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**The Severn Estuary (UK):  
Quaternary investigations and human exploitation**

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The Severn Estuary in southwest Britain has, due to its funnel-shaped morphology, the second highest tidal range in the world, second only to the Bay of Fundy in Canada. Interdisciplinary investigations of the Quaternary history of the Severn Estuary have shown that it occurred at the ice-limit, occupying the junction between a Welsh ice-sheet to the north and a periglacial environment to the south. Glacial and periglacial meltwaters were important for channel erosion and deposition of sediments within the basin. Holocene sea-level rise forced a coastal transgression up-estuary, flooding Pleistocene valleys in which marine sedimentation occurred resulting in extensive coastal wetlands. These depositional environments appear to have fluctuated in concert with changes in the rate of sea-level rise, being characterized by marine silt-dominated tidal flat to salt marsh environments during periods of high sea-level rise rates, but becoming peat dominated when the sea-level rise rate decreased. Evidence suggests these wetlands were exploited by prehistoric communities, but were reclaimed during the Roman occupation from AD 43 to 410 and converted to agricultural lowlands, locally known as Levels; reclamation of remaining wetland continued into the Medieval period. Much of the Levels are below the level of high tide and are vulnerable to extreme flooding events, such as in AD 1607 when either of storm surge or tsunami claimed around 2000 lives and caused much socio-economic damage. Sea level continues to rise at a rate of ca. 2 mm yr, which places pressure on existing coastal defences. National political debates on sustainable energy are now calling for a tidal barrage to be constructed across the mouth Severn Estuary, the impacts of which are now initially being discussed.