

Title: What is the future of New Orleans?

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Abstract: While the devastation of New Orleans due to flooding from Hurricane Katrina was directly caused by deficient infrastructure confronted with a record storm surge, it revealed serious vulnerabilities resulting from deterioration of the Mississippi Deltaic Plain and climate change. The national response has largely focused on repairing and upgrading infrastructure: levees, flood walls, gates, pumps, roads, power, communications, etc. The \$14.5 billion investments will significantly improve the safety of the people and property in the city and its suburbs; however, relatively little has been done to mitigate coastal landscape deterioration and climate change. These forces will significantly challenge sustainability beyond the usual sub-century planning horizons. Present and planned efforts to stabilize or restore the coastal landscape in the face of reduced sediment supplies in the lower Mississippi-Atchafalaya River Basin and high rates of relative sea-level rise will be reviewed. An inescapable conclusion is that the predominant determinant of the sustainability, and even survival, of New Orleans is the success in limiting climate change by dramatic reduction of global greenhouse emissions by mid-century.