

BASILDON DISTRICT HABITAT AND BIODIVERSITY

SERVICE LEVEL AGREEMENT REPORT 2009

December 2009

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BASILDON DISTRICT HABITAT AND BIODIVERSITY SERVICE LEVEL AGREEMENT REPORT 2009

1. EXECUTIVE SUMMARY

- 1.1 This report details the third year of a three year Service Level Agreement between Essex Ecology Services Ltd. (EECOS) and Basildon District Council for the administration of the Local Wildlife Site (LoWS) network.
- 1.2 The main aspects of the study involved monitoring existing LoWS, assessing potential new Sites and mapping UK Biodiversity Action Plan Priority Habitats.
- 1.3 In 2009, three LoWS were added to the network, three were extended and two were reduced, increasing the number to 54 and their overall extent to 1068.4 hectares. The reasons for reduction of area were adverse management in one case and more accurate mapping in the other.
- 1.4 A more detailed condition assessment was used, which suggested that 31 Sites (57%) were considered to be in favourable condition, of which 18 (33% of the total number of Sites) were considered to be maintained and 13 (24%) were thought to be declining, in relation to the features for which they are selected. A total of 23 Sites (43%) were considered to be in unfavourable condition, of which six (11.3%) were judge to be recovering, 11 (20.4%) had not changed and six (11.3%) were showing signs of further decline. Overall, 19 Sites (35%) are declining, 29 (54%) are stable and six (11%) are recovering.
- 1.5 The new Sites were: Ba52 Bluntswall Shaws (3.1 hectares); Ba53 Nether Mayne Verges (2.8 hectares); Ba54 The Wick Country Park (17.3 hectares). The hedgerow network at Snails Hall Farm was also considered, but failed to meet the LoWS Selection Criteria. Further sites for assessment during future reviews are proposed.
- 1.6 The map of UK BAP Priority Habitats across the district was brought up to date using information gathered during SLA visits. Alterations were made largely on the basis of more information regarding the UK BAP Priority Habitat Definitions.
- 1.8 The changes to LoWS in Basildon District are discussed and recommendations for future review of the LoWS network, and the survey and management of Sites are suggested.

2. INTRODUCTION

2.1 General Introduction

This report has been prepared by Essex Ecology Services Ltd. (EECOS), the ecological consultancy of the Essex Wildlife Trust, for Basildon District Council. It comprises the third and final annual report of the services carried out under a Service Level Agreement for the monitoring and review of the Local Wildlife Site network in Basildon District.

Please note that Local Wildlife Sites have previously been known as Sites of Importance for Nature Conservation (SINCs) and County Wildlife Sites (CoWS), but for ease of reference LoWS is used as a blanket term to represent all of these names. Hence, where a date is given for designation of a LoWS, for example, it refers to whichever term was in usage at the time.

2.2 Objectives of Survey

The four main strands of the Service Level Agreement are:

- Existing LoWS annual inspection of all LoWS, survey of any that have suffered disturbance or damage;
- Potential LoWS survey of sites proposed by BDC;
- UK Biodiversity Action Plan (BAP) Habitats identification of the extent and assessment of condition;

A condition assessment of Sites of Special Scientific Interest within Basildon District was originally included within the agreement, but it was perceived that there was little value in this element and so has not been considered this year.

2.3 Survey and Methodology

2.3.1 Existing Local Wildlife Sites

Survey visits were carried out throughout the year and involved a visit to each of the existing Sites to determine its condition. Opportunities were taken to revise or add to the descriptions and records for the Site in order to maintain the relevance of the LoWS network. For each Site a Local Wildlife Site Monitoring Form, based on one produced by The Wildlife Trusts, was completed.

The following notes are intended to clarify the questions and information given on the monitoring forms. The form comes in two sections: Site Details and Site Visit.

The "Site Details" section presents the existing information about the Wildlife Site including its code number, full name, size, ownership and type of habitat. Ownership details are given where known or strongly suspected or alternatively the Site is said to be private. Date selected gives the year in which it originally became a Local Wildlife Site together with the date of any subsequent reviews, not including those carried out as part of this SLA. National Vegetation Classification (NVC) community is given under habitat type where it is known, but in the majority of cases is unknown, as few such surveys have been carried out. The "Initial Site Description" is taken from the existing Local Wildlife Site Register produced as part of the SLA in 2008. "Site Boundary" uses the map from the LoWS Register and shows any proposed changes to the boundary; red cross hatched for deleted areas and orange hatched for added areas.

Questions 2-6 reflect the existing knowledge of the BAP and otherwise significant species and habitats present on the Site and include data from any reliable source that could be located. The opportunity has been taken under question 2 to list all of the "nationally significant" species that have been thus far recorded on the Sites. "Nationally significant" is a term with no official definition, but here is taken as Red Data Book and Nationally Scarce species, i.e. all of those species recorded in fewer than 100 ten kilometre squares nationally. The majority of such species should automatically be included in the Essex Red Data List, although some that are particularly abundant within the county may not be. Legally protected species are also listed and, where few Nationally Scarce or Nationally Rare species are known, other Essex Red Data List species are included, especially plants. The habitats listed under questions 5 and 6 are the current Essex and UK BAP habitats.

Questions 7-9 relate to grant schemes and management advice, much of which information has not been available during this review.

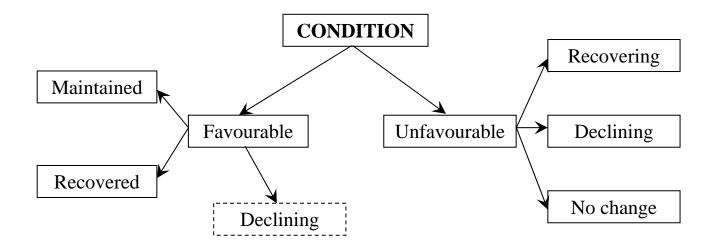
Question 10 relates to National Indicator 197, which is included in the current Essex Local Area Agreement.

The "Site Visit" section presents information generated during this set of survey visits. Question 11, "Site Description", has been used to present information that could modify or expand on the description within the existing LoWS Register. This includes additional plant species, particularly where they are characteristic of one of the Site's main habitats, general habitat description where this is lacking in the existing description or additional invertebrate, bird or mammal species noted during the survey visit.

Questions 12 to 14 consider the site visit itself, allowing the areas and the proportion of the Site visited and the route taken to be recorded together with any information regarding photographs that were taken (site photos are included in Appendix 3).

Questions 15 to 22 deal with changes to the Site and its condition: has there been a change, positive or negative? When was it? How much of the Site has been affected? What prompted the change? Is it reversible? If the answer to question 15 is "no", then questions 16-21 are omitted from the form for the sake of clarity.

Question 22 has previously provided a somewhat crude assessment of the Site's overall condition, but this has been strengthened this year in line with the methodology used by Natural England to assess the condition of SSSIs. Sites are first described as 'Favourable' or 'Unfavourable', considering the features for which they have been selected. Then this opinion is qualified by consideration of the trend in condition. 'Favourable' Sites can be considered to be 'Maintained', 'Recovered' or 'Declining', in comparison to previous assessments. 'Unfavourable' Sites can be 'Recovering', 'Declining' or 'No change'. A 'Favourable Maintained' Site is one in good condition and the management of which is appropriate to maintain the features for which the Site has been selected. The diagram below outlines the process of assessment.



The Natural England method does not allow for 'Favourable' Sites to be 'Declining', but this category is included here, as it is possible for some Sites to remain in favourable condition, even though the trend is negative; through a lack of management for example. The method does rely on information being obtainable for the Site's features, which may not be the case where a Site is selected primarily for its species populations. Where a trend cannot be determined, this is made clear in the comments box. The condition attributed to the Site is a summary of the overall condition of the Site, bearing in mind all of its features of interest. It is possible that a Site that is 'Favourable Maintained' to have a feature that is in decline or for a Site that is 'Unfavourable declining' to have a feature that is maintained or recovering. These situations will be highlighted on the monitoring forms. For Sites where the boundaries have been altered, condition refers to the land within the modified boundary.

If, because of the changes in its area or condition, a Site no longer meets the LoWS selection criteria, this will be noted in question 23.

Question 24, "Other comments", has been used to highlight any actual or potential management issues or the evidence of positive site management. Changes to the LoWS selection criteria are also noted together with information regarding addition or deletion of parts of the Site.

2.3.2 Proposed Local Wildlife Sites

In addition, potential new Local Wildlife Sites notified to EECOS by Basildon District Council, were surveyed and assessed against the current Local Wildlife Site Selection Criteria for Essex. These assessments were all based on single visits to the Sites.

2.3.3 **UK BAP Priority Habitats**

Changes to the map produced as part of the SLA in 2008 were made to reflect additional information that has been forthcoming. This largely relates to changes observed during the course of SLA visits to the LoWS, although changes in available guidance on habitat definitions have also been considered.

2.4 Developments in Non-statutory Site Protection

The Essex Wildlife Trust published a "Local Wildlife Site Selection Criteria" document in June 2009, modifying and finalising the draft criteria used in previous years. These new criteria have been applied to all of the existing and new Sites in the District. With this change in criteria there is also a change in the philosophy of applying the criteria. In the past any criteria applicable to a Site were included within the Site description, so that if there were any records of scarce or rare plants in a woodland, for example, then the rare plant criteria would be applied in addition to any woodland selection criterion. It is now considered that the criteria stated should only be those that would support the Site's selection irrespective of any other criterion. In the example given above, the rare plant criterion would only be listed if the population of one or more plants present would be significant enough to justify the Site's selection irrespective of whether a woodland habitat selection criterion be satisfied or not.

The updated criteria are more closely related to the UK BAP Priority Habitats in line with national guidance produced by Defra. This requires more careful consideration of the habitat types present and has resulted in changes to the UK BAP habitat mapping.

3. RESULTS

3.1 Existing Local Wildlife Sites

3.1.1 Summary

Map 1 illustrates the Local Wildlife Site Network as it stands following the revisions resulting form this year's work. The Local Wildlife Site Monitoring forms for each existing Site are included in Appendix 1. Table 1, below, gives a summary of the changes noted for each Site together with the outcome of their review (*i.e.* deletion, extension, reduction, no change) and information about observations made and suggested action. The Basildon District LoWS Register has also been updated and should be considered in association with this report. The register has been modified to provide more detailed information about the selection criteria used for each Site and about the evolution of Sites through the various reviews that have now been completed.

As a result of the observations during the visits, each Site was given a "condition" assessment as detailed in 2.3.1. The results of this assessment are presented in Table 1 with a summary of any change in condition and comments and suggestions about their existing management and possible improvements to it.

Of the 54 Sites, including those proposed in this report, 31 (57%) were considered to be in favourable condition, of which 18 (33% of the total number of Sites) were considered to be maintained and 13 (24%) were thought to be declining, in relation to the features for which they are selected. A total of 23 Sites (43%) were considered to be in unfavourable condition, of which six (11.3%) were judge to be recovering, 11 (20.4%) had not changed and six (11.3%) were showing signs of further decline. Overall, 19 Sites (35%) are declining, 29 (54%) are stable and six (11%) are recovering. Analysing these figures, it could be said that 56% of Sites (30) are not being managed in a satisfactory manner at present using this methodology for assessing condition.

While a third of the Sites are considered to be declining, a significant proportion of this figure (14 of the 19 Sites) is made up of woodland Sites that, while in decline, are relatively robust and that would take a considerable period of years before reaching a condition that would cause serious concern. As many of these Sites are ancient woodland, they would only be

removed from the register if completely cleared. This leaves five Sites (9%) for which there are serious concerns in relation to their condition

Of the six recovering Sites, four have been the subject of management specifically aimed at improving or restoring their conservation value, while two have benefited from incidental horse grazing.

Ten of the 18 Sites maintained in favourable condition are subject to an agreed conservation management strategy, with the rest either requiring a non-intervention approach (2 green lanes/hedgerows) or benefiting from management that happens to maintain the features for which they have been selected.

3.1.2 Changes to Existing Sites

The following Sites were subject to revision following their inspection:

Ba9 The Wilderness

The hedgerow connecting this Site to Ba14 Laindon Common has been added to the Site, as it is likely to be very old and acts as a corridor between the two Sites. It contains a good diversity of woody species, including Wild Service Tree (*Sorbus torminalis*) and supports an interesting ground flora including Wood Anemone (*Anemone nemorosa*). The Site is increased to 0.9 hectares.

Ba11 Poles Wood

This Site has been subject to some clearance and ground compaction, with various materials stored on the cleared area. The areas in question are unlikely to recover as woodland and so have been removed from the Local Wildlife Site.

Ba15 Basildon Recreation Ground

The extent of qualifying habitat on this Site has been re-mapped to reflect current management practices, leading to a reduction in area to 1.8 hectares.

Ba21 Langdon Complex

Two small blocks of habitat have been added. One was formerly part of Ba15, but does not support the species-rich grassland of that Site, and the other is an additional block of woodland on the edge of Willow Park.

Ba28 Moses' Spring/Barrenleys/Claypitshills Woods

Ba31 Parsonage Farm Green Lane

Ba31 has been greatly extended to include many of the hedgerows between it and Ba28, assessed as one of this year's proposed Sites. In order to rationalise these Sites, the green lane section of Ba28 has been removed and added to the extended Ba31. Ba28 is reduced to 23.8 hectares and Ba31 has been increased to 9.4 hectares.

Ba48 Tompkin's Farm Meadow

This Site has been fenced and is now being grazed by horses. It's boundary has been altered to fit the new fence line.

3.2 Proposed Local Wildlife Sites

At the request of Basildon District Council, five sites were surveyed as potential Local Wildlife Sites and these are detailed below, with the exception of the extension to Ba31 detailed above.

3.2.1 Bluntswall Shaws

These small blocks of woodland are adjacent to the ancient Bluntswall Wood and share much of that Site's character. They are largely dominated by Pedunculate Oak (*Quercus robur*) standards with Hornbeam (*Carpinus betulus*), Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) coppice. The canopy also includes Wild Cherry (*Prunus avium*), while the varied understorey features Midland Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*).

Bluebell (*Hyacinthoides non-scripta*) is prominent within the ground flora alongside Wood Millet (*Milium effusum*), Wood False-brome (*Brachypodium sylvaticum*), Red Campion (*Silene dioica*), Wood Spurge (*Euphorbia amygdaloides*), Broad Buckler Fern (*Dryopteris dilatata*) and Male Fern (*Dryopteris filix-mas*).

There are a number of damp hollows within the woodlands, but only one permanent pond, possibly landscaped in recent times and surrounded by willows (*Salix* sp.). The western block includes a more open strip indicating some disturbance in the recent past.

The name of these blocks suggests antiquity, a shaw being a strip of woodland forming a field boundary, usually created from the extension of an old hedgerow or being the remains of cleared woodland. There remain prominent ditch and bank features around and within the blocks and mid 19th century maps show them in their current form as mature woodland.

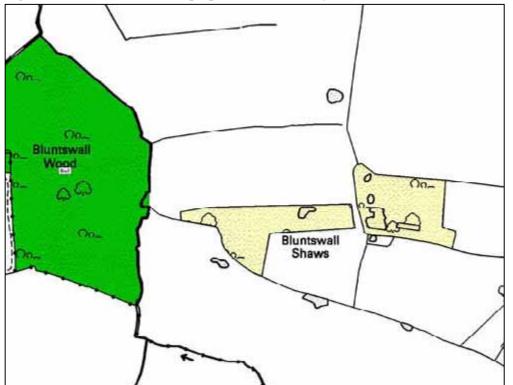


Figure 1 – Bluntswall Shaws – proposed areas shown yellow.

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Although not on the Ancient Woodland Inventory, their species and topography suggest an ancient origin and so it qualifies under criterion HC1 Ancient Woodland Sites becoming Ba52. Each block would have been too small to be considered for the Inventory.

3.2.2 Nether Mayne Verges

This site is a well-managed roadside verge situated in a cutting and located within a Local Wildlife Site cluster on the southern side of Basildon. It consists of a mosaic of flower-rich grassland and young scrub managed on rotation for the benefit of the plants and invertebrates known to be present.

The plant community features Common Knapweed (*Centaurea nigra*), Bird's-foot Trefoil (*Lotus corniculatus*), Creeping Cinquefoil (*Potentilla repens*), Lady's Bedstraw (*Galium verum*), Meadow Vetchling (*Lathyrus pratensis*), Red Bartsia (*Odontites vernus*), Agrimony (*Agrimonia eupatoria*), Glaucous Sedge (*Carex flacca*) and Sweet Vernal Grass (*Anthoxanthum odoratum*). Species of greater conservation significance include Yellow Rattle (*Rhinanthus minor*), Spiny Restharrow (*Ononis spinosa*), Corky-fruited Waterdropwort (*Oenanthe pimpinelloides*) and Green-winged Orchid (*Orchis morio*).

The verge is known to support a range of butterflies including Marbled White, Green Hairstreak and the UK BAP Priority species Grizzled Skipper.

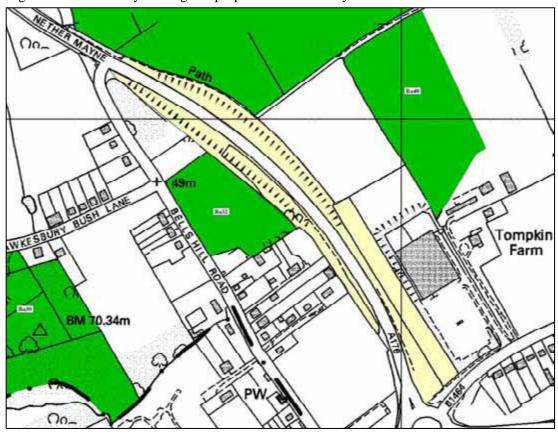


Figure 2 – Nether Mayne Verges – proposed area shown yellow.

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A strip of rough grassland to the east of the verge, bounded by a large, old hedgerow, is also included. Species present include Common Knapweed, Tall Fescue (*Festuca arundinacea*) and Corky-fruited Water-dropwort

This species rich grassland site is not unimproved and so could not be selected as Lowland Meadows; instead it qualifies under HC11 Other Neutral Grasslands and becomes Ba53. SC18 is also applied because of the presence of Grizzled Skipper.

3.2.3 The Wick Country Park

This site is a recently created country park hosting an education centre and comprising a mixture of rough grassland, young planted woodland and amenity grassland, bounded and crossed by old hedgerows. North Benfleet Brook flows through the site and a lake has been excavated.

The majority of the grassland is of no botanical interest, but its management encourages good populations of invertebrates. In some areas thinner topsoil has lead to the development of finer grasses and a more diverse herbaceous component. These areas are characterised by the presence of Wild Carrot (Daucus carota).

Sappers
Farm

Education
Centre

Country Park

Fanton
Hall

Figure 3 – The Wick Country Park – proposed area shown yellow.

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The lake has some shallow margins where fringes of Common Reed (*Phragmites australis*) and Bulrush (*Typha latifolia*) are established. The various ponds around the site contain Common Reed and Sea Club-rush (*Bolboschoenus maritimus*) and have been shown to support a good range of dragonflies and damselflies.

Pill boxes within the site support both Hart's-tongue (*Phyllitis scolopendrium*) and the Essex Red Data List species Flattened Meadow-grass (*Poa compressa*).

This site is composed of a mosaic of habitats that are not of sufficient value to justify selection on their own, but the site qualifies under HC27 Small Component Mosaics. The site has clear education value for the nearby population centres adding the supporting Urban Sites criterion (HC30). It becomes Ba54. The site possess features that may be of significance to invertebrates, including the bare ground around the lake, areas of sparsely swarded, flowery grassland and the mature hedgerows. Few data exist for invertebrates, but a survey may be productive.

3.2.4 <u>Snails Hall Farm Hedges</u>

The hedgerows in this area to the south of Billericay are tall and wide with many mature standards, principally Pedunculate Oak. There is not a great diversity of woody species within the hedges and their bases do not appear to be particularly flower rich.

The northern fields are small and reflect an old field system, as is the case on Mill Meadows to the west, but there is little or no semi-natural habitat enclosed by them. Several small Badger setts are present in the hedgerows.

The hedgerows do not satisfy any of the current selection criteria, which for hedgerows is based on connections with existing Local Wildlife Sites or the presence of semi-natural habitats of significance. Of interest, though, is the sandy nature of the soils along the western edge of this block. These would be suitable for the re-creation of acid grassland habitat similar to that present on Mill Meadows.

ICAY

Short Farm

To Many

To

Figure 3 – The Wick Country Park – proposed area shown yellow

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3.3 **UK BAP Priority Habitats**

Table 2 below lists the latest UK BAP Priority Habitats that are present in the district together with an approximate estimate of their extent. The only known areas of BAP habitat outside of LoWS and SSSIs, with the exception of those habitats detailed in section 4.3, are sections of inter-tidal habitat that cannot easily be added to another LoWS and that are too small to be made LoWS in their own right.

It is possible that there are areas of non-ancient woodland outside of the Site network that conform to the NVC W8 or W10 communities and so could be considered to be Lowland Mixed Deciduous Woodland BAP habitat. Such information could not be gathered as part of this review, but might lead to the creation of additional Local Wildlife Sites under the new Site Selection Criteria.

Information regarding the Ponds and Saline Lagoons BAP habitats is still not sufficient to include them within this analysis.

Table 2 – UK BAP Priority Habitats

UK BAP broad habitat	UK BAP priority habitat	Area in Basildon District (ha)	% in LoWS	% in SSSI	Notes
Boundary and Linear Features	Hedgerows	(13.7)	(100)	0	Only Sites with relevant habitat selection criteria are included, see section 4.3 for further explanation
Broadleaved Mixed and Yew Woodland	Lowland Mixed Deciduous Woodland	165.6	60.4	39.6	Norsey Wood SSSI is the only non LoWS ancient woodland in the district
Acid Grassland	Lowland Dry Acid Grassland	6.7	100	0	Some overlap with the following habitat remains
Neutral Grassland	Lowland Meadows	140.8	92.4	7.6	Decrease, as some sites now recognised as acid grassland
Improved Grassland	Coastal and Floodplain Grazing Marsh	382.8	94.0	6.0	
Fen, Marsh and Swamp	Reedbeds	19.9	34.9	65.1	
Inland Rock	Open Mosaic Habitats on Previously Developed Land	63.6	100	0	This includes only sites known to have importance for nature conservation, as set out in the BAP
Littoral Sediment	Coastal Saltmarsh and Intertidal Mudflats	74.6	44.7	38.7	Two priority habitats combined because of mapping difficulties; note that 16.6% lies outside of SSSIs and LoWS
Total		867.7	82.3	16.3	Note: 1.4% outside of LoWS and SSSI

At present the resolution of habitat mapping is at a field unit level, although some sites, particularly grassland ones, do contain mosaic of habitats on a smaller scale. Mill Meadows is an example where both acid and neutral grassland is present, but insufficient information is available to plot an accurate boundary between them. In these cases the predominant grassland type has been used.

The Lowland Meadows UK BAP Priority habitat now has a more defined definition relating to grassland communities. In Essex grassland has to be largely unimproved and of the National Vegetation Classification (NVC) MG5 "hay meadow" community in order to qualify as Lowland Meadow. This has meant that some grassland LoWS are no longer considered to be this UK BAP Priority Habitat, but have been re-defined as Lowland Dry Acid Grassland.

Species-rich grasslands of more recent origin (the new Nether Mayne Verges LoWS being a good example) do not sit within this UK BAP Habitat.

Map 2 illustrates the UK BAP Priority Habitats within the district.

4. CONCLUSIONS

4.1 Local Wildlife Site Network

As a result of this review, three Local Wildlife Sites are proposed to be added to the network and none has been deleted, giving a total of 54 Local Wildlife Sites. These Sites cover an area of 1068.4 hectares following the removal of 1.2 hectares and the addition of 31.6 hectares. Virtually all of the change in area relates to the addition of new Sites, with the existing Sites now stable in their boundaries following the three year review contract.

Half of the area removed has been added to a different Site (Ba31 Parsonage Farm Green Lane) and the other half, lost from Ba15 Langdon Hills Recreation Ground, is the result of more accurate mapping of habitat extent.

Although still intact at the time of the inspection visit, it is understood that Ba44 has, or very soon will, be destroyed in order to build a waste management facility. This will be the first loss of LoWS habitat as a direct result of a planning decision, since the SLA began, albeit in this case a planning decision made by Essex County Council and not Basildon District Council.

Other Sites face an uncertain future, such as Ba35 Vange Hill and Golf Course, which it is understood will be subject to a landscaping proposal and Ba51 Barrenleys Meadow, where a number of mature Oaks have been cleared suggesting a possible change of management

Although no positive management has been carried out at Ba20 Norsey Meadow, it was not deleted during this review, as the new Selection Criterion for Lowland Meadows puts more emphasis on retaining grasslands that are in a deteriorated condition if they are capable of being restored. It is understood that plans are being developed to introduce cattle grazing on the Site, but if these are delayed then any amount of cut and collect management would be of benefit in preventing further deterioration. The meadow should be monitored prior to and following any management work in order to inform the management strategy in the light of the plant community's response. If with appropriate management the grassland does not regain some of its previous species diversity, it may still be removed from the LoWS network during a future review.

Other Sites still in need of positive conservation management in the near future, including:

- St Nicholas Church Complex, where the grassland immediately north of the churchyard has become rank and is losing its floral diversity;
- Hawkesbury Manor, where management is failing to retain the full extent of species rich grassland;
- Vange Hill and Golf Course, where the formerly open earthworks are now dominated by scrub'
- Nevendon Bushes; where scrub is invading an open ride;
- Pitsea Landfill Site; scrub and grassland management desperately needed; a management agreement is proposed, but action should not wait for this to be settled.

In contrast, the following Sites are showing evidence of positive management:

- Laindon Common, a block of scrub has been cleared and acid grassland plants have re-colonised. The remaining open acid grassland also needs management, though to prevent the scarce plants being lost;
- Dry Street Pastures, Basildon Natural History Society is advising on management;

Further Sites face the prospect of positive management, although no action has yet been taken, including:

- Ba43 "Untidy Industries" Site, to be managed by a partnership of organisations as a "brownfield" nature reserve;
- Ba46 Bowers Marshes, under the control of the RSPB with major enhancement works about to start.

The condition assessments used during this year's assessment visits are more valuable than the three-choice system (poor, moderate or good) used in previous years, primarily because they clearly show the trend in condition of each Site. Over half of the Sites (57%) are considered to be in favourable condition, but 40% of these favourable Sites are declining. It is recommended that any future review of Sites uses this same system, which would then allow an interesting analysis of longer term trends. The full Natural England condition assessment system, which includes quantifiable targets for each site feature may not be readily achievable within the scope of the district's Sites, not least in that it requires considerable preparatory work in order to determine the targets.

As well as monitoring for the practical effects of planning policy on the network of Local Wildlife Sites, the visits carried out as part of this SLA serve to maintain the information held about the Sites, providing a strong evidence base on which consider future planning decisions. Without some form of review, confidence in the validity of the data declines, with the possible result that the strength of the conservation argument is weakened.

After the three years of this review it is believed that the network of LoWS is relatively robust, all of the Sites being subject to detailed surveys and assessments to ensure that their boundaries, selection criteria and descriptions will stand up to scrutiny.

4.2 Potential Local Wildlife Sites

A number of Sites were noted for their potential to be included in the Local Wildlife Site Network. Few obvious potential sites remain following the three years of the SLA, so those suggested below are more speculative and have mostly been identified by looking at landscape features on maps and air photos. There is a continual possibility of additional sites coming to the attention of interested parties. These sites and any others that come to the attention of the District Council should be included in any future review of LoWS. The sites are listed below and illustrated by maps in Appendix 1:

- Hannikins Farm; this site has been suggested by a reliable third party, although its
 exact location and extent are not known at the time of writing. This site is believed
 to include some good grassland;
- Wiggins Lane; an old Green Lane or linear woodland;
- Land north of Northlands Farm, Dry Street; a collection of paddocks on the same aspect and slope as the Ba24 Dry Street Pastures. Adjacent to Ba22 Westley Heights;
- Shipmans Shaw, London Road, Billericay; an old strip of woodland that may be of ancient origin, as suggested by its name;
- Langhams, Great Burstead; an old landscape with field boundaries unchanged in the last 150 years. The suggested areas include hedgerows, grassland, a stream and recent reservoirs.

In addition the coastal areas around Bowers and Vange Creek Marshes (Ba46 and Ba37) should be monitored for changes as a result of the RSPB's habitat creation and restoration

plans being carried out. These existing LoWS may be extended as a result or their habitat description and selection criteria may need to be reviewed.

4.3 UK BAP Priority Habitats

As in 2008, changes to the extent of each UK BAP Priority Habitat are the result of more detailed consideration of the updated habitat definitions and make little difference to the overall picture. The main point to be taken from the figures is that the statutory protection afforded to SSSIs is unlikely to play a significant role in protecting the District's UK BAP Priority Habitats. Instead it is the LoWS that will play a vital role in recognizing and protecting BAP habitats within the District, provided that sufficient weight is given to their status in the planning system.

The SSSIs do cover coastal habitats and Reedbeds well, but Lowland Meadows are particularly poorly represented given their extent in the District. The major problem facing these Sites is inappropriate management, which prevents them from achieving their full potential and reduces the possibility of them being afforded statutory protection. Open Mosaic Habitats on Previously Developed Land are not represented within the SSSI at all, although some of these represent the best habitat in the District for overall species diversity and are in many ways the most vulnerable to development pressure, as evidenced by the imminent loss of Ba44 Burnt Mills.

Additional Lowland Mixed Deciduous Woodland has been added this year on the basis of its National Vegetation Classification community type and some Lowland Meadows have been switched to Lowland Dry Acid Grassland, as they fit that habitat more than they do the NVC MG5 hay meadow community.

A significant area of the Hedgerows habitat has been added as a result of the extension to Ba31 Parsonage Farm Green Lane Site. The designation of more hedgerows as Local Wildlife Sites is hampered by the relevant Site Selection Criteria, which specifies that, to be selected, hedgerow networks must connect existing LoWS or enclose semi-natural habitat. Without one of these conditions being met, the quality of the hedgerows, in terms of their diversity of woody shrubs or ground flora, would have to be very high in order to justify selection. It is believed that few such networks remain in the county. The conclusion is that

the Hedgerows UK BAP Priority Habitat is unlikely to be satisfactorily protected by the LoWS network and so other mechanisms should be put in place to prevent a decline in the districts resource.

4.6 **Recommendations**

The LoWS network in Basildon District is now considered to be robust and up to date. No other District in Essex has put in place such a proactive mechanism to refine and strengthen the evidence base required under national planning guidance. It could be argued that LoWS reviews are out of date as soon as they are complete and, in most other cases, the reliance on a single year's field survey work dictates that a certain level of uncertainty remains in the information pertaining to Sites that are selected or those that are left out.

Now that a sound base has been created, an annual review of all Sites would provide a diminishing return in terms of new Sites or additional data gathered about existing ones. As the Site Selection Criteria have now, in theory, stabilised the need for further continual review has eased. It is, however, recommended that the network is reviewed again after an interval of no more than three years, to prevent the evidence base from losing its integrity. More frequent monitoring of those Sites perceived to be most under threat from development or adverse management could certainly be justified and it is recommended that some mechanism for carrying out such monitoring is put in place.

Any future review should include a condition assessment of all Sites using the methodology outlined in this report. Changes to the Priority Habitats included within the UK BAP should also be monitored in relation tot heir effect on Site selection. It is hoped that a more stable system has now been created following the latest national review.

Until a further review is carried out, it will be important to maintain a register of potential Sites and for these to be borne in mind in the planning process. All ecological surveys in support of a planning application should include an assessment against LoWS Site Selection Criteria, as an appropriate benchmark for the establishment of conservation value in a geographic framework. LoWS are important at a county level and any site satisfying one or more of the selection criteria should be considered to be of such importance.

The monitoring forms used during this SLA have the advantage of collating all of the information considered to be of relevance in one place. However, they are cumbersome and the structure of questions in some cases limits the information that is forthcoming. It is suggested that an alternative monitoring form structure is developed with fewer questions and less repetition of existing information. The forms should be read in conjunction with the LoWs Register and so repeating information in both serves little purpose. A more open set of questions soliciting information in a prose format would make an easier read and provide more detail.

There are aspects of the LoWS network that may best be dealt with outside of the cycle of reviews. Certain Sites would benefit from more detailed specialist surveys of, for instance, plants or invertebrates in order to gain information that may strengthen their status. Specialist information of this kind can go out of date in a short space of time, particularly in the face of changes in management practices.

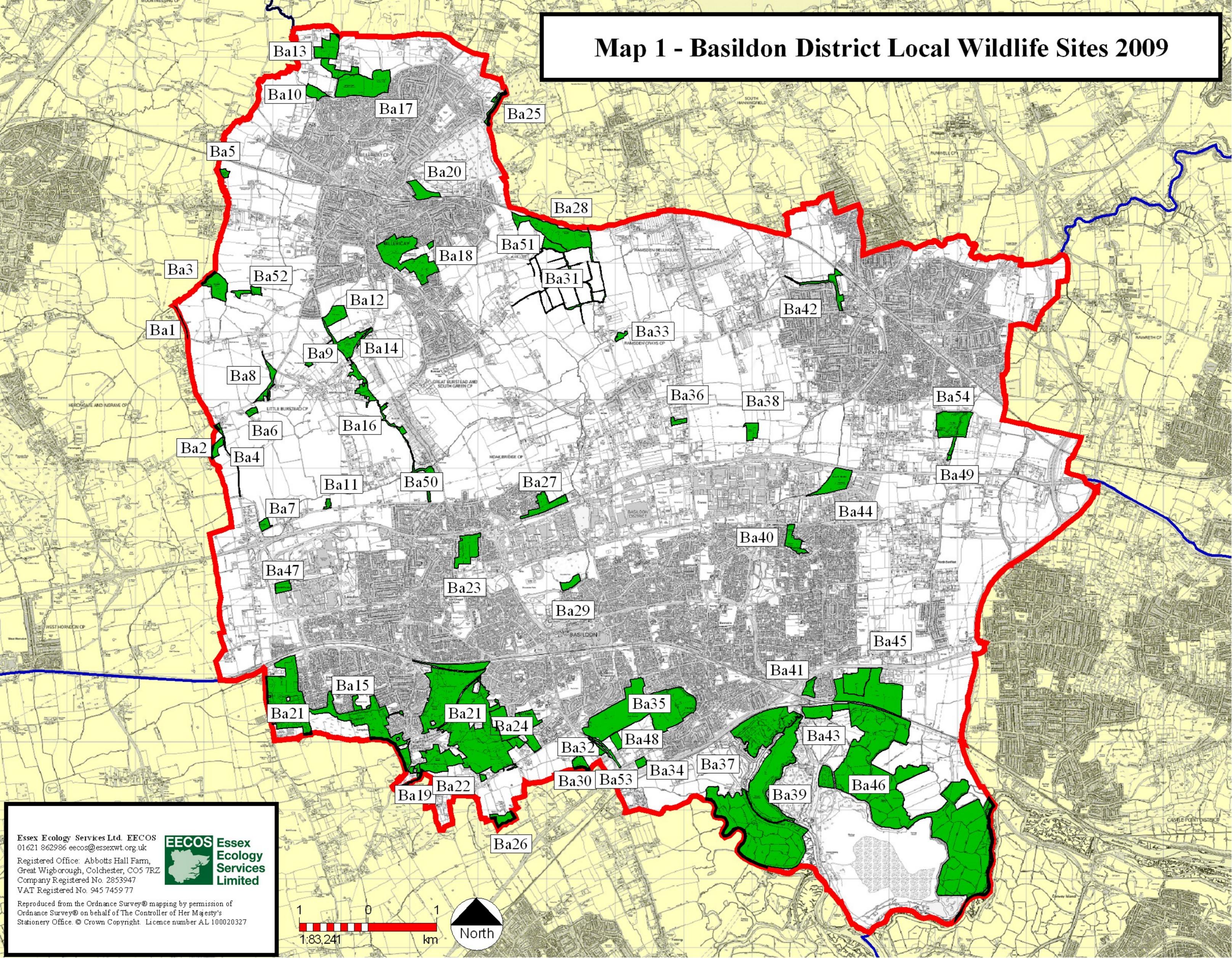
It would also be useful to provide coordinated management advice for Site owners, either in the form of a simple Positive Conservation Management Statement, the format for which has been developed by the Essex Local Wildlife Sites Partnership, or as a more detailed management strategy or plan for larger or more complicated Sites. There is a possibility of pooling resources across the District to encourage appropriate management in those Site owners sympathetic to the LoWS concept. Obvious examples are in woodland management, the use of grass management machinery, and in the provision of stock for grazing. Such projects may be suitable for external funding.

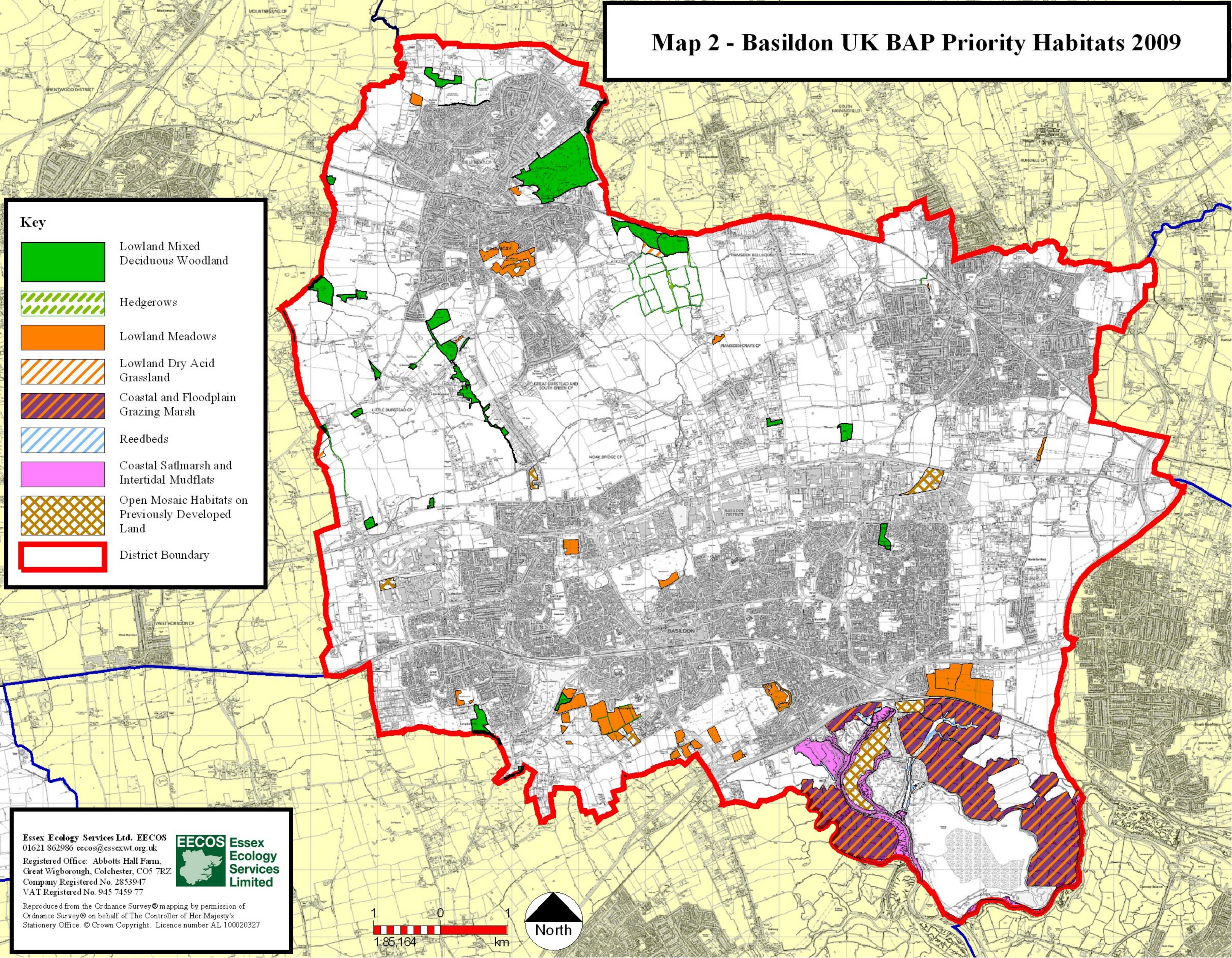
TABLE 1 – Change and Condition of Existing LoWS

Site	Review	Condition	Comments	Suggested Action	Whom	PCMS?
Ba1 Blind Lane	No change	Favourable - maintained		Remove Spanish Bluebell to prevent hybridisation	?	
Ba2 Parkhill Wood Meadow	No change	Favourable - maintained	Now being horse grazed			
Ba3 Bluntswall Wood	No change	Favourable - declining	no active management	Offer advice to landowner	ELWSP	
Ba4 St Margaret's Wood and Lane	No change	Unfavourable - declining	Fly tipping in southern half			
Ba5 Round Wood	No change	Favourable - declining	No active management	Offer advice to landowner	ELWSP	
Ba6 Botneyhill Wood	No change	Favourable - declining	No active management	Offer advice to landowner	ELWSP	
Ba7 Gravelpit Wood	No change	Unfavourable - declining	No active management	Offer advice to landowner	ELWSP	
Ba8 Little Burstead Common	No change	Unfavourable – No change	Woodland management needed; track created	Monitor use and effect of the track	EECOS	
Ba9 The Wilderness	Extension	Favourable - declining	Old hedgerow added			
Ba10 Queens Park Meadow	No change	Unfavourable - recovering	Grazing plan needs to be fine tuned	Produce management plan; instigate botanical monitoring of condition of grassland	Basildon District Council	
Ball Poles Wood	Reduction	Unfavourable - declining	No active management; damaged by owners	Offer advice to landowner	ELWSP	
Ba12 Frith Wood	No change	Favourable - maintained				
Ba13 Buckwyn's Wood	No change	Favourable - declining			Basildon District Council	
Ba14 Laindon Common	No change	Unfavourable - recovering	Scrub clearance has happened	Encourage the production of a management plan and facilitate action	Basildon District Council	
Ba15 Langdon Hills Recreation Ground	Re-mapped	Favourable - maintained				
Ba16 Little Burstead Woods	No change	Favourable - declining	No active management	Offer advice to landowner	ELWSP	
Ba17 Queens Park Country Park	No change	Favourable - maintained				
Ba18 Mill Meadows LNR	No change	Favourable - maintained				Yes
Ba19 Coombe Wood Extensions	No change	Favourable - declining				Yes
Ba20 Norsey Meadow	No change	Unfavourable - declining	Continued lack of management	Begin grassland management immediately	Basildon District Council	
Ba21 Langdon Complex	Extension	Favourable - maintained	Small block added			
Ba22 Westley Heights	No change	Favourable - maintained				Yes
Ba23 St Nicholas Church Complex	No change	Unfavourable – Recovering		Manage grassland north of church; encourage residents group to manage scrub under supervision; develop management strategy.		
Ba24 Dry Street Pastures	No change	Unfavourable – Recovering	Some positive management underway			
Ba25 Forty Acre Plantation	No change	Favourable - maintained				Yes
Ba26 "Kennels Wood"	No change	Favourable - maintained				Yes
Ba27 Noak Bridge Reserve	No change	Unfavourable – No change	Scrub management desirable; no information on GCN population trend	Encourage Friends group to manage under supervision; develop management strategy		
Ba28 Moses' Spring/Barrenleys/Claypitshills Woods	Minor reduction	Unfavourable – No change	Green lane switched to Ba31	Encourage positive woodland management if possible	ELWSP	
Ba29 Gloucester Park Meadow	No change	Unfavourable – No change	Grassland management not sufficient to limit coarse species			
Ba30 Hawkesbury Manor	No change	Unfavourable – No change	Scrub and woodland management necessary	Produce management plan and resource	ECC?	Yes
Ba31 Parsonage Farm Green Lane	Major extension	Favourable - maintained	Connected hedgerows added			
Ba32 Bells Hill Meadow	No change	Favourable - maintained	Monitor management		ECC	Yes
Ba33 Crays Hall Meadow	No change	Unfavourable – No change	Grassland management not currently ideal	Offer advice to landowner	ELWSP	Yes
Ba34 All Saints Grasslands, Vange	No change	Unfavourable – No change	Grassland management not currently ideal			
Ba35 Vange Hill and Golf Course	No change	Unfavourable – No change	Management needed; Golf course needs protection from development	Produce management plan; focus on scrub removal from earthworks	Basildon District Council	
Ba36 Nuttons Wood	No change	Favourable - declining	No active management	Offer advice to landowner	ELWSP	

TABLE 1 – Change and Condition of Existing LoWS

			Overall benefits from RSPB management, but			
Ba37 Vange Creek Marshes	No change	Unfavourable - recovering	some features yet to receive appropriate management.			Yes
Ba38 Noke Wood	No change	Favourable - declining	No active management	Offer advice to landowner EI	LWSP	
Ba39 Pitsea Landfill	No change	Unfavourable - declining	Inappropriate use near entrance; grassland management needed		asildon District ouncil	
Ba40 Nevendon Bushes	No change	Favourable - declining	No active management	, 1	asildon District ouncil	
Ba41 Pitsea Mount	No change	Unfavourable – No change	Further management desirable	\mathcal{E}	asildon District ouncil	
Ba42 Wickford Riverside	No change	Favourable - maintained	Grassland management could be improved	Produce Management Plan		
Ba43 "Untidy Industries" Site	No change	Favourable - declining	Scrub management needed to maintain open aspect and invertebrate interest			Yes
Ba44 Burnt Mills	No change	Favourable - maintained				
Ba45 Bowers Gifford Grasslands	No change	Favourable - declining	Gradually scrubbing over; careful management needed	Offer advice and assistance to owner EI	LWSP	
Ba46 Bowers Marshes	No change	Unfavourable – No change	Positive management anticipated following RSPB takeover			Yes
Ba47 Southfields Washlands	No change	Favourable - maintained	Could be improved by targeted management	Discuss management with AWS EI	LWSP	
Ba48 Tompkins Farm Meadow	Boundary adjusted	Unfavourable - recovering	Appears to be more secure, although horse grazing not ideal		asildon District ouncil; EECOS	
Ba49 Home Farm Meadow	No change	Unfavourable – No change	Scrub encroachment needs to be cleared and horse grazing not ideal			
Ba50 River Crouch at Noak Bridge	No change	Favourable - maintained				
Ba51 Barrenleys Meadow	No change	Unfavourable - declining	Concern over future management; tree removal has reduced overall value, but not the target feature			
Ba52 Bluntswall Shaws	New	Favourable - declining	No active management	Offer advice to landowner EI	LWSP	
Ba53 Nether Mayne Verges	New	Favourable - maintained				
Ba54 The Wick Country Park	New	Favourable - maintained				



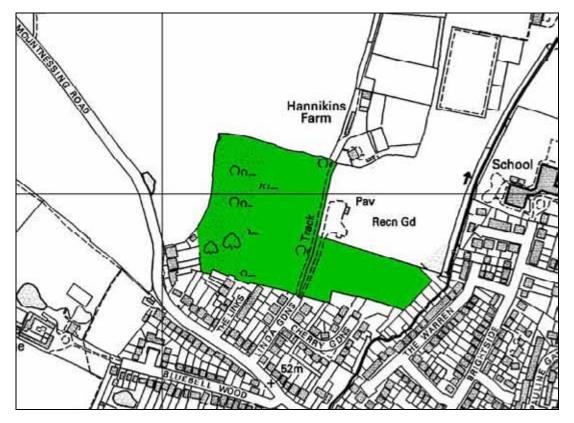


APPENDIX 1 - SUMMARY TABLE OF LOCAL WILDLIFE SITES 2008

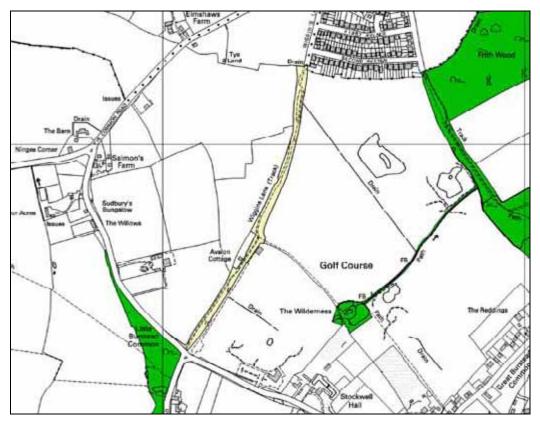
Code	Site Name	Area (ha)	Grid Reference
Ba1.	Blind Lane	0.3	TQ 647931
Ba2.	Parkhill Wood Meadow	3.0	TQ 651912
Ba3.	Bluntswall Wood	9.4	TQ 652937
Ba4.	St. Margaret's Wood and Lane	2.0	TQ 653913
Ba5.	Round Wood	1.3	TQ 653953
Ba6.	Botneyhill Wood	1.4	TQ 657918
Ba7.	Gravelpit Wood	2.1	TQ 659902
Ba8.	Little Burstead Common	4.0	TQ 660923
Ba9.	The Wilderness	0.9	TQ 665925
Ba10.	Queens Park Meadow	4.0	TQ 666965
Ba11.	Poles Wood	1.0	TQ 668905
Ba12.	Frith Wood	6.3	TQ 669932
Ba13.	Buckwyn's Wood	15.4	TQ 669969
Ba14.	Laindon Common	10.0	TQ 671928
Ba15.	Langdon Hills Recreation Ground	1.8	TQ 673875
Ba16.	Little Burstead Woods	9.9	TQ 674921
Ba17.	Queen's Park Country Park	24.1	TQ 674966
Ba18.	Mill Meadows LNR	29.8	TQ 680941
Ba19.	Coombe Wood Extensions	1.1	TQ 682864
Ba20.	Norsey Meadow	6.1	TQ 682951
Ba21.	Langdon Complex	205.9	TQ 683874
Ba22.	Westley Heights	17.1	TQ 684867
Ba23.	St. Nicholas Church Complex	11.9	TQ 688896
Ba24.	Dry Street Pastures	27.7	TQ 693874
Ba25.	Forty Acre Plantation	3.5	TQ 693964
Ba26.	"Kennels Wood"	4.7	TQ 694859
Ba27.	Noak Bridge Reserve	8.7	TQ 700905
Ba28.	Moses' Spring/Barrenleys/Claypitshills Woods	23.8	TQ 701944
Ba29.	Gloucester Park Meadow	3.2	TQ 703893
Ba30.	Hawkesbury Manor	3.6	TQ 705867
Ba31.	Parsonage Farm Green Lane	9.4	TQ 705934
Ba32.	Bells Hill Meadow	1.5	TQ 707868
Ba33.	Crays Hall Meadow	1.4	TQ 711929
Ba34.	All Saints Grasslands, Vange	1.9	TQ 715867
Ba35.	Vange Hill	73.1	TQ 719874
Ba36.	Nuttons Wood	1.7	TQ 719917
Ba37.	Vange Creek Marshes	122.1	TQ 730860
Ba38.	Noke Wood	4.2	TQ 730915
Ba39.	Pitsea Landfill	46.6	TQ 732865
Ba40.	Nevendon Bushes	6.2	TQ 736899

Ba41.	Pitsea Mount	3.3	TQ 738877
Ba42.	Wickford Riverside	6.0	TQ 740938
Ba43.	"Untidy Industries" Site	7.3	TQ 741874
Ba44.	Burnt Mills	11.5	TQ 743908
Ba45.	Bowers Gifford Grasslands	43.5	TQ 747875
Ba46.	Bowers Marshes	244.2	TQ 750860
Ba47.	Southfields Washlands	3.3	TQ 661892
Ba48.	Tompkins Farm Meadow	2.9	TQ 710870
Ba49.	Home Farm Meadow	1.5	TQ 759913
Ba50.	River Crouch at Noak Bridge	6.2	TQ683908
Ba51.	Barrenleys Meadow	3.7	TQ701942
Ba52.	Bluntswall Shaws	3.1	TQ656935
Ba53.	Nether Mayne	2.8	TQ708869
Ba54.	The Wick Country Park	17.3	TQ758916

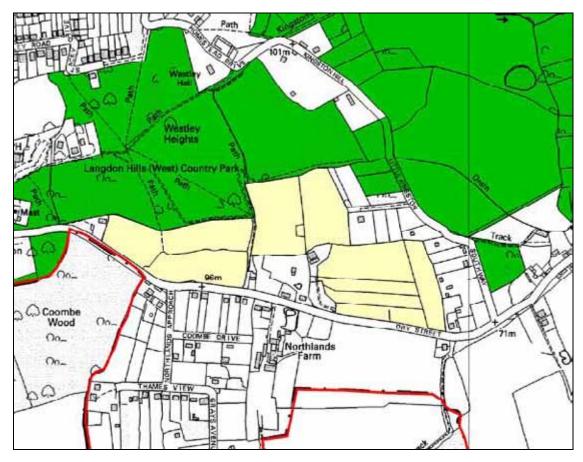
APPENDIX 2 – POTENTIAL LOCAL WILDLIFE SITES



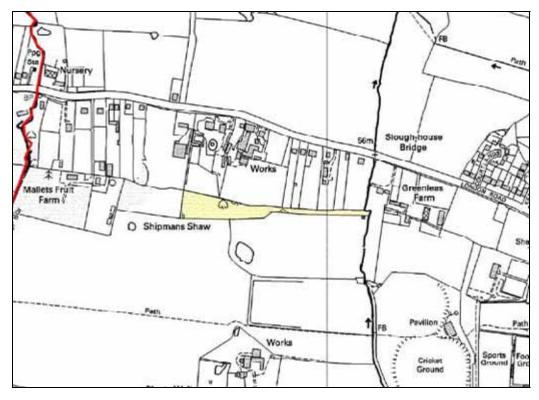
Hannikins Farm



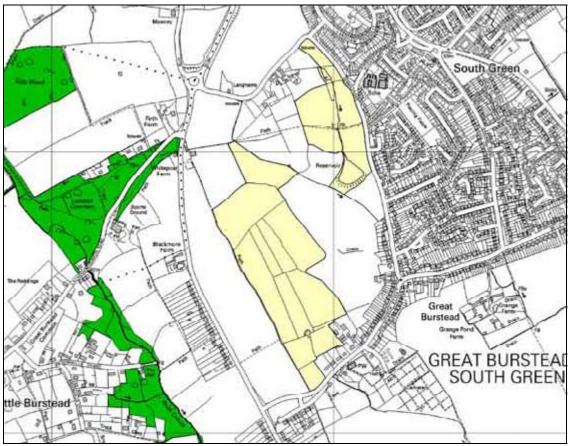
Wiggins Lane



Land north of Northlands Farm, Dry Street



Shipmans Shaw



Langhams, Great Burstead

Appendix 3 – Site Photos

Ba4 St Margarets Wood and Lane – showing fly tipping



Ba4 St Margarets Wood and Lane – showing fly tipping



Ba7 Gravelpit Wood – showing newly surfaced track



Ball Poles Wood – showing clearance of LoWS woodland



Ba12 Frith Wood – showing coppice management and re-growth



Ba15 Langdon Hills Recreation Ground – Sward containing Green-winged Orchid and Yellow Rattle



Ba15 Langdon Hills Recreation Ground – Quaking Grass with orchids in background



Ba39 Pitsea Landfill Site – Showing recent dumping



Ba51 Barrenleys Meadow – showing clearance of streamside and mature trees



