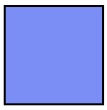
LANDSCAPE CHARACTER TYPE:
River Valley Floor



Originating in the chalk of the Hampshire Downs- predominantly flowing south into the south Hampshire landscape. Smaller stream systems occur in the north.

SIMILAR AND ASSOCIATED TYPES HAMPSHIRE DISTRICT AND BOROUGH LEVEL ASSESSMENTS	
Basingstoke:	Valley Floor
East Hampshire	Chalk Valley Systems (valley floor plus sides)
Eastleigh	Tidal River
Fareham	Open Floodplain Farmland, Enclosed Floodplain Farmland.
Gosport	n/a
Hart	Floodplain Farmland
Havant	n/a
New Forest	River Floodplain (falls completely within the River Valley Floor type)
Rushmoor	Blackwater Valley
Test Valley	River Valley Floor
Winchester	**Primary association:** River Valley Floor **Secondary association**: River Valley Side (lower parts)
SIMILAR AND ASSOCIATED TYPES IN NEIGHBOURING AUTHORITY ASSESSMENTS	
Dorset	
West Berkshire	Upper Valley Floor, Lower Valley Floor
West Sussex	River Valleys (includes sides)
Wiltshire	Chalk River Valley (includes sides)

KEY IDENTIFYING CHARACTERISTICS AND BOUNDARY DEFINITIONS

- The extent roughly follows possible flooding extents but is drawn on boundary features and breaks in contour spacing.
- Mapped where the river valley floor is perceived to be of a significant visual feature of the valley - upper reaches where the valley fades out to a dry valley is not mapped.
- Single channels becoming braided and divided in lower reaches of the chalk and the lowland setting sometimes with man made canals or remains of waterways such as the Itchen navigation and Titchfield Canal.
- Pasture dominated landscape with field boundaries often orientated to maximise accessibility to the water's edge.
- Smooth flowing crystal clear waters – of international reputation for fishing.
- The larger chalk rivers of the Meon, Itchen, Test and Avon are important for relic water meadows with their ripple pattern fields, of varying complexity with surviving banks, carriers, sluice and small bridge structures.
- Varied availability of waterside access with limited or no use of the watercourse itself for access - until the lower reaches of the Itchen at Southampton.
- Road and lane bridge crossings are low to the water and often with white parapet railings Modern large roads are also relatively low to the water.
- Numerous watermills often converted to residential use.

PHYSICAL

GEOLOGY, LANDFORM, ELEVATION:

Bedrock and Superficial Geology:
This LCT has its origins in the Hampshire chalk downland apart from the Blackwater and Avon, which have chalk spring origins in West Berkshire and Wiltshire, respectively.
Landform and Elevation: This type includes the river bed and floodplain, but not the valley sides. It approximates to the extent of the Environment Agency's 2006 flood zone 2 mapping for the major rivers and some of their tributaries in Hampshire: the Avon, Test, Itchen, Hamble, Meon, Blackwater, Loddon and Lyde. This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year. The type boundary will generally follow a recognisable feature such as road, field boundary or step change in level. Not all the flood zones are mapped, other landscape considerations are taken into account when deciding what area to include. The underlying bedrock geology is varied but the superficial geology is of fundamental importance in differentiating this type spatially from adjoining types. It is almost entirely head deposit, of undifferentiated clay, silt, sand and gravel.

The landform varies from medium to large scale with broad, flat valley floor including low-lying floodplain and flat, slightly raised gravel terrace as in Avon Valley, and generally where the rivers flow through the coastal plain landscape; to smaller-scale, narrow and relatively confined valley character as in parts of Meon Valley.

SOILS TYPES:

Typical soil type pattern:. As would be expected, the river valley soils are all river alluvium, but there is significant variation within this type across Hampshire, which is closely related to the way the landscape has been exploited. The Avon is predominantly 812a; a chalky gravely alluvium. Similarly the Blackwater and Loddon are underlain by 841b another gravely type of alluvium, both areas have a history of mineral extraction. The very fertile river valley floors of the lower parts of the Test and Itchen have significantly deeper and stoneless soils often with a humus/peaty horizon e.g. type 1024c. The narrower valley floor landscape of the Meon valley has high proportions of clayey silty/alluvium such as 813d and 813a. The unifying feature of all the valley floor soils is that they have a high calcareous content.

FUNCTIONS:

Hydrological function: These soils have high groundwater levels and have an obvious important hydrological function.

Food and Biomass: These areas don't support high biomass or arable food production levels. They were traditionally important areas for pastoral farming especially sheep.

Biodiversity potential: The habitat opportunity mapping which has been carried out (heathland, chalk grassland and ancient woodland reversion) is not particularly relevant to the valley floor landscape.

LANDCOVER AND LAND USE PATTERN:

Grazing land comprising grade four agricultural land on floodplains. Watercress beds are a particular features of the nutrient-rich alkaline streams in upper Test and Itchen valleys.
As well as improved grassland the river valley floor has the highest concentrations of neutral and semi improved grassland in the County, especially in the setting of the Downs. The river channels in the upper reaches and the flood plains of the lower reaches of the Meon, Itchen, Test and Avon have international wildlife status with their own specific management objectives which have to be carefully balanced with recreational needs.

HYDROLOGY:

All the rivers rise in chalk with clear nutrient-rich spring water supporting rich aquatic flora and fauna; the Avon also receives acidic water from New Forest catchment. Several of Hampshire's rivers (the Test, Itchen, Hamble and Meon) are complete river systems from source to mouth. The lower reaches are usually tidal unless as at the mouth of the Meon for instance tidal flow is controlled – resulting in large intertidal areas of mud being exposed at low tide. These areas are given a separate landscape type classification, and the river valley floor invariable will refer to just the river below mean low water mark.

EXPERIENTIAL

ACCESS AND TRANSPORT ROUTES:

Definitive rights of way can often form part of the boundary of the River Valley Floor. Each valley has a main road along much of its length; where these intersect main roads crossing the valleys, major towns are usually located, for example, Ringwood, Romsey, Totton and Winchester. Most of Hampshire's major through routes cross the valleys, notably the M27, M3, A303 and A31.

TRANQUILLITY:
Away from the busy valley bottom trunk roads and expanded settlements, the pastoral landscape with views over the river and presence of semi natural habitats makes these landscapes highly tranquil.

BIODIVERSITY

The River Valley Floor landscape character type is a river associated landscape. The River Valley Floor landscape character type has a strong grassland character and associated running water which is often rich in aquatic flora and fauna, wetland habitats, occasional ponds and some woodland.

Hampshire's rivers vary in underlying geology and this creates diversity in the habitats and species that they can support. Chalk rivers are a significant feature in Hampshire and exist primarily in the south of the county. They provide habitat to a range of species: Mid channel is often dominated by river water crowfoot and starworts, with watercress and lesser water-parsnip at the margins. Invertebrate communities tend to be rich and to include rare species such as the fine lined pea mussel and the mayfly. Hampshire's rivers are not exclusively chalk: rivers in the north east of the County often rise from chalk but then leave the chalk and flow over clays, meaning they begin clear and become increasingly muddy; drainage from adjacent heathland can occasionally lead to acidic character.

Grassland associated with the River Valley Floor landscape character type ranges from arable land and improved grasslands, which often run into this landscape from adjacent landscapes, to unimproved grasslands and wet grasslands. Wet grasslands (water meadows) occur when riverside pastures have not been improved or drained for agriculture. Channels built to enable the pastures to flood, and the, now remnant, water meadows provide habitat for the southern damselfly and other species. They also support breeding waders and wintering wildfowl.
Other wetland habitats existing here include swamp and bog habitats such as reedbeds, base rich fen, marshy grassland and tall vegetation alongside water courses. These habitats often provide an important resource to breeding wader birds and wintering wildfowl. Ponds often exist along the River Valley Floor landscape character type and provide important habitats. Ponds often support important and rich wetland marginal flora and can be an important resource to diverse dragonfly fauna; occasionally ponds are associated with land uses such as quarrying which can reduce their ecological value.
Woodland is limited within this landscape. There are some areas of broadleaved woodland, little of which is ancient and semi-natural. Mixed plantations, forestry scrub and continuous scrub also exist as do areas of parkland, which are more prevalent within the River Valley Floor landscape character type to the east of the county.

There are a number of BOAs existing in this landscape character type:

- Rivers Loddon/ Lyde/ Whitewater Catchment and Headwaters BOA identifies opportunities for wet woodland, lowland meadow, purple moor grass and rush pastures, floodplain grazing marsh, lowland mixed deciduous woodland, lowland dry acid grassland and lowland heath habitat creation and enhancement.
- Itchen Valley BOA identifies opportunities for wet woodland, lowland meadow, purple moor grass and rush pastures, floodplain grazing marsh and reedbed habitat creation and

enhancement.

- Blackwater Valley BOA identifies opportunities for floodplain grazing marsh, wet woodland, purple moor grass and rush pastures, lowland meadow, and reedbed habitat creation and enhancement.
- Northern Wey Valley BOA identifies opportunities for lowland meadow, wet woodland and reedbed habitat creation and enhancement
- Avon Valley BOA identifies opportunities for wet woodland, lowland meadow, purple moor grass and rush pastures, and floodplain grazing marsh habitat creation and enhancement.
- Test Valley BOA identifies opportunities for wet woodland, purple moor grass and rush pastures, floodplain grazing marsh, lowland meadow, and reedbed habitat creation and enhancement.
- Meon Valley BOA identifies opportunities for purple moor grass and rush pastures, wet woodland, lowland meadow, reedbed, and lowland fen habitat creation and enhancement.

HISTORIC ENVIRONMENT

ARCHAEOLOGY

There is little direct archaeological evidence from the valley floor. Flooding potential has limited settlement, and accumulating alluvial deposits hide evidence. It is likely that the archaeology of the exploitation of the rich resources of the river environment (such as fish and wild fowl) will exist from all periods, but in particular it is likely that Mesolithic exploitation of the landscape is rich and hidden within these zones, as has been shown in the Kennet valley. In the lower reaches some evidence of transhipment, as at Testwood Lakes, will exist, and in the later periods, the archaeology of river crossing and water power will probably be evident. Water logging means that a much wider range organic archaeological evidence will be available.

HISTORIC LANDSCAPE CHARACTER

Water meadows are far and away the most significant HLT -. The county is important in the overall distribution of water meadows nationally, consequently their management is both a local and national issue. Water meadows flourished in Hampshire because they were ideally suited to the flat bottomed valleys of the chalk rivers and were an intrinsic part of the of the sheep corn system that was the mainstay of Hampshire's agriculture at that time. The system involved sheep being grazed on the water meadows by day and at night being driven up to the arable fields above the valleys where they were folded to manure and improve the poor chalk soils.

HISTORIC BUILT ENVIRONMENT

Settlement types by form: Generally, settlements will fall outside the river valley floor extent, reflecting the fact that development tends to minimise the risk of flooding. However development is historically, closely associated with the traditionally strong economic value of proximity to water supply and rich alluvial soils for grazing and therefore there is often a rich built environment landscape just outside the boundaries of this type.

Building materials and type;
Bridges are an important feature of this landscape type, some of which are listed structures. The decline in water meadows has resulted in many of the built structures being destroyed,

buried or hidden from view, very few are listed. Hampshire is particularly fortunate to have a considerable number of watermills that are capable of producing stone ground flour. There are over 240 watermills in the County (Hampshire Mills Group).

VISIBILITY

Prominency: Necessarily low lying by definition they are not prominent in relation to altitude.
Enclosure: Very varied both by landform and tree cover. Very often where the river valley is in a downland and coastal plain and some lowland mosaic landscape settings the valley can be picked out from higher ground by the relatively high proportion of tree cover. The narrower valleys such as the Hamble and Meon can be considered to be relatively well enclosed.
Public perceptions: The villages and hamlets which are generally just outside these landscape types are some of the most populated areas locally, especially in the dowland areas. The boundary will often follow a road or track which often coincides with the extent of the possible flood area. Both these factors mean that these landscape types will have relatively high and frequent contact with the visual perceptions of people.