12 WATER

Plate 9: Kielder Water

Key Historic Landscape Characteristics

- Historic landscape types: artificial lake/pond, reservoir, natural open water, marsh and river
- Historically important food resources, including fish and waterfowl
- Developed for recreation and tourism in the 20th and 21st centuries, eg fishing, bird watching

Northumberland has a number of significant water bodies and waterways, both natural and manmade. Bodies of water have always been an important source of food, with fish and waterfowl living in them or nearby; today salmon and sea trout still return each year to many of the county's rivers and are fished for recreation. Other water bodies have been created in the 19th and 20th centuries as a result of demand for clean water by the region's urban areas, but they also provide facilities for recreation, including fishing.

Despite the presence of great rivers like the Tyne and Tweed, the modern reservoir of Kielder, and numerous ornamental lakes, water comprises only a very small percentage of land cover in Northumberland (0.64%). The water types that have been identified by Historic Landscape Characterisation include: **artificial lake/pond, reservoir, natural open water, marsh, and river.**

Total area = 3237ha (0.64%), Number of polygons = 87

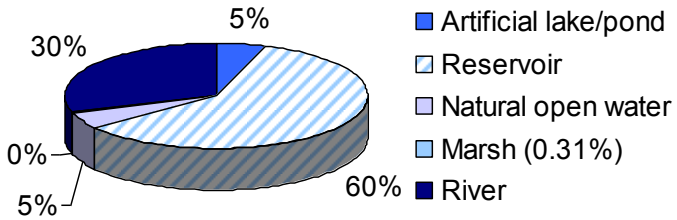


Figure 35: Proportion of Water HLC types

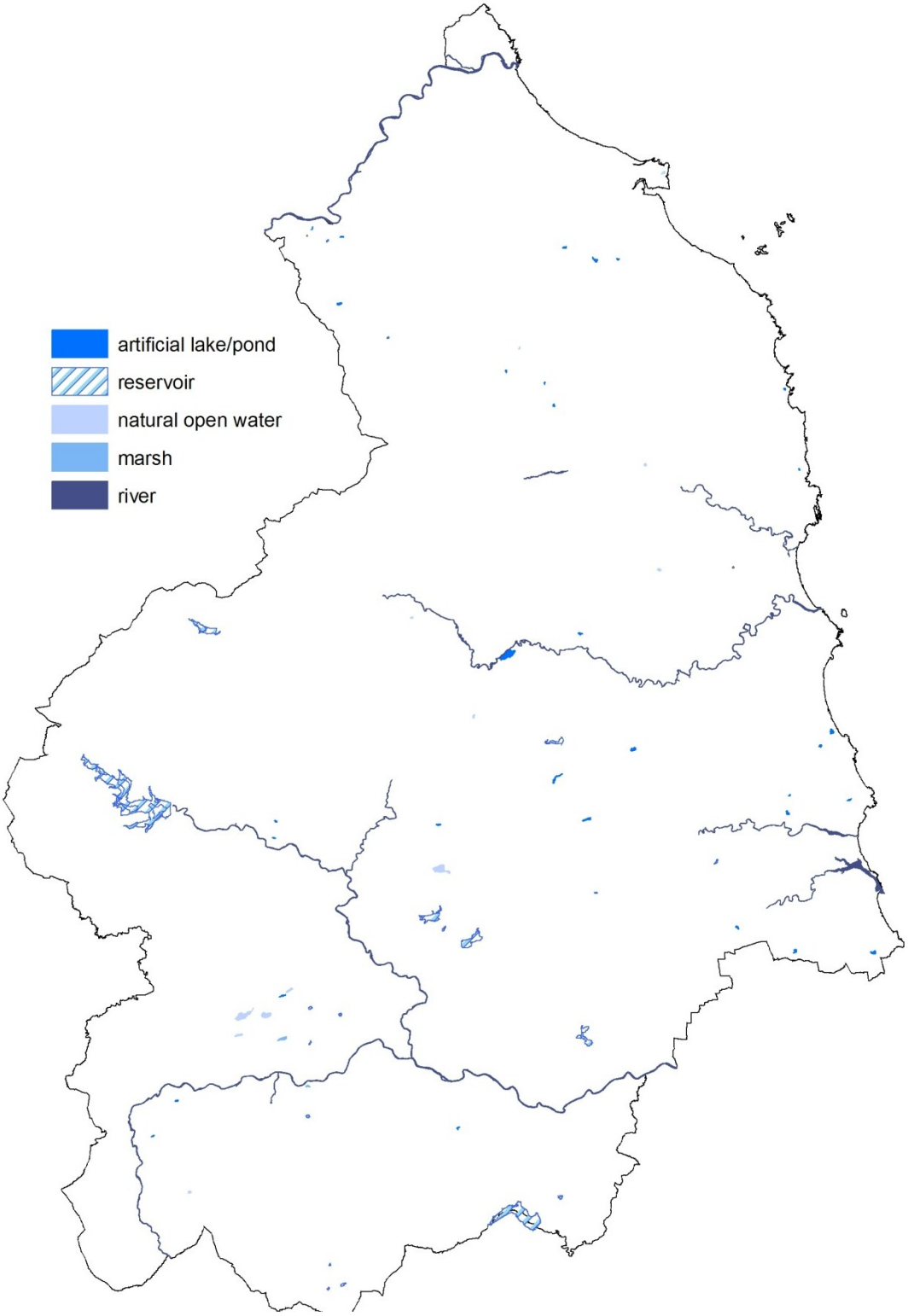
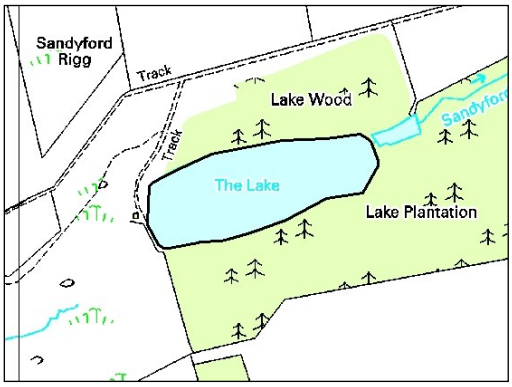


Figure 36: Water HLC types.

12.1 Artificial lake/pond

Key Features:

- Includes ornamental and mining subsidence ponds and lakes
- Total area = 171ha
- % of County = 0.03%
- Number of polygons = 31



Artificial lakes and ponds have arisen through mining subsidence as well as for ornamental purposes in landscaped parkland. All but one are small and under 10 hectares, with the largest being the former gravel workings at Caistron, now a nature reserve (59ha); many smaller ponds were too small to be recorded by HLC (ie, under 1ha).

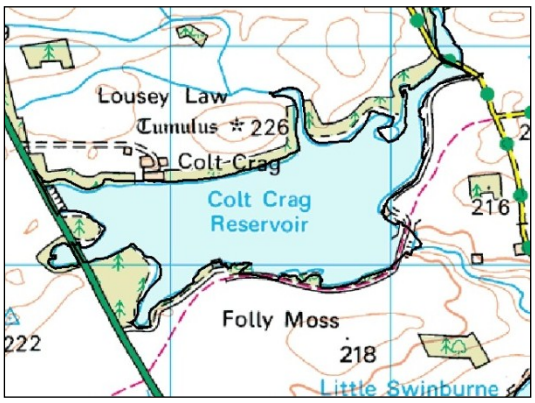
Only six archaeological sites are known in this HLC type. They include water-related structures and features from the post-medieval period such as fishponds, water mill and power station. The discovery of prehistoric animal remains is the only other known site.

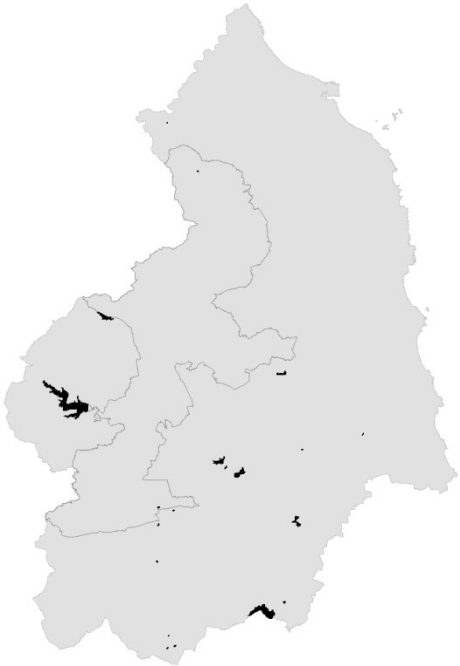
Rarity: very rare
Trajectory of change: increasing significantly
Susceptibility: medium

12.2 Reservoir

Key Features:

- Earliest reservoirs built in the 19th century
- Total area = 1923ha
- % of County = 0.37%
- Number of polygons = 30





Reservoirs first appear in the Northumberland landscape in the later 19th century and were built in response to the demand for clean water in Newcastle and Gateshead. The earliest was built by the Newcastle and Gateshead Water Company at Whittle Dene (1846) and culminated in the 19th century with the construction of Catcleugh Reservoir (1891-1905). More recently, Kielder Water was completed in 1982 and is the largest manmade lake in western Europe (Pevsner 1999, 99).

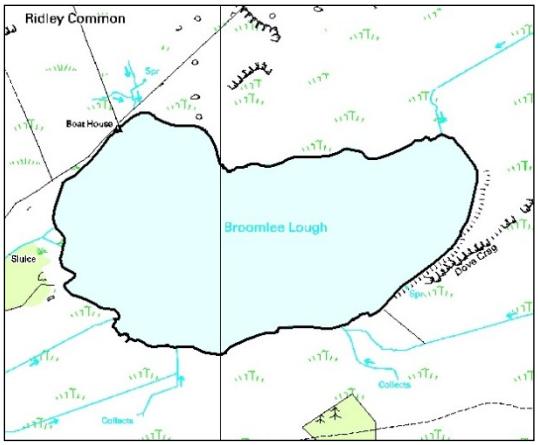
A range of archaeological sites are known from this HLC type. Most have been destroyed or submerged beneath the reservoirs but some records are of structures and buildings associated with the reservoirs themselves. Many of the post-medieval and medieval sites destroyed by flooding are farmsteads and field systems. The small number of Roman remains includes parts of Hadrian's Wall as well as native settlements. Prehistoric sites vary from Mesolithic and Neolithic tools to Bronze Age burials and Iron Age farmsteads.

Rarity: occasional
Trajectory of change: increasing significantly
Susceptibility: low

12.3 Natural open water

Key Features:

- Total area = 161ha
- % of County = 0.03%
- Number of polygons = 13



Northumberland has no large natural lakes, instead there are small loughs on upland fringes (Lunn 2004, 203). The smallest lough recorded here is Coldmartin Lough near Wooler, which is only just over 1ha in size; the largest loughs are Sweethope (50ha), Greenlee (44ha) and Broomlee (27ha); the remainder are all less than 8ha. A number of loughs of varying sizes are clustered either side of Hadrian's Wall, near Housesteads and are glacial in origin (Grindon, Crag, Broomlee and Greenlee).

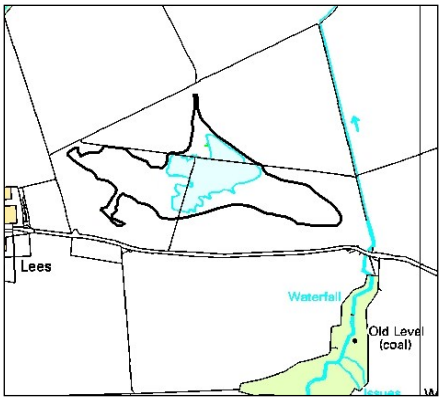
Archaeological sites are very limited in this type, with two possible prehistoric finds (a spearhead and urn), and the remains of a post-medieval waggon way on Holy Island.

Rarity: very rare
Trajectory of change: decreasing slowly
Susceptibility: high

12.4 Marsh

Key Features:

- Total area = 10ha
- % of County = 0.00%
- Number of polygons = 2



Only two areas of marsh over one hectare in area have been identified in Northumberland and they are both in the Tyne valley near Haydon Bridge. Identification of this type is derived from Ordnance Survey MasterMap which defines marsh as a named area of low, flat waterlogged land. It is likely that other, smaller marshes exist but they lie outside the scope of this project.

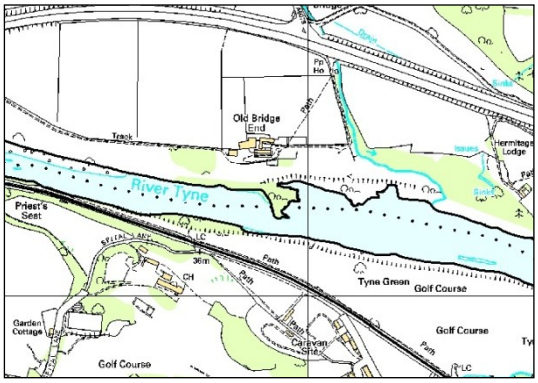
Archaeological sites are very rare in this HLC type, and comprise Roman coal workings near Grindon in the Tyne valley.

Rarity: extremely rare
Trajectory of change: new
Susceptibility: low

12.5 River

Key Features:

- Total area = 971ha
- % of County = 0.19%
- Number of polygons = 11



The major rivers of Northumberland are the Tyne, South Tyne, North Tyne, Coquet, Tweed, Aln, Blyth and Wansbeck, but there are other, smaller rivers including the Till, Rede and Pont. The Coquet and Tweed are nationally rare because they are near natural-river systems, whereas other rivers have been dredged, polluted, or modified by reservoirs (Lunn 2004, 21). The predominant course of the county's rivers is from west to east; they rise in the uplands where the conditions are wetter and cross the drier lowland plain to the North Sea Coast.

Rivers would have been an important resource for food throughout history, and today many of the county's rivers are home to spawning salmon and sea-trout. Only watercourses over 20m wide have been recorded by the HLC project.

Archaeological sites found in this type are mainly post-medieval in date and include many features associated with rivers and river crossings, such as bridges, fords, boat houses, stepping stones, dams and weirs. Earlier remains include several medieval and Roman bridges and fording points, but prehistoric discoveries are nearly all finds of stone or metal tools and weapons. Some of these may have been deposited in rivers as votive offerings and others may have been lost accidentally.

Rarity: rare
Trajectory of change: declining slowly
Susceptibility: medium