

## Financing the Future

### **Turning Coastal Restoration and Protection Plans into Realities: How Much Is Currently Funded?**

Second in an Occasional Series

An Issue Paper of the Tulane Institute on Water Resources Law and Policy<sup>1</sup>

#### Summary

- Recapping [Financing the Future, Turning Restoration and Protection Plans into Realities: The Cost of Comprehensive Coastal Restoration and Protection \(August 18, 2014\)](#), the cost to restore and protect coastal Louisiana will significantly exceed the \$50 billion set forth in the 2012 Coastal Master Plan. But the benefits of those actions will also exceed the projected benefits set forth in the 2012 Coastal Master Plan.
- From FY 2016 to 2018, annual revenue projections to implement the 2012 Coastal Master Plan average only \$574.7 million, meaning greater investment will be needed to fully fund the 2012 Coastal Master Plan.
- From FY 2012 to 2018, annually recurring revenues for 2012 Coastal Master Plan projects total roughly \$386.67 million, or 8.61% of the total revenue in the annual budgets.
- Restoration dollars from offshore oil and gas revenues will likely increase significantly in fiscal year (FY) 2018<sup>2</sup> from the Gulf of Mexico Energy Security Act (GOMESA); however, that revenue is capped at an annual amount of \$500 million, with 37.5% of that total to be divided between the four producing Gulf States and their political subdivisions, meaning that Louisiana's share will always be less, even substantially less, than \$375 million per year. This funding is not guaranteed, however, and there have been periodic legislative and administrative efforts to reduce or eliminate GOMESA funding.
- The *Deepwater Horizon* oil spill fines, penalties, and settlements will provide an influx of cash for restoration and protection efforts in the short and mid-terms; however, they will not plug the funding gap. BP has agreed to settle claims related to the oil spill. Under the terms of the agreement, Louisiana stands to receive just under \$6.8 billion.

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<sup>2</sup> In Louisiana, the fiscal year begins in the middle (July 1) of the preceding calendar year (e.g. FY 2016 is July 1, 2015, to June 30, 2016).

- The federal assistance that Orleans, Jefferson, and St. Tammany Parishes are receiving for internal drainage infrastructure will not likely be extended to other coastal Parishes, given the increasing infrastructure needs across the country and decreased overall funding for such projects.
- The operation and maintenance costs for flood risk reduction infrastructure, which is largely supported by local millages, will continue to rise as more segments of the flood risk reduction system are completed.

## **Introduction**

The existential threats of sinking lands, rising seas, and more intense flood events facing coastal Louisiana have been well documented and recognized as matters of local, state, and national importance.<sup>3</sup> In response, all levels of government and the private sector have shown support, in one way or another, for finding and implementing solutions. Consensus has amassed around a “multiple lines of defense”<sup>4</sup> approach that integrates wetlands restoration with structural (i.e. public infrastructure projects like levees) and nonstructural (i.e. risk reduction measures implemented on an individual property scale) flood protection. The question now is how to finance these multiple lines of defense.

Louisiana’s 2012 Comprehensive Master Plan for a Sustainable Coast (the “2012 Coastal Master Plan”) embraces the multiple lines of defense approach, or as the state terms it “integrated coastal protection.”<sup>5</sup> While certainly the most robust plan for protecting and restoring the coast and its communities to date, the scope of the 2012 Coastal Master Plan is limited by the state and federal funding reasonably expected over the course of its fifty year implementation period. At its core, the 2012 Coastal Master Plan is a prioritization of projects that are expected to have the most impact on coastal communities and the natural environment, given a limited supply of funds.<sup>6</sup>

While the 2012 Coastal Master Plan is a good start it cannot, and will not, fix everything. Furthermore, it openly and explicitly excludes from its scope several vital responsibilities related to the sustainability of the coast and its communities. These exclusions include navigation channel bank maintenance, Mississippi River Gulf Outlet (MRGO) ecosystem restoration, the operation, maintenance, and rehabilitation of certain flood risk reduction

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<sup>3</sup> Louisiana’s Coastal Protection and Restoration Authority. Louisiana’s Comprehensive Master Plan for a Sustainable Coast, 20 (2012). Available at [issuu.com/coastalmasterplan/docs/coastal\\_master\\_plan-v2?e=3722998/2447530](https://issuu.com/coastalmasterplan/docs/coastal_master_plan-v2?e=3722998/2447530).

<sup>4</sup> John Lopez et al., Comprehensive Recommendations Supporting the Use of the Multiple Lines of Defense Strategy to Sustain Coastal Louisiana (2008). Available at <http://www.saveourlake.org/PDF-documents/MLODSreportFINAL-12-7-08with-comments.pdf>.

<sup>5</sup> LA. REV. STAT. § 49:214.2(11).

<sup>6</sup> The Louisiana Coastal Protection and Restoration Authority and its partners will not attempt to recreate the coast of the twentieth century; rather, they will strive to “fashion a new landscape that will support viable natural and human communities into the future.” See 2012 Coastal Master Plan, 36. With \$50 billion in 2010 constant dollars over the next fifty years, or about \$91.7 billion when adjusted for future inflation, curbing coastal land loss and reducing risk to communities is possible. If the budget is doubled, more projects in the 2012 Coastal Master Plan would be implemented, creating a net land gain by 2041 and continuing to build on or sustain this progress beyond 2061.

infrastructure, and rainwater (and related subsidence) management within polders.<sup>7</sup> Undertaking these additional responsibilities will require resources beyond those called for in the 2012 Coastal Master Plan.

The degree to which these multiple lines of defense are implemented largely depends on civic and political will and funding. The general challenge of getting and keeping civic and political will is beyond the scope of this paper. The reality, however, is that funding decisions are reflections of that will, and that needs to be kept very much in mind. With a total price tag upwards of \$100 billion over fifty years, a better understanding of the funding currently available must be developed. This white paper aims to help that development by first looking at the funding and spending pursuant to the 2012 Coastal Master Plan and then looking into the funding and spending for those responsibilities outside the 2012 Coastal Master Plan.

## **2012 Coastal Master Plan – Available Funds**

The Louisiana Coastal Protection and Restoration Authority (“LACPRA”) grounded the scope of the 2012 Coastal Master Plan on current and future revenues that have “a good chance of coming to the state from various state and federal sources between now and 2061.”<sup>8</sup> The LACPRA estimated this revenue to be between \$20 and \$50 billion (in 2010 constant dollars), meaning the annual implementation budget between 2012 and 2061 will range between \$400 million and \$1 billion.<sup>9</sup> The LACPRA chose \$50 billion as the minimum fifty-year budget because any less would be insufficient to curb land loss and protect communities.<sup>10</sup> Despite this recognition, the 2012 Coastal Master Plan labels the \$50 billion budget as a “high funding level,” as compared to the “low funding level” of \$20 billion,<sup>11</sup> signaling the uncertainty of the LACPRA’s ability to secure \$50 billion for the 2012 Coastal Master Plan.

As explained in the first installment of this series, even \$1 billion in yearly revenue will be too little to maintain coastal lands in their current state. Certainly, infusions of cash in the wake of disasters – like the federal dollars that flowed to the region after Hurricanes Katrina and Rita, and the private dollars expected as a result of the 2010 *Deepwater Horizon* oil spill – catalyze the implementation of vital coastal restoration and protection projects. Such windfalls, however, are not going to be the panacea that some initially thought. Furthermore, the fact that implementing the 2012 Coastal Master Plan depends to a significant degree on dollars generated by disasters is a major caution flag. Calamity is not a viable financing tool.

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<sup>7</sup> The 2012 Coastal Master Plan, on page 93, excludes funding for “MRGO Ecosystem Restoration, federal levees, and navigation channel maintenance.” We would like to correct our misinterpretation of this statement in our first report. The 2012 Coastal Master Plan uses “federal levees” to mean those levees that are part of the Mississippi River and Tributaries (MRT) project, which is indeed wholly constructed and rehabilitated by the federal government. Routine operations and maintenance of the MRT, however, is the responsibility of the local entities. See 33 U.S.C. 702(c). The 2012 Coastal Master Plan budget includes operations and maintenance in the cost estimates for its recommended projects. The method for calculating these estimates are discussed below.

<sup>8</sup> 2012 Coastal Master Plan, 93.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> 2012 Coastal Master Plan, Appendix B, B-15.

## What the Annual Plans Tell Us, and What They Do Not

The \$50 billion budget is split into three planning periods: \$26 billion in the first twenty years, \$15 billion in the next twenty years, and \$9 billion in the last ten years.<sup>12</sup> Underscoring the urgency for action, this is a front-heavy spending plan with an average of \$1.3 billion (in 2010 constant dollars) per year between 2012 and 2032.

Since the 2012 Coastal Master Plan does not detail the various sources of funding it identifies, an understanding of the Plan's financial footing starts with the LACPRA's annual plans.<sup>13</sup> In addition to the submission of an updated Master Plan every five years, the LACPRA is required to develop and submit to the legislature an annual coastal protection plan.<sup>14</sup> Constituting the short-term analogue to the fifty-year Master Plan, each annual plan must "include at least a three-year projection of funding available for projects and programs related to integrated coastal protection, including but not limited to relevant public or private funding sources."<sup>15</sup>

In the years since the 2012 Coastal Master Plan was published, the LACPRA has yet to bring in enough revenue in any year to meet its mark of \$1.3 billion in either 2010 nominal or real dollars.<sup>16</sup> Looking at just the first year's revenue projection in each of the annual plans from FY 2012-2016 (therefore, excluding the revenue projections for the subsequent two years in each annual plan), the average annual revenue is \$729.62 million.<sup>17</sup> If we look at each annual plan's projected three-year revenues from FY 2012-2016, the average total for each three year period is only \$1.476 billion, which breaks down into average annual revenue of just \$492.1 million.<sup>18</sup> In either case, the average annual revenue is well short of the \$1.3 billion expenditure mark.

Factoring in an annual inflation rate of 2.3 percent,<sup>19</sup> the purchasing power of the LACPRA's revenues will diminish over the course of the 2012 Coastal Master Plan's fifty-year implementation period. This reduction is, in part, the result of the most significant revenue streams not increasing with inflation. Revenue-sharing through GOMESA has a hard-number cap that is not indexed to the inflation rate.<sup>20</sup> The same is true for Clean Water Act fines resulting from the *Deepwater Horizon* oil spill.<sup>21</sup>

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<sup>12</sup> *Id.*

<sup>13</sup> This report relies on cost estimates used in the annual plans. The methodology used to set those cost estimates is not clear and we offer no opinion on their completion or accuracy.

<sup>14</sup> LA. REV. STAT. § 49: 214.5.3.

<sup>15</sup> LA. REV. STAT. § 49: 214.5.3(A)(2).

<sup>16</sup> The closest was the FY 2013 Annual Plan, which projected revenue of \$923,140,959 in 2013.

<sup>17</sup>  $\{FY\ 2012\ (\$395M) + FY\ 2013\ (\$923.14M) + FY\ 2014\ (\$721.05M) + FY\ 2015\ (\$725.48M) + FY\ 2016\ (\$883.46M)\}/5 = \$729.62M.$

<sup>18</sup>  $\{FY\ 2012-2014\ (\$848.35M) + FY\ 2013-2015\ (\$1,602.54M) + FY\ 2014-2016\ (\$1,577.47M) + FY\ 2015-2017\ (\$1,629.03M) + FY\ 2016-2018\ (\$1,724.11M)\}/5 = \$1,476.3M; \$1,476.3M/3 = \$492.1M.$

<sup>19</sup> 2.3% is the average rate for the period 2005-2014. See Bureau of Labor Statistics, CPI Detailed Report, Data for January 2015, 94. Available online at <http://www.bls.gov/cpi/cpid1501.pdf>.

<sup>20</sup> Pub. Law 109-432 §105(f).

<sup>21</sup> To be clear, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. §2461 note), EPA periodically adjusts civil penalty schedules to keep up with increases in cost of living and thereby maintain the degree of deterrence. Civil monetary penalties were most recently adjusted for inflation at the end of 2013; however, the schedule attaches to the date of violation (28 U.S.C. 2461 note, §4). The previous schedule,

The lack of overall revenue generation to date and inflation’s impact on this revenue should be disconcerting; the dearth of *recurring* revenue sources, however, may be of greater concern. Only three of the fifteen sources are recurring - GOMESA, DOTD interagency transfers, and statutory dedications of state revenues from mineral exploration and production to the Coastal Protection and Restoration (CPR) Trust Fund.<sup>22</sup> The revenues from these three sources compose only 8.61 percent of the total projected revenues from FY 2012-2018.<sup>23</sup> The balance is comprised of funding identified as one-time sources; however, we will break this down into “quasi-recurring” revenue and truly one-time sources.

## Recurring Sources

Reliable streams of recurring revenue allow government entities to look beyond the current budget cycle when planning capital projects. Recurring revenue can also be leveraged to meet debt service obligations for the bonding of coastal protection and restoration projects. With the addition of GOMESA Phase II receipts, FY 2018 recurring revenue sources dedicated to Louisiana coastal restoration – GOMESA, CPR Trust Fund Annual Revenue, and DOTD Interagency Transfers – are projected to total only \$172.4 million.<sup>24</sup> Assuming future GOMESA revenues and DOTD Interagency Transfers continue at the projected FY 2018 amounts and future CPR Trust Fund Annual Revenues equal the average from FY 2012-2016 through 2061, these revenue streams will have funded roughly \$7.91 billion of the 2012 Coastal Master Plan, or 8.62 percent of the inflation-adjusted \$91.693 billion total implementation budget.<sup>25</sup>

### **Gulf of Mexico Energy Security Act of 2006 (GOMESA)**

GOMESA is a federal law that mandates the sharing of revenues from Outer Continental Shelf (OCS) mineral leases with the four oil and gas producing Gulf Coast States and their coastal

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therefore, is applied to penalties related to the *Deepwater Horizon* spill (40 C.F.R. 19.4). While interest begins to accrue on the date of the entry of a judgment in district court until the judgment is paid (see 28 U.S.C. 1961(a)), inflation will not be factored post judgment.

<sup>22</sup> FY 2012 Annual Plan, ix; FY 2013 Annual Plan, 7; FY 2014 Annual Plan, 5; FY 2015 Annual Plan, 5; FY 2016 Annual Plan, 3.

<sup>23</sup>

	2012	2013	2014	2015	2016	2017	2018	2012-2018
GOMESA	\$ 222,725	\$ 222,725	\$ 80,775	\$ 80,775	\$ 80,775	\$ 80,775	\$ 140,000,000	\$ 140,768,550
DOTD	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 28,000,000
CPR	\$ 32,622,357	\$ 33,971,465	\$ 34,277,097	\$ 33,131,175	\$ 27,600,000	\$ 27,900,000	\$ 28,400,000	\$ 217,902,094
<b>Total Recurring Revenue</b>	\$ 36,845,082	\$ 38,194,190	\$ 38,357,872	\$ 37,211,950	\$ 31,680,775	\$ 31,980,775	\$ 172,400,000	\$ 386,670,644
<b>Total Revenue</b>	\$ 395,033,609	\$ 923,140,959	\$ 721,049,753	\$ 725,480,021	\$ 883,463,278	\$ 428,010,350	\$ 412,635,983	\$ 4,488,813,953
<b>Recurring revenue as percentage of total</b>	9.33%	4.14%	5.32%	5.13%	3.59%	7.47%	41.78%	8.61%

Source: FY2012-2016 Annual Plans.

<sup>24</sup> FY 2016 Annual Plan, 3.

<sup>25</sup> GOMESA (\$140,768,550 + \$140,000,000\*43) + DOTD Transfers (\$4,000,000\*50) + CPR Trust Fund (\$217,092,094/7\*50) = \$7,911,426,364. For inflation adjustment of total implementation budget, see Appendix A.

political subdivisions.<sup>26</sup> The Gulf producing states and their political subdivisions must use revenues from GOMESA for one or more of the following purposes:

(A) Projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses. (B) Mitigation of damage to fish, wildlife, or natural resources. (C) Implementation of a federally-approved marine, coastal, or comprehensive conservation management plan; [or] (D) Mitigation of the impact of outer Continental Shelf activities through the funding of onshore infrastructure projects.<sup>27</sup>

To demonstrate its intent to use GOMESA revenues for coastal restoration and protection, Louisiana amended its constitution to require that these revenues be deposited in the CPR Trust Fund to be “used only for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly impacted by coastal wetland losses.”<sup>28</sup> The state further requires that “[i]n each year, no more than ten percent of the federal revenues received by the state generated from Outer Continental Shelf oil and gas activity be used for the purposes of infrastructure directly impacted by coastal wetlands losses.”<sup>29</sup>

GOMESA was broken down into Phase I and Phase II, which apply to different offshore mineral leases and play by different rules. Phase I allows for unlimited sharing of OCS royalties from certain leases. However, the Bureau of Ocean Energy Management (BOEM) expects little development over the first ten years of the Coastal Master Plan. BOEM projects a limited amount of revenue from the Phase I area, and consequently will have little to share with the four Gulf States. Louisiana expects to receive \$80,775 from GOMESA each year through 2017.<sup>30</sup>

Phase II revenue sharing begins in FY 2017. Under GOMESA, Phase II revenues are shared 50 percent, with 37.5 percent going to the four Gulf States and up to 12.5 percent going to the Land and Water Conservation Fund (LWCF).<sup>31</sup> The amount of GOMESA Phase II funds all states and the LWCF can receive is capped at \$500 million per year.<sup>32</sup> BOEM personnel expect Phase II revenues to exceed the amount necessary to reach the cap.<sup>33</sup> Between Phase I and II revenues, Louisiana expects to receive approximately \$140 million a year from GOMESA starting in FY

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<sup>26</sup> Gulf of Mexico Energy Security Act of 2006, 43 U.S.C. § 1331. Available online at <http://www.boem.gov/Oil-and-Gas-Energy-Program/Energy-Economics/econ/GOMESA-pdf.aspx>.

<sup>27</sup> *Id.* at (d).

<sup>28</sup> LA. CONST. ART. 7, § 10.2.

<sup>29</sup> LA. REV. STAT. § 49:214.4.5.4(E)(3).

<sup>30</sup> FY 2014 Annual Plan, 5; FY 2015 Annual Plan, 5; FY 2016 Annual Plan, 3.

<sup>31</sup> On September 30, 2015, Congress allowed the Land and Water Conservation Fund to expire. Congress could reauthorize the fund in the future, but that’s far from guaranteed. It is unclear where the 12.5% will go in the absence of the LWCF. U.S. Department of Interior, Statement from Secretary Jewell on the Expiration of the Land and Water Conservation Fund. Available online at <https://www.doi.gov/pressreleases/statement-secretary-jewell-expiration-land-and-water-conservation-fund>.

<sup>32</sup> 30 C.F.R. § 519.412 (2011).

<sup>33</sup> The BOEM analysis was obtained on November 26, 2012 from the office of U.S. Senator David Vitter and confirmed with BOEM on July 10, 2014 via email.

2018,<sup>34</sup> plus an additional \$35 million annually to be shared between nineteen of Louisiana's coastal parishes.<sup>35</sup>

Generally speaking, federally authorized and funded public works projects require that a non-federal cost-share be provided by the non-federal project sponsor, which is usually a state or political subdivision. GOMESA is silent, however, as to whether the revenues it directs to the four Gulf States and their political subdivisions constitute federal funding for purposes of cost-sharing requirements for such projects. Elaborating on this statutory silence in its final rule on GOMESA Phase I, the Minerals Management Service ("MMS"), a predecessor of BOEM, stated that "it appears that GOMESA funds may be used to meet a certain Federal program's recipient matching requirement depending on whether or not that specific Federal program's statutory language or guidelines specifically excludes Federal funds from being used by the recipient as matching funds."<sup>36</sup>

If MMS's interpretation is correct, then GOMESA revenues cannot legally be used as the non-federal match for Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) projects, as CWPPRA states that "[t]he matching moneys required of a coastal State to carry out a coastal wetlands conservation project shall be derived from a non-Federal source."<sup>37</sup> However, for water resources studies or projects authorized under the Water Resources Development Act (WRDA) of 2007, the non-federal project sponsor may be able to use GOMESA revenues to satisfy the non-federal share of the total project cost.<sup>38</sup> Projects authorized under WRDA 2007 include Morganza to the Gulf and the Louisiana Coastal Area program.<sup>39</sup>

Notwithstanding the foregoing, the final word on the use of GOMESA Phase II dollars remains an open point. The Department of the Interior is currently finalizing a rule regulating the distribution and disbursement of Phase II revenues.<sup>40</sup> Of note, these proposed rules make no mention of whether revenues can be used as the non-federal match.<sup>41</sup>

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<sup>34</sup> FY 2016 Annual Plan, 3.

<sup>35</sup> If royalties meet or exceed the cap, which Bureau of Energy Management officials and the LACPRA project, Louisiana can expect to receive approximately \$174 million each year. However, Louisiana must share 20 percent of the amounts it receives with nineteen coastal parishes. Thus, starting in FY 2018, Louisiana should begin receiving approximately \$139.2 million a year from GOMESA Phase II plus a continuation of revenues from Phase I leases.

<sup>36</sup> Minerals Management Service, Interior Allocation and Disbursement of Royalties, Rentals, and Bonuses – Oil and Gas, Offshore, 73 Fed. Reg. 78622 (December 23, 2008) (to be codified at 30 C.F.R. pt. 219). Available online at [http://www.boem.gov/uploadedFiles/BOEM/Oil\\_and\\_Gas\\_Energy\\_Program/Energy\\_Economics/Revenue\\_Sharing/AD46\\_FR78622.pdf](http://www.boem.gov/uploadedFiles/BOEM/Oil_and_Gas_Energy_Program/Energy_Economics/Revenue_Sharing/AD46_FR78622.pdf).

<sup>37</sup> 16 U.S.C. § 3954(d)(2).

<sup>38</sup> 33 U.S.C. § 2222.

<sup>39</sup> Water Resources Development Act of 2007, PL 110–114, 121 Stat 1041.

<sup>40</sup> Minerals Management Service, Interior Allocation and Disbursement of Royalties, Rentals, and Bonuses – Oil and Gas, Offshore, 97 Fed. Reg. 17948 (proposed March 31, 2014) (to be codified at 30 C.F.R. pt. 519). Available online at [http://www.onrr.gov/Laws\\_R\\_D/FRNotices/PDFDocs/17948.pdf](http://www.onrr.gov/Laws_R_D/FRNotices/PDFDocs/17948.pdf).

<sup>41</sup> Id.



While GOMESA is an important component of the coastal restoration financial plan, its capacity is limited. The Phase II leases are capped between 2016 and 2055 at a total of \$500 million per year, which must then be apportioned to the four producing Gulf Coast States and their political subdivisions.<sup>42</sup> This cap is not indexed to the inflation rate, so the purchasing power of Phase II revenues will decrease with inflation. By 2027, the purchasing power of the \$139 million received in 2017 will decline by twenty percent to \$111 million.

The GOMESA funding stream is further limited by several uncertainties. The impact of GOMESA is dependent on the continued dominance of oil and gas as an energy resource worldwide, but the volatility of the global oil and gas market. The increasing market-share of renewable forms of energy threatens GOMESA's full potential over the mid and long-terms. Even in the short-term, there is cause for concern. A recent oil lease auction in the western Gulf garnered little interest from bidders: "The drop in lease sales today is a clear indicator of unprofitable crude oil prices," Don Briggs, president of Louisiana Oil & Gas Association, said in an issued statement. "As prices are in the \$40 range today, the interest to invest dollars in the Gulf of Mexico is clearly not as appealing as a year ago."<sup>43</sup>

Another threat to GOMESA is legislative. The former U.S. Senator from Louisiana, Mary Landrieu, was the bill's co-sponsor and a major reason for the bill becoming law. Since Landrieu's departure from the Senate in 2014, the Obama administration has proposed to redirect funds from GOMESA to nation-wide programs.<sup>44</sup> While redirecting or repealing GOMESA would require major political capital, the threat exists. Louisiana's lack of control over GOMESA and the oil and gas market has effectively prevented the state from securitizing the future revenues, which is permitted under state law.<sup>45</sup>

### **Coastal Protection and Restoration (CPR) Trust Fund Annual Revenue**

Originally created in 1989 as the Wetlands Conservation and Restoration Fund and restricted to wetland restoration,<sup>46</sup> the Louisiana CPR Trust Fund exists now to "provide a dedicated, recurring source of revenues for the development and implementation of a program to protect and restore Louisiana's coastal area."<sup>47</sup> The CPR Trust Fund is subject to appropriations by the legislature only for the purposes of integrated coastal protection<sup>48</sup> - such as "hurricane protection or coastal conservation or restoration, and shall include but not be limited to coastal restoration; coastal protection; infrastructure; storm damage reduction; flood control; water resources development; erosion control measures; marsh management; diversions; saltwater intrusion prevention; wetlands and central wetlands conservation, enhancement, and

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<sup>42</sup> Gulf of Mexico Security Act, 120 Stat. 3001 § 105(f)(1) (Dec. 20, 2006), available at [www.boem.gov/Oil-and-Gas-Energy-Program/Energy-Economics/econ/GOMESA-pdf.aspx](http://www.boem.gov/Oil-and-Gas-Energy-Program/Energy-Economics/econ/GOMESA-pdf.aspx).

<sup>43</sup> Ken Stickney, *Gulf of Mexico Oil, Lease Sale Draws Little Interest*, The Advertiser (Aug. 19, 2015), <http://www.theadvertiser.com/story/money/business/2015/08/19/gulf-mexico-oil-lease-sale-draws-little-interest/32019449/>.

<sup>44</sup> Department of Interior Legislative Proposals and Offsetting Collections, DH-61. Available online at <http://www.doi.gov/budget/appropriations/2016/highlights/upload/DH061.pdf>.

<sup>45</sup> LA. ACT 249 (2007 Regular Session).

<sup>46</sup> 1989, La. 2nd Ex. Sess., No. 24, §1, approved Oct. 7, 1989.

<sup>47</sup> LA. CONST ART. VII § 10.2.

<sup>48</sup> LA. REV. STAT. § 49:214.5.4(G).



restoration; barrier island and shoreline stabilization and preservation; coastal passes stabilization and restoration; mitigation; storm surge reduction; or beneficial use projects.”<sup>49</sup>

CPR Trust Fund Annual Revenue refers to annual dedications of revenues from mineral exploration and production that the CPR Trust Fund has received since its creation in 1983.<sup>50</sup> These mineral revenues include severance taxes, royalty payments, bonus payments, and rentals.<sup>51</sup> Each year, after allocations to the Bond Security and Redemption Fund, political subdivisions, and the Education Quality Trust Fund, a minimum of \$5 million from mineral exploration and production must be allocated to the CPR Trust Fund.<sup>52</sup>

Importantly, the balance of these mineral revenues in the CPR Trust Fund (note: exclusive of GOMESA revenues) cannot exceed \$500 million.<sup>53</sup> The balance is defined as those dollars not expended or obligated under an annual plan or otherwise obligated in accordance with law.<sup>54</sup> This \$500 million cap set by the state legislature is actually the minimum allowable cap for such revenues under the Constitutional provision creating the CPR Trust Fund.<sup>55</sup>

Not all deposits to the CPR Trust Fund are included in the “CPR Trust Fund Annual Revenue” line-item in the LACPRA’s annual plans. As mentioned above, the state constitutionally dedicated revenues from GOMESA to the CPR Trust Fund. The state also dedicated any reimbursement it receives for costs incurred responding to the *Deepwater Horizon* oil spill, as well as civil penalties it receives from parties liable for the spill for violations under the federal Clean Water Act and certain state laws.<sup>56</sup> Finally, if the state ever securitizes the revenues received from the Master Tobacco Settlement Agreement (i.e. sells bonds that will be serviced by future settlement payments) in order to increase the liquidity of its assets, 20 percent of the revenues received from that securitization will be deposited in the CPR Trust Fund.<sup>57</sup> These three different types of deposits – sourced from GOMESA, *Deepwater Horizon*, and the Master Tobacco Settlement Agreement – are not included in the CPR Trust Fund Annual Revenue figures found in the annual plans.

According to the annual plans from FY 2012 to 2015, this yearly revenue stream for the Coastal Protection and Restoration Fund was expected to remain relatively steady, fluctuating minimally from \$32.6 to \$34.3 million per year.<sup>58</sup> The 2016 annual plan, however, adjusted these numbers down to an average of \$28 million from FY 2016 to 2018.<sup>59</sup>

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<sup>49</sup> LA. REV. STAT. § 49:214.2(11).

<sup>50</sup> LA. REV. STAT. § 49:214.5.4.

<sup>51</sup> LA. REV. STAT. § 49:214.5.4(B).

<sup>52</sup> LA. CONST. ART. VII § 10.2(B)(1).

<sup>53</sup> LA. REV. STAT. § 49:214.5.4(F).

<sup>54</sup> LA. REV. STAT. § 49:214.5.4(H).

<sup>55</sup> LA. CONST. ART. VII § 10.2(C).

<sup>56</sup> LA. REV. STAT. § 49:214.5.4.

<sup>57</sup> LA. CONST. ART. VII § 10.2.

<sup>58</sup> FY 2012-2015 Annual Plans.

<sup>59</sup> FY 2016 Annual Plan.

## **Interagency Transfers**

In an effort to improve coordination after the devastating hurricanes of 2005, the state legislature reassigned all of the duties and responsibilities of other state agencies related to coastal protection and restoration to the LACPR. <sup>60</sup> The \$4 million annual interagency transfers from the Louisiana Department of Transportation and Development to the LACPR <sup>61</sup> constitute a funding reallocation mechanism corresponding to the transfer of responsibilities. This paper does not address the extent to which these transfers will continue into the future.

## **Quasi-Recurring Sources**

### **Coastal Wetlands Planning, Protection & Restoration Act (CWPPRA)**

Championed by former Senators John Breaux and J. Bennett Johnston in 1990, Congress enacted CWPPRA to identify, prepare, and fund wetlands enhancement projects. <sup>62</sup> Transferred from the Highway Trust Fund to the Sport Fish Restoration and Boating Safety Trust Fund, small engine fuel taxes support CWPPRA's competitive matching grant program. <sup>63</sup> CWPPRA, as it applies to Louisiana, requires a 15% non-federal cost share. <sup>64</sup> Since 1990, 151 CWPPRA projects have been authorized in Louisiana, benefitting over 110,000 acres of Louisiana wetlands. <sup>65</sup> CWPPRA was reauthorized through 2019; <sup>66</sup> however, the Sport Fish Restoration and Boating Safety Trust Fund has, in recent years, been funded through annual Continuing Resolutions. A more secure financial position for CWPPRA will seemingly wait for the next federal transportation bill.

Louisiana has generally received \$30-\$80 million annually for restoration projects, but the funding structure of the program frustrates multi-year planning for projects, raising their cost and effectively limiting CWPPRA's scope. The 2016 Annual Plan is the first annual plan to project both the states expenditures under CWPPRA *and* the anticipated federal match. The 2016 Annual Plan projects an annual average of \$74.24 million in federal CWPPRA revenue and an annual average \$15.66 million in state matching funds for 2016-2018. <sup>67</sup> Assuming these amounts remain steady through 2061, and adding it to the total state expenditures from 2012-2015, the CWPPRA funding (state and federal) will total \$4.215 billion. <sup>68</sup>

### **Coastal Impact Assistance Program**

The Coastal Impact Assistance Program (CIAP) is another quasi-recurring source of funding. Funded with royalties set aside from federal off-shore mineral leases during the years 2007-

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<sup>60</sup> ACT 604 of 2012 Regular Session, §6-7. Available online at <http://www.legis.la.gov/legis/ViewDocument.aspx?d=811731&n=HB916%20Act>.

<sup>61</sup> FY 2012-2016 Annual Plans.

<sup>62</sup> Coastal Wetlands Planning, Protection & Restoration Act, Pub. Law 101-646, Title III.

<sup>63</sup> CWPPRA Legislative History. Available online at [http://lacoast.gov/new/Data/cwppra\\_compiled-legislation.pdf](http://lacoast.gov/new/Data/cwppra_compiled-legislation.pdf).

<sup>64</sup> The cost sharing responsibility for Louisiana was originally 25% but was dropped to 15% following the completion of a federally approved Wetlands Conservation Plan. See 16 U.S.C. 3952(f)(2).

<sup>65</sup> "About CWPPRA," by the Managing Agencies. Available online at <http://lacoast.gov/new/About/>.

<sup>66</sup> Public Law 108-447, Division D, Title X, Section 114, dated Dec. 8, 2004.

<sup>67</sup> FY 2016 Annual Plan, 3.

<sup>68</sup> \$19.838 M (FY 2012) + \$21.176 M (FY 2013) + \$20.770 M (FY 2014) + \$18.374 M (FY 2015) + ((\$74.24 M + \$ 15.66 M)\*46).

2010, CIAP helps states and their coastal political subdivisions conserve, protect, and restore coastal areas that have been impacted by oil and gas production.<sup>69</sup> These federal grants do not require a non-federal cost-share<sup>70</sup> and are allocated amongst six oil and gas producing states bordering the Outer Continental Shelf proportionally, according to their geographic and population size and proximity to the revenue generating leases.<sup>71</sup> Through CIAP, the State of Louisiana and coastal political subdivisions received nearly \$500 million over the four years that ended in 2010, which roughly matches the total combined allocations to the other five states and their political subdivisions in the program.<sup>72</sup> To date, all of Louisiana's CIAP funds have been awarded for the implementation of 99 projects.<sup>73</sup> All CIAP dollars are expected to be spent by the end of FY 2017.<sup>74</sup>

## **Significant One-Time Sources of Funds**

### **Surplus '07, '08, '09**

The State of Louisiana experienced a budget surplus during the period 2007-2009, and it dedicated \$790 million of this surplus for coastal restoration projects.<sup>75</sup> These funds provided a vital shot in the arm to the coastal protection and restoration campaign.

The portrayal of these funds in the annual plans, however, illuminates the opaqueness of the plans and the figures portrayed within. Adding together the first year revenue projections across the annual plans from FY 2012-2016 (i.e. FY 2012 from the 2012 Annual Plan, FY 2013 from the 2013 Annual Plan, etc.), revenue from the surplus totals \$1.35 billion.<sup>76</sup> Since we know that the total amount dedicated was \$790 million, revenues reported in one year are being rolled over into the following year. While there is a logical explanation – the revenues are intended to match actual spending and sometimes projects get delayed – this “double counting” is important to recognize, as it demonstrates the limitations of using the annual plans as a proxy for revenues and expenditures. It perhaps also demonstrates the need for a separate set of figures representing actual revenues and expenditures from previous year's budgets as a basis of comparison to the current budget and a measure of actual progress on the ground.

Regardless of how these surplus dollars have been portrayed in the annual plans, they provided a much needed boost in funding. The surplus dollars, however, are projected to be fully spent by the end of FY 2018.<sup>77</sup> With the state recently struggling to fill a \$1.6 billion budget deficit, the prospect of future surpluses (much less surpluses dedicated to coastal restoration) anytime soon cannot be viewed as realistic.

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<sup>69</sup> 43 U.S.C. § 1356(a).

<sup>70</sup> “Coastal Impact Assistance Program – Overview,” Wildlife & Sport Fish Restoration Program of the U.S. Fish & Wildlife Service. Available online at <http://wsfrprograms.fws.gov/Subpages/GrantPrograms/CIAP/CIAP.htm>.

<sup>71</sup> 43 U.S.C. § 1356a(b).

<sup>72</sup> FY 2016 Annual Plan, 34.

<sup>73</sup> Id.

<sup>74</sup> Id at 3.

<sup>75</sup> FY 2014 Annual Plan, 61.

<sup>76</sup> \$161.565M (FY 2012) + 361.795M (FY 2013) + \$319.283M (FY 2014) + \$291.733M (FY 2015) + \$218,204 (FY 2016) = \$1,352,580M.

<sup>77</sup> FY 2016 Annual Plan, 57.

### **Deepwater Horizon Oil Spill Fines**

It was widely hoped that the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act)<sup>78</sup> would divert enough *Deepwater Horizon* oil spill fines and penalties to Louisiana to sufficiently fill the gaps in the coastal restoration and protection budget. To be sure, the criminal and civil fines assessed against the responsible parties will provide billions of dollars of funding for restoration and protection projects, but it will not be enough.

In January and February of 2013, the U.S. Justice Department entered into criminal plea agreements with BP and Transocean Deepwater, Inc. for \$4 billion and \$400 million, respectively. \$1.272 billion of the funds, which are administered by the National Fish and Wildlife Foundation (NFWF), are dedicated to barrier island restoration and/or river diversions projects in Louisiana.<sup>79</sup> The payment schedules for BP and Transocean Deepwater Inc. cover a period of five years from the date of the settlements. Transocean also settled its civil penalties in 2013 for \$1 billion;<sup>80</sup> Louisiana will receive \$143 million of this total through the RESTORE Act.<sup>81</sup>

On October 5, 2015, the Department of Justice released a proposed consent decree between BP, the federal government, and the five Gulf States to settle payment of economic and environmental damages from the *Deepwater Horizon* oil spill. The total settlement amount is \$20.8 billion, to be paid out over a fifteen year period.<sup>82</sup> \$5.5 billion will be paid to the United States to resolve Clean Water Act civil penalties.<sup>83</sup> \$8.1 billion will be paid to the Gulf States directly to resolve natural resource damages; this includes nearly \$1 billion already paid.<sup>84</sup> BP has also agreed to set aside up to an additional \$700 million paid out in the last five years of the payment period to cover natural resource damages that are unknown at this time.<sup>85</sup> BP will also reimburse the states for \$350 million in damage assessment costs and another \$250 million for early response costs.<sup>86</sup> The economic damages paid to the states are covered by a different agreement, where BP has agreed to pay a total \$4.9 billion to resolve the Gulf State's economic

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<sup>78</sup> Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act) (title I, subtitle F of Public Law 112-141).

<sup>79</sup> National Fish and Wildlife Foundation, Gulf Environmental Benefit Fund in Louisiana, <http://www.nfwf.org/gulf/Pages/GEBF-Louisiana.aspx>.

<sup>80</sup> EPA, Transocean Settlement, <http://www2.epa.gov/enforcement/transocean-settlement>

<sup>81</sup> Department of Treasury, Transocean Settlement, [http://www.treasury.gov/services/restore-act/Documents/Trust%20Fund%20Allocations%20\(09.03.2014%20Revision\).pdf](http://www.treasury.gov/services/restore-act/Documents/Trust%20Fund%20Allocations%20(09.03.2014%20Revision).pdf).

<sup>82</sup> Consent Decree Among Defendant BP Exploration & Production.

Inc. ("BPXP"), The United States Of America, And The States Of Alabama, Florida, Louisiana, Mississippi, and Texas at 20. In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010. No. 02179 (E.D. La. Oct. 5, 2015).

<sup>83</sup> Id at 18.

<sup>84</sup> Id at 20.

<sup>85</sup> Id at 23.

<sup>86</sup> Id at 24, 27.

claims, out of which Louisiana will receive \$1 billion.<sup>87</sup> In addition to these payments to the state, BP has also agreed to pay up to \$1 billion to “resolve economic claims of the vast majority of local government entities.”<sup>88</sup>

Louisiana will receive at least \$6.787 billion under the settlement agreement: \$787 million from the Clean Water Act penalties; \$5 billion for natural resource damages; \$1 billion for economic damages.<sup>89</sup> Importantly, money received for economic damages is not dedicated to coastal restoration; it will be directed to the Budget Stabilization Fund, the Medicaid Trust Fund for the Elderly, and the Health Trust Fund.<sup>90</sup> The state is also eligible to obtain project funds from the Gulf Coast Ecosystem Restoration Council, which will receive a total of \$1.56 billion through the RESTORE Act.<sup>91</sup> This is in addition to the \$1.272 billion fund controlled by the National Fish and Wildlife Foundation, derived from criminal fines levied against BP and Transocean.<sup>92</sup> When the United States District Court for the Eastern District of Louisiana approves the consent decree, likely in early 2016, the date of the approval becomes the annual due date for installment payments. From 2017 to 2031, BP will pay off the Clean Water Act fines and natural resource damages at a rate of nearly \$869 million per year.<sup>93</sup> Louisiana will receive \$200 million from BP for economic damages in 2016, no economic damage payments for 2017 or 2018, and \$53.33 million per year from 2019 to 2033. From 2019 to 2031, Louisiana’s annual share from CWA, NRDA, and economic damages, assuming the annual disbursements are proportional to the total share, would be around \$423 million per year.<sup>94</sup>

Prudent use of this money in the near future can help reduce overall costs. For example, projects which use natural processes, like sediment diversion, require energy-intensive construction up front but continue to build land over time.<sup>95</sup> With energy costs currently low, starting these projects sooner rather than later will reduce overall costs and should increase the amount of land built (or, more accurately, reduce the net amount of land lost) within the 50 year plan period. Starting these projects early will also give planners time to study and refine their techniques.

## **Outside the Scope of the 2012 Coastal Master Plan**

As mentioned at the beginning of this paper, certain responsibilities indispensable to coastal restoration and protection were not included in the 2012 Coastal Master Plan. The first paper in this series identified these responsibilities – MR-GO ecosystem restoration as well as navigation

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<sup>87</sup> Settlement Agreement Between the Gulf States and the BP Entities with Respect to Economic and Other Claims Arising From the *Deepwater Horizon* Incident, In re: Oil Spill by the Oil Rig “Deepwater Horizon” in the Gulf of Mexico, on April 20, 2010. No. 02179 (E.D. La. July 2, 2015).

<sup>88</sup> Id at 4.

<sup>89</sup> Consent Decree.

<sup>90</sup> LA. REV. STAT. § 39:91.

<sup>91</sup>  $((\$1 \text{ billion Transocean Civil Settlement} + \$5.5 \text{ billion BP CWA Civil Settlement} * 0.8) * 0.3) = \$1.56 \text{ billion.}$

<sup>92</sup> See fn. 76, supra.

<sup>93</sup> In 2018 the payments will be reduced to reflect money already paid. Consent Decree at 21.

<sup>94</sup>  $\text{LA Share of CWA \& NRDA/CWA \& NRDA Total} = \$5.787 \text{ billion}/\$13.6 \text{ billion} = 42.55 \%. \text{ Annual total} * 0.4255 = \$369,744,827; \$369,744,827 + \$53,300,000 = \$423,044,827.$

<sup>95</sup> 2012 Coastal Master Plan, 57.

channel bank maintenance, levees, and municipal drainage infrastructure – and discussed the issues involved in determining who will have to foot the bill for each.<sup>96</sup> On August 27, 2015, the U.S. District Court for the Eastern District of Louisiana ruled that the Army Corps of Engineers must pay the full costs of MR-GO wetland restoration. “Congress’s unambiguously expressed intent does not require the State of Louisiana to pay for the shortcomings of the U.S. Army Corps of Engineers. Unfortunately, coastal restoration necessitated by MRGO remains stalled while the legal wrangling continues.”<sup>97</sup> The Federal government has decided to appeal the District Court’s ruling, so that legal wrangling could continue for some time.<sup>98</sup> Regardless of when and how the case is resolved, any federal contribution at this point will be subject to appropriation by congress, hardly a sure thing. This section looks more deeply into the flood protection responsibilities that are not included in the budget of the 2012 Coastal Master Plan and the local entities that will largely be required to step up to pay those costs. This also serves as an opportunity to clarify statements made in the first part of this series.

To be sure, responsibilities are not always set in stone. A great example is the responsibility for the operations and maintenance (O&M) of the West Closure Complex, the Lake Borgne Surge Barrier, and the Harvey Canal Sector Gate. Prior to their construction, the LACPRA and the U.S. Army Corps of Engineers (USACE) agreed that the O&M of these projects would be the responsibility of the non-federal sponsor.<sup>99</sup> Through the Water Resources Reform and Development Act of 2014, Congress transferred that responsibility to the USACE with the non-Federal sponsor responsible for 35 percent of the cost.<sup>100</sup>

Local authorities are still operating and maintaining these works, however, because Congress did not explicitly dedicate federal funds to carry out this new responsibility.<sup>101</sup> The West Closure

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<sup>96</sup> See fn. 7, *supra*.

<sup>97</sup> *The State of La. v. U.S. Army Corps of Eng’rs, et. al. No. 14-2467 at 20* (E.D. La. Aug. 27, 2015).

<sup>98</sup> Mark Schleifstein, *Feds Appeal \$3 Billion MR-GO Restoration Ruling Against the Army Corps of Engineers*, Times Picayune (Oct. 26, 2015), [http://www.nola.com/environment/index.ssf/2015/10/feds\\_appeal\\_3\\_billion\\_mr-go\\_re.html](http://www.nola.com/environment/index.ssf/2015/10/feds_appeal_3_billion_mr-go_re.html).

<sup>99</sup> Amendment Number 2 of the Local Cooperation Agreement Between the Dept. of the Army and W. Jefferson Levee District for the Accelerated Completion of Construction of the West Bank and Vicinity, New Orleans, La., Hurricane Protection Project Situated in Jefferson, Orleans, and Plaquemines Parishes, La., Art. VI. Available online at <http://www.mvn.usace.army.mil/Portals/56/docs/PPMD/WRDA-Agreements/AmendNo2toLCAHurricaneProtectionWJLDApr22007.pdf>.

<sup>100</sup> PL 113-121, § 2011 (June 10, 2014) (stating that the USACE “shall be responsible for the operation and maintenance, including repair, of any flood gate, as well as any pumping station constructed within the channel as a single unit with that flood gate, that – (A) was constructed as of the date of enactment of [this act] as a feature of an authorized hurricane and storm damage reduction project; and (B) crosses an inland or intracoastal waterway described in section 206 of the Inland Waterways Revenue Act of 1978. . . The non-Federal share of the cost of operation, maintenance, repair, rehabilitation, and replacement of any structure under this subsection shall be 35 percent.”).

<sup>101</sup> Jeff Adelson, *Senator David Vitter gives U.S. Army Corps of Engineers an ultimatum*, The New Orleans Advocate (May 17, 2015), <http://www.theneworleansadvocate.com/news/politics/12384292-123/vitter-corps-must-run-flood-control>.

Complex alone is expected to cost about \$2-\$3.5 million annually to operate.<sup>102</sup> While this cost-shifting could significantly ease the burden on local flood authorities if sufficient federal funds start to reliably appear, it would be a mistake to consider this type of cost-shifting from local to federal authorities as a reliable, or even meaningful funding source.

Unfunded (or underfunded) mandates are not limited to O&M and, perhaps even to a greater degree, apply to the construction of water infrastructure and ecosystem projects. As Terrebonne Parish knows all too well, the distinction between Congressional authorization and Congressional appropriation is the difference between a project made of ink and paper and one made of earth, concrete, and steel. Authorized in the Water Resources and Development Act of 2007 and then reauthorized in the Water Resources Reform and Development Act of 2014 after the cost estimate increased more than 20 percent, the Morganza to the Gulf flood protection project has yet to see any federal appropriation of funds for its construction.<sup>103</sup>

Not waiting for these federal dollars, which may indeed never come, the people of Terrebonne Parish decided to take it upon themselves to construct a hurricane levee. In 2001, they passed a quarter-cent sales tax dedicated to Morganza to the Gulf and other storm-protection projects.<sup>104</sup> In 2012, they passed an additional half-cent sales tax dedicated solely to Morganza to the Gulf.<sup>105</sup> Combined, these two taxes generate an estimated \$18 million annually.<sup>106</sup> For its part, the state has contributed \$102.6 million of its own funds from 2005-2016 to help build Morganza to the Gulf.<sup>107</sup> While these revenues will not be enough to complete the estimated \$12.9 billion project,<sup>108</sup> they constitute the requisite state and local investment needed to help induce federal investment.<sup>109</sup> This is also a powerful reminder that local investment is often a precondition to (though by no means a guarantee of) federal funding.

### **Operations and Maintenance**

The cost estimate of the 2012 Coastal Master Plan includes the O&M of its projects over the course of the fifty-year implementation period. Cost estimates for structural flood control projects in the 2012 Coastal Master Plan “[i]ncludes annual O&M costs to maintain the intended level of risk reduction. It includes items such as routine inspections and reporting,

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<sup>102</sup> Andrea Shaw, *West Bank Levee Authority Looks for Millions to Finance Interim Operations at World’s Largest Pump Station*, Times-Picayune (Oct. 24, 2014),

[http://www.nola.com/environment/index.ssf/2014/10/west\\_bank\\_levee\\_authority\\_prep.html](http://www.nola.com/environment/index.ssf/2014/10/west_bank_levee_authority_prep.html).

<sup>103</sup> Morganza to the Gulf Project Update, U.S. Army Corps of Engineers, February 2015. Available online at

<http://www.mvn.usace.army.mil/Portals/56/docs/PD/Projects/MTG/117.pdf>.

<sup>104</sup> Associated Press, *Terrebonne Parish Notes Progress on Levee System*, New Orleans City Business (May 15, 2015), [http://neworleanscitybusiness.com/blog/2015/05/15/terrebonne-parish-notes-progress-on-levee-system/?utm\\_source=WhatCounts+Publicaster+Edition&utm\\_medium=email&utm\\_campaign=May+15+2015+evening&utm\\_content=Terrebonne+notes+progress+on+levees](http://neworleanscitybusiness.com/blog/2015/05/15/terrebonne-parish-notes-progress-on-levee-system/?utm_source=WhatCounts+Publicaster+Edition&utm_medium=email&utm_campaign=May+15+2015+evening&utm_content=Terrebonne+notes+progress+on+levees)

<sup>105</sup> Id.

<sup>106</sup> Id.

<sup>107</sup> FY 2015 Annual Plan, 23.

<sup>108</sup> Amy Wold, *Morganza to Gulf Levee Project Swells to \$12.9B*, The Advocate (June 17, 2014),

<http://theadvocate.com/home/4839743-125/report-levee-project-swells-to>.

<sup>109</sup> It should be noted that the 2012 Mater Plan budget significantly underestimates the cost of constructing Morganza to the Gulf, as it projects a construction cost of only \$3.44 billion. See 2012 Coastal Master Plan, Appendix A2, C-25.



vegetative plantings, gravel, profile access road maintenance, surveys, and other typical maintenance items.”<sup>110</sup> This inclusion of routine O&M, representing seven percent of the total 2012 Coastal Master Plan budget,<sup>111</sup> can be misleading in several ways for those who do not look closely.

First, as stated in the 2012 Coastal Master Plan Appendix A2, “O&M costs presented in the master plan represent only those costs that would occur within the plan’s 50 year period of analysis.”<sup>112</sup> But those costs will not cease at the end of the fifty-year planning period, they will continue for the lifespan of the project. The 2012 Coastal Master Plan does not include the O&M costs for the lifespan of many of its projects. While this methodology may be logical for a plan based on a fifty-year implementation period, these contours of the O&M projections must be more widely understood, and funding for O&M over the life of a project must be considered, if not secured, on the front end.

Second, the annual O&M expenses do not include the levee rehabilitations needed to maintain the intended level of risk reduction.<sup>113</sup> The burden of these critical expenses is ripening as the USACE continues to turn over sections of the federal hurricane protection system to local control.<sup>114</sup> Once the USACE “completes” a functional section of the system, responsibility for its operations, maintenance, and repair turns over to the local levee boards. The issue turns on the definition of “complete,” which is determined by the USACE.<sup>115</sup> The USACE takes the view that once the levees are built to the required height, despite significant and immediate compaction and subsidence, the project is complete.

The Southeast Louisiana Flood Protection Authority-East estimates that it will cost \$37 million over the next ten years to rehabilitate the Lake Pontchartrain levees in Jefferson, St. Bernard, and Orleans Parishes in order to maintain certification in the National Flood Insurance Program. To help cope with the additional financial burden, local levee districts, like West Jefferson and Lake Borgne Basin, are requesting additional funding from their residents.<sup>116</sup> However, as

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<sup>110</sup> 2012 Coastal Master Plan, Appendix A, A-72. Available online at <http://sonris-www.dnr.state.la.us/dnrservices/redirectUrl.jsp?dID=4733148>.

<sup>111</sup> 2012 Coastal Master Plan, 153.

<sup>112</sup> 2012 Coastal Master Plan, Appendix A2, A2-15. Further, significant O&M costs detailed in the 2012 Coastal Master Plan are unfunded. See 2012 Coastal Master Plan, 136.

<sup>113</sup> While not included under routine O&M, the 2012 Coastal Master Plan includes projects to rehabilitate the levees on the West Bank of Greater New Orleans as well as those from Larose to Golden Meadow. 2012 Coastal Master Plan, SE-43, C-27.

<sup>114</sup> Bob Marshall, *Sections of New, Best-Ever Levee System Are Sinking and Are Likely To Be Raised*, The Lens (May 20, 2015), <http://thelensnola.org/2015/05/20/sections-of-new-best-ever-levee-system-are-sinking-need-to-be-raised/>.

<sup>115</sup> See Project Partnership Agreement Between the Dept. of the Army and the Coastal Protection and Restoration Authority of Louisiana for the Lake Pontchartrain and Vicinity, Louisiana Project, Art. 1I. Available online via The Lens at <https://s3.amazonaws.com/s3.documentcloud.org/documents/784089/contract-between-corps-and-louisiana-for-the-new.pdf>.

<sup>116</sup> Andrea Shaw, *Unexpected Flood Protection Expenses Push Proposed West Jefferson Tax Increase to \$5.5 Million*, Times-Picayune (Feb. 25, 2015), [http://www.nola.com/environment/index.ssf/2015/02/unexpected\\_flood\\_protection\\_ex.html](http://www.nola.com/environment/index.ssf/2015/02/unexpected_flood_protection_ex.html).

demonstrated by the citizens of the Lake Borgne Basin Levee District who within the last eight months twice voted against an additional millage, residents may balk at additional taxes, no matter how vital. In fact, the millage proposed by the Lake Borgne Basin Levee District would not only have helped build a reserve for future levee rehabilitation,<sup>117</sup> but also plugged an existing \$1.2 million annual operating budget deficit.<sup>118</sup> A major reason for the levee district's financial woes is that the population in the district is roughly half of what it was pre-Katrina.<sup>119</sup> By comparison, larger populations and higher property values have thus far allowed Jefferson and Orleans Parishes to satisfy their levee boards' obligations without new millages, despite increasing financial responsibilities as the USACE turns over more sections of the flood risk reduction system.<sup>120</sup> Impending O&M expenses prompted the Nov. 21, 2015 millage ballot initiatives for Algiers and West Jefferson Levee Districts.<sup>121</sup>

Third, O&M costs for existing infrastructure and for those restoration and protection projects that did not make it into the 2012 Coastal Master Plan were not included in the budget. Certainly this is a logical exclusion, considering the 2012 Coastal Master Plan is simply a prioritization of projects; however, many miles of critical, existing levees and municipal drainage infrastructure were not included in the 2012 Coastal Master Plan. As a result, their O&M costs were not included either. Therefore, the O&M that represents seven percent of the total 2012 Coastal Master Plan budget consists only of the O&M for the projects included in the 2012 Coastal Master Plan.

The Lake Pontchartrain and Vicinity flood control project demonstrates these three areas of potential misunderstanding very well. The 2012 Coastal Master Plan includes a project called the Greater New Orleans High Level, a structural protection project for the east bank of Greater New Orleans.<sup>122</sup> First, the O&M projection only embodies the remainder of the fifty-year implementation period after the GNO High Level is completed. Second, the O&M does not include any levee rehabilitation, at least not prior to the completion of the project. With St. Bernard, Orleans, and Jefferson Parishes' fates tied to the weakest link in the surrounding

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<sup>117</sup> Jeff Adelson, *Flood Protection Board Tries to Figure Out Plan B for Protecting St. Bernard*, *The Advocate* (May 15, 2015), <http://www.theneworleansadvocate.com/news/12372975-172/flood-protection-board-tries-to>.

<sup>118</sup> Wynton Yates, *St. Bernard Struggles to Find Solution to Maintain Levee Systems*, *WWL Eyewitness News*, <http://www.wwltv.com/story/news/2015/05/22/st-bernard-struggles-to-find-solution-to-maintain-levee-systems/27821857/>.

<sup>119</sup> Bob Marshall, *Levee Authority Plans to Ask St. Bernard to Reconsider Rejection of Property Tax*, *The Lens* (Feb. 4, 2015), <http://thelensnola.org/2015/02/04/levee-authority-plans-to-ask-st-bernard-to-reconsider-rejection-of-property-tax/>.

<sup>120</sup> Mark Schleifstein, *Orleans Levee District Tax Rate Unchanged for 2015, but Rising Property Values to Net More*, *Times-Picayne* (Nov. 20, 2014), [http://www.nola.com/environment/index.ssf/2014/11/levee\\_authority\\_makes\\_no\\_chang.html](http://www.nola.com/environment/index.ssf/2014/11/levee_authority_makes_no_chang.html).

<sup>121</sup> Chad Calder, *November Millage Proposals in Algiers, West Jefferson Aim to Fund Maintenance of Flood Protection System*, *The Advocate* (Sept. 6, 2015), <http://theadvocate.com/news/13348896-148/november-millage-proposals-in-algiers>.

<sup>122</sup> The project includes "[c]onstruction of a levee to an elevation of 15-35 feet NAVD88 around the Greater New Orleans area from Verret to the Bonnet Carre spillway for hurricane storm surge risk reduction. Project features include approximately 290,000 feet of earthen levee, 16,000 feet of concrete T-wall, armoring of 113,000 feet of existing concrete T-wall, one 40-foot roller gate, two 56-foot sector gates, one 110-foot barge gates, and two 220-foot barge gates." 2012 Coastal Master Plan, SE-33.

levees, the ability for each district to finance their own levee lifts is vital for the long-term viability of the region. Third, the budget does not include the O&M costs for the permanent closure structures at the mouths of the Orleans, 17<sup>th</sup> Street, and London Canals, which were not included as projects in the 2012 Coastal Master Plans but are nonetheless expected to increase the Sewerage & Water Board of New Orleans' (S&WBNO) annual O&M budget by about \$20 million annually.<sup>123</sup> Additionally, the O&M of other internal drainage infrastructure was not included in the scope of the 2012 Coastal Master Plan's flood protection for the east bank of Greater New Orleans.

### **Municipal Drainage Infrastructure**

Municipal drainage infrastructure plays a vital role in the multiple lines of defense. Generally speaking, this infrastructure primarily reduces flooding from rain events but also can pump out storm surges that overtop hurricane risk reduction levees. With some important exceptions,<sup>124</sup> this infrastructure is financed and managed by local government entities. Since this is a local responsibility, the state did not include this type of flood protection infrastructure in the 2012 Coastal Master Plan. The financial burden of operating, maintaining, rehabilitating, and upgrading this infrastructure shouldered by local government entities and their residents, however, should be included in the overarching water management framework in southeast Louisiana. These costs should be considered when discussing the distribution of the financial burdens required for the implementation of the multiple lines of defense strategy.

While the state of drainage infrastructure varies greatly by municipality or parish, using Orleans Parish as an example demonstrates the scope of responsibilities and financial burdens that comprise municipal drainage infrastructure. The S&WBNO owns and operates the water, sewerage, and drainage systems for all of Orleans Parish. Water and sewerage infrastructures are operated and maintained through monthly customer assessments based on usage. Historically, these O&M costs as well as extension and repair costs have been supplemented through millages on immovable property.<sup>125</sup> In 2012, the City Council of New Orleans approved ten percent rate increases each year through 2020 for water and sewerage.<sup>126</sup> This influx of revenue has helped finance the rebuilding of the water and sewerage infrastructure.

The drainage system, on the other hand, is financed primarily through millages. Some of these millages are statutorily dedicated to all three systems,<sup>127</sup> while others are exclusively dedicated to the drainage system.<sup>128</sup> The acts authorizing the several millages dedicated exclusively to the

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<sup>123</sup> "State of the Agency", Sewerage & Water Board of New Orleans, 21 (January 15, 2014). Available online at <file:///C:/Users/waterlaw/Downloads/StateOfAgency011514.pdf>.

<sup>124</sup> One exception is the Southeast Louisiana Urban Flood Control Project, which is currently in the midst of construction and will reduce the risk of flood damages due to rainfall flooding in Orleans, Jefferson and St. Tammany Parishes. The project includes over \$2 billion in drainage improvements in Orleans and Jefferson Parish. "Southeast Louisiana Urban Flood Control Project Overview", U.S. Army Corps of Engineers. Available online at <http://www2.mvn.usace.army.mil/pd/projectslist/home.asp?projectID=165>.

<sup>125</sup> See LA. REV. STAT. §§ 33:4094, 33:4094.1, 30:4095.

<sup>126</sup> "State of the Agency", Sewerage & Water Board of New Orleans, 33 (January 15, 2014). Available online at <file:///C:/Users/waterlaw/Downloads/StateOfAgency011514.pdf>.

<sup>127</sup> SEE LA. REV. STAT. §§ 33:4094, 33:4094.1, 30:4095.

<sup>128</sup> See LA. REV. STAT. §§ 33:4124, 33:4137, 33:4147 (totaling 18 mills).

drainage system are staggered and therefore expire at different times. A three-mill levy expires at the end of 2016, while a six-mill levy and a nine-mill levy expire at the end of 2027 and 2031 respectively.<sup>129</sup> These revenue streams will need to be replaced, and potentially increased, as the S&WBNO continues its drainage capital improvement campaign. The roughly \$1.5 billion needed to upgrade the drainage infrastructure (not to mention sewerage and water infrastructure) will receive significant assistance from the federal government.<sup>130</sup>

While federal assistance for drainage infrastructure is welcome, it does not come without its own set of additional local responsibilities. The Southeast Louisiana Urban Flood Control (SELA) project was authorized by Congress to help reduce flooding in Jefferson, Orleans, and St. Tammany Parishes caused by a 10-year rain event.<sup>131</sup> While the federal government will have provided \$1.5 billion in total SELA funding from project inception to completion, the S&WBNO must chip in its non-federal cost-share of \$306 million over a 30-year period starting in 2018 (amounting to \$10.2 million per year).<sup>132</sup> Additionally, S&WBNO will also be responsible for all of the estimated \$12 million annual O&M costs associated with the pump stations at the end of the outfall canals once they are completed, as well as at least part of the O&M costs associated with the West Closure Complex which is still being negotiated between the local partners.

As a historically local responsibility, internal drainage infrastructure was not included in the 2012 Coastal Master Plan budget. It must, however, still be factored into the total equation for financing coastal protection and restoration, as it is certainly an additional burden on local taxpayers and, in some instances, a burden on the political capital wielded by the state's U.S. Congressional delegation.

## **Conclusion**

In the 2012 Coastal Master Plan, the LACPRA has a science-based guide to restore the coast; it does not, however, have sufficient funds lined up to fully implement that plan. The sum of the sources identified above (GOMESA, CPR Trust Fund, DOTD Transfers, CWPPRA, CIAP, budget surplus, *Deepwater Horizon*-related funds, and NFWF) is approximately \$20.617 billion over the 50 year planning period.<sup>133</sup> While this total assumes a number of constants that may not prove true, it starkly indicates that the currently identified funding sources fall well short of the \$91.693 billion inflation adjusted total cost. This \$71.076 billion gap means that 77.5% of the total cost still needs to be secured.

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<sup>129</sup> Id.

<sup>130</sup> Richard Rainey, *New Orleans Sewerage & Water Board Looking Down the Road at a New Drainage Fee*, Times Picayune (May 13, 2013),

[http://www.nola.com/politics/index.ssf/2013/05/new\\_orleans\\_sewerage\\_water\\_boa\\_7.html](http://www.nola.com/politics/index.ssf/2013/05/new_orleans_sewerage_water_boa_7.html).

<sup>131</sup> "Southeast Louisiana Urban Flood Control Project Overview", U.S. Army Corps of Engineers. Available online at <http://www.mvn.usace.army.mil/Missions/HSDRRS/SELAJeffersonAve.aspx>.

<sup>132</sup> "State of the Agency", Sewerage & Water Board of New Orleans, 21 (January 15, 2014). Available online at <file:///C:/Users/waterlaw/Downloads/StateOfAgency011514.pdf>.

<sup>133</sup> (Recurring Funds Total (see note 24) + CWPPRA Total + CIAP Total + Surplus + Transocean Civil + Tentative BP *Deepwater Horizon* Total excl. economic damages + NFWF) = (\$7.91 billion + \$4.215 billion + \$0.5 billion + \$0.79 billion + \$0.143 billion + \$5.787 billion + \$1.272 billion) = \$20.617 billion.

While the ebb and flow of spending should be expected as restoration projects go through the many phases of planning, construction, and operation, revenue (without the help of a major windfall) should come as a steady stream so as to hasten project implementation through securitization and construction bonding. The current funding deficiencies do not preclude the plan's overall success; it does, however, allow for time to drive up the price of the 2012 Coastal Master Plan in the forms of inflation and erosion.

There are funds currently available to the LACPRA, and it is putting those funds to good use. While the *Deepwater Horizon* spill will bring in billions of dollars to put more of the 2012 Coastal Master Plan into motion, this windfall will not be sufficient to fully fix the coast. Another potential windfall, the lawsuit filed by the Southeast Louisiana Flood Protection Authority-East against 97 oil, gas, and pipeline companies for alleged damage to the coast, faces an uphill legal battle to stay alive after the State legislature acted to kill it and the federal district court dismissed it (not even using the legislature's action as a reason for dismissal).

But rather than say the gap is too much and give up, we must press on and cultivate new, recurring streams of funding to restore the coast. Future installments in this series will consider a variety of options of how the State can realistically plug this funding gap.

Louisiana Coastal Master Plan

Inflation Adjusted Plan Expenditures

**Table 24. Historical Consumer Price Index for All Urban Consumers (CPI-U): U. S. city average, all items-Continued**

(1982-84=100, unless otherwise noted)

Year	Semiannual averages		Annual avg.	Percent change from previous	
	1st half	2nd half		Dec.	Annual avg.
2003	183.3	184.6	184.0	1.9	2.3
2004	187.6	190.2	188.9	3.3	2.7
2005	193.2	197.4	195.3	3.4	3.4
2006	200.6	202.6	201.6	2.5	3.2
2007	205.709	208.976	207.342	4.1	2.8
2008	214.429	216.177	215.303	-1	3.8
2009	213.139	215.935	214.537	2.7	-4
2010	217.535	218.576	218.056	1.5	1.6
2011	223.598	226.280	224.939	3.0	3.2
2012	228.850	230.338	229.594	1.7	2.1
2013	232.366	233.548	232.957	1.5	1.5
2014	236.384	237.088	236.736	.8	1.6
2015	-	-	-	-	-

U.S. Department of Labor, Bureau of Labor Statistics  
 Consumer Price Index History Table - Table 24 - Page 94  
 Retrieved February 25, 2015 - <http://www.bls.gov/cpi/cpid1501.pdf>  
 Calculation of Average Inflation Rate 2005-2014

Year	Annual Average	
	Inflation	Index
2004	2.70%	188.9 B
2005	3.40%	
2006	3.20%	
2007	2.80%	(236.7/188.9)-1 = 25.3%
2008	3.80%	(1+.0228)^10 = 25.3%
2009	-0.40%	Compound Average = 2.3%
2010	1.60%	
2011	3.20%	
2012	2.10%	
2013	1.50%	
2014	1.60%	236.7 A
-----		1.253 A/B
Average inflation last 10 years		2.30%
Inflation adjustment 2010 to 2012		105.37%

Master Plan Actual & Planned Expenditures in 2010 Dollars

Assumes that Annual Plan Budgets were actually spent

	2011	2012	2013	2014	2015	2016	2017	2018	
Expenditures									
2012 Annual Plan									
2013 Annual Plan		441,272	960,365						
2014 Annual Plan				767,319					
2015 Annual Plan					725,487				
2016 Annual Plan						883,947	449,063	296,142	
	-----	-----	-----	-----	-----	-----	-----	-----	Total
	-	441,272	960,365	767,319	725,487	883,947	449,063	296,142	4,523,595
Discounted Back to 2010 Dollars									
Actual Inflation by Year	3.20%	2.10%	1.50%	1.60%					
Assumed Average Inflation					2.30%	2.30%	2.30%	2.30%	
Inflation Index	103.2%	105.4%	106.9%	108.7%	111.2%	113.7%	116.3%	119.0%	
Discount Rate to Adjust to 2010 Dollars	0.969	0.949	0.935	0.920	0.900	0.879	0.860	0.840	
									Total
Master Plan Expenditures in 2010 Dollars		418,794	897,976	706,172	652,663	777,338	386,025	248,847	4,087,815

2012 Master Plan Assumes the Following Expenditure Streams - Millions of Dollars in 2010 Dollars

	Original Plan	Spent thru 2018	Remainder	
1st 20 Years	26,000	(4,088)	21,912	minus dollars from 2012-2018 above
2nd 20 Years	15,000		15,000	13 years of remaining dollars for the initial
Last 10 Years	9,000		9,000	20 year period or
	-----	-----	-----	\$1,686 per year on average.
	50,000	(4,088)	45,912	

Remaining Master Plan Expenditures in Nominal Dollars i.e. inflation adjusted					
			Assumed	Cumulative	Inflated
		2010	Inflation	Inflation	To Nominal
		MDollars	Rate	Factor	Dollars
Inflation Adjustment 2010-2011				1.032	
Per 2012 Annual Plan	2012	418.8	2.10%	1.054	441.3
Per 2013 Annual Plan	2013	898.0	1.50%	1.069	960.4
Per 2014 Annual Plan	2014	706.2	1.60%	1.087	767.3
Per 2015 Annual Plan	2015	652.7	2.30%	1.112	725.5
Per 2016 Annual Plan	2016	777.3	2.30%	1.137	883.9
Per 2016 Annual Plan	2017	386.0	2.30%	1.163	449.1
Per 2016 Annual Plan	2018	248.8	2.30%	1.190	296.1
1st 20 Years minus 2013-2018	2019	1,685.6	2.30%	1.217	2,052.0
	2020	1,685.6	2.30%	1.245	2,099.2
	2021	1,685.6	2.30%	1.274	2,147.5
	2022	1,685.6	2.30%	1.303	2,196.9
	2023	1,685.6	2.30%	1.333	2,247.4
	2024	1,685.6	2.30%	1.364	2,299.1
	2025	1,685.6	2.30%	1.395	2,352.0
	2026	1,685.6	2.30%	1.427	2,406.1
	2027	1,685.6	2.30%	1.460	2,461.4
	2028	1,685.6	2.30%	1.494	2,518.1
	2029	1,685.6	2.30%	1.528	2,576.0
	2030	1,685.6	2.30%	1.563	2,635.2
	2031	1,685.6	2.30%	1.599	2,695.8
2nd 20 Years	2032	750.0	2.30%	1.636	1,227.1
	2033	750.0	2.30%	1.674	1,255.3
	2034	750.0	2.30%	1.712	1,284.2
	2035	750.0	2.30%	1.752	1,313.8
	2036	750.0	2.30%	1.792	1,344.0
	2037	750.0	2.30%	1.833	1,374.9
	2038	750.0	2.30%	1.875	1,406.5
	2039	750.0	2.30%	1.918	1,438.9
	2040	750.0	2.30%	1.963	1,471.9
	2041	750.0	2.30%	2.008	1,505.8
	2042	750.0	2.30%	2.054	1,540.4
	2043	750.0	2.30%	2.101	1,575.9
	2044	750.0	2.30%	2.149	1,612.1
	2045	750.0	2.30%	2.199	1,649.2
	2046	750.0	2.30%	2.249	1,687.1
	2047	750.0	2.30%	2.301	1,725.9
	2048	750.0	2.30%	2.354	1,765.6
	2049	750.0	2.30%	2.408	1,806.2
	2050	750.0	2.30%	2.464	1,847.8
	2051	750.0	2.30%	2.520	1,890.3
Last 10 Years	2052	900.0	2.30%	2.578	2,320.5
	2053	900.0	2.30%	2.638	2,373.9
	2054	900.0	2.30%	2.698	2,428.5
	2055	900.0	2.30%	2.760	2,484.3
	2056	900.0	2.30%	2.824	2,541.5
	2057	900.0	2.30%	2.889	2,599.9
	2058	900.0	2.30%	2.955	2,659.7
	2059	900.0	2.30%	3.023	2,720.9
	2060	900.0	2.30%	3.093	2,783.5
	2061	900.0	2.30%	3.164	2,847.5
Expenditures 2012 - 2061		50,000.0			91,693.7
		=====			=====
Assumptions:					
2012 Master Plan - Assumes Expenditures in 2010 constant dollars as follows:					
Appendix B - page B-15 - see	<a href="http://coastal.la.gov/a-common-vision/2012-coastal-master-plan/cmp-appendices/">http://coastal.la.gov/a-common-vision/2012-coastal-master-plan/cmp-appendices/</a>				
	\$26 Billion	1st 20 Years			
	\$15 Billion	2nd 20 Years			
	\$9 Billion	Last 10 Years			
2012 Master Plan cost estimate were figured in 2010 constant dollars - see					
David G. Graves, Christopher Sharon, & Debra Knopman. (2012). Technical Report, Planning Tool to					
Support Louisiana's Decision making on Coastal Protection and Restoration. Page xvi. Gulf States Policy					
Institute/RAND Corporation. Retrieved July 11, 2013, from:					
<a href="http://www.rand.org/content/dam/rand/pubs/technical_reports/2012/RAND_TR1266.pdf">http://www.rand.org/content/dam/rand/pubs/technical_reports/2012/RAND_TR1266.pdf</a>					

Per the 2012 Master Plan - Appendix B page B-15		
\$26 billion in expenditures are planned for the 1st 20 years of the plan.		
	2010	Nominal
Expenditures - 1st 20 Years	Constant \$'s	Dollars
2012-2014 Assumed To Be Spent	2,022.94	2,168.96
2015 - per 2015 Annual Plan	652.7	725.5
2016-2018 per 2016 Annual Plan	1,412.21	1,629.15
	-----	-----
Spent or Planned To Be Spent	4,087.82	4,523.60
Remaining 13 years	21,912.19	30,686.95
	-----	-----
	26,000.00	35,210.54
	-----	-----

Spending rate required in the 13 years ending 2031 in order for the Master Plan to "catch up" 1,686 per year



Source	Projected Total \$	Timing	Limits on usage	Usable as Federal Match?	Required Match	Conditions	Comments	Adjusts with inflation?
CWPPRA (Federal)	\$3,340,814,280.00	\$74,240,317/yr (Avg. annual amount 2016-2018)	Must be used for coastal wetlands restoration or conservation projects.	NO	15%	To reduce the state cost share from 25% to 15%, Louisiana has submitted a Coastal Wetlands Conservation Plan. "In the event that the Secretary (of the Army), the Director (of FWS), and the (EPA) Administrator jointly determine that the State is not taking reasonable steps to implement and administer a conservation plan" the state portion of the cost share reverts back to 25%	The funding structure of the program frustrates multi-year planning for projects, raising their cost and effectively limiting CWPPRA's scope. The source of CWPPRA's matching grant program has been funded through continuing resolutions in recent years, leaving the program on uncertain financial footing.	No. CWPPRA projects are funded from the Sport Fish Restoration and Boating Trust Fund which collects revenue from small-engine fuel taxes at a flat rate per gallon rather than a percentage. Without legislative action changing tax, the available funds will stay the same.
CIAP	\$500,000,000.00	\$500,000,000 total from 2007-2010	Can only be used for: Projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands; Mitigation of damage to fish, wildlife, or natural resources; Planning assistance and the administrative costs of complying with this section; Implementation of a federally-approved marine, coastal, or comprehensive conservation management plan; Mitigation of the impact of outer Continental Shelf activities through funding of onshore infrastructure projects and public service needs.	No	None	Louisiana was required to submit coastal impact assistance plan. It was approved and the CIAP funds have been disbursed.	All CIAP money is expected to be spent by the end of 2017	No
SELA	\$1,524,800,000.00	\$224.8 million appropriated in 2005; \$1.3 billion appropriated in 2008.	Used for projects to help reduce flooding in Jefferson, Orleans, and St. Tammany Parishes caused by a 10-year rain event.	No	0% for 2005 appropriation, 35% for 2008 appropriation	Before carrying out a project authorized under WRDA, a non-Federal interest shall "obtain any permit or approval required in connection with the project or separable element under Federal or State law; and ensure that a final environmental impact statement or environmental assessment, as appropriate, for the project or separable element has been filed."	Orleans S&WB will begin paying back its non-federal cost-share of \$306 million over a 30-year period starting in 2018 (amounting to \$10.2 million per year).	No
MRT	\$302,000,000 total for river below Cape Girardeau, MO	Subject to annual appropriations	Usage decided by Army Corps of Engineers	No	No		Upon the completion of any levee constructed for flood control, said levee shall be turned over to the levee district protected thereby for maintenance thereafter.	No
GOMESA - State	\$6,160,768,550.00	\$768,550 (2012 - 2017); \$140,000,000/yr (2018-2061)	To be used for projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses; Mitigation of damage to fish, wildlife, or natural resources; Implementation of a federally-approved marine, coastal, or comprehensive conservation management plan; Mitigation of the impact of outer Continental Shelf activities through the funding of onshore infrastructure projects.	Maybe	No		GOMESA funding is dependent on continued dominance of oil and gas in the global economy, if oil and gas production in the gulf wanes, so will GOMESA funds. There is also the possibility that funds will be redirected to nation-wide programs or that GOMESA will be repealed.	No. GOMESA has a \$500 million cap on the annual amount that can be shared among states.

Source	Projected Total \$	Timing	Limits on usage	Usable as Federal Match?	Required Match	Conditions	Comments	Adjusts with inflation?
GOMESA - Local	\$1,575,000,000.00	\$35000000/yr (2017-2061)	Same as State	Maybe	No		GOMESA funds to Coastal Political Subdivisions are subject to the same concerns as the state portion	No. Subject to same cap as Federal funds.
CPR Trust Fund Annual Revenue	\$1,550,657,814.00	\$31,013,156/yr (Avg. annual amount for 2012-2018)	CPR Trust Fund is subject to appropriations by the legislature only for the purposes of 'integrated coastal protection' as defined in LA. REV. STAT. 49:214.2(11).	Yes	N/A	The CPR Trust Fund balance cannot exceed \$500 million.	The CPR Trust Fund also includes GOMESA revenues and Deepwater Horizon CWA civil penalties.	No. The fund has a \$500 million cap. Mineral revenues received by the state are allocated according to La. Const. Art. VII, § 10.2. Of excess funds after required allocations, a minimum of \$5 million must be deposited in CPR Trust fund; \$10 million deposited into fund when excess revenues hit \$600 million and another \$10 million when revenues exceed \$650 million. This formula does not adjust for inflation.
DOTD Transfers	\$200,000,000.00	\$5,000,000/yr	None	Yes	N/A		Funds reallocated DOTD correspond to transfer of responsibilities for hurricane response coordination. Unkown if/to what extent tehse transfers will continue	No
RESTORE Pot 1	\$364,000,000.00	\$21,241,379/yr disbursed over 15 years.	70% to CPRA (\$254.8 million); 30% to coastal parishes (\$109.2 million). State money is deposited into the Coastal Protection and Restoration Fund for integrated coastal protection efforts, including coastal restoration, hurricane protection, and improving the resiliency of the Louisiana Coastal Area affected by the Deepwater Horizon oil spill.	Yes	No	State or Parishes must certify that the project or program for which they are requesting money is, among other things, designed to restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands, or economy of the Gulf Coast, was selected with meaningful public input, and the state or subdivision must develop and submit a multiyear implementation plan for the use of such amounts		No

Source	Projected Total \$	Timing	Limits on usage	Usable as Federal Match?	Required Match	Conditions	Comments	Adjusts with inflation?
RESTORE Pot 2 (Controlled by GCERC)	\$1,560,000,000.00	\$91,034,483/yr disbursed in installments over 15 years.	Priority is given to Projects that are projected to make the greatest contribution to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands, projects contained in existing state comprehensive plans, and projects that restore the long term resiliency of those resources.	No	No	The RESTORE Council selects projects and programs submitted by the States and places them on its "Funded Priorities List", it is unclear how much of Pot 2 will go to Louisiana but it is likely to be substantial.		No
RESTORE Pot 3	\$540,000,000.00	\$104,993,103.5/yr disbursed in installments over 15 years.	State money is deposited into the Coastal Protection and Restoration Fund for integrated coastal protection efforts, including coastal restoration, hurricane protection, and improving the resiliency of the Louisiana Coastal Area affected by the Deepwater Horizon oil spill.	Yes	No	Each Gulf Coast State submits a plan for the expenditure of amounts in Pot 3. Subject to exceptions, the plan may use not more than 25 percent of the funding made available for infrastructure projects		No
RESTORE Pot 5	\$22,000,000.00	\$1,517,241/yr disbursed in installments over 15 years	Money in Pot 5 is earmarked for "Centers of Excellence" to be used for grants to NGOs in the Gulf	Yes	Yes			No
Deepwater Horizon Economic Damages	\$1,000,000,000.00	One payment for \$200,000,000 due in 2016, no payments in 2017 or 2018, \$53,333,333/yr 2019 - 2033	Not earmarked for coastal projects. 45% to Budget Stabilization Fund; 45% to Medicaid Trust Fund for the Elderly; 10% to the Health Trust Fund.	Yes	No			No
Deepwater Horizon NRDA	\$5,000,000,000.00	\$302,264,137/yr disbursed in installments over 15 years.	The Natural Resource Trustee Council works to identify the damage caused by the spill and selects projects designed to restore resources directly or indirectly harmed by the oil spill. The goal of the short-term and long-term recovery projects implemented by the trustees is to restore, replace, rehabilitate, or acquire the equivalent of the impacted resources.	Yes	No			No
NFWF	\$1,272,000,000.00	The Gulf Environmental Benefit Fund receives payments in installments between 2013 and 2018	NFWF funds in Louisiana will be used for barrier island and river diversion projects.	N/A	No			No
Surplus 2007-2009	\$790,000,000.00	Spent by the end of 2018	Dedicated to CMP Projects	Yes	No			No