

The Commons

10 Year Landscape Management Plan




2025 – 2035



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SITE SUMMARY

Site Name	The Commons Local Nature Reserve
Address	The Commons, Welwyn Garden City, Hertfordshire, AL7 4RU
Grid Reference	TL258110
What3words	pilots.label.leaned
Size (ha)	13.2
Statutory Designations	Local Nature Reserve
National Character Area (NCA)	111: Northern Thames Basin



Figure 1: Aerial image showing The Commons Local Nature Reserve site boundary (© Google Earth, 2023)

CONTENTS

1.	Introduction	4
2.	Site Description	7
2.1	Introduction	7
2.2	Historical Context	7
2.3	Landscape Context	8
2.4	Habitats & Wildlife	9
2.5	Access & Function	18
2.6	Signage and Furniture	19
2.7	Site Management	19
3.	Policy Context	21
3.1	Introduction	21
3.2	National Policy	21
3.3	Legislation	21
3.4	Local Policy	22
4.	Analysis & Evaluation	24
4.1	Introduction	24
4.2	Continuation of Management & Funding	24
4.3	Woodland Management	24
4.4	Tree Risk Management	25
4.5	Grassland Management	26
4.6	Scrub & Hedgerow Management	26
4.7	Orchard Management	26
4.8	Fen Management	27
4.9	Ditch and Pond Management	27
4.10	Invasive Species	27
4.11	Access & Amenity	28
4.12	Wildlife	28
5.	Aims & Objectives	29
5.1	Vision Statement	29
5.2	Aims & Objectives	29
6.	Action Plans	31
6.1	Capital Works Programme	32
6.2	Annual Maintenance & Monitoring Schedule	35
7.	Monitoring & Review	39
7.1	Annual Management Meetings	39
7.2	Management Plan Review	39
8.	References	40

1. Introduction

Maydencroft Limited was commissioned by Welwyn Hatfield Borough Council to produce a 10-Year Landscape Management Plan (LMP) for The Commons Local Nature Reserve (LNR), hereafter referred to as the 'site'.

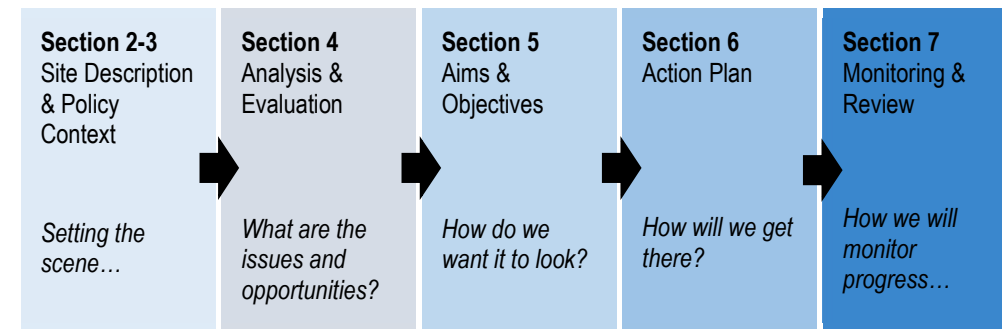
The Commons LNR is located to the southeast of Welwyn Garden City in central Hertfordshire. The site is owned by Welwyn Hatfield Borough Council, and has been managed under the terms of a 10-year Higher Level Stewardship (HLS) Agreement since 2014.



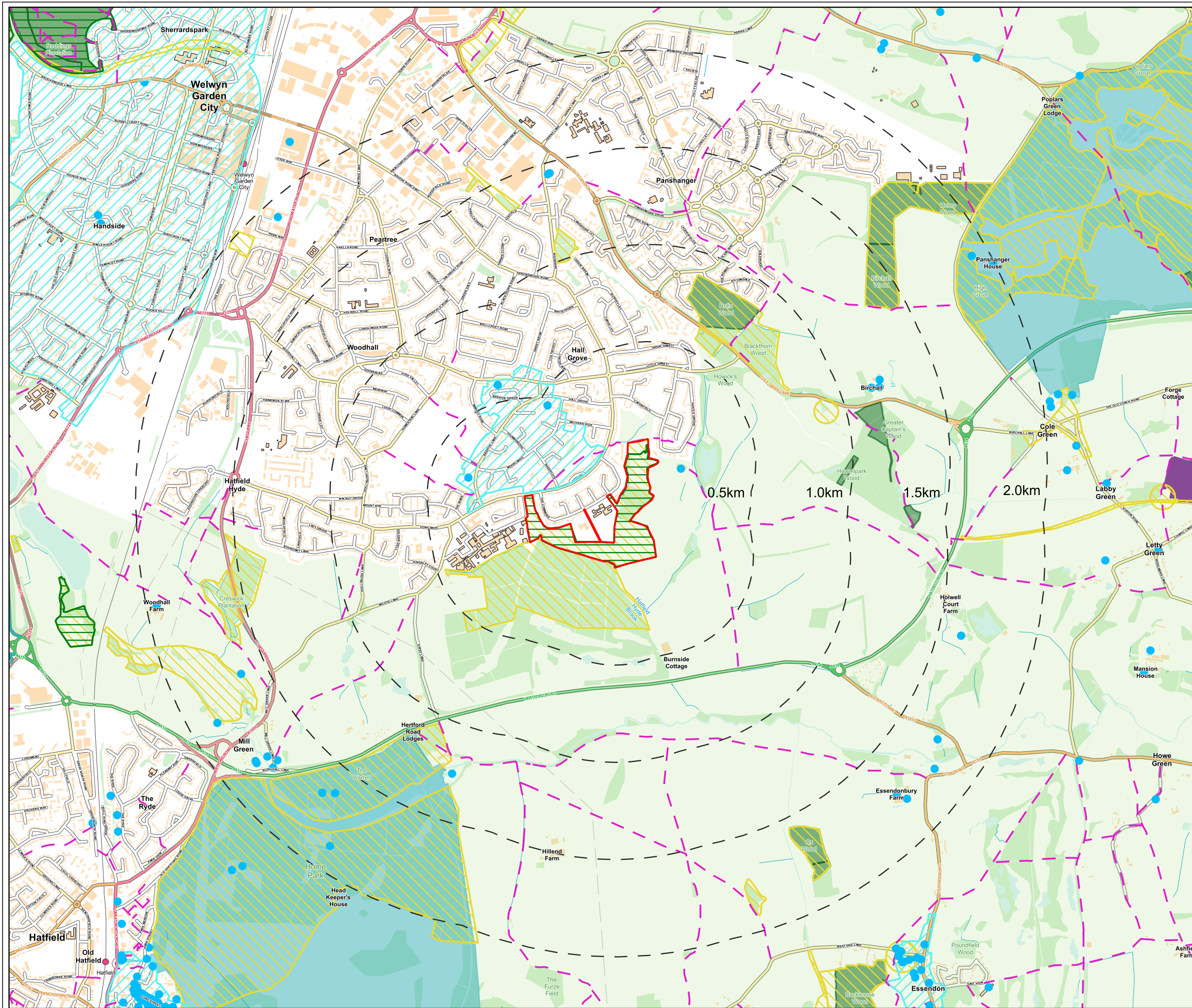
Figure 2: Map showing the location of the site (© Ordnance Survey, 2023)

This LMP is intended to direct the management of the site for a ten-year period from 2024 – 2034, working alongside the requirements for the stewardship agreement. It aims to capture all of the basic requirements to manage the site effectively, and seeks to make meaningful site improvements where opportunities are identified.

The plan is designed to be read and understood by all who are involved or interested in the management of the site, with the aim that more people can understand, contribute and have a say in how The Commons LNR should be managed. The structure of the document aims to give a legible process for understanding the current condition of The Commons LNR and how actions for the next ten years have been determined. The layout can be summarised as follows:



Section 2 of this document provides a Site Description which sets out all the factual, baseline information relating to the site in terms of its history, ecology, function, and landscape. Section 3 summarises key areas of legislation that direct the actions and responsibilities for the management of the site. Section 4 takes this factual information and analyses it to ascertain the key issues facing the site and opportunities for improvement. The aims and objectives for site management and enhancement are set out in Section 5 and action plans for delivering these aspirations in Section 6. The final section includes details on how the plan will be monitored and reviewed.



- ### Key
- Site boundary
 - Listed Building
 - PRoW
 - LNR
 - Conservation Area
 - Wildlife Site
 - Ancient Woodland
 - Scheduled Monument
 - Parks and Gardens
 - Greenbelt

Client	Welwyn Hatfield Borough Council		
Project	The Commons LMP		
Title	Site Constraints Plan		
Drawn	VJ	Checked	LW
Drawing No.	MH9028-002		Date
			11.10.2023
			Revision
			Issue
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Key

- Site boundary
- Site furniture**
- Memorial plaque
- ◆ Memorial bench
- Dogs-on-leads sign
- Welcome signage
- Waymarker
- Bin
- Bridge
- Field gate
- Pedestrian gate
- Viewing platform
- Habitats and surfaces**
- Permissive footpaths
- Ditch
- Pond
- Fen
- Orchard
- Grassland
- Grassland - grazed
- Mature scrub with trees
- Woodland
- Wet woodland
- Cropland

Client **Welwyn Hatfield Borough Council**

Project **The Commons LMP**

Title **Site Description Map**

Drawn **VJ** Checked **LW** Date **09.11.2023**

Drawing No. **MH9028-001** Revision **Issue**

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2. Site Description

2.1 INTRODUCTION

The Commons is a narrow V-shaped reserve located on the southeast limit of Welwyn Garden City, within the Howlands residential ward. The site falls within Green Belt land. The Howlands estate forms the site boundary to the north, which includes Commonswood School and Howlands Baptist Church on the site boundary. The New Queen Elizabeth II Hospital is located to the west, a privately-owned woodland also called The Commons to the southwest, and arable land with woodland blocks and hedged margins to the south and east. The A414 is located 0.6km to the south and the A1(M) 3km to the west.

The site can be separated into three distinct areas:

- Blackfan Fen located to the north of the east side of the site, and comprised of two compartments, North Fen and South Fen.
- Windmill Hill located to the east of the site, and comprised of two grassland compartments, Upper Windmill Hill and Lower Windmill Hill.
- Howlands, a long and narrow area of woodland and grassland to the west of the Hatfield Hyde Brook, extending to the reserve entrance along Howlands. This area incorporates a track from The Commons residential road leading to an old Thames Water pumping station now used as a volunteer base.

2.2 HISTORICAL CONTEXT

A 1st edition OS map from 1884 shows the site situated within an arable landscape comprising fields with scattered trees and hedgerow-lined margins, farmsteads and woodland blocks. The landscape had very little settlement until the creation of Welwyn

Garden City in the early-mid 20th century. The Hatfield Hyde Brook is not clearly identifiable on 19th century maps; however the presence of marsh is clear to the north of the site, now known as Blackfan Fen, and the land parcels have similar boundaries to present-day. The Commons woodland plantation to the southwest was planted at some point during the early 20th century.



Figure 3: 6-inch 1st edition OS map of The Commons and surrounding land from 1884. The marsh is demarcated by the red pin. (© National Library of Scotland, 2023)

A large assemblage of Neolithic worked flints have been found within Blackfan Fen. The flints have been interpreted as a possible burnt mound.

2.2.1 Historical Designations

Beehive Lane, Welwyn Garden City Conservation Area is located immediately to the northwest of the site.

Holwellhyde Farmhouse, located approximately 100m to the east of the site, is a Grade II listed building of 16th or early 17th century origins (list number 1172793).

There are two additional listed buildings within 500m of the site, both Grade II listed: Ludwick Hall and The Beehive Public House.

2.3 LANDSCAPE CONTEXT

2.3.1 National Character Area

Natural England have produced a framework of 159 landscape profiles for England, resulting in National Character Areas (NCA). The NCA profile summarises the key features of the character area. The site is located within **NCA: 111 Northern Thames Basin**, which extends from Hertfordshire in the west to the Essex coast in the east.

The NCA profile document summarises the key features of the character area. The area is broadly described as rich in geodiversity, archaeology and history, with diverse landscapes ranging from woodlands, river valleys and open arable areas to historic and recent urbanisation. Urban expansion has been a feature of the area since the 16th century, and as infrastructure improved connectivity into London, tranquillity has been reduced.

Semi-natural habitats in the area are diverse and provide important habitats for a wide range of species, but these have become fragmented over time. A number of Priority habitats are within the NCA; these include woodland, lowland grassland and fen.

Statements of Environmental Opportunity have been drawn up by Natural England to help understand the value of each NCA. Of particular relevance to the site is:

- SEO1: *Manage the rivers and river valleys to protect and improve water quality... Conserve the riparian landscapes and habitats, for their recreational and educational amenity and for their internationally significant ecological value; and*
- SEO3: *Protect and appropriately manage the historic environment for its contribution to local character and sense of identity, and as a framework for habitat restoration and sustainable development... Enhance and increase access between rural and urban areas through good green infrastructure links to allow communities recreational, health and wellbeing benefits.*

2.3.2 District Landscape Character

The Welwyn Hatfield Landscape Character Assessment was produced in 2005 by The Landscape Partnership Ltd. The site lies within area **45: Welwyn Fringes**. The area is described as an urban fringe belt around the eastern flanks of Welwyn, with a wide range of land uses. While the western end of this area has obvious urban-fringe land uses, the area to the east is more rural, with arable cultivation and some blocks of woodland. Key characteristics include a gently undulating, open landform, with large woodland blocks. There is an obvious sense of proximity to large settlements through the transport network, land uses and fly-tipping.

The Commons (including the private woodland to the southwest) is described as “*a unique area ecologically*” although the local landscape cannot be regarded as distinctive. The aim of the character area is to *improve and restore* which includes the use of low-density grazing for management of unimproved pasture, the reversal of habitat fragmentation by creating corridors, expansion of hedged field boundaries and woodland, and creation of buffer zones between field margins and semi-natural habitats.

2.3.3 Topography

The site is approximately 70m above sea level, with a lower elevation of 60m at the south of the site where the Fen Brook and Hatfield Hyde Brook converge. The surrounding landscape rises to the east and northwest of the site to an approximate elevation of 90m.

2.3.4 Landscape & Visual Appraisal

Windmill Hill is more elevated and provides views to the rural landscape to the north and east. Views are limited in distance due to woodland blocks and tree lines / scrub belts along field edges.

The rest of the site feels enclosed and peaceful due to the low-lying topography and woodland, which extends offsite to the southwest. This is an important feature of the site, as it provides a sense of separation from the urbanisation to the northwest.

2.3.5 Geology and soils

The geology is a major factor in determining an area's topography and soils. These, together with the climate, determine the natural vegetation and habitats which support a range of species.

The Geology Map of Britain (developed by the British Geological Survey) shows that the site lies on chalk sedimentary bedrock, formed between 93.9 and 83.6 million years ago during the Cretaceous period. Parts of the site also lie on sand and gravel superficial deposits formed between 2.588 million and 11,800 years ago.

The Soils Map of the United Kingdom (developed and hosted by Cranfield University) shows that the site is located on two Soils: Soil 8, which is described as being slightly acid, loamy and clayey soils with impeded drainage to the north, and Soil 6, which is described as freely-draining slightly acid loamy soils to the south. Soil 8 is associated with a wide range of pasture and woodland type habitats, and Soil 6 neutral and acid pastures and deciduous woodlands.

A 2m deep excavation by Thames Water to replace a sewer in the fen also revealed an extensive layer of compacted peat. Samples of the peat sequence were taken for radiocarbon dating by Wessex Archaeology. Samples indicated that the peat formed in the late Roman to Early Anglo-Saxon period (c. 5-6th century A.D) and was sealed by alluvial fan deposition in the late Medieval to early post-Medieval period (c. 15-16th century).

It should be noted that a site-based soil assessment was not carried out as part of the survey.

2.3.6 Hydrology

There are two watercourses on site: Fen Brook and Hatfield Hyde Brook. The brooks form part of the Lee (from Luton Hoo Lakes to Hertford) catchment, which has moderate ecological status. The two watercourses converge at the most southerly point of the site, and

continue southwards offsite as Hatfield Hyde Brook until discharging into the River Lee 1km to the south. Land in close proximity to the watercourses is in Flood Zone 3, which means there is a high probability of flooding from rivers.

There are several groundwater springs around the fen area of the site, which results in year-round provision of water and suitability for fen habitat.

2.4 HABITATS & WILDLIFE

2.4.1 Habitats

Lowland Fen

Blackfan Fen is divided into two compartments: North Fen (0.8ha) and South Fen (0.5ha). Previous surveys have shown the fen is dominated by lesser pond sedge (*Carex acutiformis*) and blunt-flowered rush (*Juncus subnodulosus*) with willowherb (*Epilobium hirsutum*), hemp-agrimony (*Eupatorium cannabinum*), common fleabane (*Pulicaria dysenterica*), fen bedstraw (*Galium uliginosum*), marsh bedstraw (*Galium palustre*), marsh horsetail (*Equisetum palustre*), ragged robin (*Silene flos-cuculi*) and meadowsweet (*Filipendula ulmaria*). Woody species include willow (*Salix* sp.), alder (*Alnus glutinosa*) and hazel (*Corylus avellana*). Many specimens have been coppiced or are pollards; the North Fen is more wooded compared to the South Fen. The south and west boundaries of South Fen are marked by dead hedges from willow and hazel coppicing works on site.



Figure 4: South Fen marked by a dead hedge boundary

Surface water is present on the fen for the majority of the year, likely from high groundwater levels due to the combined effect of loamy and clayey soils reducing percolation, and presence of springs.

The fen has not been recognised as a Priority habitat on MAGIC, but is an uncommon and locally important habitat in Hertfordshire.

An assessment of the sediments, pollen and plant macrofossils within the peat by Wessex Archaeology indicate that the site has remained a fen-type environment throughout the period of peat formation. However, there have been notable changes in the vegetational environment through time; in the earlier stages the fen was dominated by reeds and sedges in an open oak, hazel and ash wooded environment, which became increasingly open over time. Pollen records also suggest the onset or increase of hazel coppice management.

Wet Woodland

North Fen and South Fen are separated by 0.4ha of wet woodland. The woodland species composition is similar to the trees found in the fen (willow, alder and hazel) with ash (*Fraxinus excelsior*), hornbeam (*Carpinus betulus*) and oak (*Quercus robur*) on drier ground.



Figure 5: Wet woodland between North Fen and South Fen

Woodland

Two areas of deciduous woodland are present onsite: to the east of the Fen Brook and surrounding Blackfan Fen, and to the west of the site within Howlands Meadow. The woodland onsite is listed as a Priority habitat.

The woodland surrounding the fen is a mature oak woodland with hornbeam and hazel coppice. Standing and fallen deadwood is present.



Figure 6: Coppice-with-standards woodland surrounding the fen

The Howlands Meadow woodland, which also extends offsite as The Commons woodland, is ash-dominated with field maple (*Acer campestre*), blackthorn (*Prunus spinosa*) and willow. Many ash trees are showing signs of ash dieback. A herbaceous woodland edge borders the surfaced footpath ride through the woodland; species include bramble (*Rubus fruticosus*), nettle (*Urtica dioica*), dog rose (*Rosa canina*) and common hogweed (*Heracleum sphondylium*), as well as grasses and rushes.



Figure 7: Ash-dominated woodland with herbaceous border in Howlands Meadow

Orchard

A 0.08ha orchard is located to the south of the old Thames Water pumping station. The orchard is listed as a Traditional Orchard under the Priority Habitat Inventory. The orchard more closely resembles an open area of grassland with scattered mature trees. Several saplings have been planted into this orchard as part of its restoration. These have derived from the mature crab apple trees elsewhere onsite. The grassland within the orchard is cut very regularly, at least once a month through the spring and summer to prevent scrub cover establishing.



Figure 8: The orchard to the south of the old Thames Water pumping station

Grassland

There are distinct areas of grassland onsite with differing management practices.

Lower Windmill Hill is a 1.3ha sloping tussocky grassland divided by a shrub belt. The area is grazed by Longhorn cattle from May/June – August. The grassland is topped in autumn when required.



Figure 9: Lower Windmill Hill

0.7ha of grassland to the north of Howlands Meadow is grazed by Longhorn cattle between August – October. The grassland is also topped in autumn when required. Previous surveys have identified the grassland composition as lowland neutral grassland, with cowslip (*Primula veris*), bird's-foot trefoil (*Lotus corniculatus*), meadow vetchling (*Lathyrus pratensis*), tufted vetch (*Vicia cracca*) and greater knapweed (*Centaurea scabiosa*). Bee orchid (*Ophrys apifera*) and pyramidal orchid (*Anacamptis pyramidalis*) have been recorded. Wetter areas of grassland support hard rush (*Juncus inflexus*).



Figure 10: Grazed grassland in Howlands Meadow

Species-poor short grassland is located at site entrances and bordering footpaths on Windmill Hill.



Figure 11: Grassland at the site entrance at Howlands

Hedgerows and Mixed Scrub

Hedgerows and mixed scrub with trees are found along the banks of the Fen Brook, at site entrances, to the west of North Fen, on Windmill Hill, and around the volunteer base.

Species include field maple, hazel, oak, hornbeam, ash, dog rose, blackthorn, hawthorn, bramble, nettle and ivy (*Hedera helix*). Hedgerows have been laid in places.



Figure 12: A mature scrub belt / hedgerow between Upper and Lower Windmill Hill



Figure 13: A laid field maple and hazel hedgerow in Howlands Meadow

Cropland

Upper Windmill Hill (1.5ha) is topped, ploughed and sown with 229kg of wild bird seed in mid-March. A wide arable field margin and mature scrub belt with trees form the outer perimeter of the cropland.

Table 1: Wild bird seed mix composition sown on Upper Windmill Hill.

Name	Quantity (kg)	%
Spring wheat	60	34.5
Spring barley	60	34.5
Spring oats	40	23
White millet	10	5.7
Quinoa	2	1.1
Red clover	1	0.6
White clover	1	0.6



Figure 14: Cropland with an arable field margin and mature scrub belt with trees

Ditches, Ponds and Pools

Hatfield Hyde Brook is a ditch that forms the boundary of the site to The Commons woodland to the south. The brook is spring-fed, with the source located in the Woodhall area of Welwyn Garden City. The brook has a gravel bed, and is shallow and slow flowing during dry conditions. Road drainage is directed into the brook, and high rainfall leads to an increase in flow, scouring the bed and leaving the banks steep with little emergent vegetation.



Figure 15: Hatfield Hyde Brook

Fen Brook flows southwards along the west boundary of Blackfan Fen and Windmill Hill. Fen Brook is also spring-fed and emerges at the north of the fen. The northern end of Fen Brook is shallow and muddy, with decaying wood and detritus.



Figure 16: The northern end of Fen Brook

A culvert enters Fen Brook from the west approximately halfway through the site. Road drainage enters the brook from this point, and the channel becomes steeper and faster-flowing. A greater diversity of flora is found along Fen Brook, although there are poached areas along the bank. Litter was observed within the channel.



Figure 17: Fen Brook at the entrance from The Commons. Bank poaching is frequent in this location

Two ponds were observed on site, located to the north within woodland surrounding the fen. The Fen Brook also widens to the north of the site creating a shallow pool. An abundance of aquatic and emergent vegetation is present. Due to groundwater conditions, additional hydrological features may be present within the Fen.



Figure 18: A pond within North Fen

2.4.2 Invasive non-native species

The Commons is included in a borough-wide invasive species management plan for WHBC due to the presence of Japanese knotweed (*Reynoutria japonica*) along a footpath.

Variegated yellow archangel (*Lamiastrum galeobdolon* subsp. *argentatum*) was observed within woodland to the north of Windmill Hill on the site visit.

Both species are listed on Schedule 9 of the Wildlife and Countryside Act 1981 which means it is an offence to plant or otherwise cause these species to grow in the wild.



Figure 19: Variegated yellow archangel within the woodland

The site lies within the Forestry Commission's 'Established Area' for Oak Processionary Moth (OPM), with an oak tree to the northeast of the site recorded as infested in 2022.

Muntjac deer have been observed within the woodland on site.

2.4.3 Ecological designations

The site was designated as a Local Nature Reserve (LNR) in 1998.

The site is also a Wildlife Site (WS80 'Blackfan Fen & the Commons Meadow' 58/037). The Wildlife Site WS79 'The Commons (Wood)' 58/023 is located immediately to the southwest of the site.

2.4.4 Tree preservation orders

The online service provided by Welwyn Hatfield Borough Council shows that of the 9th October 2023 there are no Tree Preservation Orders on site.

2.4.5 Wildlife

The variety of habitats on site support a wide range of species. Previous surveys have shown small mammals are found in good numbers within the fen and surrounding scrub. Species recorded include wood mouse, yellow-necked mouse, field vole, bank vole and both common and pigmy shrew. In some years, harvest mice have bred within the fen. The last recorded breeding was in 2017. Historically, water vole and water shrew have been recorded in the brook and ditch system within Blackfan Fen.

The reserve's freshwater habitats – ditches and ponds – offer a resource for rarer invertebrates, aquatic mammals and birds with limited distributions in Hertfordshire. It is possible that great crested newts could be present in the ponds but no formal survey has taken place to confirm this.

The eastern side of the fen lies on slightly higher and drier ground and the coppice-with-standards structure along with thorn scrub supports a varied bird life. In a 2014 survey, this included both resident and migrant species such as blackcap, fieldfare and redwing. Evidence of dormouse has been historically recorded along the hedge boundary of the North Fen.

Monitoring of the arable area has revealed its importance for farmland birds including yellowhammer, reed bunting, chaffinch, greenfinch and linnet. The former was recorded incidentally during the site visit between the cropland and the grazed field on Windmill Hill. Skylark and meadow pipit have also been recorded feeding here in the past. The hedgerows and wide margins on Windmill Hill support good populations of small mammals. These provide food for tawny and barn owls, the latter of which have successfully raised young between 2016 and 2020, when the last survey was carried out. More recently, three barn owls have been recorded on site by a local ornithologist. In 2014 there was anecdotal evidence of a polecat recorded on NBN Atlas. Additionally, butterflies are recorded in good numbers here, including past sightings of grizzled skipper and clouded yellow, a

migrant species. Nine species of grasshopper and cricket have been recorded.

As a result of the floristic diversity in the grazed grasslands, a wide range of insects have been recorded including bees and wasps, spiders and bugs as well as beetles, moths and grasshoppers. Historically, 26 species of butterfly have been recorded in Howlands Meadow including the locally scarce white-letter hairstreak but not all were still present in 2020 during the last survey. Both slow-worm and grass snake have been found in Howlands Meadow. Additionally, areas of grassland which are grazed by Longhorn cattle allow for the creation of bare ground which is important for invertebrates.

The woodland within Howlands Meadow has shown to be highly valuable for woodland edge species of birds, especially migrant warblers in the past. Other rare species that have occurred in this area include garden warbler and lesser spotted woodpecker. Decaying wood will support a number of invertebrates and fungi.

Mature trees within the woodlands may provide roosting opportunities for bats. Linear features such as hedgerows and streams provide commuting corridors for bats, and the grasslands and arable field provide foraging opportunities for bats.

2.5 ACCESS & FUNCTION

The site is primarily used by local people for dog walking and informal recreation. There is open pedestrian access to the majority of the site at all times of the year from a number of gates around the boundaries. Some areas of the site, including the fen, grazed areas of grassland, the volunteer hut and track at the old Thames Water pumping station, the orchard and arable land on Windmill Hill are fenced off and do not have public access.

More recently the site has been used by the council to host guided walks aimed at engaging the local community with their green spaces, such as the 'Muddy Boots' campaign ran in partnership with

local non-profit CultureWood CIC in 2023. There are plans in place to continue to deliver events such as these.

There are no public rights of way (PROW) through the site, although there is a network of footpaths around the site. Some surfacing works were completed by Maydencroft in 2021/22 on the central footpath running through the site. Other pathways are more informal and can become muddy in the winter.

A wooden platform overlooking the fen is located by the larger pond. The site has historically received educational visits from local schools; however, these have not taken place for a number of years.

There is no car park for the reserve, but there is limited parking available on adjacent residential roads.

A gas main and sewer run underneath the site. Gas works took place in 2022 which resulted in a number of trees being felled, and Thames Water have undertaken sewer works on site.

2.6 SIGNAGE AND FURNITURE

There is welcome signage at the three main entrances to the site. There are bins for litter and dog waste located at two of these entrances. There is a dogs-on-leads sign and waymarker posts towards the centre of the site.

There is one bench on site, which is a memorial bench to the north of Windmill Hill. A memorial plaque is located at the base of a tree on the footpath between the arable field and grazed grassland.

The site has been subject to some incidents of antisocial behaviour such as motorbikes being ridden through the site, vandalism of the memorial bench and signage, and the volunteer base has suffered theft.

2.7 SITE MANAGEMENT

The reserve is owned by Welwyn Hatfield Borough Council and has been managed under the terms of a 10-year Higher Level Stewardship (HLS) Agreement with Natural England since 2014. This agreement has been extended until 31st October 2028.

Volunteers are an integral part of the management of the site and there are two groups who work on site: The Commons Nature Group meet once per month, and the Wednesday Group meet on an ad hoc basis. Volunteers use the old Thames Water pumping station as a base and for storing tools. Some volunteers have chainsaw tickets and are therefore able to coppice and pollard smaller trees such as willow on the fen. Branches are used for creating dead hedges and logs for wildlife piles. The volunteers also cut the fen back and coppice around both fens to extend the habitat but not merge, as they are independent habitats with differing qualities. The traditional practice of hedgerow laying is also undertaken. A local ornithologist regularly volunteers their time and undertakes bird surveys on site.

Under the HLS, Longhorn cattle have been grazing Lower Windmill Hill from May/June to August, and 0.7ha of grassland to the north of Howlands Meadow is grazed by Longhorn cattle between August and October, as well as mowing when required.

The arable field on Upper Windmill Hill is topped, ploughed and sown with wild bird seed in mid-March. The results of this management approach seem beneficial to wildlife through informal observations. There are some challenges to this approach during wet weather due to the clayey soils in this location.

The orchard is regularly mown by volunteers. The herbaceous border along the woodland edge in Howlands Meadow is flailed in autumn.

Tree Safety Inspections (TSI) and resulting remedial works are routinely carried out along site boundaries, as well as along paths, specific points of interest and to check for ash dieback.



Figure 20: Topping the grassland within Howlands Meadow



Figure 21: Flailed herbaceous border in Howlands Meadow

3. Policy Context

3.1 INTRODUCTION

The following paragraphs summarise a few of the key areas of legislation, policies and strategies that direct the actions and responsibilities of WHBC with regard to the management of The Commons LNR.

3.2 NATIONAL POLICY

3.2.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities & Local Government (MHCLG) and last updated in September 2023. The NPPF sets out the national planning policies for England and how these are expected to be applied.

Some of the key messages from the NPPF which are of relevance to the Site and its context include:

- Conserving and enhancing the natural environment by protecting and enhancing “valued landscapes” and sites of biodiversity or geological value / soils. Recognise the intrinsic character and beauty of the countryside, and the wider benefits of natural capital and other ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- Taking opportunities to minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- To protect and enhance biodiversity and geodiversity, local wildlife-rich habitats and wider ecological networks should be identified, mapped and safeguarded, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping

stones that connect them, and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;

- Promote the conservation, restoration and enhancement of priority species, and identify and pursue opportunities for securing measurable net gains for biodiversity.

3.2.2 Improving Access to Greenspace: A New Review For 2020

This report sets out the importance of greenspace as being increasingly recognised as an important asset for supporting health and wellbeing. The report also highlights how ‘natural capital’ can help local authorities address local issues, help improve health and wellbeing, manage health and social care costs, reduce health inequalities, improve social cohesion and take positive action to address climate change. This report also makes the case that we must not lose sight of our growing population’s need for greenspace.

3.2.3 A Green Future: Our 25 Year Plan to Improve The Environment

A Green Future was published in 2018 by the Department for Environment, Food & Rural Affairs (DEFRA) and sets out the Government’s actions to help the natural world regain and retain good health. The 25 Year Environment Plan aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. The plan sets out a number of goals and also identifies six key areas for action which includes (but not limited to): “*Recovering of nature and enhancing the beauty of landscapes.*”

3.3 LEGISLATION

3.3.1 The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities (NERC) Act makes provision in connection with wildlife, Sites of Special Scientific Interest (SSSI), National Parks and the Broads, amends the law relating to public rights of way, makes provision as to the Inland Waterways Amenity Advisory Council and provides for flexible administrative

arrangements in connection with functions relating to the environment and rural affairs.

Section 40 of the NERC Act states that every public body, including local authorities, must in exercising its functions, have regard to the purpose of conserving biodiversity. Conserving biodiversity includes restoring or enhancing a species population or habitat.

3.3.2 *The Occupier's Liability Act 1957 and 1984*

The Occupier's Liability Act amends the law of England and Wales as to the liability of the occupiers of premises for injury suffered by persons other than their guests. The occupier of a premises owes a duty to another (not being a visitor) in respect of any known danger associated with a risk or if they have reasonable grounds to believe the danger exists. The occupier owes a duty if they know or believe that another is in the vicinity or danger or may come into the vicinity of danger, and the risk is one against which they may reasonably be expected to offer protection against. Any duty owed by virtue may be discharged by taking steps to give warning of the danger or by discouraging persons from incurring the risk.

3.3.3 *The Wildlife and Countryside Act 1981*

The Wildlife and Countryside Act 1981 is an Act of UK Parliament which gives protection to native species, enhances the protection of SSSIs and builds upon the rights of way rules in the National Parks and Access to the Countryside Act 1949. Birds, their nests and eggs are protected from injury and certain methods of killing and injuring are prohibited. Animals listed on Schedule 5 and their places of shelter and protection are protected from being killed injured or taken. Wild plants listed in Schedule 8 are protected from being uprooted and sold. The act contains measures for preventing the establishment of non-native species listed in Schedule 9 which may be detrimental to native wildlife.

3.3.4 *The Conservation of Habitats and Species Regulations 2017*

The Conservation of Habitats and Species Regulations 2017 (as amended) states that work likely to impact on species or their habitat

listed under Schedule 2 (known as European Protected Species) require an EPS Licence issued by Natural England.

3.3.5 *The Countryside and Rights of Way Act 2000*

The Countryside and Rights of Way (CRoW) Act 2000 (as amended) is an Act of UK Parliament normally gives a public right of access to land mapped as 'open country' or registered common land. These areas are known as 'open access land'. Public rights of way are typically listed and described in Definitive Maps and Statements (legal records of public rights of way) usually held at a local authority's office or library.

3.4 LOCAL POLICY

3.4.1 *Welwyn Hatfield Borough Council Local Plan 2016-2036*

The Local Plan was adopted by Welwyn Hatfield Council in October 2023 and provides the basis for assessing all development until 2036. The policies considered of relevance to the Site are summarised below:

Policy SP11 – Protection and enhancement of critical environmental assets

The protection, enhancement and management of the environmental, ecological and historic assets within the borough, will be sought commensurate with their status, significance and international, national and/or local importance.

Development that would secure positive improvements to and ensure the long-term conservation of ecological and heritage assets for the enjoyment of future generations will be supported.

Designation of ecological and heritage assets will be supported where it is deemed appropriate and necessary to safeguard them for the enjoyment of future generations.

Policy SP12 – Strategic Green Infrastructure

The Council will actively support the creation and enhancement of strategic green infrastructure across the borough. Opportunities to link existing green spaces and to improve public access and amenity will be supported in order to provide a comprehensive network of functional and linked spaces for the benefit of wildlife, biodiversity and the community.

Priorities for the creation and enhancement of green infrastructure include river corridors and sites designated for their nature conservation, heritage and/or landscape value.

The Commons has been listed as a strategic site to form part of the Welwyn Hatfield Green Corridor. The Green Corridor will connect existing green infrastructure, ecological assets, rights of way, and community resource.

Policy SADM 16 – Ecology and Landscape

Proposals will be expected to maintain, protect and wherever possible enhance biodiversity, the structure and function of ecological networks and the ecological status of water bodies.

Proposals will be expected to help conserve and enhance the borough's natural and historic landscape, and sit comfortably within the wider landscape setting. Proposals should take full account of the relevant Landscape Character Assessment and adopt the strategy and guidelines for managing change.

4. Analysis & Evaluation

4.1 INTRODUCTION

This section of the management plan constitutes an analysis of the current condition of The Commons compared to the 2014-2024 Management Plan, and whether it is achieving its full potential. It takes the factual information set out in the Site Description a stage further by discussing the quality of important features alongside any identified threats and issues, combined with the aspirations of Welwyn Hatfield Borough Council. This evaluation will determine the aims, objectives and future management actions for The Commons over the next ten years.

4.2 CONTINUATION OF MANAGEMENT & FUNDING

The Commons comprises a variety of important and locally rare habitats, including lowland fen, unimproved neutral grassland, woodland with scrub edges, and freshwater habitats, which in turn support a variety of species. The site's isolation from other nature reserves and position on the urban fringe of Welwyn Garden City highlights the importance of continuing to manage these habitats for biodiversity and people.

The previous 10-Yr LMP for The Commons LNR had at its core the following vision:

The Commons Local Nature Reserve will be a special place where local people and visitors can enjoy its visual qualities, its unique assemblage of wildlife and peaceful environment.

This and any future plan will be used to conserve and enhance the best aspects of The Commons and guide future management to ensure it remains an important place for wildlife and people.

It would appear that through the delivery of the LMP and ongoing management this vision is being met. Maintenance through HLS-funded cattle grazing with native Longhorns and cultivation of Upper Windmill Hill has helped to increase biodiversity of grassland areas.

Voluntary activities, including vegetation cutting on Blackfan Fen and coppicing of woodland and scrub species, provide successional and more diverse habitats elsewhere.

Volunteers are an integral part to the management of habitats on site. Opportunities to increase both the frequency of activities and local participation should be sought. This may be achieved by raising awareness of volunteer groups through local newsletters and exploring corporate volunteering opportunities. Additionally, volunteer training sessions should continue that will allow volunteers to undertake a greater variety of tasks.

Due to the successful management over the past 10 years to retain and restore the important habitats on site, Welwyn Hatfield Borough Council have received an extension to their Environmental Land Management Scheme, securing further funding to support ongoing management. This Management Plan for the period of 2025-2035, will ensure the commitments of this scheme are met. Other internal and external funding opportunities should be explored to support capital work projects.

4.3 WOODLAND MANAGEMENT

The previous LMP identified the felling and coppicing of the ash woodland to the north of Hatfield Hyde Brook. Works have been completed to trees showing signs of ash dieback, and retained ash trees are subject to routine Tree Safety Inspections and remedial works as required. Consequently, the woodland has become more open, allowing the understorey to develop.

The scrub-herbaceous border adjacent to the surfaced path in Howlands Meadow is cut and collected in autumn by a contractor. As shown in Figure 21, cutting is linear and one height, and occurs on both sides of the footpath. In order to move away from contractor involvement on site and increase biodiversity opportunities, it is recommended to rotationally cut the ride in offset scalloped sections as part of a volunteer task. This will increase the diversity of habitats

present and provide important niches for invertebrates and small mammals.

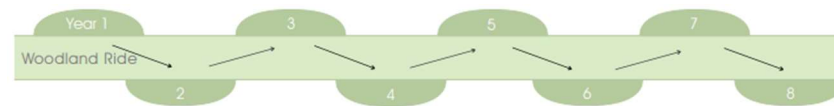


Figure 22: Offset scallops along a woodland ride (Butterfly Conservation, n.d.)

The oak and hazel standard-with-coppice woodland to the north and east of the fen has been successfully managed over the period of the previous LMP. Several hazel trees were observed to be overstood, and should be considered for the next round of coppicing. Brush from these works has been used to create dead hedges on site. Coppicing around the edges of the fen habitat will help to prevent the succession into woodland.



Figure 23: Overstood hazel coppice

Willow pollards have been created within the wet woodland area between the North and South Fens. The pollards are at a height suitable for ongoing management by volunteers. Hazel coppicing has also taken place in this area.

Mature trees should be left to go into senescence where safe to do so. Similarly, standing and fallen dead wood should be retained in-situ where not posing a health and safety or accessibility issue.

4.4 TREE RISK MANAGEMENT

The Commons contains many large trees and woodlands of varying ages and states of condition; as such it is not uncommon for trees to drop limbs and deadwood, or to fracture and fall.

To date, site management has taken a pragmatic approach to tree safety, through undertaking regular Tree Safety Inspections and

commissioning remedial work to high-risk trees as required, but also allowing trees to naturally decline and seeking to retain both standing and fallen deadwood. This approach is of huge benefit to wildlife, and far more cost-effective for WHBC budgets. It also sends an important message to visitors about the nature of the site and not to expect a sanitised, formal park.

Ash dieback is likely to affect more ash trees, both on site and to the private woodland to the southwest of the site. A continuing programme of monitoring and remedial works should be sufficient to appropriately manage risk.

It is likely that in the not-too-distant future, the site will start to see populations of Oak Processionary Moth (OPM), particularly given the abundance of oak trees present. As with any other tree-related issue, it is recommended that a risk-based approach is taken to OPM management, involving a process of survey, risk assessment, and then hand-removal of nests only where there is significant risk to the public. In general terms, it is likely that a signage campaign will be sufficient in warning the public of its presence and proceeding with caution.

4.5 GRASSLAND MANAGEMENT

Conservation grazing of Lower Windmill Hill and Howlands Meadow are key to the site's continued biodiversity value. Cattle are non-selective grazers, which means they leave areas of longer, tussocky coarse grasses and areas of bare ground to create a diverse structure. This allows wildflowers to grow, flower and set seed, providing a suitable habitat for a wide range of wildlife. Topping of the species-rich grassland in late summer can supplement grazing to avoid succession in years where grazing has not achieved the desired objective. The grassland should not be topped to a uniform height; areas of longer grass and scrub should be left to provide sward diversity, particularly around field margins. The stocking density of the cattle should be reviewed regularly with the grazier to identify any patterns in under-achievement.

The sowing of wild bird seed in mid-March on Upper Windmill Hill is providing a rich habitat that is able to support a greater variety of wildlife. Due to this success, Upper Windmill Hill should continue to be managed under the same programme of topping, ploughing and sowing of wild seed mix under the HLS. Wildflowers may be established by including small quantities of seed in sown mixtures from time to time. Arable margins should be cut on rotation.

4.6 SCRUB & HEDGEROW MANAGEMENT

Scrub provides a transitional habitat between open and wooded areas, and contains species suitable for nesting and feeding opportunities. Open areas of scrub, such as along the west bank of Fen Brook, on Windmill Hill and north of the orchard should continue to be rotationally coppiced to provide habitat diversity and prevent succession into woodland. Scrub along site entrances or footpaths may need to be cut back more frequently for access.

Hedgerows should continue to be managed under the programme within the previous LMP, to include re-laying and gapping up where necessary. Dead hedges using material from works on site should continue to be used as natural fences along footpaths and around the fen.

4.7 ORCHARD MANAGEMENT

Restoration of the Traditional Orchard would be a fantastic way to increase the number of habitats on site, improve biodiversity and provide opportunities for community involvement and learning new skills. As a first step, the number, location, condition and variety of fruit trees on site should be recorded. Consultation with The Orchard Project is recommended for advice on site preparation, tree selection (to include utilising any local varieties currently found on site), planting, aftercare and management. Opportunities for securing funding for capital works will also need to be explored.

4.8 FEN MANAGEMENT

The fen has been managed by cutting during the winter months by the volunteer groups to prevent succession to scrub. However, this is a slow process and due to limited capacity, the cutting cannot be completed all in one season.

One solution is to consider using Longhorn cattle to help manage the fen vegetation. Grazing will help to reduce the dominance of taller plants and scrub, and as cattle are non-selective grazers, they will eat large and less palatable plant species. Consultation with the grazier will establish the optimal stocking density to achieve a range of vegetation heights and management of undesirable vegetation, and the most suitable time of year for grazing to avoid excessive poaching, as well as the required changes to infrastructure. Natural England will also need to be consulted in regards to funding. A small area of fen can be grazed initially, and if successful, more areas can be opened up to grazing over time. The idea is that grazing would complement fen cutting by volunteers, resulting in more of the fen cut each year and enabling more volunteer time for other tasks around the reserve.

4.9 DITCH AND POND MANAGEMENT

Fen Brook was observed to contain litter and the banks are also subject to poaching. Poaching leads to the deterioration of habitat on the banks and exposes the soil, making it vulnerable to erosion and causing siltation of the water. This results in poorer water quality and ecological status. In order to restore the bank vegetation, it is recommended poaching 'hotspots' are protected from further erosion by dead hedges at the top of the bank. These should be of sufficient length to prevent the creation of new poached areas further along the channel and at a suitable height to prevent dogs jumping over. Signage can also be installed to notify members of the public.

Along both ditches, short sections of scrub and bankside vegetation should be coppiced on rotation to vary light levels and encourage

regeneration of vegetation. Additionally, inspections for obstructions and litter should take place regularly, and remedial works undertaken as required.

Prior to pond management works, it is recommended surveys are carried out to identify the likelihood of great crested newt presence, which will then inform the need for further surveys or amended programme of management. If great crested newt are absent, ponds should continue to be managed under the programme within the previous LMP, to include clearance of one third of aquatic and marginal plants per year to ensure open water is maintained.

4.10 INVASIVE SPECIES

Japanese knotweed has historically been recorded on site. An Invasive Species Management Plan for WHBC was produced in 2021. The control measures for Japanese knotweed in this Plan should be followed; this includes the installation of fencing around the patch and the cessation of vegetation cutting in this area to prevent the spread of Japanese knotweed around and off site.

Variegated yellow archangel was observed within the woodland between South Fen and Windmill Hill. This species can dominate the woodland floor and suppress native ground flora. Variegated yellow archangel can be controlled by hand pulling and digging of the plants and their roots, making the task suitable for volunteers. Plant material can be buried or burnt on site or disposed offsite as controlled waste. A D7 exemption may be required to burn arisings onsite. Good biosecurity procedures are necessary to prevent the spread of the species around and off site on equipment and boots.

The monitoring of invasive species on site should continue as part of the Invasive Species Management Plan. Regrowth of Japanese knotweed should be informed by surveys and control measures implemented from the Plan.

4.11 ACCESS & AMENITY

Non-surfaced pathways can become muddy in the winter. This is causing some access issues and encouraging users of the site to walk over sensitive habitats. Further surfacing works to other pathways is not recommended, due to the expense and concern that this might lead to unauthorised access by motorbikes. As an alternative, brash from tree works on site can be chipped and used to surface paths that are susceptible to becoming muddy in the winter months. Branches from tree works can also be used to more formally line the edges of paths and discourage the formation of new tracks through woodland areas.

There are currently some boundary issues as fallen fences on the north-eastern boundary of the site has led to the creation of informal tracks in to the site from neighbouring gardens. This has led to further issues with fly tipping of garden waste over garden fences and fences which extend back into the woodland. This situation should be monitored during routine walkover visits by WHBC Officers. Reinstatement of fallen fences should also be considered.

One aspiration is to encourage local schools and community groups to use The Commons for educational visits. There is the potential to develop a forest school on site, with the orchard an ideal location as it is closed off to the public and the access track is suitable for vehicles. As an initial step, consultation should be made with local schools and groups to gauge the level of interest in the scheme and opportunities for funding should be explored.

The previous management plan had an objective to provide interpretation boards, but this action has yet to be achieved, likely due to lack of budget. This will therefore continue over to the new plan with an aim to understand the costs for a signage scheme, and to secure either internal or external budget. It is recommended that these signs are map-based and include for clear trails around the site, with the potential to add more waymarks in the future.

Communication of site information, reserve management works and events should continue to be broadcast to the local community through newsletters, social media and the council website.

4.12 WILDLIFE

Management of the habitats as described above will provide suitable opportunities for a range of wildlife. Scarce, notable and protected species are also likely to benefit from wildlife-focussed habitat management. Efforts to manage habitats for species historically recorded in The Commons (including harvest mouse, hazel dormouse, water shrew and water vole) should continue where possible. The installation of bird and bat boxes in suitable locations may be considered to supplement natural nesting and roosting opportunities. Logs and branches from tree works on site can be stacked to provide a habitat for invertebrates, reptiles and amphibians. Grass heaps at least 1m³ can provide a suitable nesting site for grass snake, and hibernation opportunities for other reptiles over winter.

The effects of deer populations should be monitored and appropriate management taken as necessary. For example, over-browsing of coppice shoots will require remediation measures, such as the stacking of brash on cut stumps to protect regrowth.

Monitoring of the reserve's species (such as birds, bats, great crested newt, butterflies, flora and small mammals) should continue in partnership with local voluntary surveyors and results shared with relevant bodies.

5. Aims & Objectives

5.1 VISION STATEMENT

The Commons Nature Reserve will continue to be a welcoming and accessible green space for the enjoyment of local residents, schools and visitors.

Important habitats on site will be sensitively managed to keep a balance between protecting and enjoying the reserve.

Long-term management will seek to become more targeted, and recognise the importance of local volunteer groups for ongoing maintenance.

5.2 AIMS & OBJECTIVES

The vision for The Commons will be achieved through the following Aims and Objectives, and implementation of the Action Plan in Chapter 6. This Landscape Management Plan aims to support the requirements of the Higher Level Stewardship Scheme.

A To secure, maintain and enhance the biodiversity value of The Commons LNR

- A1 Undertake regular monitoring of invasive species present on site and treat as required.
- A2 Continue to undertake conservation grassland management, and seek opportunities to increase the area that is managed through grazing.
- A3 Continue the management of cropland as a floristically diverse area to support a number of invertebrate and bird species.
- A4 Continue to allow trees to go into senescence unless causing an unmanageable health and safety risk to the public.

- A5 Undertake sensitive management operations to improve the condition of woodlands.
- A6 Carry out targeted scrub management and coppicing in Blackfan Fen.
- A7 Continue hedge laying and creation of dead hedges using brash material generated onsite
- A8 Restore the orchard using locally sourced fruit varieties and develop into an educational area.
- A9 Regularly monitor the effectiveness of capital and maintenance operations, and adapt this LMP as required.

B To enable visitors and volunteers to continue to safely access and enjoy The Commons LNR

- B1 Maintain a network of accessible, waymarked routes and entrances.
- B2 Install a new site signage scheme.
- B3 Carry out regular site cleansing within woodland areas and ditches.
- B4 Explore opportunities to re-engage local schools with visits and outdoor learning experiences.
- B5 Undertake regular site-risk assessments and resultant works related to access, site boundaries and cattle.
- B6 Undertake periodic TSI in high-risk locations, such as along paths and boundaries.
- B7 Continue to share updates through social media, newsletters and on-site signage.

- C To secure the financial stability of The Commons LNR**
- C1 To manage the reserve and meet the commitments of the extended Environmental Land Management Scheme agreement.
 - C2 Explore internal and/or external funding options to support capital projects.
 - C3 Seek to increase volunteer involvement on site and continue volunteer training sessions.

6. Action Plans

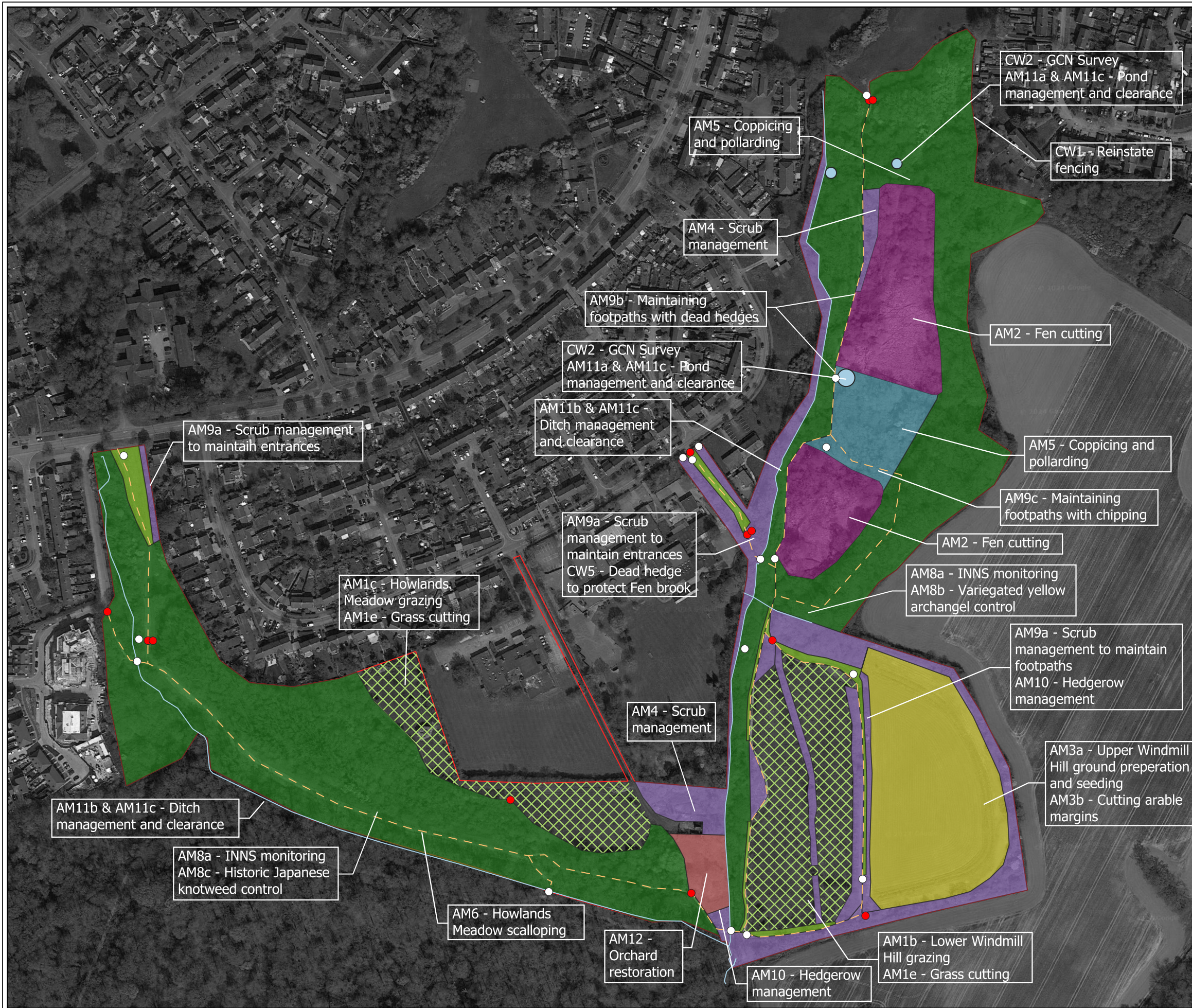
The following Action Plan section is divided into two tables. The first is a Capital Work Programme, covering all one-off items that will be delivered throughout the ten-year life span of the Management Plan. Each action is preceded by one or more objective references, and where appropriate suggests responsible parties and timescales.

The second table contains an Annual Maintenance & Monitoring Schedule including all of the regular tasks required to maintain the site in a positive condition. It should be noted that the schedule does not include for any reactive remedial works and standalone operations that will be determined by future management plan meetings.

6.1 CAPITAL WORKS PROGRAMME

Ref	Item	Description of Works	Year	Timing / Restrictions	Responsibility	Quantity	Unit	Pre-commencement Actions
CW1	Fencing	Consider reinstating or replacing fallen fencing along site boundaries.	1	n/a	WHBC	TBC	Lm	-
CW2	Ponds – Great crested newt survey	Great crested newt (GCN) surveys should be carried out prior to pond works to identify presence and inform the need for further surveys or amended programme of management.	1	Mar - Jun	WHBC	1	Item	-
CW3a	Site Signage – Brief & outline costs	Put together a brief describing the aims of a map-based welcome / interpretation signage scheme, including broad ideas about numbers, size, locations, materials and content. Consider inclusion of waymarkers and routes as part of the brief. Send the brief to signage companies / contractors to seek a rough idea of costs.	1	n/a	WHBC	n/a	n/a	Include volunteer groups in production of the brief.
CW3b	Site Signage – Funding	Identify any internal capital budget for delivering a signage scheme, or start to explore potential options for internal or external funding support.	1-2	n/a	WHBC	n/a	n/a	-
CW3c	Site Signage – Design	Further to confirmation of funding, adapt the previous outline brief into a full brief & specification, including text and images. Brief to be sent to companies for costing, in accordance with WHBC Procurement rules.	TBC	n/a	WHBC	n/a	n/a	Include volunteer groups in production of the brief.
CW3d	Site Signage – Production & installation	WHBC to commission a company (or companies) to design, produce and install welcome signage.	TBC	n/a	WHBC	TBC	No.	-
CW4	Fen – Grazing	Review potential to open up grazing to the Fen area. This will require an exercise to specify and cost the required changes to infrastructure, consideration over impact on stocking density, and communication with Natural England over funding agreement.	1	n/a	WHBC; Grazier; Natural England	n/a	n/a	-

Ref	Item	Description of Works	Year	Timing / Restrictions	Responsibility	Quantity	Unit	Pre-commencement Actions
CW5	Fen Brook – Dead hedging	Use brush from coppicing works to create dead hedges at the top of the bank where there are poaching 'hotspots' along the brook to restore the bank vegetation and prevent further erosion. Dead hedges should be of sufficient length to discourage the creation of new poached areas further along the channel and at a suitable height to prevent dogs jumping over. Consider inclusion of signage.	2	n/a	WHBC & Volunteers	TBC	Lm	Identify poaching hotspots and inform the local community of plans.
CW6a	Forest School – Consultation	Communication with local schools and groups to gauge the level of interest for site visits and outdoor learning experiences.	1	n/a	WHBC	n/a	n/a	-
CW6b	Forest School – Funding	If feedback is positive, internal or external funding should be explored and a proposal and plan developed to submit a funding application.	2	n/a	WHBC	n/a	n/a	-
CW7	Submit Environmental Land Management Scheme application	Develop and a submit a new Environmental Land Management Scheme application.	3	TBC	WHBC	n/a	n/a	-



Key

- Site boundary
- Furniture
- Access Points
- Permissive footpaths
- Ditch
- Pond
- Fen
- Orchard
- Grassland
- Grassland - grazed
- Mature scrub with trees
- Woodland
- Wet woodland
- Cropland

Client			
Welwyn Hatfield Borough Council			
Project			
The Commons LMP			
Title			
Site Action Plan Map			
Drawn	TS	Checked	LW
Drawing No.	MH9028-003		Date
			05.01.2024
			Revision
			Issue
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6.2 ANNUAL MAINTENANCE & MONITORING SCHEDULE

Ref	Item	Detail	Start	End	Frequency	Years	Quantity	Unit	Responsibility
AM1a	Grazing – Annual inspection	Undertake a walkover check of all grazing infrastructure including gates, fences, corral, and troughs.	Apr	May	Annual	All	1	Item	Grazier
AM1b	Grazing – Lower Windmill Hill	Cattle grazing to continue on Lower Windmill Hill.	May/Jun	Aug	Annual	All	1	Item	Grazier
AM1c	Grazing – Howlands Meadow	Cattle to be moved to Howlands Meadow.	Aug	Oct	Annual	All	1	Item	Grazier
AM1d	Grazing – Monitoring	Ongoing monitoring visits to check on cattle and infrastructure including checking stocking densities for patterns of under achievement.	May/Jun	Oct	Annual	All	1	Item	Grazier
AM1e	Grass cutting	Non-uniform topping of Lower Windmill Hill and Howlands Meadow in late summer leaving a longer sward around field margins, if grazing has not achieved the desired objective. Annual as needed depending on success of grazing.	Sep	Oct	Annual	As required	2	ha	Contractor
AM2	Fen – Cutting	Maintain the extent of fen habitat by cutting to prevent succession to scrub. Material to be collected and removed.	Oct	Feb	Annual	All	1.3	ha	Volunteers
AM3a	Upper Windmill Hill – Ground preparation and seeding	Continue to follow existing management regime. Top, plough and sow annual wild seed mix on cropped area. Promote the establishment of wildflowers such as cornflower by including small quantities of seed in sown mixtures from time to time.	Mar	Apr	Annual	All	1.5	ha	Contractor
AM3b	Upper Windmill Hill – Cutting arable margins	Maintain a wide grass headland and margin around the cropped area. Cut sections every 2-3 years on rotation to prevent scrub.	Mar	Apr	Every 2-3 years	Follow existing plan	~400	Lm	Contractor
AM4	Scrub Management	Rotationally coppice scrub areas to provide habitat diversity and prevent succession into woodland. Undertake targeted scrub management surrounding the fen to prevent succession to wet woodland.	Oct	Feb	Annual	All	~0.25	Ha	WHBC & Volunteers

Ref	Item	Detail	Start	End	Frequency	Years	Quantity	Unit	Responsibility
AM5a	Woodland – Coppicing	<p>Coppice hazel and pollard willow on rotation in woodland surrounding Blackfan Fen to maintain habitat diversity, prevent succession to woodland and open up the woodland floor.</p> <p>Overstood hazel to be coppiced first. Approx. 3-6 coppiced in one location per year on an eight-year cycle. Stools should be cut 10-20cm from the ground and at a 30-45° angle to allow water to run off.</p> <p>Stack brash on coppiced stumps to protect regrowth from deer browsing.</p>	Dec	Feb	3-6 per year	All	~4.7	Ha	Volunteers
AM5b	Woodland – Pollarding	<p>Pollard willow on rotation in woodland surrounding Blackfan Fen. Maintain willow pollards at a height suitable for continued management by volunteers.</p> <p>Branches should be pruned just above the previous cuts on a 3-4 year cycle</p>	Dec	Feb	Every 3-4 years	3,6,9	~1.7	Ha	Volunteers
AM6	Howlands Meadow – Scalloping	<p>Rotationally cut the ride in offset scalloped sections. A scallop should be created each year on a continuous cycle and be approximately 10m deep by 30m wide.</p> <p>Herbaceous vegetation within the scallop to be cut and collected to prevent nutrient enrichment of the soil. All scrub and trees within the scallop to be coppiced and the arisings used to protect regrowth from deer browsing or to create habitat piles around the edge (half in the shade and the cut half facing the sun).</p> <p>Once all scallops have been established (after 8-10 years), scallops to be cut annually on rotation, with the oldest scallop cut first.</p>	Oct	Feb	1 per year	All	~400	Lm	Volunteers
AM7	Tree Safety Inspection	<p>Lantra-qualified Professional Tree Inspector to undertake a Tree Safety Inspection at least every 3 years; any trees with significant defects requiring remedial works will be recorded in a detailed report.</p> <p>Survey to include for inspecting oak trees for evidence of OPM.</p> <p>Survey to include inspecting ash trees for evidence of ash dieback in the woodland to the north of Hatfield Hyde Brook</p>	Jan	Dec	Every 3 years	1,4,7,10	1	Item	WHBC

Ref	Item	Detail	Start	End	Frequency	Years	Quantity	Unit	Responsibility
AM8a	INNS – Monitoring	Undertake an annual walkover survey for variegated yellow archangel and Japanese knotweed in accordance with the 2021 INNS Management Plan.	May	Sep	Annual	All	1	Item	WHBC or Contractor
AM8b	INNS – Variegated yellow archangel control	Removal of variegated yellow archangel by hand pulling and digging of the plants and their roots. Plant material can be buried on site or disposed offsite as controlled waste. Good biosecurity procedures are necessary to prevent the spread of the species around and off site on equipment and boots.	Feb	Mar	Annual	All	1	Item	Volunteers
AM8c	INNS – Japanese knotweed control	Installation of fencing and cessation of vegetation cutting in this area to prevent the spread of Japanese knotweed around and off site. Regrowth to be monitored and subject to the control measures in the 2021 INNS Management Plan.	Jan	Dec	Annual	All	1	Item	WHBC
AM9a	Maintaining Footpaths & Entrances – Scrub management	Scrub along site entrances or footpaths may need to be cut back for access.	Oct	Feb	Annual	All	~700	Lm	WHBC & Volunteers
AM9b	Maintaining Footpaths & Entrances – Dead hedges	Dead hedges using material from works on site should continue to be used as natural fences along footpaths and around the fen.	Jan	Dec	Annual	As required	TBC	Lm	WHBC & Volunteers
AM9c	Maintaining Footpaths & Entrances – Chipping	Consider chipping brash from coppicing works on site and spreading on paths which become muddy in winter. Chipping will likely need to be replenished annually. Additionally, consider using larger branches from tree works to line path edges.	Jan	Dec	Annual	As required	TBC	Lm	WHBC & Volunteers
AM10	Hedgerow Management	Re-visit all hedgerows restored during previous plan and undertake management as necessary such as re-laying or gapping up.	Oct	Feb	Every 3-5 years	As required	TBC	Lm	WHBC & Volunteers
AM11a	Ditch & Pond Management – Pond Maintenance	Subject to the results of the GCN survey, ponds should continue to be cleared of one third of aquatic and marginal plants per year to ensure open water is maintained. Cleared material can be left in piles on site for wildlife.	Sep	Feb	Annual	All	2	No.	Volunteers

Ref	Item	Detail	Start	End	Frequency	Years	Quantity	Unit	Responsibility
AM11b	Ditch & Pond Management – Ditch Maintenance	Coppice 20-30m sections of scrub and bankside vegetation on rotation to vary light levels and encourage regeneration of vegetation.	Oct	Feb	Annual	All	~1300	Lm	Volunteers
AM11c	Ditch & Pond Management – Clearance	Remove litter and major obstructions to flow, especially in Fen & Hatfield Hyde Brooks.	Jan	Dec	Every 3-4 months and after every storm event	All	~1300 2	Lm No.	WHBC & Volunteers
AM12a	The Orchard – Planting	Aftercare of newly planted trees. Keep area around trees free of weeds. Water regularly through dry summer months.	May	Sep	As required	1-3	0.08	ha	Volunteers
AM12b	The Orchard – Pruning	Once established, undertake a programme of fruit tree pruning as identified in monitoring visits. Arisings can be left onsite to decay naturally as if they have fallen.	Nov	March	As required	6+	n/a	n/a	Volunteers
AM12c	Traditional Orchard – Grass Maintenance	Grass to be mechanically cut on a monthly basis to keep down scrub. Once the scrub has been controlled, consider reducing mowing frequency in future, and manage grassland with a hay cut taken in late-summer.	April	Sep	Monthly	1-3 (then review)	0.08	ha	Volunteers
AM13	Litter Picking & Site Cleaning	Carry out regular litter picking on site and remove any fly-tipped material. Clean and repair benches and signs as necessary.	Jan	Dec	Annual	All	1	Item	WHBC
AM14	Species Monitoring	Monitoring for species such as birds, bats, great crested newt, butterflies, flora and small mammals should continue. Results should be shared with relevant bodies.	Jan	Dec	Ongoing	All	n/a	n/a	WHBC & Volunteers
AM15	Volunteer Training	Continue volunteer training sessions in first aid, leadership and other skills so that the groups work safely and effectively on the reserve.	Jan	Dec	Ongoing	All	n/a	n/a	WHBC & Volunteers
AM16	Communication	Continue to share site updates through social media, newsletters and on-site signage. Include messages that seek to recruit more volunteers.	Jan	Dec	Ongoing	All	n/a	n/a	WHBC & Volunteers

7. Monitoring & Review

The Commons LMP is intended to cover a period of ten years, from 2024 to 2034. Monitoring will be used to measure the success of ongoing management and any capital enhancement works on site and to determine how site usage and habitats are responding to the changes. This information will then be utilised to modify management operations as required.

7.1 ANNUAL MANAGEMENT MEETINGS

It is recommended that annual management meetings are held between WHBC, stakeholders and contractors in order to review the progress of site management for the current year, and to agree the work programme for the forthcoming year. This approach will allow management objectives to be adjusted through the course of this plan or as and when the conditions on site change in response to management.

7.2 MANAGEMENT PLAN REVIEW

The management plan is intended to run for a period of ten years in which time it is hoped that the majority of the actions set out within the Capital Works Programme will be completed. At the end of the ten-year period, a meeting will be held with the landowner and all relevant stakeholders to discuss the progress of the plan and review successes, failures, and lessons learnt. The process of reviewing and amending the document, and the preparation of new action plans, will help build a new plan for the period 2034 - 2044.

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