THE GREAT LAKES OF THE OUSE VALLEY

Bridget Flanagan of the Great Ouse Valley Trust explains how our lakes were formed and why they are so important

This view from the air shows the guided busway as it approaches St Ives. The river is seen on the right. It flows from St Ives in the top centre of the photo and after a series of long bends curves past the small cluster of houses at Holywell. Just visible at the top is Wyton airfield and runway. The aerial view changes our perception of the landscape of the valley. Where we might have thought of the river as the major feature, we now see it dwarfed by the great lakes.

The landscape of the Great Ouse Valley in Cambridgeshire has seen many changes over millennia and most recently these have been formed not by nature, but by man – from diverting rivers to fen drainage to urban development and infrastructure. And the pace of change is increasing. In just the last eighty years huge new areas of water have been created. When the railway from St Ives to Cambridgeshire was built in 1847, old maps show its tracks across meadows, pasture and fen – no lakes.

The fields were dug for their rich harvest of gravel. Over 420,000 years ago the Anglian Ice Age glaciers eroded rock into sand and gravel. When the climate warmed, fast-flowing meltwaters added further deposits along the river valleys. The gravel beds along the Great Ouse are close to the surface and, for the most, are easily accessible. Gravel was dug on a small, local scale in the 18C and 19C and used to dress road surfaces. But in the 20C the extent of extraction was industrialised; firstly, to supply the concrete for the many WWII East Anglian airfield runways, and secondly from the 1960s when a nationwide network of motorways began to be built. A typical concrete mix contains between 60-80% sand and gravel – an 'aggregate' – so when you consider the extent of infrastructure projects using vast quantities of concrete, you realise why there are so many large water-filled holes along the Great Ouse.

The area of lakes from Paxton Pits through to Needingworth and Earith is c 1,300 hectares - larger than the c 950 hectares of the Norfolk Broads! (The Broads are also man-made, but shallower, having been formed from vast medieval peat diggings that later flooded.) And whereas the Broads are complete, here in Cambridgeshire there is a further 700 hectares of lakes underway. The 30-year excavation at Needingworth Quarry will continue until 2030, by which time 28 million tons of sand and gravel will have been excavated. The quarried areas are progressively restored to wetland by Hanson and then handed over to the RSPB

for future management. When complete, this huge nature reserve of Ouse Fen will have the largest area of reedbed in the UK - an important but scarce wetland habitat, particularly for birds. Ouse Fen will link with the neighbouring RSPB reserves at Fen Drayton Lakes and the Ouse Washes, creating a near-continuous wetland of c 2,500 hectares – the Great Ouse Wetland. What an exciting transformation, happening here in the Great Ouse Valley!

Syd Deakin's photograph clearly shows how the vast lakes of the valley now dwarf the river.

The Great Ouse Valley Trust promotes for public benefit the conservation, restoration and enjoyment of the landscape, wildlife and heritage of the Great Ouse Valley and environs in the county of Cambridgeshire. For more information about the Trust please visit www.greatousevalleytrust.org.uk

Great Ouse Valley Trust
Our landscape for life