Financing the Future

Exploring Potential Financing Mechanisms for Coastal Restoration and Protection
2012 Coastal Master Plan

50 years - $50 billion in 2010 constant dollars

Inflation-adjusted - $91.7 billion
Identified Funding Sources ~ $20.6 B

- GOMESA
- DOTD Transfer
- CPR Trust Fund Dedications
- BP Deepwater Horizon Civil
- CWPPRA
- CIAP
- Surplus
- Transocean Civil Penalties
- NFWF
Funding Gap:

$91.7 billion - $20.6 billion = $71.1 billion
“There is a backlog of more than 1,000 authorized studies and construction projects. In recent years, few new studies, new construction projects, and new programs have been in either the President’s budget request or enacted appropriations.”

- Congressional Research Service, 2016
“(c) Environmental Bank.—

“(1) Definition of Environmental Bank.—

In this section, the term ‘environmental bank’ means a project, project increment, or projects for purposes of restoring, creating, or enhancing natural resources at a designated site to establish mitigation credits.

“(2) Credits.—Mitigation credits created from environmental banks approved pursuant to this section may be used to satisfy existing liability under Federal environmental laws.
Water Infrastructure Improvements for the Nation (WIIN) Act, cont.

SEC. 1106. ALTERNATIVE PROJECTS TO MAINTENANCE DREDGING.

The Secretary may enter into agreements to assume the operation and maintenance costs of an alternative project to maintenance dredging for a Federal navigation channel if the costs of the operation and maintenance of the alternative project, and any remaining costs necessary for maintaining the Federal navigation channel, are less than the costs of maintaining such channel without the alternative project.
Climate change is a direct threat to U.S. citizens as well as a “threat multiplier” to critical infrastructure and military preparedness.
Historical Precedent

“A safe and efficient highway network is essential to America's military and civil defense.”
Military Use of Solar

In 2014 Maj. Gen. Al Aycock decided to use Georgia as a model for solar exploration. Georgia Power contracted with the U.S. Army and the U.S. Army Energy Initiatives Task Force to build, own and operate on-base installations with 30 MW at Fort Benning, 30 MW at Fort Stuart and 45 MW at Fort Norton; and then the Navy came forth and decided they wanted 31 MW of solar at their submarine base in Kings Bay and 31 MW in Albany.

"The ability to generate renewable power on base can help the resilience of both the military and the civilian national grid," said Bishop. "And so broadening our nation's access to clean and renewable energy will not only improve our national security by increasing our energy reserves, but also continue to lessen our dependence on foreign resources."
But...

• The only remaining environmental provision in the $619 billion defense bill concerns the Pentagon's spending on climate mitigation projects, but the conference committee significantly weakened previously proposed language.

• The original House version would have exempted the Defense Department from executive orders on climate change and renewable energy. Some Democrats had interpreted that as effectively banning DOD from spending any money on mitigation.

• By contrast, the final bill now expresses the "sense of Congress" that DOD should prioritize spending on "the support and enhancement of the combat capabilities of the department" rather than climate change or renewable energy.
Takings Claims

“Corps could face billions in 'takings' payments for MR-GO misdeeds”  Times Picayune; May 6, 2016

“Government-induced flooding temporary in duration gains no automatic exemption from Takings Clause inspection.”
Arkansas Game and Fish Commission v. US
(Some) State Funding Mechanisms

• Water marketing
• Pipeline tariff
• Cap & Trade/Carbon Tax
• Revolving loan program
Taxing Water

Louisiana collects no severance tax on groundwater, even though it is covered by the Mineral Code.

Any effort to tax its withdrawal would have to be done with special care and attention. On the other hand, a carefully conceived tax could facilitate the conservation of groundwater in ways that ensure its broader availability for drinking water and public health and welfare purposes.

Selling Water

Growing demand for water beyond traditional users (fracking for example) and beyond Louisiana’s borders will likely force this issue, and it deserves careful consideration.

Pending proposal to pipe MS River water across Arkansas to Texas.

Until a comprehensive state-wide water budget is completed, it would be imprudent to sell rights over waters that are already in use by municipalities, navigation, ecosystems, agriculture, etc.
Pipeline Tariff

~$85 billion/yr in Oil and Natural Gas moves through Louisiana

To pass constitutional muster:
Substantial nexus between taxpayer & state
Fair apportionment
Non-discriminatory
Fair relationship between tax and services provided by state

Cap & Trade/Carbon Price

• Regional Greenhouse Gas Initiative – RGGI

During the 2012-2014 period, the states received, programmed, and disbursed virtually all the $1.0 billion in allowance proceeds back into the economy. The money has been spent on energy efficiency measures, community-based renewable power projects, assistance to low-income customers to help pay their electricity bills, greenhouse gas reduction measures, and education and job training programs. Net economic benefit of $1.3 billion.
Rvolving Loan Fund

• TX SWIFT Program; Priority for projects with:
  – Larger populations
  – Multiple communities
  – Multiple regions
  – Local financial commitment
Insurance & Credit

“To date, sea level rise has not played a material role in Fitch’s assessment of the fundamental credit characteristics of any of its rated issuers...However, there are real threats faced by governments in coastal areas. As the effects of sea level rise upon issuers’ credit fundamentals become known and measurable, over time these considerations may take on greater importance as a credit factor in Fitch’s rating decisions.”

The “protection gap” – the difference between the costs of natural disasters and the amount insured – has quadrupled to $100bn a year since the 1980s.
Insurance & Credit

Consider an expensive beachfront house that is highly likely to be submerged eventually, although “eventually” is difficult to pin down and may be a long way off. Will the value of the house decline gradually as the expected life of the house becomes shorter? Or, alternatively, will the value of the house—and all the houses around it—plunge the first time a lender refuses to make a mortgage on a nearby house or an insurer refuses to issue a homeowner’s policy? Or will the trigger be one or two homeowners who decide to sell defensively?
Conclusions

• Diverse revenue sources
• Coordination between sources/interests
• We can’t wait