

EMECS'11 Conference Declaration

The theme of the EMECS11 - SeaCoastsXXVI Conference is *Managing risks to coastal regions and communities in a changing world.*

Much like the recovery of the White Stork in Japan, that had been extirpated in the 1970's to 90 breeding pairs today, restoration takes time but can be effective. It is much more so for ecosystems like enclosed coastal seas, with high population densities, significant uses (fisheries, shipping, etc), and extensive vulnerability to hazards. Engagement between individuals from the scientific, stakeholder, management, and political communities have shown that pollution can be reduced and environments can begin the long process of recovery and restoration.

For example, well over 50 years ago scientists began to link eutrophication to low dissolved oxygen, sea grass declines and reduction in fish production. By reducing nutrient loading, scientists are now showing that the recovery of these coastal systems has begun. These changes are largely only occurring in systems that have applied shared governance systems, such as Satoumi, where scientists, stakeholders, managers, and politicians have proactively worked together. Additionally, the new and emerging international partnerships on large enclosed coastal seas, such as the Gulf of Finland, Black Sea, Sea of Japan, North Pole Sea bring us closer to solving the global challenges we face.

This restoration network is stronger than ever *but* there are new emerging threats that require our attention. The rate of temperature change is increasing as the melting of our polar ice sheets raise our seas, change winds & currents, exacerbate flooding while infrastructure, human health and safety are threatened. Micro-plastics, ocean acidification, & harmful algal blooms are additional emerging threats that require our attention today so it will not take another 50 years before we begin to take significant action.

THEREFORE, WE DECLARE, scientists must continue to reduce the time between discovery and community engagement to enhance the effectiveness of shared governance. This requires new partnerships and educational networks focused on our youth & underrepresented stakeholders, to engage communities at the local and regional scale that enhances a governance model that can react quickly. We have made great progress but must adapt faster than the pace of change the world is currently experiencing.