

Sea Level Rise Adaptation & Response Planning in Maryland

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Maryland is in a precarious position when it comes to the impacts of climate change. With over 4,000 miles of coastline, and a combination of rising sea levels and naturally occurring regional land subsidence, Maryland is one of the most vulnerable states in the country. An anticipated two to four feet of sea level rise over the next 100 years will result in a dramatic intensification of coastal flood and storm surge events; exacerbate ongoing shoreline erosion; cause the intrusion of salt-water into freshwater aquifers; and, submerge thousands of acres of tidal wetlands, low-lying lands and the Chesapeake's last inhabited island community, Smith Island.

In April 2007, Governor Martin O'Malley signed an Executive Order creating the Maryland Commission on Climate Change, charging the State's best scientists with determining what Marylanders can do to adapt to the consequences of climate change and to begin reversing global warming trends. In August 2008 the Maryland Commission on Climate Change issued the Climate Action Plan detailing the effects global warming will have on Maryland and recommended 61 specific actions to reduce global warming pollution and protect Maryland's people and property from rising sea levels and changing weather patterns. Many of these recommendations have significant and far-reaching implications for local governments.

According to a recent report from the U.S. Climate Change Science Program, "*Coastal Sensitivity to Sea Level Rise: A Focus on the Mid-Atlantic Region*", Maryland leads the mid-Atlantic coastal states in its level of preparedness climate change-induced increases in storm surge flooding and coastal erosion. The Maryland Chesapeake & Coastal Program (CCP) has a ten-year history of providing planning assistance and technical tools to help the state and local communities understand, and adapt to sea level rise and coastal hazards.

Recognizing that planning for sea level rise is a complex and multi-disciplinary task, the Maryland CCP worked with three pilot counties to develop response strategies and written guidance. Completed in the fall of 2008, the reports contain maps, recommendations for infrastructure planning, economic impacts, and potential planning timelines. The next step for these materials is to draft statewide guidance and recommendations to assist all coastal communities.

To further implementation of the *Climate Action Plan*, the Maryland CCP is launching its Coast-Smart Communities Initiative with an interactive summit on April 27th, 2009. In partnership with the MIT – USGS Science Impact Collaborative (MUSIC) and the Consensus Building Institute (CBI), this summit is bringing hundreds of key coastal leaders together for a half-day event to engage in the difficult real-life discussions and decisions facing coastal communities that are vulnerable to the impacts of climate change such as sea level rise, coastal erosion, and storm inundation. Participants will work through a set of actions that communities can take to protect it's people, infrastructure, and investments from future risk. This event is designed to provide an excellent opportunity to get the hands-on experience that will help participants as they move forward to address the challenges presented by climate change.