

LAKE CHARLES HARBOR AND TERMINAL DISTRICT





Calcasieu River and Pass

Dredge Material Management Plan



Regional Port Impacts

Creates 31,325 Jobs

Generates \$2.3 Billion in Personal income

Produces \$4.6 Billion in Business Revenue

Generates \$250 Million in State and Local Taxes

Source: Martin Associated, 2007, Economic Impact of the Port of Lake Charles



National Port Impacts

12th Largest Seaport in the U.S.

Handles 55 million tons of cargo annually

A Strategic Energy Waterway

Produces 10% of the motor oils used in
U.S. daily

Currently Home to the Largest U.S. LNG
Plant

Stores 1/3 of the Strategic Oil Reserve

In 2006, a nine day channel closure
increased U.S. energy costs \$1 Billion.



The Future

Expansion of Trunkline LNG



The Future

Cameron LNG Fully Operational 4th Qt 08

Cheniere LNG Planned



The Future

An aerial photograph of an industrial facility, likely a refinery or chemical plant, situated along a wide river. A large orange tanker ship is docked at a pier, with a green tugboat assisting it. The facility includes several large cylindrical storage tanks, various industrial buildings, and a complex network of pipes and walkways. The surrounding area features lush green vegetation and a large body of water. In the background, a city skyline is visible under a clear sky.

La. Cogeneration Plant (SNG) Planned



By 2011

5th Largest U.S. Seaport

Import 20% of U.S. LNG (42 M Tons/Yr)

Vessel Traffic Increase 70% to 80%



Lake Charles

The biggest little port you've never heard of



**What if the Port had to
Close?**

Is That Possible?

Yes!



The Port Faces A Major Challenge

Lack of Dredge Material Disposal
Capacity



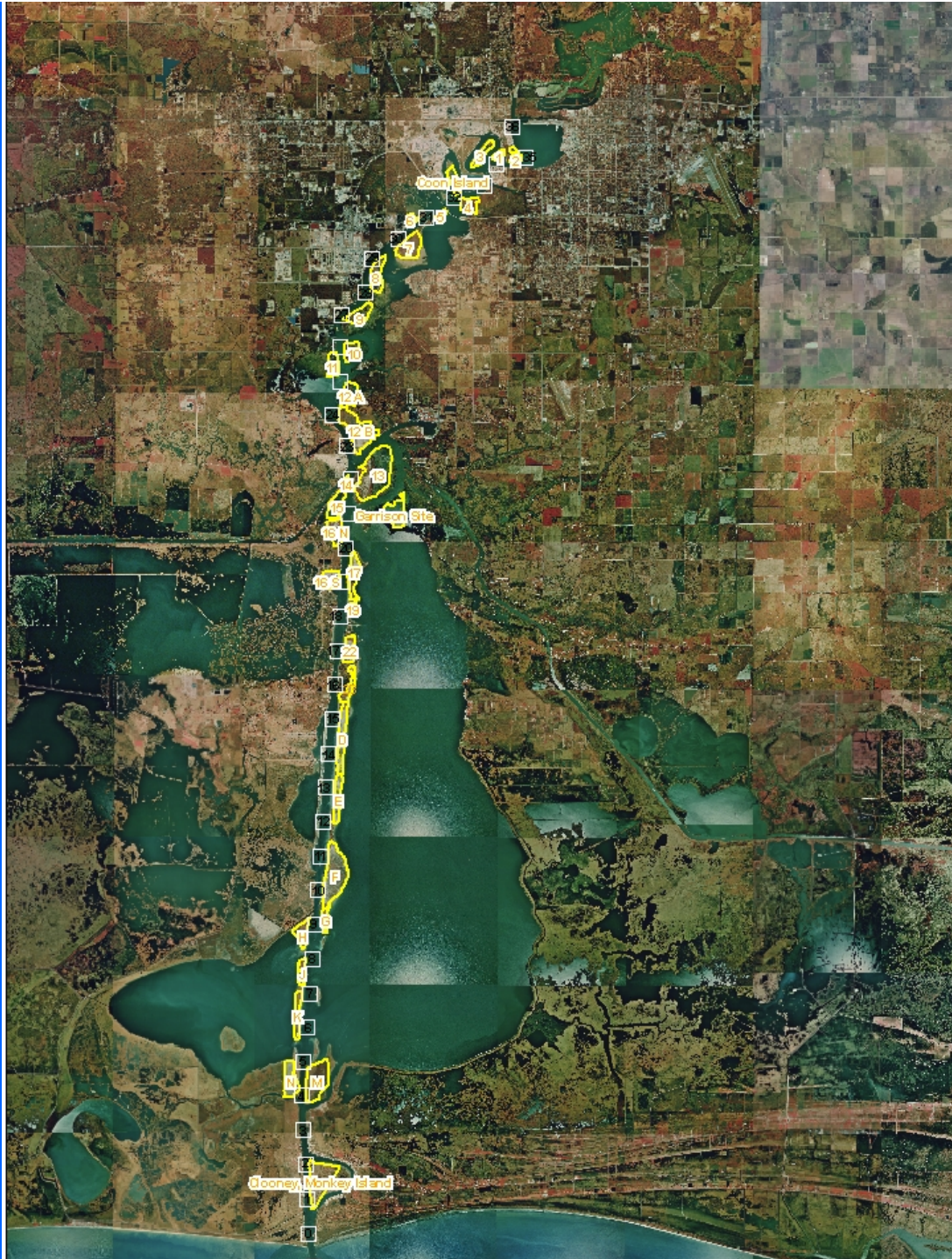
Project Dimensions

Bar Channel (32 Miles) : 600 X - 40

Inland Reach (36 Miles): 400 X - 40



**The Port
Cannot
Exist
Without
Dredging**



**32 Mile
Outer Bar**

**36 Mile
Inland
Channel**

**Mostly
Manmade**

**High
Shoaling
Rates**

**CDFs At or
Near
Capacity**



Historic Dredging Schedule

Channel Divided Into 5 Sections

Outer Bar – Dredged Annually

Mile 0 to 5 – No dredging necessary

Mile 5 to 17 – Lower River – Dredged Every
Other Year

Mile 17 to 30 – Middle River – Dredged
Every Other Year

Mile 30 to 36 – Upper River – Dredged
Every 5 to 7 Years



Historic Disposal Strategy

Outer Bar – Ocean Dumping

Inland Reach – Confined Upland Disposal Sites
Along the Channel



Mile 0 to 5





Lower River
Mile 5 to 17





Middle River Miles 17 to 30





Upper River Miles 30 to 36





The Challenge

Better Manage Current Disposal Sites
Identify Additional Disposal Sites

The Solution

Develop A Dredge Material Management Plan



DMMP

20 Year Plan for Dredge Material Disposal

To Be Updated Every 5 Years

**Identify Dredge Material Disposal Strategies That
Maintain the Channel at Project Dimensions**



The DMMP Process

Long

Arduous

Often Frustrating

Expected to Take 2 years

Likely 2 ½ Years Plus Approval

Determine Future Disposal Needs (20 years)

Determine Future Disposal Capacity of
Existing Sites If Well Managed

Identify Additional Disposal Sites to Cover Any
Shortfall



But Nothing Is As Easy As It Seems

Shoaling Study
Geotechnical Study
Hydrodynamic Study
Cost Estimation
Plan Formulation
Biological Resource Study
HTRW Analysis
Cultural Resource Study
Oyster Resource Study
CZMA Consistency Determination
Endangered Species Coordination
FWCA Report
Agency and Public Comment, and
Compliance Determination with Environmental Laws, Regulations and
Executive Orders



Plus Unexpected Hiccups

The HTRW Found

Clean Water

Clean Sediment

But All the Critters Died

Conclusion

The EPA-Approved Critters Were Not Indigenous And

Could Not Live In The Material



Four Alternatives Considered

Do Nothing

Closes the Channel

Ocean Dumping

Least Cost - \$400 Million

Port/State/Public Won't
Approve

CDF Expansion and BU – Option 1

CDFs Plus 8 BU Sites

\$422 Million

Optimize BU – Option 2

CDFs Plus 14 BU Sites

\$405 Million



Tentatively Selected Plan

CDF Expansion and BU – Option 1

Twenty Year Costs

Federal Costs - \$378 M Sponsor Costs - \$50 M

Advantages

Meets 20 year Disposal Needs

Creates Wetlands

Disadvantage - Very Costly



What's Next

Have Option 1 Approved

Have Option 1 Funded

Doubles the Historic Maintenance Costs

Paying for Past Sins – Not Properly Maintaining
CDFs

Increased Cost to Properly Maintain CDFs
in the Future

Increased Disposal Cost (Longer Pumps to BU
Sites)



What's Needed

Joint Action by All Ports Similarly Situated to
Increase Maintenance Funding

Appropriate Total Annual HMF Collections for
Maintenance

Spend Down the HMF Surplus

LAKE CHARLES HARBOR AND TERMINAL DISTRICT

Thank You

Questions

