

Fishlake Meadows Management Plan 2016-2026



May 2016

Acknowledgements

We would like to acknowledge Neil Sanderson, Jonathan Cox, Dr Bob Page, Andy Lester and Ian Ralphs whose ecological survey information was drawn upon to inform the management plan. We would also like to acknowledge the support and assistance from and Tom Hanslip the previous owner of Fishlake Meadows.

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Document Control

Version	Author name	Date	Signed off by	Date
<i>Draft</i>	<i>J Durnell/M De Retuerto/D Whitfield</i>	<i>02/11/2015</i>	<i>J Durnell</i>	<i>03/11/2015</i>
			<i>K Harrington</i>	<i>23/11/2015</i>
<i>Draft</i>	<i>J Durnell/M De Retuerto/D Whitfield</i>	<i>10/5/16</i>	<i>J Durnell</i>	<i>10/5/16</i>
			<i>K Harrington</i>	<i>10/5/16</i>
<i>Final</i>				

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SITE DESCRIPTION

1.1. General information

Size: 148 acres, 60 hectares

Grid Ref: SU 3573 2266

Parish: Romsey Extra

Local Planning Authority: Test Valley Borough Council

Designations: Site of Importance for Nature Conservation (SINC) and adjacent to a Site of Special Scientific Interest (SSSI).

Fishlake Meadows is a wetland area of approximately 60 hectares of formerly drained, semi-improved pasture in the lower Test Valley. The area also includes the historic Romsey Barge Canal and a series of former water meadows known as Ashley Meadows. Since active farming ceased in the 1990's (Cox, 2013) the site has been rapidly evolving into an area of outstanding importance for wildlife.

The site comprises of a mosaic of wetland habitats including areas of open water, swamp, reed bed, wet grassland, and scrub. Recent surveys have revealed that the site has developed a diversity of species found in few other places in Hampshire. The site is of particular importance to wetland birds, for both breeding and overwintering species. Birds are only one of the groups that thrive at Fishlake, mammals such as otter, and bats are regularly recorded, dragonflies are extremely well represented and the botanical importance of the site is becoming increasingly well understood.

The rapid evolution that formed the site continues today but the unique assemblages of habitats and species that make the site so valuable are now threatened by encroachment of scrub and the increasingly rank grassland swards. To retain its value for wildlife the site will require substantial management works over the next few years. The only practical way to manage the grassland will be to introduce an extensive grazing and scrub control regime.

1.1.1. Location

Fishlake Meadows is located to the north of Romsey, within Test Valley Borough. The area lies within the floodplain of the River Test, sitting between the main river channel and the Romsey Barge Canal (see Map 1).

1.1.2. Land tenure and brief history

The land is currently owned by Tom Hanslip, but will shortly be transferred to Bellway Homes Ltd., who in turn will transfer the land to Test Valley Borough Council, under the terms of the Section 106 Agreement.

Much of the site was under arable cultivation until the 1990s when the continual pumping of water required to lower the water table to a level where cultivation was possible ceased. Since the cessation of pumping the natural water table has re-established itself within the floodplain and the site has become extensively inundated.

Previously farmland, the site has not been actively managed since the 1990's, during this time it has been neglected in terms of management and hence reclaimed by nature.

The site is accessible on foot from the town to the south and east, and from the countryside to the north and west. Three rights of way cross the site and run along the perimeter, another well-used track enables access to the centre of the site.

A pylon line crosses the north end site for a distance of approximately 395 metres. Details of the wayleave/easement associated with this structure are unclear at this point in time. Additional wayleaves or easements are also unknown at this time.

1.1.3. Compartments

The compartment boundaries and numbers are shown in Map 3.

Comp no.	Compartment name	Location and brief description
1.	Ashley Meadows	Rank floodplain grazing marsh and fen to the north of east/west footpath FP 9. The area also contains an area of scrub adjacent to the barge canal
2	North woodland	Area of former poplar plantation in the north west of the site
3.	Western meadow	Large area of floodplain grazing marsh, scrub and open water in the west of the site. Nb this compartment contains the main north south ditch and path
4.	Central meadow	Area of floodplain grassland, open water and reedbed south of east/west footpath
5.	Southern wetland	Open water and reedbed occupying the south and central parts of the site.
6	Eastern meadow	Area of floodplain grazing marsh, reed and scrub along the eastern edge of the site.
7.	Romsey Barge Canal	The barge canal which runs along the eastern boundary of the site is part of the River Test SSSI. The compartment includes the tow path and buffer areas.

1.2. Environmental Information

1.2.1. Physical

The site is a wetland within the floodplain of the River Test and is subject to seasonal flooding. The site is approximately 15m above sea level, sloping very gently from north to south. Bore hole scans report water encountered between 1.5m and 4m (BGS, 2015). The site sits between the Romsey Barge Canal and the River Test, and the direction of flow is north to south.

The soil is a silty peat, on top of silty, clay, gravelly sand. The underlying bedrock is London Clay at the northern end, a small central area is Whitecliff Sand, and the remaining southern area Whittering Formation (BGS, 2015).

1.2.2. Biological

An indication of the current value of habitats and species populations present within the Fishlake Meadows wetlands is provided by their current level of wildlife site designation. The Romsey Barge Canal is included in the River Test (SSSI) and can be regarded as an integral part of this nationally important wildlife site. Fishlake and Ashley Meadows have been designated in the Test Valley Local Plan as a (SINC). These are sites considered to be of regional or county importance. The analysis of species and habitat data from this wetland complex has revealed that it supports a great diversity of wildlife, including many species that are considered nationally important. As a complex, this wetland area also meets several of the criteria for designation as a SSSI in its own right.

Priority Habitats

Rivers, Reed bed and Standing Open Water

The pools and shallow lakes that have developed within the flooded Fishlake Meadows conform to the priority UK BAP habitat type “Eutrophic Standing Waters”. These are highly productive water bodies due to the plentiful supply of plant nutrients they contain. In their natural state eutrophic waters have high biodiversity. Planktonic algae and zooplankton are abundant in the water column, submerged vegetation is diverse and numerous species of invertebrate and fish are present.

The Romsey Barge Canal is fed with water from the River Test and from streams draining the Tertiary gravel deposits on the eastern valley side. This mixing of water and its slower flow regime gives the Canal a distinctive character that contrasts with that of the River Test. Many plant and animal species that are rare or scarce in the Test are able to flourish in these conditions. The Canal between the A3059 and Fishlake Meadow Road is of national nature conservation importance forming part of the River Test SSSI.

The Barge Canal has been included in the River Test SSSI and meets criteria 6 (SSSI designated for river species, riverine features or fluvial geomorphology) of the UK BAP priority river types. It also qualifies under criteria 7 (Species including; Annex II Habitats Directive species, BAP priority species) for the populations of BAP priority species it supports. Although Canals are specifically excluded from the Rivers priority habitat definition, the Barge Canal is a canal in name only, and has many features of a natural river.

Reed beds have developed across much of Fishlake Meadows occurring along drains and ditches and as fringes to pools and areas of standing water. Reed beds, dominated by the common reed *Phragmites australis*, provide habitat for a specialist group of birds and insects as well as providing important roosting habitat for migrant birds in particular swallow and martins. Many of the species associated with reed beds are listed as priority species within the UK BAP.

Coastal and Flood plain grazing marsh

Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water levels, containing standing brackish or fresh water. The ditches can be especially rich in plants and invertebrates. As the name suggests, almost all grazing marshes are grazed, but some are also cut for hay or silage. Flood plain grazing marshes may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities. The Fishlake Meadows wetlands contain several areas of flood plain grassland. Within Fishlake Meadows areas of derelict grazing marsh persist. This has remained ungrazed and unmown for many years and the vegetation is gradually changing from grassland to other vegetation and habitat types.

To the north of Fishlake Meadows are the Ashley Meadows. These have not been managed intensively in recent years with extensive grazing conserving open grassland habitat. All the grazing marsh in the area is quite poor in grassland plant species and is typical of grassland that has been agriculturally improved in the late 20th century but has since been left to revert to a more natural state. With continued un-intensive management these meadows should gradually improve their botanical species diversity.

Priority Species

Plants

Fishlake meadows flora was surveyed in 2006 by Neil Sanderson and again in 2008 by Ian Ralphs of Hampshire Biodiversity Information Centre. A full vascular plant list is provided by Hampshire Flora Group in Appendix 5. There are few uncommon or specialist species, probably due to the quite recent abandonment of drainage and intensive farming over much of the area, the fertile soil and lack of effective grazing. With time, and appropriate management, the variety of plant species is likely to increase.

The site supports the locally rare cyperus sedge *Carex pseudocyperus*, a small amount of the fen specialist yellow loosestrife *Lysimachia vulgaris* has also been recorded in the south-east corner of the site. The highest areas have flowery communities dominated by a common fleabane *Pulicaria dysenterica* – false oat-grass *Arrhenatherum elatius* – couch grass *Elytrigia repens* community. Along the dry edges of the site, bindweed *Calystegia sepium* and comfrey *Symphytum officinale* are spreading in. The intermediate wet areas are variously dominated by soft rush *Juncus effusus* and *Deschampsia caespitosa* tufted hair-grass. The wettest areas mainly consist of open muddy lagoons with bulrush *Typha latifolia* or *Juncus effusus* stands.

The flora of the Barge Canal includes the uncommon arrowhead *Sagittaria sagittifolia*. This is a candidate County Scarce species and found in lowland shallow still or slowly flowing water. It rarely colonises newly created water bodies and avoids acid or polluted water.

Belts of poplar cultivars and planted tree willows survive along old boundaries and there is some local invasion by Alder and Sallow.

Birds

The birds of Fishlake Meadows are possibly its most outstanding and spectacular wildlife feature. A remarkable list of birds has been generated with 164 species recorded so far (Lester and Thelwell, 2015). A full bird list is provided in Appendix 4. The bird-life in the Fishlake Meadows wetlands is rich and varied, due to the range of wetland habitats and the lack of disturbance. These wetlands are important as a breeding site for many species, in particular migrant birds such as warblers.

A total of 18 red listed and 48 Amber listed birds of conservation concern, and 27 species listed by the Rare Breeding Birds Panel have been recorded in the last 10 years (Cox, 2013). Not all species nest in the Fishlake Meadows wetlands but utilise them as part of their regular migration route or over-winter in the area before moving to breeding sites elsewhere in the UK. It is clear that the wetlands provide habitat for a significant number of rare breeding birds for at least part of the year.

Within this important assemblage of breeding wetland birds, the numbers of reed bed associated species is particularly impressive. In 2011, this included 31 pairs of reed warbler, 22 pairs of sedge warbler, 8 Cetti's warblers and 4 pairs of reed buntings. Fishlake Meadows wetlands are also of regional importance for the migratory grasshopper warbler, Ashley Meadows area to the north of the wetlands provide ideal habitat for this species. The wetlands are thought to be the most important site for grasshopper warbler in Hampshire. The abundance of breeding reed bed species is particularly significant and is higher than many other wetlands sites in the County (Cox, 2013).

The numbers are a reflection of the diversity of good quality bird habitat present and the value of this site for the conservation of nationally declining bird species, however ecological succession poses a risk to many of the key open habitats. A full list of notable and protected species is provided in Appendix 1.

Invertebrates

As is common with many wildlife sites, the amount of recording effort devoted to invertebrates within the Fishlake Meadows wetlands has been limited. Dragonflies and damselflies are the only species to have been recorded in any detail. On Fishlake Meadows itself, 15 species of dragonfly and damselfly have been recorded, with the azure damselfly *Coenagrion puella*, four-spotted chaser *Libulla quadrimaculata* and broad-bodied chaser *Libulla depressa* being the commonest. Ten of these species were also recorded in a separate survey on the Barge Canal (the *Test Southern Damselfly Survey 2006* produced for the Hampshire Wildlife Trust and Environment Agency by Jim Rouequette). The other group of invertebrates that has received some degree of attention are the moths. These have been recorded mostly from along the Barge Canal. A total of 14 UK BAP priority species have been recorded from the 1km square based on Fishlake Meadows. This list includes many widespread and common species that have undergone significant population declines within the UK over recent years.

Fish

The fish fauna of the Barge Canal has not been studied in any detail, but is known to support a good diversity of typical species of slower flowing waters. This contrasts with the trout and grayling dominated fauna of the main River Test. Species that are particularly abundant include minnow, gudgeon, roach, perch and chub. It is likely that other species such as the EU protected bullhead and lampreys also inhabit the Barge Canal at least for part of their life cycle.

Mammals

There are frequent records of otters using Fishlake Meadows and its surrounding water courses. There is also evidence that they have bred in the area. Otter populations in the Test Valley have recovered from near extinction since the 1980s. However, the conservation of undisturbed breeding refugia such as that provided by Fishlake Meadows is vital for the conservation of otters in the Test Valley and the restoration of their historic range and numbers.

Water voles have been recorded at Fishlake Meadows and along the Barge Canal. This species has undergone a dramatic decline in population throughout the UK since the 1990s, although this seems to have stabilised in recent years. The Test Valley provides ideal habitat for water voles and has remained a strong hold for them in the face of these dramatic national declines.

The Test Valley is important for bats with the Mottisfont Bats Special Area of Conservation (SAC) being identified as an internationally important site for the rare barbastelle bat. These are known to forage up to 16 km from their roost although 80% travel less than 7.5km. A protocol for the conservation of the Mottisfont Bats SAC was prepared for Test Valley Borough Council by Natural England (Cox, 2010). This identifies the need to conserve these important feeding areas within 7.5km of the SAC boundary. Fishlake Meadows wetlands fall within this core foraging area for the Mottisfont Bats SAC. Its diversity of invertebrate rich wetland habitats provides ideal feeding habitat for them. The site is also important for other bats, with noctule, common and soprano pipistrelle, brown long-eared, natterer's, Daubenton's, and whiskered or Brandt's (the last two are difficult to separate) recorded so far.

Reptiles and Amphibians

There has been very little recording of this group of animals. Frogs and grass snakes are present. The grass snake is protected under the UK Wildlife and Countryside Act, and is a UK BAP priority species.

1.2.3. Cultural

Landscape

In landscape terms Fishlake Meadows occupies an important position within the Lower Test valley; it is situated in the broad floodplain immediately to the north of Romsey and as such provides an important link, both physically and historically between the town and its position in the landscape. Fishlake is the first area of semi-natural habitat encountered when leaving Romsey to the north and provides a unique “wilderness” experience to those who visit the site.

Archaeology

There are no known Scheduled Ancient Monuments on site. The site would have been managed as an extensive water meadow system at times during its history, however little evidence of this historic land use remains today.

Land use and current management

Following the cessation of active farming in the early 1990s, the site has seen little active management. As its importance for wildlife became more evident, local naturalists have taken an increasing interest and some rotational scrub management has been undertaken both by contractors commissioned by the Hampshire & Isle of Wight Wildlife Trust and by local volunteers under the supervision of Andy Lester of the Romsey and District Society. Tom Hanslip, the current owner, has also carried out limited tree works to minimise health and safety risks to the public.

The local volunteers group has also carried out some wider habitat management work including ditch management and reed cutting. An active group of bird ringers have monitored the site for a number of years and they have carried out limited scrub management work ostensibly the cutting of flight lines to facilitate their ringing activities.

Local naturalists have also carried out extensive survey work of a range of species groups in recent years. Birds, dragonflies and mammal records are fairly robust and the botany of the area has been more closely studied in recent years with the Hampshire Flora Group visiting in summer of 2014.

Access

The site is regularly used both by special interest groups such as bird ringers and members of the local community for informal recreation primarily walking, often with dogs. Most informal users follow the existing public rights of way and the central path when underfoot conditions allow. Anecdotal reports of an increase in unauthorised access has been noted recently with a number of low-level additional access points being created for undesirable activities such as motorbike scrambling, poaching and canoeing.

Issues

Fishlake has not suffered from a great deal of undesirable activities over time; however there appears to be an increase in issues in recent years. Local users of the site have reported seeing more incidents of poaching and some structures have been defaced with graffiti, often relating to the proposed housing developments. As discussed above, some additional pressure from unauthorised users of the site have also been reported.

IMPORTANT FEATURES AND NON-NATURAL ATTRIBUTES

2.1. Summary of important features and non-natural attributes

Important Features		
Feature	Description	Cmpts Present
Floodplain Grazing marsh	Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water levels, containing standing brackish or fresh water. Most of the grazing marshes at Fishlake have been ungrazed for an extended period and are therefore developing into other vegetation forms such as reedbed and scrub.	1, 3, 4, 5, 6
Reedbed and swamp	Reed beds have developed across much of Fishlake Meadows occurring along drains and ditches and as fringes to pools and areas of standing water. Reed beds, dominated by the common reed <i>Phragmites australis</i> , provide habitat for a specialist group of birds and insects as well as providing important roosting habitat for migrant birds in particular swallow and martins.	3, 4, 5
Eutrophic Standing water	The pools and shallow lakes that have developed within the flooded Fishlake Meadows conform to the priority UK BAP habitat type Eutrophic Standing Waters. These are highly productive water bodies due to the plentiful supply of plant nutrients they contain. In their natural state eutrophic waters have high biodiversity and the aim should be to maintain areas of open eutrophic water bodies within the site..	3, 4, 5
River/flowing water	The Romsey Barge Canal is fed with water from the River Test and from streams draining the Tertiary gravel deposits on the eastern valley side. The site also contains a number of other slow flowing water bodies, notably the main north south ditch and the ditch that runs immediately to the north of the main east/west footpath, which support a diverse range of species	1, 3, 6, 7
Scrub/bankside trees	Scrub and bankside trees have developed in most compartments and have developed as an important feature on the site, particularly for the invertebrate and bird interest. While the continued development of scrub across the site would pose a threat to open habitats if left unchecked, the maintenance of areas of scrub of various age structures is essential to maintaining the sites wider interest for wildlife.	All
Poplar plantation	A derelict poplar plantation is located in the north/west of the site. Many of the poplars are dead and others are in poor condition. A public footpath runs adjacent to the	2

	plantation. If the poplars were removed the area would regenerate naturally to a wet woodland/scrub habitat.	
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Non-natural Attributes		
Attribute	Description	Cmpts Present
Boundary fences/features	Boundaries such as gates and fences are currently incomplete. There are some fences bounding the land to the north and west of the site and to the east of the barge canal. Where it does exist, much of the fencing is dilapidated.	All
Barge Canal	The section of the Romsey Barge Canal is a man-made slow flowing water body which forms the eastern boundary of the site. The canal is part of the River Test SSSI, while sections of the Canal north of the area covered by this plan have a number of chalk stream features this section is of lower quality in ecological terms. In general it is fairly heavily shaded, canalised, over widened with fairly deep silts.	7
Water control structures	The only water control structures present on site are found on the barge canal where sluices are found. The key water control structure off site is the pen-stock on Fishlake Meadows Lane, which controls much of the water level on site.	7
Public Rights of Way	Three public rights of way are found within the site. The first runs north south along the Barge Canal tow path (FP10) and is the key route for access on foot from Romsey, the second public right of way (FP 9) runs east west across the site and the third (FP 502) runs from Fishlake Meadows Lane north along an overgrown route before ending (see Map 4).	7, 1, 3
Permissive paths	One non-definitive path has become established as a well-used access route within the site. This path runs south from FP 9 for approximately 400 metres providing access to the centre of the site. This path is overgrown in places and occasionally floods. It will require significant upgrading if it is to provide access for the full range of visitors. The potential to provide a full circular walk around the site linking FP 9 with FP 502 via a permissive path along the western edge of compartment 3 also exists.	3
Hides/viewing platforms	No hides or viewing platforms are found on site as of November 2015, however the section 106 agreement identifies the aim of providing viewing platforms from the barge Canal tow path, an area at the south end of the site off Fishlake Meadows Lane and at the south end of the permissive path in the centre of the site. There may be potential for	N/A

	a raised platform or viewing hide at the centre of the site, which will provide much better viewing opportunities into the reserve.	
Signage	At present no on-site signage exists. Once the reserve is established, low key entrance signs will be required to inform visitors that they have entered the reserve. There is also scope for bespoke interpretation signs at key viewing points.	N/A

2.2. Site in a wider perspective and the implications for management

Fishlake Meadows offers the opportunity to experience of “wilderness” on the edge of the town. Its proximity to Romsey and the surrounding urban area provides an accessible space where people can escape from the noise and pace of ‘urban’ life for a few minutes, or where they can explore for several hours. The mix of habitats and openness makes for a varied visual and sensory experience. The presence of water and the opportunity to walk or sit beside it enhances the appeal of the site and adds to its gentle, reflective qualities.

The site will attract a variety of visitors, many of whom may not be confident countryside users or whom visit other nature reserves. The site is rich in wildlife, giving people the chance to see, in particular, birds, plants (including a range of striking and attractive flowering plants) and insects that they might not usually encounter. Special consideration will be given to how the site communicates with and welcomes novice, experienced or special interest users.

The Test Valley, in which the Fishlake Meadows wetlands proposed Nature Reserve is located, is rich in important wildlife sites. The whole river has been notified as a Site of Special Scientific Interest in reflection of the important chalk stream habitat it supports. Included in the valley are a number of other SSSI that also have some similarity to the Fishlake Meadows wetlands. These include areas of reed bed, for instance within the Lower Test Marshes Nature Reserve or within the Leckford Estate near Stockbridge. Other sites have valuable examples of flood plain grazing marshes, for instance at Bransbury Common near Longparish or within Chilbolton Common. Although these other wetland sites in the Test Valley have features in common with the Fishlake Meadows wetlands, few, if any of them display the diversity of wetland habitat in such a relatively small area.

The Test Valley has been identified by the Local Nature Partnership as one of 36 Biodiversity Opportunity Areas (BOA) in the County (HBIC, 2009). This is a landscape scale project, which seeks to ensure the conservation of existing wildlife sites, the expansion of these sites and the creation of new wildlife sites to create bigger, better and more places for wildlife in line with the recommendations of Natural England and Defra within ‘Securing biodiversity, A new framework for delivering priority habitats and species in England’ (Defra, 2011). The Test Valley falls within a themed group of similar BOAs referred to as the Major Chalk Rivers that comprises the Itchen Valley, the Avon Valley, the Test Valley and the Meon Valley. This project recognises the current unfavourable condition of most of these chalk river wetlands and the need to make provision for the maintenance, enhancement and reconnection of wetland habitat within them.

The Fishlake Meadows wetlands is therefore a component of an important wildlife rich landscape within the Test Valley and is part of a wider set of important chalk river valleys within the county. These include habitats that are of national and international importance to nature conservation. However, it is also acknowledged that many of the wildlife sites within these river valleys are currently in unfavourable condition and that action and resources are needed to maintain, enhance and reconnect these remaining wetland habitats. The declaration and management of the Fishlake Meadows wetlands as a Nature Reserve fits in well with the objectives of both the national framework for securing biodiversity and the regional objectives for securing biodiversity through Biodiversity Opportunity Areas.

OBJECTIVES

3.1. Vision for the site

The vision for Fishlake Meadows is to create a wildlife rich gateway to the Test valley. The site will offer opportunities for visitors to witness spectacular wildlife at close quarters in an extensively managed landscape. Fishlake will offer opportunities for young and old within the local community to learn about and to become involved in the management of their natural heritage. Fishlake should be recognised as one of the premier sites for wildlife in the County and as such, will add to the prestige of Romsey and its surrounds.

3.2. Site-wide Higher Level Objectives

The following high level objectives are summarised below. They are not shown in priority order and none are mutually exclusive. Each Higher level Objective is supported by a number of operational objectives identified in section 3.3.

	High level objective	Notes
1	Manage the site as a Nature Reserve.	The Section 106 Agreement that underpins the planning permission for land at Oxlease Farm requires that the ownership of Fishlake Meadows is transferred to Test Valley Borough Council and that the area is managed as a Nature Reserve.
2	Facilitate sustainable public access and involvement by local community.	Fishlake Meadows provides an excellent opportunity for the local community to become involved with their local natural environment. Involvement could range from simply accessing the site and enjoying the views of wildlife, to helping out with work parties, leading guided walks or carrying out monitoring.
3	Ensure that Fishlake Meadows does not increase flood risk to adjacent properties.	The Environment Agency manages the key water control structure (the penstock on Fishlake Meadows Lane) which impacts on water levels at Fishlake. At present the hydrology of the site is not well understood and a better understanding is required to ensure that appropriate control measures are in place to ensure that the wildlife interest of the site can be maintained without adding to local flood risks.
4	Manage SSSI Barge Canal to favourable condition.	Romsey Barge Canal is part of the River Test SSSI it is currently defined as in “unfavourable - no change” condition. The Barge Canal suffers from a range of problems which contribute to this classification including over-shading, low flows, lack of in-channel vegetation and deep silt. A restoration plan will be developed to adequately address many of these issues.
5	Comply with the legal, contractual and administrative obligations.	In addition to the requirements set out within the Section 106 Agreement, the management of the site must comply with a series of other legal and administrative requirements. These range from health and safety duties, through to land drainage consent, and the Town and Country Planning, Forestry and Wildlife and Countryside Acts.

3.3. Operational Objectives

The operational objectives below identify the key elements involved in delivering the higher level objectives. The prescriptions in section 3.5 outline how each operational objective will be delivered.

Operational Objective	High Level Objective
Maintain species diversity of flood plain grazing marsh.	1
Maintain areas of open water free from invasive non-native species.	1, 3
Maintain diversity of scrub and woodland habitats.	1,4
Maintain reed bed habitat.	1,4
Maintain populations of notable species.	1
Improve access infrastructure within the site.	2
Develop opportunities for the local community to better view and understand the wildlife found on site.	2
Provide opportunities for community involvement in the management of the site.	1,2
Develop the use of the site for educational purposes.	2
Develop an appropriate water management regime.	1,3, 4
Restore the Romsey Barge Canal to favourable condition.	4, 5
Comply with the requirements of the Section 106 Agreement.	5
Comply with health and safety requirements.	5
Comply with all other statutes.	5
Ensure that Fishlake Meadows is managed to best practice all financial and other records are maintained in a thorough and transparent manner.	5

3.4. Factors Influencing the Achievement of Higher level Objectives

Factor	Notes
Local community ownership	The ownership of the local community is essential, not only to fulfil the site's potential for people but also to ensure that users of the site take account of wildlife in their actions.
Natural Succession	Natural succession is the process by which open bare ground develops into grassland and eventually woodland. All open habitats in the UK are prevented from becoming woodland by external factors such as grazing pressure, mechanical cutting or fire. At Fishlake, a combination of grazing and mechanical cutting will be required to maintain the open habitats.
Uncontrolled water levels	Fishlake meadows has experienced long-term flooding on a number of occasions over the past decade and this type of flooding has the potential to adversely impact upon both wildlife and public enjoyment of the site. Under less extreme conditions the appropriate management of water is essential to ensure that the wetlands continue to function as they should.
Siltation of open water habitats	It is inevitable that ditches and open water areas will become shallower as siltation takes place. If allowed to go unchecked this process will have a profound effect on the Fishlake Meadows landscape and the wildlife that utilises it. The possibility of rotational ditch clearance and removal of sediment should be considered.

Factor	Notes
Invasive non-native species	Aquatic environments are particularly susceptible to the impacts of invasive non-native species. Once an invasive plant or animal has colonised an aquatic area, control is difficult and extremely costly; it is therefore essential that biosecurity measures are implemented.

3.5. Prescriptions

The table below sets out the more detailed operation objectives and prescriptions for the site. Ideally targets and/or limits of acceptable change should be identified for each operational objective. Where this is not possible because additional work is required to inform the setting of targets, an action is identified in the work programme set out in Appendix 2.

Operational Objective	Notes and Prescription	Monitoring
Maintain species diversity of flood plain grazing marsh	<p>Compartments 1, 3, 4 and 6 will require extensive grazing with cattle to maintain the floristic diversity of the sward and limit invasion by scrub and reed.</p> <p>Prescription – Grazing in compartments 3, 4 and 6 should take place from April to August each year with Compartment 1 may require a more flexible grazing regime to reflect the non botanical interest found in this particular compartment.</p> <p>Target – Annual site condition assessment demonstrates improvement of species diversity and reduction in negative indicators</p>	<p>NVC survey at 5 year intervals.</p> <p>Annual rapid Condition Assessment</p>
Maintain areas of open water free from invasive non-native species	<p>The open water habitats, both in the open areas and ditch network at Fishlake are key to supporting the large number of waders, wildfowl and odonata that currently use the site. As areas become shallower due to siltation, invasion from reed and scrub may cause a reduction in the areas of open water and active intervention will be required.</p> <p>Invasive non-native species are a particular problem in aquatic environments and control is expensive</p> <p>And often ineffective. Signal Crayfish are already present at Fishlake and it is important that other invasive species are prevented from colonising the site.</p> <p>Prescriptions – Rotation clearance of ditches and open water areas using mechanical means to maintain areas of open water</p> <p>Put in place a biosecurity protocol to prevent further invasive non-native species colonisation</p> <p>Targets – No net loss of open water habitats.</p> <p>No new colonisation of wetland by invasive non-native species.</p>	<p>5 year mapping of water bodies from aerial photography.</p> <p>Wetland Bird survey counts.</p> <p>Dragonfly transect counts</p>
Maintain diversity of scrub and woodland habitats	<p>A wet woodland and scrub mosaic is a key feature of Fishlake meadows and is essential to maintaining the wildlife interest and landscape character of the site. The invasion of scrub into open areas does</p>	<p>Annual rapid condition Assessment.</p>

Operational Objective	Notes and Prescription	Monitoring
	<p>however pose a threat to the wildlife interest of the site and as scrub ages and develops into secondary woodland, much of its value to wildlife is lost</p> <p>Prescription – Develop a programme of scrub management through mechanical cutting or removal that improves age diversity across the site.</p> <p>Targets – Reduction in the overall cover of scrub on site by 20% by end of year 5.</p> <p>No net loss of open habitats to scrub or woodland.</p> <p>Diverse age structure in 50% of scrub blocks by end of year 5.</p>	<p>Aerial and fixed point photography</p>
<p>Maintain reed bed habitat</p>	<p>Reed bed habitats have developed over areas of permanently inundated grassland and shallow open water in many parts of Fishlake. The reed beds support many important species and are important elements of the aesthetic appeal of the site, however reed invasion can reduce areas of grassland and open water and if left un-managed reed beds will eventually succeed to scrub and wet woodland.</p> <p>Prescription – In areas where reed is to be maintained reed beds should be cut during winter on a 5 to 10 year rotation, to prevent succession to scrub or reed swamp.</p> <p>In areas where reed is invading, grassland reed should be grazed or cut during summer months.</p> <p>In areas where reed is invading areas of open water, rotation mechanical removal every 5 years should be employed to maintain open water.</p> <p>Targets – No net increase in cover of reed across the site.</p> <p>No net loss of reedbed to scrub or wet woodland.</p>	<p>NVC survey at 5 year intervals.</p> <p>Annual rapid condition assessment</p> <p>Fixed point photography</p>
<p>Maintain populations of notable species</p>	<p>A number of the notable species that utilise the site may have specific habitat requirements that are not catered for through the more general habitat management work. Identifying these species and the particular requirements they have will be an important task, utilising the expertise of the naturalist community who have been involved in the site for a number of years.</p> <p>Prescription – Liaise with local experts to identify particular species of concern and establish whether specific management regimes are required.</p> <p>Target – No loss of populations of notable species.</p>	<p>Targeted individual species monitoring.</p>

Operational Objective	Notes and Prescription	Monitoring
<p>Improve access Infrastructure</p>	<p>The current path network consists of three public footpaths and one permissive path. The permissive path that provides access to the centre of the site is not surfaced and becomes impassable when water levels rise.</p> <p>Prescriptions – Ensure all paths provide a quality of surface that facilitates access for those with mobility issues where possible.</p> <p>Investigate the feasibility of providing a circular route, utilising the existing rights of way network and the installation of additional surfaced path.</p> <p>Targets – All existing paths to provide universal access to viewing points by end of year 2.</p> <p>Costed feasibility study examining possible circular route completed by end of year 1.</p>	<p>Audit of access facilities by specialist groups e.g. New Forest Access for All.</p>
<p>Develop opportunities for the local community to better view and understand the wildlife found on site.</p>	<p>Fishlake Meadows has the potential to provide members of the local community with the opportunity to view wildlife at close quarters. As well as physical structures, innovative ways of interpreting the wildlife on site can improve both understanding and interest.</p> <p>Prescriptions – Install viewing platforms at three locations including raised viewing platform at the centre of the site.</p> <p>Develop range of on-site and online interpretation materials.</p> <p>A range of public engagement activities will be provided on site by officers e.g. guided walks</p> <p>Targets – Viewing platforms to be in place by end of year 2.</p> <p>Interpretation programme to be developed in discussion with local community during years 1 and 2, and in place by end of year 3.</p>	<p>Visitor satisfaction survey carried out every 3 years.</p> <p>Monitoring of access to online materials</p> <p>Number of activities provided/ number of attendees</p>
<p>Provide opportunities for community involvement in the management of the site</p>	<p>Having opportunities to take part in active volunteering has been shown to have significant benefits for both physical and mental wellbeing. Volunteers also provide an invaluable source of manpower for site managers and provide an important link with the local community.</p> <p>Prescriptions – Hold annual forum meetings to canvas views from a wide range of users groups and local community representatives</p> <p>Set up a Friends of Fishlake Meadows Group.</p> <p>Develop a range of volunteer roles that can cater for a diverse set of interests and abilities.</p>	<p>Agenda and minutes of forum meetings produced.</p> <p>Number of volunteer man days recorded.</p> <p>Annual survey of friends groups</p>

Operational Objective	Notes and Prescription	Monitoring
	<p>Targets – Minimum of one forum meeting held every year.</p> <p>Set up Friends of Fishlake Meadows Group within year 1</p> <p>Minimum of 30 volunteers registered as “Friends of” by end of year 1</p>	views.
Develop the use of the site for educational purposes	<p>While the lack of on-site toilet facilities may limit the appeal of Fishlake to some school groups, the site may still offer opportunities for use by informal groups and tertiary education.</p> <p>Prescription - Engage with local schools and youth groups to better understand barriers to use of the site.</p> <p>Develop programme of potential research projects for tertiary education.</p> <p>Targets – A clear understanding of the barriers to use by schools developed by end of year 2.</p> <p>A series of research opportunities promoted to colleges and universities by end of year 3</p>	Use of site by educational groups recorded
Develop an appropriate water management regime.	<p>Much of the wildlife found at Fishlake Meadows is closely associated with wetlands and the management of water is therefore a key issue. It is essential that the management of water at Fishlake Meadows does not increase the risk of flooding for neighbouring properties.</p> <p>Prescription – Develop a better understanding of the hydrology of Fishlake meadows its relationship with the neighbouring water bodies.</p> <p>Develop a water management regime with the Environment Agency that maintains or enhances the wildlife value of the site without increasing flood risk.</p> <p>Targets – Hydrological study completed by end year 1</p> <p>Water management regime and protocol agreed with the Environment Agency and Natural England during year 2</p>	Hydrological study and water level management plan produced
Restore the Romsey Barge Canal to favourable condition	The Romsey Barge Canal is part of the River Test SSSI is in unfavourable condition. In addition to the SSSI issues, much of the canal is also unattractive aesthetically and supports a poor diversity of species. A plan outlining measures required to restore the canal was produced by Wessex Land and Water in 2011.	Utilise Natural England Site Condition assessment survey methodology to set up

Operational Objective	Notes and Prescription	Monitoring
	<p>Prescription – Deliver measures outlined in the 2011 Romsey Barge Canal Enhancement Proposals.</p> <p>Target – Barge Canal SSSI unit to be classified as unfavourable recovering as defined by stand alone SSSI condition assessment..</p> <p>Barge Canal to have marginal and emergent vegetation growing along all sections managed by the Partnership.</p>	<p>stand alone survey.</p> <p>Annual rapid condition assessment</p>
<p>Comply with the requirements of the Section 106 Agreement</p>	<p>The Section 106 Agreement is a legal agreement that sets out certain obligations that must be delivered to comply with the conditions outlined within the planning permission granted for the housing development.</p> <p>Prescription – Ensure that partnership agreement and site management plan contain provisions to ensure the 106 Agreement is delivered.</p> <p>Target – TVBC as a planning authority are content that the Section 106 Agreement is being delivered.</p>	<p>TVBC to monitored compliance through Planning enforcement team</p>
<p>Comply with health and safety requirements</p>	<p>The owners and manager of Fishlake Meadows have legal obligations under the Health and Safety at Work Act to ensure that the risks to those who work on the site (including volunteers) are minimised as much is reasonably practical. The owners and managers of the site also have a responsibility to ensure that where reasonable, practical risks to those visiting the site are minimised.</p> <p>Prescriptions – Ensure that all officers and Volunteers comply with H&S policies.</p> <p>Ensure that hazards identified through an annual site risk assessment are address.</p> <p>Targets – No preventable accidents take place at Fishlake Meadows.</p> <p>All health and safety records are maintained correctly</p> <p>All potentially serious accidents/near accidents are investigated and appropriate risk control measures put in place.</p>	<p>All accidents or near accidents are recorded and reviewed at the appropriate H&S committee</p>
<p>Comply with all other statutory requirements.</p>	<p>A wide range of other statutory obligations need to be considered when managing land. The erection of structure such as hides, signs and viewing platforms will need to comply with the Town and Country Planning Act, the felling of significant volumes of timber will need to comply with the Forestry Act, work on the Barge Canal SSSI will require consent from Natural England under the Wildlife and</p>	<p>Copies of consents and permissions held on project files</p>

Operational Objective	Notes and Prescription	Monitoring
	<p>Countryside Act (As amended by the CROW Act) and work within 8 metres of main river will require consent from The Environment Agency. It is essential when managing a high profile site of this nature that the land managers operate to best practice and comply with these and other statues during their operations.</p> <p>Prescription – Ensure that all works on site have permissions/ consents in place prior to work commencing.</p> <p>Target – Consents available for inspection by Management Committee prior to work commencing.</p>	
<p>Ensure that Fishlake Meadows is managed to best practice and that all financial and other records are maintained in a thorough and transparent manner.</p>	<p>The management of Fishlake Meadows will be delivered through a partnership between Test Valley Borough Council and the Hampshire and Isle of Wight Wildlife Trust with input from the statutory agencies and local interest groups. The project partnership will be underpinned by three management committee meetings per year and the Partners will feedback to the annual forum meeting.</p> <p>Prescriptions - Deliver day to day management of Fishlake Meadows through a formal partnership between TVBC and HIWWT.</p> <p>Ensure that records relating to the management of Fishlake Meadows are available for inspection by the Management Committee</p> <p>Targets – Partnership agreement is in place prior to the site being transferred to TVBC</p> <p>Agree a site Management Plan prior to the site being transferred to TVBC.</p> <p>Hold three Management Committees per year.</p>	<p>Management plan in place</p>

3.4. Rationale by Compartment

Comp no.	Compartment name	Rationale
1.	Ashley Meadows	<p>Ashley meadow is generally drier than much of the site and therefore supports a different plant community and structure. This compartment also supports important examples of scarce breeding birds most notably grasshopper warbler and nightingale.</p> <p>To maintain the floristic diversity of the meadow an extensive grazing regime will be required. This compartment may require a more flexible grazing regime to minimise impacts on the key breeding bird species. Rotational scrub management will also be required to maintain the areas of scrub in a condition suitable for nightingale and other scrub breeding species. Particular care should be taken to ensure that some infield scrub is retained for grasshopper warbler to utilise.</p>

2	North woodland	<p>The derelict poplar plantation in this compartment should be felled and if possible removed from site. If the timber cannot be removed it should be retained in large lengths and secured to ensure that it does not present a flood risk. Some standing deadwood should be retained where it does not represent a risk to the nearby footpath. Once the poplars are removed the compartment should be allowed to revert to a wet woodland/ scrub habitat, as a refuge for otter and breeding birds. Intervention should be limited to that required to ensure the safety of the public using the adjacent footpath.</p>
3.	Western meadow	<p>The large western meadow ranges from rank relatively species poor floodplain grassland at its northern end, to open standing water in the south. Contained within the compartment are areas of dense scrub, and the main north south ditch and permissive track that provide access to the centre of the site.</p> <p>To enhance the floristic diversity of the sward an extensive spring/summer grazing regime utilising hardy breeds of cattle should be introduced. The grazing regime should be supported by a programme of scrub control, utilising mechanical cutting and removal using an excavator.</p> <p>The main north south ditch will require a programme of silt removal to ensure it continues to function as a flowing water body.</p> <p>The main north south path will require significant improvements to facilitate access to the centre of the site, where a viewing platform will be erected.</p>
4.	Central meadow	<p>The central meadow is characterised by relatively open floodplain grassland, a series of areas of shallow open water and developing areas of reed. Scrub while present, is relatively widespread and scattered. A row of trees, many of which are dead or dying mark the northern boundary of the compartment and provide a barrier between the compartment and the public footpath FP 9.</p> <p>To enhance the floristic diversity and prevent reed spreading more widely of the sward, an extensive spring/summer grazing regime utilising hardy breeds of cattle should be introduced. To facilitate this grazing regime water levels may need to be lowered during spring and summer.</p> <p>The grazing regime should be supported by a programme of scrub control, utilising mechanical cutting although some scrub should be retained within the compartment.</p> <p>Area of open water should be retained.</p> <p>Mature trees should be retained even if diseased or dying, unless they pose a threat to the public using FP 9.</p>
5.	Southern wetland	<p>The southern wetland contains large areas of open standing water, scrub, reed bed and generally inundated grassland.</p> <p>Grazing in this compartment may prove difficult and it is proposed that this area is not grazed initially. To facilitate grazing water levels may need to be lowered in Spring and Summer.</p>

		<p>Some reed and scrub cutting will be required to improve sight lines from the central viewing platform and to prevent loss of open habitats. Over time, some mechanical removal of silt may be required to prevent open water from becoming too shallow.</p> <p>Rows of dead trees should be retained as perch points for birds of prey and as habitats for bats.</p> <p>A viewing platform will be located in the south eastern edge of the compartment accessed from the Barge Canal tow path.</p> <p>While active management intervention is proposed in limited circumstances, this compartment will be a low intervention area.</p>
6	Eastern meadow	<p>The eastern meadow contains a mix of rank floodplain grassland, reed bed, scrub and open water. For much of its length the compartment borders the Barge Canal tow path.</p> <p>To enhance the floristic diversity and prevent reed spreading more widely of the sward, an extensive spring/summer grazing regime utilising hardy breeds of cattle should be introduced. To facilitate this grazing regime water levels may need to be lowered during spring and summer.</p> <p>The grazing regime should be supported by a programme of scrub control, utilising mechanical cutting. Scrub control in this compartment should be used to enhance views across the site from the tow path and particularly from the viewing point.</p> <p>The potential to create shallow scrapes within this compartment should be examined with the aim of attracting wildfowl and waders within viewing distance of the Barge Canal tow path.</p>
7.	Romsey Barge Canal	<p>The Romsey Barge Canal compartment includes the canal tow path and the eastern buffer area between the canal and the new housing development.</p> <p>The restoration of the canal will involve increasing light levels through the removal or coppicing of some bank side trees as well as bank and in-channel work .</p> <p>Increased light levels will encourage in channel vegetation growth, which should in turn lead to some natural narrowing of the channel. A narrower channel profile will help to offset issues of low flows within the canal.</p> <p>The eastern canal buffer will be managed as a rough grassland, scrub woodland mosaic to ensure that impacts of the new housing development on the Barge Canal SSSI are minimised.</p> <p>This compartment contains the Barge Canal tow path, one of the key access routes onto the site. A number of large poplars grow along the tow path and these present an increasing threat to users of the path and the integrity of the Canal itself. These poplars should be removed as soon as is practically possible.</p> <p>Potential improvements to the access infrastructure of the canal will be investigated.</p>

RESOURCES

Income

Income source	Narrative	Resources available
Commuted sum	<p>As part of the Section 106 Agreement the developers have agreed to transfer a sum of money to support the capital infrastructure and ongoing revenue costs.</p> <p>This sum will be made available in a number of tranches and held by TVBC.</p> <p>The first tranche of funds circa £300,000 will be transferred on commencement of work on the development.</p>	The sum available to facilitate the long term management of the site is £1.3 Million
Basic Payment scheme	Parts of Fishlake Meadows may be eligible for Basic Payment Scheme (BPS) once a grazing system is in place. The site does not currently possess any BPS entitlements and these will need to be purchase if BPS is to be claimed. Initial purchase of entitlements would cost in the region of £4500	Based on 30 eligible hectares est. £5,500 per annum.
Countryside Stewardship	Countryside Stewardship (CS) is an agri environment scheme administered by natural England. The application process is competitive and Fishlake may not be eligible because of the nature of the 106 agreement. If eligible CS provides an annual income stream and supports certain capital works.	Circa £5,000 per annum
Landfill Tax Credit Grants	Fishlake Meadows is located within 10 miles of Virador's Squabb Wood landfill site and as such would be eligible for support through the Landfill Tax Credit scheme. Landfill tax Credits can support a range of activities, however applications to support the purchase of capital items most easily fit the criteria.	One off capital items
Heritage Lottery Fund Grants	The Heritage Lottery Fund provides funding for a range of projects involving both capital and revenue expenditure. Fishlake Meadows has the potential to sit as a centre piece of a large landscape scale bid, for example, for a Romsey Waterway Project or as a standalone project, for example, for restoration of the Barge Canal.	Variable £50,000 to £2 million

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MAPS

APPENDICES

Appendix 1:
Protected and notable species records

Appendix 2:
Annual work plan

Appendix 3:
Long term work programme

Appendix 4:
Fishlake Meadows Bird List

Appendix 5:
Fishlake Meadows Vascular Plant List