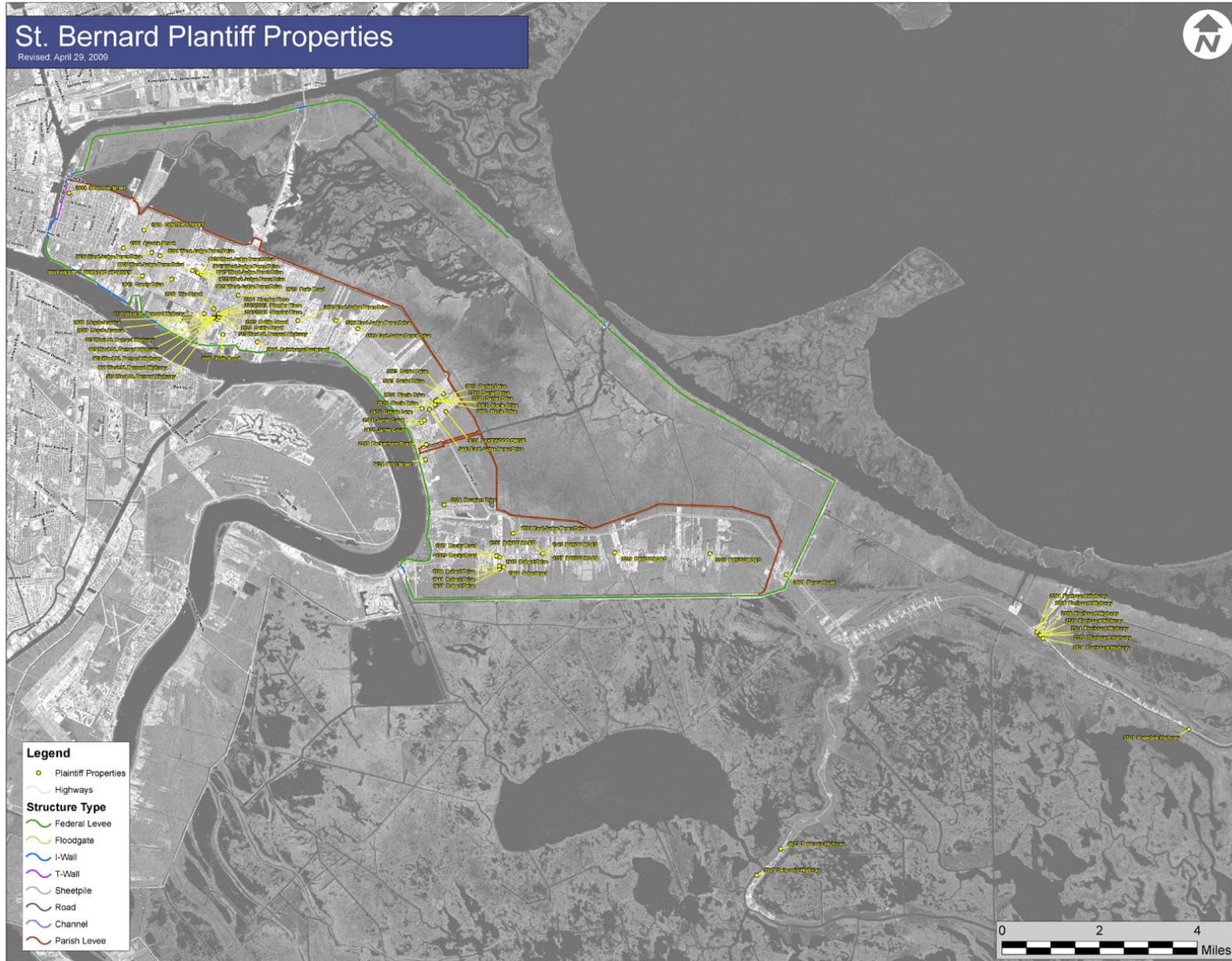
COURT MAP 6



COURT MAP 7



COURT MAP 8



COURT APPENDIX D

Hurricanes 1968-2005
Area I - Lake Pontchartrain and Vicinity
Area II - Mississippi River Delta below New Orleans

Date	Hurricane	Type of Damage	Maximum Sustained Wind Speed	Relevant Storm Surge Data
August 14-18, 1969	Camille	Major	160 mph (est.)	In Lake Borgne - Lake Pontchartrain 8.0-11.1 ft; Ysclosky 8.0 ft; Shell Beach 11.1 ft; MR-GO at Paris Road 9.7 ft; Inner Harbor Navigational Canal at Florida Ave. 9.8 ft.*
July 9-26, 1979	Bob	Minor	58 mph	No serious flooding in Louisiana*
July 11, 1988	Florence	Minor	160 mph	
August 16-28, 1992	Andrew	Major	150-185 mph	Moderate storm surge along the Louisiana coast eroded hundreds of acres of barrier island, uprooted and destroyed thousands of acres of marsh. No Corps of Engineers flood control project was overtopped by the storm surge.*
September 27-October 6, 1995	Opal	Minor	130mph	5.09 ft. NVGD on the MR-GO at Shell Beach*
September 15-October 1, 1998	Georges	Minor	105-155 mph	9.1 ft NGVD at IWW near Paris Road; 6.6 ft at MR-GO Outlet at Shell Beach*
September 14-27, 2002	Isidorre	Minor	125 mph	5.61 ft NGVD at Rigolets near Lake Pontchartrain; 6/0 ft NGVD at Lake Pontchartrain at West end*
September 21-October 4, 2002	Lili	Minor	145-150 mph	6.04 ft NGVD at Rigolets near Lake Pontchartrain*
July 3-7, 2005	Cindy	Minor	70-75 mph	Storm surge 4-6 ft above normal tide levels along coasts of southwestern Louisiana.*
August 23-30, 2005	Katrina	Major	100-175 mph	Storm surge exceeded 18 ft along the southeast Louisiana coast, overtopping and breaching protection levees and flooding New Orleans Metropolitan area (22,500 acres New Orleans East Bank), New Orleans East (18,000 acres), and virtually all of Plaquemines (37,888 acres) and St. Bernard Parishes (19,000 acres). (Some of the estimated higher water elevations . . . associated with the storm were 13.5 ft at the Inner Harbor Navigational Canal Lock . . . 18.7 ft at Shell Beach . . . 10.9 ft in St. Bernard Parish near the courthouse.)*; <i>see also</i> Gov't S. J. Ex. E (2006 WESTERINK NOTE at 1).

*U.S. ARMY CORPS OF ENGINEERS, 2006 LOUISIANA COASTAL PROTECTION AND RESTORATION: PRELIMINARY TECHNICAL REPORT TO UNITED STATES CONGRESS (July 2006), Enclosure B (History of Hurricane Occurrences) at B-4, available at <http://lacpr.usace.army.mil/PreliminaryReport%20Preliminary%20Technical%20Report%20to%20United%20States%20Congress.pdf>. Hurricane Rita (September 18-26, 2005) is not listed, although it was a major hurricane, it did not affect Areas I or II. *Id.* B-6.

COURT APPENDIX E

**Hurricanes 2006-2008
(affecting Louisiana)**

Date	Hurricane	Type of Damage	Maximum Sustained Wind Speed	Relevant Storm Surge Data
August 25-September 4, 2008	Gustav		155 mph [†]	Widespread storm surge along the northern Gulf coast; above normal tides reported from the Florida Panhandle to the upper Texas coast, including Lake Ponchartrain. Surges of 12-13' along Louisiana coast in the Mississippi Delta of southeast of New Orleans; surges of 9-10' in other portions of Louisiana. Storm surge overtopped the levees and floodwalls in a few parts of the New Orleans metropolitan area, but did not cause widespread inundation of city and suburbs.**
September 1-14, 2008	Ike	Significant storm surge and wave damage	116 mph ^{†Δ}	Maximum storm surge along coasts of Alabama, Mississippi, and southeastern Louisiana in 3 - 6 ft range. Concave orientation of coastline in this region caused the highest surge values along the coast of the Mississippi and Louisiana east of the Mississippi River, including the New Orleans and Lake Ponchartrain area. Surge of 7.51 ft. at Shell Beach “was higher than that recorded within most of the neighboring region.”***

[†] Based on conversion that 1 kt = 1.15077945 mph

^Δ With offshore wind speeds reaching 125 mph

** John L. Beven II & Todd B. Kimberlain, National Hurricane Center, TROPICAL CYCLONE REPORT: HURRICANE GUSTAV at 4, 11 (Jan. 22, 2009), available at <http://www.nhc.noaa.gov/2008atlan.shtml>.

*** Robbie Berg, National Hurricane Center, TROPICAL CYCLONE REPORT: HURRICANE IKE at 6, 19, 36 (January 23, 2009), available at <http://www.nhc.noaa.gov/2008atlan.shtml>.