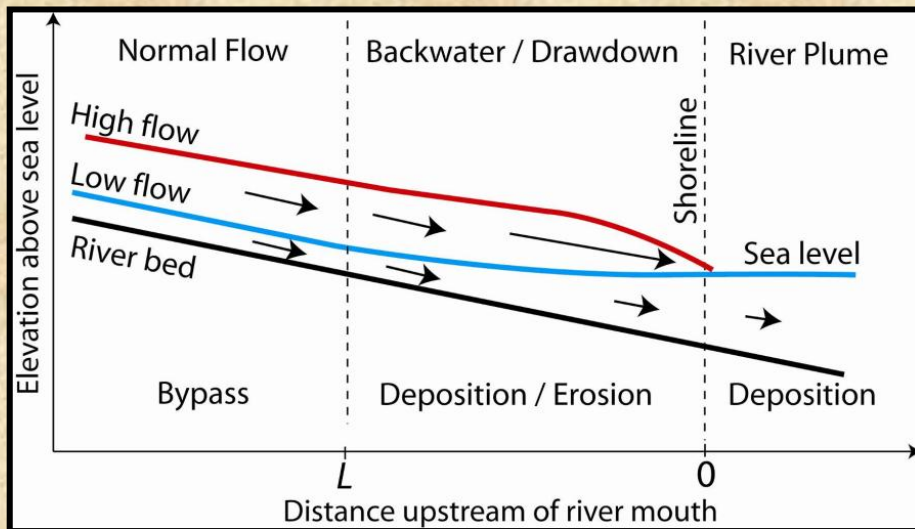
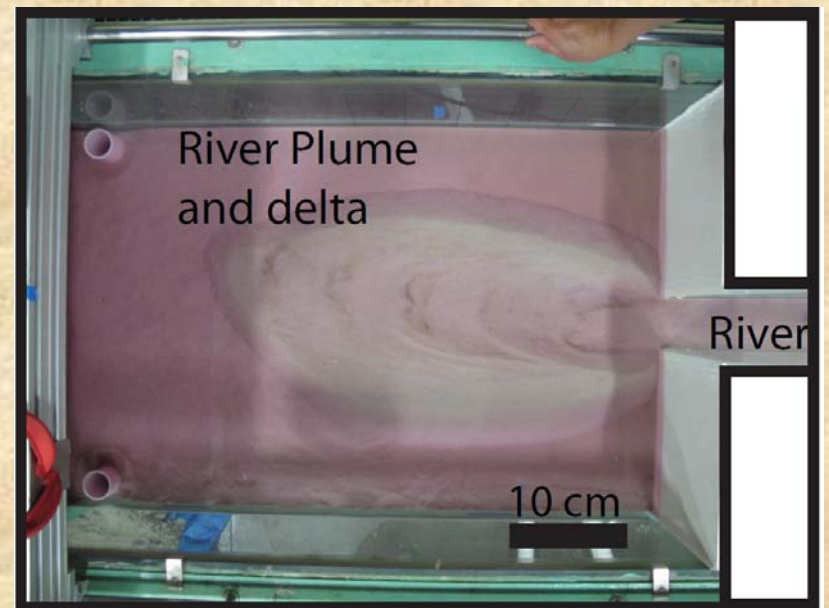


Backwater controls on fluvial morphodynamics near river mouths

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Computer modeling and comparison to Mississippi River data shows that a backwater zone exists at the junction between rivers and the ocean. This zone acts like a dynamic filter on sediment transport reducing the offshore sediment flux at low flow and enhancing the offshore flux during river floods.



Physical flume experiments are underway to test model predictions of river bed scour and delta building.