



LCA Science Board  
U.S. Geological Survey  
New Orleans Office @ Big Branch Wildlife Refuge  
61389 Hwy 434, Lacombe, LA 70445

**Report from the Science Board Meeting**  
**September 18-19, 2006, Baton Rouge, Louisiana**  
Submitted to the Program Management Team, October 18, 2006

**Meeting Particulars:**

The second meeting of the Science Board for the Louisiana Coastal Area Ecosystem Restoration Program (LCA Program) was held at the Energy, Coast and Environment Building at the Louisiana State University, Baton Rouge, on September 18 and 19, 2006. Ten of the eleven members of the Board (Appendix 1) were in attendance for all or part of the meeting.

The main objectives of the second meeting were to:

- review the status of development of the Louisiana Coastal Protection and Restoration (LaCPR) report to Congress, including the Preliminary Technical Report (July 2006) and ongoing and planned activities;
- review the status of development of the Louisiana Comprehensive Coastal Protection Master Plan (or State Master Plan);
- review the activities of the LCA Science and Technology Program, particularly the status of the Program Office;
- provide an opportunity for members of the Science Board to learn more about the LCA ecosystem and the LCA planning process and to meet the primary contacts for the State and Corps of Engineers; and
- create an opportunity for general discussion of other pertinent matters.

The meeting agenda is provided in Appendix 2. The Board heard presentations on the science of Louisiana coastal dynamics and restoration, S&T Program, LACPR and State Master Plan development, outcomes from the Coastal Wetland Protection, Planning, and Restoration Act (CWPPRA) projects, biophysical and socio-economic considerations for coastal defense, and findings from the Interagency Performance Evaluation Task Force (IPET). Two of the presentations were made by members of the Science Board. PowerPoint files of the presentations made to the Board are posted at <ftp://ftp.dnr.state.la.us/pub/LCA/LCA%20SB%20Presentation%20Sept06/>.

This report summarizes the outcomes from the perspective of the Science Board. Key points are highlighted in boldface.

## Science and Technology Program

The S&T Program staffing and structure is still under development. However, a review of the current status and progress since the first meeting led to the following general observations:

1. The search for a Director of the S&T Program was constrained by Corps of Engineers personnel rules and actions. The position has been readvertised, thus reopening the search. This is a key position and if the appointee is to be successful, she/he must command the respect of the national scientific community, yet be familiar and able to operate in the federal and state political arena. The number of individuals with this range of skills is limited within and outside the federal government as is evidenced by the difficulties in recruiting in other similar programs.

**The Science Board again recommends that there should be the maximum possible creative flexibility in attracting and appointing the most qualified and capable leader, including the possibility of a federal interagency assignment or an Intergovernmental Personnel Act (IPA) appointment.**

These needs and constraints were discussed with Dan Hitchings of the Corps and Suzette Kimball of the U.S. Geological Survey. It was pointed out that other federal agencies used such “exchange” appointments even for senior management positions. This can be done because fiduciary responsibilities are vested with contracting officers in any case. The CALFED Bay-Delta Program, another state-federal program involved in ecosystem restoration, is also considering and has used various appointment arrangements to employ science program leaders. Mr. Hitchings said that based on this information he would request reconsideration of the approach the Corps is using to fill the Director position.

2. Although the Science Board is up and running, the Technical Support Team and the Interagency Science Coordination Team have either not been active or are in the process of formation. Consequently, while the Acting Director and Deputy Director are obviously playing roles in the LCA, LaCPR and State Master Plan development, the S&T Office is not yet the primary catalyst for bringing together the various engineering and scientific experts and is not yet taking the leadership role in applying expertise on critical science and engineering issues. Nonetheless, significant financial commitments have already been made by the S&T Office for Decision Support and Hurricane Damage Assessment activities.

**While the Science Board understands that further development of the S&T Program Office and its functions depends to some extent on appointment of a Director, the Science Board is concerned that the management, logistical and organizational**

**capacity of the Office has not kept pace with its commitments and responsibilities.**

3. The Science Board was impressed by the web-enabled, GIS-Integrated Coastal Restoration Information Management System that is used by the Louisiana Department of Natural Resources and recommends that the S&T Program build on this base in its development of information management for the LCA Program.

### **Louisiana Coastal Protection and Restoration Program**

Science Board members have read the July 2006 Preliminary Technical Report to United States Congress on the LaCPR Program. Because this report has been finalized the Board is not offering comments on it, but focused instead on understanding the LaCPR objectives and approaches as described in the Preliminary Technical Report and in the September presentation to the Board.

1. The Science Board is impressed with the extensive, multiple-scenario modeling of storm surges that is being undertaken. This provides a far more technically sound basis for design and planning than used heretofore.
2. The Risk-Informed Decision Framework (RIDF) that is being employed seems very much a work in progress and there remains much to be accomplished in the practical application of the theory to be able to support the Robust Decision Making objective. The information requirements for the quantitative analyses are large and potentially unrealistic, particularly within the planning timeframe.
3. It is not at all clear how coastal restoration objectives will be integrated into the RIDF, which seems to be directed principally to hurricane protection. Restoration considerations are not listed at all in the Corps Policy Direction on RIDF Development. Will it be through ex post facto overlay on the risk-derived hurricane protection plan or somehow integrated throughout the process? How will restored coastal landscape features be included in assessing inundation potential? How will the consequences of hurricane protection alternatives on coastal landscape sustainability be factored in?
4. The Science Board is concerned about the short timeframe available to complete the comprehensive and interrelated set of tasks included in the LaCPR plan. Certain scientific information is not yet available and modeling capabilities must be developed within several months to meet the timetable.

**In order to fulfill its obligations, the Science Board should be afforded an opportunity to review and comment on the approaches used in integrating protection and restoration and preliminary results before the completion of the public comment draft of the LaCPR Report.**

## State Master Plan

The Science Board heard an informative overview of the State's Master Plan presented by Jon Porthouse.

1. The planning process appears to more explicitly incorporate both short and long-term strategies for coastal restoration as well as hurricane protection than the planning process for the LaCPR Report.
2. The State planning effort seems to build from the Coast 2020 Plan. The Board feels that this is important since it acknowledges the major community involvement in the planning effort—and that the time and effort invested by local communities is not being ignored.
3. The Master Plan development shares a number of features and information resources with the LaCPR but is less wedded to formal risk-informed methodology and perhaps more dependent on judgment. This seems to the Board to be a prudent approach given that the RIDF is still under development and has not been applied in coastal protection and restoration decision making. However, as pointed out in the presentation the different approaches could result in significant plan divergence.
4. The target for the public release of a draft of the Master Plan by November 27, 2006, seems unrealistic. Nonetheless, the Science Board will be ready to provide comments on the draft if it should be completed prior to its December meeting.

**The Science Board stands ready to provide advice on the development of and to review of relevant elements of the draft State Master Plan.**

## Integration of State and Federal Programs

State and federal participants working on coastal restoration and hurricane protection speak of a high level contact and collaboration across agencies. The LCA Program itself is a state-federal partnership, as is the LaCPR program. Nonetheless, the Science Board has the impression that state and federal personnel may be moving on divergent paths. It is hoped that the S&T Program Director will ensure that the science, models and studies being generated currently are part of a common effort and goal.

1. The LaCPR draft Technical Report and USACE's briefing provided to the Science Board reflect a desire on the part of USACE to develop a detailed decision-making process leading to a blueprint for action that would be fully developed before inviting public input. In contrast, discussions of the State Master Plan and CWPPRA projects reflect an iterative process consistent with the principles of adaptive management. Moreover, state personnel appear to be more

committed to public involvement at an early stage of program development than does the Corps' LaCPR planning.

2. These divergent paths reflect institutional cultures and fundamentally different views of the analysis, scope and involvement of the planning process. The fact that state agencies of Louisiana and the USACE approach wetlands restoration and hurricane protection from different starting points is understandable and can be a source of productive dynamics. As the LCA Science Board, our writ is to focus attention on the quality of science used in furtherance of LCA goals. Continued divergence between federal and state personnel could result in a lack of focus within the S&T Office that would engender confusion or even conflict over funding priorities. The Science Board would like to have a presentation on the 'process' used to formalizes the joint-partnership interaction between the State and COE.
3. The Science Board believes that the interests of public policy and science are best served by creating opportunities for public involvement at all steps of the LCA program. Good science can become better with appropriate input from knowledgeable stakeholders. This is certainly the case when developing risk assessment criteria, where the insights of individuals and communities who face risks of coastal erosion/subsidence and storm damage should be considered. If this integration of approaches and science is conducted correctly, the S&T Program Office could become a model for other large scale management programs and the tools and technologies adopted for the benefit of all interests in the region and beyond.

**The Science Board recommends that state and federal partners in the LCA Program work toward integrating programs and approaches to wetlands restoration and hurricane protection. In particular, the Science Board recommends that the LCA and LaCPR programs adopt a more open and iterative approach such as used by the state partners.**

### **Additional Thoughts on Science Board Activities**

1. In order to assure tight and timely feedback the Science Board requests that the PMT designate an appropriate liaison responsible for ensuring that the Board's recommendations are brought to the right persons and that the Board receives appropriate acknowledgements and responses to its reports.
2. The Science Board notes that sorting out the responsibilities and relationships among the U.S. Geological Survey, Corps of Engineers, and State of Louisiana in supporting and interacting with the Board is still a work in progress. The Board encourages the partners to work together to improve the logistics, communication and timely information exchange with the Board.

3. The Science Board stands ready to address specific tasks assigned by the PMT or S&T Office, but will, under its own initiative, also undertake proactive evaluations on matters germane to its charge.
4. The Board believes that it could play an effective role in stimulating, convening, and summarizing topical workshops that would support the current S&T activities on important long-range issues, e.g. the sediment supply of the rivers, abandoning the birdsfoot delta, integrated models and endangered species considerations. These might involve a subset of Board members and a few other external experts, as well as scientists, engineers and managers within the Louisiana community.

**The Science Board requests the feedback of the PMT, S&T Program Director and Science Board Executive Director regarding agency liaisons, improved logistics and communication, and workshop approach described above.**

### **Subsequent Meetings**

1. The Science Board is planning to meet on December 13-14, 2006 in New Orleans in conjunction with the National Conference on Coastal and Estuarine Habitat Restoration. Although the Board welcomes suggestions from the Program Management Team and S&T Program Office for the meeting's agenda, it sees the need to include the following:
  - a. Review of the draft State Master Plan, if available.
  - b. Assessing the compatibility of hurricane protection structures under evaluation in the LaCPR plan with coastal landscape restoration and sustainability.
  - c. On going consultation on the development of the S & T Program.
2. The fourth meeting of the Science Board should be scheduled in the March-early April, 2006, timeframe at a time most helpful to the planning processes. The Board will begin the development of its annual report during this meeting.

## Appendix 1

**LCA Program Science Board**

Dr. Donald Boesch, *Chair*

President

University of Maryland Center for Environmental Science  
PO Box 775, Cambridge, MD 21613

Dr. Conner Bailey

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202 Comer Hall

Auburn University, Auburn, AL 36849

Dr. Ronald Best

Coordinator, Greater Everglades Science Program, USGS  
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Dr. Stephen Brandt

Director, Great Lakes Environmental Research Laboratory  
National Oceanic and Atmospheric Administration  
2205 Commonwealth Blvd, Ann Arbor, MI 48105-2945

Dr. Robert Dean

Department of Civil and Coastal Engineering, University of Florida  
PO Box 116580, Gainesville, Florida 32611-6580

Dr. William Dietrich (not attending)

Chair, Department of Earth and Planetary Science  
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Dr. Joseph Fernando

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## Appendix 2

**LCA Science Board  
Baton Rouge  
September 19-20, 2006**

**Meeting Location:**

Rotunda Conference Room, Energy, Coast and Environment Building, Louisiana State University, Baton Rouge

**Meeting Purpose:**

The main objectives of this second meeting of the Science Board are to review (1) the LA CPR Technical Report to Congress and the status of continued planning for that and the State's Master Plan, (2) the status and activities of the S&T Program Office, and (3) general discussion .

**Agenda:****Tuesday, September 19**

8:30 – 8:45	Meet and greet – coffee	
8:45–9:45	The Louisiana Coast “101” (background overview)	Don Boesch, Chair
9:45-10:00	Short break	
10:00 - 11:00	LCA Program Office update Status, projects, and processes	Rick Raynie, LA DNR,
11:00-12:00	CWPPRA: project outcomes and survivability	Dan Llewlyn, LA DNR
12:00-1:30	Lunch - on your own	
1:30 - 2:30	LACPR Technical Report to Congress: Open discussion	Dan Hitchings, USACE
2:30 - 3:30	Multiple Lines of Defense concept	John Lopez, LPBF
3:30 – 4:30	“Non-Point Source” Mitigation and Social Resilience	Shirley Laska, CHART
4:30 - ??	Open discussion	

**5:00 – 6:30 Mixer hosted by Dean Ed Laws and Science Board chair Don Boesch**

**Wednesday, September 20**

8:30 – 9:30 State’s Master Plan Jon Porthouse, LA DNR

9:30 – 10:00 Interagency Performance Evaluation Task Force (IPET)  
Conclusions concerning storm surge, wetlands and canals Bob Dean

11:00-11:15 Break

11:15-2:30 \* Science Board working time (including working lunch)

\*This is an open meeting except for the slot listed as Science Board working time