49. Esthwaite Water

Geographical Coordinates 54°21′N 2°59′W **Area** 134ha

Location About 15km west-north-west of the town of Kendal, in the county of Cumbria, north-west England.

Date of Ramsar Designation 7 November 1991.

Other International Designations None.

National Designations National Park (Lake District); National Nature Reserve^P (NNR); Site of Special Scientific Interest (SSSI); Environmentally Sensitive Area (ESA).

Principal Features A mesotrophic freshwater lake situated in a formerly glaciated valley between Lake Windermere and Coniston Water in the famous "Lake District" of north-west England. The lake is about 2.5km in length, 0.5km wide and has an average depth of 6.4m. Although its waters are artificially enriched by sewage effluent, Esthwaite Water is the most productive of the larger lakes in the Lake District and includes open water, fen and grassland communities supporting plant and breeding bird species typical of such habitats. Amongst features of national importance are the rare plants *Najas flexilis*, *Carex elongata*, and several uncommon aquatic invertebrates including the water flea *Alonella exigua*. The fen at the lake's northern end has been the subject of long-term studies on wetland vegetation succession. (1a,2a)

Conservation Issues As noted above, the lake's nutrient status is artificially enriched by sewage effluent. Phosphate stripping of this effluent has now been initiated, although monitoring has indicated that high phosphate levels remain in the lake. Work is currently under way to evaluate the impact of a recently established caged fish farm.