

The Abberton Scheme

Essex & Suffolk Water (ESW) supplies drinking water to 1.8 million people in Essex, north Suffolk and south Norfolk. It has a duty to do this in a way that conserves and enhances the environment. Demand for water within the region has been rising and is predicted to rise further over the next 25 years, largely due to a forecast increase in population. In addition, Essex on average receives half the national average rainfall and climate change presents uncertainties over the stability of water supplies. These factors were the primary drivers for a need to increase security and sustainability of water resources and resulted in the creation of The Abberton Scheme.

Situated in Essex, near Colchester, Abberton Reservoir was, prior to The Abberton Scheme, the largest freshwater body in Essex with 472ha covered by water when the reservoir was full. The reservoir was constructed during the 1930s and completed by 1939.

The reservoir is filled with water from local rivers including Layer Brook, Roman River and the River Stour. The site has developed into one of the most important sites in Britain for wildfowl, particularly as an over wintering migratory and moulting habitat. The reservoir is a Ramsar site, a Special Protection Area (SPA), and a Site of Special Scientific Interest (SSSI).

The Abberton Scheme consisted of three main elements: enhancing and enlarging Abberton Reservoir, enhancing the water transfer route and varying an abstraction licence.

The primary element of the Scheme involved increasing the storage capacity of Abberton Reservoir by 58%. This was achieved by raising the main dam and the top water level in the main section of the reservoir by 3.2m. The reservoir enlargement also involved: building a number of smaller col (earth) dams around the edge of the reservoir; relocating the Essex Wildlife Trust visitor centre to a larger site; diverting 1.8km of the B1026 highway; enhancement of public access routes and improved parking provision; and construction and refurbishment of a number of pumping stations.

Enhancing the reservoir for birds and other wildlife was also a fundamental aspect of the Abberton Scheme. Primary enhancement features were the removal of concrete edge and the re-profiling of the shoreline to a more natural contour and the creation of additional lagoons and shallow water habitat. The habitat creation and management measures during construction, completed between 2010 and 2014, resulted in increased species and numbers of birds using the site which for many, continues to this day.