

## **CONSIDERING CLIMATE CHANGE ADAPTATION IN COASTAL URBAN WATERFRONT: PRACTICES AND POLICIES**

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Impacts to coastal cities from the effects of average global sea-level rise, which is estimated at 0.6 feet to 2.0 feet in the next century by the IPCC\*, may include the following effects: increased coastal erosion, higher storm-surge flooding, inhibition of primary production processes, more extensive coastal inundation, changes in surface water quality and groundwater characteristics, increased loss of property and coastal habitats, increased flood risk and potential loss of life, loss of nonmonetary cultural resources and values, impacts on agriculture and aquaculture through decline in soil and water quality, and loss of tourism, recreation, and transportation functions.

Now that most Americans understand that coastal areas will feel the effects of climate change despite future mitigation efforts, including relative sea level rise and increased frequency and intensity of storms, it is time to build consideration of these effects into urban waterfront planning policies. Climate change adaptation will require the production or packaging of scientific data, risk and social-economical assessments, mapping and modeling, science transfer to policy, planning, technical capacity and coalition building regulatory and technical tools for implementation strategies.

As it applies to coastal urban waterfronts, the café conversation will discuss the following questions:

- How should coastal urban planners modifying building practices, permitting requirements and master planning?
- What are stand-out examples of these best management practices nationally or internationally?
- What are effective ways to educate the inhabitants, workers and businesses on these effects leading to effective and accepted change in development practices?
- How should climate change risks have been taken into account?
- How should impacts of climate change have been assessed?
- Are there conflicts between measures for climate change mitigation and adaptation?

Results of the conversation are recommendations of practical procedures and means for taking climate change into account in urban planning and impact assessment.

\*Intergovernmental Panel on Climate Change

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