Shifting Foundations
Louisiana State University Center for River Studies
Baton Rouge, Louisiana

Shifting Foundations is a 10,000 square foot permanent exhibition designed to visualize ecosystem, infrastructure, and scientific innovations needed to protect South Louisiana from flooding. Located in the Center for River Studies on the Baton Rouge Water Campus, the Center houses a 120’ x 90’ Moveable-Bed Physical Model of the Lower Mississippi River. The design team was comprised of a trans-disciplinary group of designers, scientists, and engineers. More than a collection of data, scientific principles, restoration strategies, and modeling outputs, Shifting Foundations is a forum, a platform for stakeholders to engage, connect, and debate the future of the Louisiana coast.

At the southern end of the Mississippi River watershed, South Louisiana bears the consequences of the urban development, farming practices, and industrial economy of 11,000 square miles, or 41%, of North America. The River is engineered for control to maintain navigation on the world’s busiest waterway, generate hydroelectic power, and control flooding for cities who live along the lower river. The upper basin has been dammed, and the lower river has been channelized in order to increase flood protection, and reduce the amount of sediment delivered to the delta. At the mouth of the river, there has been a dramatic reduction in sediment flux since the 1930s, with a reduction of over 50% in the last 20 years. The result is a rapidly subsiding and eroding coastline that has lost 1,870 square miles of wetlands since the 1930s — most recently at a rate of one football field every 100 minutes. For the people of the Mississippi River Delta, a combination of sea level rise, land subsidence, and levee failure threaten their homes, jobs, and way of life. Shifting Foundations is an exhibition that: 1) describes the constant negotiation between water and land that defines South Louisiana and 2) presents future scenarios which leverage the complexity of the aqueous terrain to ensure its viability as a site of settlement and industry.

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LSU Center for River Studies
The Water Campus
Baton Rouge, Louisiana