



# ROTHERLANDS LOCAL NATURE RESERVE MANAGEMENT PLAN 2018-2023

Produced for South Downs National Park Authority  
Written by Jenny Edbrooke 2017

**This plan could not have been produced without the help of  
the following organisations**

**The Rotherlands Conservation Volunteers  
Petersfield Town Council  
The Petersfield Society  
HBIC  
The Wild Trout Trust**

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# BACKGROUND

This site is one of 13 areas of open space around Petersfield, highlighted as significant in the Petersfield Neighbourhood Development Plan 2013-2028. Together with the network of public rights of way, rivers and tributaries, running through the town, these areas are an important link between Petersfield and the surrounding countryside of the South Downs National Park.

## THE SITES

The sites highlighted in the Neighborhood Plan are listed below and are illustrated in the map (Petersfield Neighbourhood Plan 2013-28) overleaf.

The Heath

Greenspace east of Causeway Farm

Tilmore Brook green finger

Green space north of Buckmore farm

Merritts Meadow

Land east of Tilmore Road

Bell Hill Recreation Ground

Land either side of Borough Hill

Borough Hill Recreation Ground & land adjoining the railway line

Woods Meadow (Tilmore Recreation Ground)

Recreation Ground south of Paddock Way

Rotherlands Nature Reserve

Land south of Borough Road

## FUNDING

Recent Section 106 funding for the management of these areas provides an opportunity to strengthen and enhance Petersfield's connection with the surrounding landscape and "to protect and enhance the Districts high quality natural environment and its green infrastructure" for the benefit of both people and wildlife.

## WORKING TOGETHER

This management plan is designed to help officers, environmentalists and other professionals, as well as volunteers and other interested parties, to achieve the aims and objectives of the individual site whilst ensuring a coordinated approach to the management of Petersfield's 13 highlighted open spaces and its green infrastructure as a whole. Policy decisions or work relating to any of these sites should not be carried out in isolation and should always take into account, the relationship between areas, as well as with the town itself and the surrounding countryside.

## APPOINTMENT OF A PETERSFIELD OFFICER

The ownership of these areas is varied and therefore, to ensure the successful coordination of this Petersfield project, serious consideration should be given to the appointment of a single Countryside Officer with responsibility for the management of all sites across the town. This will ensure best use of funding and resources available and provide a central point for the sharing of ideas, training, equipment, information and support for volunteers.

## CONCLUSION

In conclusion, this coordinated management approach will not only maximize the resources available but also, act as a multiplier on the benefits achieved. The management of all these sites provides Petersfield with a unique opportunity to strengthen and enhance links with its surrounding countryside in a way that has never been attempted before and in a way, that will benefit both people and wildlife for generations to come.

# 1. DESCRIPTION

## 1.1 General Information

### 1.1.1 Location (see location map 1)

Rotherlands Local Nature Reserve (LNR) is located approximately 2km to the east of Petersfield town centre. It stretches from Pulens Lane in the west (SU760235) to the north (SU765239) and east (SU770234) of Penns Place and the Taro Leisure Centre. The reserve encompasses part of two water courses, the Tilmore Brook which flows into the reserve from the west, and the Rother which runs in a south easterly direction along the reserve's northern boundary.

OS Map 1:50,000 Sheet 197 Chichester and The Downs

District: Petersfield

County: Hampshire

Local Planning Authority: South Downs National Park Authority/East Hampshire District Council

### 1.1.2 Summary description

Despite its urban setting this is a relatively quiet site consisting of several different wildlife habitats. The land originally formed part of a series of grazed meadows, fens, ponds and wet woodlands belonging to Penns Farm. In the 1960s, it was acquired by East Hampshire District Council and Petersfield Town Council and although, largely unmanaged, was used for informal recreation by local people.

Today, the site is important for both wildlife and recreation. Despite being in two separate ownerships it will continue to be managed with these aims, as a single unit. This low-lying land, to the south side of the river, contains habitat typical of the Rother Valley, including alder carr, dry and wet woodland, scrub, tall ruderal vegetation and semi-improved neutral grassland. Natural England's website describes Rotherlands LNR as comprising "a semi-wilderness area of unmanaged rank grassland, scrub, woodland, wetland and river bank. The edge of the woodland adjoining the playing field is marked by a row of shrubs, mainly hazel, hawthorn, elm, oak and apple with some areas of brambles, nettles and thistles. It supports a wide range of common birds, insects and other creatures including occasional Badgers, Otters and Crayfish."



In 2000, the Rotherlands Conservation Group began management of this previously neglected area, using local volunteers to carry out an annual work programme. PTC, EHDC and South Downs National Park Authority (SDNPA) have supported them in this work.

### **1.1.3 Land Ownership** (see landownership map 2)

Petersfield Town Council (PTC) owns 75% of this site at the western end.

East Hampshire District Council (EHDC) owns the eastern end of the site, which forms the remaining 25%.

### **1.1.4 Map Coverage**

OS Map 1:10,000 Sheet No. SU72 SW

OS Map 1:25,000 Sheet 133 Petersfield and Haslemere

OS Map 1:50,000 Sheet 197 Chichester and The Downs

### **1.1.5 Conservation status**

In 1997, a decision was made to manage the area for nature conservation and Petersfield Town Council commissioned a management plan from the Environmental Project Consulting Group. Two subsequent plans have been written 2003, 2013-18. This is the 4th management plan for the site. In 2001, the area was designated a SINC in the local plan and declared a LNR in 2004 by East Hampshire District Council under the provisions of the Wildlife & Countryside Act 1949.

### **1.1.6 Access & Recreation** (see access maps 3a & 3b)

A car park is available at Penns Place and it is thought most people access the site from this point however, there are two further access points on the southern boundary and one on the western boundary of the reserve. The site is visited by dog walkers, joggers and local people appreciating the wildlife and since 2000, joining the many work parties held by the Rotherlands Conservation Group. There are currently no fishing rights or angling societies associated with this stretch of the River Rother.

Public access is available to most of this site, except for an enclosed area managed as an otter haven. Access to the EHDC land is limited due to tall rank vegetation and the absence of a formal path. As a result, this area of the reserve is more secluded.

Public Footpath 48 enters the site from Pulens Lane and follows the west bank of the Tilmore Brook until it crosses to follow the River Rother in a south easterly direction through the PTC part of the site. The footpath eventually exits the reserve onto the rugby practice fields. Bank erosion is a problem and in practice the walked route diverts to provide a drier path through the Central and Eastern meadows.

In a wider context, this public footpath could provide a key link, from the town centre, to the wider countryside to the east of Petersfield where there are possible routes to Sheet Mill, Penns Farm and along the Rother Valley toward the Sussex Border Path.

## 1.2 Environmental Information

**Physical** (Appendix 1 cross section, Rotherlands LNR management plan 2013/18)

### 1.2.1 Topography

The site includes the southern part of the floodplain of the River Rother and is generally level. To the south of this and north of the gravel terrace on which the playing fields are sited there is an old drain which takes spring water away from the meadows and the terrace.

### 1.2.2 Hydrology

The hydrology of the Local Nature Reserve is made up of three components, the River Rother, the Tilmore Brook and a number of springs.

The Rother forms the reserve's northern boundary and varies considerably in flow rate and height during winter and summer. Two tributaries of different character feed it, one from chalk and lower greensand and the other from acid sandstones of the lower greensand, both meet north of Petersfield and then meander through wet woodland and meadow to the county boundary, just south of Petersfield (Biodiversity Action Plan for Hampshire Vol ii July 2003).

The Tilmore Brook is a shallow, narrow stream fed by water flowing through Petersfield. It runs into the Rother in the centre of the reserve. Finally, there are several springs which supply water to the wet woodland from the adjacent terrace gravel aquifer and the meadows.

### 1.2.3 Geology

The 1:10,000 geological map (NERC 1992) SU72SE indicates that the wet woodland and meadows are underlain by River Alluvium with small areas of Head abutting the edge of the floodplain. The adjoining playing fields are on 2<sup>nd</sup> Terrace Deposits (gravels). The whole site is underlain with Cretaceous Rogate Beds (poorly graded clayey sand with much polished ironstone) part of the Sandgate Formation. The banks of the Rother show the presence of buried peat in places.

### 1.2.4 Soils

The soils have not been examined in any detail and the 1:250000 scale soil map of SE England does not distinguish the area. General observation suggests the floodplain deposits, clays and clay loams are subject to high groundwater and that the Head deposits have more freely drained soil. Flushed areas below the springs have wet peaty soils.

## Biological

### 1.2.5 Habitats/Compartmentments (See management compartment/habitat maps 4 & 5)

N.B In the absence of the 1997 and the 2003 management plans much of following habitat information is taken from 2003 HBIC survey records and it should be noted that the management compartments are arranged in the same way as this survey, rather than the 2013/18 management plan.

Habitat	Estimated Hectares
i. Broadleaved semi natural woodland, Tilmore Brook Wood, Central & East Wood	3.03 ha
ii. Broadleaved plantation, Western Meadow	0.10 ha
iii. Semi improved neutral grassland, Western, East & Central Meadow	0.95 ha
iv. Marsh & marshy grassland, Central meadow	0.45 ha
v. Swamp, Western & Central meadow	0.55 ha
vi. Other tall herb & fern, East & Western Meadow	0.90 ha
vii. Scrub, Central & East Meadows	0.15 ha
<b>Total</b>	<b>6.13 ha</b>

## 1.2.6 Flora

Several surveys have been carried out at the site but no data is available for EHDC area at time of writing. Please note most of the information in this section has been gathered from the phase 11 surveys carried out by HBIC in 2003. To view the full survey please contact HBIC. The management compartments in section 3 below, follow the 2003 survey, rather than those in the 2013/18 management plan.

Surveyor	Area	Date
HBIC	Tilmore Brook Woods	2003
HBIC	Tilmore Marsh (Western Meadow)	2003
HBIC	Tilmore Brook Woods (south bank)	2003
HBIC	Alder Carr alongside River Rother	2003
Rotherlands Conservation Group	Rotherlands LNR	2000-2016 (App 6)

### 1.2.6.1 Broadleaved semi natural woodland 3.03 ha

#### East Woods Compartment 1 (Appendix 2 Alder carr alongside the Rother)

NVC - W6a *Alnus glutinosa*-*Urtica dioica*

W10 *Quercus robur*-*Pteridium aquilinum*-*Rubus fruticosus*

These woodlands run along the southern edge of the land owned by EHDC and into the eastern area owned by PTC, as far as Public Footpath 48, forming a strip approximately 300m long by 20m wide.

There is a dry bank which runs along the southern edge of the site marking the boundary with East and Central woods and the playing fields. This contains oak with some field maple and ash, below this there is some hazel, crab apple and hawthorn before the land falls away as a steep bank at the edge of the gravel terrace. In the autumn of 2010, 1000 whips were planted along the southern boundary of the reserve including Hazel, Blackthorn, Field Maple, Dogwood, Dog rose and Spindle.

An area of alder carr runs from the southeast corner of the site between the meadow and the old drain to the south. Here even aged alder form a high canopy over gently sloping, peaty ground with ponds, pools and old silted drains. This area remains wet due to the springs above.

The shrub layer is sparse with occasional willow and elder. The field layer contains largely nettles, though there is also broad buckler fern, hemlock water dropwort and opposite leaved golden saxifrage.

### **East Hampshire District Council Land 1**

This area was not surveyed in 2003 but contains similar habitat to that found in the East Wood and Meadow. The woodland is wet and boggy containing willow and alder but, dominance of alder gives way to grey willow with occasional crack willow. In the very southeast of the site there is an area of dry sweet chestnut woodland with ash and poplar over hazel bramble, ground ivy and Yorkshire fog. The meadows along the river bank are wet course grassland and were probably once grazed as in other areas of the site. There is some mixed scrub and ruderal vegetation below the boundary bank.

### **Central Woodland 1** (Appendix 2 Alder Carr alongside the Rother)

**NVC** - W6a *Alnus glutinosa-Urtica dioica*

W6b *Alnus glutinosa-Urtica dioica. Salix fragilis*

W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus*

This woodland is a continuation of the area of alder carr which runs adjacent to the River Rother from the south east of the site through East Wood. The springs and silted drains continue along the bottom of the slope where there is an area of grey and crack willow before the land becomes increasingly wet and slopes down into willow carr and the restored pond, where some years ago a dipping platform was constructed.

### **Tilmore Brook Woodland north 3** – (Appendix 4 Tilmore Brook Wood adjacent to Tilmore Brook Wood)

**NVC** - W6d *Alnus glutinosa-Urtica dioica, Sambucus nigra*

W10a *Quercus robur-Pteridium aquilinum-Rubus fruticosus*

This area of woodland lies to the north east of the main Tilmore Brook Wood, on the east bank of the Tilmore, across from the Western meadow. It is dominated by a canopy of alder and ash with a grey and crack willow sub canopy. There is little understory apart from elder and the ground flora is largely nettles with ivy, red campion, yellow archangel, creeping buttercup and ground ivy. Where the ground rises to the reserve boundary it becomes drier and the canopy is

of oak and ash with some coppiced hazel. Here the ground flora includes extensive carpets of bluebells with some bracken, common bent, false brome and greater stitchwort.

#### **Tilmore Brook Woodland south 4** – (Appendix 5 survey details for Tilmore Brook wood)

**NVC** - W6d *Alnus glutinosa*-*Urtica dioica*, *Sambucus nigra*

This area stretches from the reserves boundary in the south west corner as far northeast as the Western Meadow, covering both sides of the stream. At the beginning of the reserve, there is Sycamore and several garden escapes such as Bamboo and daffodils. Further in, it is dominated by a high canopy of alder with a shrub layer of hazel coppice and some holly. Wetter areas have willow and alder buckthorn. On the east bank of the Tilmore, where the land is drier there are some ash and oak.

#### **1.2.6.2 Broadleaved plantation 0.10 ha**

#### **Western Meadow 2** (Appendix 3 Tilmore Brook Marsh)

There are several areas of oak plantation in this area of the reserve which were formerly open grassland. The plantation has been thinned since the 2003 survey and part of the meadow enclosed for otters. A new survey of these areas is advised at the earliest opportunity to determine the need for further thinning, crown lifting and eventual removal of the oaks to improve ground flora.

#### **1.2.6.3 Mesotrophic (neutral) grassland 0.95ha**

#### **East Meadow 1** (See Appendix 2)

**NVC**—OV24b *Urtica dioica*-*Galium aparine*, *Arrhenatherum elatius*-*Rubus fruticosus*

East Meadow is an area between the western end of the Eastern Woodland and several meander loops of the River Rother.

An area of drier grassland runs along the river bank through this meadow and into Central Meadow. Tall grasses and herbs include nettles, yorkshire fog, rough meadow grass, docks, marsh thistle, soft rush and cleavers as well as creeping buttercup and cuckoo flower. Bramble is frequent at the edge near the river.

### Central Meadow 1 (See Appendix 2)

NVC - OV24b *Urtica dioica*-*Galium aparine*, *Arrhenatherum elatius*-*Rubus fruticosus*

MG1 *Arrhenatherum elatius*

W24 *Rubus fruticosus*-*Holcus lanatus* underscrub

This meadow stretches from its boundary with East Meadow as far north west as the Tilmore Brook and south from the Rother to Central Woodland. It is a large area of coarse grassland sharing much of the same tall grasses and herbs as the East Meadow with a shorter more uniform sward in the centre. In places, it is very wet, particularly in the winter months. In the northwest of the compartment an area of bramble scrub was abundant.

### Western Meadow 2 (Appendix 3 Tilmore Brook Marsh)

NVC - OV24b *Urtica dioica*-*Galium aparine*, *Arrhenatherum elatius*-*Rubus fruticosus*

MG1 *Arrhenatherum elatius*

MG27c *Filipendula ulmaria*-*Angelica sylvestris* mire, *Juncus effusus*-*Holcus lanatus*

This is an extensive area of coarse grassland, rather drier than East Meadow. The area is raised in a broad dome and the vegetation includes nettles, brambles, hogweed and areas of mature oak scrub. The ground slopes down to become wetter toward the northern boundary with the Rother and to the Tilmore Brook on the south side of FP48. Brambles are beginning to encroach both these areas from their main holding in the north west of the meadow and Himalayan balsam is now extensive. In the north of this area there are areas of grey willow, bramble and nettle. Along the western edge of this area, and in the north along the River Rother there are extensive areas of bramble with some elder, hazel, grey willow, oak and ash scrub.

#### 1.2.6.4 Marsh & marshy grassland 0.45ha

### Central Meadow 1 (App 2)

NVC - M23b *Juncus effusus*/*acutiflorus*-*Galium palustre*, *Juncus effusus*

There is a small area of marshy grassland (subsite 7) toward the north-western end of the meadow dominated by soft rush and Yorkshire fog, with some jointed rush, creeping bent, greater bird's foot trefoil and hedge bindweed.



### Western Meadow 2 (App 3 Tilmore Brook Marsh)

NVC - M23b *Juncus effusus*/*acutiflorus*-*Galium palustre*, *Juncus effusus*

There is a sedge bed on low lying ground (subsite 3) close to the river. The vegetation by the Rother also includes opposite-leaved golden saxifrage (*Chrysosplenium oppositifolium* 3/17) cuckoo flower (*Cardamine pratensis* 3/17) and ramsons (*Allium ursinum* 3/17). However, brambles are beginning to encroach.

#### 1.2.6.5 Swamp 0.55 ha

### Central Meadow 1 (App 2)

NVC – S28c *Phalaris arundinacea*

This is an area of tall herb fen in the south east of the meadow.

### Western Meadow 2 (App 3)

NVC – S7 *Carex acutiformis* swamp

S28c *Phalaris arundinacea*

There are two small areas (subsite 4) of lesser pond sedge with some nettles, Yorkshire fog, meadowsweet, cleavers, marsh thistle and hedge bindweed and a further area (subsite 5) of reed canary grass with rough meadow grass, hedge bindweed, Yorkshire fog, docks, tufted vetch, false oat grass and great willowherb. All three areas are on the southern side of the meadow, not far from the brook. Himalayan balsam is now extensive in this area but, opposite-leaved golden saxifrage (*Chrysosplenium oppositifolium* 3/17) and Town hall clock (*Adoxa moschattellina*) can still be found on the wet ground near the stream 3/17.

#### 1.2.6.6 Watercourses

Tilmore Brook – Swift flowing stream in winter, almost dry in summer. Generally shaded and lacking in aquatic plants but, becomes more open as it gets closer to its confluence with the Rother. The RCV have done much work to retain the banks and create riffles by placing logs in the stream flow.

**River Rother** – The Environment Agency manage the main river. It has substantial banks which support rows of coppiced Alder and can be subject to local slumping. These slumps form relatively rich sheltered wildlife habitats with seepages and spring flows variously supporting Ransoms, Reedmace, branched Burr-Reed and Floating Sweet Grass. The water course supports patches of Water Starwort and Water Crowfoot. Some bank erosion has been caused by dogs/people accessing the river from Central and Eastern Meadows and this should be monitored to ensure it does not extend further.

#### 1.2.6.7 Invasive species

Himalayan balsam is now widespread across the reserve, despite efforts to control it in recent years in June before it seeds. Other alien plants at the site include giant hogweed and American skunk cabbage. Concentrated, well timed efforts to control these species is essential. Volunteers should be trained in health and safety to ensure safe removal of plant material.

Bramble and woody scrub is also a constant problem particularly in the north west of the site and along the Rother and Tilmore and in the south east of the site. If left unchecked, it will take over the grassland and is indeed, also beginning to invade Central Meadow.

Many of these invasive plant species are common to other open spaces highlighted in the Neighbourhood Plan. Co-ordination of volunteer efforts between these sites eg. Rotherlands LNR and all the other sites upstream along the Tilmore Brook, such as Merritts Meadow, would have a far greater impact and help to minimise the negative effects these plants have on our native wildlife in the Petersfield area.

### 1.2.7 Fauna (RCV survey's, Rotherlands LNR management plan 2013/18)

#### 1.2.7.1 Mammals

Several mammal species have been seen on the site including Badger. There are not thought to be any Water Vole. An otter haven and artificial holt have been created on site in a fenced off area at the confluence of the Tilmore and Rother. Otters have been seen nearby in the Rother Valley.

### 1.2.7.2 Birds

Matthew Shaft, of the Rotherlands Conservation Group, conducted an annual bird survey from 2001 to 2015. Several notable species have been recorded which are now on the red list. These include Song Thrush, Yellow Hammer, Cuckoo and Skylark. Only the former has been found in any number but, this may be partly due to the habitat, as the Skylark and the Yellow Hammer are generally birds of open countryside rather than woodland.

### 1.2.7.3 Invertebrates

SDNPA has set up a number of river monitoring stations including one on the reserve. The Petersfield society is keen to be involved with this. Limited butterfly, dragonfly and damselfly surveys have been carried out by Matthew Shaft. This is something local people could also get involved with to ensure regular recording throughout the summer months.

### 1.2.7.4 Fish

There are no formal survey records of fish on the reserve, however the Wild Trout Trust have written a report on both the Tilmore Brook and a stretch of the River Rother at Hog moor in Sheet, to the north of the reserve.

## Cultural

### 1.2.8 Archaeology

No research available. An approach should be made to a group such as the Petersfield Area Historical Society.

### 1.2.9 Land Use

It is thought that the land was originally part of Pens Farm owned by a Samuel Seward according to the 1841 tythe map. The Western meadow was grazed by cattle and the Central meadow by horses. In the 1960's the land was transferred to the local authorities who did little with it until the late 1990's.

### 1.2.10 Past Management for Nature Conservation

Until 1997 no management for nature conservation took place at this site. In that year, Petersfield Town Council commissioned the first management plan. The Rotherlands Conservation Group was formed in 2000 and held regular work parties at the site. In 2003, the management plan was updated and RCV work parties continued until 2015, supported by SDNPA, PTC and EHDC. In 2016, RCV folded and PTC and SDNPA have managed the site between them however, much of the work prescribed in the last plan has not been completed.

Since 2000, the meadows have benefited from some clearance and mowing but, this has not been carried out as frequently as prescribed in the last management plan and a regular cutting regime in all meadows needs to be re-established to ensure long term benefit wildlife. A return to grazing would be the ideal management to retain areas of open grassland with a mosaic of sward make up, height and density.

Since 2012, practical work in Central Woodland has included pond clearance, scrub clearance and in February 2017, the SDNPA thinned the canopy to diversify the age range, increasing light levels in the pond and reducing leaf litter. Invasive scrub and saplings were knocked back. Little work seems to have been carried out in East Woodland under the last plan and therefore the prescriptions have been repeated in this plan.

In Tilmore Brook Wood south, the RCV have carried out much work to include path maintenance, stream clearance and a survey of ash trees to check for signs of dieback.

Throughout the reserve there remains a problem with encroachment of brambles and scrub despite the prescription of rotational cutting in the last management plan and some work of this nature being carried out.

RCV have hand pulled himalayan balsam on an annual basis for a number of years but unfortunately, this has been insufficient to prevent its spread. Other invasive species are now present on the reserve and it is recommended that these be removed.

Natural succession causes the reserve to dry out but, RCV have worked hard to retain the seasonal ponds and pools on the reserve. In 2012/13, some scrapes were created in Central Meadow to provide seasonal pools for amphibians.

### 1.2.11 Ecological Relationships and Implications

The ecological value of this reserve is enhanced by being part of the Rother Valley. The combination of wetland habitats found here include the river itself, its wet margins, wet woodland and meadows. Together with adjacent land, they form an area of considerable local ecological importance. Although not rare, these wet habitats have seriously declined in recent years largely through a lack of management and farm intensification. Rotherlands LNR is thought to be one of a limited few riverside meadows in public ownership, in Petersfield and the East Hampshire District.

The Tilmore Brook flows into the reserve at its western end. It rises from several springs in the chalk slopes to the north of Petersfield. It is particularly susceptible to urban runoff and localised pollution where it drains the centre of the town. A few years ago, the brook was badly polluted when untreated sewage entered the watercourse, following failure at a local waste water pumping station (The Wild Trout Trust). On reaching the northern boundary of the reserve the Tilmore flows directly into the River Rother, a main river flowing through the heart of the South Downs National Park and, one to which otters have recently returned. It is therefore essential to the health of the wider countryside that regular monitoring is carried out along these two watercourses in the reserve.

The land to the south forms part of the Taro Leisure complex where there are several sports buildings and playing fields. Existing and proposed new development in this area adds to the pressure on the reserve and the sensitive habitats found there. Increased use of the path network is likely to cause further erosion of banks and disturbance to wildlife, while the visual impact of development will detract from the quiet enjoyment of the reserve. It is therefore essential to manage the boundaries to ensure that a buffer zone is retained and screening is maximized.

## 2. EVALUATION AND OBJECTIVES

### 2.1 Evaluation of Features

#### 2.1.1. Size

This is an area of the Rother Valley measuring approximately 7.3 hectares. It is large enough to provide a significant part of the ecological value of the Rother wildlife corridor.

#### 2.1.2 Diversity

This linear site supports a surprisingly diverse number of habitats including wet and dry woodland, pond, wet and dry grasslands, scrub, running water and associated bank and waterlogged areas and coarse vegetation.

#### 2.1.3. Naturalness

The land, which is former farmland, has been extensively managed in the past and contains no habitat undisturbed by man. Woodlands have been coppiced, grasslands grazed and river banks have been managed. However, the area is composed mostly of native species and semi natural vegetation has developed to provide considerable ecological and environmental interest.

#### 2.1.4. Rarity

The wildlife habitats present although not rare, are important as elsewhere they have seriously declined in recent years due to farm intensification and in some places, neglect. A moderate range of plants typical of the habitats occur here and badgers regularly pass through the area. The native crayfish may also occur in the watercourses. Otters have not been seen in the upper reaches of the River Rother in Hampshire since 2001. However, in 2015 a young male otter was caught on camera for the first time and in April 2017, two more otters were seen on the mink raft located in the reserve area.

### 2.1.5 Fragility

The habitats found on site are relatively robust however, without management seral succession to rankness, scrub and eventually woodland will occur. This particularly threatens the open grasslands and the wet woodland where a closing of the canopy will cause other species to be shaded out.

Any grassland management at the site should consider past practice to avoid any catastrophic effects on communities present. Grazing rather than mowing should be seriously considered to ensure a mosaic of sward heights providing greater benefit to wildlife. However, any grazing carried out will need to be monitored carefully to ensure correct stocking levels.

Human pressure on the site brings a risk of vandalism, disturbance to wildlife, over fishing, spread of invasive species such as the Signal Crayfish and American Mink and pollution. Agricultural practices such as abstraction may cause changes in river flow rates and use of chemicals may affect the water quality through run off.

### 2.1.6 Typicalness

The habitats found at this site are typical of their type and representative of habitats formerly more extensive in the Rother Valley.

### 2.1.7 Recorded History

There is an absence of historical information about this site. In particular, it is recommended that research be undertaken in to past management particularly of the grassland here and any coppicing practices in the woodlands.

### 2.1.8 Position in ecological unit (see local green space map 6)

This site is part of the River Rother Valley and the South Downs National Park. As such its ecological value is greatly enhanced. By being adjacent to playing fields to the south and farmland to the north and east the impact on wildlife habitats should be relatively low although, use of artificial fertilisers and other chemical products may have a negative effect. Existing and proposed housing to the west will increase the pressures on the reserve however since Rotherlands is now one of several sites in and around Petersfield named in the Neighbourhood Plan as a key area of the town to be protected from development, it is hoped that these pressures will be minimised.

### 2.1.9 Potential value

The site has suffered due to a lack of management since grazing stopped in the 1960s and species diversity has most likely declined. However, the past efforts of the Rotherlands Conservation Group together with continued management by the new group and the Petersfield Town Council should result in a continued increase in the ecological, environmental and educational value of the site.

### 2.1.10 Intrinsic appeal

This site is the only Local Nature Reserve within Petersfield and provides a valuable alternative for local people to the more formal leisure pursuits provided by the Taro leisure complex. As a result of feedback from the local community, the Neighbourhood Plan stresses the need for green infrastructure linking the town to the wider countryside and names Rotherlands as a key area. The site, has considerable aesthetic appeal including woodland, grassland and watercourses, the River Rother and the Tilmore Brook.

### 2.1.11 Evaluation of plant communities & habitat

HABITAT	VALUABLE FEATURE	NATIONAL	COUNTY	LOCAL
WHOLE RESERVE	Various habitat types within the river valley to include woodland, grassland, wetland, river and stream. No rare or scarce plant species recorded. Most notable are Water Avens ( <i>Geum rivale</i> ) and <i>Ranunculus fluitans</i> both unconfirmed. Large Bittercress <i>Cardamine amara</i>			*
WOODLANDS	Wet alder wood			*
GRASSLANDS				*
WETLANDS	Open wetland seepages			*
RIVER ROTHER AND MARGINS	Important to the South Downs National Park, Hampshire, East and West Sussex. Otter haven and holt at the confluence of the Tilmore Brook and the Rother.		*	*
TILMORE BROOK AND BANKS	Spawning and nursery site for Brown Trout migrating from main river.			*
SCRUB				*



### 2.1.12 Policy context & implications for management

The importance of this site as Petersfield's only Local Nature Reserve and as a resource for local people is considerable. In the Neighbourhood Plan (NEP1) the area forms a vital part of a policy to extend and improve a network of green infrastructure and open space, linking Petersfield with the wider countryside. It is important however, that any future improvement to rights of way should respect the environmentally sensitive nature of the site.

### 2.1.13 Ideal management objectives

- \* To maintain continuity of management through sound record keeping
- \* To ensure continuity of surveying and monitoring of site
- \* To maintain and enhance habitat diversity
- \* To reintroduce cattle grazing to the site
- \* To ensure water quality of the Tilmore and Rother through regular sampling
- \* To improve and enhance habitats for key species such as otter
- \* To open up areas recently invaded by scrub and woodland
- \* To maintain and enhance the conservation value of the wetlands
- \* To encourage the development of herb rich grassland and wet fen
- \* To maintain and enhance the conservation value of the dry grassland
- \* To maintain and enhance the conservation value of the dry woodland
- \* To maintain and enhance the conservation value the wet woodland
- \* To maintain specific areas of tall scrub
- \* To improve areas of coarse ruderal vegetation
- \* To increase awareness of the conservation value of the site
- \* To encourage and assist active participation of local people in the care and management of the site

- \* To encourage and provide for public enjoyment and recreation through interpretation, path networks and self-guided walks
- \* To maintain a balance between conservation and amenity value
- \* To encourage positive use of the site as an educational resource

## 2.2 FACTORS INFLUENCING MANAGEMENT

### 2.2 Natural trends

The main trend is for seral succession from rankness through to scrub and woodland. This is illustrated by increasing amounts of bramble, scrub and ruderal herbs within the grassland and silting and shading of wet areas within the alder woodlands. This process will lead to a decline in the botanical interest of the site although some fauna will prefer these conditions.

A heavy litter layer if allowed to build up will suppress less vigorous herbs and fine leaved grasses and increase soil nutrients. This will only encourage the further invasion of non-native species in particular, Sycamore, Himalayan Balsam, Giant Hogweed and American Skunk Cabbage which will out compete native species.

#### 2.2.2 Human induced trends

Excessive recreational use will disturb wildlife on the site. Littering is a danger to both wildlife and humans.

#### 2.2.3 External factors

The springs and seepages arising from the aquifer below the playing fields are crucial to the biodiversity of the site and these must not be damaged in any way which may affect water flow or quality. It is important that open water levels are maintained and adjacent wildlife habitats protected. Residential development of the fields to the south of the site is of concern as this will present a barrier to wildlife and increase the isolation of the site in this direction. Pollution risks associated with the development increase with the building of new roads, pressure on water resources and recreational pressures.

#### 2.2.4 Obligations & constraints

The Petersfield Neighbourhood Development Plan 2013-2028 recognises the need to protect and enhance the Districts high quality natural environment and green infrastructure. The Rotherlands LNR has been identified in the plan as forming an important part of the green infrastructure network and local green space in the town. **Natural Environment Policy 4 (NEP4)** states “Development which damages or adversely affects the Rotherlands LNR will not be permitted.” It further states “Development in proximity to the Reserve will be required to protect and enhance the Reserve. Any proposals which detract from the landscape, nature conservation status and setting of the Reserve will not be permitted.”

In order to be a successful LNR there is an obligation to maintain and enhance both the wildlife and recreational value of the site. Public footpath 48 runs north along the west side of the Tilmore Brook and then east across the site to Penns Place.

### 2.2.5 Management constraints

There are several resource constraints which affect the site. These include finance, although it is understood that there is currently some S.106 money available, the absence of an employed ranger for the site at either local authority, skilled labour including those with survey and monitoring skills, volunteer numbers and qualified volunteer leaders.

## 2.3 Operational objectives & management options

### 2.3.1 Rationale for a Local Nature Reserve

The aim is to maintain and enhance the conservation and wildlife value of this site through sensitive management and to provide access for quiet recreation and field study to the local community.

The LNR was dedicated by East Hampshire District Council under the National Parks and Access to the Countryside Act 1949 in consultation with Natural England. Following the publication of the Petersfield Neighbourhood Plan in 2013 the reserve now also forms an important part of a proposed green infrastructure network linking Petersfield with the wider countryside.

Rotherlands is not a country park or a landscaped area. Management of a Local Nature Reserve is primarily for nature conservation and the benefit of local people. It is therefore essential the local community is involved with the management of this site if it is to succeed.

A new group of volunteers is currently being formed. It is recommended that PTC, EHDC and SDNPA continue to support the work of volunteers at the reserve and enable the new volunteer group to concentrate on practical habitat management to ensure the site does not fall into neglect again.

As an educational resource, it could offer huge benefits to local schools, colleges and local interest groups. The site provides opportunity for involvement in practical habitat management, publicity and interpretation, as well as survey and monitoring tasks.

### 2.3.2 Outline objectives & management prescriptions

FEATURE	MANAGEMENT OPTION	OUTLINE PERSCRIPTION
WHOLE SITE	Active management	Remove rank species & eradicate himalayan balsam, American skunk cabbage, giant hogweed & any other alien species under supervision of ecologist. Review & update interpretation & siting of interpretation boards, especially at western end which could be sited at entrance from Pulens Lane. Collate & annually update survey and monitoring information according to management plan compartments. Send results to relevant bodies. Encourage & support local involvement with management. LNR leaflet to be located, updated & distributed locally especially to neighbours who should be regularly informed of operations. Garden waste/encroachment to be removed & discouraged. Research local graziers with a view to reintroduction of cattle grazing.
DRY WOODLANDS (Compartment 4)	Limited management	Survey and remove Sycamore, Himalayan Balsam and other alien species e.g. Bamboo, variegated yellow archangel, laurel, Spanish bluebells and daffodils. Coppice hazel understory in rotation. Limited felling of trees to encourage age diversification.
WET WOODLANDS (Compartment 1)	Active management	Selective coppicing of Alder stems to continue. Some areas of mature Willow carr to be retained. Remove recent invasive Willow and Alder saplings from edge to retain and create seasonal pools. Consider active management of EHDC wilderness area.
DRY GRASSLAND (Comps 1 & 2)	Active management	Remove young invasive scrub, open up areas by pushing back brambles, to tree line especially in Western and Central Meadows. Mow spring and Autumn and remove arisings. Consider reintroduction of grazing
WET GRASSLAND (Comps 1 & 3)	Active management	Remove young invasive Willow and Alder scrub. Time mowing spring and autumn to minimize damage, remove all arisings. Consider reintroduction of grazing.
POND and Wetlands (Compartment 1)	Active management	Remove leaf litter, fallen branches and willow to retain open water and maintain deep permanent water in pond. Drains to remain blocked to retain water. Retain seasonal pools by removal of invasive willow scrub at woodland edge.
OPEN WATER AND BANKS (All comps)	Active management	Regular sampling and monitoring of water quality. Coordinate work with neighbouring riparian land owners. Work in channels only with permission of EA. Natural debris to be left in stream and river. If human litter removed seek EA permission to replace with natural debris to retain habitat. Remove and thin heavy shade cover on banks.

SCRUB (Comps 1,2,3)	Active management	Identify specific areas of scrub to be maintained. Ensure scrub does not encroach site beyond specified limits. Cut back bramble areas to open up grassland, thereafter to be cut back in rotation to provide habitat continuity and reduce fire risk.
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# 3. PRESCRIPTIONS

In this section, we will discuss management options and provide specific prescriptions. The reserve is divided into management compartments, a number of the habitats described in section 1.2.5 overlap compartment boundaries

## 3.1 Compartment Prescriptions (see Compartment map 5)

### 3.1.1 Compartment 1 - East Woods, 1

The basic aim of this compartment is to maintain and enhance the wet alder woodland thereby promoting wildlife value and increasing species diversity. To achieve this, it is essential to protect the unpolluted, seasonal pools and limit natural succession to dry woodland.

Alder carr is characteristic of much of the Rother Valley and is a dynamic habitat that needs to be managed to maintain its high wildlife value. It is particularly valuable to invertebrates. In the past Alder coppice was often used for charcoal making although it is uncertain if it was the case at this site. Now seen as uneconomic, much of it is overstood and susceptible to neglect and Phytophthora disease. Before considering the reintroduction of coppicing it is important to survey the whole compartment but, especially the area belonging to EHDC for which there are currently no records available. It is important that both water levels and quality are surveyed and regularly monitored, particularly with the development of land to the south of the reserve.

Table 3: East Woods Compartment 1

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR				
		Operations in winter unless stated				
		1	2	3	4	5
Maintain & enhance wet alder woodland with seepages & shallow seasonal pools.	<b>RCV</b> & ecologist to survey including EHDC land in south east of compartment in spring/summer. Particular attention to invertebrates as wet woodland very important. Send data to relevant bodies. <b>SDNPA</b> to review management of EHDC land and consider reintroduction of selective coppicing of Alder	*				
	<b>RCV</b> to monitor compartment as above	*	*	*	*	*
	<b>All</b> Dead wood to be left in situ unless danger to public	*	*	*	*	*
	<b>RCV</b> to hand clear himalayan balsam in June and other alien species as required under supervision of ecologist and with necessary health and safety precautions taken.	*	*	*	*	*
	<b>PTC</b> to grade & scallop grass edge along playing field boundary where possible	*	*	*	*	*
	<b>SDNPA/contractor</b> to coppice 45% of alder on PTC land to diversify age range and let light in <b>N.B</b> Figures assume no coppicing carried out in comp. 1 under last management plan	15%		15%		15%
	<b>RCV</b> to collect litter in spring	*	*	*	*	*
Prevent pollution	<b>RCV &amp; SDNPA</b> to monitor water quality & levels of river, springs & seepages	*	*	*	*	*



### 3.1.2 Compartment 1 - East Meadow, 1

The aim of this compartment is to maintain both the wet and dry grassland, to improve wildlife value and species diversity. The ideal form of grassland management throughout the site would be to reintroduce cattle grazing from May to October at a very low stocking rate. Although this is not currently possible it is an option to be considered over the course of this plan and steps should be taken to form links with suitable graziers and measures begun to get local people on board. Until grazing can be resumed the meadow should be cut and all arisings removed.

**Table 4: East Meadow Compartment 1**

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR				
		Operations in winter unless stated				
		1	2	3	4	5
Maintain & enhance wet & dry grassland	<b>RCV</b> with competent ecologist to survey compartment to include EHDC land & send data to relevant bodies	*				
	<b>RCV</b> to monitor compartment as above	*	*	*	*	*
	<b>SDNPA</b> to research reintroduction of grazing at low stocking rate through summer.	*				
	<b>RCV</b> to hand clear himalayan balsam in June and other alien species as required under supervision of ecologist and with necessary health and safety precautions taken.	*	*	*	*	*
	<b>RCV</b> to remove woody vegetation as necessary to prevent encroachment from edge before mowing	*	*	*	*	*
	<b>SDNPA/RCV</b> to cut & clear grassland in April & September. Remove arisings NB. Some bramble to be left at river edge to protect river bank from erosion.	*	*	*	*	*
Prevent pollution	<b>RCV/PTC</b> to collect litter in March, especially along boundary with playing fields	*	*	*	*	*
	<b>RCV &amp; SDNPA</b> to monitor river water quality & pools	*	*	*	*	*

### 3.1.3 Compartment 1 - Central Wood, 1

The aim of this compartment is the same as East Wood. Much work to diversify the age range of the canopy, let in the light and prevent drying of the pond and pools has already been carried out under the last plan. This work should continue and progress be monitored to ensure maximum benefit to wildlife.

Table 5: Central Wood Compartment 1

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR				
		Operations in winter unless stated				
		1	2	3	4	5
To maintain & enhance wet woodlands	<b>RCV</b> & ecologist to survey compartment in spring/summer. Send data to relevant bodies	*				
	<b>RCV</b> to monitor compartment as above	*	*	*	*	*
	<b>RCV</b> to hand clear himalayan balsam in June and other alien species as required under supervision of ecologist and with necessary health and safety precautions taken.	*	*	*	*	*
	<b>SDNPA/RCV</b> to monitor 2017 alder coppicing to ensure successful rejuvenation. <b>N.B.</b> figures assume coppicing only carried out in 2017		7%			7%
Maintain pond	<b>RCV</b> to cut & clear invasive willow scrub from pond & pools to encourage wetland flora		50%			50%
Maintain drains	<b>RCV</b> to ensure drains remain blocked to retain water.	*	*	*	*	*
Maintain & enhance dry woodland boundary	<b>RCV/PTC</b> to maintain new hedge plants. Collect litter in March, especially along boundary with playing fields	*	*	*	*	*
Prevent pollution	<b>RCV &amp; SDNPA</b> to monitor water quality of ponds & pools & remove litter	*	*	*	*	*

### 3.1.4 Compartment 1 - Central Meadow, 1

The management aims for this compartment are the same as for East Meadow.

Table 6: Central Meadow Compartment 1

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR Operations to be carried out in winter unless stated				
		1	2	3	4	5
Maintain & enhance wet & dry grassland	RCV with competent ecologist to survey compartment & send data to relevant bodies	*				
	RCV to monitor compartment as above	*	*	*	*	*
	RCV to hand clear himalayan balsam in June and other alien species as required under supervision of ecologist and with necessary health and safety precautions taken.	*	*	*	*	*
	RCV clear bramble from centre of grassland and remove buddleia from edge to keep grassland open	*				
	RCV to remove willow saplings from scrapes and push back in north west corner.	*	*	*	*	*
	SDNPA/RCV to cut & clear grassland in April & September. Remove arisings	*	*	*	*	*
Prevent pollution	RCV/PTC to collect litter in March, especially along boundary with playing fields	*	*	*	*	*
	RCV & SDNPA to monitor river water quality & pools	*	*	*	*	*
	PTC to relocate bin from centre of reserve to entrance at boundary with playing fields	*				
Interpretation	PTC to install interpretation board at entrance to central meadow next time boards are renewed	*				

### 3.1.5 Compartment 2 - Western Meadow

This compartment would also benefit from grazing to promote a mosaic of sward heights. Until then however, the dry grassland to the north of FP48 should be cut twice a year to encourage fine grasses and herbs. The wet areas, to the south, should be cut less often to encourage a longer, tussock sward. Five years may be too long to leave this area but, this has been the management over the last plan period and it may be detrimental to change this. However, if the area begins to dry out, frequency of cut could be increased to every 2/3 years.

Table 7: Western Meadow Compartment 2

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR Operations to be carried out in winter unless stated				
		1	2	3	4	5
Maintain & enhance wet & dry grassland	RCV & ecologist to survey north & south of PF48 & enclosure in spring. Data to relevant bodies	*				
	RCV to monitor comp as above	*	*	*	*	*
	RCV to hand clear himalayan balsam in June & other alien species as required with ecologist & with necessary health & safety precautions. NB. HB widespread in area by brook	*	*	*	*	*
	RCV to cut back bramble to tree line on north west boundary to stop invasion of river bank on north side. Follow with annual rotational cut of 20% of bramble to keep grassland open	20%	20%	20%	20%	20%
	RCV to remove saplings to stop encroachment from edge	*				*
	SDNPA/PTC to discuss removal/crown lifting of some remaining plantation oaks					
	SDNPA/RCV to review 5 year cutting regime for area south of FP48. As area appears to be drying and is full of himalayan balsam, it may be necessary to cut and clear more frequently	*				
	SDNPA/RCV to cut & clear north of FP48 in March & Sept. <b>NB</b> This area may have been divided in the past, with one half mown every 5 years to create different sward heights. SDNPA to confirm & consider continuation of same management	*	*	*	*	*
Prevent pollution	RCV/PTC to collect litter in Feb	*	*	*	*	*
	RCV & SDNPA to monitor water quality & levels in brook & pools	*	*	*	*	*

### 3.1.5 Compartment 3 - Tilmore Brook Woodland, north 3

The aim of this compartment is to maintain and enhance the woodland for the benefit of wildlife while at the same time promoting its amenity value. This area of the reserve is likely to come under increasing pressure and ecological isolation due to new development planned for adjacent fields to the south. It is therefore important to encourage local involvement with and knowledge of the reserve.

Table 8: Tilmore Brook Woodland North, Compartment 3

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR				
		1	2	3	4	5
Maintain & enhance wet and dry woodland	RCV & competent ecologist to survey compartment. Send data to relevant bodies	*				
	RCV to monitor as above	*	*	*	*	*
	RCV to hand clear himalayan balsam in June and other alien species as required under supervision of ecologist and with necessary health and safety precautions taken.	*	*	*	*	*
	SDNPA/contractor to identify and coppice single alders to diversify age range and let light in. To include stream bank	*		*		*
	RCV to coppice hazel on long rotation. To include stream bank	5%	5%	5%	5%	5%
	RCV to manage wet seepages by pulling invasive saplings nearer to stream		*			*
Prevent pollution	RCV to collect litter in Feb/March	*	*	*	*	*
	RCV/SDNPA to monitor water quality of brook	*	*	*	*	*

### 3.1.6 Compartment 4 - Tilmore Brook Woodland South, 4

The management aims for this woodland are as for the northern compartment.

**Table 9: Tilmore Brook Woodland South, Compartment 4W4**

COMPARTMENT OBJECTIVES	PRESCRIPTION	PRIORITY/YEAR				
		1	2	3	4	5
Maintain & enhance wet and dry woodland	<b>RCV</b> & competent ecologist to survey compartment. Send data to relevant bodies	*				
	<b>RCV</b> to monitor as above	*	*	*	*	*
	<b>RCV</b> to hand clear himalayan balsam in June & other alien species as required with necessary health & safety precautions taken.	*	*	*	*	*
	<b>RCV</b> to hand clear garden waste & escapes including privet, laurel, bamboo, daffodils, variegated archangel	*	*	*	*	*
	<b>SDNPA/contractor</b> to coppice 30% of alder to diversify age range		15%		15%	
	<b>RCV</b> to coppice hazel, include stream bank & FP 48 with the initial focus on overstood stools	5%	5%	5%	5%	5%
	<b>SDNPA/contractor</b> to coppice willow at entrance & remove sycamore	20% *	20%	20%	20%	20%
Prevent pollution	<b>RCV</b> to collect litter, March	*	*	*	*	*
	<b>RCV/SDNPA</b> to monitor water quality of brook	*	*	*	*	*
Interpretation	<b>PTC</b> to relocate interpretation board to Pulens Lane entrance & install board at entrance on boundary near new development.	*				%

## 3.2 ADMINISTRATIVE PRESCRIPTIONS

### 3.2.1 Protect the site from potentially damaging peripheral development

Increased pressure on the reserve will result from the new use and development proposed for the adjacent land to the south. An ecotone should be established between the woodland edge of the reserve and the short-mown grass of both the existing and proposed playing fields. Any further development in the area should be carefully considered in the light of NEP4 in the Petersfield Neighbourhood Plan and where at all possible a buffer zone established around the reserve. It is vital to wildlife that it does not become isolated from the wider countryside.

### 3.2.2 Identify key personnel at Petersfield Town Council and East Hampshire District Council

The support of local volunteers is paramount to the success of this Local Nature Reserve. Since 2000 the Rotherlands Conservation Volunteers have carried out much of the management work on the site. In 2016 the group folded, due in part to dwindling support. Currently a new group is being set up and if this is to succeed long term it is critical they have adequate support. It is therefore essential to identify an appropriate liaison officer at each local authority who will support and enable the group and to ensure that efforts are coordinated and resources pooled.

### 3.2.2 Promote support and involvement of local community

Until 2015 there was a regular work programme run by the Rotherlands Conservation Volunteers. It is hoped that a new group will now re-establish these work parties. Local residents should be kept informed of reserve operations. A site leaflet and regular publicity is essential to this. Activities should include practical conservation, surveying and monitoring, cattle looking (if grazing is resumed), activities for children, walks and talks. Volunteers could include local groups, schools and individuals who could take on roles such as volunteer wardens and leaders. With support from personnel at PTC, EHDC and SDNPA, essential training and possibly further funding could be sourced from appropriate bodies.



## 3.3 Project groups

### 3.3.1 Management

**Table 10: Management Project Groups**

PROJECT	COMPARTMENT NO.
Maintain & enhance dry woodland	3,4
Maintain & enhance wet woodland	1,3,4
Maintain & enhance wet grassland	1,2,
Maintain & enhance dry grassland	1,2,
Maintain & enhance stream bank	2,3,4
Control invasive species by hand	All
Remove litter	All
Maintain boundary shrubs	1,3,4
Maintain blocked drains, seepages and pools	1,
Research grazing possibilities	1,2,
Find/design site leaflet	All
Distribute site leaflet to local residents	

### 3.3.2 SURVEY & MONITORING

**Table 11: Survey & Monitoring Project Groups**

PROJECT	COMPARTMENT NO.
Monitor alder rejuvenation	1
Survey/monitor wet woodland	1,4
Survey/monitor dry woodland	3,4
Survey/monitor wet grassland	1,2,
Survey/monitor dry grassland	1,2,
Survey invertebrates	All
Survey butterflies/dragonflies	All
Survey birds	All
Monitor water quality	All
Survey fish stocks	All

## References

The Hampshire Biodiversity Action Plan Vol 11 July 2003

Rotherlands Management Plan 2013-18

The Wild Trout Trust River Rother Hog Moor, Sheet

The Wild Trout Trust Tilmore Brook

Petersfield Neighbourhood Development Plan 2013-28

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[www.easthants.gov.uk](http://www.easthants.gov.uk)

[www.petersfield-tc.gov.uk](http://www.petersfield-tc.gov.uk)

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