Louisiana is Experiencing a Coastal Crisis
Predicted Land Change over the Next 50 Years

Southeast Louisiana Land Loss
*Historical and Projected Land Loss in the Deltaic Plain

Coastal Louisiana has lost an average of 34 square miles of land, primarily marsh, per year for the last 50 years. From 1933 to 2006, coastal Louisiana lost 1,700 square miles of land, roughly an area the size of the state of Delaware. If nothing more is done to stop this land loss, Louisiana could potentially lose approximately 700 additional square miles of land, or an area about equal to the size of the greater Washington D.C.-Baltimore area, in the next 50 years.

For more information about the land loss analysis or to see an animated time series of land change, visit www.Lafcoast.gov/LandLoss
Who am I?

John Driscoll
- CPA by training, financial analyst by profession.
- B.A Economics (LSU) – MBA (Tulane).
- Ran financial planning & analysis for 2 Fortune 500 Companies.
- Past principal in 2 Private Equity Firms.
Louisiana’s Comprehensive Master Plan
For a Sustainable Coast

The Need for Funding

It’s time for an intellectually honest conversation about coastal restoration funding.

August 2013
Presentation Takeaways

1) Funding stream required for the Master Plan is a lot more than $50 billion.

2) Existing funding streams will only be a down payment on coastal restoration.
   - Gulf of Mexico Energy Security Act (GOMESA)
   - BP Oil Spill Fines (RETORE Act)

3) Louisiana has some tough choices to make.
Louisiana Coastal Land Loss

• Land loss from 1932 to 2010 – 1,882 square miles

• Prior to Hurricanes Katrina & Rita – Viewed as environmental issue effecting fish, wildlife and wild places

• Hurricanes Katrina & Rita changed that – Total estimated damage – $141 billion ($165 billion in 2012 dollars)

• Coastal land loss now viewed as a threat to Louisiana’s:
  • Coastal communities
  • Business assets
  • Public Infrastructure
2012 Louisiana Comprehensive Master Plan for a Sustainable Coast (2012 Mater Plan)

• First comprehensive, science-based plan
• Details specific projects to restore the coast
• Estimate cost over the 50 year implementation period – $50 billion

• However, just 2 pages devoted to Funding out of 188 pages – 269 pages with appendixes
“We are living in a historic moment, one that presents us with a stark choice: either make the bold and difficult decisions that will preserve our state’s future, or cling to the status quo and allow coastal Louisiana and its communities to wash away before our eyes.”

Introduction and Executive Summary to Integrated Ecosystem Restoration and Hurricane Protection: Louisiana’s Comprehensive Master Plan for a Sustainable Coast – April 2007
“If we do not aggressively address this crisis, the problem intensifies. Our analysis confirmed that if we do nothing more than what has been done to date, we have the potential to lose up to an additional 1,750 square miles of land. This land loss will increase flooding risk with disastrous effects.

Put simply: the status quo cannot be maintained, and we must take bold action now to save our coast. At the same time, our analysis demonstrated that we do have the opportunity, if we continue to build upon current successes, to avert an otherwise bleak future.”

Introduction to Louisiana’s Comprehensive Master Plan for a Sustainable Coast Page 14 - March 2012
2012 Master Plan – “Setting a Budget” (page 93)

Identified 8 potential sources of funding, albeit without
details:
1) Gulf of Mexico Energy Security Act (GOMESA)
2) Energy and Water Act (Corps Funding)
3) Coastal Wetlands Planning Protection and Restoration Act
   (CWPPRA)
4) Deepwater Horizon Clean Water Act Penalties
5) Deepwater Horizon Natural Resources Damage
   Assessment (NRDA)
6) Carbon and Nutrient Credits
7) Future State Funding
8) Louisiana’s Coastal Protection and Restoration Fund

“These funds are not guaranteed” and “Much of the
funding that we are expecting is tied to [federal
government] programs that have been phase in over the
past decades . . .”
2012 Master Plan – “Funding” (page 99)

“Funding” – Page 99
• Provides no details – only caveats
• “Louisiana could [emphasis added] receive … Between $20 and $50 billion over the next 50 years”.

Appendix F – Implementation and Adaptive Management
• Appendix F–3: “… [the Master Plan] relies on one thing – securing the funding …”.
• Appendix F–3: “The 2012 Coastal Master Plan is the centerpiece of a compelling case for funding [from the federal government] …”
The Federal Government Has Its Own Problems
Integrated Ecosystem Restoration & Hurricane Protection in Coastal Louisiana: Fiscal Year 2014 Annual Plan

More Caveats

Introductory Letter by Governor Jindal:

“While the current plan [2012 Master Plan] is constrained by the reality of limited available resources our resolve to do more whenever and wherever possible is unwavering, because all of South Louisiana and everyone in it is worth saving”.

The implications for funding coastal restoration are:
• The 2012 Master Plan picked a “budget” of $50 billion because anything short of that would be meaningless.
• The funding model relies largely on hoped for federal funding and BP Oil Spill fines.
• The lack of predictable and reliable funding will limit both the scope and timely execution of the 2012 Master Plan.
The 2012 Master Plan is Not Really a Plan

A Plan Has the Following Elements:
1) Project start and completion dates.
2) Schedule of project costs over a defined planning horizon outlining project expenditures by period spent.
3) Schedule of identified funding sources which match or exceed project expenditures by year of receipt.

The 2012 Master Plan is tabulation of costs. Is not a “plan” per se; it is simply a cost estimate.
When $50 Billion Is Not $50 Billion

The $50 billion required to fund the 2012 Master Plan in not really $50 billion – It is much more!

Master Plan costs were estimated in 2010 constant dollars – i.e. without inflation factored in

An expenditure stream of $1 billion per year over 50 years when escalated for inflation at 2.4% = $95 billion

At 3.0% inflation to total increases to $113 billion
## When $50 Billion Is Not $50 Billion

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant Dollars</th>
<th>0% Nominal Dollars</th>
<th>2.4% Nominal Dollars</th>
<th>3.0% Nominal Dollars</th>
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<tbody>
<tr>
<td>2012</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>2013</td>
<td>1,000</td>
<td>1,024</td>
<td>1,030</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>1,000</td>
<td>1,049</td>
<td>1,061</td>
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</tr>
<tr>
<td>2015</td>
<td>1,000</td>
<td>1,074</td>
<td>1,093</td>
<td></td>
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<tr>
<td>2061</td>
<td>1,000</td>
<td>3,197</td>
<td>4,256</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$50,000</td>
<td>$94,725</td>
<td>$112,797</td>
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</tbody>
</table>
## Integrated Ecosystem Restoration & Hurricane Protection in Coastal Louisiana: Fiscal Year 2014 Annual Plan

### Louisiana Coastal Protection and Restoration Authority 2014 Draft Annual Plan

<table>
<thead>
<tr>
<th>Revenues - $000</th>
<th>Projected 2014</th>
<th>Projected 2015</th>
<th>Projected 2016</th>
<th>3 Year Total</th>
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<tbody>
<tr>
<td>Coastal Protection and Restoration Fund – Mineral Income</td>
<td>$34,277</td>
<td>$34,300</td>
<td>$34,300</td>
<td>102,877</td>
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<tr>
<td>Gulf of Mexico Energy Security Act (GOMESA)</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>243</td>
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<tr>
<td>DOTD Interagency Transfers</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>12,000</td>
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<tr>
<td>Coastal Impact Assistance Program (CIAP)</td>
<td>100,709</td>
<td>44,095</td>
<td>10,366</td>
<td>155,170</td>
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<tr>
<td>Community Development Block Grants - FEMA</td>
<td>13,615</td>
<td>5,097</td>
<td>-</td>
<td>18,712</td>
</tr>
<tr>
<td>Berm to Barrier</td>
<td>44,576</td>
<td>-</td>
<td>-</td>
<td>44,576</td>
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<tr>
<td>NRDA Early Restoration Agreement – BP Oil Spill</td>
<td>131,808</td>
<td>335,552</td>
<td>55,950</td>
<td>523,310</td>
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<tr>
<td>Other Oil Spill Related Revenues</td>
<td>36,368</td>
<td>47,782</td>
<td>58,599</td>
<td>142,749</td>
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<tr>
<td>LDNR Mitigation Funds</td>
<td>900</td>
<td>-</td>
<td>-</td>
<td>900</td>
</tr>
<tr>
<td>MOEX Settlement</td>
<td>6,755</td>
<td>-</td>
<td>-</td>
<td>6,755</td>
</tr>
<tr>
<td>FEMA Reimbursement of OM&amp;M</td>
<td>860</td>
<td>-</td>
<td>-</td>
<td>860</td>
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<tr>
<td>Projected Generated – Adaptive Management</td>
<td>12,613</td>
<td>28,750</td>
<td>8,591</td>
<td>49,954</td>
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<td>Projected Generated - Administration</td>
<td>3,599</td>
<td>7,667</td>
<td>2,291</td>
<td>13,557</td>
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<tr>
<td>Project Billing</td>
<td>14,000</td>
<td>16,000</td>
<td>18,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Total Revenues Received</td>
<td>$698,431</td>
<td>$624,369</td>
<td>$203,516</td>
<td>$1,526,316</td>
</tr>
<tr>
<td>Expenditures</td>
<td>742,942</td>
<td>747,494</td>
<td>333,599</td>
<td>1,824,035</td>
</tr>
<tr>
<td>Surplus (Deficit)</td>
<td>($44,511)</td>
<td>($123,125)</td>
<td>($130,083)</td>
<td>($297,719)</td>
</tr>
<tr>
<td>%age of Funding From Reoccurring Sources</td>
<td>5.5%</td>
<td>6.2%</td>
<td>18.8%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Shaded areas represent reoccurring revenue sources
Analysis of the LACPR 2014 Annual Plan:

• **Reoccurring revenues sources** provide only $115 million over the 3 year period – 7.5% of total funding.

• Balance of funding from one time sources.

• **Sources of funding fall** over the 3 year plan horizon – $698MM (2014) to $204MM (2016).

• **3 year expenditure total** of $1.8 billion (average $600 million/year) falls short of the $1 billion per year indicated by the 2012 Master Plan.

• Plan expenditures for the 3 years total $1.8 billion – funding sources provide $1.5 billion – a $300 million shortfall
Gulf of Mexico Energy Security Act (GOMESA)

• Phase I – area largely undeveloped i.e. no production – limited to lease sale receipts – ~$9.4 million to Louisiana over the last 5 years (2008–2012).

• Phase II – revenue sharing begins in 2017
  • Developed area – current production
  • Capped at $500 million
  • 4 Gulf States and Water Conservation Fund
  • Louisiana share (Bureau of Ocean Energy Management):
    • According to BOEM analysis $174 million per year
    • 80% to Coastal Restoration Fund – $139 million
    • 20% to 19 coastal parishes – $35 million
    • $6 billion over Master Plan implementation period.
Deepwater Horizon Oil Spill Fines

Resources and Ecosystems Sustainability, Tourist Opportunity and Revived Economies Act (RESTORE Act):

- 80% of civil penalties from Clean Water Act fines to a Gulf Coast Restoration Trust Fund managed by Gulf Coast Ecosystem Restoration Council
- 35% – equally divided among 5 states (FL, AL, MS, LA and TX)
  - Louisiana’s share split: 70% coastal restoration/30% coastal parishes
- 30% – allocated to each state based on a formula:
  - 40% shoreline oiled
  - 40% distance from spill site
  - 20% population
- 30% – state projects approved by the Council – priority to projects that contribute to restoring and protecting Gulf Coast natural resources and their resiliency – especially large scale projects contained in a comprehensive master plans
- 5% – observation, monitoring and technology
Deepwater Horizon Oil Spill Fines

Clean Water Act Penalties:
• Minimum – $4.5 billion (4.1 million barrels x $1,100/B)
• Maximum – $17.6 billion (4.1 million barrels x $4,300/B) if gross negligence or willful misconduct is found.

Restore Act allocations – 80% to the Council:
• Minimum – $3.6 billion
• Maximum – $14.1 billion
Deepwater Horizon Oil Spill Fines

RESTORE Act Funding
What might this mean for Louisiana?

<table>
<thead>
<tr>
<th>Dollars in Billions</th>
<th>Minimum Penalty</th>
<th>Maximum Penalty</th>
<th>Minimum Penalty</th>
<th>Maximum Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation</td>
<td>Dollar Allocation</td>
<td>Dollar Allocation</td>
<td>Louisiana’s %age</td>
<td>Louisiana’s Share</td>
</tr>
<tr>
<td>Gulf Restoration Trust Fund Allocation</td>
<td>35%</td>
<td>$1.260</td>
<td>$4.935</td>
<td>20%</td>
</tr>
<tr>
<td>Oil Spill Impact Allocation</td>
<td>30%</td>
<td>1.080</td>
<td>4.230</td>
<td>35%*</td>
</tr>
<tr>
<td>Gulf Coast Ecosystem Restoration Council</td>
<td>30%</td>
<td>1.080</td>
<td>4.230</td>
<td>80%*</td>
</tr>
<tr>
<td>Observation Monitoring &amp; Technology</td>
<td>5%</td>
<td>0.180</td>
<td>0.705</td>
<td>20%*</td>
</tr>
<tr>
<td>Total</td>
<td>$3.600</td>
<td>$14.100</td>
<td>$1.530</td>
<td>$5.992</td>
</tr>
</tbody>
</table>

* Assumed amounts – could be more or less.

Both scenarios are highly speculative as to amount and timing.
Deepwater Horizon Oil Spill Fines

Natural Resource Damage Assessment – Oil Pollution Act

Under NRDA, the U.S. Department of Interior (DOI) conducts a damage assessment to determine restoration needs that address the public’s loss of and use of natural resources.

No published estimates of potential NRDA assessments.

In 2012, BP made an early down payment of $1 billion on its future NRDA obligations. So far, $370 million allocated to Louisiana. Other states have received allocations of $295 million.

Early in 2013, the Department of Justice (DOJ) entered into criminal plea agreements with BP and Transocean for a total of $4.4 billion. Under the deals, a total of $2.6 billion will be dedicated to acquiring, restoring, preserving coastal environments. Approximate half ($1.3 billion) will be directed to barrier island restoration and diversion projects in Louisiana.
BP Oil Spill Fines & GOMESA
Will They Be Enough?

2 Louisiana Funding Scenarios

<table>
<thead>
<tr>
<th>Dollars in Millions</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESTORE Act</td>
<td>$1,530</td>
<td>$5,992</td>
</tr>
<tr>
<td>Plea Agreements</td>
<td>1,300</td>
<td>1,300</td>
</tr>
<tr>
<td>Natural Resource Damage Assessments (NRDA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Funding Agreement</td>
<td>370</td>
<td>370</td>
</tr>
<tr>
<td>Future Funding</td>
<td>???</td>
<td>???</td>
</tr>
<tr>
<td>Total RESTORE Act</td>
<td>3,200</td>
<td>7,662</td>
</tr>
<tr>
<td>GOMESA</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Total RESTORE Act and GOMESA</td>
<td>$9,200</td>
<td>$13,662</td>
</tr>
<tr>
<td>%age of Master Plan Funding Requirements - $95B</td>
<td>10%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Both scenarios are highly speculative as to amount and timing.

A nice down payment on coastal restoration, but not nearly enough and went will it come.
RESTORE Act
Things to Keep in Mind

• All amounts highly speculative with regard to amount and timing.

• RETORE Act funding, what ever it turns out to be, will not be in the form of a lump sum – spread out over many years.

• Gulf Coast Ecosystem Restoration Council – rules and processes.

• Other Gulf Coast states will fight for their share.
State Finances

The State has had operating deficits each year over the 5 years ending June 30, 2012.

<table>
<thead>
<tr>
<th>Millions of Dollars</th>
<th>2011/12</th>
<th>2010/11</th>
<th>2009/10</th>
<th>2008/09</th>
<th>2007/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenues</td>
<td>24,814</td>
<td>25,626</td>
<td>25,032</td>
<td>27,306</td>
<td>28,431</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>(25,961)</td>
<td>(27,192)</td>
<td>(26,453)</td>
<td>(28,916)</td>
<td>(28,787)</td>
</tr>
<tr>
<td>Surplus (Deficit)</td>
<td>$ (1,147)</td>
<td>$ (1,566)</td>
<td>$ (1,421)</td>
<td>$ (1,610)</td>
<td>$ (356)</td>
</tr>
<tr>
<td>Surplus (Deficit) Cumulative</td>
<td>$ (6,100)</td>
<td>$ (4,953)</td>
<td>$ (3,387)</td>
<td>$ (1,966)</td>
<td>$ (356)</td>
</tr>
<tr>
<td>Federal Gov't Revenues/Total Revenues</td>
<td>50%</td>
<td>54%</td>
<td>53%</td>
<td>50%</td>
<td>49%</td>
</tr>
<tr>
<td>Revenues Solely From State Sources</td>
<td>$ 12,287</td>
<td>$ 11,830</td>
<td>$ 11,827</td>
<td>$ 13,652</td>
<td>$ 14,455</td>
</tr>
</tbody>
</table>

A lot of states have similar fiscal problems.

However, Louisiana is the only state with an environmental need as large as the one we have.
State Finances

Facts:
• State revenues in 2012 totaled $24.8 billion.
• But, 50% came from federal sources.
• Raising an additional $1 billion would require an 8% across the board increase for all taxes and fees.
• Unfunded pension and post retirement benefits total $27.2 billion

The State could raise taxes will all proceeds dedicated to the Coastal Protection and Restoration Fund

• Louisiana has:
  • 3rd highest sales tax (state and parish) – 8.9%.
  • 2nd highest homeowner’s insurance – $1,546 vs. $909.
  • 48th in median household income – $40,700 vs. $50,054.
  • 2nd highest poverty rate – 20% vs. 16%.
Potential Funding Sources
Tough Choices

State Sales Tax:
• 3rd highest
• If equal to the highest state (Tennessee) – $177M

State Property Tax:
• 10% on current accessed values – $390M
• Only state with state-wide property tax

Insurance Premium Excise Tax (imposed on policy holders):
• If equal to what insurance companies pay – $190M
• Would be only state with a insurance tax imposed on policy holders
• 3rd highest homeowner’s insurance rates
• Flood Insurance Reform Act, flood insurance could be going up.
Potential Funding Sources
Tough Choices

The State could impose:

Tariff on all oil and gas volumes transported through Louisiana’s coastal wetlands – both onshore and offshore.

With all proceeds Dedicated to the

Coastal Protection and Restoration Fund
Pipeline Tariff on Oil & Gas Transported Through the Coastal Zone

Estimated value of oil & gas transported though the coastal zone in 2011 – ~$85 billion.

Revenues for Coastal Restoration “As If” the Proposed Tariff Was In Place Last 5 Years

<table>
<thead>
<tr>
<th>Percentage of Value</th>
<th>Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0%</td>
</tr>
<tr>
<td>2007</td>
<td>$848</td>
</tr>
<tr>
<td>2008</td>
<td>1,041</td>
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<tr>
<td>2009</td>
<td>633</td>
</tr>
<tr>
<td>2010</td>
<td>813</td>
</tr>
<tr>
<td>2011</td>
<td>847</td>
</tr>
<tr>
<td>Five Year Total</td>
<td>$4,182</td>
</tr>
</tbody>
</table>
Conclusion

For three plus decades, Louisiana coastal restoration revenue model has been to rely on federal funding. This model has been and will be doomed to failure, especially in light of the current political and economic environment.

Today, Louisiana’s coastal restoration revenue model is pinned to:
• Federal Funding
• Deepwater Horizon Oil Spill Fines

Simply too little to accomplish the mission.

Louisiana – Tough Choices
Which alternative would you choose?
Sustainable and Reliable Funding

Louisiana can determine its coastal destiny, but it has some choices to make. It can …

“… either make the bold and difficult decisions that will preserve our state’s future, or cling to the status quo and allow coastal Louisiana and its communities to wash away before our eyes”. 69

Introduction and Executive Summary to Integrated Ecosystem Restoration and Hurricane Protection: Louisiana’s Comprehensive Master Plan for a Sustainable Coast – April 2007
Presentation Takeaways

1) Funding stream required for the Master Plan is a lot more than $50 billion.

2) Existing funding streams will only be a down payment on coastal restoration.
   - Gulf of Mexico Energy Security Act (GOMESA)
   - BP Oil Spill Fines (RETORE Act)

3) Louisiana has some tough choices to make.

Louisiana is running out of Time
Frequently Asked Questions

• Isn’t this pipeline tariff just a way to punish the oil companies?
  No. The simple fact is that the value of oil and gas moving through Louisiana’s coastal zone (~$85B) is the only untapped source of funding for coastal restoration large enough to meet the need.

  Louisiana can no longer rely and wait on federal funding to meet this need.
Frequently Asked Questions

• Won’t a tariff on oil and gas cause jobs to leave Louisiana?
  No. Oil & gas is where you find it. Major oil companies invest billions of dollars in harsh environments like the North Sea and the Artic and in politically volatile counties like Nigeria, because that is where to oil is. They would gladly drill off the coasts of California, Florida and the Eastern Seaboard where costs would likely be higher if they could.

Coastal restoration as an industry can create jobs. A 2011 study published by the Louisiana Workforce Commission estimated $750 million of in restoration expenditures would create 10,000 direct and indirect jobs at a average wage of $50,000. Total economic impact = $1.3 billion.
Frequently Asked Questions

• Can’t oil companies transport their production to Texas or Mississippi and bypass the tariff?
  No. The pipeline network is extensive, but not interconnected. There are over 37,000 pipeline segments spanning over 63,500 miles.
Sustainable and Reliable Funding – The Concept

Frequently Asked Questions

• Why a tariff as a percentage of value and not a flat one?
  If the tariff was a fixed amount per unit of production, then during periods of falling commodity prices, the tariff would equal a higher percentage of value, potentially making some production uneconomic.

• Won’t a tariff increase gasoline prices?
  No. If the tariff proposed had been in place during 2011, the cost of producing gasoline in the U.S. would have gone up by only ½ cent per gallon.