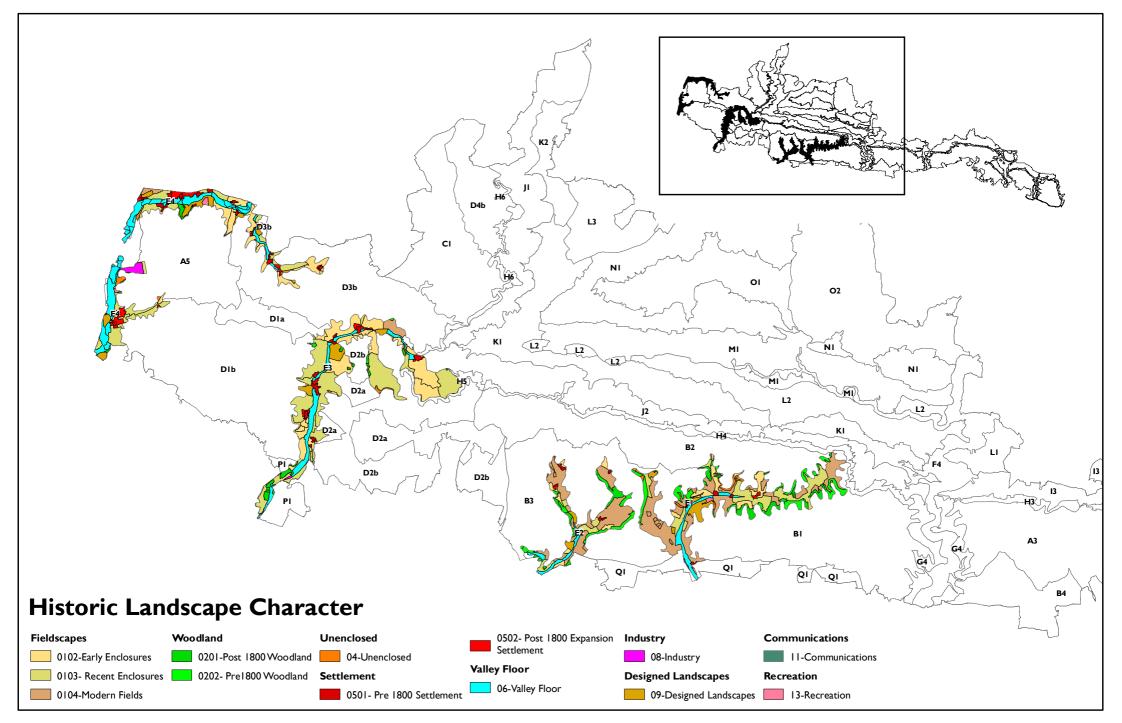


E: Chalk Valley Systems



E: Chalk Valley Systems

LANDSCAPE TYPE E: CHALK VALLEY SYSTEMS

E.I The *chalk valley systems* are branching valley systems that drain the dipslope of the chalk downs and contain a river along at least part of their length. They often follow the lines of faults in the chalk and are winterbournes in their upper reaches. This type does not include the extensive dry valley systems that form part of the open downland to the east (these are incorporated into the open downland type). Similarly, the distinct wide, glacially enlarged U-shaped valleys of the Arun, Adur, Ouse and Cuckmere are classified as a separate landscape type.

DESCRIPTION

Integrated Key Characteristics:

- Broad, branching valleys carved from the chalk downs and indented by dry valleys and coombes to produce smoothly rounded valley sides.
- On the valley sides the chalk soils support intensive arable cultivation on shallower slopes, with pasture, calcareous grassland, scrub and woodland on steeper slopes.
- Valleys are often winterbournes in their upper reaches wells and springs are features.
- Lower valley floors contain clear, chalk rivers that flow within a flat, narrow floodplain characterised by permanent pasture, wet woodland, water meadows, and open water, all of which are of great ecological interest.
- Historically, meadowland alongside the river was integral to the medieval sheepcorn husbandry regime, providing valuable winter and spring grazing for the extensive communal sheep flocks.
- The valleys have provided important routeways from prehistory today, they often contain a road or winding lane connecting a string of regularly spaced nucleated flint villages. Stone built medieval bridges are located at historic river crossing points.
- Farms, including distinctive flint barns, are located on lower valley sides, sheltered by trees and forming a visual focus. Gentry houses and landscape parks provide evidence of the wealthy population of the past.
- Extensive blocks of early enclosure occur throughout the valleys, notably around settlements, indicating survival of late medieval landscape.
- Rivers were used to power watermills in the past weirs, mill ponds and mills, as
 well as fish farms, trout lakes, and watercress beds are distinctive features of the
 landscape.
- Away from transport corridors the valleys retain an unspoilt and tranquil pastoral character.

Physical Landscape

- E.2 The Chalk Valley Systems are broad, branching valleys carved from Upper and Middle Chalk by a process of erosion, sometimes along structural folds, to produce distinctive smoothly rounded U shaped valleys. Where valleys coincide with structural folds in the chalk the result is often an asymmetrical valley with one extremely steep valley side.
- E.3 The underlying chalk geology gives rise to shallow well drained, calcareous silty soils, known as grey and brown rendzinas. Deposits of 'Head' (weathered and broken up material that has moved downslope) are found in the bottom of the valleys where they give rise to deeper soils. There are also deposits of valley terrace gravels in the lower reaches of the larger valleys. The shallow, well drained calcareous soils give rise to fertile soils which support good agricultural land (classified by DEFRA as Grade 3). Where topography permits, the soils support arable cultivation. The steeper slopes support a mixture of calcareous grassland, scrub and woodland.
- E.4 Each valley contains a chalk river, rising from one or more spring sources and flowing within a narrow floodplain. The floodplain is typically underlain by river alluvial deposits of sands and gravels which have given rise to alluvial gley soils stoneless calcareous clayey soils which are periodically waterlogged. These soils have a lower agricultural capability (classified by DEFRA as Grade 4) and the floodplain typically supports small permanent pastures divided by hedgerows, wet woodland, water meadows, and open water. The nutrient-rich alkaline spring waters support distinctive habitats, game fishing and watercress beds are a particular feature. Other distinctive features of the floodplain include mill ponds, fish farms and trout lakes.

Perceptual/Experiential Landscape

- E.5 The Chalk Valley Systems provide a sheltered environment that contrasts with the exposed character of the surrounding downs. The rising valley sides, small field sizes, presence of hedgerows with hedgerow trees, and woodland all contribute to the enclosed and secluded character. The chalk rivers typically exhibit gentle meanders, open floodplains, and flood meadows which together create the typical pastoral character of the valley landscape. However, the sense of tranquillity is often eroded by the presence of traffic on the main transport routes that occupy the valley floors, plus the presence of settlement, and small scale development along the valleys.
- E.6 The valley roads combined with a network of public rights of way mean that the landscape is easily accessible by car and on foot/horseback. Many recreational routes are linear in nature, following the valley form, with links up to the higher surrounding downs. The chalk rivers are also important for game fishing.
- E.7 The Chalk Valley Systems have been appreciated by many writers. Moncrieff's early 20th century 'Guide to Hampshire' notes that one could 'sit on cowslip banks, hear the birds sing, and possess ourselves in as much quietness as these silent silver streams'. The Meon Valley is described, in the same guide, as 'a prettily varied country of commons, parks and embowered villages below green slope'. The village of East Meon is particularly appreciated Cobbett, writing in the early 19th century, thought that he could 'dwell long on the beauties of this place' and describes the Lavant Valley as 'a long valley, on the South Downs, which winds and twists about amongst hills, some higher and

some lower, forming cross-dells, inlets, and ground in such a variety of shapes that it is impossible to describe'.

Biodiversity

- E.8 The Chalk Valley Systems support a range of semi-natural wetland habitats, plus arable and agricultural grassland. The river corridors are of inherent ecological value, the clear alkaline rich nutrient-rich spring waters support a rich aquatic flora and fauna, with a range of characteristic marginal and in-stream aquatic plant species. The narrow floodplains typically contain small permanent grassland pastures divided by hedgerows, wet woodland, water meadows and open water. Many sites are designated at a local or national level.
- E.9 The wider valleys are often dominated by arable agriculture and improved pasture/grassland on the valley sides, with the steeper valley slopes retaining occasional areas of calcareous grassland, scrub and woodland.

Key Biodiversity Features	Importance
Chalk rivers with associated aquatic habitats	Inherent ecological interest often associated with other ecologically valued habitats such as meadows and wet woodland along the immediate river corridor.
Occasional areas of woodland and calcareous grassland, particularly on steeper slopes	Chalk grassland supports important populations of vascular plants, birds and invertebrates - woodland adds to the overall diversity of chalk grassland habitats, and provides additional ecological interest.

Historic Character

- E.10 Occasional finds of Palaeolithic and Mesolithic artefacts along the valleys testify to the passage of hunting bands, although these may occur within deposits that have moved downslope, rather than indicating presence of hunting bands within the valley. In the past, it is likely that the rivers were formerly, much wider in extent compared to the present course. By comparison, the alluvial floodplains, although very fertile, were narrow and vulnerable to flooding, rendering them unsuitable for prehistoric and later settlement and arable agriculture, although the meadows may have been used for pasture by communities situated on the higher land to either side of the rivers.
- E.11 The more sheltered soils of the valley sides are likely to have been exploited by early farmers. However, evidence for prehistoric and Romano-British occupation is scarce, due to suitable deposits being buried beneath later colluvial deposits.
- E.12 By the Anglo-Saxon and medieval periods, the *Chalk Valley Systems* formed an integral part of an agrarian landscape based around sheep-corn husbandry and the exploitation of the extensive woodlands on the downs. At this time a series of small nucleated settlements were established up the valleys, surrounded by rings of open fields, with open downland and woodland beyond. Large amounts of meadowland were listed in the Domesday Survey these rich pastures on the valley floors provided valuable winter and spring grazing for the extensive communal sheep flocks that were folded on the arable land at night. The rivers were typically used to power watermills.

- E.13 Some of the rivers would have been important routeways from prehistory onwards, although probably too small to be navigable beyond their lower reaches. The 16th and 17th centuries saw the development of water meadows, regulated systems of ditches and channels that provided a continuity of access to winter feed for the sheep flocks, but with a greater degree of control. These were abandoned in the 19th century.
- E.14 The open fields were enclosed during the late medieval/early post-medieval period, resulting in small blocks of irregular fields bounded by hedgerows situated around the main settlements, much of which survive in the present landscape. The remainder of the open land was enclosed during the 18th-19th century, during gentrification of the landscape, when it became incorporated into the great landed estates of the region, resulting in extensive areas of regular enclosures containing isolated farmsteads.
- E.15 Today, the floodplains are now typically occupied by a series of enclosed fields, reclaimed from the former marshy margins of the river from the medieval period onwards, and bounded by ditches and occasional hedgerows. Fragmentary systems of watermeadows are evident, together with a number of archaeological features characteristic of flood plains, including bridges, weirs and mills. Landscape parks are a further feature of the Chalk Valley Systems.

Key Features of the Historic Environment	Importance
Nucleated settlements	Indicative of medieval manorial system based around open fields.
Early enclosures	Survival of late medieval landscape.
Recent enclosure	Forms part of post-1800 gentrification of the landscape.
Scattered post-medieval farmsteads	Indicates the changing nature of farming practice following decline of traditional manorial system.
Presence of designed landscapes	Provide evidence of gentry houses and landscape parks of the wealthy population of the past, some listed on the English Heritage register of Historic Parks and Gardens.
Remnant features relating to water management and agricultural/industrial use of the river	Evidence of the importance of the river and its margins in the local economy throughout history.

Settlement Form and Built Character

- E.16 The settlement pattern of the Chalk Valley Systems is characterised by a string of nucleated settlements of medieval origin often dramatically located along the edge of valley floor with steep slopes rising above the settlement. Villages are frequently surrounded by irregular enclosures of late medieval date. These are linked by a strong linear communication pattern, including major roads and railways. Typically the valley sides support a scatter of farmsteads of largely 18th-19th century date set within regular enclosures of the same date. This conforms to English Heritage's rural settlement designation of East Wessex Sub-Province within the South-eastern Province.
- E.17 Building materials are typically flint, red brick, clay tile and straw thatch. Flint walls, within the villages are a particularly distinctive characteristic of the valleys.

EVALUATION

Sensitivity

- E.18 The Chalk Valley Systems have a number of sensitive natural, cultural and aesthetic/perceptual features that are vulnerable to change. Key landscape sensitivities include:
 - The smooth form of the intact valley sides which reveal dramatic chalk landforms.
 - Areas of pasture, plus calcareous grassland on the valley sides which contribute to biodiversity.
 - The courses of the chalk rivers, including their springs, meanders, pools, and riffles, and the clear alkaline spring water, with associated rich biodiversity.
 - The pastoral character of the valley floors and floodplain habitats including wet woodland, unimproved river valley grassland, bank edge vegetation, and water meadows which have a high biodiversity value.
 - The nucleated villages of Anglo-Saxon medieval origin on the valley floors, each clustered around a distinctive church tower or spire.
 - The setting of, and uninterrupted views to churches tower/spires, which are
 often seen against the rising downland backdrop of the valley sides are also
 important.
 - The extensive blocks of early enclosure, notably around villages, which indicate survival of late medieval landscapes.
 - Historic bridges which provide minor crossing points over the river.
 - Fragments of watermeadows and watercress beds which are particularly distinctive cultural and historic features.
 - Mills, weirs and mill ponds which provide evidence for past use of the river.
 - Designed landscapes which provide evidence of gentry houses and landscape parks of the wealthy population of the past.
- E.19 The woodlands and hedgerows generally limit visual sensitivity of these valley landscapes. However, the visibility of the chalk valleys from the adjacent downs increases their visual sensitivity. From within the valleys, the valley crests are seen against an open sky and are particularly visually sensitive.

Change - Key Issues and Trends

Past Change

- E.20 Observable changes in the past include:
 - Cessation of water meadow management, improvement of river valley grasslands, and reduction in the extent of wetland habitats.

- Removal of bank edge vegetation and localised erosion of river bank edges by livestock.
- Abstraction resulting in reduction of river flows.
- Diffuse pollution of rivers as a result of intensive farming with subsequent impact on biodiversity.
- Scrub encroachment onto chalk grassland and pastures on the valley sides.
- Introduction of water control works and associated monitoring apparatus.
- Increased traffic and 'improvement' of valley roads so that many of these are now main routeways.
- Extension of the nucleated villages so that some may now be more linear in form.
- Introduction of grazing paddocks on the valley floor; alternatively abandonment of grazing and encroachment of scrub.

Future Landscape Change

- E.21 In the short term (5 years) it is likely that there will continue to be reduced flows as a result of over-abstraction and dry summers resulting in a reduction in the extent of wetland habitats. On steeper slopes it is likely that there will be further scrub encroachment onto chalk grassland and pastures as a result of low grazing pressures, despite ongoing policies and incentives for management of chalk grassland habitats. Patterns of crops in the arable areas on the valley sides are also likely to continue to change some of these crops could have a sudden impact particularly seen in the context of the rising valley sides. On the flatter land of the valley floor subdivision of grassland to create grazing paddocks is likely to continue to be a pressure, combined with abandonment of some marginal land. There may also be pressure for development of new trout lakes and fish farms, and further built development on the edge of existing settlements.
- E.22 It is difficult to be prescriptive about long term change (20 years) as this will be dependent on prevailing policies and incentives. The South Downs Management Plan will be a key tool in managing change and ensuring a positive future for the area. Some potential changes and key vulnerabilities within the Chalk Valley Systems are outlined below.

Climate Change: A possible impact of climate change will be the effect on the wet woodland, water meadows, and unimproved river valley grassland where drier, warmer summers may reduce damp conditions needed for the survival of these habitats. Drying of the floodplains in summer could result in replacement of pasture with dry grassland species. On the other hand, increases in winter precipitation may result in increased flooding during winter - this could mean that new developments, which are currently outside the flood risk area, could be at risk of flooding in the future. Increased temperatures may also result in more prolific vegetation growth within rivers and on banks.

Increased drought conditions could result in the potential to grow different crop types, which could change the visual character of the valley sides. Increased rainfall could result in soil erosion on the valley sides, and in adjacent downland areas, which could have knock-on effects on water quality in the chalk rivers. Areas of drier land, such as the valley sides, may be under pressure for growth of biomass crops.

Agricultural Change and Land Management: Agricultural management will be driven by the changes in the world market and the CAP. In the valley bottoms, it is likely that marginal farms may cease grazing with further scrub encroachment or continuing pressure for new farm types (small holdings) and introduction of further horse paddocks into the floodplain. On the less steep valley sides it is likely that agricultural production will continue to intensify with amalgamation of farms and potential demand for new large scale farm buildings. There may also be positive landscape change arising from regimes to promote enhanced environmental management of chalk grassland habitats, although retention of livestock grazing will be critical to the success of such schemes.

Pollution from agriculture is a key concern for the chalk rivers, and is seen as one of the biggest challenges to meeting the requirements of the Water Framework Directive. The correct implementation of existing legislation will have a major role in ensuring good water quality.

Development: The valleys contain many small village settlements. The existing AONB designation and, if confirmed, the new designation of National Park is likely to continue to limit pressure for built development. However, the character of the villages could be eroded by incremental small scale changes. The valleys contain main access routes to the South Downs and are likely to be under pressure from increasing traffic volumes and increased numbers of visitors seeking recreational opportunities. The impact of increased development outside the area would lead to increased abstraction and reduced water levels with a knock-on effect on landscape character and biodiversity.

Broad Management Objective and Landscape Guidelines

E.23 The overall management objective should be to conserve the rural character of the chalk valleys, support opportunities to enhance natural floodplain habitats, and maintain water flows and high water quality in the chalk rivers.

Landscape Management Considerations

- Conserve the intact smooth form of the valley and its dramatic chalk landforms.
- Maintain and increase the species diversity of areas of semi-improved and unimproved grassland.
- Protect and continue to manage the existing chalk grassland on steeper slopes –
 manage scrub to vary the age and species structure and to enhance the
 distinctive landform of the valley sides.
- Safeguard water flows in the chalk rivers to maintain the pastoral character of the valley floors and their floodplain habitats.

- Monitor water quality in the rivers and seek to minimise water pollution from agriculture through the CAP cross-compliance rules and support for the production of Nutrient, Manure and Crop Protection Management Plans.
- Manage areas of wet woodland, unimproved river valley grassland, bank edge vegetation, and water meadows which have a high biodiversity value and contribute to the visual significance of the river channels.
- Create buffer strips alongside ditches to enhance their habitat importance and create a continuous network of wildlife corridors, and reduce nutrient run-off into watercourses.
- Manage valley side and valley bottom woodlands to ensure a diverse species and age structure by thinning, coppicing, and replanting as necessary. This will also minimise risk of damage as a result of increased storms and high winds.
- Monitor the impact of climate change on riverside trees, river valley grassland, water meadows and woodlands.
- Conserve the extensive blocks of early enclosure patterns around villages, which
 indicate survival of a late medieval landscape and provide texture in the
 landscape.
- Conserve the distinctive built features of the valleys such as mills, weirs, and historic bridges, which provide evidence for past use and management. In particular retain small scale valley crossing points.
- Conserve remnant historic water meadow systems which are of historic and archaeological interest as well as ecological value.
- Encourage traditional management of flooding in spring and grazing with stock during the summer and autumn.
- Conserve historic designed landscapes, and their settings, which provide evidence of gentry houses and landscape parks of the wealthy population of the past.

Development Considerations

- Maintain the nucleated form of medieval villages, each with a distinctive church tower or spire, and consistent palette of building materials.
- Conserve the setting of the villages, with their medieval pattern of enclosures and views to key features such as church towers/spires.
- Ensure that any built development reflects the local vernacular seek to resist suburban style garden boundaries, kerbs, and lighting, through provision of appropriate guidance. Conserve key vernacular features such as the flint walls that characterise the villages.
- Monitor the effects of incremental change to buildings and land, and minimise such change by providing design guidance and encouraging applicants to enter into discussions at an early stage in the preparation of their proposals.

- Consider using planting that blends with the existing valley woodlands and hedgerows to mitigate the impacts of any built development on the lower valley sides.
- Conserve the open skylines of the valley crests which are particular sensitive in views from the valleys. Consider views from the adjacent downs in relation to any change in the chalk river valleys.

Character Areas		
There are four <i>Chalk Valley Systems</i> in the South Downs. These are all located in the western part of the South Downs.		
EI:	Lavant Valley	
E2:	Emms Valley	
E3	Meon Valley	
E4:	Itchen Valley	

EI: LAVANT VALLEY

Location and Boundaries

- E1.1 This character area comprises the valley of the River Lavant which incises a deep, branching course through the downs north of Chichester. It also includes the Chilgrove Valley, a tributary valley of the Lavant.
- E1.2 The Lavant Valley system dissects the Wooded Estate Downland, following a sinuous route from its source at Duncton Down to the designated boundary of the National Park on the northern edge of Chichester. The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the valley bottom.

Integrated Key Characteristics:

- Deep, branching U shaped valley carved from the chalk downs and indented by coombes to produce smoothly rounded valley sides.
- Dry in its upper reaches with the main source of the Lavant at East Dean numerous wells and springs in its lower reaches.
- Shallow well drained, calcareous silty soils on the valley sides support intensive arable cultivation on shallower slopes and pasture, calcareous grassland, scrub and woodland on steeper slopes.
- The clear, chalk river flows in a narrow floodplain which is characterised by small permanent pastures divided by hedgerows, wet woodland, water meadows, and open water, all of which are of great ecological interest.
- Strong linear communication pattern comprising the A285, Droke Lane, Charlton Road, A286, and B2141 connecting a series of medieval nucleated villages at East Dean, Charlton, Singleton and West Dean, each with a distinctive church tower of spire and the river flowing alongside the village street.
- Extensive blocks of early enclosure survive throughout the valley indicating survival of late medieval landscape.
- Remnant features relating to water management and agricultural/industrial use of the river, including fragments of watermeadows, weirs and mill ponds. There are also water works and sewage works.
- The presence of designed landscapes, for example West Dean, provide evidence of gentry houses and landscape parks of the wealthy population of the past.

Specific Characteristics Unique to the Lavant Valley

E1.3 This physical characteristics of this landscape character area are typical of its landscape type, exhibiting a smoothly rounded U shaped valley which is dry in its upper reaches. However, the Lavant Valley follows a distinct east-west direction which relates to lines of weakness in the chalk. The source of the Lavant is at East

- Dean, where there are a number of springs. The valley also includes a large number of wells which are located on the valley sides, for example at Welldown in the Chilgrove Valley.
- E1.4 The character area is characterised by wetland habitat, meadow and fringing woodland on the valley sides. Part if the river itself is designated as a SINC, being particularly notable for its rich aquatic plant communities and associated invertebrates. The upper valley sides are particularly well wooded, and support a number of ancient woodlands including East Dean Park Wood SSSI, and a number of non-statutory sites. These woodlands comprise a diverse mixture of tree and scrub species, including beech, whitebeam and ash. The extent of woodland is partly associated with the landscape park at West Dean (listed on the English Heritage register).
- E1.5 The majority of the valley is characterised by regular 18th-19th century enclosures with small blocks of early enclosure around the medieval villages. However, the southern part of the character area (south of West Dean but including most of the Chilgrove valley) is dominated by large scale modern fields with very little woodland.
- E1.6 Although the valley has a rural character, the sense of tranquillity is eroded by the presence of traffic on the A285 and A286. It is also accessible on foot due to the good network of rural roads and rights of way. Monarch's Way and South Downs Way national trail, which cross the valley, provide access to adjacent landscapes.
- E1.7 Remnant features relating to water management and agricultural/industrial use of the river, include fragments of watermeadows, weirs and mill ponds (all typical of the landscape type). However, there are also more modern water works and sewage works located in the lower reaches of this valley.
- E1.8 The settlement pattern in this character area is typical of the type nucleated villages (East Dean, Charlton, Singleton, West Dean, Mid Lavant and East Lavant) are strung out along the valley, located on the edge of the floodplain. The settlement pattern has been given an additional distinctive character by virtue of its history as part of a wealthy landed estate (West Dean). Several wealthy Roman villas have been excavated in the Chilgrove valley.

Sensitivities Specific to the Lavant Valley

E1.9 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. Specific to this character area is the estate character of the villages and landscape around West Dean.

Change Specific to the Lavant Valley

E1.10 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include the introduction of water works and sewage works in the lower reaches of the River Lavant, and traffic regulation, road improvements and signage associated with the A285 and A286. East Lavant, in the lower reaches of the valley, has also expanded from the traditional nucleated valley form of settlement into a larger settlement on the outskirts of Chichester. The intensity of dairy farming in this area has led to diffuse pollution of the river.

Landscape Management/Development Considerations Specific to the Lavant Valley

- E1.11 In addition to the generic landscape management and development considerations for this landscape type, the following development considerations are specific to this character area:
 - Conserve the estate character of the villages and landscape around West Dean.
 - Consider using native vegetation to screen modern development of water works and sewage works located on the edge of the Lavant Floodplain.
 - Monitor water quality in the Lavant and seek to minimise water pollution resulting from intensive dairy farming.



The valleys have provided important routeways from pre-history, with winding lanes connecting a string of flint villages.



Although dominated by arable land, there are areas of scrub vegetation and calcareous grassland.



Once away from the noise and movement associated with transport routes this is a tranquil, natural landscape.



The valleys provide a sheltered environment that contrasts with the exposed character of the surrounding downs.



Deep, branching, U-shaped valley. The upper valley sides are particularly well wooded.



The river runs in narrow channels and ditches alongside roads and villages in the valley.

E2: EMS VALLEY

Location and Boundaries

- E2.1 This character area comprises the valley of the River Ems which incises a deep, branching course through the downs north of Emsworth. North of Walderton the valley splits into two branches, bit of which are dry valleys for most of their length. The boundaries are strongly defined by the topography and are drawn along the apparent skyline of the valley sides as seen from the valley floor.
- E2.2 The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the valley bottom. The river continues southwards, beyond the designated National Park boundary, onto the coastal plain.

Integrated Key Characteristics:

- Deep, branching U shaped valley carved from the chalk downs and indented by coombes to produce smoothly rounded valley sides.
- Dry in its upper reaches with the main source of the Ems at Mitchamer Farm numerous wells in its lower reaches and some wells in its upper reaches, for example at Wildham Farm.
- The valley is asymmetrical with a steep east facing slope and a shallow west facing slope.
- Shallow well drained, calcareous silty soils support intensive arable cultivation on shallower slopes and pasture, calcareous grassland, scrub and woodland on steeper slopes e.g. Watergate Hanger.
- The clear, chalk river flows in a narrow floodplain which is characterised by small permanent pastures divided by hedgerows, wet woodland, water meadows, and open water, all of which are of great ecological interest.
- Strong linear communication pattern comprising the B2146 in one branch and a more minor road in the other, connect the picturesque medieval nucleated villages of Compton, West Marden, East Marden, Stoughton, and Walderton.
- Villages are surrounded by irregular enclosures of late medieval date with the remainder dominated by large arable fields which reflect 20th century modification of earlier planned 18th and 19th century enclosures.
- Watercress beds in the valley bottom close to Aldsworth and historic parkland at Watergate Park.

Specific Characteristics Unique to the Ems Valley

E2.3 The Ems Valley exhibits characteristics typical of its landscape type – it is a smoothly rounded U shaped valley which is dry in its upper reaches. However, it has particularly steep valleys sides in places which support large areas hanger woodland.

The majority of the woodland is of ancient origin, and of significant ecological interest. Many carry SINC designation, including Lordington Copse, Watergate Hangar, West Marden Copse and Nore Down SINC. Kingsley Vale NNR, a site notable for supporting one of the finest yew forests in western Europe as well as species-rich chalk grassland, also falls partly within the character area.

- E2.4 The source of the River Ems is a spring at Mitchamer Farm there are also a number of other springs further downstream. In places this winterbourne River is no more than a ditch alongside the road e.g. through Walderton. However, further downstream, the *River Ems* meanders through its open floodplains, creating flood meadows and wetland environments. Wetland habitats and woodland characterise this area, including a section the River Ems and its associated fringing meadows that are designated as a SINC.
- E2.5 The remainder of the valley is characterised by enclosed arable fields that are a product of 20th century expansion of arable farming. Surviving isolated 18th-19th century farmsteads indicate the former 18th-19th century planned enclosure landscape that previously dominated the valley.
- E2.6 The river's branching form dissects the downland and forms a natural entry route up into the chalk one branch of the valley contains the B2146 and the other contains a more minor road. These roads link the nucleated villages of Compton, West Marden, East Marden, Stoughton, and Walderton, each surrounded by irregular enclosures of late medieval date.
- E2.7 This valley provides a sheltered environment that contrasts with the exposed character of the surrounding downs. The rising valley sides, enclosed hedgerow lined fields, and blocks of hanger woodland, all contribute to the enclosed and secluded character.

Sensitivities Specific to the Ems Valley

E2.8 All of the landscape and visual sensitivities of the River Valley type are relevant to the Ems Valley. Specific to this valley system are the ancient hanger woodlands, the historic parkland at Watergate Park, and the secluded, rural character of the valley.

Change Specific to the Ems Valley

- E2.9 In addition to the generic changes listed in the landscape type evaluation, specific change to this area includes the 20th century re-organisation of the 18-19th century planned landscape into large scale arable fields.
- E2.10 In the future there could be specific change relating to the woodlands such as wind damage due to increases in severe gales and drought. There could also be pressure for expansion of settlement along the main transport routes and increases in traffic.

Landscape Management/Development Considerations Specific to the Ems Valley

E2.11 In addition to the generic landscape management and development considerations for this landscape type, the following management considerations are specific to this character area:

- Manage woodland to ensure a diverse species and age structure to minimise risk
 of damage as a result of increased storms and high winds. Promote interest in,
 and marketing of, local wood products, including wood for fuel.
- Conserve historic designed landscapes, and their settings, encouraging the management/ restoration of permanent pasture, parkland trees, avenues and clumps of trees.
- Maintain watercress beds at Aldsworth as a distinctive cultural feature of the Ems Valley.
- E2.12 The following development considerations are specific to this character area:
 - Ensure that any future traffic regulation and road upgrades associated with the B2146 are integrated into the rural valley landscape by means of careful siting, materials and design.
 - Avoid 'improvements' that would alter the rural character of the unmarked lanes.



The flat valley is used as a transport network linking together settlements along the valley.



Post and wire fences are a characteristic feature.



In places, the river is no more than a very narrow stream in a roadside ditch.



Hedgerow boundaries are well developed.



Floodplain pastures are undergrazed in places.



The flat landscape affords long range views to adjacent character areas, e.g. Stansted House.

E3: MEON VALLEY

Location and Boundaries

E3.1 This character area comprises the valley of the River Meon, between the source of the Meon (at East Meon) to Wickham on the designated boundary of the National Park. The valley forms a natural entry route up into the chalk downland from the coastal plain, dissecting the downland. The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the valley bottom.

Integrated Key Characteristics:

- Broad, branching valley carved from the chalk downs and indented by dry valleys and coombes to produce smoothly rounded valley sides.
- On the valley sides, shallow well drained, calcareous silty soils support intensive arable cultivation on shallower slopes and pasture, calcareous grassland, scrub and woodland on steeper slopes.
- Springs, including the main source of the Meon at South Farm, are located on the chalk. This is the highest rising chalk stream in the UK.
- The clear, chalk river flows in a narrow floodplain which is characterised by small permanent pastures divided by hedgerows, wet woodland, water meadows, and open water, all of which are of great ecological interest.
- Strong linear communication pattern comprising the A32, minor roads and disused railway connecting a string of nucleated villages of medieval origin, each with a distinctive church tower of spire and the river flowing alongside the village street.
- Extensive blocks of early enclosure survive throughout the valley indicating survival of late medieval landscape.
- Frequent river crossing points on historic bridges.
- Remnant features relating to water management and agricultural/industrial use of the river, including fragments of watermeadows, weirs and mill ponds, fish farms, and trout lakes. The mill at Warnford is evidence of the 19th century papermaking industry.
- Watercress beds are a particular characateristic.
- The presence of designed landscapes, for example Warnford Park, provides evidence of gentry houses and landscape parks of the wealthy population of the past.

Specific Characteristics Unique to the Meon Valley

E3.2 The physical characteristics of this landscape character area are typical of its landscape type, exhibiting a smoothly rounded U shaped valley indented by dry

valleys and coombes. The Meon Valley is a distinctive curved valley which follows a fault in the chalk and is therefore asymmetrical in its upper reaches, as seen to the eastern side of Old Winchester Hill and Salt Hill. These north-east facing steep valley sides support a mixture of calcareous grassland, scrub and woodland, for example on the slopes to the east of Winchester Hill – with several non statutory SINC sites e.g. Drayton Down and Whitewool Hanger. The valley also includes a small area of Peake Wood SSSI, a nationally important example of ash/hazel woodland on calcareous soil which extends onto the adjacent downs.

- E3.3 The Meon River rises from its main spring at South Farm and is also fed by secondary springs, for example at Whitewool Farm. The river is of inherent ecological value and is designated as a SINC, providing a good example of a small chalk river. The river corridor contains a number of further SINC sites, representing woodlands and water meadows that are characteristic of the floodplain. Watercress beds are also a particularly distinctive feature of the Meon Valley.
- E3.4 Although the valley has a rural character, the sense of tranquillity is eroded by the presence of traffic on the A32. The landscape is widely accessible due to the good network of public rights of way. The Wayfarer's Walk, King's Way, and South Downs Way national trail, which cross the valley, provide access to adjacent landscapes. The disused railway that runs between West Meon to Wickham now forms the 'Meon Valley Trail', a trail for use by walkers, cyclists and riders. It forms part of the 'Winchester Watercress Tour' and is also part of the Sustrans cycle network. Furthermore, an off-road cycle trail through the Meon Valley is promoted by Hampshire County Council. There is an area of open access land on the steep valley side to the north of Tegleaze Down which provides further opportunities for countryside access. The chalk river between Wickham and Meonstoke is a prime trout fishing area with an abundant wild fish population. East Meon was the home of Isaac Walton, a famous angling writer.
- E3.5 In this landscape character area the watermills were often fulling mills associated with the cloth trade centred on Winchester. In addition, the mill at Warnford is notable for its association with the papermaking industry. At Warnford an area of parkland is listed on English Heritage's register of Historic Parks and Gardens. There are also three other (unlisted) landscape parks in the character area at Midlington, Corhampton and Westbury Park.
- E3.6 The settlement pattern in this character area is typical of the type nucleated villages (East Meon, West Meon, Warnford, Exton, Meonstoke, Corhampton, Droxford, and Soberton) are located on the edge of the floodplain. Many of the villages are centred on a church with a locally prominent church tower or spire, as at the distinctive church spire at East Meon. Building materials are typically flint, red brick, clay tile and straw thatch.

Sensitivities Specific to the Meon Valley

E3.7 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. Specific to this character area are the river and the watercress beds which are particularly distinctive cultural features. The panoramic viewpoints from Winchester Hill and Butser Hill also increase the sensitivity of the valley to change.

Change Specific to the Meon Valley

E3.8 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include the introduction of trout lakes, fish farms with associated development and infrastructure, and upgrading of the A32. Nutrient run off from intensive dairy farms is an issue in this area. A further change relates to development pressures, with more recent development extending some villages from their historic nucleated form to create extensive linear development along roads.

Landscape Management/Development Considerations Specific to the Meon Valley

- E3.9 In addition to the generic landscape management and development considerations for this landscape type, the following landscape management considerations are specific to this character area:
 - Maintain watercress beds as a distinctive cultural feature of the Meon Valley.
- E3.10 The following development considerations are specific to this character area:
 - Seek opportunities to reduce the visual and biological impact of existing trout lakes, fish farms and their associated development, through planting of locally native species.
 - Monitor water quality in the Meon and seek to minimise nutrient run off/ water pollution resulting from intensive dairy farming.
 - Ensure that any future traffic regulation and road upgrades associated with the A32 are integrated into the rural valley landscape and ensure any signage is sensitively detailed.
 - Maintain the nucleated form of villages and avoid extending linear development along roads. Maintain trees within these built up areas using re-planting where necessary.
 - Pay particular attention to the panoramic views from Winchester Hill and Butser Hill (in adjacent character areas) in planning any change within the Meon Valley.



Small woodland blocks and arable fields in the Meon Valley.



Frequent river crossing points on historic bridges.



Watercress beds are a distinct feature of the Meon Valley.



A natural chalk river.



The village of East Meon is dramaticaly located against the rising downland.



Corehampton and Meonstoke form part of the linear settlement pattern connected by the A32.

E4: ITCHEN VALLEY

Location and Boundaries

E4.1 This character area includes the rural part of the valley of the River Itchen in two locations north east and south of Winchester. The boundaries are strongly defined by the topography and are drawn along the apparent skyline of the valley sides as seen from the valley floor. The upper portion of the valley is drawn close to the edge of Bramdean; beyond this the valley form continues as an unsettled dry valley within the surrounding downland.

Integrated Key Characteristics:

- Broad, branching valley carved from the chalk downs and indented by dry valleys and coombes to produce smoothly rounded valley sides.
- The character area flows through and provides a landscape setting for Winchester.
- Shallow well drained, calcareous silty soils support intensive arable cultivation on shallow slopes of the valley sides. Pasture and paddocks occur on the valley floor.
- Springs, including the main source of the Itchen, south of Cheriton, are located on the chalk.
- The clear, chalk river flows in a relatively narrow floodplain in the upper reaches with a wider floodplain south of Winchester. Pasture and paddocks occur on the valley floor
- The watercourse and banks of the Itchen are designated as a SAC incorporating a diversity of habitats including the clear alkaline river, fen/marsh/swamp, neutral grassland and pockets of woodland.
- Historic features associated with the presence of the River and the Itchen Navigation are apparent today. Remnant features relating to water management and agricultural/industrial use of the river, including fragments of watermeadows, weirs and mill ponds, fish farms, trout lakes, and watercress beds.
- Extensive blocks of early enclosure survive throughout the valley. Downstream
 of Itchen Abbas the landscape is of recent enclosure, comprising regular field
 systems with very little woodland.
- Crossed by the M3 and A roads which interrupt the otherwise tranquil landscape. A sequence of settlements occur along the lower valley sides.
- Frequent minor river crossing points are marked by white bridges.
- One of the most renowned fly fishing rivers in the world with populations of wild brown and rainbow trout.

 Presence of landscape parks including Hinton Ampner (owned by the National Trust) and Avington Park (listed on the English Heritage register).

Specific Characteristics Unique to the Itchen Valley

- E4.2 The physical characteristics of the Itchen Valley are typical of its landscape type. The character area comprises a relatively narrow valley floor in the upper reaches with a wider floodplain south of Winchester. The valley sides are gently sloping with an exception to the south of St Catherine's Hill where the valley side rises steeply to this chalk downland feature.
- E4.3 The shallow valley sides support arable cultivation with pasture and paddocks occurring on the flat valley floor. The western part of the character area, downstream of Itchen Abbas is noticeably more open. This is a landscape of recent enclosure, comprising regular field systems with very little woodland. The remainder of the character area preserves an older landscape, with extensive blocks of early enclosure surviving throughout the valley. East of Itchen Abbas tree cover provides enclosure and shelter particularly in association with historic parkland.
- E4.4 The Itchen Valley has high biodiversity interest with a large number of designated sites. Throughout this character area the watercourse and banks of the Itchen are designated as a SSSI incorporating a diversity of habitats including the clear alkaline river, fen/marsh/swamp, neutral grassland and pockets of woodland (e.g. to the east of Titchborne). It is also a SAC. Non-statutory SINC sites include Twyford Mead Meadow, the River Itchen and Old Rectory Meadow both at Easton. Winnall Moors Nature Reserve incorporates a portion of the Itchen and associated wet meadow and reedbeds on the north eastern edge of Winchester. The river also supports a good otter and water vole population.
- E4.5 The main source of the River Itchen is a spring south of Cheriton with secondary springs occurring along its course. The river itself would have been an important routeway from prehistory onwards, although probably too small to be navigable beyond its lower reaches until artificially canalised in the medieval period. The 16th and 17th centuries saw the development of water meadows, regulated systems of ditches and channels that provided a continuity of access to winter feed for the sheep flocks, but with a greater degree of control. These ceased to be used in the 19th century and the canalised stretch of the river was also abandoned at this time. Historic features associated with the river and the Itchen Navigation are still apparent today.
- E4.6 Fragmentary systems of watermeadows are evident, together with a number of archaeological features characteristic of flood plains, including bridges, weirs and mills. The route of the former canal is still evident in places where it runs parallel with the river, and is marked by a series of locks. Watercress beds are also a feature.
- E4.7 Although the valley has an overall tranquil quality this is disrupted in place by the audible 'hum' of traffic. The character area is crossed in two locations by the M3 and in several places by A roads. Hockley viaduct (a Victorian brick built structure with a concrete core) which once linked the Didcot, Newbury and Southampton railway with the Great Western Railway is now disused but remains an important landmark

- feature. There is also a disused railway line between Winchester and Alresford. Distinctive white bridges mark the points where rural lanes cross the river and occasional mills occur.
- E4.8 The Itchen Valley Way allows public access all along the valley and to places of interest. The river is popular for chalk stream fishing and is famous for its wild brown and rainbow trout. Avington trout fishery is one of the oldest stillwater trout fisheries in the country.
- E4.9 Numerous landscape parks survive in the valley, the most important being at Hinton Ampner (owned by the National Trust) and Avington Park (listed Grade II* on the English Heritage register). Also unregistered but of local importance are, among others, Shawford Park, Bambridge Park, Martyr Worthy Manor House, Itchen Abbas Manor, Worthy Park, Ovington House and Park, Titchborne Park. As for the landscape type, evidence for prehistoric and Romano-British occupation is scarce, due to suitable deposits being buried beneath later colluvial deposits, although a Roman villa is known from Twyford.
- E4.10 The settlement pattern in this character area is typical of the type with a sequence of nucleated and linear settlements occurring on the valley sides above the floodplain. From the source downstream these are Cheriton, Titchborne, Ovington, Itchen Stoke, Itchen Abbas, Martyr Worthy, Easton, Winchester, and Twyford. Extensive more recent linear development occurs between Itchen Abbas and Martyr Worthy.

Sensitivities Specific to the Itchen Valley

E4.11 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. Specific to this character area is the historic course of the Itchen Navigation and the watercress beds which are` particularly distinctive cultural features. The panoramic viewpoints over the valley from St Catherine's Hill also increase the sensitivity of the landscape to change.

Change Specific to the Itchen Valley

E4.12 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include the dereliction of the Itchen Navigation, disuse of the Hockley viaduct, visual intrusion of pylons and traffic regulation, road improvements or signage associated with the M3, A34 and A31. The proximity of the valley to Winchester has resulted in the encroachment of suburban influences (e.g. fencing around properties in the villages) and increases in lighting. Noise from aircraft that fly into Southampton airport along the valley has become an issue. The introduction of horse paddocks in place of grazing has occurred across the floodplain and associated fencing has a visual impact. A further change relates to development pressures, with more recent development extending some villages from their nucleated form to extended linear development along roads, as at Itchen Abbas.

Landscape Management/Development Considerations Specific to the Itchen Valley

E4.13 In addition to the generic landscape management and development considerations for this landscape type, the following management considerations are specific to this character area:

- Maintain watercress beds as a distinctive cultural feature of the Itchen Valley.
- Conserve field and parkland boundaries.
- Restore, and improve access to, the Itchen Navigation and its banks.
- Explore options for re-instating the Hockley Viaduct for recreational use as a footpath and cycleway.
- E4.14 The following development considerations are specific to this character area:
 - Conserve the distinctive white bridges which provide river crossing points.
 - Ensure that any future traffic regulation and road upgrades associated with the M3, A34 and A31 are integrated into the rural valley landscape and ensure any signage is sensitively detailed.
 - Maintain the nucleated form of villages and avoid extending linear development along roads. Minimise light spill from settlements.
 - Pay particular attention to the varied nature of views throughout the area and in particular the panoramic views from St Catherine's Hill (in adjacent character area) in relation change within the Itchen Valley.
 - Seek to limit further encroachment of suburban influences (such as fencing)
 around village properties and conserve areas of flint walling which are particularly
 distinctive features of a number of settlements.
 - Seek opportunities to reduce the impact of existing trout lakes, fish farms and their associated development through appropriate tree planting.
 - Seek to minimise extraction of sand and gravel within the Itchen Valley and ensure sensitive restoration of on-going schemes.



Frequent minor river crossing points are marked by white bridges.



Mills and millponds symbolise historic industrial use of the river.



A sequence of linear and nucleated settlements are located above the floodplain, with housing constructed from traditional brick, flint and thatch materials.



The watercourse and banks of the Itchen are designated as an SSSI incorporating a diversity of habitats.



Paddocks are a frequent feature on the edge of settlements.



Watercress beds are a distinct historic feature.