

Louisiana's 2012 Coastal Master Plan

Hard Choices, Smart Investments for Our Future

Regional Community Meetings
Overview Presentation



Tonight's Agenda

- I. Introductions
- II. Coastal Master Plan Overview
- III. Vision and Services
- IV. Community Exercise Part I
- V. Future Without Action
- VI. Community Exercise Part II
- VII. Where We Are and Next Steps
- VIII. Public Discussions

Who Is Involved?



Nearly 100 individuals are working together to restore and protect our coast.

Ways to Provide Input

Fill out the
Community
Exercise

Tell us what you
think during the
comment period

Have a conversation
with one of the team
members

Send us an email at
MasterPlan@la.gov

Come to CPRA
public meetings


Louisiana's 2012 Coastal
Master Plan

Request a
presentation for
your citizen
group

Talk to your local leaders or
representatives on the
Framework Development
Team

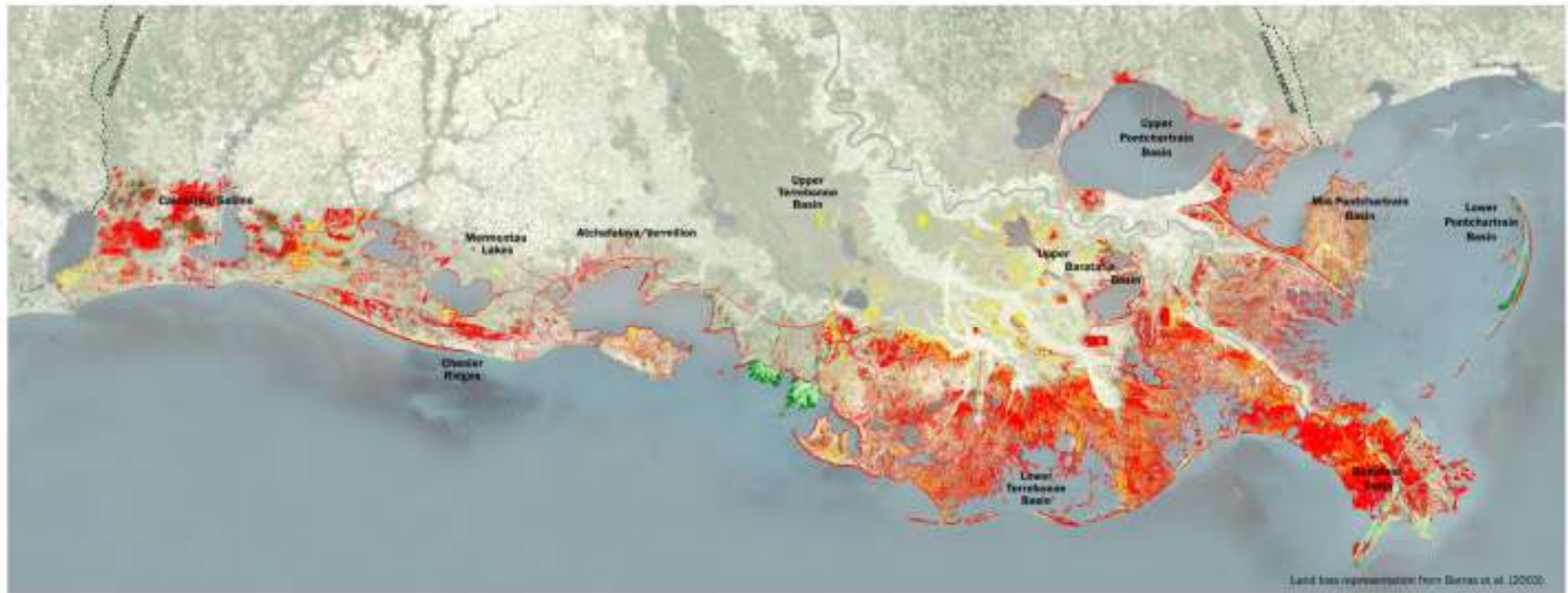
Tell your family,
friends and
co-workers!

Check the website regularly at
coastalmasterplan.la.gov

Coastal Master Plan Overview



Our Coastal Crisis



Designates Historic Land Loss

Coastal Land Change 1932-2050

- Land Loss 1932 - 2000
- Potential Land Loss 2000 - 2050
- Land Gain 1932 - 2000
- Predicted Land Gain 2000 - 2050

Based on coastal Louisiana has lost an average of 34 square miles of land, primarily marsh, per year for the last 50 years. From 1932 to 2000 coastal Louisiana has lost 1,600 square miles of land, roughly an area the size of the state of Delaware. If nothing is done to stop this land loss, Louisiana is expected to lose another 700 square miles of land, or about equal to the size of the great Washington D.C. Baltimore area, in the next 50 years. Further, Louisiana accounted for an estimated 90 percent of the coastal marsh loss in the lower 48 states during the 1990s.

Source: Barajas et al., 2003

Approximate Scale



Historic and Projected Land Change (1932 -2050)



Wake Up Calls



4 Major Hurricanes
in 5 Years

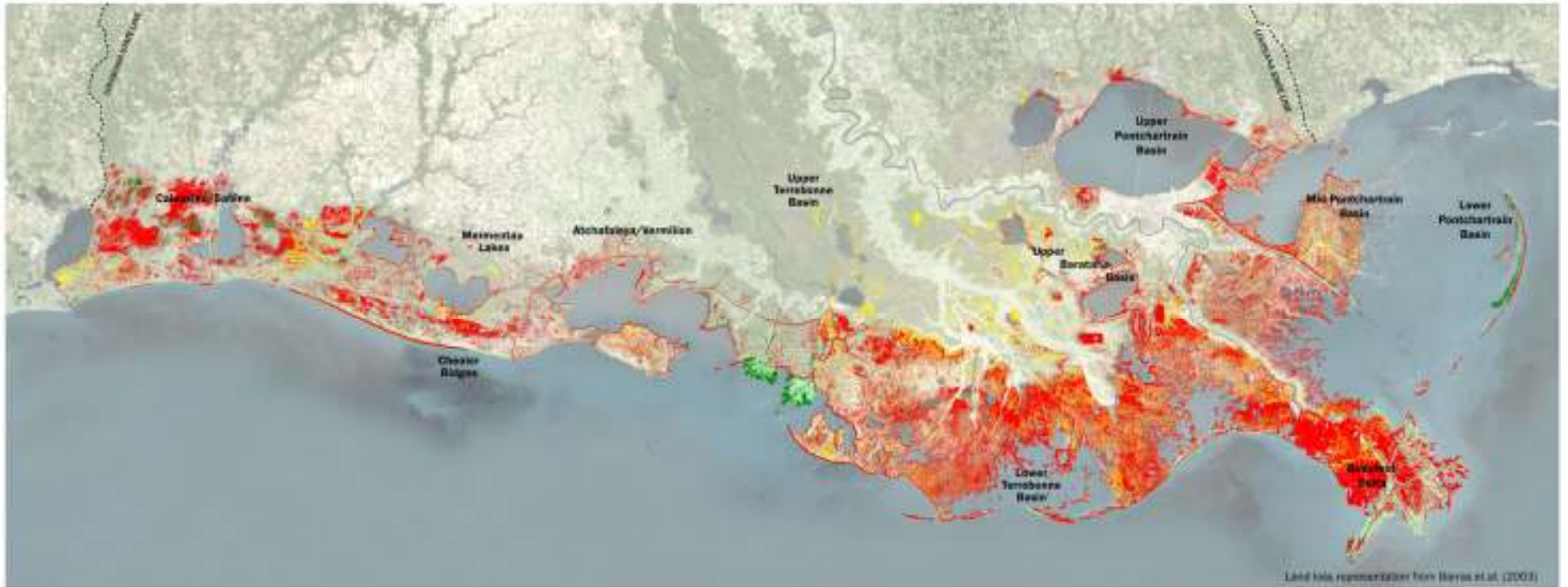


Nation's Largest Oil Spill



2011 High Water Event

Why haven't we been more effective?



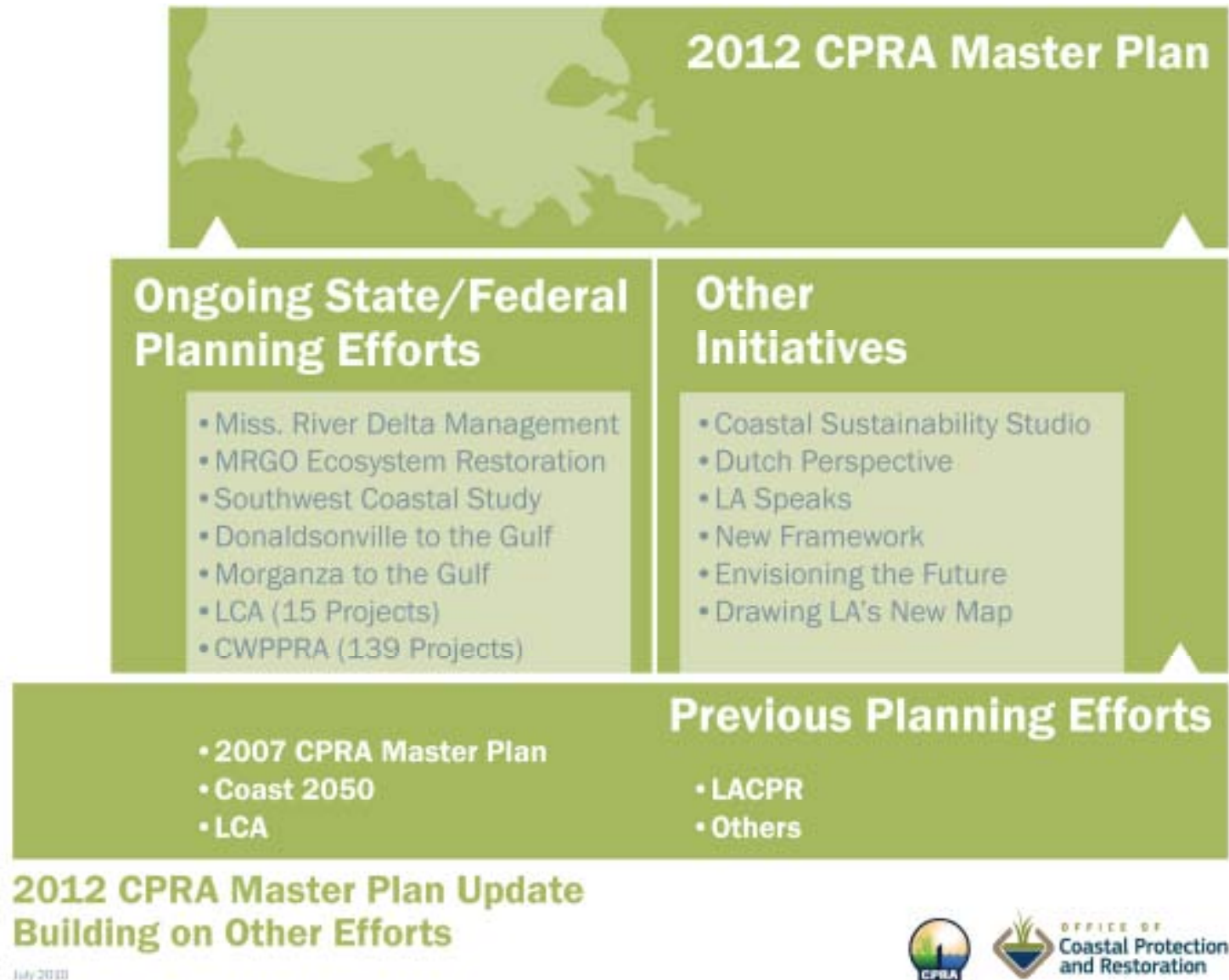
- ❖ Too small to address this large-scale problem
- ❖ Focused on single projects instead of interconnected ecosystem and communities
- ❖ Allowed conflicts to lead to compromises that don't address the needs
- ❖ Did not fully understand the tradeoffs

What's at Stake?



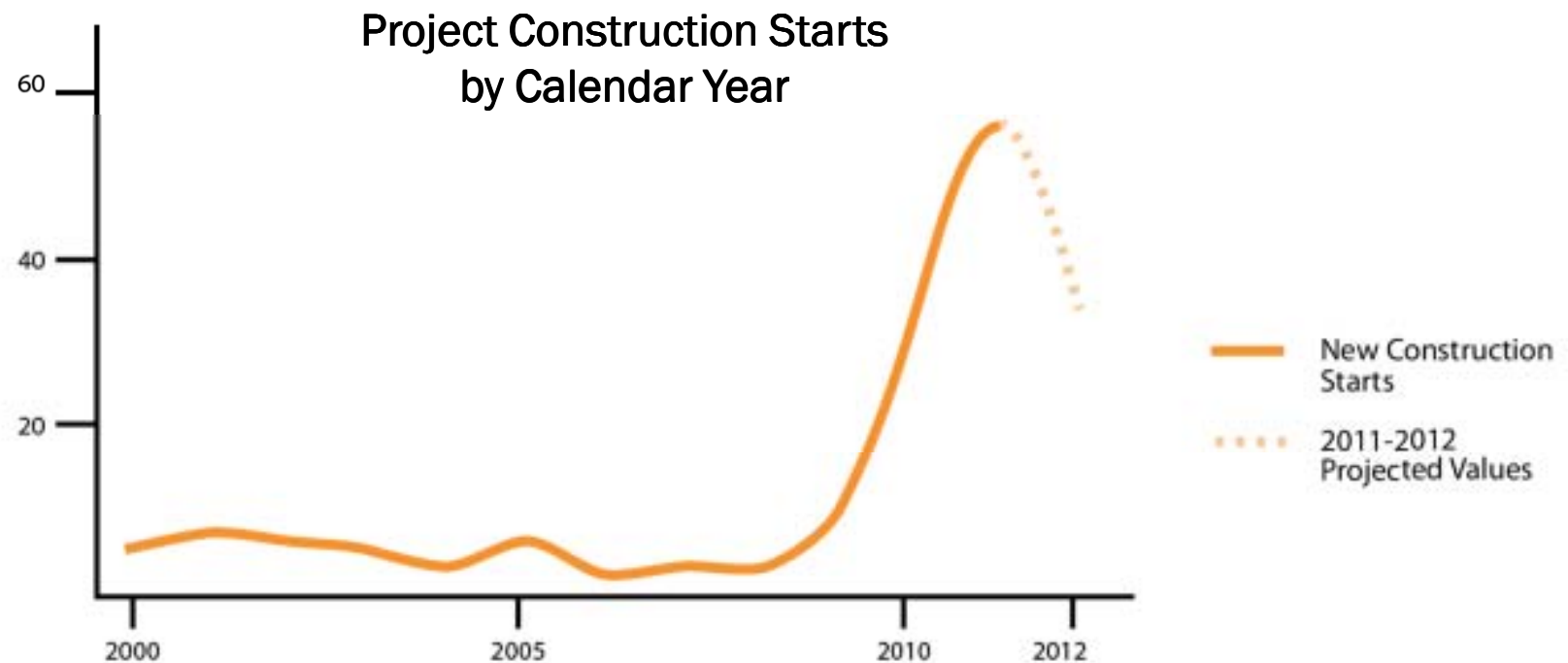
Predicted Land-Water Change from 2010-2060

Building on Past and On-Going Efforts



Actions Since 2007 Master Plan

- 1500% increase in program activity
- Expedited project implementation



Progress Since 2007 Master Plan



Morganza to the Gulf



East Grand Terre



Black Lake Beneficial Use



LPV IHNC Surge Barrier

- ❖ 48 projects began new construction since the 2007 Master Plan was approved
- ❖ Construction has been on-going on the New Orleans Risk Reduction System

An Opportunity...

Potential Future Funding

- ❖ Natural Resources Damage Assessment credits from Deepwater Horizon Oil Spill
- ❖ Clean Water Act penalties from spill
- ❖ GOMESA funding
- ❖ Credits from restoration activities (carbon sequestration, nutrient uptake, etc.)

Current estimates show potential available funding in the range of \$20 to \$50 billion over the next 50 years

An Advanced Approach

- ❖ Seeks long-term, sustainable solutions
- ❖ Uses science-based tools to objectively compare projects and inform our decisions
- ❖ Understands interactions between restoration and protection projects
- ❖ Will provide a specific group of integrated projects that work together to protect and restore our coast
- ❖ Provides clear expectations of the anticipated outcomes
- ❖ Provides an implementation strategy



The 2012 Coastal Master Plan will pave
the way for action.

It will be the first of Louisiana's coastal
plans to outline a series of specific
projects for addressing land loss and
reducing flood risks.

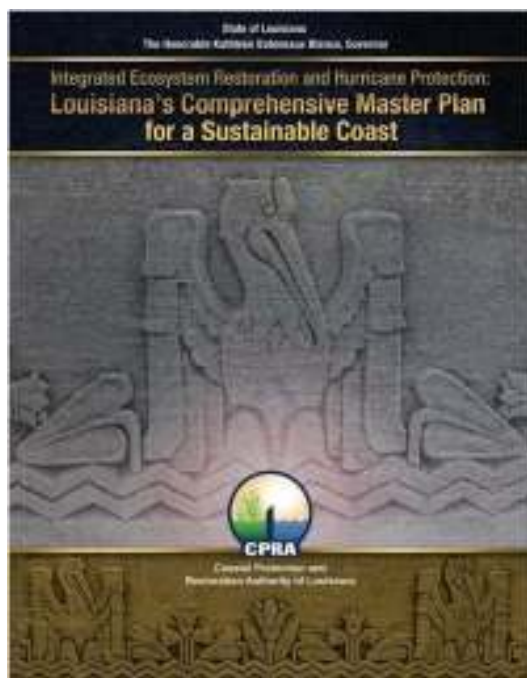
Vision and Services



Building on the 2007 Master Plan

OBJECTIVES

- ❖ Reduce economic losses from storm surge based flooding.
- ❖ Promote a sustainable coastal ecosystem by harnessing the processes of the natural system.
- ❖ Provide habitats suitable to support an array of commercial and recreational activities coast-wide.
- ❖ Sustain, to the extent practicable, the unique cultural heritage of coastal Louisiana.
- ❖ Promote a viable working coast to support businesses and industries.



Important Terms

Definition - Objectives

One of the five defining statements that express the overall purpose of the 2012 Coastal Master Plan

WHAT DO WE WANT TO
ACHIEVE?

Definition - Vision

An articulation of a desirable future state for the coast that meets the objectives and is technically possible.

WHAT DO WE WANT THE
COAST TO PROVIDE IN THE
FUTURE?

Master Plan Outcomes

Previous Outcomes

Acres of wetlands created and/or benefitted

Amount of water/sediment discharge

Miles of shoreline protected

Miles of levee constructed

Number of floodgates constructed

Number of homes elevated

New Outcomes

Availability of natural resources (oysters, alligators, fisheries, etc.)

Economic/production potential (agriculture, tourism, industry, etc.)

Level of risk reduction from storm surge flooding and waves

Ability to conserve cultural heritage

WHAT DO WE WANT
THE COAST TO
PROVIDE?

Importance of A Vision

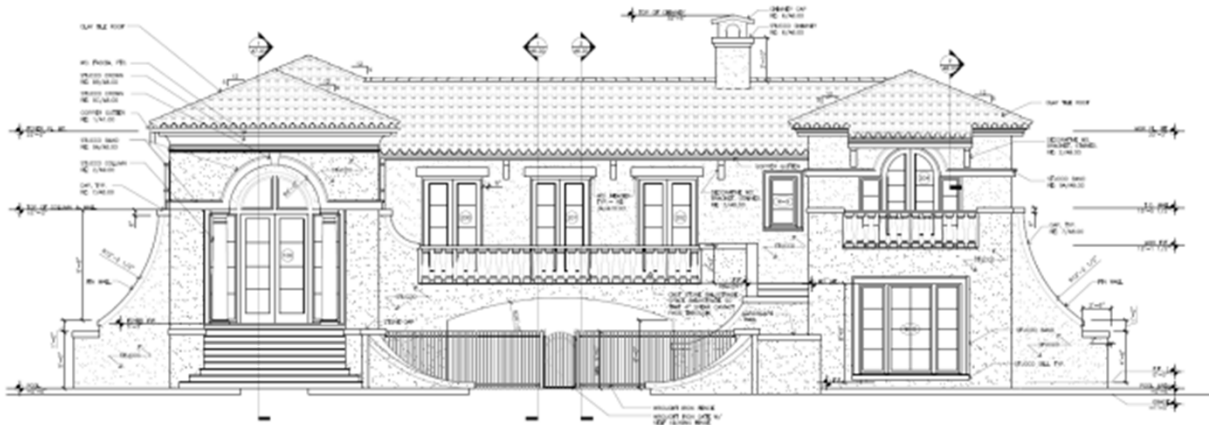
- ❖ Past plans guided by broad goals and project-specific objectives
- ❖ Provides a common view about what we want to achieve
- ❖ A path to focus state investments
- ❖ Ability to understand and confront trade-offs

We want the vision to be
AMBITIOUS and **ACHIEVABLE**



Developing a Vision

is like Building A House



The Vision consists of:



12 Ecosystem
Services



3 Levels of Flood
Risk Reduction

Services are...



the reasons to restore and protect our coast



Protection Services are...

The benefits of the coast to provide a level of risk reduction from flooding due to storm surge and waves.



3 Levels of Flood
Risk Reduction

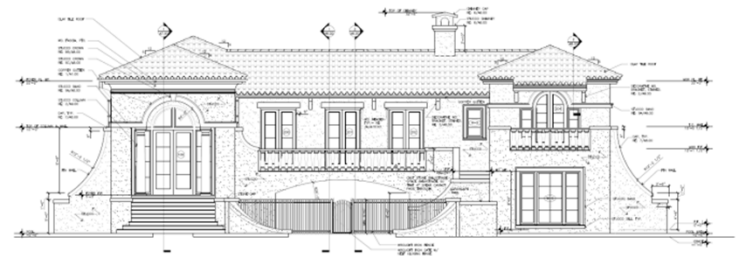
Protection Services are provided by...



- Current landscape
- Structural projects (e.g., levees)
- Nonstructural projects (e.g., elevating structures)
- Ecosystem restoration projects
- Any combination of above

Draft Vision for Protection Services

- ❖ For Louisiana's 2012 Coastal Master Plan, we are focusing on 3 risk reduction levels
 - 50-Year Risk Reduction Level
 - 100-Year Risk Reduction Level
 - Greater than 100-Year Risk Reduction Level
- ❖ The Vision aims to provide a risk reduction level for each coastal community



The Vision does not guarantee that the level of risk reduction will be achievable.

Important Term

100-Year Risk Reduction Means:

Statistically means a 1% chance of flooding from an event in any given year.

A homeowner has a 26% chance of experiencing a storm surge/flood event during a 30 year mortgage.

26% in 30-year Mortgage



Draft Vision for Protection Services

50-Year Risk Reduction Level (*Rural Parish Areas*)

- <1,000 people per square mile
- < 5,000 total population

100-Year Risk Reduction Level (*Urbanized Areas*)

- >1,000 people per square mile
- total population between 5,000 and 75,000

Greater than 100-Year Risk Reduction Level (*Metropolitan Areas*)

- >1,000 people per square mile
- > 75,000 total population

What's to Come...

- ❖ Our tools are currently analyzing the Future Without Action risk reduction levels.
- ❖ It's important to know what levels of risk reduction are currently provided by the landscape and how that will change over the next 50 years.
- ❖ Once we have this information, we will be preparing maps to show the predicted future level of protection services.

When available, maps will be posted at
coastalmasterplan.la.gov

Ecosystem Services are...

The natural benefits the coast provides to communities and the economy.



12 Ecosystem
Services

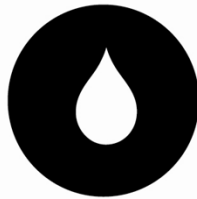
Ecosystem Services



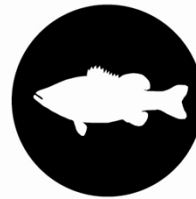
Agriculture/
Aquaculture



Alligators



Freshwater
Availability



Freshwater
Recreational
Fisheries



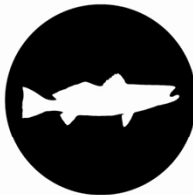
Nature Based
Tourism



Oysters



Coastal
Wildlife



Saltwater
Fisheries



Shrimp



Storm Surge/
Wave Reduction



Waterfowl
Hunting



Wild Crawfish

Ecosystem Services - 12 Regions



Evaluated over 12 Regions and Coastwide

What's to Come...

- ❖ Our tools are currently analyzing the service level under Future Without Action.
- ❖ It's important to know what levels of ecosystem services are currently provided by the coast and how that will change over the next 50 years.
- ❖ Once we have this information, we will be preparing maps to show the predicted future level of the ecosystem services.

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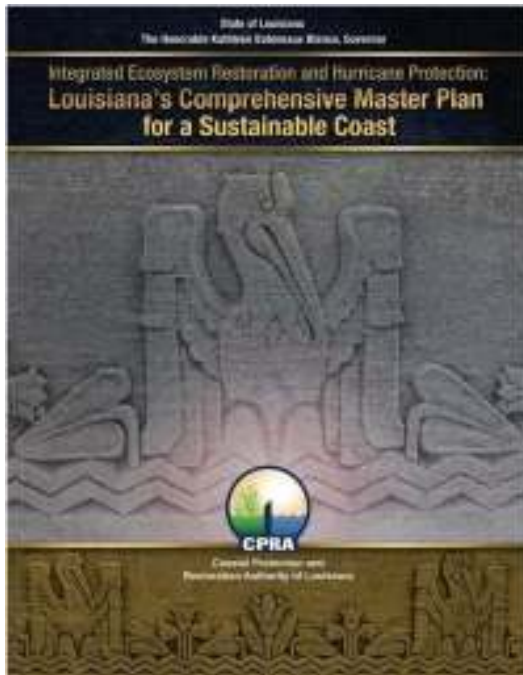
Community Exercise Part I



Building on the 2007 Master Plan

OBJECTIVES

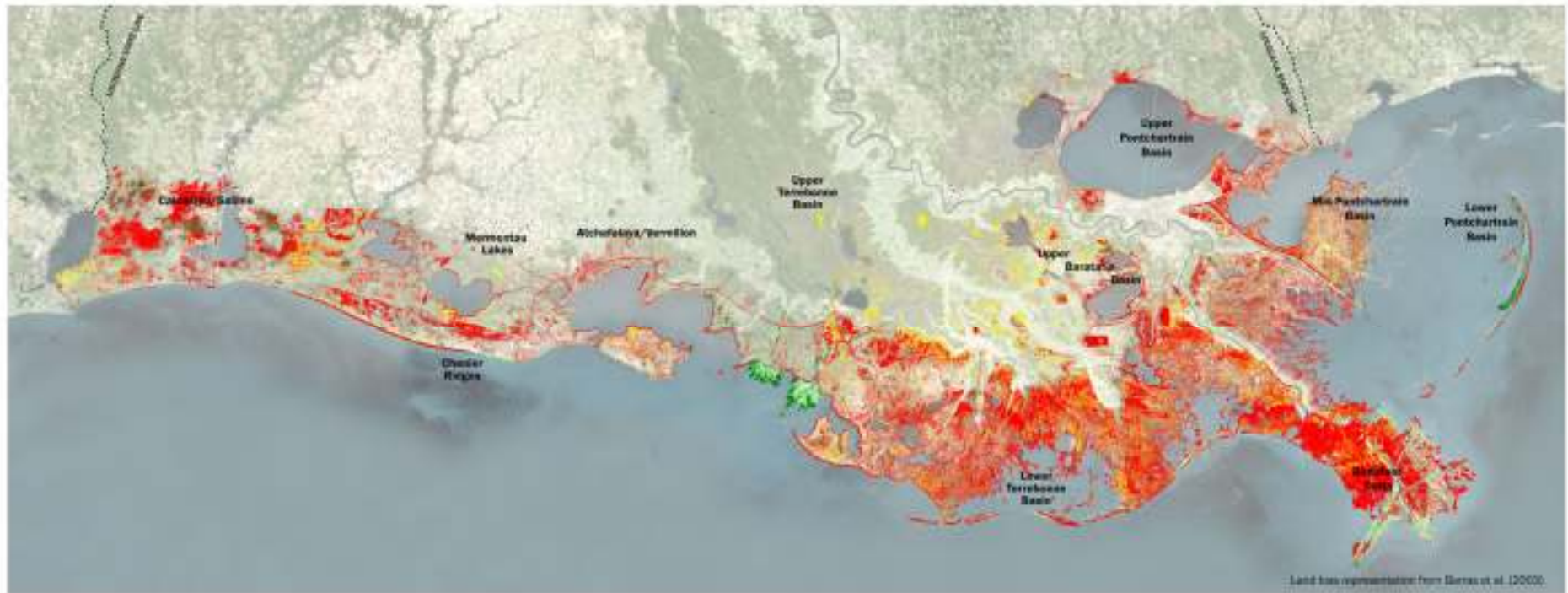
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Future Without Action



Estimate of Historic Service Changes

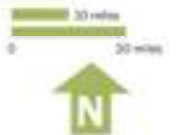


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Approximate Scale



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Source: Barajas et al., 2003

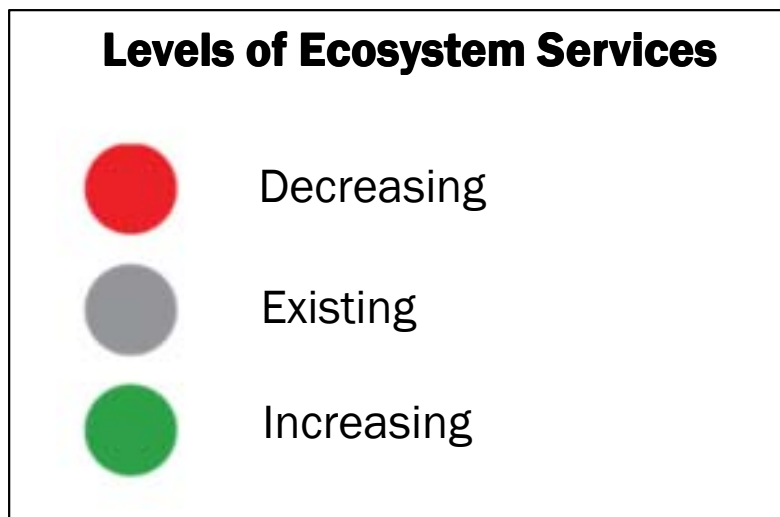
Historic and Projected Land Change (1932 -2050)



Coastwide Ecosystem Services

Icons denote a service or group of services that share a common habitat.

The color of the icon indicates if the level is increasing, decreasing, or stays the same as existing conditions.



What will these maps look like?



Example Map



Coastwide Ecosystem Services

This example map shows how ecosystem services may have changed due to historic land loss

Future Without Action



Predicted Land-Water Change from 2010-2060

Future Without Action



Potential Funding for the Future

Current estimates show potential available funding in the range of \$20 to \$50 billion over the next 50 years

- ❖ For the plan, we estimate an average of \$400 million to \$1 billion every year for the next 50 years
- ❖ This funding level is not guaranteed
- ❖ Funding will be spaced out over 50 year period, so projects will not all be built at once
- ❖ Total implementation costs of all projects under analysis is approximately \$250 billion

Community Exercise Part II



Make your voice heard!



Tell your friends, family and co-workers to tell us what's most important to them

www.coastalmasterplan.la.gov

Where We Are and Next Steps



Louisiana's 2012 Coastal Master Plan

Project-Specific Planning

Select projects based on individual project effects

Difficult to compare different types of projects and project interactions



Levee



Wetland
Restoration



Non-Structural
Protection

Systems-Based Planning

Predicts how projects interact: we can identify projects that benefit or conflict with each other

Allows comparison of different types of projects

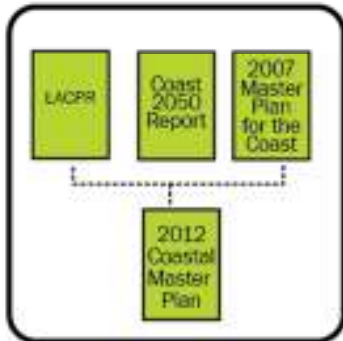
Provides a realistic understanding of what is achievable and sustainable

Depicts the best investments for the State



Integrated System

Master Plan Process



1. Review and build on past planning projects.
What do we need to carry forward?



2. Organize planning approach using systems-based analysis. **What does the big picture tell us?**



3. Understand future coastal conditions.
What is at stake?



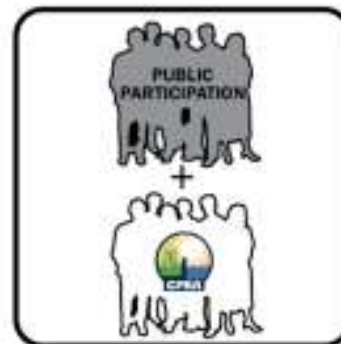
4. Set goals for protection and ecosystem services.
What do we want the coast to provide?



5. Evaluate projects.
Which projects achieve results?



6. Analyze options?
How should we combine projects to deliver large scale benefits?

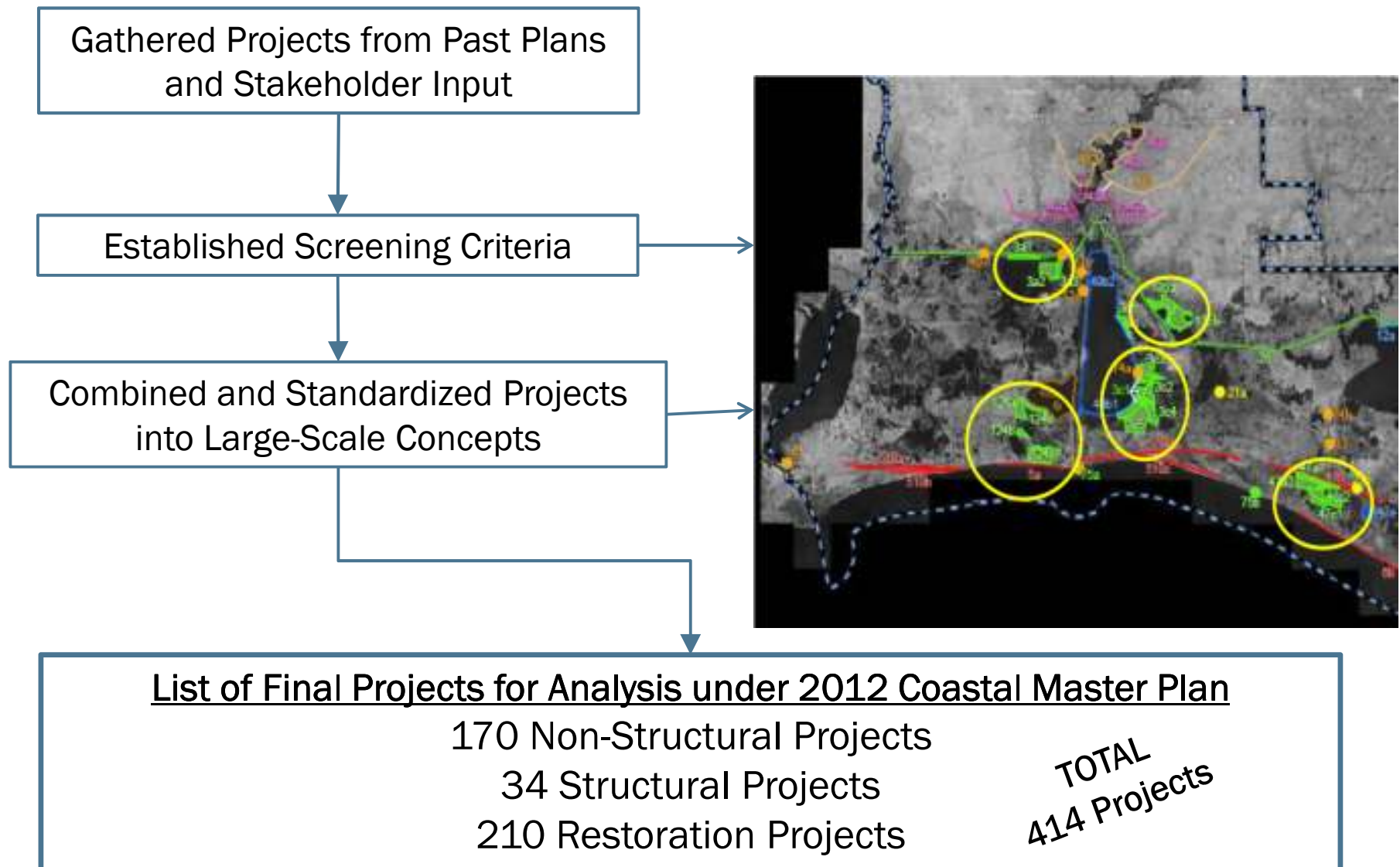


7. Develop recommendations for 2012 Coastal Master Plan. **What combination of projects is best?**



8. Propose 2012 Coastal Master Plan to LA State Legislature. **Our proposal for guiding coastal investments into the future.**

Projects for Analysis



New Science-Based Tools

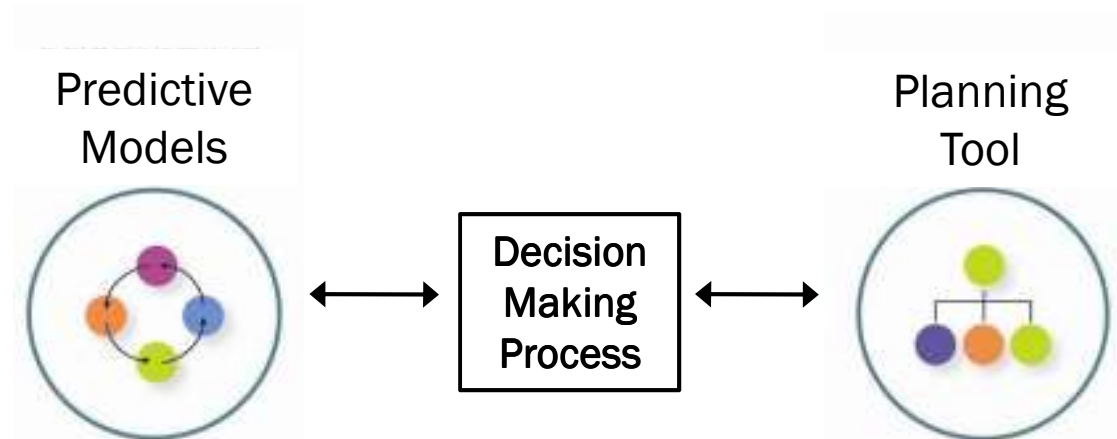
Developed for planning effort to provide technical and scientific information to support the decision-making process

❖ Predictive Models

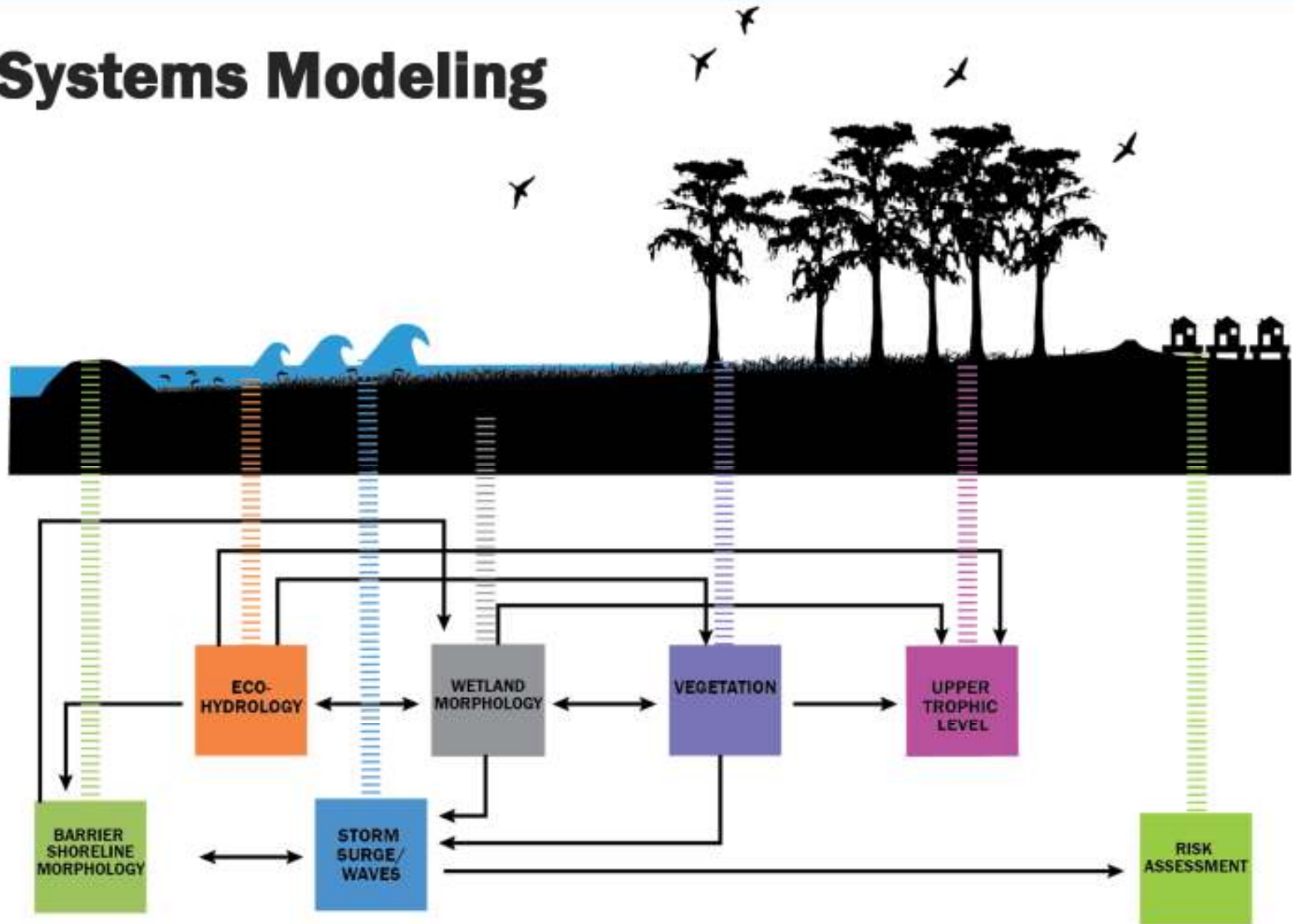
- Used to predict the future without action and the effects of projects on the coast

❖ Planning Tool

- Used to compare projects fairly and objectively and inform decision making.

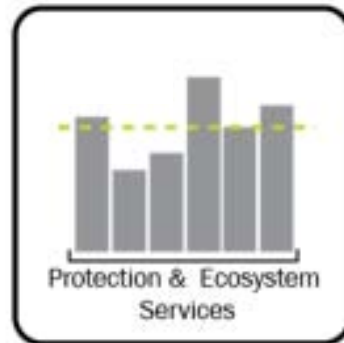


Systems Modeling



Where are we now?

STEP 4



Set goals for protection and ecosystem services.

WHAT DO WE WANT
THE COAST TO
PROVIDE?

STEP 5



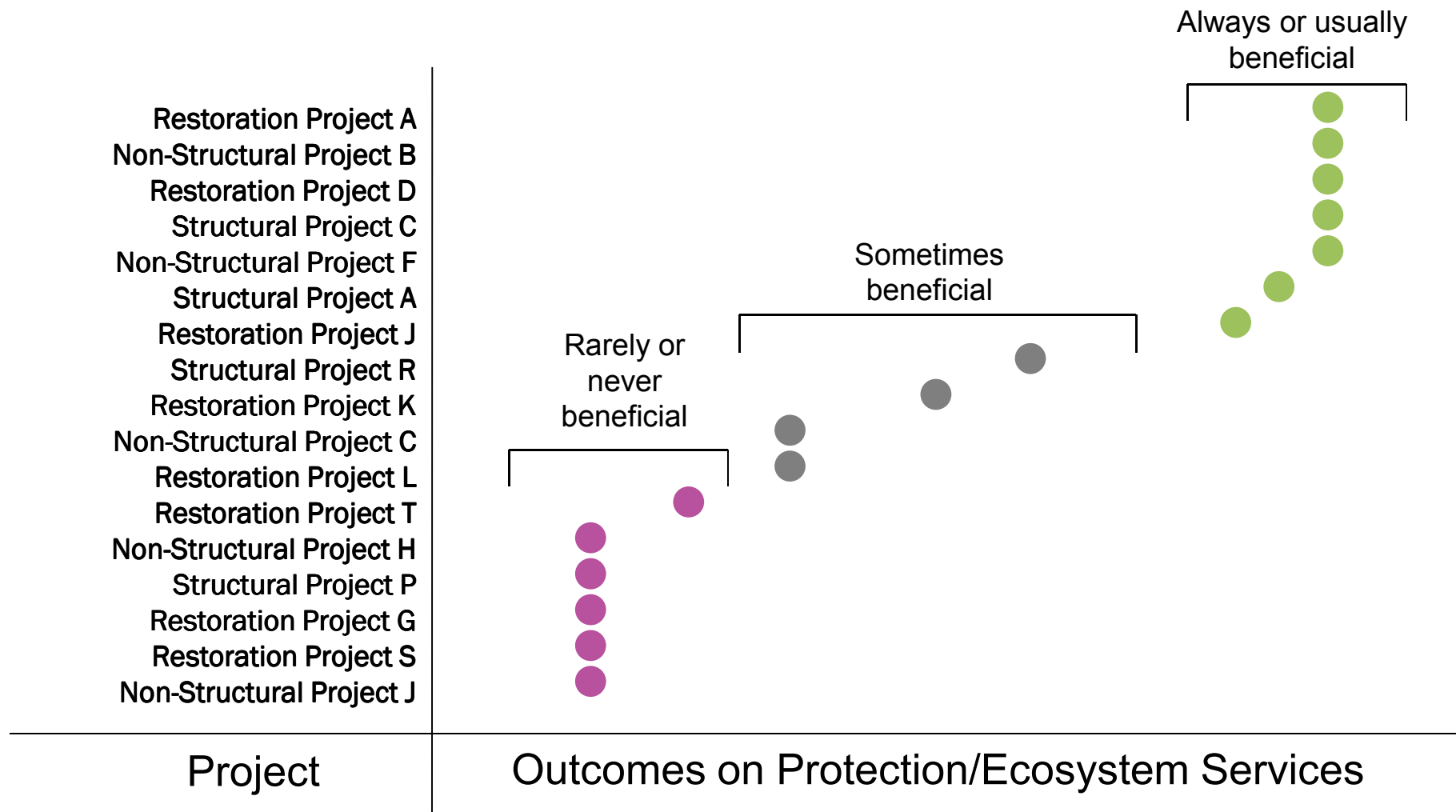
Evaluate projects.

WHICH PROJECTS
ACHIEVE RESULTS?

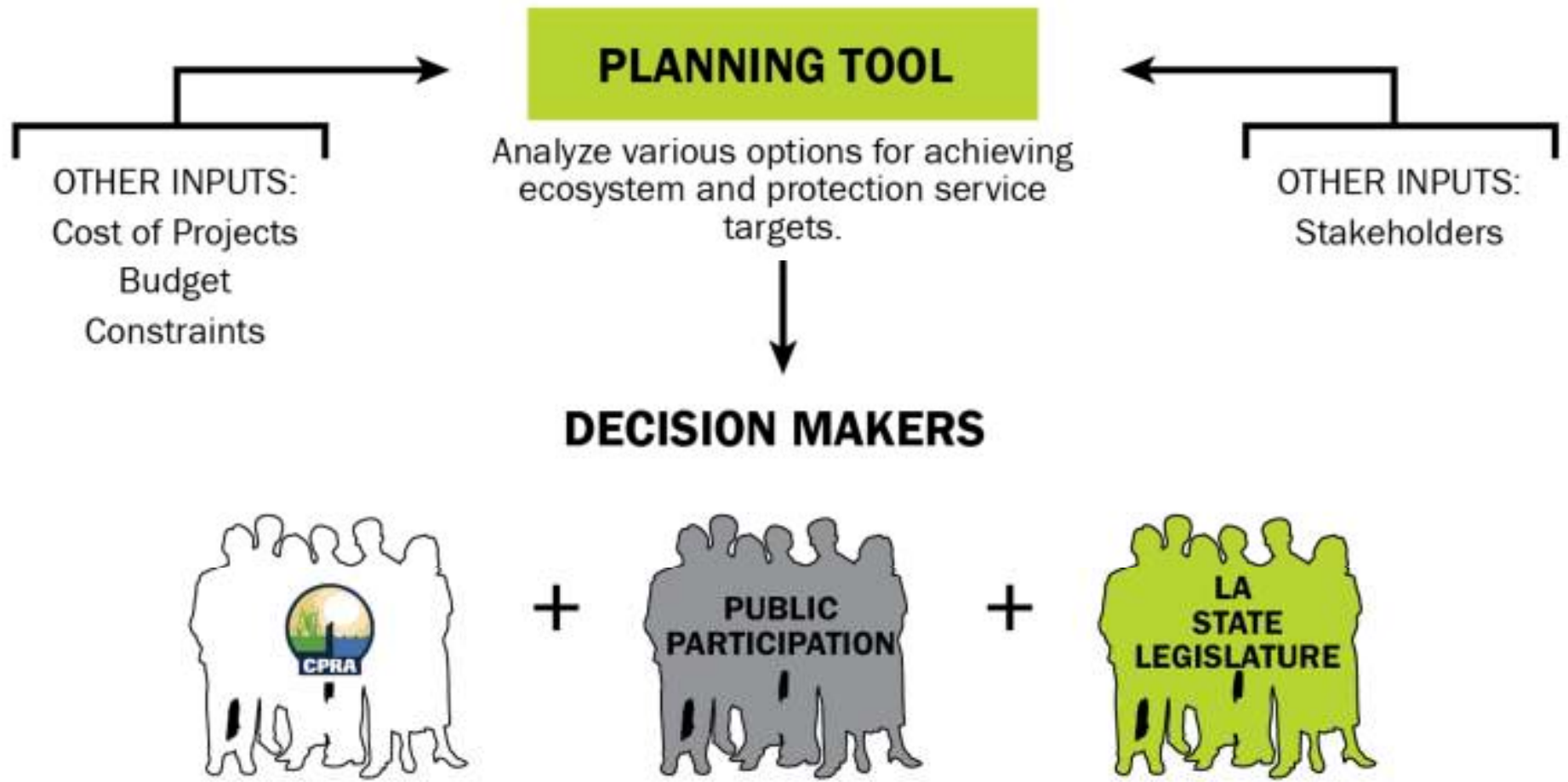
Hundreds of Projects...

16 Different Services Affected

Thousands of Possible Combinations



The Decision is Ours



Stay Informed on our Progress

website

CoastalMasterPlan.la.gov

email

masterplan@la.gov



Louisiana's 2012 Coastal Master Plan

Public Meeting Schedule

The Coastal Protection and Restoration Authority (CPRA) has announced a series of regional community meetings to share information about Louisiana's 2012 Coastal Master Plan. Over the next few months, we will be developing the draft plan. Now is the time to come offer your ideas and learn about the state's work.

Join us as we make hard choices to secure our coast's future.

JUL 28	St. Bernard Parish Council Chambers Chalmette, LA
AUG 09	Larose Civic Center Larose, LA
AUG 10	Ward 7 Community Center Chauvin, LA
AUG 11	Morgan City Auditorium Morgan City, LA
AUG 23	Abbeville Branch of Vermilion Parish Library Abbeville, LA
AUG 24	Belle Chasse Auditorium Belle Chasse, LA
AUG 30	Slidell Branch of St. Tammany Parish Public Library Slidell, LA
AUG 31	Lake Charles Civic Center Lake Charles, LA
SEP 01	Westbank Regional Public Library Harvey, LA
SEP 14	Pavilion of Two Sisters at City Park New Orleans, LA

Important Dates

2011

July – Sept	Regional Community Meetings
July – Dec	Continue Outreach Efforts
	Website Updates with New Information
	Available to Speak to Citizen Groups

2012

Jan	Draft Coastal Master Plan Released
Jan 23	Public Meeting in New Orleans
Jan 24	Public Meeting in Houma
Jan 25	Public Meeting in Lake Charles
Jan – Feb	Stakeholder Engagement and Feedback
March	Submit Final Plan to LA Legislature

**Once approved by the Louisiana Legislature,
implementation of this plan will begin.**



For more information:

Email

MasterPlan@la.gov

Visit

coastalmasterplan.la.gov