

MINUTES
CHIEF OF ENGINEERS' ENVIRONMENTAL ADVISORY BOARD MEETING
Washington, D.C.
July 18, 2007

1. The Chief of Engineers, **LTG Robert L. Van Antwerp**, called the Environmental Advisory Board (EAB) to order at 0900 hours, 18 July 2007 at the Palomar Hotel, Washington, D.C. The following EAB members were present:

- **Dr. George F. Crozier**, Executive Director, Dauphin Island Sea Lab, Chair;
- **Dr. Courtney T. Hackney**, Professor, Department of Biology and Marine Biology, University of North Carolina at Wilmington, Vice-Chair;
- **Dr. Richard F. Ambrose**, Director of the Environmental Science and Engineering Program, Professor, Department of Environmental Health Sciences, University of California at Los Angeles;
- **Mr. Kenneth M. Babcock**, Director of Operations, Ducks Unlimited Southern Regional Office; and,
- **Dr. G. Mathias Kondolf**, Associate Professor, Department of Landscape Architecture and Environmental Planning, University of California at Berkley.

Also present were: **Mr. Tom Waters**, Chief, Civil Works Planning and Policy, **Dr. Edwin Theriot**, Chief, of the Environment Community of Practice (CoP); and **Ms. Rennie Sherman**, Executive Secretary for the EAB.

2. WELCOMING REMARKS

Ms. Sherman noted the meeting was being conducted under Federal Advisory Committee Act (FACA) rules.

LTG Van Antwerp welcomed everyone and emphasized that the business meeting of the EAB was open to the public. He recognized the two departing members of the Board – Mr. Babcock and Dr. Kondolf – and thanked them for their service and presented them each with a Commander's Coin. Both Dr. Babcock and Dr. Kondolf indicated that their service on the EAB was eye opening and observed that the Corps leadership was implementing change to make the Corps more environmentally responsible and appreciated the challenges faced by the Corps in communicating these ideas to the public and within their own corporate structure.

LTG Van Antwerp swore in Drs. Crozier and Hackney for their second terms and Dr. Ambrose for his first term. The Chief looked forward to working with the new chairs and members in developing EAB future directions to assist the Corps in improving its environmental and ecosystem restoration mission.

LTG Van Antwerp stressed his desire to improve Corps decision making transparency and communicate the Corps efforts to work with the EAB in managing these changes. He stated his desire to have the EAB help bring the many diverse disciplines and systems together to fulfil his goals of transparency and risk assessment as derived from the Interagency Performance Evaluation Task Force (IPET) report and recently released Hurricane Protection Decision Chronology report related to the New Orleans Flooding. This must all occur while the Corps carries out its mission in the Global War on Terrorism, supports disaster recovery and executes its Civil Works mission.

Dr. Crozier thanked the Chief for the honor, privilege and opportunity to participate on the Environmental Advisory Board, thanking Mr. Babcock and Dr. Kondolf for their skills, ideas and knowledge. Under Mr. Babcock's leadership as Chair, Dr. Crozier enjoyed the Board's outspoken

and critical assessments in efforts to assist the Corps in implementing its transformation. He stated that while originally pessimistic about the Corps willingness to change, he has found that the Corps is taking the EAB suggestions seriously. He also stated that the EAB will continue to remind the Chief of his commitment to improving the Corps environmental mission.

3. CORPS ACTIVITIES IN RESPONSE TO THE 2005 HURRICANES AND TWELVE POINTS

Mr. Waters summarized the recently released Hurricane Protection Decision Chronology (HPDC). The HPDC evaluated the decision-making process associated with the New Orleans hurricane protection system.

In the discussion that followed, **Dr. Crozier** described a climate change impact assessment session in which he participated that highlighted the enormous uncertainties and risks to our coastal resources. He supports and applauds the Corps effort to communicate and quantify risk and manage risk. However, he would like to see a decision where the Corps will say, “we just can’t do it, and it is too risky.” Don’t take the money and just do the work. Again, he applauds the Corps for willingness to say, “We made a mistake.” It may be hard for the military to say “No,” but academics and biologist see chaos and uncertainty in natural systems which must be considered in decision making.

Mr. Babcock commended the Corps for the introspective look, becoming transparent in its decision making and making changes to communicate risk. However, he does not see a process to take these lessons learned forward; as he does not see the Districts’ changing their practices. In order for the Corps to become a leader in ecosystem restoration, it must integrate the environment and environmental response into its traditional Navigation and Flood Control planning to prevent the need to mitigate and restore.

Dr. Hackney recognized that most of the public does not appreciate risk or consider risk in its actions. There is a big challenge in communicating risk to the public. Risk is there now. There will be uncertainty in the future, such as the uncertainties of sea level rise, which we need to integrate with long term plans. We can’t continue to use structural measures to protect coastal investments.

Dr. Kondolf expressed the idea that risk communication also has the component of the Corps telling Congress that it’s not wise to construction a project, that a long term view is needed; possibly non-governmental organizations could provide some help in this area.

Dr. Ambrose said he was impressed with the Hurricane Protection Decision Chronology, especially with the effort to analyze fifty years of record. As a new board member he welcomes the opportunity of understanding the behavior of the Corps and other agencies in these decision processes. The study is worthwhile if actions for change are implemented.

LTG Van Antwerp said he was interested in exploring EAB ideas that will contribute to the Corps’ leadership in Ecosystem Restoration. He would like to receive EAB ideas on the challenges and a way forward. The IPET and Hurricane Protection Decision Chronology indicate we need to work our projects as systems; we need to consider 10-20 year response time frames for environmental restoration and the consequences of subsidence and sea level change. We can no longer have a “field of dreams” build it and they-will-come attitude. “It” may never happen. We need to adapt to changes, changes in technology and information. We need to move away from a project to project basis of planning. We recognize now that the weakest link is where the system fails. Even if we restore, we don’t know if another hurricane will damage the new feature. We

need not be arrogant when looking at possibilities and consequences. We can't just have best science and technology, but also consider the political and institutional aspects. We need to translate alternative, risks and consequences to the public, communicating down to the level of the individual.

4. ECOSYSTEM RESTORATION CENTER

Dr. Ed Theriot, Lead for the Environmental Community of Practice, provided the EAB with preliminary plans on setting up a Center for Ecosystem Restoration as recommended by the EAB and reaffirmed the Corps commitment to the concept. Dr. Theriot said he would like assistance from the Institute for Water Resources (IWR) and the Engineer Research Development Center (ERDC) to standup a virtual center as a first stage based on existing Corps assets. Dr. Theriot plans to provide a status of the Ecosystem Restoration Center in November to the EAB.

Dr. Crozier stated his appreciation that the Corps is acting on the EAB recommendations and that staff has been assigned to available to start working on making the Center a reality. He asked if the Corps could provide the EAB with a catalogue of Corps people and expertise so the EAB could get a feel for the level of Corps environmental competency. Dr. Crozier also expressed the desire for a "real center" with a physical place, although he recognized that a "virtual center" has its value. A physical place allows real people to engage in person-to-person contact important to the exchange and development of ideas. Non-governmental organizations, stakeholders, academics, and Corps personnel can all learn from one another, and the "center" can provide the platform for collaborative planning.

Dr. Hackney said he realized funding was a problem as was working out the requirements of making the center work. He asked the Corps to provide a cost estimate.

Dr. Kondolf applauded the Corps commitment indicating the EAB can help to steer the Corps as it retools, but that some of the help the Corps needs must come from outside the Corps in terms of skills, assets, resources and knowledge; the help cannot be Corps centric.

Dr. Ambrose said he was excited by the idea of moving from traditional habitat restoration (including mitigation) to a more complex and uncertain ecosystem restoration. He said that as a new member, he did not have much background on the center purpose and what activities the Corps performs under ecosystem restoration, he could see a substantial value.

Mr. Babcock reiterated that the original EAB vision was NOT a virtual center, but recognized this was a first and great step forward. The Center the EAB proposed is one of integration, one that invites others as partners in a process of collaboration and integration. There is no one agency with ultimate knowledge of ecosystem restoration. There needs to be debate related to the years of wetland land loss over the 100 years of Corps water development and decisions. The Center must influence how traditional Corps Navigation and Flood Control missions will affect more wetland loss and how those missions must be modified to incorporate wetland value into a new strategy for providing Navigation and Flood Control benefits reducing wetland losses and working with nature. The Center should bring non-Corps thinking into this debate.

LTG Van Antwerp reiterated the value of a virtual center eventually becoming a physical center in the long-term, while recognizing the limitations of funding. He indicated his interest in a Center that could reach out to partners and become a part of the corporate psyche affecting Corps transformation, regionalism and standard business practice.

5. EAB FUTURE DIRECTIONS

Dr. Crozier suggested to the members that they look at the Chief's Twelve Actions For Change to determine what the EAB could contribute to the Corps transformation efforts. He also wanted departing members to continue to contribute to the EAB recognizing the increased intellectual value they can bring to the group. In this way, the board could continue to have, on an individual interest basis, the services of the departing members. He suggested that the EAB become involved with the risk-based decision development and communication and assist the Corps in its transformation.

Dr. Hackney suggested that the EAB could engage non-governmental organizations and obtain insights for the Corps, looking to implement the engagement in the next working meeting, where each member brings a friend to the working meeting.

Dr. Kondolf indicated a willingness to help that process.

Mr. Babcock recalled the EAB theme of assisting the Corps to become a leader in ecosystem restoration. He stated that the EAB should not lose that focus. He also said that LTG Strock had asked for EAB ideas on the Twelve Actions for Change. He also stated that Corps transformation is not punitive, but a positive way to move forward and that the EAB can assist in this endeavor.

Dr. Kondolf noted that his experiences with the Corps Districts, which demonstrate a wide range of Corps staff awareness and vast differences, shows him that the Corps' greatest challenge is internal communication and education of its staff to the changes needed and made by management. He stated his surprise at the limited command and control in the Corps of Engineers; and has been surprised to see how management policies were not implemented at the Districts. He stated that the Corps should develop incentives for incorporating adaptive management as a framework for conducting business. It is essential that Corps project managers recognize its importance. Corps is not adequately making use of lessons learned from past projects. The Center could serve this purpose. Corps traditional Flood Control project planning hasn't studied how that purpose affects wetlands well. The Corps must learn to predict project performance and impact on resources.

LTG Van Antwerp indicated that the Corps is implementing a process to standardize Corps processes, i.e., ISO 9000.

6. PUBLIC COMMENT

Three individuals addressed LTG Van Antwerp and the EAB

Mr. David Conrad -- National Wildlife Federation (NWF). Mr. Conrad stated that he applauds the Corps in its efforts to transform (per IPET and the Chronology reports) and wants to help. NWF welcomes the opportunity to assist. One area for Corps improvement is early involvement of non-governmental organizations. Too often an organization must react to a review. The Corps review process is not dynamic or integrated with the non-governmental organization as participant.

Mr. Conrad said that water is a growing importance in the Nation, and the country must adopt a long view of water use. Within the last 100 years water has contributed to a strong economy, which must be sustained by wise water use. The world is interested and is watching the Nation and the Corps efforts to restore the Everglades. The NWF would like to work with the Corps.

The NWF has a profound interest in the Corps efforts to stand up a Center for Ecosystem Restoration

Ms. Jeanne Christie --Association of State Wetland Managers. The Corps must recognize that protection and maintenance of wetlands is as important as the war on Global Terrorism. As troops return from the war, the Nation should insure that they are afforded a quality of life as provided by the environment.

She affirmed that the States are an important ally in the Section 404 program, commending the Corps Chief of Regulatory, Dr. Sudol, for coming to the States and their meetings frequently. She identified, however, to Corps actions that highlighted apparent lack of stature of the States with the Corps. The Corps needs to approach the states with respect to issuing general permits without State consultation on Coastal Zone Management or Section 401 Certifications and jurisdiction. States were caught short by the Corps unilateral action, placing the States in a role of being the obstacle. This is an example of how far the Corps needs to go to improve its relations with the States, remembering that several States have assumed the Section 404 program and many have similar type programs. The Rapanos guidance also was not developed in consultation with the States, who have ultimate resource primacy. Twenty States have a Section 404 program, and three have assumed the program.

Mr. Jason Albritten -- The Nature Conservancy (TNC). The Nature Conservancy appreciates its working relationship with the Corps. The IPET and Chronology reports provide the way forward for systems approach to project development and leads to the Center idea. But there is a need to integrate Navigation and Flood Control into a broader role with the ecosystem. Non-governmental organizations and Academia can bring more science to the process. TNC is willing to contribute and bring with them TNC/Corps lessons learned from joint projects. Ecosystem Restoration approaches should also extend to how we operate and maintain systems, i.e., dams where we regulate flows. We can operate those as a restoration activity.

7, CLOSING REMARKS AND ADJOURNMENT

LTG Van Antwerp encouraged the EAB to continue with its review of the Twelve Actions as well as provide their views of the Corps independent review process. He encouraged and wants past members to continue to maintain a relationship with the EAB. An Ecosystem Restoration Center which provides for an integration of non-governmental, academia and students working with the Corps increases the Corps talent pool. He said that he is attempting to transform the Corps culture, through the difficult process of cultural change, and encourages the EAB to help him. He accepts the EAB challenge of internal communications and is using the ISO 9000 process to standardize the processes. Learning from success and past projects is valuable and is encouraged. He wants to change technical arrogance and move toward the recognition of uncertainty, as well as quantifying and communicating risk and residual risk associated with decision. This will take some reorganization, owning up to mistakes, and lessons learned to go forward. Corps needs to collaborate and integrate on a broad Federal approach with the inclusion of the States. The EAB needs to consider and recognize that the O&M world is a looming giant that provides us with opportunities to consider ecosystem restoration.

There being no further business, LTG Van Antwerp adjourned the meeting.