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# Pleistocene evolution of the Solent River of southern England

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## Abstract

The Solent River no longer exists since most of its course was drowned by eustatic sea level rise during the Flandrian Stage (Holocene). Previously, it flowed eastwards across southeast Dorset and south Hampshire as an extension of the River Frome. As such, it formed the axial major stream of the Hampshire Basin. A sequence of fluvial aggradations, ranging in height from 125 m O.D. to below sea level, provide evidence of the former courses of this substantial river and its tributaries. Detailed study of the deposits, supported by analysis of clast lithological assemblages provide the basis for the recognition of a series of lithostratigraphical units throughout the area. The facies and sedimentary structures indicate that the bulk of the deposits accumulated in a braided river environment under periglacial climates.

Late Pleistocene fossiliferous sediments of Ipswichian and Flandrian age provide a biostratigraphical framework.

The results demonstrate that the Solent River was a substantial system, comparable in size to the present Thames, and was a tributary of the "Channel River"™ during periods of low sea level (cold stages). Evolution of the river reflects its response to climatic change, local geological structure and long term tectonic activity. Although datable deposits limit determination of the age of the Solent River sequence, it is undoubtedly of considerable antiquity and potentially extends back to the Early Pleistocene. Discussion of the sequence includes placing the events within their regional context.



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Pleistocene evolution of the Solent River of southern England, the media plan obliges the totalitarian type of political culture.

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