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Lessons from Katrina: Flood Management Technology Strategies for the US.

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Coastal and riverine flooding and hurricane-driven storms have long plagued those in the United States who live or work on or near the shoreline or the rivers edge. The devastation wrought by Hurricane Katrina brought the challenge of protecting against such events to the political and technical forefront. The predicted impacts of global warming strongly suggest that our floodplains and coastlines could be at greatly increased risk. This presentation will review the development of the U.S. program for providing structural protection, discuss the effectiveness of employing levees, dams, floodways, beach nourishment and storm barriers in this struggle, highlight the changes over the last two decades that have gradually shifted the focus from a structural-only approach to one that includes the non-structural approaches such as wise land use, wetland restoration, relocations, insurance, floodproofing, and emergency warning and evacuation. Using post-Katrina planning as an example, it will explore what new approaches can be taken. Should New Orleans take a 'levees only' approach to its protection? or should attention to New Orleans be part of a coastal Louisiana integrated flood damage reduction and coastal restoration strategy. The nation needs to make changes in its water resources policies and investment strategy to deal with the new threat that it now faces.