

Waterhall Conservation Area

Management Plan 2011-2016



Written by the friends of Waterhall

Waterhall Conservation Area Management Plan 2011-2016

Written by: The Friends of Waterhall
Adopted version, October 2011.

Summary.

Waterhall Conservation Area Vision.

A matrix of grasslands, scrub and woodland that is rich in wildlife and enjoyed and respected by users of the site connecting onwards into the hills and valleys of the South Downs.

Waterhall is located on the northern edge of Brighton and is separated from the urban area by the A27 road. The Waterhall Conservation Area contains a mixture of species rich grassland and scrub and is part of a Site of Nature Conservation Importance. The site also connects well to the wider South Downs.

Waterhall is important for the species rich grassland and important populations of birds, dormouse and reptiles. The site is also an important area for informal public recreation.

This plan addresses the need for active intervention to manage habitats on the site to prevent loss of key species and to increase diversity. The plan also addresses the issues of maintaining public access whilst minimising the impact on wildlife. It is also hoped that through active management new species may colonise the site or lost species such as the nightingale and skylark may return.

The main management issues for the conservation area are to maintain and enhance species rich grassland alongside the key species of plants and invertebrates and to increase diversity of species and age structure within the dense scrub which will improve habitat for breeding birds, small mammals and ground flora. In addition diversity will be improved by developing small areas of woodland to replace dense scrub.

The draft versions of this management plan have been the subject of extensive consultation with officers of the Council; in addition it was published through notices on the site and in the newsletter sent to all members of the friends of Waterhall. Copies of this version of the plan will be placed in local libraries and sent to adjacent landowners and relevant Members of the Council.

Contact details for the relevant parties.

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1. General information

1.1 Introduction

This management plan has been written in order to set out the management of the important Wildlife and Community resource of Waterhall Conservation Area for the next 5 years. The plan has been compiled by the Friends of Waterhall with input from the BHCC Countryside team. The plan will be due for review in 2016.

The management plan has been based on current knowledge, however there have been limited detailed surveys of the site and where possible these surveys should be carried out in order to inform future management and revisions of this plan.

The following groups have been consulted in the preparation of this document; members of the Friends of Waterhall, users of the site, the wider public, the Waterhall Golf Club, Brighton Rugby Club, neighbouring farmers, BHCC staff and local Ward Councillors, the South Downs National Park Authority.

1.2 Location

Waterhall Conservation Area encompasses 16ha (39.5 acres) and is located on the dip slope of the South Downs about 5.5km north west of Brighton City Centre. The conservation area is in the bottom of the valley to the east of Waterhall Golf Course grid reference TQ 285 091. The site is bounded by Waterhall Farm to the north and east, Waterhall golf course to the west and Brighton rugby club to the south. The site location and boundary are shown on plan 1.

1.3 Status

Waterhall is designated a Site of Nature Conservation Importance (SNCI), a county designation. The designated area includes the conservation area, the golf course and part of Sweet Hill. The reasons for designation are important areas of Chalk Grassland and Scrub.

The site falls within the South Downs National Park and therefore enjoys the highest level of planning protection. The site is also within a Nitrogen Vulnerable Zone (NVZ) and an Inner Groundwater Source Protection zone.

1.4 Tenure

The conservation area is owned by Brighton and Hove City Council and is de facto public open space. The Friends of Waterhall are a community group who have an interest in the management and conservation of the site, interpreting the site to the public and management tasks.

1.5 Policy Considerations

The Local Development Framework draft Core Strategy contains policies that protect Waterhall from development and recognise its status as a Site of Nature Conservation Importance (SNCI) within the South Downs National Park. The site also sits in a groundwater protection zone which places restrictions on any activity that may threaten the quality of the groundwater; this includes the use of nitrogen fertilizers. The former licensed landfill activity at the site has now ceased and the site is officially closed and the licence no longer valid.

Other legislation protects some of the species found on the site including badgers, reptiles, dormice and birds.

Details of all relevant policies and legislation are provided in Appendix 2.

2. Environmental information

2.1 Physical

The site is located on the dip slope of the South Downs and is underlain by upper and lower chalk. The site occupies a section of dry valley and valley sides which runs up from Patcham and connects through to Varncombe and Saddlescombe.

The soils are typical rendzinas, thin soils overlying chalk bedrock although deeper soils may be found in the valley bottom with more clay component. The causeway area overlies an area of inert landfill which has been capped. The lower causeway or scrape has had the topsoil removed as part of the preparation for tipping activity that was not carried out and now provides a very thin layer with sparse vegetation.

The site drainage is generally good; however the adjacent Waterhall playing fields are regularly subject to water logging. The whole area is above the important chalk groundwater aquifer that provides drinking water for Brighton.

2.2 Biological

The table below summarises the key habitat areas on the site, these are also detailed on map 2.

Habitat	Area
Dense continuous scrub	10.5ha
Scattered scrub	1.5ha
Relict chalk grassland	1.45ha
Semi improved grassland	2.5ha
Open water	0.05ha

2.2.1 Habitats

A). Grasslands

There are two main grassland types on the site, firstly relict unimproved calcareous grassland (NVC CG3) with species including carline thistle (*Carlina vulgaris*), horseshoe vetch (*Hippocrepis comosa*), kidney vetch (*Anthyllis vulneraria*) and wild thyme (*Thymus drucei*). There are two areas of this grassland, firstly the 'Wildflower' and 'butterfly banks' on the eastern side of the valley and secondly between the scrub and the golf course on the south western side of the site, this area is especially rich.

The second grassland type is semi improved grassland, some areas of this type have reverted from former arable and others are on top of the former tip site. Where the grassland is on clay soils, such as the valley bottom and the tip cap they are neutral in nature, whilst in other areas they have species that indicate more calcareous soils and potential to be restored to chalk grassland.

B). Scrub

A large part of the site is covered by dense continuous scrub, dominated by hawthorn (*Crataegus monogyna*) (NVC W21). The scrub is largely of a similar age and structure and little grows underneath it, however in places other species can be found including patches of willow (*Salix caprea*) which

have matured to woodland. Clearings have been made in places which have been planted with other tree species by the 'Friends' group to diversify the site.

A wide ride and glade alongside a path running N/S, cut through the middle of the scrub provides a useful break with a woodland edge of species including bramble (*Rubus fruticosus*) and wild flowers including cowslip (*Primula veris*). These areas are particularly good for birds and butterflies.

There are also two areas of gorse scrub (*Ulex europaeus*), one at the top Western side of the site and the other on the former tip.

Scattered scrub, dominated by dogwood (*Cornus sanguinea*) has begun to colonise some grassland areas and is becoming invasive.

C). Open water

The dew pond in the base of the valley was created in 1999 by the Friends and the site ranger. The pond is artificially lined. It is a major attraction to dogs but despite this disturbance it still provides a spawning ground for toads and frogs and several dragonfly species have been recorded.

D). Other habitats

There are areas of permanent bare ground on the scraped area below the tip which host a large colony of mining bees. There are also some areas of the former tip that are dominated by tall herbs such as nettle (*Urtica dioica*) and teasel (*Dipascus fullonum*).

2.2.2. Species

There have been no detailed wildlife surveys of the site so all records are based on casual observations. A list of records to date has been compiled from observations by members of the Friends of Waterhall and reference to City wildlife and the Sussex Biological Records Centre; this is included as an appendix to this plan. In 2010 a fungal survey of the site and adjacent golf course was carried out by Dave Bangs. The notes below detail only the known species that are protected by law.

A). Birds

Currently there are five red list and five amber list bird species that are known to have bred on the site, these are summarised below;

Turtle dove	Red list
Stock dove	Amber list
Mistle thrush	Amber list
Song thrush	Red list
House sparrow	Red list
Linnet	Red list
Bullfinch	Red list
Green woodpecker	Amber list
Dunnock	Amber list
Willow warbler	Amber list

In addition two further amber list species used to breed, nightingale and stonechat, these are still annual visitors to the site.

B). Mammals

In 2008 Hazel dormice were found to be breeding in a bird box in the scrub area. Hazel dormice are a European protected species.

Badgers are frequent visitors to the site and are protected under the badger's act 1992. There is speculation that there may be a sett within the scrub but there is also evidence of a sett along the hedge bank in adjacent farmland.

C). Reptiles

All reptiles are protected under the Wildlife and Countryside act. Waterhall has a good population of 3 species, the Adder, common lizard and slow worm.

There may be many other red data book species present on the site but there is a lack of survey information at this time.

2.3 Cultural

There are no known archaeological features on the site, however given the wealth of historic sites across the South Downs there may still be undiscovered archaeology on the site.

The site has only evolved to its current state in the last few decades. An aerial photograph from 1947 indicates that the whole area is treeless and in use as farmland. This was probably a mix of grassland and arable. Part of the site was subsequently used for inert landfill, now ceased and an area is set aside for a burning site as part of the Dutch elm disease control programme.

The site is well used by the local community; principal activities include dog walking and bird watching. Dog walking has greatly increased over the last few years.

A public bridleway runs up the southern edge of the site and a public footpath connects to this and runs along the western edge between the site and the golf course.

2.4 Past Management in Nature Conservation

The site has been managed for nature conservation by the council countryside staff and the friends group over the last fifteen years. Over this time various projects have been undertaken including some tree and wildflower planting and creating the dew pond. Until recently many of the grassland areas were mown (on varying frequencies) this has now ceased (last cut in 2008 or spring 2009). Grazing was re introduced to the wildflower and butterfly paddocks in 2006 and the main meadow in 2010.

3. Evaluation

3.1 Biodiversity

3.1.1 Size

The site is relatively small and the habitat areas are not exceptional in a local context, however the site has good connectivity to the wider South Downs area and good potential for chalk grassland restoration and linking to similar habitats.

3.1.2 Structure and Condition

There are some areas of relict chalk grassland that are diverse; however these are in danger of deteriorating due to lack of management. The butterfly paddock has suffered from bramble encroachment due to a lack of grazing over many years.

The grassland areas that have previously been mown are in need of further management.

The bulk of the scrub area is dense with very poor diversity of structure and age this needs a scrub management plan.

The dew pond was created in 1999 and has begun to establish despite regular disturbance, however the lining has become damaged and needs repair.

3.1.3 Diversity

The most diverse habitats on the site are the grasslands. Areas of chalk grassland in the south west are excellent with some local and regionally important species. The main (large) meadow has areas on the higher ground where species richness is good and restoration of a diverse sward possible. Likewise the Wildflower bank paddock is very diverse although some wildflower planting has taken place here.

3.1.4 Past and Current Use

The site was formerly farmland although some areas were presumably not in arable production as a good chalk grassland sward can be seen.

There are some areas of the site that are influenced by the former landfill activity.

3.1.5 Species

The site is an important area for both breeding and migratory birds including several species on the red list. The site is also important for two mammal species, the hazel dormouse is a European protected species and a small population was discovered in 2008, one of only a few known sites in Brighton. Badgers are also important and protected by the badgers act.

Three reptile species, protected under UK law are also present, the adder, common lizard and the slow worm all favour grass areas with some cover.

Finally the chalk grassland areas have some important wild flower and insect species and are the most diverse habitats on the site.

3.1.6 Position in a wider context

Waterhall is separated from the urban area by the A27 trunk road. The site links to the wider South Downs and has connectivity through to other areas of unimproved grassland and hedgerow/scrub.

3.2 Appreciation of Nature

3.2.1 Accessibility

The site is well used by dog walkers and birdwatchers. The site is accessed from Waterhall playing fields where there is a car park (see plan 1). There is also access via a bridleway that links to Saddlescombe road and a public footpath that links to Sweet hill and the Sussex border path. There is a good network of informal paths across the site (see plan 3, access).

3.2.2 Use

The site has an active friends group. Other volunteer groups such as the green gym and brownie packs have also worked on the site. There is some on site interpretation on birds and the dew pond and a notice board for current information. Occasional guided walks have been taken on the site by rangers and wildlife groups such as butterfly conservation.

3.2.3 Historical

There is no known historical interest.

3.2.4 Potential

The main potential is for maintaining and improving the current habitats and access for local people to enjoy. Consideration should also be given to linking beyond the site through liaison with the golf course and other landowners/managers.

4. Main factors influencing management

Rank	Feature	Positive factor	Negative factor
6	Scrub	Large areas of scrub which provide habitat for breeding birds, dormice and other species	Dense scrub with no ground flora, lacks age and species diversity
1	Calcareous grassland	Small areas of important calcareous grassland with diverse range of flowers and invertebrates	In danger of being lost due to lack of management and encroachment of bramble.
2	Calcareous grassland	Two paddocks with potential for rich ground flora and invertebrates, grazed for several years.	Suffering from encroachment by bramble.
7	Semi-improved grassland	Main meadow with good range of flora and invertebrates and potential for restoration to species rich grassland.	Formerly mown, no longer carried out, risk of dominance by tall grasses and flower species. Some areas being invaded by dogwood.
10	Woodland edge	Good woodland edge habitat where the ride and deer glade are maintained	Potential for becoming overgrown by bramble and nettles.
9	Pond	Dew pond provides additional habitat for wildlife and drinking area for mammals and birds. Replicates a historic down land feature.	Constant disturbance by dogs swimming in the pond which also attracts litter and the liner has been damaged.

8	Woodland	Tree planting by friends group has increased species diversity.	Clearings have not been large enough and trees have become shaded. Planting random rather than focused on planned areas.
5	Hedgerows	Excellent hedgerow connections which link to Sweet hill and Varncombe areas.	Lack of management may disrupt connectivity
4	Access	Good public access to the site which is well used by local people and enjoyed by dog walkers as a safe end enjoyable place to visit.	Dog walking has increased massively especially by dog walking companies. This can lead to large intimidating packs. As the site is not subject to bylaws there is a major issue with dog mess, often not cleaned up this constitutes a health hazard and could also be causing nutrification of the soils and resultant loss of biodiversity. Constant disturbance of the pond by dogs resulting in turbidity and loss of biodiversity. Good public access has also led to a major problem with litter.
3	Volunteers	An active and dedicated friends group with along association with the site	Not near a community which causes difficulty in recruiting new members

5. Management Policy

5.1 Habitat and Species Management

- To increase the age and species diversity to the areas of dense continuous hawthorn scrub.
- To create a designated area for the planting of other tree species to develop into woodland.

- To manage hedgerows and woodland edge habitats for maximum diversity of species and to maintain connectivity for dormice and other species.
- Manage areas of relict chalk grassland to maintain and improve the diversity of the sward, preventing encroachment of bramble, coarse vegetation or scrub.
- Manage the dew pond as an important wildlife resource.

5.2 Visitor services

- Maintain all benches, paths, gates and steps in a safe and usable condition
- Provide information to the public on key issues.
- Seek to control the issues of dog mess and damage to the ecology of the pond

5.3 Research, survey and monitoring

- Facilitate more detailed wildlife surveys of the site.
- Monitor the dormouse population through regular surveys by a licensed dormouse surveyor
- Monitor the impacts of grazing on sward diversity

6. Management Prescriptions and Operations

6.1 Habitat and Species Management

6.1.1. Coppice areas of hawthorn scrub on rotation as detailed on the attached plan 4 to encourage species and age diversity. Coppicing work to be carried out between October and February to minimise disturbance to wildlife. Arising to be burnt, shredded or used as habitat piles/ dead hedging for the benefit of wildlife. Coppice areas have been selected to maintain habitat connectivity for dormice.

6.1.2. Remove scrub to enlarge woodland areas as detailed in green on the attached plan 4. Scrub removal to be carried out between October and February.

6.1.3. Plant suitable locally sourced tree species (native to the local area) in the woodland areas (marked in green on plan 4). Planting to be carried out between November and February.

6.1.4. Selectively coppice or lay scrub edge and hedgerow areas to maintain species diversity and connectivity. To be carried out between October and February.

6.1.5. Remove bramble and scrub from grassland areas prior to grazing each year. (Orange hatch on plan 4) Seek to control bramble by grazing where possible utilising low density grazing in spring.

6.1.6. Seek to graze glades and smaller grassland areas using temporary fencing and low density stock (yellow on plan 4) investigate the potential for permanent fencing where possible to improve stock security and reduce management costs.

6.1.7. Plant hedges alongside new fence lines to increase connectivity for dormice. Hedge planting should only be carried out where in agreement with the South Downs Integrated Landscape Character assessment. Planting to

be carried out between November and February using locally sourced species.

6.1.8. Maintain the wild flower bank, butterfly bank and main meadow by grazing. An annual grazing plan to be agreed between the Friends of Waterhall and the Council Grazing officer/Ranger.

6.1.9. Use temporary fencing to control grazing on the small meadow butterfly project area (see plan 4) grazing this area on a two yearly, rotational basis (half each year) to prevent scrub encroachment.

6.1.10. Cut rides and deer glade area annually to maintain open areas, open up scrub to enlarge glade and connect ride to upper glades (see yellow areas on Plan 4).

6.1.11. Carry out repairs to dew pond and protect liner from further damage by dogs by installing barriers and covering exposed areas with soil.

6.1.12. Carry out annual maintenance and cleaning of bird boxes.

6.1.13. Maintain small meadow butterfly area by removing invasive species, bramble and scrub in areas not being grazed.

6.2 Visitor services

6.2.1. Repair the steps to the dew pond

6.2.2. Reinstate the path through the scrub at the back of the rugby clubhouse to complete a circular link away from the playing pitches.

6.2.3. Keep footpaths clear and safe to use throughout the year.

6.2.4. Maintain all access gates and fences in a safe and stock proof condition

6.2.5. Maintain benches in a safe condition

6.2.6. Provide information to site users on the notice boards and at key places as necessary to inform of site issues and management.

6.2.7. Maintain the interpretive boards on birds and the dew pond

6.2.8. Seek to extend the council bylaws to cover Waterhall and control dog mess.

6.3 Research, survey and monitoring

6.3.1. Seek to train volunteers to conduct surveying and monitoring to include species surveys for the site especially for under recorded groups

6.3.2. Organise dormouse monitoring by a licensed dormouse worker and utilising the methodology outlined in the dormouse conservation handbook.

6.2.3. Organise fixed annual monitoring points in areas to be grazed to enable monitoring of the effects of grazing on plant species diversity in the sward.

7. Five Year Work Plan

Year 1

Activity	Timing	Who	Finance
Coppice hawthorn scrub in areas marked year 1.	October to February	Rangers/ contractors. Possible small volunteer task.	
Clear areas of scrub set aside for woodland planting and to connect central ride to upper glade	October to February	Rangers/ contractors. Possible small volunteer task.	
Plant trees in woodland areas.	November to February	Friends of Waterhall	£100
Clear bramble from grassland areas	September/ October prior to grazing	Volunteers / ranger	
Agree annual grazing plan	September	Friends of Waterhall/ Grazing officer	None
Graze paddocks, meadow and smaller chalk grassland areas	Autumn/Winter. Low density grazing in Spring for Bramble	BHCC grazing project	Unknown
Cut rides and deer glade	October/November	Ranger	
Repair dew pond	Spring/ summer	Ranger	Unknown
Clean and repair bird boxes	September/ October	Friends of Waterhall	0
Maintain small meadow butterfly area, removing scrub, bramble and invasive species	Autumn	Friends of Waterhall	0
Repair steps to the dew pond	Spring/ summer	Ranger/ volunteers	£100
Reinstate the path behind the rugby clubhouse	Summer/ autumn	Ranger/ volunteers	0
Keep footpaths clear	Spring/ summer / autumn	Friends of Waterhall Ranger/ volunteers	0
Remove litter	ongoing	Ranger/ friends of Waterhall/	0

		volunteers	
Maintain benches, gates and fences	Ongoing	Ranger	£100
Provide information to site users	Ongoing	Friends of Waterhall/ ranger	0
Extend the dog byelaws	Summer	BHCC staff	
Organise species surveys	Spring summer	Friends of Waterhall/ ranger	
Organise dormouse monitoring	April to October	Friends of Waterhall/ ranger	
Organise fixed monitoring points for grazing	Summer	Friends of Waterhall/ ranger	

Year 2

Activity	Timing	Who	Finance
Coppice hawthorn scrub in areas marked year 2.	October to February	Rangers/ contractors. Possible small volunteer task.	
Clear around planted trees.	October to February	Rangers/ contractors. Possible small volunteer task.	
Plant Hedge alongside new fence line.	November to February	Friends of Waterhall	£100
Clear bramble from grassland areas	September/ October prior to grazing	Volunteers / ranger	
Manage hedgerows by coppicing/ laying	November to February	Ranger/ volunteers	
Agree annual grazing plan	September	Friends of Waterhall/ Grazing officer	None
Graze paddocks, meadow and smaller chalk grassland areas	Autumn/Winter. Low density grazing in Spring for Bramble	BHCC grazing project	
Cut rides and deer glade	October/November	Ranger	
Clean and repair bird boxes	September/ October	Friends of Waterhall	0
Maintain small	Autumn	Friends of	0

meadow butterfly area, removing scrub, bramble and invasive species		Waterhall	
Keep footpaths clear	Spring/ summer / autumn	Friends of Waterhall Ranger/ volunteers	0
Remove litter	ongoing	Ranger/ friends of Waterhall/ volunteers	0
Maintain benches, gates and fences	Ongoing	Ranger	£100
Provide information to site users	Ongoing	Friends of Waterhall/ ranger	0
Organise species surveys	Spring summer	Friends of Waterhall/ ranger	
Organise dormouse monitoring	April to October	Friends of Waterhall/ ranger	
Organise fixed monitoring points for grazing	Summer	Friends of Waterhall/ ranger	

Year 3

Activity	Timing	Who	Finance
Coppice hawthorn scrub in areas marked year 3.	October to February	Rangers/ contractors. Possible small volunteer task.	
Clear around planted trees.	October to February	Rangers/ contractors. Possible small volunteer task.	
Plant trees in woodland areas.	November to February	Friends of Waterhall	100
Clear bramble from grassland areas	September/ October prior to grazing	Volunteers / ranger	
Agree annual grazing plan	September	Friends of Waterhall/ Grazing officer	None
Graze paddocks, meadow and smaller chalk grassland areas	Autumn/Winter. Low density grazing in Spring for Bramble	BHCC grazing project	

Cut rides and deer glade	October/November	Ranger	
Maintain hedgerows by coppicing/laying	November to February	Ranger/ volunteers	
Clean and repair bird boxes	September/ October	Friends of Waterhall	0
Maintain small meadow butterfly area, removing scrub, bramble and invasive species	Autumn	Friends of Waterhall	0
Keep footpaths clear	Spring/ summer / autumn	Friends of Waterhall Ranger/ volunteers	0
Remove litter	ongoing	Ranger/ friends of Waterhall/ volunteers	0
Maintain benches, gates and fences	Ongoing	Ranger	
Provide information to site users	Ongoing	Friends of Waterhall/ ranger	0
Organise species surveys	Spring summer	Friends of Waterhall/ ranger	
Organise dormouse monitoring	April to October	Friends of Waterhall/ ranger	
Organise fixed monitoring points for grazing	Summer	Friends of Waterhall/ ranger	

Year 4

Activity	Timing	Who	Finance
Coppice hawthorn scrub in areas marked year 4.	October to February	Rangers/ contractors. Possible small volunteer task.	
Clear around planted trees.	October to February	Rangers/ contractors. Possible small volunteer task.	
Plant trees in woodland areas.	November to February	Friends of Waterhall	100
Clear bramble from grassland areas	September/ October prior to grazing	Volunteers / ranger	
Agree annual grazing plan	September	Friends of Waterhall/ Grazing officer	None

Graze paddocks, meadow and smaller chalk grassland areas	Autumn/Winter. Low density grazing in Spring for Bramble	BHCC grazing project	
Cut rides and deer glade	October/November	Ranger	
Clean and repair bird boxes	September/ October	Friends of Waterhall	0
Maintain small meadow butterfly area, removing scrub, bramble and invasive species	Autumn	Friends of Waterhall	0
Keep footpaths clear	Spring/ summer / autumn	Friends of Waterhall Ranger/ volunteers	0
Remove litter	ongoing	Ranger/ friends of Waterhall/ volunteers	0
Maintain benches, gates and fences	Ongoing	Ranger	
Provide information to site users	Ongoing	Friends of Waterhall/ ranger	0
Organise species surveys	Spring summer	Friends of Waterhall/ ranger	
Organise dormouse monitoring	April to October	Friends of Waterhall/ ranger	
Organise fixed monitoring points for grazing	Summer	Friends of Waterhall/ ranger	

Year 5

Activity	Timing	Who	Finance
Coppice hawthorn scrub in areas marked year 5.	October to February	Rangers/ contractors. Possible small volunteer task.	
Clear around planted trees.	October to February	Rangers/ contractors. Possible small volunteer task.	
Plant trees in woodland areas.	November to February	Friends of Waterhall	100

Clear bramble from grassland areas	September/ October prior to grazing	Volunteers / ranger	
Agree annual grazing plan	September	Friends of Waterhall/ Grazing officer	None
Graze paddocks, meadow and smaller chalk grassland areas	Autumn/Winter. Low density grazing in Spring for Bramble	BHCC grazing project	
Cut rides and deer glade	October/November	Ranger	
Clean and repair bird boxes	September/ October	Friends of Waterhall	0
Maintain small meadow butterfly area, removing scrub, bramble and invasive species	Autumn	Friends of Waterhall	0
Keep footpaths clear	Spring/ summer / autumn	Friends of Waterhall Ranger/ volunteers	0
Remove litter	ongoing	Ranger/ friends of Waterhall/ volunteers	0
Maintain benches, gates and fences	Ongoing	Ranger	
Provide information to site users	Ongoing	Friends of Waterhall/ ranger	0
Organise species surveys	Spring summer	Friends of Waterhall/ ranger	
Organise dormouse monitoring	April to October	Friends of Waterhall/ ranger	
Organise fixed monitoring points for grazing	Summer	Friends of Waterhall/ ranger	
Review management plan	Ongoing	Friends of Waterhall / ranger	

8. Appendices and plans.

Plan 1. Site location and boundary

Plan 2. Habitats

Plan 3. Access

Plan 4. Scrub and grazing management

Appendix 1. Species records.

Appendix 2. Policies and legislation

Appendix 1. Waterhall species list

Mammals

Badger
Red fox
Hazel dormouse
Wood Mouse
Field vole
Mole
Common shrew
Rabbit
Western European Hedgehog
Roe deer
Stoat
Weasel

Birds

Grey heron	Woodpigeon
Buzzard	Collared dove
Sparrowhawk	Little owl
Peregrine	Short eared owl (moribund)
Kestrel	Swift
Hobby	Green woodpecker
Red legged partridge	Great spotted woodpecker
Pheasant	Swallow
Common sandpiper	Meadow pipit
Woodcock	Pied wagtail
Snipe	House martin
Greater black back gull	Sand martin
Lesser black back gull	Wheatear
Herring gull	Stonechat
Common gull	Whinchat
Black headed gull	Robin
Stock dove	Nightingale
Feral pigeon	Wren
Turtle dove	Dunnock

Song thrush
Mistle thrush
Redwing
Fieldfare
Blackbird
Chiffchaff
Willow warbler
Reed warbler
Whitethroat
Lesser whitethroat
Blackcap
Garden warbler
Goldcrest
Pied flycatcher
Spotted flycatcher
Blue tit

Great tit
Long tailed tit
Starling
House sparrow
Crow
Jackdaw
Rook
Magpie
Jay
Chaffinch
Goldfinch
Linnet
Bullfinch
Yellowhammer
Corn bunting

Reptiles and Amphibians

Adder
Slow worm
Common lizard
Grass snake
Common Toad
Common Frog

Butterflies

Small skipper
Large skipper
Essex skipper
Grizzled skipper
Clouded yellow
Brimstone
Large white
Small white
Green veined white
Orange tip
Green hairstreak
Small copper
Brown argus
Adonis blue

Common blue
Small blue
Red admiral
Painted lady
Peacock
Small tortoiseshell
Comma
Speckled wood
Marbled white
Gatekeeper
Meadow brown
Ringlet
Small heath

Moths

Brimstone moth
Buff ermine
Drinker
Elephant hawk moth

Small elephant hawk moth
Heart and dart
Oak eggar
Cinnabar moth

Six spot burnet
Burnet companion

Mother shipton

Dragonflies and Damselflies

Large red damselfly
Azure damselfly
Common blue damselfly
Migrant hawkler
Southern hawkler

Emperor
Broad bodied chaser
Common darter
Ruddy darter

Grasshoppers and Crickets

Field grasshopper

Bees, ants and wasps

Buff tailed bumble bee
White tailed bumblebee
Red tailed bumblebee
Common carder bee
Brassy mining bee

Other insects

7 spot ladybird
Glow worm
Bee fly

Spiders

Molluscs

Trees and shrubs

Whitebeam
Blackthorn
Crab apple
Hawthorn
Common gorse
Dogwood
Buckthorn
Spindle
Oak sp
Beech
Hornbeam
Hazel
Field maple
Silver birch
Ash

Goat willow or willow
Poplar sp
Elder
Guelder rose
Wayfaring tree
Honeysuckle
Yew
Holly

Wild flowers

Creeping buttercup
Meadow buttercup
Lesser celandine
Traveller's joy
Hoary cress
Wintercress yellow rocket
Dame's violet
Garlic mustard
Weld
Wild mignonette
Common milkwort
Fairy flax
Common rockrose
Perforate St Johns wort
Common dog violet
Sweet violet
White bryony
White campion
Bladder campion
Common mallow
Musk mallow
Herb robert
White clover
Bush vetch
Common vetch
Tufted vetch
Meadow vetchling
Hairy tare
Grass vetchling
Restharrow
Ribbed melilot
Black medick
Common birds foot trefoil
Horseshoe vetch
Kidney vetch
Bramble
Raspberry
Creeping cinquefoil
Silverweed
Piri piri burr
Agrimony
Salad burnet
Dropwort
Rosebay willowherb
Broad leaved willowherb
Common evening primrose
Common nettle
Ivy
Cow parsley
Corn parsley
Rough chervil
Wild carrot
Burnet saxifrage
Upright hedge parsley
Wild parsnip
Hogweed
Broad leaved dock
Common sorrel
Cornfield knotgrass
Japanese knotweed
Primrose
Cowslip
Scarlet pimpernel
Autumn gentian
Common centaury
Field bindweed
Hedge bindweed
Great mullein
Common toadflax
Germander speedwell
Common field speedwell
Eyebright
Red bartsia
Yellow rattle
Lesser broomrape
Wild thyme
Red dead nettle
White dead nettle
Ground ivy
Hedge woundwort
Betony
Field forget me not
Green alkanet
Harebell
Round headed rampion
Crossword
Lady's bedstraw
Hedge bedstraw
Cleavers
Squinancywort
Teasel
Field scabious
Common ragwort
Common fleabane
Daisy
Winter heliotrope

Hemp agrimony
Yarrow
Pineapple mayweed
Scentless mayweed
Dwarf thistle
Spear thistle
Creeping thistle
Slender thistle
Greater knapweed
Black knapweed

Greater burdock
Carline thistle
Dandelion
Autumn hawkbit
Beaked hawksbeard
Bristly ox-tongue
Bluebell
Lords and ladies
Common spotted orchid
Pyramidal orchid

Grasses, sedges and rushes

Cocksfoot
Hairy brome
Upright brome
Early meadow grass
Hard rush
Glaucous sedge

Mosses and liverworts

Ferns

Hart's tongue fern
Soft shield fern

Fungi

Field mushroom
Shaggy ink cap
Jews ear
Vascellum pratense, Meadow Puffball
Bovista plumbea, Grey Puffball
Lycoperdon lividum, Grassland Puffball
Lepista nuda, Wood Blewit
Hygrocybe virginea, var. *virginea*, Snowy Waxcap
Panaeolus sp., a Mottlegill
Collybia dryophila, Russet Toughshank
Stropharia semiglobata, Dung Roundhead
Clitocybe nebularis, Clouded Funnel
Clitocybe rivulosa, Fool's Funnel
Clitocybe dealbata, Ivory Funnel
Conocybe sp., a Conecap
Mucilago crustacea, Dog Sick Slime Mould
Galerina laevis, Lawn Bell
Clavaria argillacea, Moor Club
Marasmius oreades, Fairy Ring Champignon

Lichens

Evernia prunastri oak moss
Usnea subfloridana
Xanthoria parietina leafy xanthoria
Xanthoria polycarpa cushion xanthoria
Parmelia sulcata
Physcia tenella
Hypogymnia physodes
Flavoparmelia caperata common green shield lichen
Cladonia rangiformis/subrangiformis

Appendix 2. Policies and Legislation

The following policies need to be considered in planning the management of the site;

Local Plan Policies (unless otherwise stated these are unchanged in the Local Development Framework draft Core Strategy).

Policy NC4. The protection of SNCI sites

Policy NC7 and NC8 the Sussex Downs AONB, note these policies will now refer to the South Downs National Park.

Policy QD18. Species protection

Policy SU3. Protecting Water Quality.

Groundwater Protection Zone policies (see Environment Agency)

Nitrogen Vulnerable Zone Policies (see Defra)

Waterhall Valley **Landfill Licence** 19689. The landfill to take non biodegradable wastes (non construction) the status of this licence under the Environment Agency guidelines is 'closed'.

National Park legislation as encompassed in the National Parks and access to the Countryside Act 1949.

The Countryside Act 1968

The Environment Act 1995

The Countryside and Rights of Way Act 2000

The Natural Environment and Rural Communities Act 2006

Species protection legislation including the Wildlife and Countryside Act 1981, the badgers act and the European Habitats directive.

Plan 1. Location and site boundary

Waterhall Conservation Area



Not to Scale

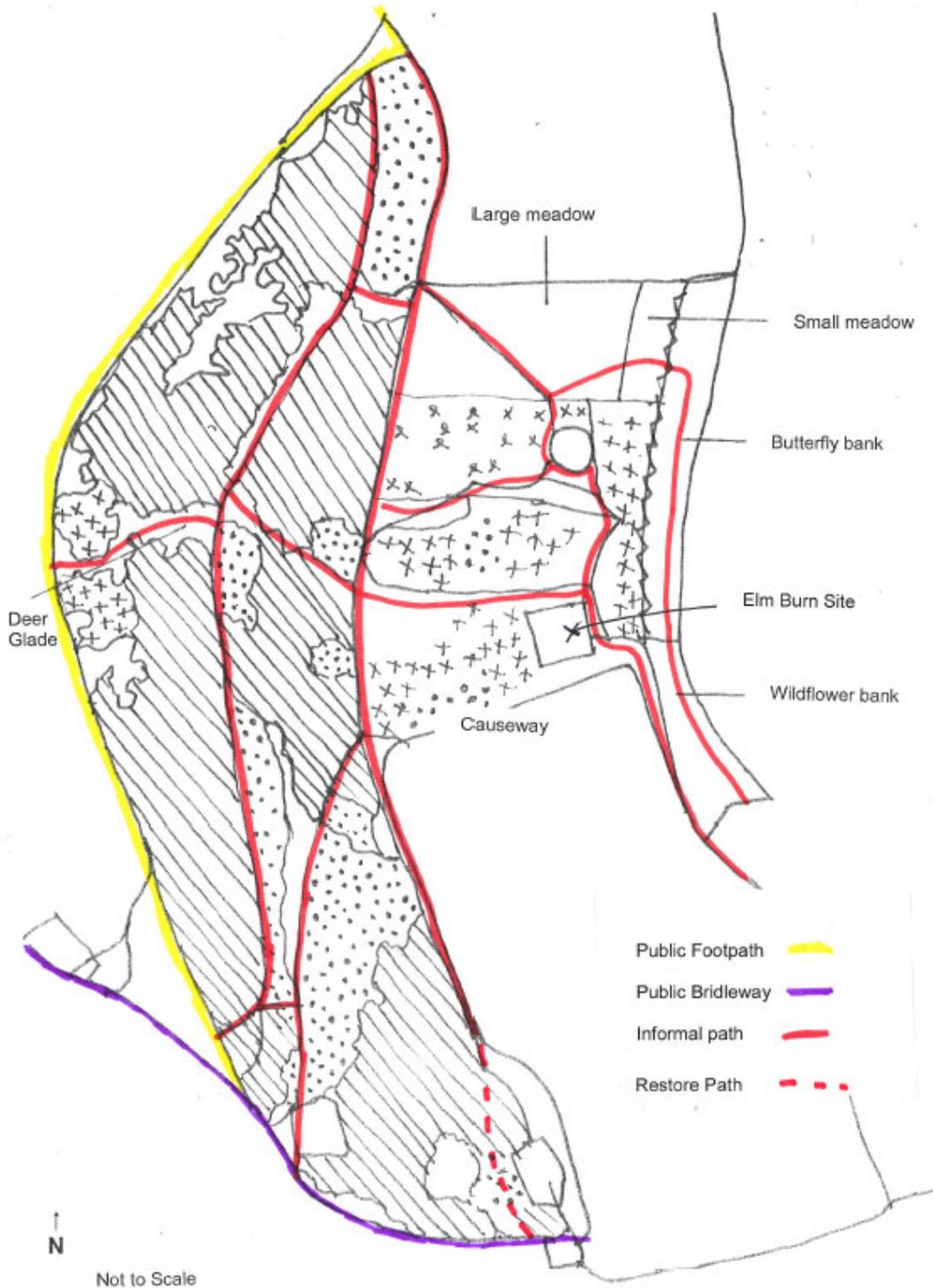
Plan 2.Habitats

Waterhall Conservation Area



Plan 3. Access

Waterhall Conservation Area



Plan 4. Scrub and
Grazing management

Waterhall Conservation Area

