

# River systems and management in England

There are estimated to be 36,403 km of river in England (**Map A**). This excludes smaller drainage tracts, and static water bodies such as lakes and reservoirs. The figure is (very roughly) the circumference of the planet.

Rivers (from their source, through their tributaries, and finally to their mouth/outlet) are part of a system within their own drainage catchments. The watershed defines the line surrounding the river system beyond which water drains into another system. (**Map B**). There are estimated to be 4,091 river catchments in England. Many of these will have a relationship with other neighbouring catchments.

The importance of river systems to life on the planet is recognised by much national and international legislation. For example, the European Union Water Framework Directive requires member states to produce River Basin Management Plans (RBMPs) as a means of achieving the protection, improvement and sustainable use of the water environment across Europe. This includes surface freshwaters (including lakes, streams and rivers), groundwater, ecosystems such as some wetlands that depend on groundwater, estuaries and coastal waters out to one nautical mile. The Directive requires member states to aim to achieve at least good status in each water body within their river basin districts. Each member state must produce a plan for each of the river basin districts within its territory. Plans must include: objectives for each water body; reasons for not achieving objectives where relevant; and the programme of actions required to meet the objectives.

River Basin Districts (RBDs) and/or their subunits (RBDSUs) are the main units for the management of river basins and have been delineated by Member States under the Water Framework Directive. RBDs are defined as the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters. An RBD covers an entire river system, including river, lake, groundwater, estuarine and coastal water bodies. The RBD RBMPs are designed to protect and improve the quality of our water environment. Good quality water is essential for wildlife, agriculture and business to thrive. And is one of the means for boosting regeneration (both structural and economic), recreation and tourism.

In England the RBDs are defined as on **Map C**; as **Map D** shows, these do not necessarily coincide with the geographical areas covered by the water utility companies responsible for providing water supply and sewerage services. This is likely to hamper full and effective coordination in the achievement of RBMP objectives.

