

Concepts for Future Decision Making and Benefits Analysis for Louisiana Coastal Restoration

Denise J. Reed, University of New Orleans

Ken Orth, U.S. Army Corps of Engineers

Jim Smyth, Smyth Water Planning Solutions

Rex Caffey, LSU Agricultural Center

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Paul Scodari and Dave Moser

Goal

- Recommend approaches that could assist decision-makers at all levels in the program in formulating, evaluating, and selecting plans for implementation
- Aimed at LCA, i.e., restoration

Observations

- Four levels of decision making
 - Nation – choices among programs for funding/authorization
 - Coastwide – choices among possible coastal futures
 - Subprovince – choices among potentially interdependent and/or synergistic projects
 - Project – choices among individual project plans based on efficiency and outcomes

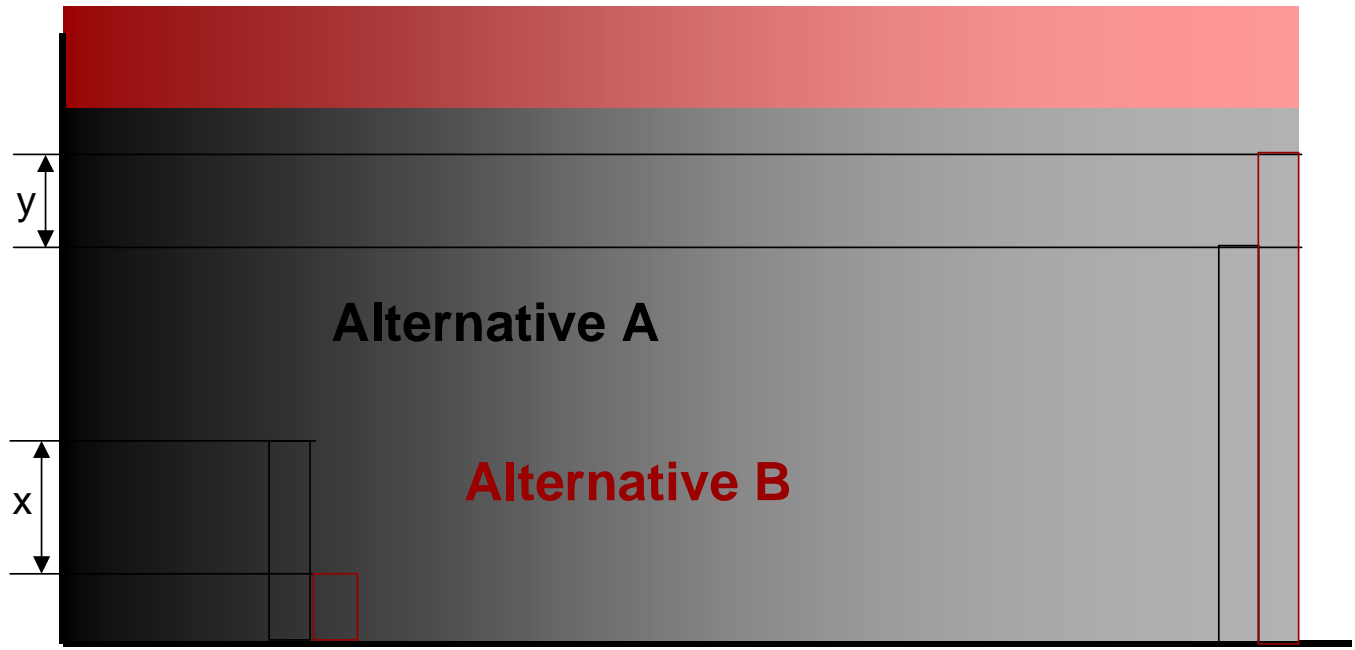
Effective Decision-Making Requires:

- The articulation of a clear vision and specific goals
- Project evaluation criteria and metrics which are directly linked to the problems, needs, objectives, and purposes of the restoration.
- The identification of synergies, interactions and constraints among projects.
- Methodologies that are transparent but as simple as possible so that the results they produce are technically credible but understandable by stakeholders.

Effective Decision-Making Requires:

- The use of a suite of systems synthesis models to identify interactions among projects and optimization of individual project features.
- Predictions which allow explicit consideration of both the magnitude and certainty of project benefits throughout the life of the project.
- Consideration of all beneficial effects and a complete evaluation of possible impacts.

Projected range of benefits



2000

20xx

Future projects constructed

2050

High confidence that A is better than B in near term

Low confidence that B is better than A in long term

Consider Magnitude and Certainty (after PCML@CDM 2004)

Recommendations

- Develop a Vision for the Coast.
 - This should be developed by an expert panel of scientific, industrial, and cultural representatives recruited from advisory bodies currently active at various levels. Must be scientifically, physically and fiscally possible. A draft would be released for public comment and refinement.
- Select an Initial Restoration Framework
 - Selected by developing projects to meet the Vision and evaluating them according the ecological and economic needs that they address

Vision

Coastwide

Develop Vision for each Restored Subprovince including

- priority habitats
- priority infrastructure protection

A

Development and Approval of Initial Restoration Framework

Project

- Develop viable projects/demos to achieve vision
- Less than feasibility level of evaluation, sufficient to quantify outcomes, assess significance of outcomes, identify timing issues and assess risks

B

Subprovince

- Identify interdependence, sequencing among projects
- Identify beneficial use to meet early sequencing needs, unique opportunities to achieve vision
- Assess projects vs. vision using \$\$ cost, community habitat models and NED as appropriate

C

Coastwide

Describe Restoration Framework encompassing any interdependence among subprovinces
Identify priority 5-year implementation plan including:

- Demo projects
- 'Precursor' projects
- Acceptable risk projects
- Beneficial use opportunities

D

National

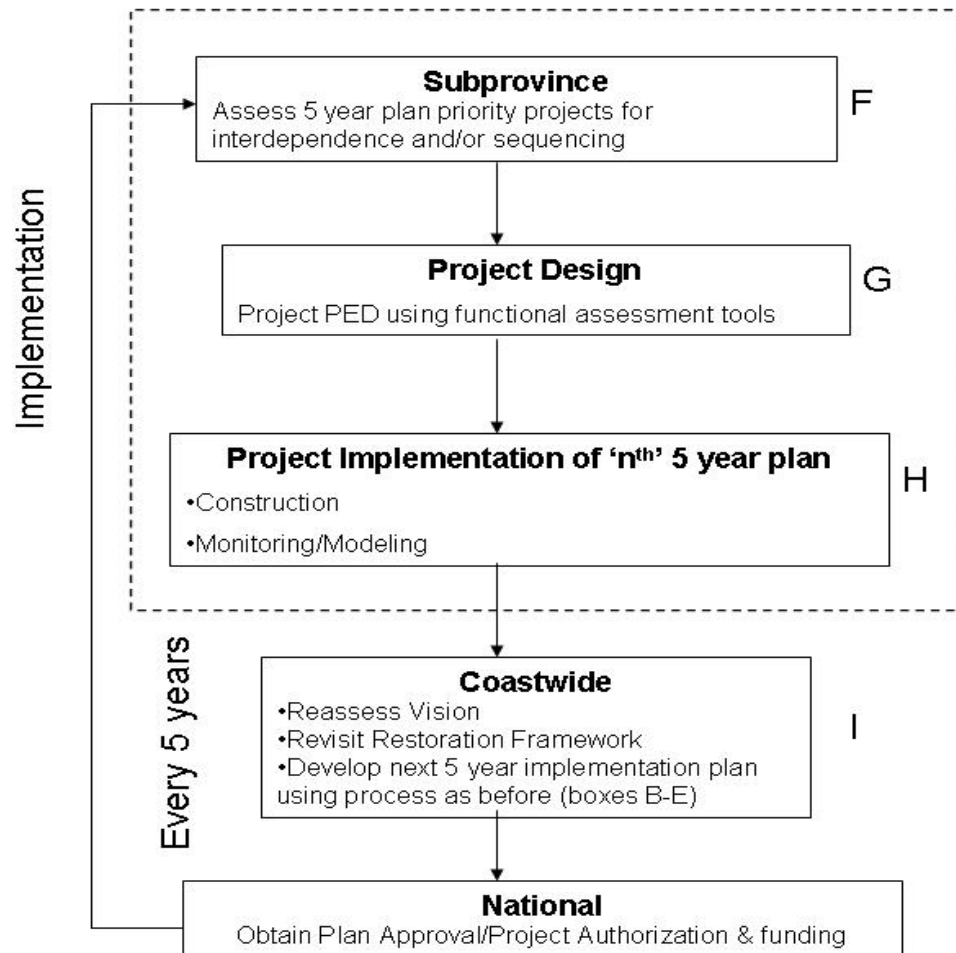
Obtain Plan Approval/Project Authorization & funding

E

Recommendations

- Periodically Re-examine the Restoration Framework
 - 5 year intervals
 - Using continually updated systems synthesis model
- Use Appropriate Tools to Support Decision Making
 - The different types of projects in LCA require different evaluation approaches, e.g., opportunity to learn is a key facet of demonstration projects but not of beneficial use projects.

Implementation and Framework Revision (Adaptive Management)



Next Steps (Nov 2005)

- Convene an expert panel to articulate the vision
- Clearly identify the roles and responsibilities of each level of decision making
- Develop/refine a suite of system synthesis models to support decision making
- Develop an HGM reference manual for Louisiana coastal marshes
- Test risk ranking and scenario planning approaches using existing information