Looking to the Future

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Projected Coastal Louisiana Trends: 1956-2050

1956 – 2000 1525 sq. mi. of coastal landscape lost
average rate 35 sq.mi./yr. for 44 years
2000 – 2050 Projected loss - another 513 square miles
Previous State Planning Efforts

- Focus on restoration *or* protection
- Very general goals
- Individual projects rather than end result for the whole coast
Coast 2050

Coast 2050 Ecosystem Strategies

Protect Shoreline
- Keep shoreline in place in critical areas.

Maintain Shoreline Integrity
- Let shore roll back, but prevent interior marsh erosion.

Maintain Sabine River Inflow
- Maintain Atchafalaya Mudstream
  - Continue shoreline accretion along Chenier Plain.

Improve Hydrology Drainage
- Lower water levels in swamps. Allow more natural flow of water. Provide flood protection if necessary.

Reduce Sedimentation in Cote Blanche Bays and Vermilion Bay
- Maintain land bridges to prevent marine forces from moving island and large lakes from joining.

Lower Water Levels
- Modify flow patterns to tidal marshes to the south.

Move Fresh Water South into Tidal Marshes
- Move Atchafalaya waters into tidal marshes. In Chenier Plain, use water from lakes to freshen southern brackish marshes.

Beneficial Use of Dredged Material or Dedicated Dredging
- Create marsh in various sites along the coast.

Maximize Land Building in Atchafalaya Delta
- Separate navigation from delta. Train lobe toward Four League Bay.

Maintain Land Bridges
- Protect the three land bridges to prevent marine forces from moving island and large lakes from joining.

Small Diversions from Mississippi River (<3,000 cfs)
- Allow river water and nutrients to nourish swamps and marshes. Flood protection where needed. Provide outfall management.

Optimize Atchafalaya Flow to West and East
- Use Atchafalaya sediments and nutrients to preserve marshes.

Conveyance Channel from Mississippi River to Build Deltas
- Build marsh and nourish adjacent wetlands in area of highest land loss.

Solve the Mississippi River
- Gulf Outlet Problem
  - Close MRGGO when deep-draft container facilities are available on river. Steer estuary, stabilize north bank, purchase oyster leases, create marsh in southern shores of Lake Borgne.

Delta-building Diversions from Mississippi River (15,000-100,000 cfs)
- Build marsh and nourish adjacent marsh. Address oyster issues.

Multi-purpose Control of Navigation Channels
- Prevent saline waters from continuing to damage marshes to north. Retain fresh water.
Integrated Ecosystem Restoration and Hurricane Protection: Louisiana’s Comprehensive Master Plan for a Sustainable Coast

November 2004
Final
Volume 1:
LCA Study - Main Report
Why did we not make more progress?

Restoration plans based on actions not outcomes
What Do We Want Out of It?

Future ecosystem goods and services
Vision

How to get there
Achieving Sustainability
Sweet Spot for Coastal Louisiana?

Using river resources for coastal sustainability

And.... a new deeper navigation channel?
more reliable protection from storms?
direct floodwaters away from communities to benefit the ecosystem?
21st Century
Flood Protection, Navigation
AND Restoration