DREDGE DONT DIVERT

SLC

The Save Louisiana Coalition

Examples of What We Do

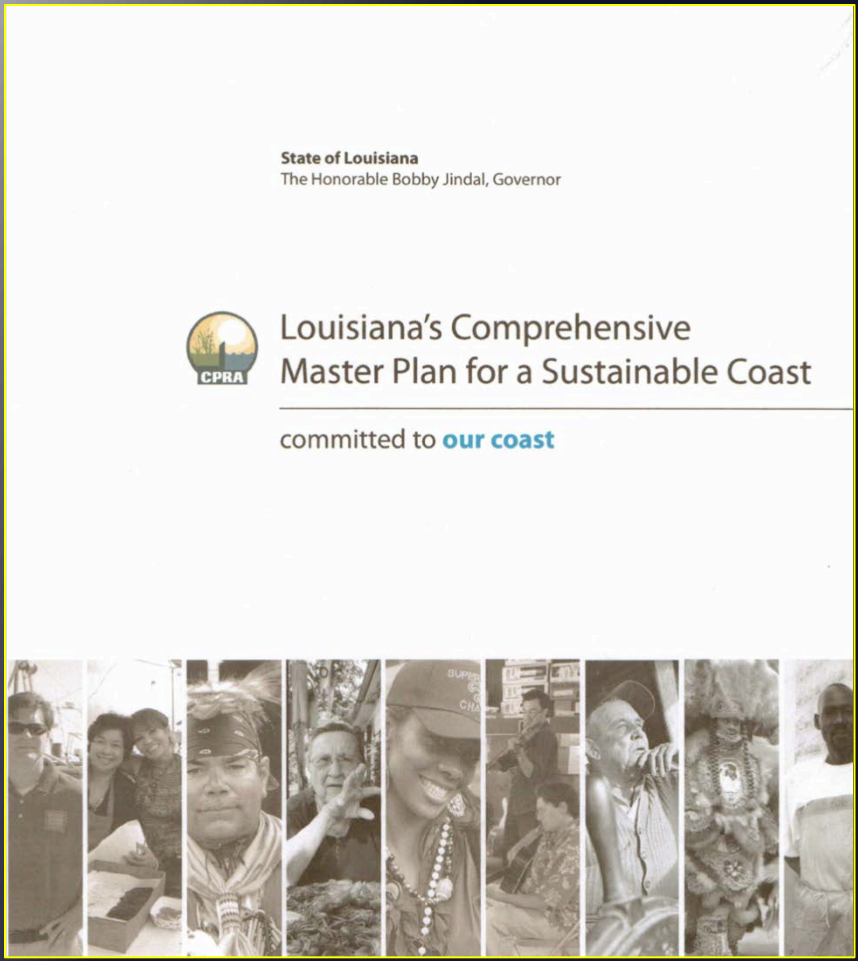
Billboards

Legislative Testimony

Newspaper Ads

Public Outreach

The Battle



Southeast Coast: Project List

1st Implementation Period (2012-2031)

Project Type	Project Name	Project Costs	Project No.
Barrier Island/ Headland Restoration	Barataria Pass to Sandy Point Barrier Island Restoration: Restoration of Barataria Bay barrier islands between Barataria Pass and Sandy Point to provide dune and back barrier marsh habitat and to provide storm surge and wave attenuation for the Barataria Basin.	$535M	002.BH.04
	Belle Pass to Caminada Pass Barrier Island Restoration: Restoration of Barataria Bay barrier islands between Belle Pass and Caminada Pass to provide dune, beach, and back barrier marsh habitat and to provide storm surge and wave attenuation for the Barataria Basin.	$281M	002.BH.05
Channel Realignment	Mississippi River Channel Realignment: Planning, engineering and design to explore potential locations and discharge regimes for a channel realignment. PLANNING AND DESIGN ONLY.	$73M	001.DI.39p
X	Lower Breton Diversion (50,000 cfs): Sediment diversion into lower Breton Sound in the vicinity of Black Bay to build and maintain land, 50,000 cfs capacity (modeled at 50,000 cfs when Mississippi River flow exceeds 600,000 cfs, at 8% of river flows between 200,000-600,000 cfs, and no operation when river flow is below 200,000 cfs).	$212M	001.DI.02
X	Upper Breton Diversion (250,000 cfs): Sediment diversion into upper Breton Sound in the vicinity of Braithwaite to build and maintain land, 250,000 cfs capacity (modeled at 250,000 cfs when Mississippi River flow exceeds 900,000 cfs, at 50,000 cfs for river flows between 600,000-900,000 cfs, at 8% of river flows between 200,000-600,000 cfs, and no operation when river flow is below 200,000 cfs).	$885M	001.DI.17
X	Central Wetlands Diversion (5,000 cfs): Sediment diversion into Central Wetlands in the vicinity of Violet to provide sediment for emergent marsh creation and nutrients to sustain existing wetlands, 5,000 cfs capacity (modeled at 5,000 cfs when Mississippi River flow exceeds 200,000 cfs and no operation for river flows below 200,000 cfs).	$189M	001.DI.18
	Mid-Breton Diversion (5,000 cfs): Sediment diversion into mid-Breton Sound in the vicinity of White Ditch to build and maintain land, 5,000 cfs capacity (modeled at 5,000 cfs for river flows above 200,000 cfs and no operation below 200,000 cfs).	$123M	001.DI.23
X Sediment Diversion	West Maurepas Diversion (5,000 cfs): Diversion(s) into western Maurepas Swamp in the vicinity of Convent/Blind River or Hope Canal to sustain existing bald cypress-tupelo swamp habitat, maximum capacity 5,000 cfs (modeled at 5,000 cfs when Mississippi River flow exceeds 600,000 and at 500 cfs for river flows between 200,000-600,000 cfs).	$127M	001.DI.29
X	Mid-Barataria Diversion (250,000 cfs- 1st Period Increment): Sediment diversion into mid-Barataria in the vicinity of Myrtle Grove to build and maintain land, maximum capacity 50,000 cfs (modeled at 50,000 cfs when the Mississippi River flow exceeds 600,000 cfs, at 8% of river flows between 200,000-600,000 cfs, and no operation below 200,000 cfs). NOTE: This project is the first implementation period component of a 250,000 cfs diversion to mid-Barataria. The influence area shown is for the total 250,000 cfs project upon completion in the second implementation period.	$275M	002.DI.03
X	Lower Barataria Diversion (50,000 cfs): Sediment diversion into lower Barataria Bay in the vicinity of Empire, 50,000 cfs capacity (modeled at capacity when Mississippi River flow exceeds 600,000 cfs; modeled at 8% of river flow from 600,000 cfs down to 200,000 cfs; no operation below 200,000 cfs).	$203M	002.DI.15
	Bayou Lafourche Diversion (1,000 cfs): Diversion of the Mississippi River into Bayou Lafourche to increase freshwater flow down Bayou Lafourche, 1,000 cfs capacity (modeled with continuous operation at 1,000 cfs).	$189M	03a.DI.01
X Hydrologic Restoration	Amite River Diversion Canal: Hydrologic restoration in the western Maurepas Swamp by gapping spoil banks along the Amite River Diversion Canal to eliminate impoundment and restore hydrologic exchange.	$4M	001.HR.01

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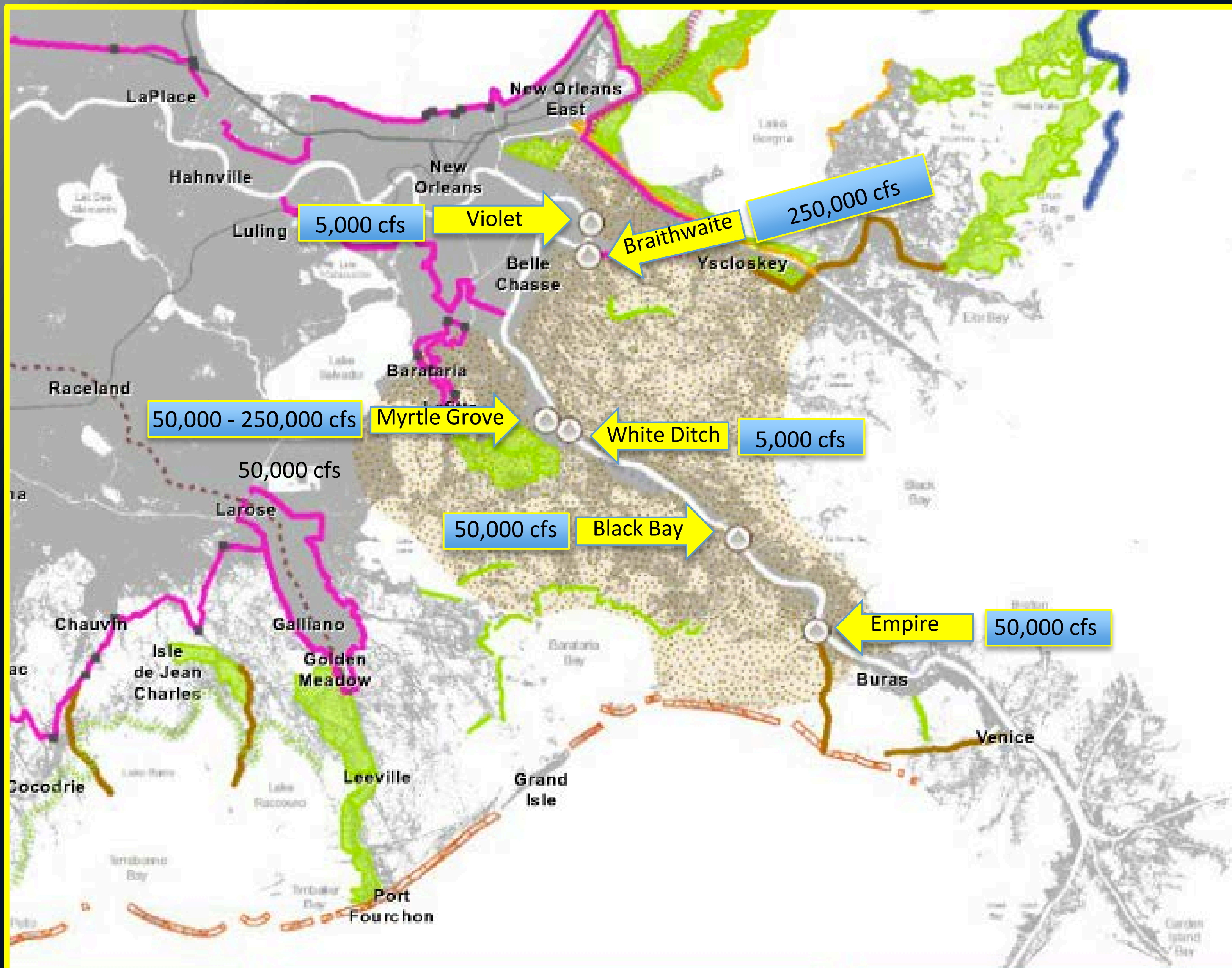
Diversion Sites



Caernarvon vs. Proposed Barataria Diversion

8,000 cfs

50, 000 - 250, 000 cfs

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Caernarvon Damage

Landsat 5
Fresh water/nutrient damage survey

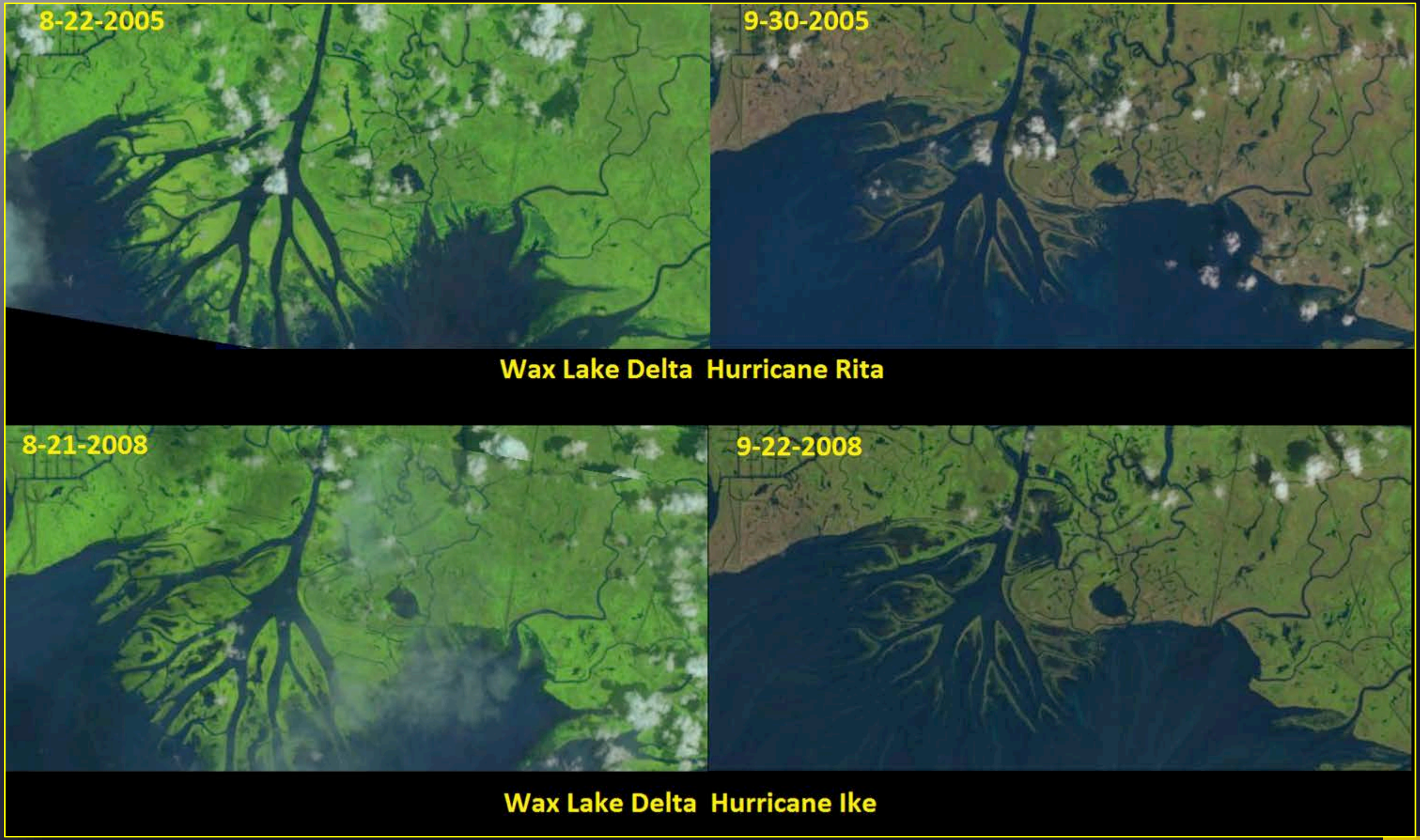
River-influenced Land Loss

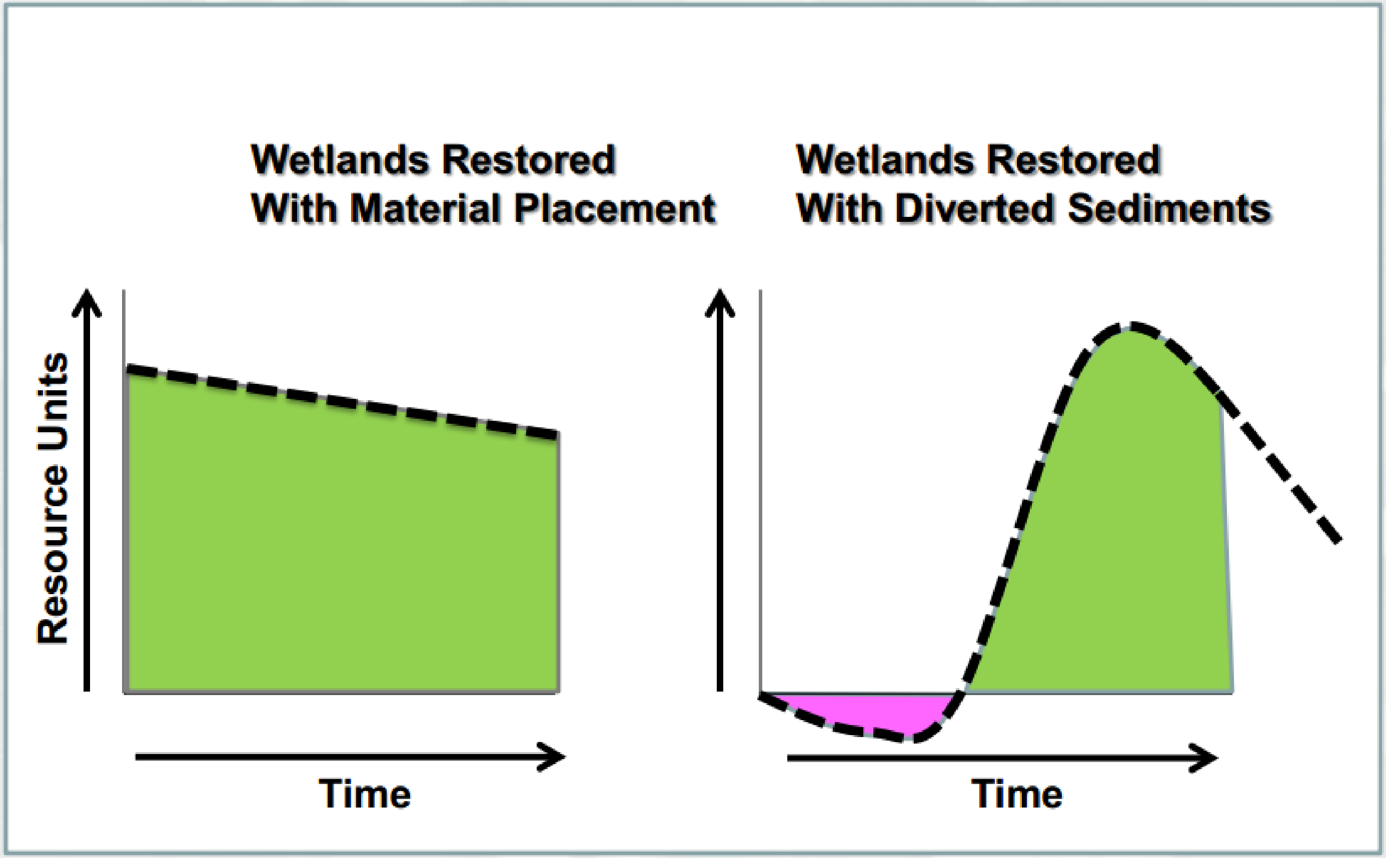
° Low salinity marsh experienced more than twice as much land loss by percent than high salinity marsh.

° The failure of low salinity wetlands was focused in the interior regions of Breton Sound, the western Chenier Plain, and the more exposed regions of the Birdfoot and Wax Lake Deltas. (from Howes et al. 2010)

Wax Lake

10% river flow/ 300,000 cfs/ 250 acres per year



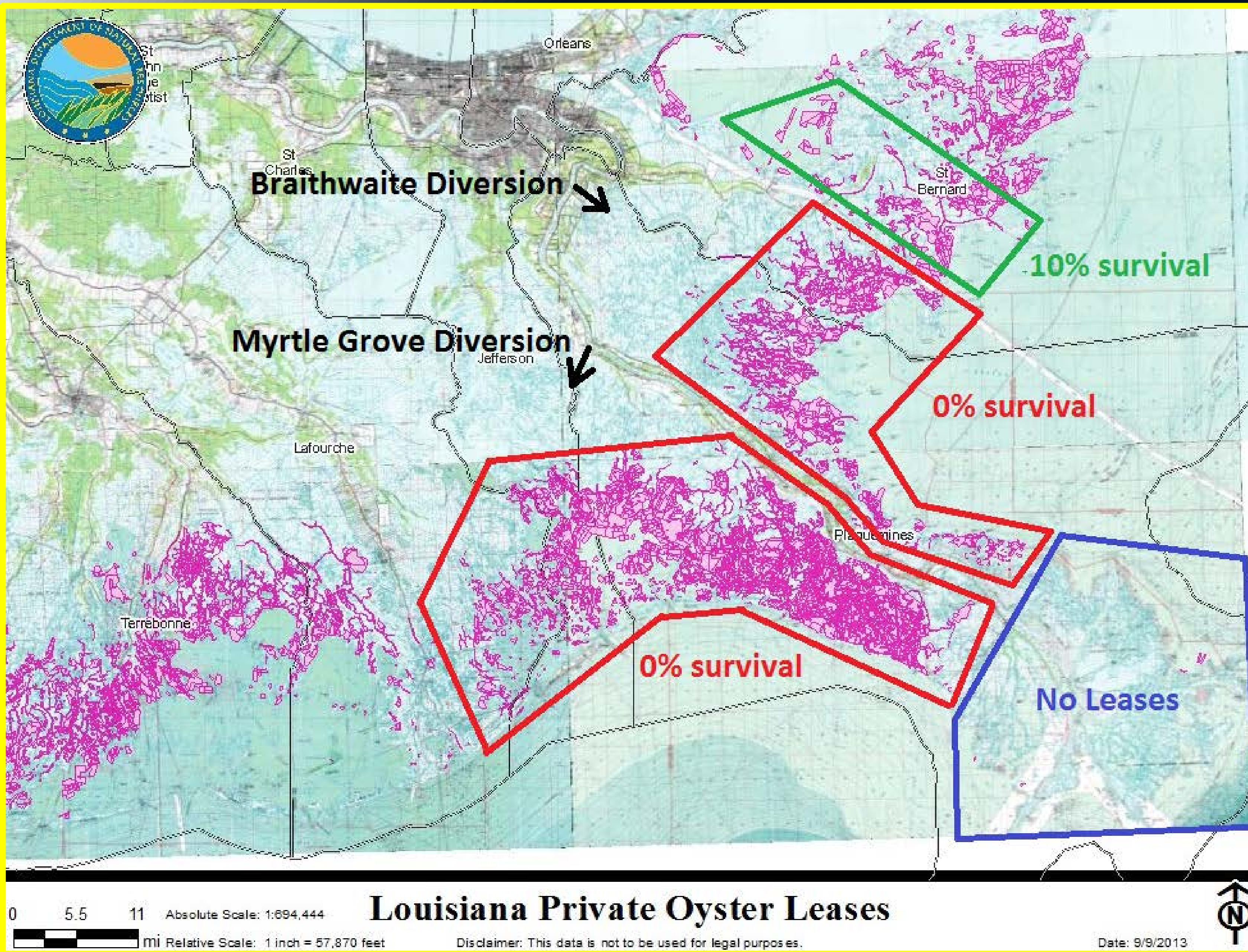

Wetlands Restored
With Material Placement
Wetlands Restored
With Diverted Sediments
Resource Units
Time
Time

COMMERCIAL/RECREATIONAL FISHING INDUSTRY -- $4.1 BILLION

Industry	Economic Impact	Jobs	State & Local Tax Revenues
	(Billions)		(Millions)
Commercial Fisheries	$2.4	26,915	$170.5
Recreational Fisheries	$1.7	18,122	$114.1
Total	$4.1	45,037	$284.6

LA is the most productive fishery in North America

- 25% of continental U.S. Commercial fisheries
- More than one billion pounds caught annually with a dockside value of $291 million
- Recreational value $900 million to $1.2 billion
- Louisiana has 40% of the coastal marshlands in the U.S.



Orleans
St John the Baptist
St Charles
Braithwaite Diversion
St Bernard
10% survival
Myrtle Grove Diversion
Jefferson
0% survival
Lafourche
Plaquemines
Terrebonne
0% survival
No Leases
0 5.5 11 mi
Absolute Scale: 1:694,444
Relative Scale: 1 inch = 57,870 feet
Louisiana Private Oyster Leases
Disclaimer: This data is not to be used for legal purposes.
Date: 9/9/2013
N
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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
http://sero.nmfs.noaa.gov

F/SER4:RH/PW

JUN 26 2013

Ms. Elizabeth L. Davoli
Coastal Protection and Restoration Authority
Environmental Section
Post Office Box 44027
Baton Rouge, Louisiana 70804-4027

Dear Ms. Davoli:

NOAA's National Marine Fisheries Service (NMFS) received the Solicitation of Views request

"(1) DISPLACE MARINE FISHERY SPECIES FROM CURRENTLY PRODUCTIVE HABITATS TO LESS SUPPORTIVE HABITATS, (2) REDUCE MARINE FISHERY PRODUCTIVITY, (3) CONVERT ESSENTIAL FISH HABITAT (EFH) TO AREAS NO LONGER SUPPORTIVE OF SOME FEDERALLY MANAGED MARINE FISHERY SPECIES OR THEIR PREY ITEMS, (4) RENDER WETLANDS IMPACTED BY DIVERSIONS MORE SUSCEPTIBLE TO EROSION FROM STORMS, (5) DEGRADE WATER QUALITY, AND (6) CAUSE SOCIO-ECONOMIC HARDSHIP TO THOSE INVOLVED IN THE COMMERCIAL AND RECREATIONAL FISHING INDUSTRIES."

Areas within the influence of the proposed diversion are designated as EFH under provisions of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act; P.L. 104-297). Categories of EFH in the Barataria basin include emergent wetlands; mangrove

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PANEL RECOMMENDATIONS

NEEDS MORE STUDY

Submitted to:

Coastal Protection and Restoration Authority

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Methodological and Ideological Options

Trajectory economics: Assessing the flow of ecosystem services from coastal restoration

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ABSTRACT

Monetized estimates of ecosystem services are increasingly cited as partial justification for a wide range of environmental restoration initiatives, yet parallel applications of these values in performance assessment have been limited. Incorporated into traditional economic models, such values can offer potential insight on programmatic efficiency and help to inform policy tradeoffs within and between competing methods. For this analysis, acreage trajectories and cost functions are developed for dredge- and diversion-based land reclamation methods in coastal Louisiana, USA. Benefit-cost models are constructed from which ecosystem service values are initially derived via break-even analysis and then specified to inform comparative case studies. Results indicate that the minimum service value required to offset project expenditures is typically higher for "natural" diversion-based restoration relative to "rapid" dredge-based methods under historic project conditions. Accounting for climatological and socioeconomic risks widens this gap, with benefit–cost ratios for dredge-based reclamation exceeding that of diversions in 16 benefit–cost simulations conducted over a 50-year project horizon. Taken together, these results highlight the influence of time and risk in the assessment of competing project alternatives, and suggest the need to reframe restoration efficiency in terms of the aggregate flow of ecosystem services, versus the per unit costs of terminal stocks.

1. Introduction

A perennial concern in the policy application of ecosystem services is the extent to which quantitative methods can be used to adequately capture the value of provisioning, regulating, supporting, and cultural functions provided by natural systems (Arha et al., 2007; Barbier et al., 2011; Pendleton, 2008; Ruckelshaus et al., in press). Such concern is especially prominent in the field of economics, where methodological debate over non-market valuation has existed for decades (Arrow et al., 1993; Carson, 2012; Diamond and Hausman, 1994; Haab et al., 2013; Hanemann, 1994; Hausman, 2012; Kling et al., 2012; Portney, 1994; Randall, 1994). Not surprisingly, ecosystem restoration programs charged with efficient stewardship of public funding have eschewed financial expressions of project benefits, relying instead on biophysical measures for performance evaluation. For example, large-scale restoration programs in coastal Louisiana and the Florida Everglades have historically gauged restoration performance via habitat suitability indices (Bartoldus, 1999). Such metrics allow for a standardized expression of project benefits and the mandated cost-efficacy assessments required by authorizing legislation (Public Law 101–646, 1990; Public Law 104–303, 1996).

Despite this operational history, monetized estimates of ecosystem services are increasingly cited within the scientific and programmatic literature of these programs and in support of a wide range of federal initiatives focused on conservation and restoration of wetlands (Barbier, 2013; Cullinane-Thomas et al., 2012; NOAA, 2009; USDA, 2007). In support of coastal restoration programming, for example, economic estimates are most often estimated for habitat provision, nutrient assimilation, and storm surge attenuation (Batker et al., 2010; Costanza et al., 2008; Petrolia and Kim, 2011; Petrolia et al., forthcoming). This expanded accounting is at least partially driven by the need to justify billions of dollars in federal requests for ecosystem restoration during an era of heightened public scrutiny and fiscal restraint (Mather Economics, 2010; Pendleton, 2008). The use of these estimates, however, is not limited to program justification. Incorporated into traditional economic

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View looking South
from Rowing Club.
10-23-26.
O.L.B. 105.

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TheSaveLouisianaCoalition.com

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