

THE BALTIMORE DECLARATION

Environmental Management of Enclosed Coastal Seas EMECS 9

August 31, 2011

Sustainability in a World of Change

This declaration has been adopted by the 300 participants from 25 countries who attended the 9th International Conference on Environmental Management of Enclosed Coastal Seas which took place in Baltimore, Maryland USA, on the shores of Chesapeake Bay.

Baltimore was also the location of the 2nd EMECS conference in 1993. We are very glad to learn that the Chesapeake Bay Program and other coastal seas initiatives represented at that conference have made progress in fisheries management and in controlling nutrient pollution. Across those years EMECS has maintained its role as a forum for exchange of ideas and information between government officials, environmental and resource managers, research scientists, non-governmental organizations and citizen stakeholders, and educators and students. But the world has changed since our first visit to the Chesapeake with accelerating advances in technology, communications, scientific knowledge, and public awareness. The world has also confronted us with an unexpected series of emergencies – oil spills, earthquakes and tsunamis, and coastal storms – that challenge the advances we have made. We must be prepared to manage sustainably our enclosed coastal seas and their resources despite such a world of change.

EMECS 9 began as Hurricane Irene struck the USA East Coast, passing within 100 miles of the conference location. This was the latest in a series of coastal environmental emergencies that occurred within months of the conference. Those emergencies included the Deepwater Horizon oil spill (April 2010) in the Gulf of Mexico and a magnitude 9.0 earthquake and resulting tsunami (March 2011) that devastated the northeastern coast of Japan. We are deeply saddened by the loss of life and economic disruption caused by such disasters and we certainly encourage attempts to predict and prevent them in the future. But we also recognize that human accidents, even if shown to have been preventable, and natural disasters are hazards that are difficult to predict. Reliance on technology alone to eliminate such hazards places our coastal communities at even greater risk when that technology fails in an unexpected emergency that we must face unprepared. We need new policy perspectives that encourage us to adapt to regional environmental conditions so that recurrent hazards can be dealt with as anticipated emergencies no matter how infrequent they may be. Surely the locating and building of structures that are susceptible to serious damage by a tsunami or coastal storm surge can constitute an unacceptable risk in the face of such potential hazards.

The adapting of our activities to regional environmental conditions is tacit acceptance that we are integral components of coastal ecosystems. We strongly believe that this recognition is long overdue: throughout history mankind has modified the ecology of enclosed coastal seas for better or for worse, and they have in turn influenced the economy, culture, and prosperity of coastal communities. The innovative concept Sato-umi, high productivity and biodiversity in the coastal sea with human interaction, is an example of this perspective. We encourage policy makers to adopt the point of view that, by taking actions to benefit our enclosed coastal seas, we are also benefiting ourselves.

Communication changes, especially those involving the Internet and social media, have created exciting opportunities for disseminating information and catalyzing citizen involvement in deeply held causes. Students now have access to real-time monitoring data along with an unprecedented wealth of information which educators can assist them to interpret. The potential for advancing environmental education and establishing a better informed citizenry is unprecedented and will continue to grow. We are wary, however, because these advances may separate learning from the cultural and environmental context of the places where our coastal seas are located. We applaud initiatives that are designed to connect or even re-connect young people with their local environment and coastal culture through activities outside of the classroom – activities for which electronic media can enrich the content but not substitute for the experience itself. We believe that the integral relationship between mankind and the coast is difficult to understand and appreciate if experienced through electronic media alone.

World economy is also changing, creating austere times that challenge us to accomplish more with considerably less available funding. There is no question that maintaining the economic vitality of our coastal seas is likely to require a continuing and costly investment of increasingly limited financial resources that other priorities seek to obtain. We encourage entities that are dependent on each coastal sea to form partnerships to implement shared programs and to achieve shared goals. These partnerships may take place at or between levels ranging from two or more local communities to cities, states, and national jurisdictions. Willing partnerships can increase program efficiency as well as spread the costs across more active participants. Coastal seas are indeed our shared responsibility. In this era of economic austerity, we must take that responsibility to heart.

The need for innovative science has never been greater. In addition to the ecology and habitat requirements of the living resources we would preserve and harvest, we also need to understand the eco-services our coastal seas provide and how changes in those services affect us as integral members of these systems. While we accept the possibility that crossing certain environmental thresholds can lead to rapid and irreversible environmental change, we have little knowledge of the nature of the thresholds themselves and of their magnitude. What is the thermal tipping point where the gradual heating of surface waters under global warming alters ocean circulation patterns and produces global climate change? To answer such questions we need better knowledge of our coastal systems today, and better models to predict future scenarios under different choices available to us now.

And so we come full circle. The changing world is mirrored by our coastal seas and our coastal societies through a dynamic, mutual relationship between each other. This integral relationship has existed throughout human history; we have modified coastal seas, and they in turn have altered us. We are not outsiders; we are not intruders. It is no more possible to restore our coastal waters to some pristine state than it is to undo the societies and the cultural identities that have developed on their shores. Our goal should be to apply ourselves to maximize and maintain the productivity and biodiversity of our coastal seas. Only when our coastal resources and coastal communities mutually benefit from the behaviors of each other will our ability to manage our coastal seas be truly sustainable in a world of change.