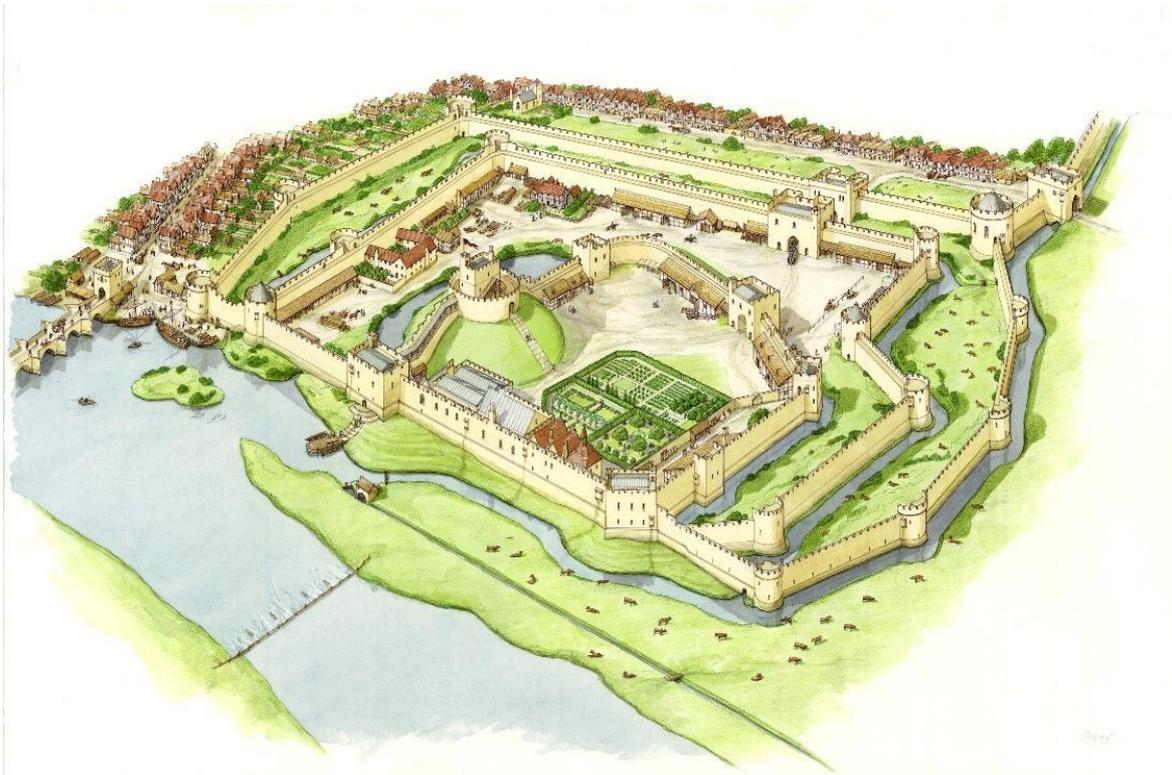


Wallingford Castle Meadows

SITE MANAGEMENT PLAN

2012 - 2017

Prepared by Earth Trust on
behalf of South Oxfordshire
District Council



Artist's impression of Wallingford Castle in the late 13th Century

Contents

	Page
1. Introduction	3
2. Site description	3
3. Policy	5
3.1 Policy statement for Wallingford Castle Meadows	5
3.2 Other policies relevant to the site	5
3.2.1 Ancient Monuments and Archaeological Areas Act 1979	5
3.2.2 Listed Buildings	5
3.2.3 Conservation area	5
3.2.4 Wildlife and Countryside Act (1981)	5
3.2.5 Trees	6
3.2.6 Occupiers Liability act	6
3.2.7. Health and Safety at Work act	6
3.3 Other legal agreements	6
4. Management	7
4.1 Management Infrastructure	7
4.2 Resources	8
4.3 Countryside Stewardship Agreement	9
4.4 Compartments	9
5. Environmental Information	10
5.1 Physical	10
5.1.1 Climate	10
5.1.2 Hydrology	11
5.1.3 Soils	11
5.2 Biological	11
5.2.1 Vascular plants	11
5.2.2 Fish, reptiles and amphibians	11
5.2.3 Birds and mammals	12
5.2.4 Water voles	12
5.2.5 Invertebrates	12
5.3 Communities	13
5.3.1 Improved grassland	13
5.3.2 Semi-improved grassland	13
5.3.3 Ponds	14
5.3.4 Mature trees	14
6. Cultural information	14
6.1 Archaeological/past land use	14
6.2 Recent land use	16
6.3 Landscape	17
6.4 Victorian parkland plantings	17
7. Recreation, interpretation, education	17
7.1 Educational, research or interpretation use/facilities	17
7.2 Recreational use/access	18
7.3 Vandalism and anti-social behaviour	20

8.	Marketing	20
	8.1 Introduction	20
	8.2 Visitor composition	21
	8.3 Access	21
	8.4 Interpretation	21
	8.5 Events	22
	8.6 Satisfaction	22
	8.7 Conclusions	22
9.	Environmental Sustainability	22
	9.1 Introduction	22
	9.2 Sustainable Procurement	22
	9.3 Carbon Reduction	23
	9.4 Waste Management	23
	9.5 Pollution Reduction	23
	9.6 Biodiversity Protection and Enhancement	24
10.	Features of interest	24
	10.1 List of features	24
	10.2 Evaluation of Features	24
	10.2.1 Scheduled Ancient Monument	25
	10.2.2 Buried archaeology	25
	10.2.3 Victorian plantings	25
	10.2.4 Drainage ditches	25
	10.2.5 Lower meadows	26
	10.2.6 Upper meadows	26
	10.2.7 Victorian pond	26
	10.2.8 Public access	27
	10.2.9 Interpretation and education	27
11.	Management and monitoring objectives	27
	11.1 Scheduled Ancient Monument	27
	11.2 Buried archaeology	29
	11.3 Victorian plantings	30
	11.4 Drainage ditches	31
	11.5 Lower meadows	33
	11.6 Upper meadows	34
	11.7 Victorian pond	35
	11.8 Public access	37
	11.9 Interpretation and education	39
	11.10 General site management	41
12.	Summary of management and monitoring activities	43
13.	References	55

Appendices

All appendices are available as separate documents that can be found on the web at: www.earthtrust.org.uk Documents are also available as hard copies on request.

Appendix 1	Biological information
Appendix 2	Strategies – Interpretation, Education and Tree Planting
Appendix 3	Accessibility Information - Access Report and EIA findings
Appendix 4	Visitor survey results 2002 – 2008
Appendix 5	Risk Assessment Form

1. Introduction

This is the third version of the Wallingford Castle Meadows Management Plan. The first was written by the Northmoor Trust (now Earth Trust) on behalf of South Oxfordshire District Council. The second plan was produced by the Council and was adopted on 1st April 2006. This third plan is not a new document but reviews and updates the information and actions outlined in the second plan that covered the period April 2006 – 2011. The new plan covers the period 2012 – 2017.

Additional objectives and actions were identified by looking at the experience of managing the site over the second plan period, and by consultation with the Meadows Advisory Group. Further objectives became apparent during the Higher Level Stewardship application process. Only those additional actions and objectives that were compatible with the overall plan vision and policies have been incorporated into the revised plan.

2. Site description

Map 1. Wallingford Castle Meadows in context



Location

Name:	Wallingford Castle Meadows
OS Grid Reference:	SU 608 898
OS sheet numbers:	Landranger (1:50 000) no. 164 Explorer 151
District:	South Oxfordshire
County:	Oxfordshire
Country:	ENGLAND

Local Planning Authority:

South Oxfordshire District Council

Current status:

Site contains a Scheduled Ancient Monument (SAM) and two sections of walls that are Grade I listed buildings. The whole site lies within a Conservation Area. There are no biological designations.

Total area:

16.6 hectares (c. 41 acres)

Person responsible for site:

Dominic Lamb, Planning,
SODC, Council Offices, Benson Lane,
Crowmarsh, Wallingford, Oxon OX10 8NJ
Tel: 01491 823133 email: forestry@southoxon.gov.uk

Owner:

South Oxfordshire District Council

Type of holding:

Freehold

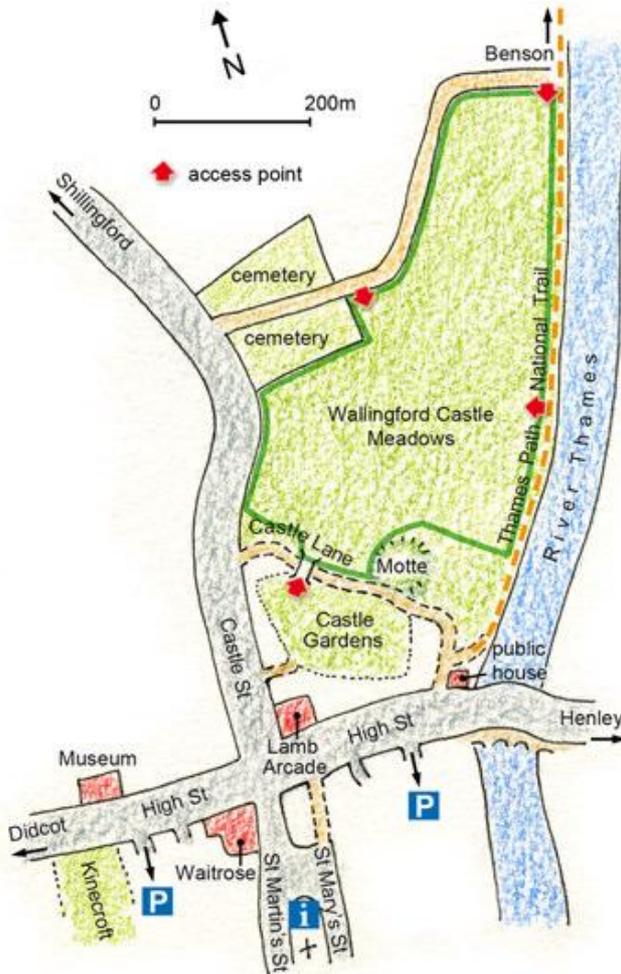
Date of purchase:

31st March 1999

Land Tenure

This is not a legal document. Please refer to the original tenure documents before taking any decision or action that may have legal implications.

Map 2. Location of Wallingford Castle Meadows



3. Policy

3.1 Policy Statement for Wallingford Castle Meadows

South Oxfordshire District Council acquired Wallingford Castle Meadows in 1999 for the benefit of the people of South Oxfordshire. The site is managed for informal recreation consistent with the proper preservation and interpretation of the Wallingford Castle Scheduled Ancient Monument and other historical landscape features, and the conservation and enhancement of wildlife.

The management of Wallingford Castle Meadows directly contributes to two of the Council's Strategic Objectives:

- To maintain and enhance the environment.
- To improve health and well-being.

In addition it indirectly contributes to the Council's strategic objective to maintain and improve the economy by helping to boost the local tourist industry.

3.2 Other Policies Relevant to the Site

3.2.1 Ancient Monuments and Archaeological Areas Act 1979

Much of the site (Areas U1, U2 and U4, as shown on Map 3) is within the Scheduled Ancient Monument. Scheduled Monument Consent (granted by the Department for Media, Culture and Sport following recommendations from English Heritage) is needed for any invasive works that would affect the archaeological deposits on the site. The standing fragments of castle wall at SU 6102 8971 and SU 6096 8978 are also listed as Grade I buildings. Scheduled Monument Consent takes precedence over Listed Building Consent and therefore it is the former that would be required for any works (including repair) to their fabric.

Certain procedures also exist for 'emergency' works (e.g. to protect public safety). There is an obligation to address the repair needs of the masonry fragments and consequently to seek guidance from English Heritage at an early stage. It should be noted that any repair works (particularly of an extensive nature) would need to be preceded by a programme of archaeological recording.

3.2.2 Listed Buildings

In addition to the masonry fragments referred to above, the walls, gates, lodge and chapels of Wallingford Cemetery (not within the Wallingford Castle Meadows, but abutting compartment U3) are Grade II listed buildings. It may be necessary to carry out repairs to the cemetery walls. Clearly, these repairs should be carried out in accordance with their listed status. Work/development affecting the 'setting' of any of the listed buildings would need to ensure the preservation of their 'setting' [Planning (Listed Buildings and Conservation Areas) Act 1990].

3.2.3 Conservation Area

The whole site is within the Wallingford Conservation Area. In addition to works affecting trees (see below), there would be a duty under the terms of the Planning (Listed Buildings & Conservation Areas) Act 1990 on the Council as Local Planning Authority to ensure that any works within the site had the effect of 'preserving or enhancing the character and appearance' of the area.

3.2.4 Wildlife and Countryside Act (1981)

This is of particular importance with reference to water voles, which are

protected under Schedule 5, Section 9(4) of the Wildlife and Countryside Act (1981). Under this scheduling, it is an offence to:

- Damage, destroy or obstruct access to any structure or place that water voles use for shelter or protection.
- Disturb a water vole while it is using such a place.

Common frog and common toad are also covered under Schedule 5. In addition, the Act will be of relevance to other species on the site, e.g. nesting birds.

3.2.5 Trees

As set out in the 1975 regulations (amendments to the Town and Country Planning Act regarding Trees in Conservation Areas) the Council is exempt from the regulations “for work on trees on land occupied by the Local Planning Authority and carried out with the Local Planning Authority’s consent”. Clearly, the Council’s Forestry Officer would be closely involved in any works necessary.

3.2.6 Occupier’s Liability Act

This Act imposes an obligation on all occupiers of the land, to ensure that every reasonable care is taken to remove any risk both to visitors and trespassers.

3.2.7 Health and Safety at Work Act

All operations carried out on site must be undertaken by trained personnel using methods and equipment approved by the Health and Safety Executive, and also in compliance with national and local safety procedures. This obligation is extended to ensuring compliance by contractors working on the site.

3.3 Other legal agreements

The Land Registry Transfer document dated 31st March 1999 imposes certain restrictive covenants on the land acquired by South Oxfordshire District Council. Most of these are of minor significance given the use of the site implied by the Policy Statement (page 6).

Castle Park (Wallingford) Company Limited¹ reserve the right of access to their retained land and Thameside Mansions with or without vehicles in case of emergency or if access via Castle Lane is impassable, along the track from the end of Cemetery Lane, shown “A” - “B” on Map 3, or along such other route agreed between both parties. Except in cases of emergency, 48hrs notice is required before entry, and all damage occasioned by the exercise of the right of access will be made good. The track referred to is mainly within compartment U3, and to the south, forms the division between U2/U1 and U5/U4.

The District Council assumes responsibility for all boundaries of the site.

A local land charge or planning obligation dated 26th November 1996, originally between Edward Ryall and SODC, is in force, prohibiting *any building structure, erection or hardstanding of any kind whether temporary or permanent . . . to be constructed placed or erected* on the land. This obligation is now of no effect, as the Council as Local Planning Authority cannot take action against itself as landowner.

¹ FPD Savills, Black Horse House, 5 Wallbrook Court, North Hinksey Lane, Botley, Oxford, OX2 0QS (managing agent).

4. Management

4.1 Management Infrastructure

As the site owner, South Oxfordshire District Council (comprising Councillors and Officers) is the budget-holder and ultimate decision-maker. The Council sets and reviews policy and targets for the site.

Responsibility for the overall management of the site and the implementation of the Management Plan rests with the Council's Countryside Officer who works closely with a warden who is responsible for day-to-day management. At the time of writing this plan the warden post is provided through a contractual agreement between the Council and the Earth Trust. This arrangement will be reviewed in, on or before April 2016 in accordance with the Councils Contract Procedure Rules.

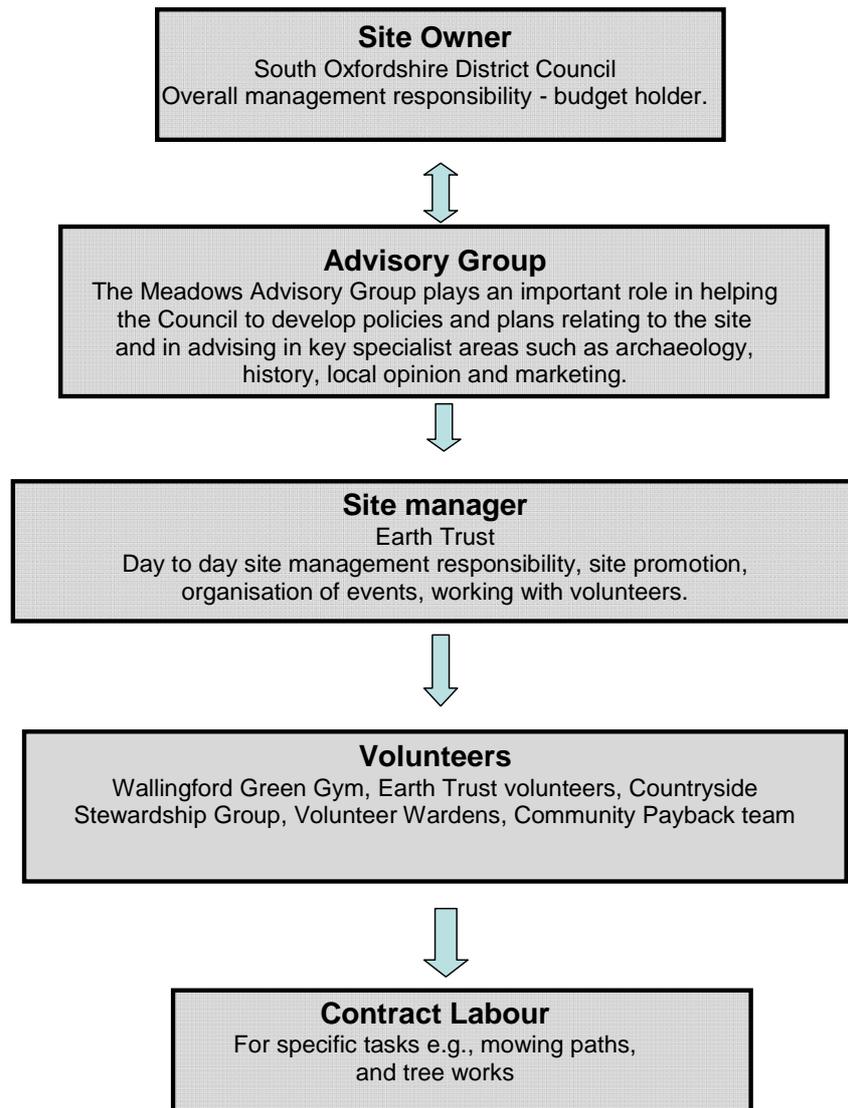
The Earth Trust are contracted to provide full time wardening cover for Wallingford Castle Meadows and two other council owned sites. The Trust is responsible for undertaking all aspects of site management contained in this plan. The Council is the budget holder and all expenditure has to be agreed in advance. In practice the Trust is able to purchase items and re-charge the Council. The warden and the Council have quarterly review meetings to review progress against an agreed set of targets and there is regular communication over all aspects of site management between the Trust and Council.

The Earth Trust has been used as the main contractor delivering site management services for the last ten years. This contractual relationship is mutually beneficial for the following reasons:

- The Trust has significant organisational resources which it can utilise to support the contract (i.e. in house ecological, land management and event organising expertise).
- The Trust benefits by being able to engage with local communities surrounding its base at Little Wittenham.
- The Trust has expertise and experience in dealing with volunteers as well as having a pool of regular volunteers that can be called on to help.

The Meadows Advisory Group was set up in 2000 to help the council in its management of the site. The group has members from all the principal bodies with an interest in the site. Its role is to ensure these bodies are properly informed and consulted, to review and give advice on general progress and specific issues, and assist with the maintenance of the management plan. It has an important role in extending contacts for the site into a wider network. A flow chart showing the management infrastructure is shown overleaf in Figure 1.

Figure 1: Management Infrastructure



4.2 Resources

In order to effectively implement the objectives and actions identified in this plan sufficient resources are required. The management flow chart identifies the staff and voluntary resources that input into the management of the site. The massive contribution of the local community in the management of the site through various forms of volunteering cannot be overstated in its importance and the maintenance of good community relations is key to ensuring the effective long-term management of the site.

In addition to these staff and voluntary resources the Council has and continues to invest significantly in the development of the site since its purchase in 1999.

Capital expenditure:

In total £146,000 has been spent in developing the site infrastructure. This has included several major projects such as the restoration of the bridge entrance over Castle Lane and the stabilisation of the standing remains.

Revenue expenditure:

There is an annual revenue budget, which in 2010-11 totalled £29,700. This budget pays for the contractual agreement with the Earth Trust and the day-to-day management of the site.

4.3 Higher Level Stewardship Agreement

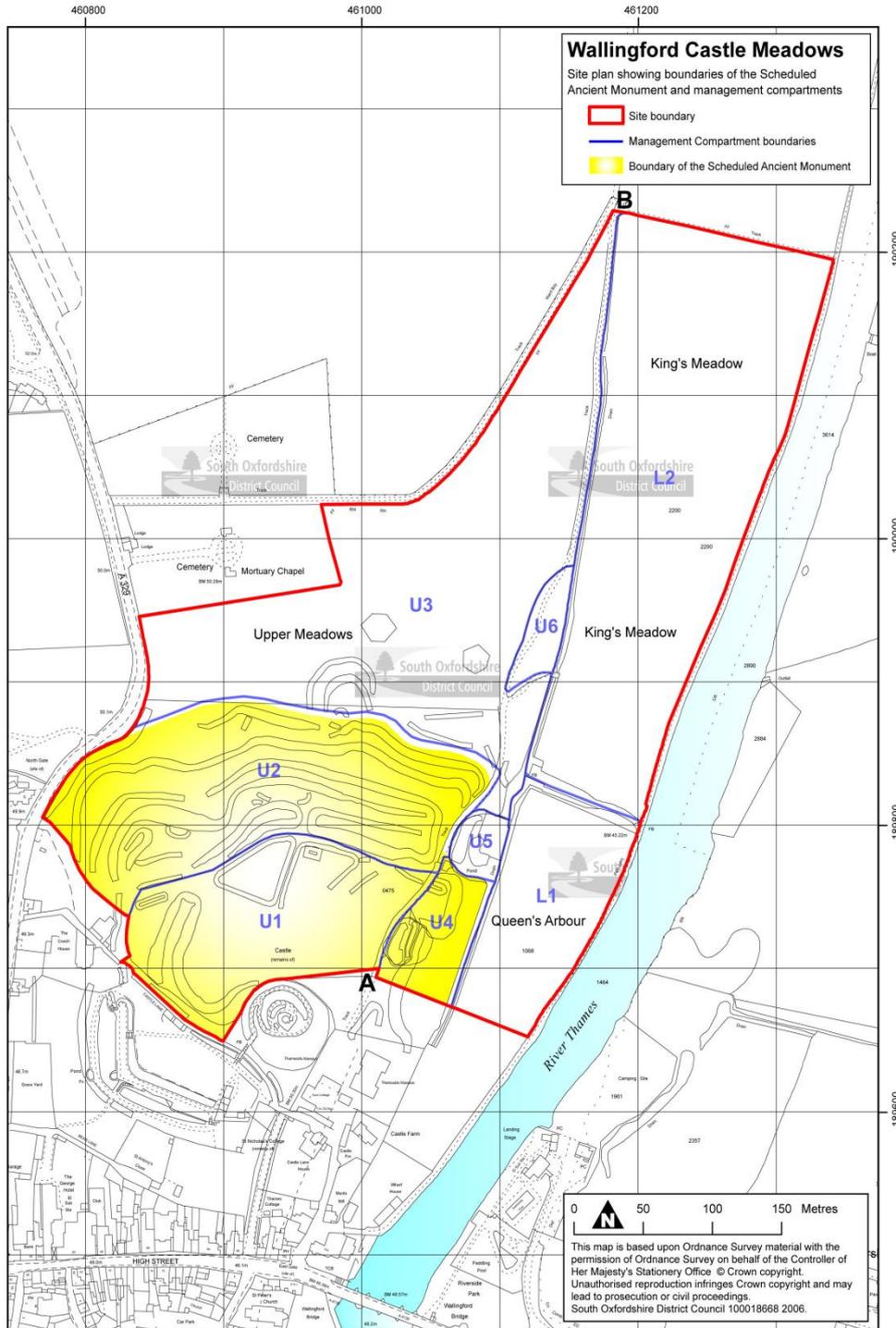
Since October 2000 the site has been in one of the Governments agri-environment schemes. The most recent Higher Level Stewardship agreement was signed in April 2011. The agreement pays a small amount towards the revenue costs of managing the site as well as capital items such as maintenance of the standing remains, remedial fencing works, tree planting and the installation of bat and bird boxes.

The agreement also places certain restrictions on management activities that are consistent with the management outlined in this management plan. If for any reason the management is to deviate from that outlined in this plan or the agreement then Natural England (NE) should be informed to ensure that it doesn't adversely affect the agreement. If management is changed and NE isn't consulted this could result in the Council being asked to repay the money that it has received.

4.4 Compartments

For reference, the site has been divided into 7 management compartments: U1, U2, U3, U4, U5, U6 (all on higher ground), L1 (Queen's Arbour) and L2 (King's Meadow) see Map 3 overleaf.

Map 3 – Site and Management Compartments



5. Environmental information

5.1 PHYSICAL

5.1.1 Climate

The climate is mildly continental with cold winters and hot summers. Frost occurs on an average of less than 80 days per year. Mean monthly minimum

temperatures of around -1.0°C occur in February. Mean monthly maximum temperatures of around 24-26°C occur in July.

5.1.2 Hydrology

No detailed hydrological survey of the site has been undertaken. Detailed topographic surveys of the two lower compartments were undertaken by the Babbie Group in September 1999 and printed at 10cm contours. Parts and sometimes all of the lower fields flood in winter and these flood instances have been mapped.

Information from Mr Edward Ryall, the previous land manager, indicates that two pipes drain compartment L2 (King's Meadow) into the ditch between L2 and U3, but the pipe at the north of L2 is blocked and non-functional. A functional pipe put in by Mr Ryall drains the centre section and joins the ditch some short distance north of the southern bridge. There is some drainage on the top fields, but the plans have been lost.

5.1.3 Soils

There is no record of a systematic survey. The 1:25,000 Soil Survey of England and Wales (1983) records the area as within the Sutton 2 series, river terrace gravels, with well-drained fine and coarse loamy soils usually over gravel with a calcareous matrix. Very preliminary sampling in September 1999 indicated the soils of the upper fields are silty loams and sandy silty loams with a pH of between 7.0 and 7.7. The lower fields are silty clay loams and slightly more alkaline, with a pH of between 7.5 and 8.0.

5.2 BIOLOGICAL

5.2.1 Vascular plants

The first detailed botanical survey was undertaken in early July 1999. Since this time several surveys have been undertaken on the site combined with casual observations. The results of the surveys to date are listed in Appendix 1. Generally the botanical composition of the grassland is species poor as it has been intensively managed in the past. There are localised patches of more diverse grassland particularly associated with the moat area in the inner bailey in compartment U1. Patches of more diverse grassland have been established on the sites of trenches associated with the four years of archaeological investigations during the Burh to Borough Project. The ditches and pond have a more diverse flora most notably including two small clumps of Loddon Lily along the banks of the ditch in Queen's Arbour (L1) and a small population of Snake's-head fritillary in compartment U5.

A number of species have possible implications for management. There are patches of thistles, including Spear and Creeping thistle and common ragwort scattered across the site. These are potentially invasive species. There is also a local dominance of wall barley (*Hordeum murinum*) in U3, which affects the quality of grazing.

5.2.2 Fish, Amphibians and Reptiles

Casual observations have been made over the last 10 years and the pond in compartment U5 has been surveyed on several occasions by bottle trapping, torch survey and egg searching. Fish fry, possibly minnows (*Phoxinus phoxinus*), are numerous in this pond. Common frog (*Rana temporaria*) and common toad (*Bufo*

bufo) have been recorded in both ponds and the ditches. Newts have not been positively recorded.

Grass snakes (*Natrix natrix*) have been recorded from a variety of locations around the site. Grass snakes are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981).

5.2.3 Birds and Mammals (general)

Regular bird recording on the site began in August 2004 and a summary of the findings to date is included in Appendix 1. Six Schwegler bird boxes were installed in May 2005 to provide additional breeding sites for birds. Scrapes were dug on the lower meadows in November 2003 to provide conditions suitable for over-wintering waders. All the nest boxes were in use during the summer of 2005 although no waders have yet been recorded using the scrapes.

There is a large population of rabbits (*Oryctolagus cuniculus*). Management to control the population has been carried out over the last 10 years when required, this aimed to prevent erosion to the earthworks and to reduce the considerable grazing pressure on the grassland. To date these efforts have been partially successful in controlling rabbit numbers, however this aspect of site management has proved controversial and unpopular with the public.

Six species of bat have been recorded using the site. These include the common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), daubenton (*Myotis daubentonii*), brown long-eared (*Plecotus auritus*), serotine (*Eptesicus serotinus*) and the noctule (*Nyctalus noctula*). All species of bat are protected under both British and European legislation. It is likely that other species use the site. Further recording will be needed to determine the status of bats on the site and to identify any roosting sites. Ten Schwegler bat boxes were erected in autumn 2008 and five of these were in use in 2011.

Badgers are known to use the site; although there are no setts on site there is one immediately adjacent.

5.2.4 Water voles

A small population of water voles previously inhabited the drainage ditch between the upper and lower meadows. Signs of activity, including feeding remains, burrows and latrines, were found up until 2006 but no positive signs have been recorded since. The population was small and very fragile, which would have limited its long term viability. Over the past five years management has focused on increasing the amount of suitable water vole habitat by selective scrub clearance along the ditch sides, increasing the mean water level in the ditches to encourage the growth of marginal vegetation and fencing the ditches to create a buffer from the meadows and grazing animals.

5.2.5 Invertebrates

Casual observations, mainly of butterflies and dragonflies, were made during the site survey (Appendix 1). Net samples were taken from the eastern pond (U5). The white-legged damselfly (*Platycnemis pennipes*) is a Nationally Notable species. Adults were seen foraging across the site but the larvae will inhabit the river. There is a small colony of marbled white butterfly (*Melanargia galathea*) associated with the more botanically diverse grassland. No aquatic invertebrates of note were recorded. Stag Beetles have been recorded from across the site;

they are Nationally Notable and a UK BAP priority species. A hornet robber fly was recorded during a survey in 2008 and a small blue butterfly was noted during the 2011 butterfly survey.

5.3 Communities

The site is mainly open, scrub free grassland, though there are two small spinney's of trees, one around the Victorian pond and the other just to the north of the main gate between the upper and lower meadows. A copse of predominantly hazel, with other species, is located at the northern end of U3. Two principal drainage ditches adjoin and bisect the lower fields. The castle earthworks and two remaining pieces of masonry add greatly to the habitat diversity of the upper field in compartments U1, U2 and U4.

5.3.1 Improved Grassland

Much of the site consists of very species-poor agriculturally improved grassland. The lower fields (L1 and L2) occupy a level tract of land bordering the river Thames, parts of which flood in winter. The sward was reseeded about 25 years ago, and is dominated by perennial rye grass (*Lolium perenne*) representing an MG7 Rye Grass ley.

A large amount of work has been undertaken to remove the weed problems on these fields, which has been successful. A strip of land adjacent to the river bank in compartment L2 seems to have been re-sown with a wild flower mix, with species such as yarrow (*Achillea millefolium*), oxeye daisy (*Leucanthemum vulgare*) and selfheal (*Prunella vulgaris*) occupying a distinct vegetation band. These fields are bordered by deep drainage ditches, which in places are overgrown and shaded by shrubs such as blackthorn (*Prunus spinosa*). The ditches also contain a few common wetland plants, such as water figwort (*Scrophularia auriculata*), water dropwort (*Oenanthe crocata*) and purple loosestrife (*Lythrum salicaria*).

The upper fields occupy higher ground above the flood plain. Again the sward is dominated by perennial rye grass, but other grasses including timothy (*Phleum pratense*) and cocksfoot (*Dactylis glomerata*) are more apparent. Locally wall barley (*Hordeum murinum*) is conspicuous, most notably in compartment U3. The flora is very impoverished but, locally, patches of more interesting plants such as yarrow and selfheal can be found, especially on the earthworks of compartments U1 and U2.

5.3.2. Semi-improved Grassland

There is a small pocket of relic grassland, which has escaped herbicide and fertiliser inputs, occupying the earthworks in the south-western corner of compartment U1 (adjacent to the Castle Gardens). A National Vegetation Classification (NVC) survey was undertaken in this area (see Appendix 1 for details of NVC methodology).

The slopes are occupied by mesotrophic grassland with a calcicolous element. The presence of species such as bird's-foot-trefoil (*Lotus corniculatus*) suggest affinities to an MG5 Knapweed-Crested Dogstail community – the typical vegetation found on traditionally managed grazed hay-meadows on circumneutral soils in lowland England (Rodwell 1992). Other species of interest include quaking grass (*Briza media*), field woodrush (*Luzula campestris*), hoary plantain (*Plantago media*), cowslip (*Primula veris*) and

burnet saxifrage (*Pimpinella saxifraga*). However, the high proportion of false oat-grass (*Arrhenatherum elatius*) in the sward indicates a transition towards an MG1 False Oat-grass community, which typically follows relaxation of grazing pressure. This vegetation type is not found anywhere else on the site.

5.3.3 Ponds

There are two ponds present on the site. The western pond in the southern corner of compartment U1 represents the remains of the principal castle moat. It holds water only seasonally, but remains damp throughout a dry summer. The central area has become dominated by floating sweet-grass (*Glyceria fluitans*). The damp marginal areas support a distinctive flora dominated by brooklime and creeping jenny, with other species of interest including cuckoo flower (*Cardamine pratensis*) and pink water speedwell (*Veronica catenata*). This vegetation type is not found elsewhere on the site.

The eastern pond, in compartment U5, was created in Victorian times and planted with a number of trees and herbaceous species to form an attractive landscape feature. In more recent times the pond became heavily shaded by trees, mainly self-sown horse chestnut (*Aesculus hippocastanum*) and sycamore (*Acer pseudoplatanus*).

In 2001 many of the trees on the south and south-eastern side were removed to allow more light in. Since this time the number of emergent plants found in the pond has increased. A small colony of Snake's-head fritillary (*Fritillaria meleagris*) was discovered in 2005, this is likely to have been planted as part of the original landscaping and only became obvious with the removal of the trees. There are large colonies of snow drop and daffodil in the area which presumably are also remnants of the original landscape design.

In spring 2006 the pond area was opened up to the public with the installation of gates and a path. A recycled plastic viewing platform was installed over the pond in the summer of 2011.

5.3.4 Mature Trees

There is no true woodland on the site. However, there are a number of mature specimen trees (see South Oxfordshire District Council tree survey report by Andrew Nall and Martin Gammie), some supporting exceptional growths of ivy (*Hedera helix*) widely scattered across the site. There are some fine 'parkland' oaks (*Quercus robur*) and beech (*Fagus sylvatica*) and a clone of pollarded mature grey poplars (*Populus canescens*) in compartment L1

There are also a number of large exotics, including Wellingtonia (*Sequoiadendron giganteum*) holm/evergreen oak (*Quercus ilex*) and various pines (*Pinus* spp.). A number of dead trees have been removed for safety reasons and the logs left on site as deadwood habitat. Over the last 8 years replacement planting for the lost parkland trees has been carried out and a number of new parkland features added, including two roundels of native oaks in compartment U3.

6. Cultural information

6.1 Archaeological/past land use

The following account, which deals mainly with the castle, is based on information provided by The Wallingford Historical and Archaeological Society

(TWHAS), supplemented by additional references. It is not intended to be definitive and much additional research is needed, especially for the post-medieval period, including a thorough investigation of all available map evidence, which may cast much light on the comparatively unresearched areas of land north of the visible castle earthworks.

While there is evidence for prehistoric and Romano-British activity in the immediate area, the present town of Wallingford was founded as a fortified town or *burh* in the late ninth century. It was surrounded on the north, west and south by substantial ramparts of timber and earth construction, and a water-filled ditch fed from a stream to the west. The eastern boundary was protected by the River Thames, very probably with a narrow bridge-head on the other side of the river (Hinton, 1990). The northern section of the town (modified by construction of the medieval castle) appears to coincide with the boundary of compartments U1 and U2, with its ditch terminating in U5, possibly associated with the present pond. These defences did not however prevent the destruction of the town by Vikings in 1006.

In 1067, following William the Conqueror's crossing of the Thames at Wallingford in his year of conquest, an order was made for the construction of a castle. This was built in the north-east corner of the town, and incorporated a section of the Anglo-Saxon rampart and ditch in its fortifications. The first phase, a motte and bailey castle, seems to have been finished in 1071, and occupied part of compartment U1 and land in the present Castle Gardens. The Domesday survey (1086) makes reference to the destruction of eight properties (*hagae*) during the building of this castle. At this time Wallingford was the most important town in Berkshire with 491 houses, compared with 100 in Windsor and 28 in Reading (Hedges, 1881) and still vied in importance with both Abingdon and Oxford (Blair, 1995).

The castle remained in royal hands throughout the 12th century, played an active role in the 'Anarchy' of Stephen's reign (Slade, 1960), and was extended in the early 13th century by the addition of a second wall and moat on the north and west surrounding a new bailey. This work buried a 12th century cob house, the remains of which were revealed in an excavation of 1972 (Simpson, 1973).

The castle was further extended in the second half of the 13th century when a third defensive rampart was added to the north and west, burying the town's northern gate, and necessitating the moving of Castle Street several metres to the west. This was revealed in excavations in 1965 and 1966 (Brooks, 1965-6). The castle was at its most formidable in the 13th and 14th centuries. It was a very strong defensive centre with active garrisons and frequently hosted royal visits. There were mills on the stream closest to the river and the castle's activities and needs encouraged the prosperity of the town, especially in the 13th century.

By the 16th century Wallingford, like many other castles, was effectively redundant in a less feudal society and fell into disrepair. Described by the antiquary John Leland in c.1538 as 'sore yn ruine and for the most part defaced', lead and timber were taken by river during the 1550s for use in royal building projects at Windsor (Colvin, 1963). Several of the buildings were, however, still occupied and some new houses appear to have been built within the walls. A plan of the castle as it stood c.1550 can be found in the Bodleian Library, Oxford (MS.Top.Berks c.28).

The castle was re-fortified during the Civil War of the 17th century, and was an important defensive outpost of the king's headquarters at Oxford. It withstood a lengthy siege in 1646, but was forced to surrender after the king's capture. On 18th November 1652 Cromwell's Council of State ordered the systematic destruction of Wallingford Castle: the stone was removed and sold, and the site left derelict with only a few fragments of wall remaining.

Although throughout its medieval history, the castle was a royal possession, it was granted at various times to individual custodians, initially by the king himself, but from 1337 as part of the Duchy of Cornwall, the inheritance of the monarch's eldest son. A large and valuable Honour of Wallingford was associated with the castle, bringing wealth from extensive land holdings throughout England and abroad. After its destruction and the restoration of the monarchy in 1660, the castle again became a royal possession and the site was used for various purposes including illicit meetings of non-conformists in the late 17th century, and also, reputedly, as a place of retreat for Oxford scholars during times of plague.

In the early 19th century it was finally sold by the crown, and after a short period in divided ownership, was bought by the Hedges family who built a substantial Gothic-style house on the southern part of the site in 1837, landscaped its immediate grounds and carried out extensive tree planting in the area to the north. The extent of this landscaping can be seen on the 1876 Ordnance Survey 25" map of the area, by which time the boat house (the remains of which still survive) had also been erected on the inlet between Queen's Arbour and King's Meadow. The town cemetery (adjoining Area U3) was laid out c.1860.

The house built by the Hedges family was demolished in 1972 and after a proposal to develop this part of the site was rejected by a public inquiry in 1977, the southern part was given at a peppercorn rent to Wallingford Town Council. The Victorian Castle Gardens were restored for public access by the Town Council. Castle Farm was eventually sold and the built-up part of the farm to the south of the castle mound was developed by Berkeley Homes in the form of Thameside Mansions. The purchase of the remaining Castle Farm land by South Oxfordshire District Council in 1999 has brought virtually the entire site of Wallingford Castle into public ownership.

6.2 Recent land use

In the 1930s, compartment L1 (Queen's Arbour) was used as a playing field by a small private junior school (St Anthony's) based in the High Street. A photograph of this period shows the grass closely mown and a game of cricket in progress. The same photograph shows the boathouse on the ditch between L1 and L2 - now reduced to concrete foundations. (M. Volins, pers comm.)

In more recent years Mr Edward Ryall ran a dairy unit at Castle Farm, on the site and the meadows beyond. Both lower compartments were ploughed and re-seeded about 25 years ago, and were subsequently cut for silage and heavily grazed, with annual applications of manure and NPK fertiliser. (E. Ryall pers. comm).

Management since the Council purchased the site has consisted of an annual hay cut followed by aftermath grazing through to the end of October. This has been supplemented by intensive weed control to remove the weed species such as ragwort, dock, spear and creeping thistle. Three scrapes have been created,

one in the northern half of King's Meadow and two in the northern part of Queen's Arbour.

In 2008 seed was purchased from Emorsgate seeds and distributed over King's Meadow, as well as in 5 strips where the existing sward was sprayed off with glyphosate.

6.3 Landscape

The site falls within the River Thames Corridor Character Area in the South Oxfordshire Landscape Assessment (Atlantic Consultants, undated). All of the site is classed as Flat Floodplain Pasture, and recommended for conservation. The Thames Corridor is characterised by its flat pasture land on gravel and alluvium soils overlying clay. There is a long history of settlement and use, with Wallingford itself at a strategic position by an important ford. Small areas of parkland are noted as of importance in the landscape. The landscape of Flat Floodplain Pasture is typically permanent pasture, riparian in character and prone to flooding, with conspicuous willows. It forms areas of important riverside green space adjoining urban settlements such as Wallingford. The landscape type contains some important floodplain wetlands, artificially created by excavation for gravel, with semi-natural vegetation and wildlife.

6.4 Victorian Parkland plantings

The site contains a large number of mature native and exotic trees that clearly formed defining features of a planned parkland landscape. The species present are listed in the South Oxfordshire District Council tree survey report (January 2000), and include Wellingtonias and evergreen oak. The Wellingtonias set the earliest possible date as 1853 when the first seeds arrived in Scotland (Mitchell 1996), and it is likely the trees were established within ten years of this date, when the species was very popular.

The Hedges family bought the castle site from the crown in 1817 and in 1837 John Allnatt Hedges built a Gothic-style house in what is now Castle Gardens. It was almost certainly he and his son, John Kirby Hedges, author of the 2-volume "The History of Wallingford" (1881) who were responsible for the majority of the landscape planting of the site, the considerable extent of which can be seen on the 1876 Ordnance Survey 25" map of the area.

It seems likely that the pines and some Wellingtonias marked key points on the demesne boundary, with specimen plantings of single trees and groups (e.g. the beech clump in U3). A line of parkland oaks in U3 may be intended to draw the eye and/or have been allowed to grow out of a vanished hedgerow. The holm oaks appear to have been evergreen roadside screening. Maintenance and gradual replacement of the planting scheme is fundamental to conserving the landscape character of the site.

7 Recreation, interpretation, education

7.1 Educational, research or interpretation use/facilities

Wallingford Museum, which includes special displays on the history and importance of the castle, is situated within 500m of the site. The Wallingford Historical and Archaeological Society has published a short guide to Wallingford Castle (TWHAS 1984), and the site is well documented in specialist

archaeological and historical literature. TWHAS is also involved in research on the site.

Interpretation panels have been placed at each of the entrances to the site and in strategic locations (7 in total). These give information on the site, about its current management, history and ecology. A guided walk leaflet is also available via leaflet dispensers at the entrances, at Wallingford Museum, the Town Information Centre and online via the council's website. An Interpretive Strategy and an Education Strategy have been produced and are available in Appendix 2.

A major research project led by Leicester University has been working in Wallingford and on the site from 2002 to 2011. This has to date involved geophysical and topographical surveys of much of the site and targeted excavations. All information will eventually be published.

7.2 Recreational use/access

Since October 2001 the site has been open to the public, only being closed during emergencies or at times when it would be unsafe for the public to enter. Although no public rights of way exist across the site the preferred paths and the route of the self guided trail are mown during the summer months. Map 4 shows the access points and the route of the self guided trail. All access points are controlled by wheelchair friendly kissing gates. A fourth access point from Castle Gardens was opened in spring 2008.

The site is well used by residents of Wallingford and many visitors to the town. Since 2002 an annual visitor survey has been carried out to find out more about people using the site, where they come from and asking for their comments and suggestions on site management.

In July 2005 a gate counter was installed at the Cemetery Lane entrance to allow a more accurate picture of the numbers of people using the site to be established. A second gate counter was installed at the Castle Gardens entrance in 2008. Visitor numbers are used as a measure of the success of the site and its importance to the local community; they are also an important tool in justifying investment in the site. The gate counters enable us to monitor fluctuations in visitor numbers year on year, to investigate potential causes of these fluctuations, and to act on them accordingly.

Public rights of way exist around most of the site. To the east, the Thames Path lies between the river and the lower meadows. This strip is owned and administered by Oxfordshire County Council. To the north, the cemetery lane track becomes a footpath linking to the river. To the west is Castle Street, and part of the southern boundary adjoins Castle Lane, beyond which are the Castle Gardens owned and opened to the public by Wallingford Town Council. The nearest appropriate car parking is within Riverside Park on the other bank of the Thames.

In designing the access points to the site all reasonable steps have been taken to ensure there are no physical barriers to prevent disabled people from accessing the site. All entrances have wheelchair friendly kissing gates and interpretation panels have been positioned to allow viewing by people in wheelchairs. Inevitably with a site of this nature it is not possible to make the whole site completely accessible due to the topography and ground conditions. Nor would it be possible to make such adjustments due to the sensitive nature of the Scheduled Ancient

Monument and the flooding which often occurs across much of the lower part of the site. We believe that we have made all reasonable adjustments to the site which would allow it to comply with the Disability Discrimination Act (DDA). A slightly amended and fully accessible alternative to the self-guided trail route is available to download from the Earth Trust website.

In order to further audit access provision and the wider provision of services on site the Disabled Ramblers were contracted to provide a report with recommendations for ways in which access to the site could be improved. A summary of the report and its recommendations can be found in Appendix 3. The findings of this report have been prioritised and the recommendations have now been implemented.

In October 2008 the Council completed an Equality Impact Assessment (EIA) of the Countryside Service. The EIA covered issues such as race, gender, sexual orientation, disability, age and religious belief and was particularly focused on the use of the council's countryside sites which include Wallingford Castle Meadows as the largest single site. The EIA found no significant issues that affected access to the site for any of the equality issues considered. A number of minor recommendations have been made and these have been implemented. A copy of the recommendations resulting from the EIA is available in Appendix 3.

Map 4 – Access points and route of self guided trail (numbered in blue)



7.3 Vandalism and anti-social behaviour

Since the site was opened to the public in 2001 there have been a number of incidents reported involving vandalism and anti-social behaviour. Compared to many areas the problems encountered are relatively trivial involving minor vandalism of interpretation signs, littering and fires associated with parties on summer evenings.

These problems are mainly associated with groups of young adults who move from one place to another throughout the town. It was therefore recognised that it would be best to tackle the problems in partnership with other organisations through the Neighbourhood Action Group (NAG).

The NAG provides a supporting role to the South Oxfordshire Community Safety Partnership whose aim is to reduce crime and the fear of crime. It consists of police and council representatives, key members of the community and local residents. The Wallingford Castle Meadows warden has been involved with the NAG since October 2006.

Involvement in the NAG enables the warden to input information to the group that influences the areas of priority policing in Wallingford. During the phase of

deciding the top three priorities to be tackled in Wallingford, the warden was able to pass on information about anti-social behaviour on Castle Meadows and its effects, which were backed up by police statistics.

The NAG provides a first hand point of contact when reporting incidents on the site and the reassurance that something is going to be done to tackle these issues. The NAG also presents a way of liaising with local young people, via NAG meetings and workshops in the local school and youth club, to ascertain what their issues are. This also helps with informing our events, education and outreach programmes to reflect the needs of young people.

Through working with the NAG we hope that the local community has a safe, secure and pleasant local space to go to to enjoy the history and wildlife of Wallingford. Since we started working with the NAG the number of incidents reported has dropped, although this is an ongoing process.

8. Marketing

8.1 Introduction

In order to gain a better understanding of who uses the site, and to help us in formulating policies, we conducted a survey of visitors to Wallingford Castle Meadows each year from 2002 to 2009. A survey will be conducted bi-annually in future, commencing 2011. A summary of the results of the surveys is included in Appendix 4.

The survey uses standard questions year on year to determine where people have travelled from, how they got to the site and the purpose of their visit. It also includes one off questions about plans that we are hoping to implement in the future. During the course of the last 11 years we have undertaken a number of works, in line with the management plan, for which we have sought public opinion. These include issues such as signage to the site, the Castle Gardens access gate, mowing of the preferred paths, the tree planting scheme and the presence of grazing cattle. Using the visitor survey to address these issues has allowed us to take into consideration public opinion before works commence.

The results of the survey help us to determine our target audience and to then target our marketing and events to those people. It also helps us to make improvements to the site, plan interpretation and find out what the visitors really think about the site as a whole.

A survey for non-users of the site has been drafted in order to find out why people do not currently use the site and what potential barriers to use might be. The majority of the survey will be undertaken during the Wallingford Carnival where the Earth Trust will have a stall and at several other events in the town such as the annual Regatta and Raft race. This will enable us to reach a wide local audience, engage with them and actively market the site.

8.2 Visitor composition

The site currently receives around 35,000 visits a year, the majority of visitors are locals from Wallingford, who walk to the site to either enjoy a stroll or specifically to walk their dogs; generally less than a quarter of visitors arrive by car. Most visit either daily or several times a week although, as the survey is undertaken in the summer, it does include people visiting the site for the first

time (presumably tourists). For the last two years the majority of visitors have been in the over 55 category; prior to this, 35-55 year olds were the predominant age group. Visitors are usually either singles or couples (plus a dog), whilst families or groups of young people make up a smaller proportion of visitor numbers.

8.3 Access

The question of signage to and from the site has been asked regularly. The majority of visitors are local and already know about the site and its location through local knowledge, however, of those, around half feel that signage would be beneficial to those not from Wallingford.

In 2004 a specific question was asked regarding car parking facilities for the site. Comments were made about the muddy, rutted state of Cemetery Lane, which is a problem for pedestrians as well as car drivers. The lane has since been resurfaced. No further action on car parking facilities has been taken as so few people drive to the site and the majority of those who do park in Cemetery Lane.

Comments were recorded on the problem of access from Castle Gardens so the survey has included a question about this since 2003. Consistently between half and three quarters of those interviewed said they would use this access point if it were reinstated. The bridge has now been restored and was opened in March 2008, providing access from Wallingford town centre during daylight hours.

8.4 Interpretation

We have consistently sought to obtain opinion on the interpretation provided on site to find out if people are reading it, if it answers their questions and if they would like more information on any particular aspect of the site. Generally around half of those interviewed had read the interpretation boards and found them to be very informative. Extra information was requested on all aspects of the site, with the castle and historical information being the most popular, only a small proportion of people wanted information relating to wildlife. This is reflected on our boards and leaflets where the emphasis is primarily on the history of the castle and visible remains.

Self-guided trail leaflets were originally provided through local sources such as the TIC and museum. Initial surveys revealed that the majority of people had not seen the leaflets so leaflet dispensers were installed on site for visitors.

8.5 Events

In 2002 nearly a third of people interviewed said they would be interested in attending an organised event on site. As a result a comprehensive events programme has been put in place and by 2005 a quarter of people had attended an event on site. By 2007 this had increased to half of those interviewed. When asked what kind of events they would like to see on site the majority wanted historical or archaeological events, with wildlife events and site walks being slightly less popular. Family and children's activities were the least popular, which is reflected in the fact that most of our visitors are over 55.

Regular events not only include historical and archaeological walks, along with various wildlife themed events but also seek to try to encourage families and

young children onto the site, an audience that at the moment we are missing out on.

8.6 Satisfaction

In 2008 and 2009 100% of visitors questioned were satisfied with Wallingford Castle Meadows and would recommend it to friends and family. This is a huge improvement on previous years when between 63% and 70% of people were satisfied with the site. This is confirmation that our management of the meadows is working and we are catering to the needs of our visitors' whilst achieving the delicate balance between wildlife and public access.

8.7 Conclusions

As a result of the research conducted we have a good understanding of our audience and what they want. We have used this information in informing the development of the site and in the formulation of the policies in this management plan.

9. Environmental Sustainability

9.1 Introduction

The council seeks to manage Wallingford Castle Meadows in the most sustainable way. The key issues relevant to the sustainable management of the site are:

- Sustainable procurement
- Carbon reduction
- Waste management
- Pollution reduction
- Biodiversity protection and enhancement

9.2 Sustainable Procurement

The management of the site does not require large scale or regular procurement of goods or services however; we will always seek to obtain goods and services from local, sustainable sources. Examples of this include the purchase of timber products from local suppliers, the use of wood chip from the council's tree works contracts for path surfacing and mulching of trees, the printing of leaflets on chlorine free paper and the purchase of log benches from local forestry contractors.

9.3 Carbon Reduction

The main factors contributing to carbon emissions are the use of contractors for regular maintenance such as the mowing of paths and travel to and from the site by site managers, volunteers and visitors.

Contractors are used to mow the preferred paths and areas around the standing remains. The contractors visit the site six times annually in the summer months and combine visits with other work on sites in Wallingford. The level of carbon emissions from contractors is therefore relatively low.

Site managers are based either in nearby Little Wittenham (warden) or Wallingford (Council Offices). Travel to and from the site is therefore minimal in carbon terms.

Regular volunteers are encouraged to car share where necessary and the Earth

Trust provides transport for volunteers to the site from Little Wittenham. The majority of regular volunteers are local and either walk or cycle to the site.

In order to reduce the carbon footprint we seek to reduce emissions where this is possible. The management of the site for biodiversity and the planting of more than 2500 trees and hedgerow plants over the last 8 years will help to offset remaining impacts.

9.4 Waste Management

No litter bins are provided on site. This is a deliberate stance to encourage site users to act responsibly and take their litter home to recycle it. Experience over the last 10 years suggests that this policy works very well as the level of littering is very low. Where problems have occurred this is as a result of unauthorised parties, in this case it is unlikely that the presence of bins would make any material difference. The litter situation is continually monitored and if there is any significant change then this policy will be reviewed.

One dog bin is provided at the Cemetery Lane entrance to the site; this is emptied regularly throughout the year and the frequency of collections can be increased during the busier summer months. Although there is only one dog bin the level of dog fouling is very low, this is regularly monitored and if problems begin to become apparent then consideration will be given to increasing the number of bins available.

Any litter that is left on the site is collected either by the warden, volunteer wardens or volunteers. The Council offices have recycling facilities that deal with any recyclables. Non-recyclable waste is disposed of at the Council Offices.

Relatively little waste is produced on the site from management operations.

9.5 Pollution Reduction

The only potential source of pollution which arises from the management of the site would be through the use of herbicides. The use of herbicides on the site is strictly controlled as a result of the Higher Level Stewardship Agreement and due to the presence of the river. The Stewardship agreement prohibits the use of herbicides for site management unless a specific derogation has been agreed with Natural England. As a result of the presence of the River Thames the use of herbicides in King's Meadow and Queen's Arbour are licensable where they are within a certain distance of the banks.

The site has suffered from infestations of certain weeds (mainly ragwort and spear/creeping thistle). Management efforts in the past have concentrated on non chemical control (pulling or cutting/topping) however, due to the severity of the infestations it has been accepted that the only effective way to control the infestations involves limited/targeted application of herbicides together with continued manual control. Derogations have been granted for herbicide use in the main areas of infestation.

All herbicide applications are carefully controlled and undertaken by licensed contractors so that the likelihood of pollution occurring is minimised.

9.6 Biodiversity Protection and Enhancement

One of the key aims of site management is the protection and enhancement of

biodiversity. The management plan sets out how this, along with the other key objectives, will be achieved.

10. Features of interest

10.1. List of features

The features are numbered in order to facilitate ease of reading. The presented order does not necessarily reflect priority.

1. Scheduled Ancient Monument
2. Buried archaeology
3. Victorian parkland plantings
4. Drainage ditches
5. Lower meadows
6. Upper meadows
7. Victorian pond
8. Public access
9. Interpretation and Education

10.2 Evaluation of features

Ratcliffe (1977) suggested a number of criteria to be used as a means of judging the nature conservation value of a site. In view of the increasing use of management plans for multiple-use sites where historical/archaeological features, access and interpretation are of equal importance, this list of criteria was extended by the Countryside Council for Wales to include assessment of cultural value (Alexander 1994).

Clark et al (1999) also stress the necessity to evaluate the archaeological and historical importance of a site, in combination with other factors, before drawing up plans for its long-term management. Several of the features of the Wallingford Castle Meadows site are historical and/or archaeological in nature.

The criteria used below are therefore intended as a focus for the evaluation of the physical, biological and cultural features of the site.

10.2.1 Scheduled Ancient Monument

Size In cultural terms, Wallingford Castle was once one of the largest castles in England, and its remains, although largely reduced to earthworks, are very large and coherent.

Recorded history There is a wealth of recorded history for the castle, much of which has already been collated by Wallingford Museum and the Wallingford Historical and Archaeological Society.

Intrinsic appeal The visible and buried archaeological remains provide some of the principal interest for local inhabitants and other visitors to the site, especially with their close integration into the landscape and local cultural history.

10.2.2 Buried archaeology

Size Two unpublished excavations in the 1960's and 70's found substantial sub surface archaeology, in good condition. A third documented excavation on Queen's Arbour conducted in 2003 revealed further buried archaeology. The Burh to Borough project have has been running since 2008 and has so far conducted five excavations within castle meadows.

Recorded history A full report on the Burh to Borough Project is due to be published in 2011.

Rarity The castle site is unusual in having so little standing fabric, which leaves the majority of the site accessible for both non-invasive investigation and, where considered appropriate, excavation. The undeveloped nature of the whole area means the site is an archaeological resource of national importance which makes it one of the principal features of the site.

10.2.3. Victorian parkland plantings

Local character The presence on the site of substantial traces of a parkland planting scheme associated with an important phase in the use of the castle site, and to a distinguished local Victorian resident, further enhances the landscape of the site and its appeal and interest to the public. The parkland landscape to the north of Wallingford Castle was singled out in the South Oxfordshire Landscape Assessment as a particular priority for maintenance and restoration. (Atlantic Consultants, undated).

Structural diversity Structural diversity is low for these trees, which have a fairly uniform (mature to senescent) age structure.

Biological diversity The site holds a number of mature oak and beech, which contribute large volumes of fallen and standing dead wood. Such large pieces of rotting wood provide important habitat for birds, bats, invertebrates and a number of specialised lower plants and fungi.

10.2.4. Drainage ditches

Size and position in ecological unit The ditches are quite small in area, but as habitat for water voles they are nevertheless important. Areas away from the main river, where the worst effects of flood and rapid drainage can be avoided, may be vital to the survival of this species. Locally there may be a number of fragile populations, isolated by a lack of suitable habitat. Only by linking areas of good habitat will the fragility of the species be lessened.

Biological diversity The ditches provide habitat for a range of locally appropriate marginal and aquatic vegetation species and the common frog, which is a species of conservation concern in the UK Biodiversity Action Plan, because of the speed with which it is declining nationally (The UK Biodiversity Steering Group, 1995). Two small clumps of Loddon lily (*Leucojum aestivum* L.) are found along the ditch in Queen's Arbour. Loddon lily is listed by the JNCC as a nationally scarce species (JNCC 2005). This species has a restricted distribution mainly in Oxfordshire (between Abingdon and Henley) and Berkshire especially along the River Loddon.

10.2.5 Lower Meadows

Size Once restored, the lower meadows (L1, L2) would exceed in individual area all but the largest 20% of wet grassland county wildlife sites (excluding NNR's and SSSI's) in Oxfordshire (Stevenson and Liwicki 1999).

Rarity Unimproved grassland has become an increasingly rare habitat, with less than 1000ha remaining in the County (Wicks and Cloughley, 1998). Of this total area, wet grassland in the floodplain is particularly valuable and is acknowledged as a key habitat of conservation importance in Europe and is protected under the 1994 European Species and Habitats Directive. Wet grassland is one of the key

habitats targeted in the Oxfordshire Local Biodiversity Action Plan (Stevenson and Liwicki 1999) and lowland meadows are now considered as a priority habitat in the UK Biodiversity Action Plans (UK Biodiversity Steering Group, 1999).

10.2.6 Upper meadows

Size The areas of semi-improved grassland are small.

Biological diversity The most diverse areas of grassland are located on the ramparts closest to the moat on the southern border of the site in compartment U1. These contain a variety of species of unimproved neutral grassland (e.g. bird's-foot-trefoil, *Lotus corniculatus*, ladies bedstraw *Galium verum*) and will also support the widest range of nectar-feeding or plant-specific invertebrates. This area is important as a potential source of colonising species for other parts of the site. There are large areas of improved grassland that lack structural diversity. Rougher areas of grass would provide habitat for a diverse community of other invertebrates such as butterflies and spiders.

There is an area of wetland associated with the moat adjacent to Castle Lane which forms a seasonal pond; this pond supports species which are traditionally associated with ponds and wet meadows including breeding frogs, brooklime, creeping jenny, cuckoo flower and pink water speedwell.

10.2.7 Victorian Pond

Rarity The common frog, present in both ponds on this site, is considered as a species of conservation concern in the UK Biodiversity Action Plan, because of the speed with which it is declining nationally (The UK Biodiversity Steering Group, 1995). A small colony of Snake's-head fritillary is also found in the south-eastern corner of the pond area and this population should be maintained.

Local character The landscaped plantings of the pond contribute to the overall 'romantic landscape' character of the site.

10.2.8 Public access

Size As a public access area, the site is larger than all the existing park spaces of Wallingford combined.

Accessibility Proximity to a population centre and other historic features, plus existing public rights of way adjacent to the site, particularly the Thames Path along the river, make this a particularly easily accessible site for both local and regional visitors. The Thames Path National Trail is increasingly used by serious walkers from all over the country, and is being linked into important heritage and conservation sites open to public access along its route. Few such sites will be more important than Wallingford Castle.

The site is compliant with the DDA and further audits have been undertaken to ensure that the whole experience is available to as wide an audience as possible (see p.22).

10.2.9 Interpretation and education

Range The sites interpretational value is obviously dependent on its importance in other respects, and so is very high for the archaeological, historical, landscape, species conservation and habitat restoration aspects.

There is clear potential for using the site for outdoor education across a wide range of subjects. Whilst the obvious beneficiary subjects are archaeology and history, the site provides an excellent resource for science and geography, especially regarding settlement, communications, water and the environment

Accessibility The link with the Thames Path and traffic on the river itself means that there is a special need for interpretation.

There are schools within walking distance of the site. Other schools in the district are a short drive away.

11. Management and Monitoring Objectives

11.1 Scheduled Ancient Monument

Vision: Preservation/consolidation of existing profiles of earthworks. Preservation of the listed wall fragments intact.

Factors that may influence the feature

Positive factors

- Grade I listing and Scheduled Ancient Monument status provides a measure of statutory protection.
- There is good survey information on current condition.
- Works were carried out during 2004 to consolidate the standing remains.

Negative factors/constraints

- Erosion by rabbits can cause problems with the earthworks; active rabbit control is keeping the population under control.
- Queen's Tower is leaning; as far as we are aware the movement has ceased but the advice we have is that there is no effective remedy that would not irrevocably damage the look and feel of the site.
- Vandalism could be a particular concern and has resulted in difficulties in Castle Gardens.
- Poaching of earthworks by cattle a concern if stocking densities not regulated.

Performance indicators

- Quantity/quality of standing masonry fragments.
- Erosion of the earthworks, by rabbits in particular.

Objective:- To maintain the Grade I listed structures and their setting, the Ancient Monument, and other archaeological features in favourable condition, where:

1. There is no further loss of fabric from the existing structures (except through unavoidable natural erosion).
2. There is no further avoidable erosion of the earthworks.

Management of feature

In 2001 the standing remains were fenced off from the main site area to prevent cattle and people causing further erosion and for public safety. Advice on the works necessary to consolidate the standing remains was obtained from English Heritage and specialist surveys were undertaken by Oxford Archaeology to determine the extent of the works required. A specialist contractor was employed in summer 2004 to carry out the consolidation works required (Nimbus Conservation) and a full record of the work has been kept and is held by the Council.

Monitoring of the standing remains is now essential to ensure their ongoing stability and to advise of any further works required. Queen's Tower is leaning towards the River Thames but this movement is not thought to be recent. Advice received by the Council is that there is little which can be done to make the tower any more stable over and above what has already taken place.

Erosion to the earthworks has been controlled by the regulation of grazing and of rabbits. In addition the preferred paths are regularly mown during the summer months to channel public use of the site and to limit the amount of erosion by walkers.

Management activities

- Control grazing pressure to prevent damage to the earthworks.
- Control rabbit population to prevent further damage to the earthworks.
- Provide interpretation for site and individual features.
- Mow preferred paths.
- Supervise the use of the site by the public by providing a warden/supervisory presence.
- Maintain the volunteer warden network and reporting system.
- Control vegetation inside fenced areas around standing remains to provide a managed "cared for" appearance.

Monitoring activities

- Monitor the levels of rabbit damage to earthworks and take action to reduce population when necessary.
- Monitor the site for damage to earthworks caused by other factors such as human pressure and grazing animals.
- Monitor the condition of the standing remains.
- Commission a survey of remains once every five years to determine works needed to stabilise next due in 2016/17.

11.2 Buried archaeology

Vision: Preservation of the buried archaeology. Location and interpretation of these features in accordance with current government guidelines, in particular *PPS 5 Planning for the Historic Environment*.

Factors that may influence the feature

Positive factors

- Previous excavations indicate substantial structures remain in good preservation.
- Possibility of organic evidence in waterlogged soils of compartment L1.
- No evidence of damage under present conditions.
- Burh to Borough archaeological project now complete but there is the possibility of attracting future funding for well-conducted research to assist interpretation.

Negative factors/constraints

- Geophysical research is costly.
- Risk from illegal metal detecting (although wider public presence could actually inhibit illicit activity).
- Constraints imposed by the Higher Level Stewardship Agreement.

Objective:- To maintain a programme of primarily non-invasive research on the archaeology and history of the site, so that:

1. The existing earthworks and fabric are researched and interpreted to visitors in an informed and interesting way.
2. The disposition of the structures within the various stages of the castle's evolution is better understood.
3. Any structures remaining on the lower floodplain meadows are identified, appropriately managed and interpreted.

Management of Feature

Information gathered during research into the history and archaeology of the Wallingford Castle Meadows site is only valuable if it is used to inform both the management of the site and the visiting public. Therefore, there should be a strong link between any research and the provision of interpretation both on and off the site. There are no members of staff assigned to the Wallingford Castle Meadows site with both the time and expertise to carry out such investigations, so work should be organised in conjunction with partners such as TWHAS and the Wallingford Museum.

Since 2002 the universities of Leicester, Exeter and Oxford have been undertaking a survey of Wallingford and its Castle called the *Burh to Borough Research Project*. These surveys have looked at documentary evidence in conjunction with TWHAS and have involved excavation, geophysical and topographical survey. Further information and contacts can be found on the project web site at:

<http://www2.le.ac.uk/departments/archaeology/research/projects/wallingford>

Any information collected on the archaeology or history of the site will be used to further inform the interpretation of the site. There is the potential for funding to interpret various features found during the course of the Burh to Borough investigations. A panel interpreting the dig in Queen's Arbour was installed along the Thames Path boundary in 2011.

Management activities

- Liaise with Archaeologists and Defra over any excavations planned.

Monitoring activities

- Monitor site for metal detectorists.

11.3 Victorian parkland plantings

Vision: Maintain the characteristics of the landscape planting by replacing trees in a planned way, over the long term. Retain non-biological features of the landscape where possible. Retain as much dead wood (standing and lying) as possible and extend the life of over-mature trees.

Factors that may influence the feature

Positive factors

- Some of the trees, both Victorian plantings and older trees, have a considerable potential remaining life span.
- Many of the trees provide valuable habitat for nesting birds, invertebrate fauna and fungal flora.
- Considerable detail of the plantings is visible on the 1876 Ordnance Survey

25 inch map.

- Public appreciation of the trees is very marked.

Negative factors/constraints

- Many trees are mature or post-mature and have limited remaining life.
- Public perception may not favour necessary management of trees (i.e. tree surgery), which will have to be carried out in order to prolong the healthy life of some of the trees, and also on grounds of health and safety.
- Bat surveys of trees or limbs will need to be conducted before any works are commenced.
- Tree surgery required for health and safety reasons will reduce the amount of standing dead wood and may also destroy nesting sites for birds.
- Replanting will need to be done skilfully to maintain character.
- No detailed estate maps of the original full planting scheme appear to exist.
- Lying deadwood provides material for unauthorised fires on site.

Objective:- To maintain the parkland landscape and historic landscape planting in favourable condition, where:

1. There is a good mixture of trees of different ages across the site.
2. The species composition of the parkland trees approximates to the original planting scheme.
3. The pattern of landscape planting is maintained.
4. There is no deterioration in the visual quality or 'romantic' landscape feel of the site.
5. Habitat suitable for nesting birds and dead wood invertebrates is maintained, as far as is compatible with public safety.

Management of feature

A tree survey conducted in 2000 identified all the trees in need of felling or works for safety reasons or to help prolong their life. All necessary works were carried out during 2000 with additional works being undertaken as and when necessary to maintain the safety of the site. Several of the felled trees were strapped to live trees to compensate for the standing deadwood habitats that were lost. The majority of the other logs were left on site to provide other deadwood habitat.

A lightning conductor was installed on the largest of the Wellingtonias (by the Victorian pond) to protect it from lightning strike as many of the other specimens have been degraded by lightning in the past.

A tree strategy for the site was produced in 2007 (see appendix 2). Re-planting has been targeted towards reproducing the Victorian landscape planting scheme, in order to perpetuate the survival of the landscape planting, and to ensure a varied age structure.

Management Activities

- Maintain existing planting scheme and carry out necessary works to ensure public safety and health of trees.
- Carry out planting in accordance with the tree strategy. (Appendix 2).

Monitoring activities

- Monitor standing deadwood by checking straps and stability of trunks.
- Monitor the lightning conductor for strikes and replace fuse as necessary.
- Carry out regular monitoring for unsafe limbs, especially after windy/stormy conditions and take appropriate action as necessary

- Monitor health of new plantings, particularly in dry conditions and water as necessary.
- Monitor use of bird/bat boxes annually and ensure fixings are secure.

11.4 Drainage ditches

Vision: Restored drainage ditches with abundant marginal vegetation including the Loddon lily on both banks, aquatic vegetation and water levels maintained throughout spring/summer.

Factors which may influence the feature

Positive factors

- Ability to control water levels.
- Remedial action to increase the amount of marginal vegetation is relatively straight forward.

Negative factors/constraints

- Bank profiles may be inappropriate in places.
- Scrub shading ditches reduces the amount of aquatic and marginal vegetation.

Objective:- To restore the drainage ditches on the lower meadows and maintain them in favourable condition, where:

1. Scrub is allowed to develop along the Queen's Arbour side of the ditch between Queen's Arbour and King's Meadow, to provide laying-up habitat for otters.
2. Aquatic vegetation colonises all the ditches.
3. Frogs can breed throughout.
4. High water levels are maintained in spring.
5. There is no access for grazing animals or the public.
6. The population of Loddon Lily is maintained and increased.
7. Suitable habitat is preserved for potential re-colonisation by Water Voles.

Management of feature

Water voles were positively identified on site up until 2005 but subsequent surveys have found no evidence of them. It is therefore likely that this small and isolated population has become extinct. Management for the foreseeable future should therefore focus on maintaining suitable habitat in the ditches for future colonisation.

The ditches provide habitat for a number of species in addition to the water vole. This includes two small clumps of the Loddon Lily (*Leucojum aestivum* L.) which is listed by the JNCC as a nationally scarce species (JNCC 2005). This species has a restricted distribution mainly in Oxfordshire and Berkshire especially along the River Thames and River Loddon. Reduction of shading by trees and scrub on the higher bank of the ditch between the upper and lower meadows should help to let in more light and encourage the growth of marginal and aquatic plant species. This, combined with measures to maintain higher water levels in spring/summer, will benefit species such as water vole and also common frog.

Allowing scrub to develop in an area along the Queen's Arbour side of the ditch between Queen's Arbour and King's Meadow will provide potential laying-up habitat for otters. An artificial log pile Otter holt was constructed in this area in 2008 and scrub has been planted surrounding it. There are records of otter sightings within the region and it is important to provide suitable habitat to

encourage their spread along the Thames.

If the vegetation inside the fences is left unmanaged it will become rank and smother some of the less competitive species and scrub will eventually develop. In order to prevent the vegetation inside the fenced areas becoming too rank these areas should be cut on a 3 year rotational basis. In addition the areas inside the fence have become infested with undesirable weeds in some areas and these should be controlled by spot spraying to prevent spread to the meadows.

Management activities

- Maintain un-shaded areas along ditch banks by rotational coppicing.
- Maintain integrity of stock fencing along ditches.
- Rotational cutting of tall herb vegetation inside the ditch fencing over a 3 year rotation.
- Control water levels in the ditches throughout the year to maintain consistently high water levels.
- Remove invasive species, such as orange monkey flower, from ditches.

Monitoring activities

- Annual Loddon lily survey.
- Vegetation survey of ditches.
- Water level monitoring/control.
- Survey otter holt for use.
- Maintain functioning of ditch – monitor for blockages.
- Count clumps of frogspawn.
- Carry out annual water vole survey.

11.5 Lower Meadows

Vision: A diverse sward, typical of unimproved riverside meadows, providing habitat for plants such as meadow saxifrage, and birds such as snipe and yellow wagtail.

Factors which may influence the feature

Positive factors

- Land still floods in some years, and this will (with time) help to re-establish some species lost through past management.

Negative factors/constraints

- Past intensive management, followed by a period without management, has left the grassland species poor.
- South Oxfordshire District Council relies on contract graziers.
- Land is prone to poaching.
- Very few desirable plant species are left and it is unlikely that any seed remains in the soil seed bank or that the plants could colonise rapidly (nearest area of unimproved grassland is at Benson Lock).
- Disturbance by dogs may restrict the use of the site by certain bird species.

Objective:- To maintain the flood plain meadow habitat on the lower meadows (Queen's Arbour and King's Meadow) in favourable condition, where:

1. Grassland covers 90% of the area of the lower meadows.
2. The species composition of the lower meadows includes appropriate grass and forb species for target communities MG5 or MG13, Black

Knapweed (*Centaurea nigra*) meadow.

3. Common ragwort *Senecio jacobaea* account for less than 1% cover.
4. Creeping thistle and spear thistle together account for less than 5% cover in representative quadrats over the area of the lower meadows.
5. Standing water remains on the meadow into March.
6. Establish a population of Snake's-head fritillary in suitable damp area.

Management of Feature

Extensive cattle grazing and/or hay cutting is the traditional management for this type of grassland. Over the last ten years a great deal of effort has gone into tackling the weed problems that were brought about by past management. This has now been largely successful on King's Meadow but some further work is needed on Queen's Arbour. The meadows are cut for hay after 15th July each year and cattle graze between August and October/November depending on the weather. Grazing is carefully controlled to ensure that poaching does not occur in wet weather.

The meadows have been fenced to ensure they are stock proof and to provide a minimum of 3 metre buffer strips alongside all ditches, these buffer strips need to be managed to prevent scrub encroachment and to control any undesirable weeds.

Traditionally the lower meadows would have been wetter for more of the year. In 2003 three scrapes were created with the aim of increasing the extent and duration of standing water on the meadows, which should provide suitable habitat for wet grassland species, such as ragged robin and cuckoo flower and birds such as yellow wagtail. To date the scrapes have been successful in holding water throughout the spring but no snipe or yellow wagtail have yet been recorded (this is likely to be due to disturbance by dogs).

Various attempts have been made to diversify the sward in the lower meadows with limited success. It is likely that past intensive use of the site as a dairy farm and applications of fertilisers limit the potential for diversification in the short term. Management will now focus on a longer term strategy to gradually reduce the fertility of the fields with limited introductions of more competition tolerant wildflower species.

The site is used by many dog walkers, so it will be necessary to alert visitors to the presence of cattle and to explain the purpose of the grazing regime. Likewise, hay cutting should be highlighted and explained to the public, for reasons of safety and public awareness.

In 2002 four black poplars were planted on the lower meadows.

Management activities

- Negotiate annual grazing licence.
- Control weeds by spot spraying and hand pulling.
- Introduce competition tolerant wildflower species.
- [Graze between July \(following hay cut\) and end November depending on the weather.](#)
- Mow preferred paths.
- Erect signs warning public of hay cutting operations.

Monitoring activities

- Monitor bird populations using meadows (particularly scrapes).
- Undertake annual vegetation survey to monitor success of seed introduction.
- Monitor duration of standing water in scrapes.
- Monitor extent and duration of flooding.
- Monitor undesirable weeds.

11.6 Upper Meadows

Vision: Maintain a quality sward with typical species spread across the entire area of the upper meadows. Typical species in unimproved neutral grassland include plants such as bird's-foot-trefoil and field scabious and butterflies such as the marbled white.

Factors which may influence the feature

Positive factors

- Some semi-improved grassland has survived on the inner ramparts of the Castle. This can act as a source of colonisation.
- Archaeological investigations by the Burh to Borough project, and subsequent restoration of the trenches, have resulted in opportunities for patches of wildflower re-seeding throughout the site.

Negative factors/constraints

- South Oxfordshire District Council relies on contract graziers.
- The bulk of the land has been improved for agriculture and a subsequent period without management has left a serious weed problem.
- Weed control is expensive and time consuming.
- Excessive disturbance by the public (and their dogs) could inhibit some species.

Objective:- To maintain the neutral grassland on the upper meadows in favourable condition, where:

1. Bird's-foot-trefoil, lady's bedstraw, ox-eye daisy and knapweed are found across the area of the upper meadows.
2. Marbled white butterflies feed across the whole area.
3. The area of temporary water associated with the moat is maintained.
4. Common ragwort *Senecio jacobaea* accounts for less than 1% cover.
5. Creeping thistle and spear thistle together account for less than 5% cover in representative quadrats over the area of the upper meadows.

Management of feature

The management of the upper meadows is aimed towards reducing the current weed problems, diversifying the grassland community and improving the structure of the grassland to increase biodiversity in general. Extensive grazing, chemical and mechanical weed control, plus pulling of ragwort have all been used to try and reduce the weed problems however, some patches still remain. Continued action, primarily spot spraying and hand pulling, will continue to be used until the weeds are under control.

Mowing of the preferred paths was introduced in 2005 in an attempt to provide visitors with areas to walk where they would not disturb wildlife, the cattle or cause erosion to the castle ramparts. Results from the visitor survey have shown that this is popular with site users.

All fences around the meadows were replaced in 2001/02 and a new hedgerow planted along the boundary with 24 Castle Street to define the boundary (which

lies outside the new fence). The boundary hedge along Cemetery Lane has been reinforced and gapped up with new planting and this will require trimming (and possibly laying). Some of the fencing, especially in the lower meadows where conditions are often wet, is now in need of replacement.

Management activities

- Manage hedgerow by trimming.
- Graze meadows extensively between May and November.
- Control undesirable weed species.
- Negotiate annual grazing licence.
- Mow preferred paths monthly between April and September.
- Use electric fencing to prevent cattle poaching the wetland area in the moat.
- Assess perimeter fences for deterioration and replace as necessary.
- Retain and manage parkland trees

Monitoring activities

- Annual vegetation survey to monitor success of seed introductions and management.
- Butterfly transect.
- Monitor growth and establishment of hedges to inform timing of management
- Monitor for poaching in wet weather.
- Monitor/map areas of significant weed infestation on an annual basis.
- Count clumps of frog spawn in the moat.

11.7 Victorian Pond

Vision: The pond is able to sustain a more balanced aquatic community while retaining its planned landscaped quality.

Factors that may influence the feature

Positive factors

- The pond already sustains populations of frogs and some invertebrates.
- There is a small population of Snake's-head fritillary.
- Some ornamentals remain, e.g. Wellingtonia, box, Spanish bluebells.
- Pond and banks lie outside the Scheduled Ancient Monument and restoration works do not require consent.

Negative factors/constraints

- Pond origins may lie within the original Saxon ditch, and this could limit restoration options.
- Pond steps and platform are likely to be inaccessible during floods. Signage is in place to warn public of the dangers.

Objective:- To restore the pond and maintain it in favourable condition, where:

1. The landscaped setting of the pond is partially restored and maintained.
2. Aquatic and marginal plants colonise the site.
3. Frogs continue to breed in the pond every year.
4. The surroundings are safely accessible to the public.
5. Population of Snake's-head fritillary thrive.

Management of feature

There is still a large amount of ornamental planting around the pond, which could be restored fairly easily. The consultation process has shown that public

appreciation of the landscape value of the site (and the pond area in particular) is high and that there is a strong desire to retain this as a landscaped feature. A large number of self-seeded sycamores have been removed from the area in order to reduce the level of shading and allow marginal and aquatic vegetation to establish.

In 2005 work began to provide public access to the area via two new self-closing pedestrian gates, a path surfaced with wood chip, and a viewing platform overlooking the pond. The area around the path and on the western edge of the pond adjacent to the ditch will be kept open and strimmed twice a year to prevent the growth of rank grasses and scrub. This should also help to maintain the small population of Snake's-head fritillary. The pond area was opened up to the public in spring 2006.

The pond area has been identified in surveys as being a popular feeding site for bats, particularly the common and soprano pipistrelle. Therefore, the remainder of the pond periphery will be left unmanaged as a habitat for bats and the insects upon which they are feeding. In addition a number of bat boxes have been put up to provide additional roosting sites.

Management activities

- Manage one third of the pond periphery by strimming twice a year (the western side) to provide a more formal area consistent with the original Victorian planting.
- Manage the box hedging to the south and west of the pond so that it doesn't encroach onto the area colonised by the Snake's-head fritillary.
- Maintain viewing points from the main path to the west of the pond enclosure to ensure that those with limited mobility, who are unable to traverse the pond steps, still have a clear view of the pond and its environs.

Monitoring activities

- Monitor viewing platform and steps in pond area for safety and undertake repairs as necessary.
- Undertake annual survey of Snake's-head fritillary and Loddon lily.
- Count clumps of frogspawn annually.
- Erect signs warning when paths underwater.

11.8 Public access

Vision: Provide access to increase the use of the site by the public for quiet enjoyment, without detriment to the site's biological and historical value or risk to the visitors.

Factors which may influence the feature

Positive factors

- Site is adjacent to Castle Gardens and easily links to the remainder of Wallingford's historic remains.
- Parking is available in Wallingford and informally along Cemetery Lane.
- The low intensity agricultural management of the grassland will provide a different and valued experience to other public grassed areas in Wallingford.
- Castle Lane adjoins the south-west boundary.
- Thames Path runs adjacent to Lower Meadows.
- The site is compliant with the DDA.

Negative factors / constraints

- Access to some features needs to be restricted.
- Some parts of the site will flood in winter. The site is prone to poaching (by visitors as well as cattle), and this could be damaging both to the biological management and to the archaeological features.
- Access provision must not encourage parking in Castle Street.
- Dog walkers can cause problems with grazing stock.
- Visitors continue to use the non-public entrance of Castle Street to access the site despite the gate being locked and the danger posed by the unsafe road crossing.
- Vandalism.

Objective:- To provide for informal recreational access by the public, particularly those resident in South Oxfordshire, in so far as this is compatible with maintaining the archaeological, biological and landscape features in favourable condition, where:

1. The site is visited daily by members of the public, the majority of who are from Wallingford or elsewhere in the District.
2. The site and its features, such as the historic structures and trees, are safe for visiting members of the public.
3. The majority of visitors to the site say that they have enjoyed their visit.
4. Visitors to the site do not park vehicles in Castle Street and parking in Cemetery Lane does not hinder access for emergency or farm vehicles, or access to the cemetery.
5. There are no barriers to access for people with disabilities.

Management of feature

Site safety

Since 1999 much work has taken place to make the site accessible to as many potential visitors as possible. Risks were identified and action has been taken to ensure that they do not pose any threat to the visiting public. The work has included: removal of an unsafe bridge, replacement or removal of all fencing, provision of four wheelchair friendly kissing gates and installation of two all access pedestrian gates, re-building of a section of unsafe boundary wall along Castle Lane, tree works to remove potential hazards, and the installation of a dog waste bin at the Cemetery Lane entrance.

Risk assessment

A formal risk assessment process has been adopted following the Council's corporate procedure, a copy of the risk assessment form used can be found in Appendix 5. Formal risk assessments are conducted every six months but can be updated between times if issues are reported.

Site safety inspections are carried out twice weekly with a visual check by the warden; any issues are noted and followed up as appropriate. In addition, the volunteer wardens and members of the public are encouraged to report any issues to the site warden.

The warden will deal with issues that pose a threat to public health and safety immediately or the area is cordoned off with appropriate warning signs and the council are then notified. In extreme circumstances the site can be closed until the problem is rectified. If the problem does not require immediate action then it is scheduled into the quarterly work plan or the council informed and

appropriate contractors appointed.

The warden or the council are contactable at all times in the event of an emergency.

Risk assessment process:

1. Risk identified – assess level and severity of risk.
2. Warden/volunteer removes/reduces risk immediately where possible.
3. If immediate removal is not possible then reduce level of risk to an acceptable level and plan work to remedy situation as soon as reasonable.
4. If this is not possible and there is a significant risk to site users then the site can be closed until level of risk is made acceptable.

Management and inspection of trees

All trees on the site are surveyed as part of a three year rolling programme of all council owned tree stock. The trees are all mapped and entered into a geographical information system and are subject to regular inspection by the council's forestry team. Any work that is identified is undertaken as part of an annual tree maintenance contract unless the hazard is sufficient to warrant immediate action. Any necessary works are carried out by appropriately qualified contractors and the site is closed to the public.

Visitor management

All the site interpretation panels contain information on the code of conduct for visitors, a self guided trail leaflet has been designed and is available on site, and the preferred paths are mown throughout the summer. A warden is employed and there are a dedicated group of volunteer wardens. For the last 9 years an annual visitor survey has been conducted to gain feedback about the site and its management. The information collected from this has been used to inform site management and to improve facilities where necessary. In July 2005 a gate counter was installed to provide information on the level of use the site receives. In 2008 a second counter was installed on the Castle Gardens gate and these are being monitored on a monthly basis year round and provide valuable information on site use.

Management activities

- Continue to mow preferred paths.
- Control litter on the site.
- Maintain the network of volunteer wardens.

Monitoring activities

- Monitor number of visitors to site.
- Carry out bi-annual visitor survey.
- Carry out six-monthly risk assessment.
- Monitor level of car parking on Cemetery Lane.
- Monitor access from Castle Gardens.

11.9 Interpretation and Education

Vision: Better awareness and understanding of the history and significance of the castle and its role in Wallingford's history by the public. Increased awareness and interest by visiting public in the natural history of the site, and of the importance of conservation within the district. Use of the site as an educational resource, by local schools and other educational establishments.

Factors which may influence the feature

Positive factors

- General attractiveness of site, presence of excellent local museum and team of local historians.
- Several other related Ancient Monuments nearby (e.g. bridge and Anglo-Saxon “burh” ramparts).
- Two impressive remaining pieces of masonry (plus more within Castle Gardens).
- Potential for a good range of quality habitats on the site.
- Enormous opportunities offered by the site for national and local history studies.
- Excellent potential for use in geography and science sectors of National Curriculum.
- Four schools within walking distance, many more within easy reach.

Negative factors/constraints

- Lack of survey information on parts of the site outside the SAM. Lack of original maps of phases of the castle’s use.
- Very limited visible remains of the castle.
- Some forms of interpretation could be visually intrusive and conflict with the landscape and setting.
- Vandalism to expensive interpretation panels, etc.

Objective:- To interpret the historical and conservation value of the site to the visiting public, so that:

1. The visiting public are aware of the site's main features and its significance for archaeological and biological conservation.
2. The public are aware of the significance of the site in relation to the other historic features of Wallingford and the surrounding area.
3. The site is seen as one of the principal attractions of the district.
4. The site provides a quality educational resource for local schools.

Management of feature

Interpretation

Six A1 interpretation panels have been installed, four at the entrances, one adjacent to Queen’s Tower and one in Queen’s Arbour visible from the Thanet Path. Three of the panels are general and provide information on history and ecology as well as the code of conduct. The other three panels provide information primarily on the history of the castle. An additional A3 panel has been installed in the Victorian Pond area which provides ecological information about this area.

A self-guided walk leaflet and oak marker posts have been produced which allow visitors to learn about the history and ecology of the site following a pre-determined route.

In addition to the *in situ* interpretation there are notice boards at all site entrances to allow for information on site management to be displayed and for advertising of events.

Education

Over the first plan period the site has been used for educational purposes on an infrequent basis by local historians and Wallingford School but the potential for

this type of use has not been fully explored. Further efforts are being made to increase the site's educational uses and an Educational Strategy is available as a separate document in Appendix 2.

Events

Since 2004 there has been a regular programme of events running over the summer months. The events have covered a variety of topics both historical and ecological and have been run in conjunction with a number of partners including TWHAS, Earth Trust and various recording groups. To date the events have proved extremely popular and have attracted many new people to the site including a lot of local people.

In addition to events organised by the warden a number of events organised by other organisations have been held under licence on the site, and have proved to be a good way of attracting new people and interest in the site.

Management and administration activities

- Implement education strategy (see Appendix 2).
- Continue to provide a varied programme of events throughout the summer months.
- Allow use of the site for appropriate non-damaging events under licence.
- Issue press releases for events.
- Warden to provide informal interpretation of site to visitors.
- Keep notice boards up to date with relevant information.

Monitoring activities

- Monitor external events.
- Keep a record of attendance at all organised events.
- Keep copies of any press or media coverage.
- Monitor educational use of site.
- Monitor condition of interpretation materials and update as necessary.

11.10 General site management

Vision: The site is well managed and the visiting public is satisfied with the management. Volunteers are valued and play an active part in the management of the site.

Objective:- To manage the site to maximise the social, economic and environmental well-being of the community where:

1. Progress towards achievement of all site management objectives is properly monitored.
2. All opportunities to obtain external funding are taken.
3. Budgets are set and adhered to.
4. All interested parties are kept informed and involved.
5. Volunteers are active in helping to administer and manage the site.

General management

This section outlines all those management and monitoring activities that do not fall within one of the discrete sections above but are critical for the successful management of the whole site.

The key to the successful management of the site, since its opening in 2001, has

been the Council's ability to fund all the necessary works, and the employment of a site warden to organise works and undertake the day to day activities of site management. To ensure that the management over the next five years is as successful, it is important that this level of resources is not significantly reduced and that the management activities and monitoring outlined in this plan are undertaken.

Volunteering

Without the buy in from the local community, and the help of many volunteers, much of the work undertaken on the site would not be possible. In 2010 volunteers put in an impressive total of **1227** hours of volunteer activity in various ways:

Volunteer Wardens act as site wardens during weekends, evenings and holiday periods when the site warden is not available. The wardens work on a rota to patrol the site, talk to the visiting public, carry out litter clearance and report problems or incidents to the site warden. The volunteer wardens also monitor the grazing livestock and report any health and safety issues directly to the site warden so they can be acted on immediately.

Wallingford Green Gym carry out practical management works on the site under the supervision of the warden. Without the help of the Green Gym much of the practical work carried out over the last few years would not have been possible within the available budgets.

The *Friday Group* is the Earth Trust's dedicated volunteer group who regularly work on the site whenever there is the need for a larger workforce or when the task needs a full day (or more) to complete. The group attracts a variety of local people who have some time to spare and are looking to improve their local area and also caters for students looking to gain vital conservation work experience. The Earth Trust's Wednesday and Saturday groups also regularly work on the site.

Countryside Stewardship is the Earth Trust's education programme for Years 10 and 11. Students completing the two-year course gain a recognised environmental qualification. The group from Wallingford School have one two-hour session every week during term time, occasionally at Castle Meadows. The Environmental Education Tutor and the warden provide a programme that fits in with the syllabus, and also work with the students on site.

Other volunteers In addition to the above there is a dedicated group of local residents who carry out activities on the site such as the butterfly monitoring and various occasional volunteers who carry out discrete projects that inform site management. There are also a number of individuals (often regular dog walkers) who are not volunteering in an official capacity but still make a significant contribution to the site's management by clearing rubbish and informing the warden of problems or issues.

One of the key roles that the warden plays is to provide support and encouragement for the volunteer workforce.

Management activities

- Seek outside funding for eligible projects.
- Revise site management plan (5 yearly revisions).

- Produce annual work plan and quarterly task list.
- Hold quarterly progress meetings with site warden.
- Hold yearly meeting of Meadows Advisory Group.
- Provide support and encouragement for all volunteers working on site.
- Maintain the volunteer warden's network.
- Supervise work by Green Gym.
- Undertake regular litter clearance.
- Produce a yearly progress report for the Meadows Advisory Group.

Monitoring activities

- Monitor dip wells and soil moisture monitoring stations installed by CEH.
- Undertake an annual bat survey and monitor usage of bat boxes.
- Maintain a wardening presence to monitor site activity and safety.
- Monitor the state of the Castle Lane wall and commission repairs if necessary.
- Fixed point photography for monitoring of site condition.
- Undertake six-monthly risk assessment.

12. Summary table of management and monitoring activities

Feature/ Location	Activity/ Task code (<u>A</u>Admin, <u>P</u>Practical, <u>M</u>Monitoring)	Activity	<u>O</u>ne off, <u>A</u>nnual or <u>C</u>ontinuous task	Further Information/Timing
All fields	M	Regularly inspect all boundary fences and furniture, repair if necessary	C	
All fields	M	Carry out butterfly surveys using a butterfly transect	A	April - Sept
All fields	M	Monitor bird species using the site and birds breeding on site	C	Recruit volunteer to do
All fields	M	Monitor/map areas of significant weed infestation on an annual basis	A	June/July
All fields	P	Remove undesirable weeds by spot spraying or hand pulling	A	April – August. Creeping thistle, spear thistle, dock, ragwort, nettle. By 2014 less than 5% cover.
All fields	P	Introduce competition tolerant wildflower species	A	
All fields	M	Undertake annual vegetation survey to monitor success of seed introduction	A	June/July

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
All fields	P	Install bat / bird boxes	O	Complete by Mar 2014
All fields	M	Undertake an annual bat survey and monitor usage of bat boxes	A	July/August
All fields	M	Monitor for poaching in wet weather	C	
All fields	M	Monitor extent and duration of flooding	C	
Buried Archaeology	A	Liase with archaeologists and English Heritage/Natural England over any excavations planned	O	As required
Buried archaeology	M	Monitor site for metal detectorists	C	
Copse	P	Replace trees/shrubs x 100	O	Complete by Mar 2014
Copse	P	Tree care - strim, hand pull/mattock weeds/grasses around saplings, mulch	A	April - August
Ditches	P	Cut emergent and aquatic vegetation	A	Three year rotation – after 31 st August. Retain a fringe on both sides
Ditches	P	Cut vegetation on ditch banks	A	Only one bank in any year. Cut after 31st August. No less than 10cm. Remove cuttings from edge of ditch

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
Ditches	P	Scrub removal on ditch banks	A	Three year rotation – between Oct - Feb Remove 75% - only one bank in any year
Ditches	M	Count/map clumps of frogspawn		Feb/March
Ditches	M	Annual Loddon lily survey	A	March/April
Ditches	M	Water level monitoring/control	C	As necessary esp. winter months
Ditches	M	Check otter holt for signs of use	A	July
Ditches	P	Maintain integrity of stock fencing along ditches	C	
Ditches	M	Maintain functioning of ditch – monitor for blockages and remove debris if necessary	C	
Ditches	M	Carry out annual water vole survey	A	July
Ditches	P	Remove invasive species, specifically orange monkey flower from eastern ditch adjacent to Thames.	A	August
General management	P	Mow preferred paths	A	April – September once a month

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
General management	A	Carry out six-monthly risk assessment	C	March and September
General management	A	Seek outside funding for eligible projects	O	As required
General management	A	Revise site management plan (5yearly revision)	O	Next revision 2017
General management	A	Produce annual work plan and quarterly task list	A	Monitor implementation of work plan/task lists
General management	A	Hold quarterly progress meetings with SODC manager	A	End of March, June, Sept, Dec
General management	A	Hold yearly meeting of Meadows Advisory Group	A	March - Also Autumn site visit
General management	A	Produce a progress report for the Meadows Advisory Group	A	March
General management	A	Negotiate annual grazing licence	A	February/March
General management	P	Maintain wardening presence to monitor site activity and safety	C	

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
General management	A	Maintain the volunteer warden network and reporting system	C	
General management	P	Control litter on the site	C	Weekly checks year-round
General management	M	Fixed point photography for monitoring of site condition	A	July – before hay cut/topping
General management	P	Continue to involve the local community in management and monitoring, through the Green Gym and other voluntary groups	C	
Interpretation and education	P	Implement education strategy	C	
Interpretation and education	M	Monitor external events	C	
Interpretation and education	A	Keep a record of attendance at all organised events	C	
Interpretation and education	A	Keep copies of any press or media coverage	C	

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
Interpretation and education	A	Provide interpretation for site and individual features	C	
Interpretation and education	A	Continue to provide a varied programme of events throughout the year	A	August – deadline for inclusion in events leaflet
Interpretation and education	A	Allow use of the site for appropriate non-damaging events under licence	C	
Interpretation and education	P	Warden to provide informal interpretation of site to visitors	C	
Interpretation and education	P	Erect signs warning of hay cutting operations	A	
Interpretation and education	A	Keep notice boards up to date with relevant information.	C	
Interpretation and education	A	Issue press releases for events	C	
Interpretation and education	M	Monitor educational use of site	C	

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
Interpretation and education	M	Monitor condition of interpretation materials and update as necessary	C	
Lower Meadows	M	Monitor bird populations using meadows	C	Recruit volunteer to do
Lower meadows	M	Monitor duration of standing water in scrapes	C	
Public access	M	Monitor number of visitors to site	C	
Public access	M	Carry out bi-annual visitor survey	A	Next survey 2013
Public access	M	Monitor level of car parking on Cemetery Lane	C	
Public access	M	Monitor access from Castle Gardens	C	
Queen's Tower	P	Commission architects to assess standing remains	O	Completed by 2016/17
Queen's Tower	P	Works to preserve standing remains	O	Completed by 2016/17
Spinney and Lower Meadows	P	Replace post and wire fencing	O	Completed by Mar 2014

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
Scheduled ancient monument	M	Control grazing pressure to prevent damage to the earthworks	C	May - November
Scheduled ancient monument	P	Control vegetation inside fenced areas around standing remains to provide a managed "cared for" appearance.	A	April - September once a month. Use same contractor for mowing paths
Scheduled ancient monument	M	Monitor the site for damage to earthworks caused by other factors such as human pressure and grazing animals.	C	Monitor weekly, particularly when wet
Scheduled ancient monument	M	Monitor the condition of the standing remains	C	
Scheduled ancient monument	P	Use temporary electric fencing to prevent cattle from poaching the wetland area in the moat	C	As required in wet weather

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
Scheduled ancient monument	M	Count clumps of frogspawn in the moat	A	Feb/March
Upper Meadows	P	Retain and manage parkland trees	C	
Upper Meadows	P	Plant standard parkland trees x 5	O	inc tubes and stakes, post and wire tree guards – Complete by Mar 2014
Upper Meadows	P	Minor tree surgery/minor pollarding	O	Willow adjacent to ditch/Thameside mansion – Complete by Mar 2014
Upper Meadows	M	Monitor growth and establishment of hedges to inform timing of management	C	
Upper Meadows	P	Manage hedgerow by trimming (Cemetery Lane)	A	November – end Jan
Upper Meadows	P	Monitor state of Castle Lane wall and commission repairs if necessary	C	
Upper meadows and Queen's Arbour	M	Graze between May and November	A	Sward height 5cm - 10cm in Nov

Feature/ Location	Activity/ Task code (Admin, Practical, Monitoring)	Activity	One off, Annual or Continuous task	Further Information/Timing
Upper Meadows and Queen's Arbour	M	Monitor site for damage by rabbits and moles. Cull rabbits and moles as required.	C	Periodically as required to prevent development of burrows. Control carried out over winter (Dec - Feb)
Victorian Parkland Plantings	P	Maintain existing planting scheme and carry out necessary works to ensure public safety and health of trees	C	
Victorian Parkland Plantings	M	Monitor standing deadwood by checking straps and stability of trunks	C	
Victorian Parkland Plantings	M	Monitor the lightning conductor for strikes and replace fuse as necessary	C	
Victorian Parkland Plantings	M	Monitor health of new plantings, particularly in dry conditions and water as necessary	C	
Victorian Parkland Plantings	M	Monitor bird/ bat boxes to ensure fixings are secure	C	

Feature/ Location	Activity/ Task code (<u>A</u>Admin, <u>P</u>Practical, <u>M</u>Monitoring)	Activity	<u>O</u>ne off, <u>A</u>nnual or <u>C</u>ontinuous task	Further Information/Timing
Victorian Parkland Plantings	M	Carry out regular monitoring for unsafe limbs, especially after windy/stormy conditions and take appropriate action as necessary	C	
Victorian Parkland Plantings	P	Carry out planting in accordance with the planting strategy	A	Oct - Feb
Victorian pond	P	Manage one third of the pond periphery by strimming twice a year (the western side) to provide a more formal area consistent with the original Victorian planting.	A	May/June and August/ September
Victorian pond	M	Monitor Snake's-head Fritillary.	A	February/March
Victorian pond	P	Frogspawn - lock gates into pond area and erect signs during spawning season	A	February/March
Victorian pond	P	Erect signs warning of floods when path underwater	C	

Feature/ Location	Activity/ Task code (<u>A</u>Admin, <u>P</u>Practical, <u>M</u>Monitoring)	Activity	<u>O</u>ne off, <u>A</u>nnual or <u>C</u>ontinuous task	Further Information/Timing
Victorian pond	P	Maintain viewing points from the path to the west of the pond enclosure	A	Aug/September
Victorian pond	P	Manage the box hedging to the south of the pond so that it doesn't encroach on the snake's-head fritillaries	A	Aug/September
Victorian pond	M	Monitor viewing platform and steps in pond area for safety and undertake repairs as necessary	C	
Victorian pond	M	Count clumps of frogspawn	A	February/March also ditches and moat

Note: This table is used to produce the annual work plan and quarterly task list which identifies who carries out the various jobs and exactly when they will be done.

13. References

- Alexander, M. 1994. *Management Planning Handbook*. Countryside Council for Wales
- Alexander, M. 1996. *A guide to the production of management plans for nature reserves and protected areas*. Countryside Council for Wales
- Alexander, M. in prep. *A management planning guide for nature reserves and protected areas*.
- Atlantic Consultants (undated c 1998) South Oxfordshire Landscape Assessment. Consultants report for South Oxfordshire District Council
- Ball, S. 1995. Recorder 3.2ib: Biological Recording Package. Peterborough, Joint Nature Conservation Committee
- Blair, J. 1994 Anglo-Saxon Oxfordshire
- Brooks, N. 1965-66 Excavations at Wallingford Castle 1965 – an interim report, *Berks. Arch. Jnl.* **62**: 17-21
- Clark K. (ed) 1999 Conservation Plans in Action, Proceedings of the Oxford Conference. English Heritage
- Colvin H. 1963 A History of the King's Works, The Middle Ages (2 vols)
- Hedges, Sir John Kirby, 1881 The History of Wallingford (2 vols)
- Hedges, Sir John Kirby, 1893. A short History of Wallingford, ancient, medieval and modern. John Bradford, Wallingford.
- Hinton, D. 1990. Archaeology, Economy & Society, England from the 5th to the 15th Century
- Institute of Geological Sciences. Soil maps
- Kirby. P. 1992. *Habitat Management for Invertebrates. A Practical Handbook*. Sandy: RSPB.
- Mitchell, A. 1996 Trees of Britain, Harper Collins, London
- Ratcliffe, D. (ed). 1977. *A Nature Conservation Review*. Cambridge, Cambridge University Press
- Rodwell. J.S. (ed). 1992. *British Plant Communities Volume 3. Grasslands and Montane Communities*. Cambridge: Cambridge University Press.
- Simpson, C. 1973 Wallingford, The Archaeological Implications of development
- Slade, C.F. 1960 Wallingford Castle in the reign of Stephen. *Berks. Arch. Jnl.* **58**:33-43.
- Soil Survey of England and Wales. 1983 Rothampstead Experimental Station
- SODC 1993 South Oxfordshire Local Plan. Draft for Consultation. South Oxfordshire District Council.
- SODC 1997 South Oxfordshire Local Plan. South Oxfordshire District Council, April 1997

- Stevenson, M and Liwicki, S. 1999. Habitat Action Plan for Grazing Marsh and Neutral Grasslands 2000-2005. Oxfordshire Local Biodiversity Action Plan. Northmoor Trust and Oxfordshire Nature Conservation Forum.
- TWHAS 1984. Wallingford Castle: A Brief Guide. The Wallingford Historical and Archaeological Society.
- UK Biodiversity Steering Group, 1995. Biodiversity: The UK Steering Group Report. Volume 2: Action Plans. London: HMSO
- UK Biodiversity Steering Group, 1999. Tranche 2 Action Plans. Volume 2: Terrestrial and Freshwater habitats. London: HMSO
- Wicks, D and Cloughley, P. (eds). 1998. The Biodiversity Audit of South East England: an Audit and Assessment. Eastleigh, Hampshire: Hampshire and Isle of Wight Wildlife Trust. 1998.