

Local Wildlife Site Report

December 2020



1. Introduction

Introduction

- 1.1 The National Planning Policy Framework (NPPF) requires Local Plans to identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity. The NPPF considers Local Wildlife Sites to be a component of the ecological network.
- 1.2 The National Planning Practice Guidance defines locally designated 'Local Wildlife Sites' as areas of substantive nature conservation value and make an important contribution to ecological networks and nature's recovery. They can also provide wider benefits including public access (where agreed), climate mitigation and helping to tackle air pollution.
- 1.3 There are more than 40,000 Local Sites in England, covering contrasting landscapes in coastal, rural and urban settings, and many are equal in quality to the representative sample of nationally recognised Sites of Special Scientific Interest (SSSI).
- 1.4 Several different terms have been used to describe Local Sites including Sites of Nature Conservation Importance (SNCI), Sites of Importance for Nature Conservation (SINC) and Regionally Important Geological Sites (RIGS). Defra uses the collective term Local Sites; subdivided as Local Wildlife Sites and Local Geological Sites.

Purpose of this Review

- 1.5 There are currently 63 designated Local Wildlife Sites in Sunderland. To support the preparation of the Draft Allocations and Designations Plan, Sunderland City Council has undertaken a comprehensive review of Local Wildlife Sites within Sunderland.
- 1.6 The LWS Review recommends minor boundary amendments to 22 sites (see chapter 3 of this report) and major boundary amendments to 28 sites (see chapter 4 of this report). The LWS Review identifies 18 new sites (see chapter 5 of this report) that meet the selection criteria for Local Wildlife Site status and therefore should be designated.
- 1.7 The purpose of this report is to set out the proposed changes to existing Local Wildlife Site boundaries and proposed new Local Wildlife Sites in the Sunderland City Council administrative area.

Consultation on the Local Wildlife Review

- 1.8 Alongside the Draft Allocations and Designations Plan, the Council is consulting on the amended boundaries and new sites. The Council will also publish the Local Wildlife Site Evidence Base which justifies each boundary amendment and new site.
- 1.9 Following consultation, the Council takes into consideration the outcomes of the consultation and presents the final Local Wildlife Sites to Cabinet with a view to formally designating the new Local Wildlife Sites and revised site boundaries.

2. Local Wildlife Review Methodology

- 2.1 The Council's Ecology Team, in partnership with Durham Wildlife Services, carried out extensive desk-based and field survey work to record the status of habitats and sites, including a review of site boundaries.
- 2.2 For all sites that were surveyed for this review the decision to propose designation was made using the Local Wildlife Sites Administration and Selection Criteria 2013 (Appendix 1), which encompasses the regionally important habitats listed in the local Biodiversity Action Plan (BAP); the Durham Lowland Priority Habitat Action Plan. Although BAP habitats are the main reason for designating a site, the boundary of the site does not necessarily rely on having to encompass BAP habitats alone. The LWS Selection Criteria 2013 (section 2.2) in line with DEFRA guidance on site selection states that a site can be designated that does not contain BAP habitats in its entirety, if the minimum area/length requirement for BAP habitat is met. Wholeness, buffering, habitat potential and alignment with key features on the ground are legitimate reasons to include areas of non-BAP habitat.
- 2.3 The criteria for the selection of Local Wildlife Sites are based on Biodiversity Action Plan (BAP) priority habitat types, as well as existing reference works that list species of conservation importance. The UK list of priority habitats has been used to help draw up statutory lists of priority habitats in England, Scotland, Wales and Northern Ireland, as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England). The term habitat refers to an assemblage of plants, animals and physical features found together, such as in a wet woodland or a calcareous grassland. UK BAP priority habitats cover a wide range of semi-natural habitat types that are characteristic of local areas and which have been deemed regionally important, or those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan.
- 2.4 Once the proposed areas have been surveyed and mapped, they are taken for initial review by a group of key stakeholders. Defra recommends that Local Wildlife Site systems should be based on a partnership approach to identify, select, assess, monitor and protect Local Wildlife Sites. The Local Wildlife Site Partnership that includes the Sunderland area comprises Durham Wildlife Trust (administrator), Environmental Records Information Centre North East (ERIC) and Local Authority Ecologists from Sunderland City Council, Durham County Council, Gateshead Council and South Tyneside Council.
- 2.5 The proposed Local Wildlife Site boundary amendments and new sites have received endorsement from the Local Wildlife Sites Partnership that confirms the proposals fulfil the Selection Criteria. Following this endorsement, the proposed boundary

amendments and sites have been identified in the Draft Allocations and Designations Plan on the Policies Map

3. Local Wildlife Sites with proposed major boundary amendments.

3.1 The LWS Review recommends major boundary amendments to 28 sites. This chapter details with maps the original boundary and the proposed boundary

Figure number	Site name
3.1	Bunny Hill
3.2	Cherry Knowle Dene
3.3	Colbeck Burn
3.4	Downhill Meadows
3.5	Elemore Vale
3.6	Eppleton Railway
3.7	Fulwell Meadows
3.8	Hendon Railway
3.9	Hetton Bogs – formerly Hetton Bogs West
3.10	Hetton Lyons Country Park
3.11	High Wood
3.12	Houghton Hill
3.13	Hylton Colliery Pond
3.14	Hylton Dene
3.15	Pattinson South Pond
3.16	Princess Anne Park
3.17	Reach Wood
3.18	Redburn Marsh
3.19	Ryhope Dene
3.20	Ryhope Village Dene – formerly Halliwell Banks
3.21	Severn Houses
3.22	South Hylton Dene
3.23	The Heughs
3.24	Tilesheds
3.25	Vigo Wood and Railway Embankment
3.26	Washington Wildfowl and Wetlands Centre
3.27	Wearmouth Riverside
3.28	Worm Hill

Figure 3.1: Proposed Bunny Hill LWS

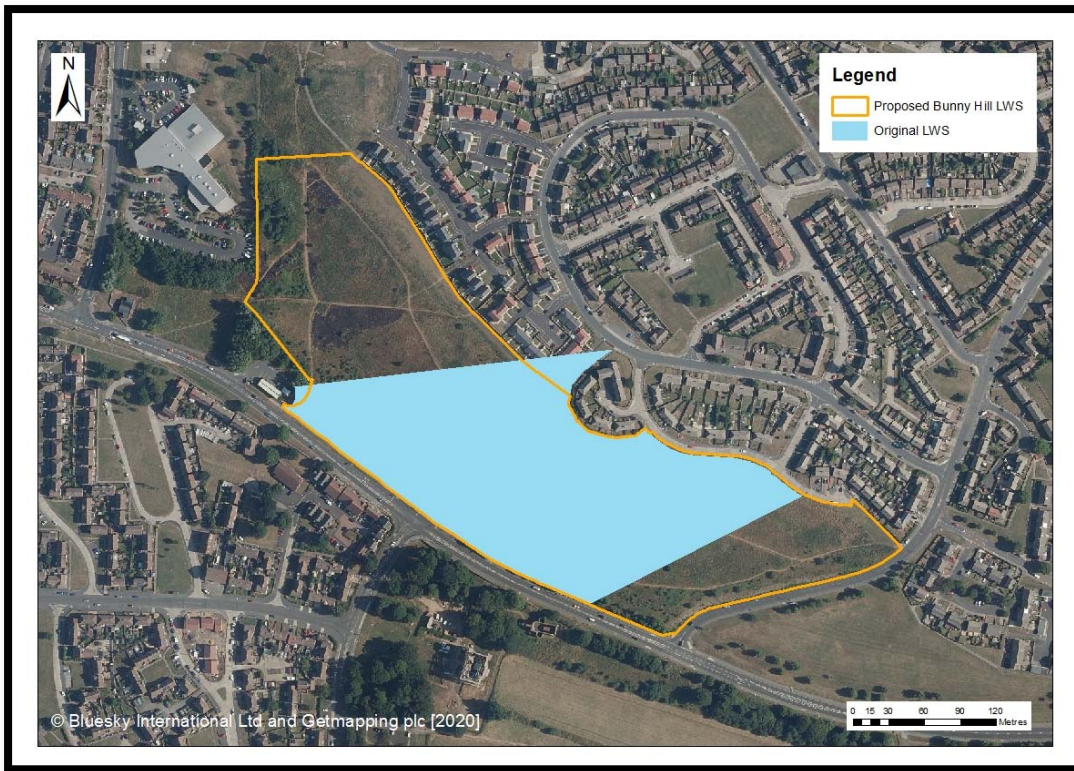


Figure 3.2: Proposed Cherry Knowle Dene LWS

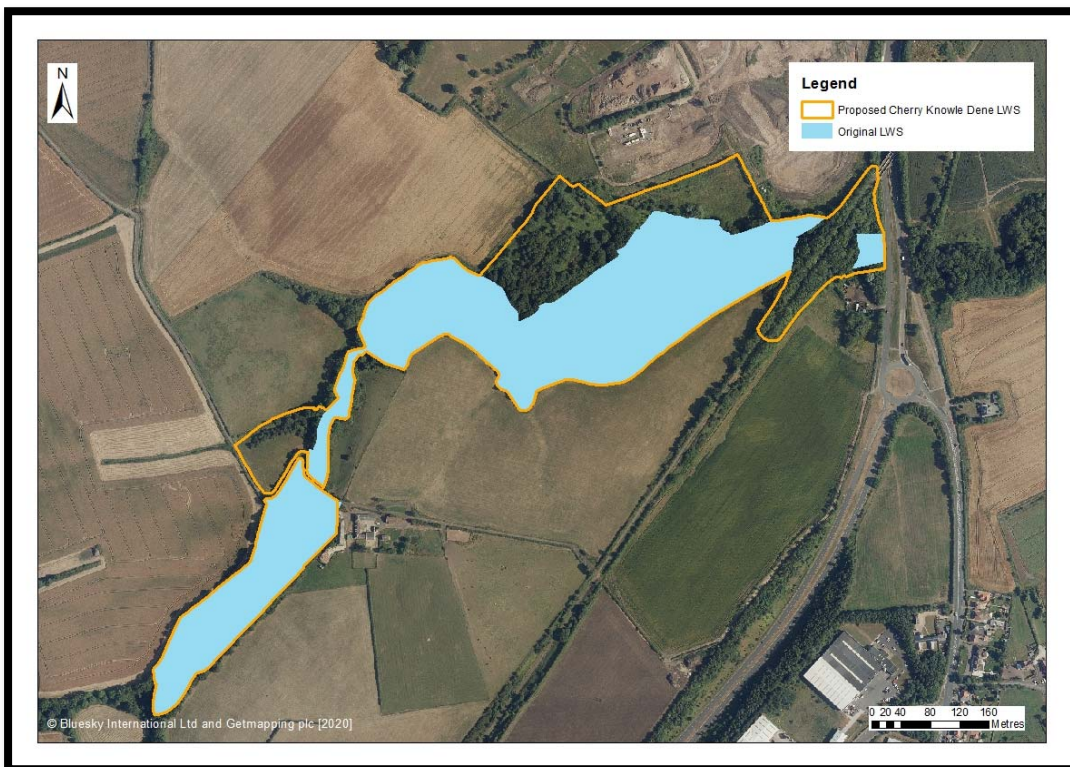


Figure 3.3: Proposed Colbeck Burn LWS



Figure 3.4: Proposed Downhill Meadows LWS

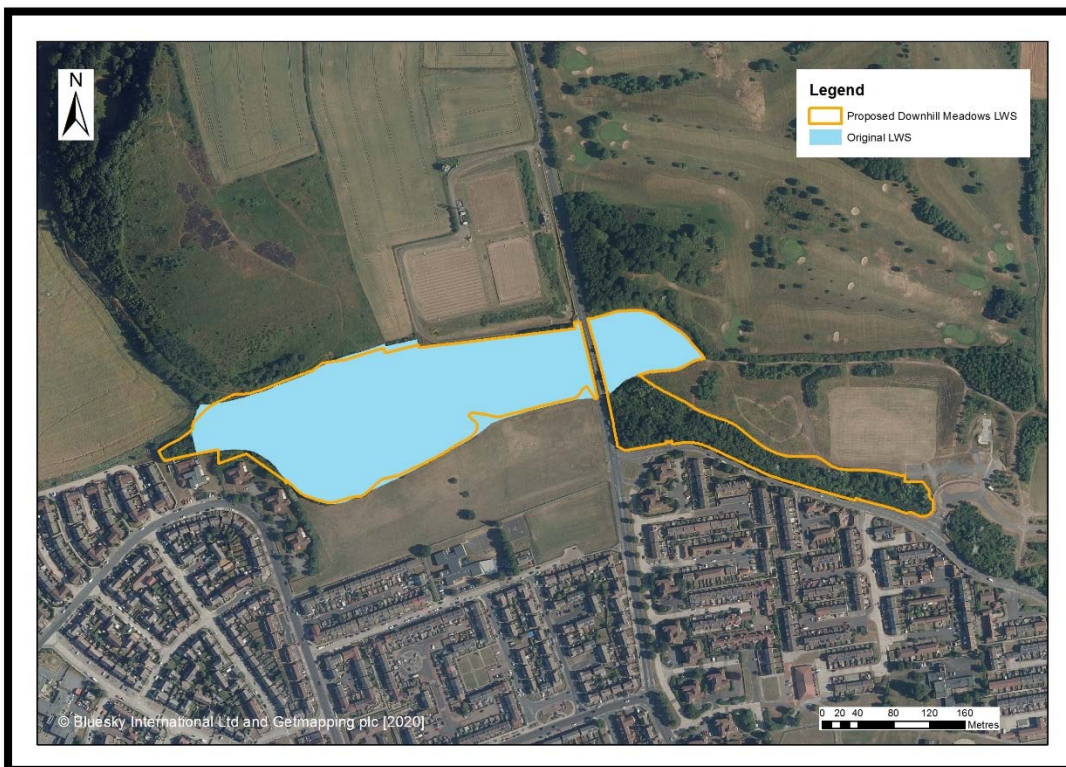


Figure 3.5: Proposed Elemore Vale LWS



Figure: 3.6: Proposed Eppleton Railway LWS

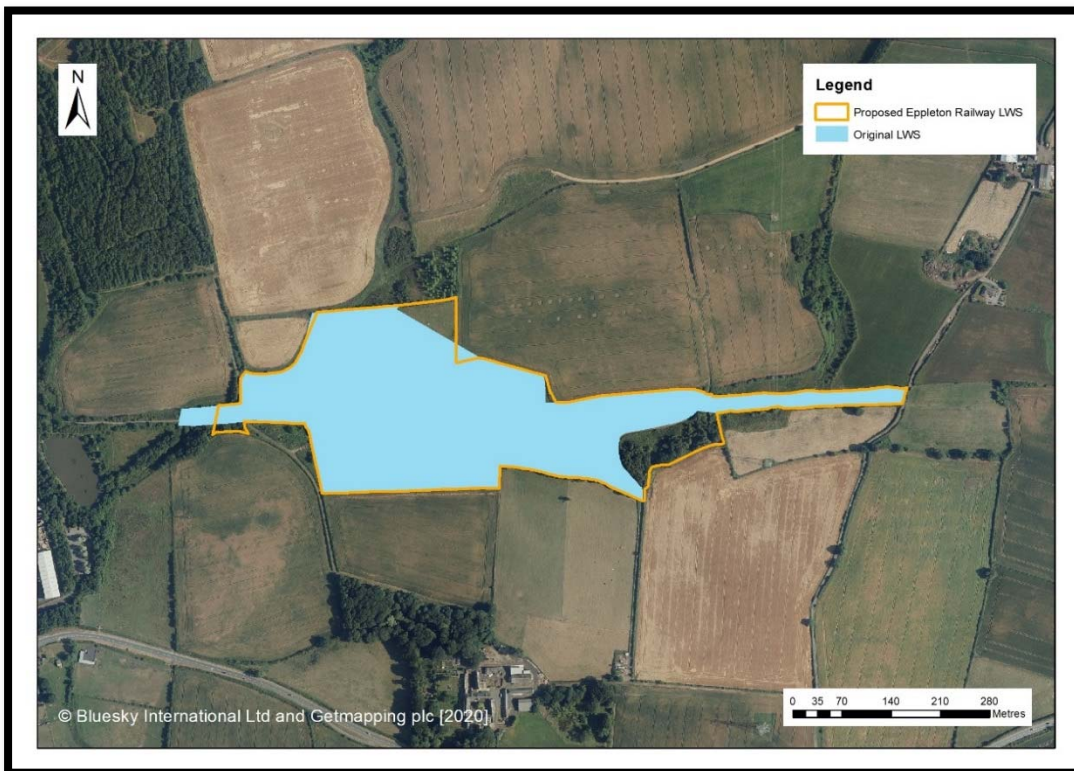


Figure 3.7: Proposed Fulwell Meadows LWS

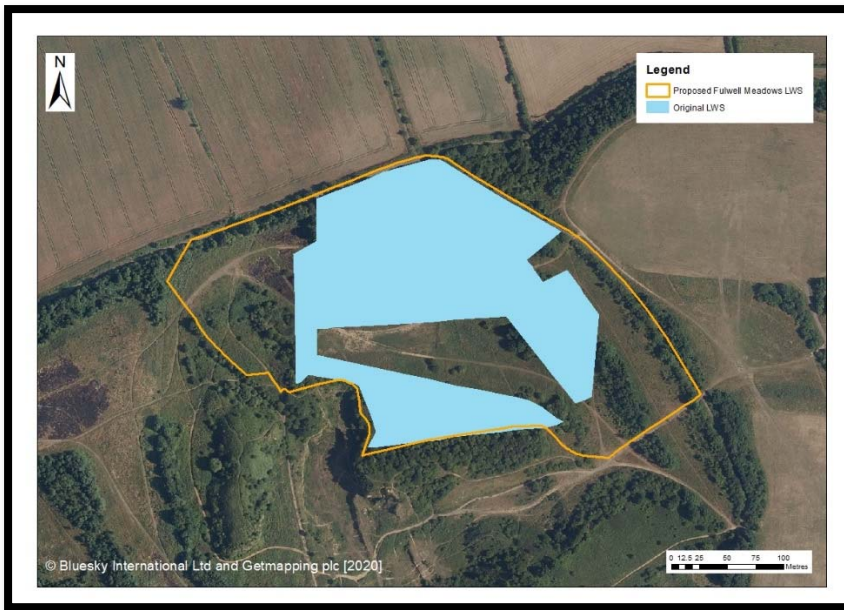


Figure 3.8: Proposed Hendon Railway LWS

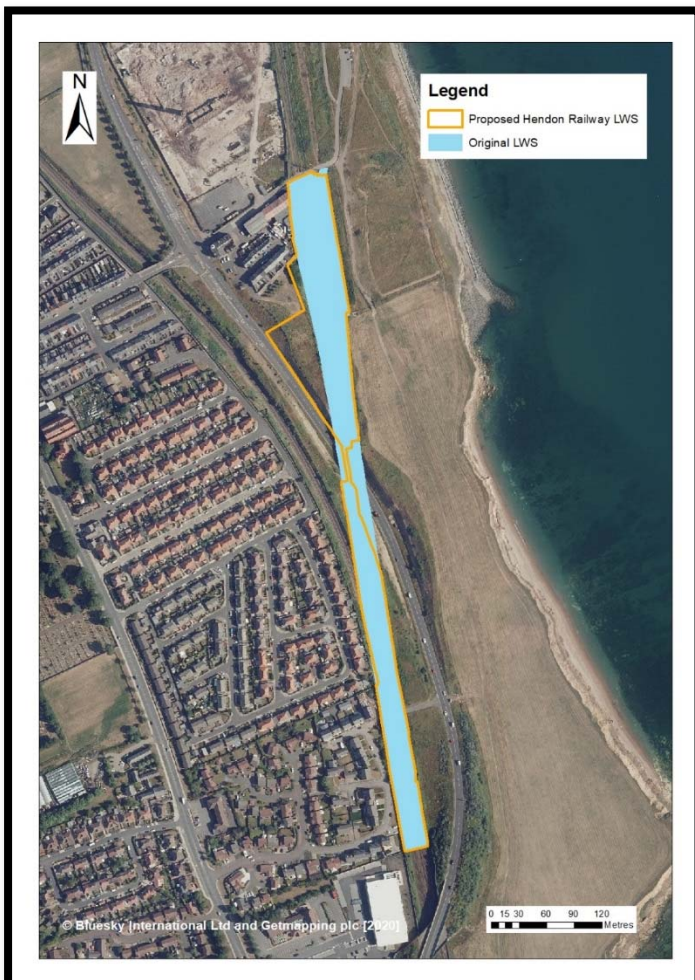


Figure 3.9: Proposed Hetton Bogs LWS

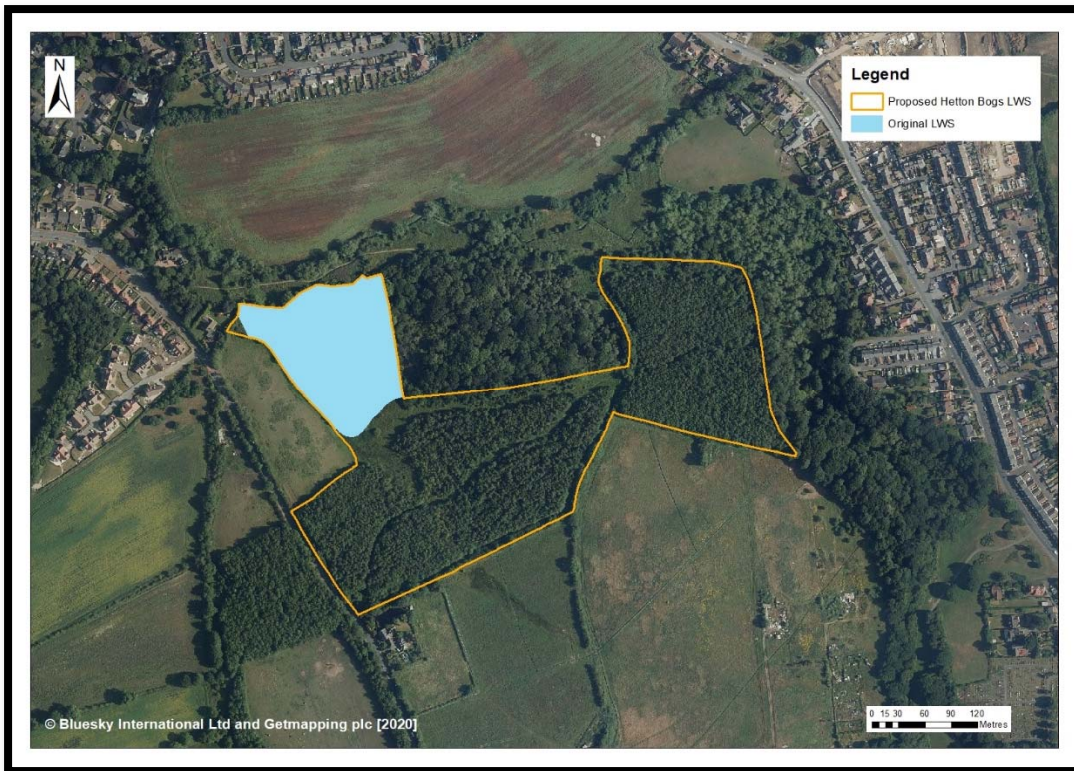


Figure 3.10: Proposed Hetton Lyons Country Park LWS

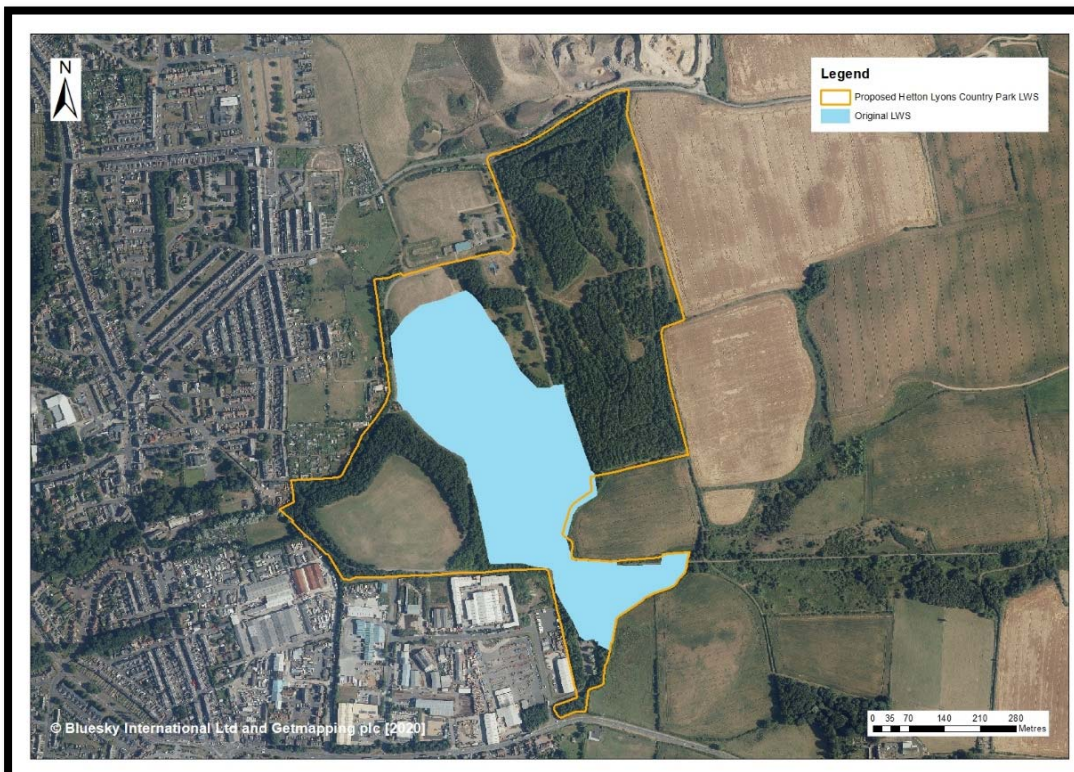


Figure 3.11: Proposed High Wood LWS

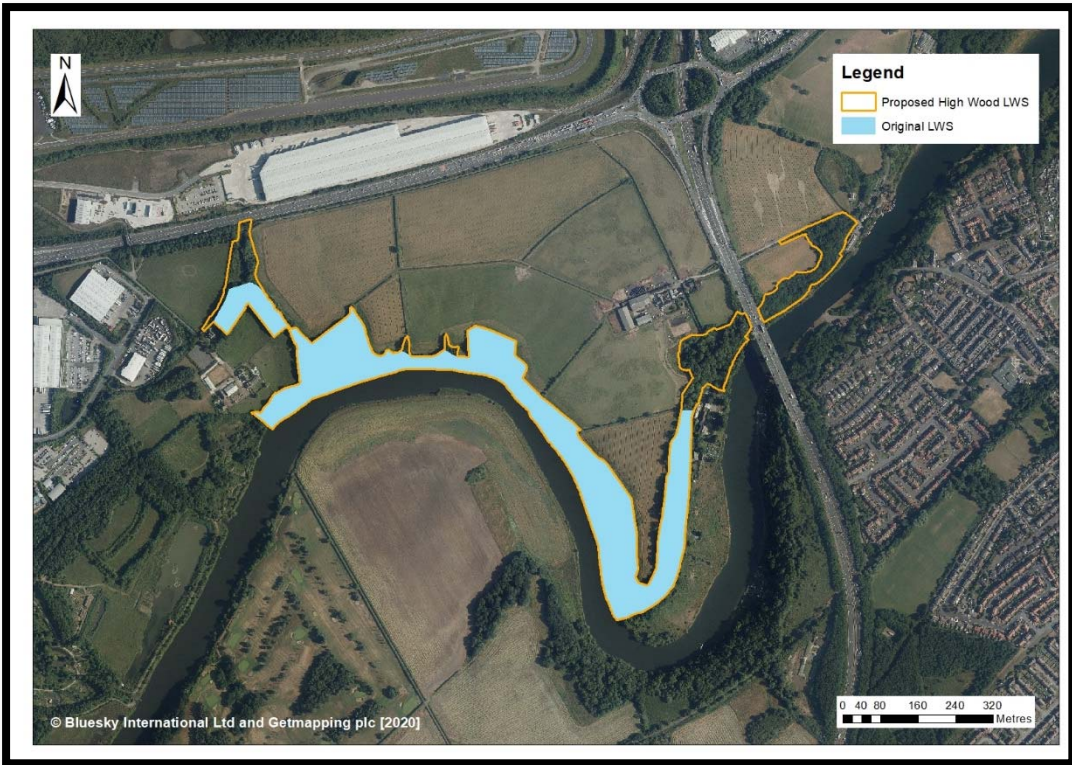


Figure 3.12: Proposed Houghton Hill LWS

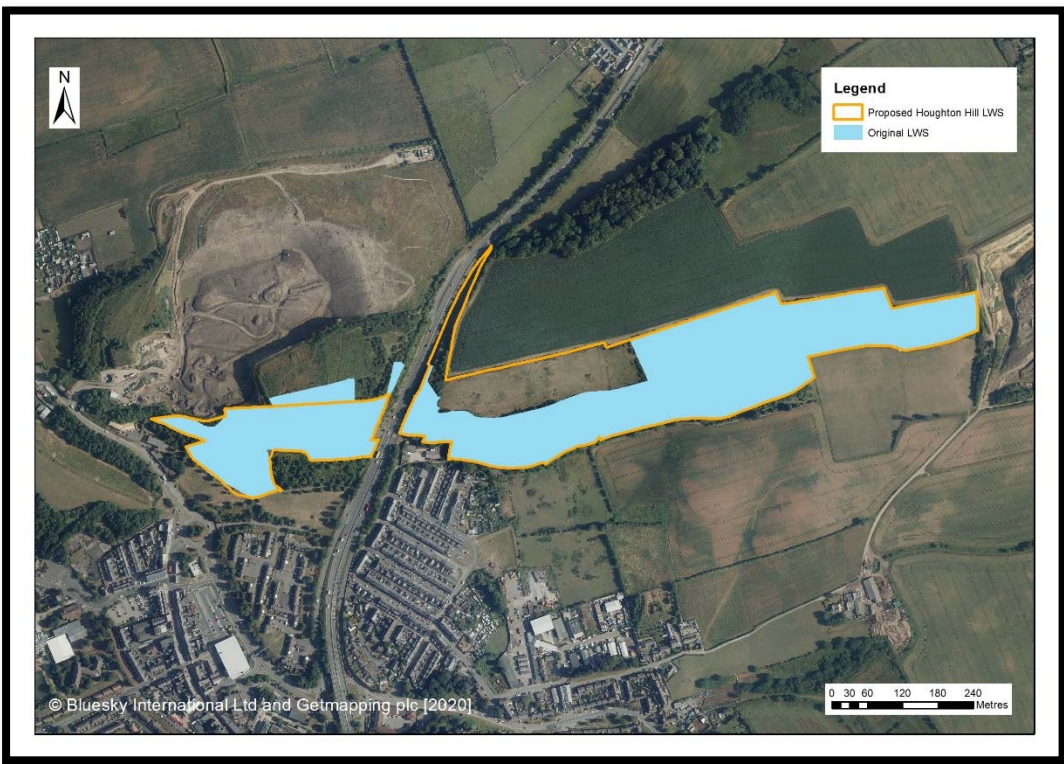


Figure 3.13: Proposed Hylton Colliery Pond LWS

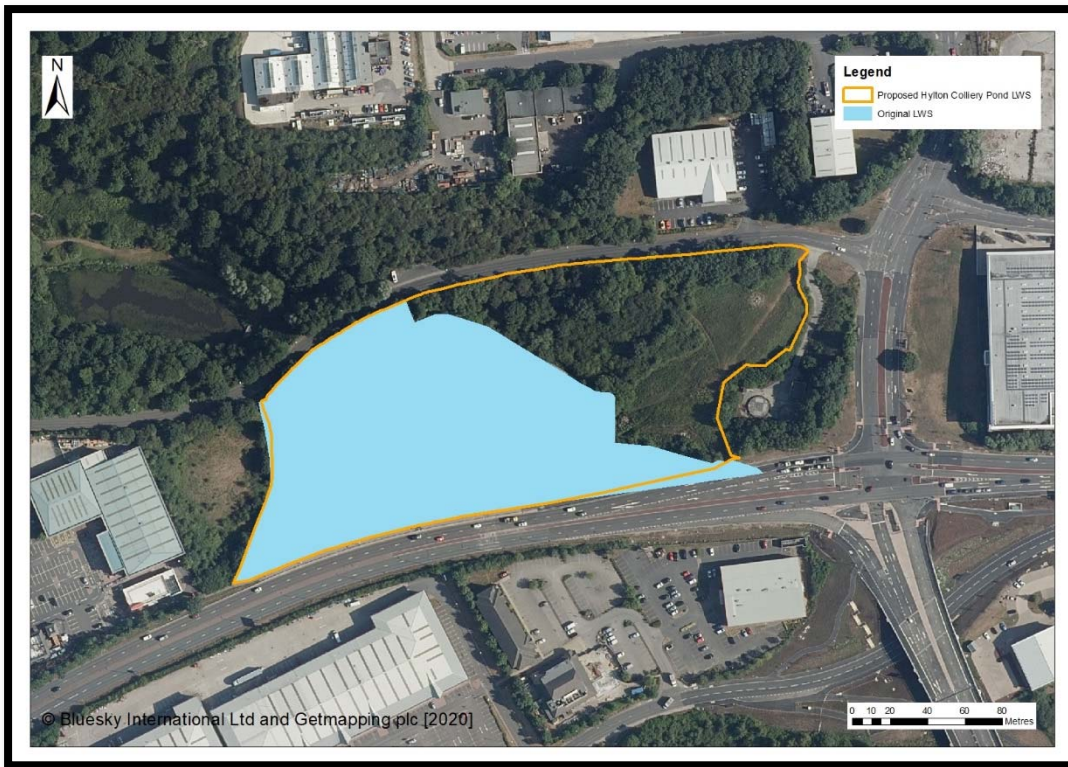


Figure 3.14: Proposed Hylton Dene LWS



Figure 3.15: Proposed Pattison South Pond LWS



Figure 3.16: Proposed Princess Anne Park

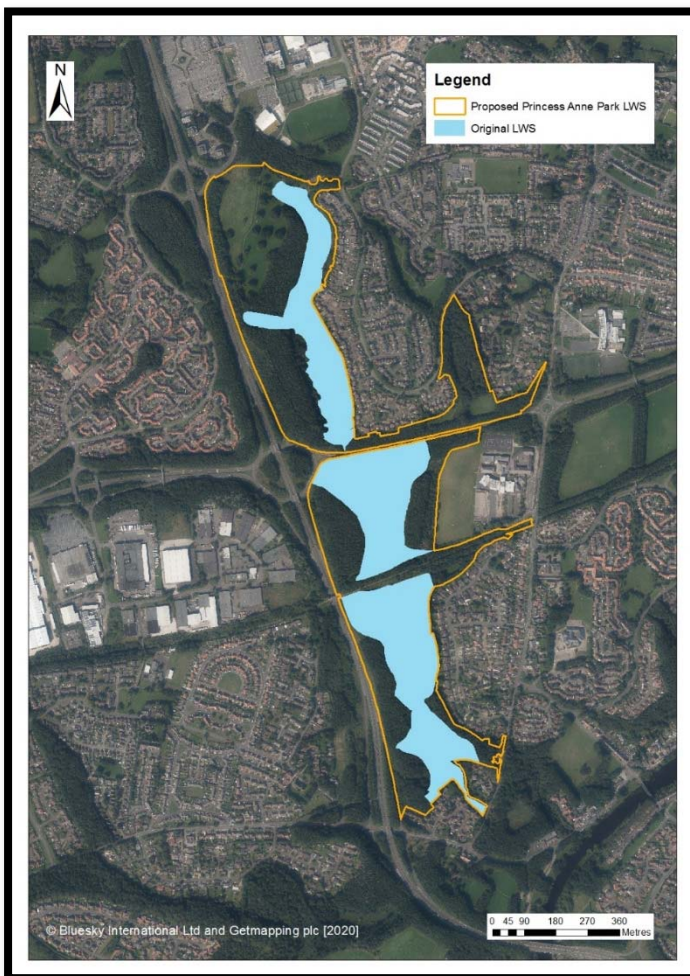


Figure 3.17: Proposed Reach Wood LWS

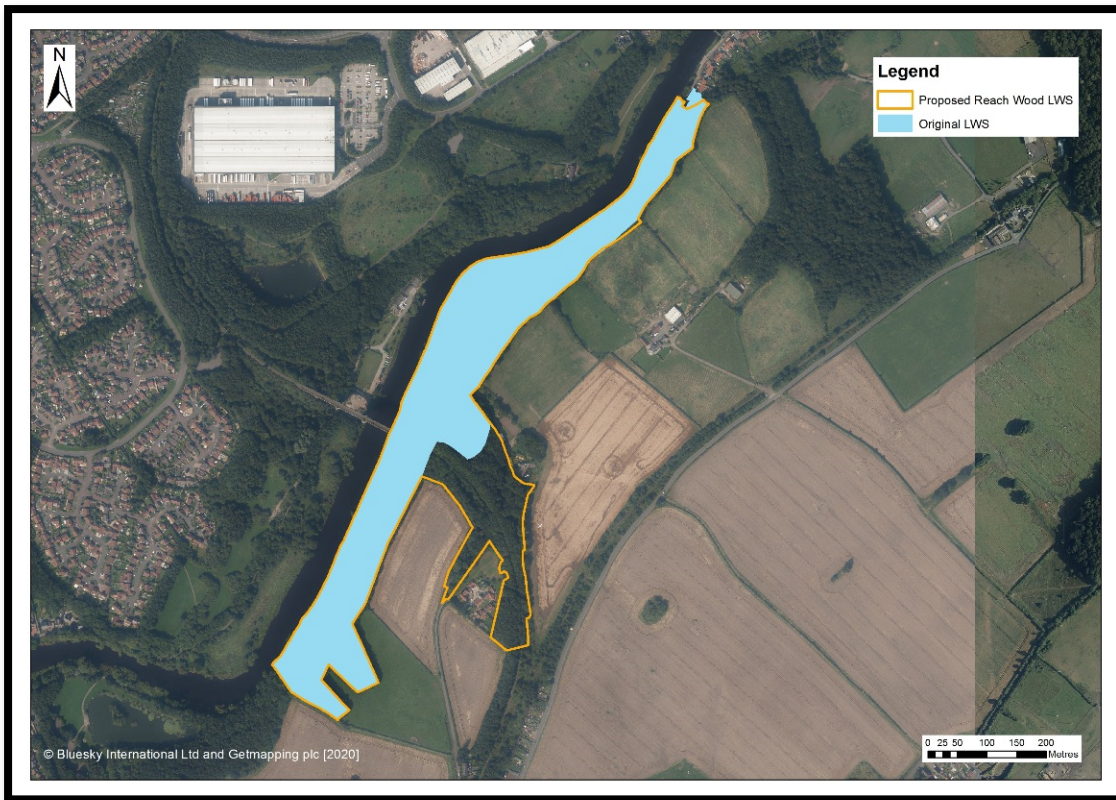


Figure 3.18: Proposed Redburn Marsh LWS

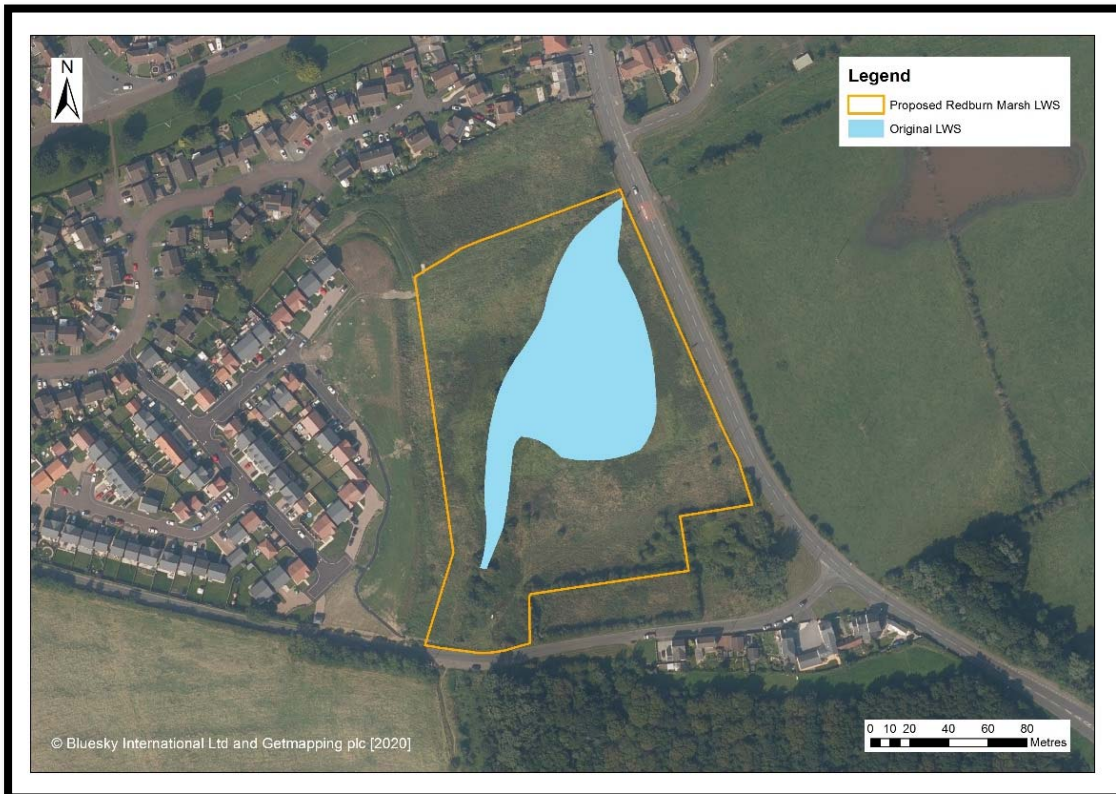


Figure 3.19: Proposed Ryhope Dene LWS

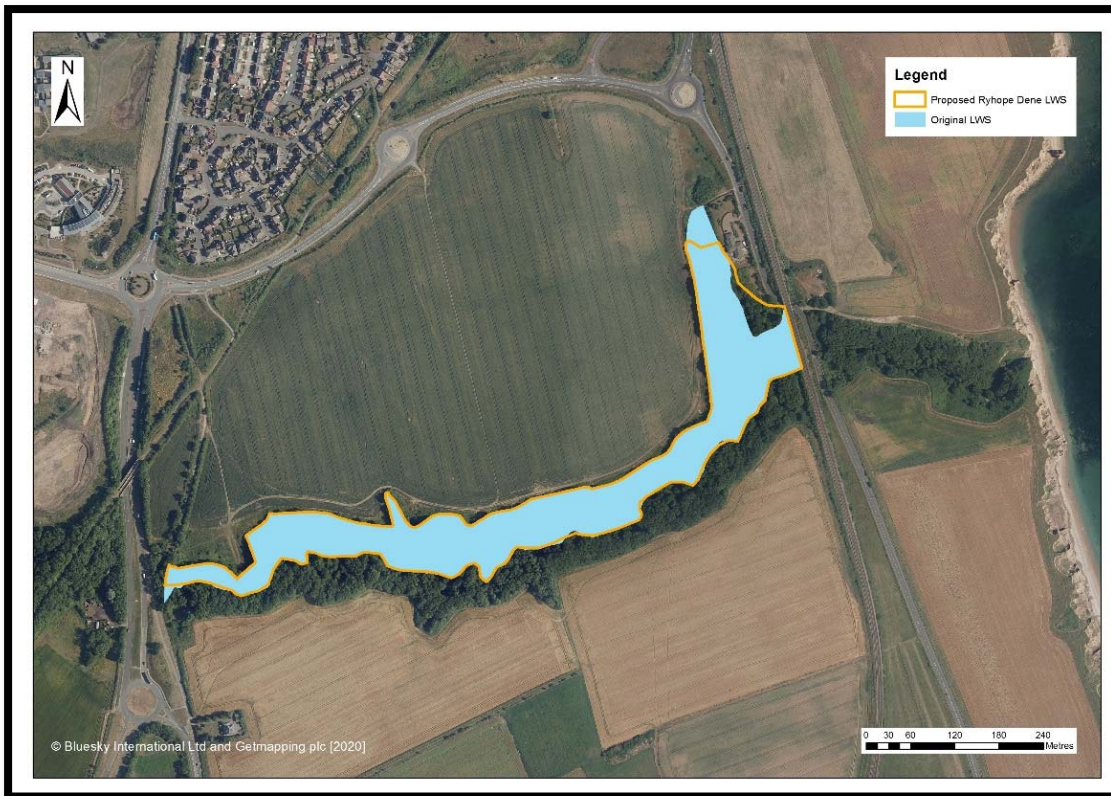


Figure 3.20: Proposed Ryhope Village Dene LWS (Formerly Halliwell Banks)



Figure 3.21: Proposed Severn Houses LWS



Figure 3.22: Proposed South Hylton Dene LWS

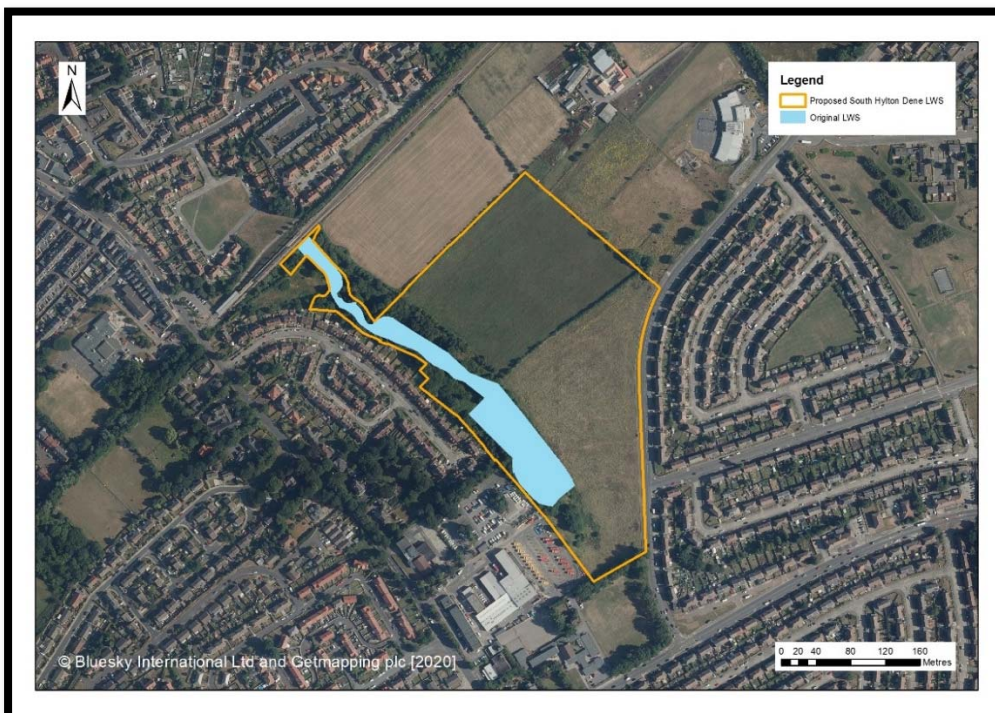


Figure 3.23: Proposed The Heughs LWS

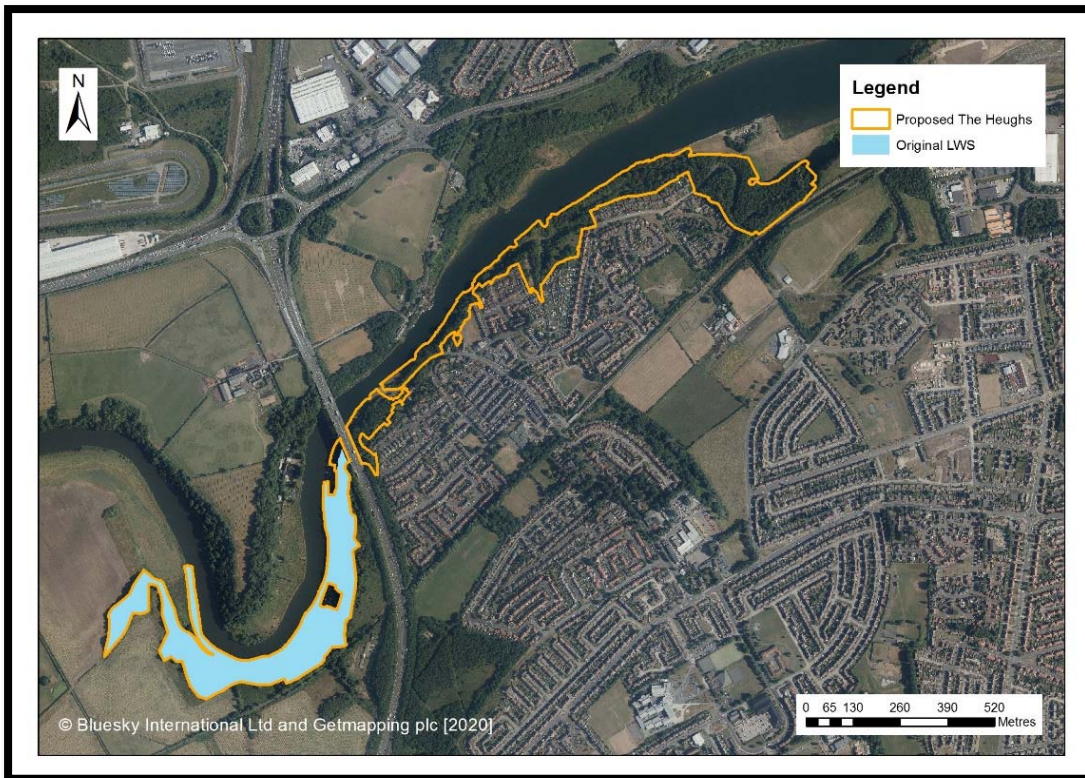


Figure 3.24: Proposed Tilesheds LWS

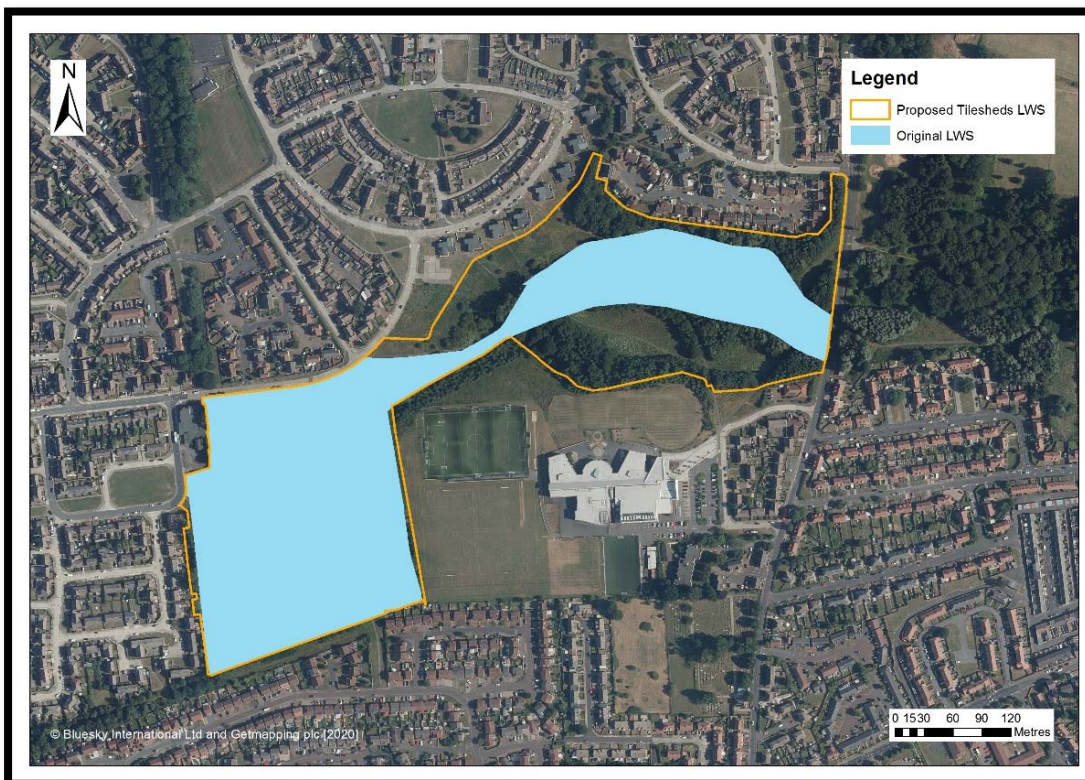


Figure 3.25: Proposed Vigo and Railway Embankment LWS

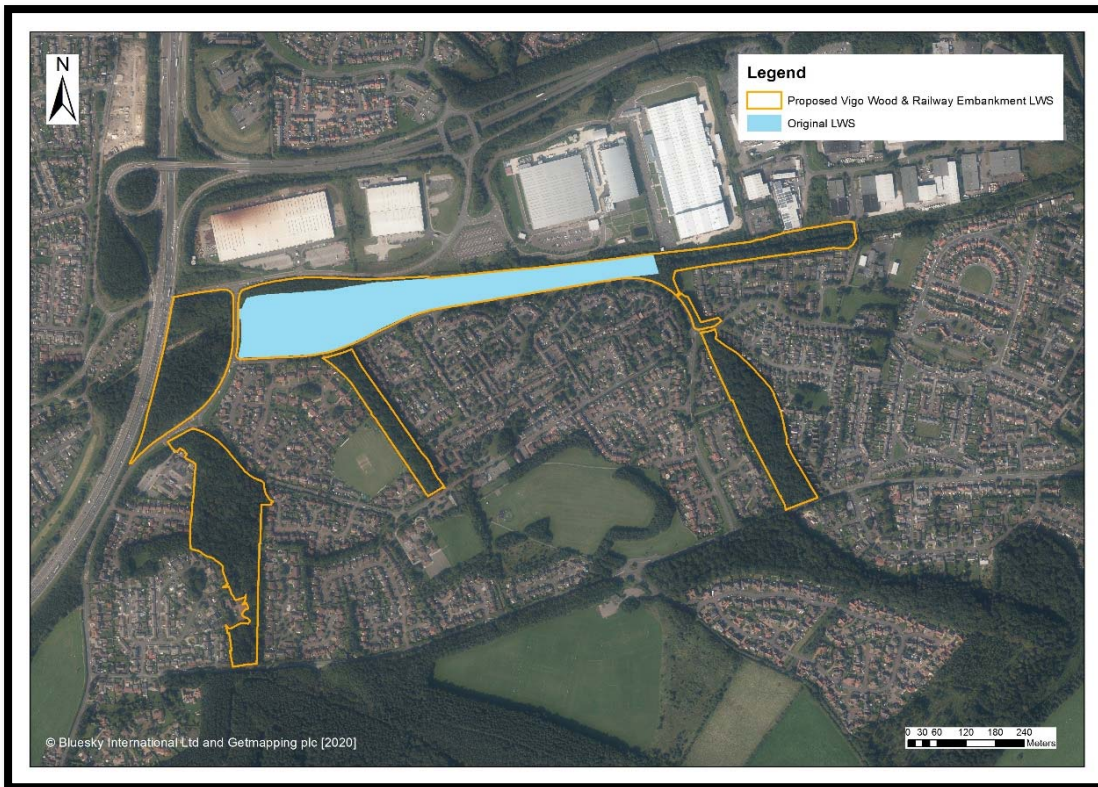


Figure 3.26: Proposed Washington Wildfowl and Wetlands Centre



Figure 3.27: Proposed Wearmouth Riverside LWS

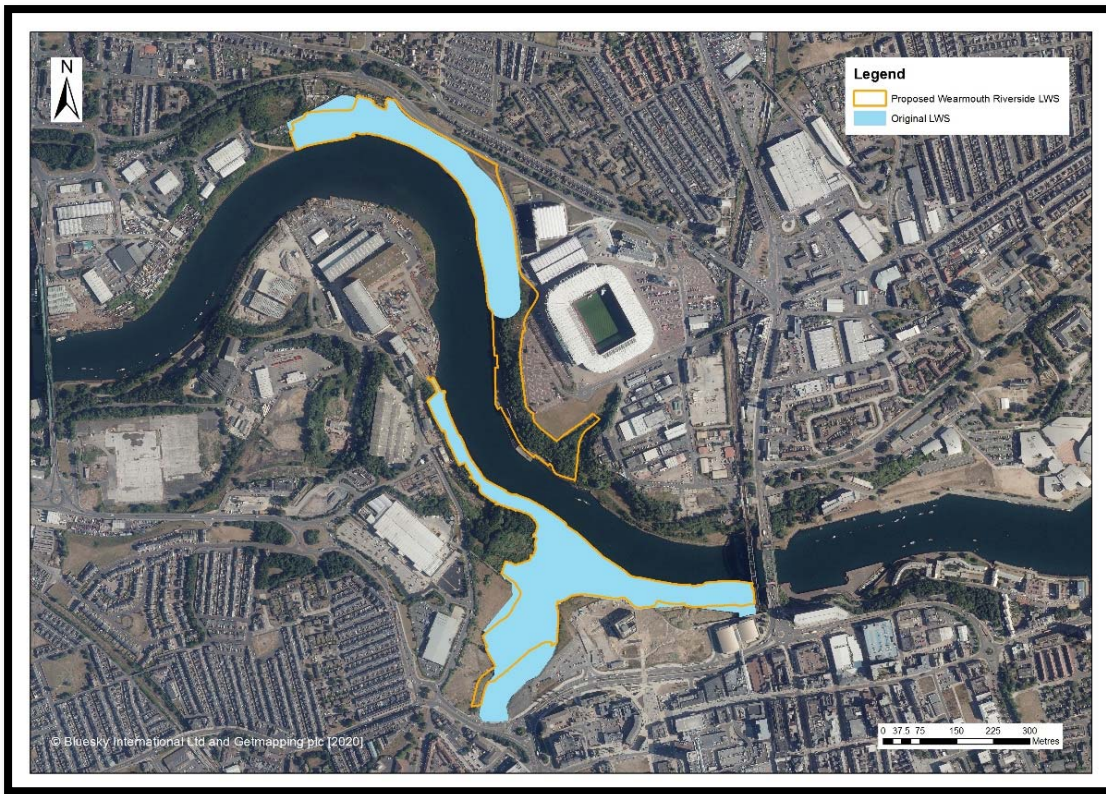


Figure 3.28: Proposed Worm Hill LWS



4. Newly proposed Local Wildlife Sites.

4.1 The LWS Review recommends 18 new sites that meet the selection criteria for Local Wildlife Site status and therefore should be designated. This chapter detail these sites and the proposed boundaries.

Figure number	Site name
4.1	Barnes Park West
4.2	Bowes Railway
4.3	Foxhole Woods
4.4	Grindon Sandhills
4.5	Hendon Promenade
4.6	Hendon Sidings
4.7	High Barmston
4.8	Philadelphia Pond
4.9	Rainton Meadows Nature Reserve
4.10	River Don
4.11	Seaton Bank
4.12	Sedgeleth Ponds
4.13	Silksworth Fishing Lake
4.14	Springwell Quarry
4.15	Success Railway Cutting
4.16	The Children's Forest
4.17	Upper Don Tributaries
4.18	Usworth Burn (River Don South)

Figure 4.1: Proposed Barnes Park West LWS

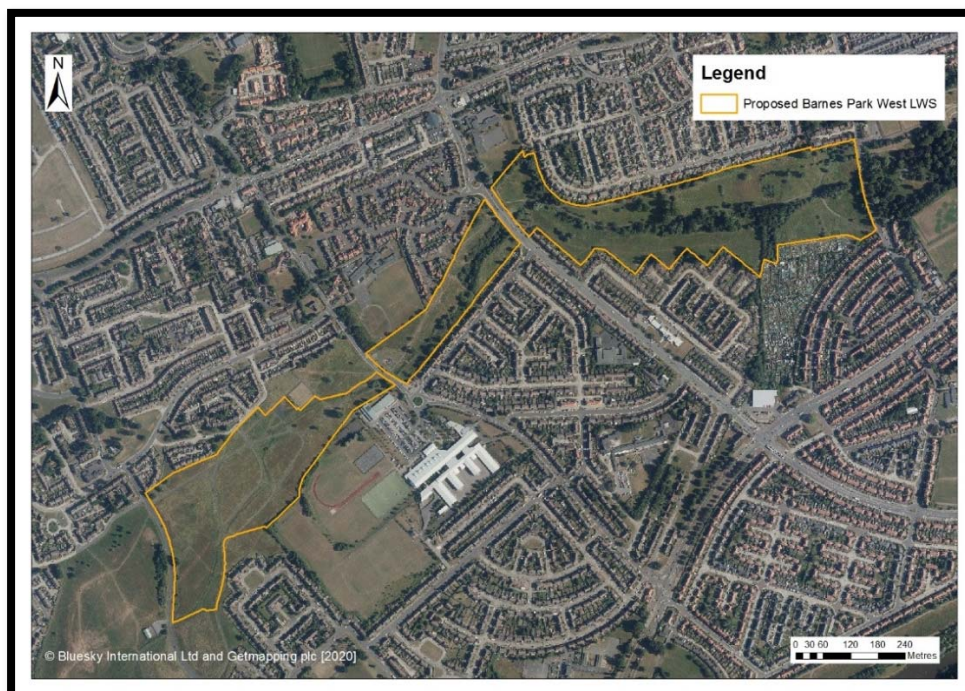


Figure 4.2: Proposed Bowes Railway LWS



Figure 4.3: Proposed Foxhole Woods LWS

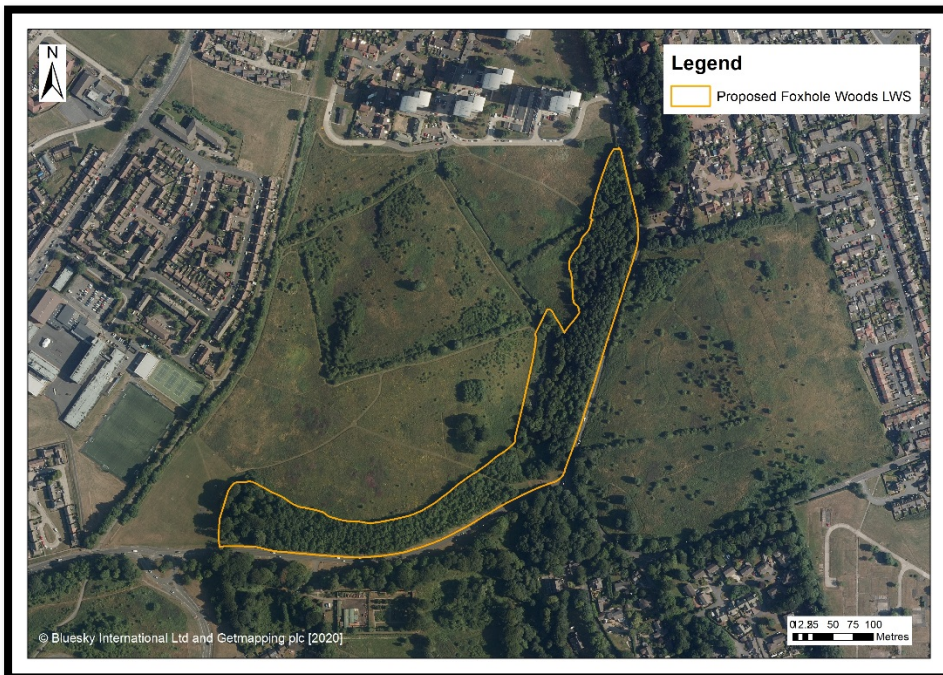


Figure 4.4: Proposed Grindon Sandhills LWS

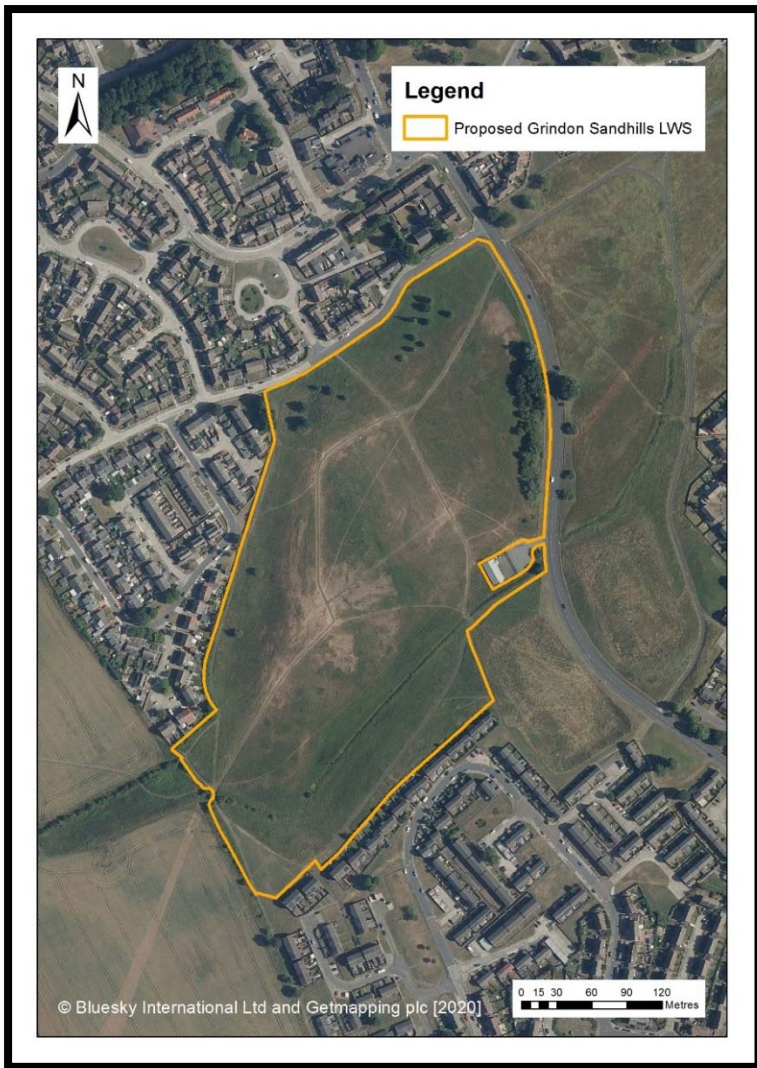


Figure 4.5: Proposed Hendon Promenade LWS



Figure 4.6: Proposed Hendon Sidings LWS

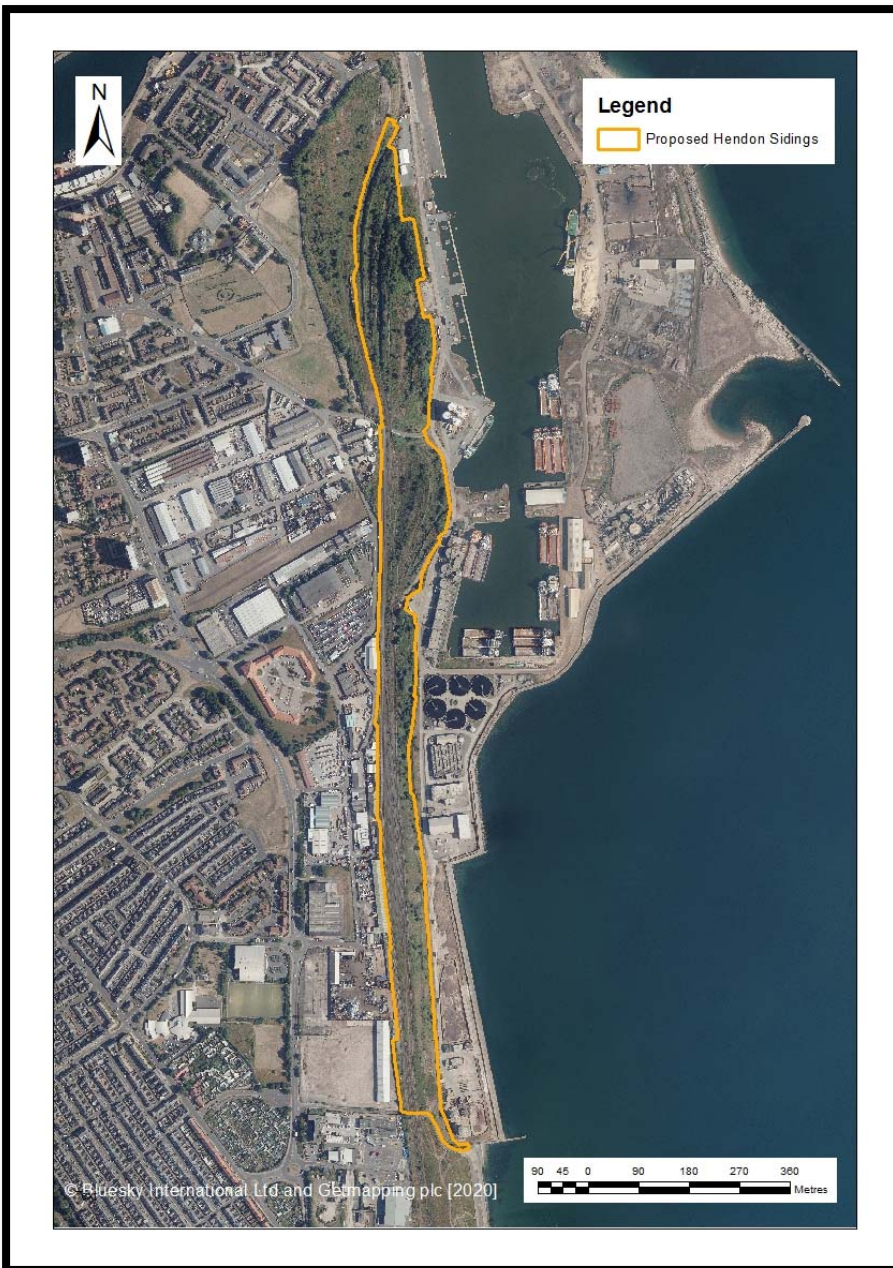


Figure 4.7: Proposed High Barmston LWS



Figure 4.8: Proposed Philadelphia Pond LWS



Figure 4.9: Proposed Rainton Meadows Nature Reserve LWS



Figure 4.10: Proposed River Don LWS



Figure 4.11: Proposed Seaton Bank LWS



Figure 4.12: Proposed Sedgeleth Ponds LWS

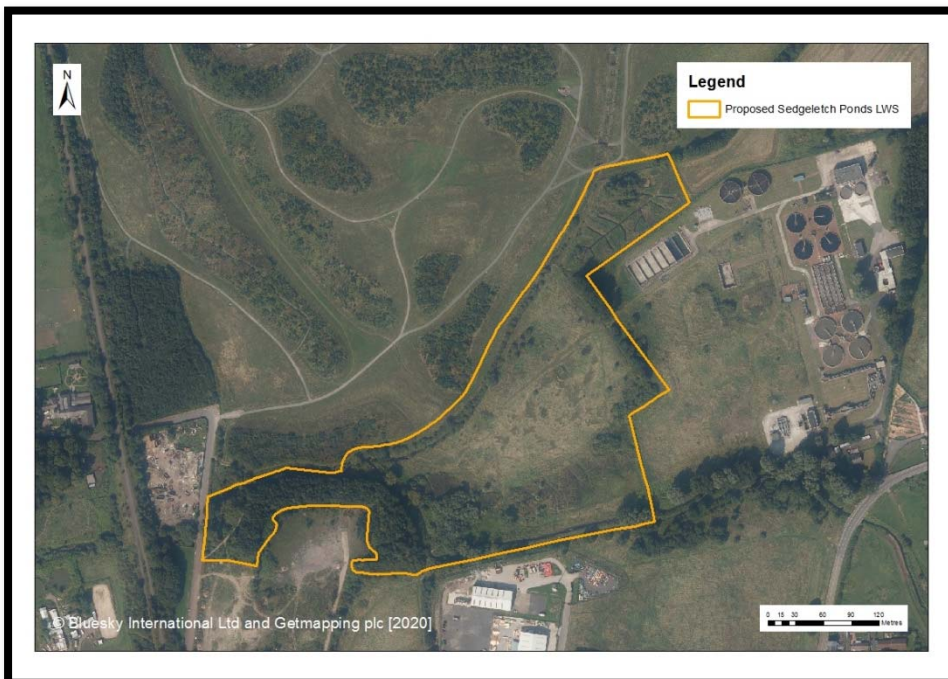


Figure 4.13: Proposed Silksworth Fishing Lake LWS



Figure 4.14: Proposed Springwell Quarry Ponds LWS

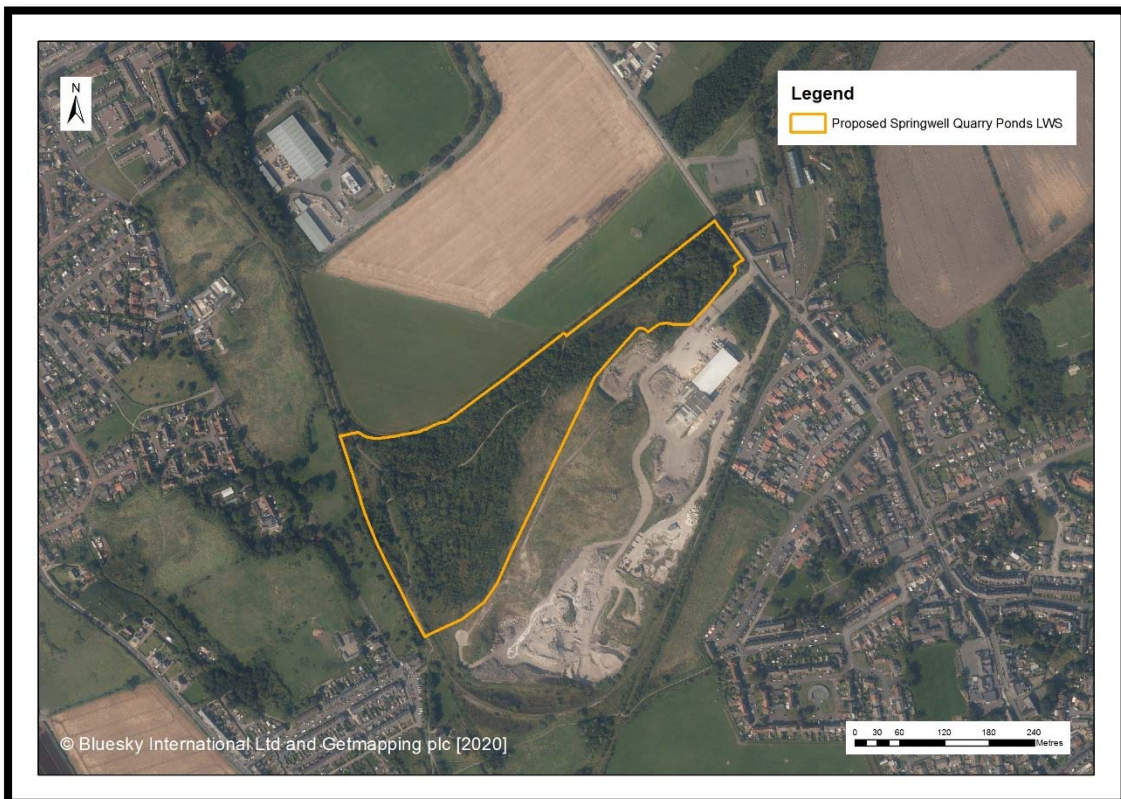


Figure 4.15: Proposed Success Railway Cutting LWS

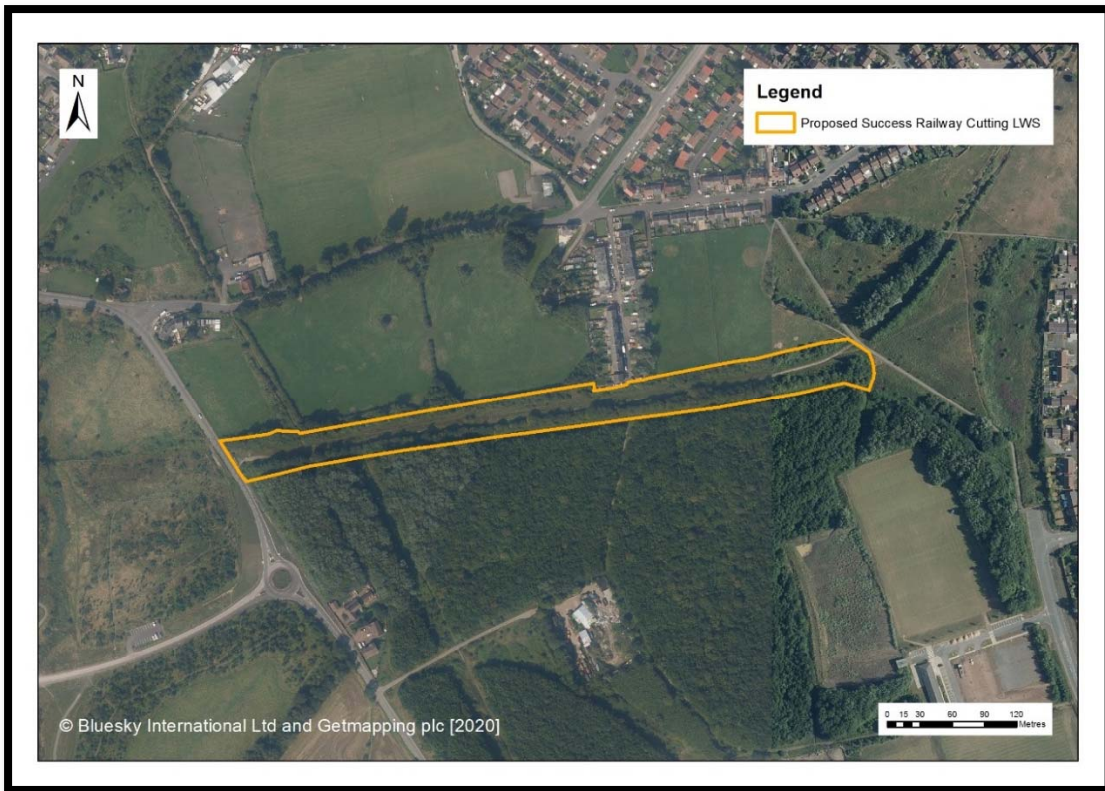


Figure 4.16: Proposed The Children's Forest



Figure 4.17: Proposed Upper Don Tributaries LWS

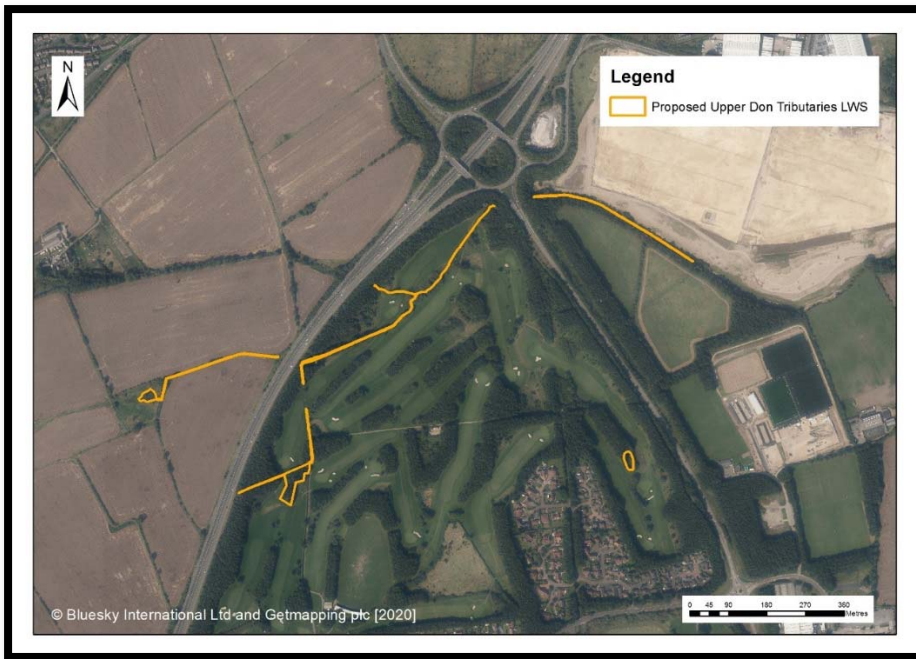


Figure 4.18: Proposed Usworth Burn LWS



Appendix 1

Selection Criteria Document for Local Wildlife Site Designation.

LOCAL WILDLIFE SITES

Administration and Selection Criteria

April 2013



CONTENTS

1 Protocol for the Administration of LOCAL Wildlife Sites

- 1.1 Background and Context
- 1.2 The Local Wildlife Sites Partnership
- 1.3 Terms of Reference of the Local Wildlife Sites Partnership
- 1.4 Evaluation and Selection of Local Wildlife Sites
- 1.5 Establishing Landownership
- 1.6 Contacting Landowners
- 1.7 Reviewing Selected Local Wildlife Sites
- 1.8 Recording and Handling of Information Relating to Local Wildlife Sites
- 1.9 Resourcing the Local Wildlife Sites Selection System
- 1.10 Advising on Effective Management of Local Wildlife Sites

2 Site Selection Criteria

- 2.1 Introduction
- 2.2 Selection of Sites by Habitat
- 2.3 Rationale for the Value of Local Wildlife Sites for the Appreciation of Nature and Learning
- 2.4 Selection of Sites by Species
- 2.5 Selection Information for Meetings

3 APPENDICES

1 Protocol for the Administration of Local Wildlife Sites

1.1 Background and Context

This document describes the system that has been adopted by the Local Wildlife Sites Partnership for defining, defending and promoting non-statutory nature conservation sites in County Durham, Gateshead, South Tyneside and Sunderland, henceforth referred to as “Local Sites”. Such Local Sites can be Local Wildlife Sites (LWS) or Local Wildlife / Geodiversity Sites (LWGS).

Historically in the administrative area covered by Durham County Council, Sunderland City Council, Gateshead Council and South Tyneside Council there existed Sites of Nature Conservation Importance and Regionally Important Geological and Geomorphological Sites (RIGGS). These historical designations are now combined and renamed as Local Sites - as defined by DEFRA in their publication ‘Local Sites Systems, Guidance on their Development and Management’. Local Geodiversity Sites are covered by a separate document.

This document relates to Local Wildlife Sites only.

LWS are sites of regional and local biodiversity interest and they have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and well-being of the community; and in supporting research and education. (Adapted from PPS9)

In order to ensure that the system for LWS selection is integrated into the wider processes that govern nature conservation and to ensure that they also complement the role the planning system plays in protecting wildlife resources, the criteria for the selection of LWS are based on Biodiversity Action Plan (BAP) habitat types and existing reference works that list species under threat.

The LWS designation should not generally be applied to land that has been given a statutory conservation designation. However, consideration may need to be given to designating LWS on land that has ecological value but currently has a statutory designation such as a geological Site of Special Scientific Interest; in order to ensure that its ecological interest is also recognised.

1.2 The Local Wildlife Sites Partnership

Partnership Members

Core Members

Durham Wildlife Trust
Durham County Council
Sunderland City Council
Gateshead Council
South Tyneside Council
Environmental Records Information Centre **North East (ERIC)**

A partnership has been formed to administer the LWS selection system on behalf of South Tyneside Council, Sunderland City Council, Gateshead Council and Durham County Council. The partnership consists of representatives from each local authority, Durham Wildlife Trust and ERIC. Supporting members will be co-opted to provide expert knowledge on aspects of LWS selection and management as required. If at any stage, it is felt that there is insufficient representation/experience within the partnership then additional members will be asked to join and provide expert technical knowledge on aspects of the LWS selection criteria.

The purpose of LWS Partnership is to:

- agree the basis for site selection;
- co-ordinate site selection procedures including survey and identification of candidate sites;
- ratify new sites;
- actively promote and support site management;
- co-ordinate funding provision and/or identify and promote the taking up of funding opportunities;
- promote educational use where appropriate;
- establish a process for monitoring the condition of the selected sites;
- review the operation of the Local Wildlife Sites System at suitable intervals;
- promote the role and importance of Local Wildlife Site at a strategic level;
- promote the enhancement of sites through buffering and/or increasing connectivity; and
- ratify information on indicators used by Government.

Roles specific to the members of the LWS Partnership are defined below:

Local Authorities

- The authorities to host and organise the LWS selection meetings in rotation.

When resources are available:

- supply funding for the management of LWS selection system;
- assist in the supply of funding for LWS promotion and management;
- co-ordinate investigation, consultation, collection of data for assessment of candidate LWS and the distribution of information to relevant parties;
- co-ordinate 5 – 10 year reassessment of LWS and present findings to the partnership; and
- provide positive support to LWS owners.

In addition:

- co-ordinate the collection of evidence relevant to Government indicators to present to LWS partnership for ratification;
- provide new data and records ERIC and;
- each authority to hold their own definitive LWS records.

Durham Wildlife Trust

- Act as a secretariat at selection meetings;
- provide expert technical knowledge on ecological matters.

When resources are available:

- provide positive support and guidance to LWS owners;
- assist in the reassessment of existing LWS and the presentation of findings to LWS Partnership;
- assist in the investigation, consultation and the collection of data for the assessment of candidate LWS and the distribution of information to relevant parties;
- assist in the supply of funding for the management of the LWS selection; and
- assist in the supply of funding for LWS promotion and management.

ERIC

- To hold copies of all LWS citations and make them available as part of their commercial data services.

Supporting members

- provide expert technical knowledge on specific species and habitat requirements.

When resources are available:

- provide positive support to LWS owners and advise on appropriate site management;
- assist in the reassessment of existing LWS and the presentation of findings to LWS Partnership; and
- assist in the investigation, consultation and the collection of data for the assessment of candidate LWS and the distribution of information to relevant parties.

1.3 Terms of Reference of the Local Wildlife Sites Partnership

The LWS Partnership will meet according to need, with a minimum of two meetings per annum. At LWS meetings potential sites will be recommended for designation as LWS, and existing sites will be recommended for removal from the LWS register if their ecological interest has fallen below the stated threshold level. In addition, existing site boundaries can be reviewed and site descriptions changed. In the period between meetings the necessary survey work and background research will be carried out in order to provide sufficient information for the LWS Partnership to review at the next meeting.

For the LWS Partnership meeting, and the decisions made at the meeting to be valid the representatives of Durham County Council, Sunderland City Council, Gateshead Council, South Tyneside Council and Durham Wildlife Trust must be in attendance. If representatives of those organisations are not in attendance the meeting cannot proceed and should be reconvened at a suitable date.

The LWS Partnership will make decisions by consensus from the evidence provided. The LWS Partnership meetings will follow a standard agenda, which is given below.

Item 1 - Apologies for non-attendance.

Item 2 - Matters arising from the last meeting. This will include consideration of information gathered since the previous meeting with reference to candidate sites, and additional information received from landowners.

Item 3 – Identification of candidate sites to be formally designated as Local Wildlife Sites

Item 4 – Identification of potential sites for consideration as candidate Local Wildlife Sites.

Item 5 – Progress update and review of existing Local Wildlife Sites including sites proposed for de-selection.

Item 6 – Report on national indicator data.

Item 7 – Review of the operation of the Local Wildlife Site selection protocol and site selection criteria.

Item 8 - Funding opportunities

Item 9 – A.O.B.

Item 10 - Confirmation of next meeting date, time and venue.

1.4 Evaluation and Selection of Local Wildlife Sites

Site selection criteria are based on the DEFRA guidance and should address the questions listed below.

- Does the site meet criteria thresholds for nature conservation value?
- Have the criteria taken account of the distribution, abundance and increasing or declining trends in the nature conservation resource?
- Will selection help to maintain viable populations and functioning ecological communities?
- Is the site of particular value in conservation terms given its geographical and social context?

DEFRA guidance states *'The objective of site selection is to select all sites that meet the criteria'*. All sites put forward for consideration as LWS that meet the selection criteria defined in Section 2 of this document will be deemed initially as candidate LWS sites only. The following baseline information is required by the LWS Partnership to assess whether a candidate LWS meets the selection criteria:

- details of the site location and boundary;
- species lists including abundance (e.g. DAFOR);
 - condition assessment of BAP habitats, using DBAP definitions when available and DEFRA definitions when not;
- a map of the BAP habitats present including total areas of BAP habitats. None BAP habitats must also be mapped;
- a site description;
- how the site contributes to the landscape character of the area;
- recorded history and cultural associations for the site;
- value for the appreciation of nature and learning;
- well defined management objectives to conserve and enhance the features for which the site has been proposed; and
- connectivity arrows illustrating links to surrounding habitats.

The LWS Partnership will forward copies of the information used to assess the site to the landowner, with a written explanation of the assessment criteria and reasoning behind site selection. The landowner will be invited to make observations on the candidate site and supply any information relating to the assessment of the site that they feel will have a material effect on the decision of the LWS Partnership. The deadline for the submission of additional information will be set at four weeks prior to the next LWS Partnership meeting.

At the next meeting, the LWS Partnership will compare any additional information supplied by the landowner against the site selection criteria and either confirm LWS status or reject the proposal to confer LWS status. The site cannot be resubmitted for Local Wildlife Site designation until the next Partnership meeting.

Details of new Local Wildlife Site to be designated, and amendments to existing sites, will be supplied to ERIC and the appropriate persons at the relevant Council in order to record the designation of the new LWS.

1.5 Establishing Landownership

Reasonable steps should be taken to establish landownership prior to the assessment of a site for Local Wildlife Site selection. These may include: searching existing information held by members of the Partnership; making verbal and written enquiries to members of the public, business, local authorities and statutory bodies; and carrying out Land Registry searches.

1.6 Contacting Landowners

It is important that adequate information is collected to allow the assessment of a site for Local Wildlife Site selection and this will involve carrying out a site survey. If landownership is known, permission must be sought from the landowner before a site is accessed to carry out a survey. The exceptions to this are if accessing the site using a Public Right of Way can provide adequate survey data, or if a right of access is permitted under an existing statutory instrument. If the landowner refuses to allow access for adequate survey work to be undertaken, a new site cannot be considered for Local Wildlife Site selection, and an existing site cannot be properly reviewed and should, therefore, not be removed from the register of Local Wildlife Sites.

1.7 Reviewing Local Wildlife Sites

All sites selected as Sites of Nature Conservation Importance prior to the adoption of this LWS protocol will be deemed to remain designated until the sites can be reassessed against the current LWS selection criteria.

Existing designated sites can only be removed from the site register if evidence is presented to the LWS Partnership that shows that the site in question no longer meets the current LWS selection criteria. A site that fails to meet the current selection criteria can maintain its status as a LWS if the LWS Partnership determines that the ecological features of the site can be restored. Sites should not be automatically deselected based on any form of 'condition assessment'.

Following the adoption of this protocol the members of the LWS Partnership will endeavour to review all LWS against the selection criteria at least once every 5-10 years. However, it is recognised that lack of resources may prevent the Partnership from conducting regular reviews. The selection criteria themselves will be subject to review and will be amended according to need and in line with changes in the Durham Biodiversity Action Plan and other relevant documents such as IUCN Red Data Books.

All site reviews must follow the advice given in 1.5 and 1.6 on establishing land ownership and obtaining landowner permission to survey. Without this permission a site cannot be reviewed and will therefore remain as a LWS until the LWS Partnership receives evidence that the site no longer meets the selection criteria.

1.8 Recording and Handling of Information Relating to Local Wildlife Sites

After the adoption of this protocol, the relevant Council will hold the definitive register of Local Wildlife Sites and information relating to the selection of new Local Wildlife Sites for their area. Data will be held in a standard format; this format is shown in the appendices of this document.

In addition to the above, ERIC will hold copies of the LWS definitive register. ERIC is permitted to copy and disseminate this information to third parties - a fee may be charged.

1.9 Resourcing the Local Wildlife Sites Selection System

On an annual basis, the members of the LWS Partnership will review the resources available to deliver the following:

- assessment of existing sites;
- implementing positive management; and
- surveying candidate LWS.

The LWS Partnership should detail the resources to be committed and those resources required and potential sources of funding.

1.10 Advising on Positive Management of Local Wildlife Sites

When selecting new Local Wildlife Sites or reviewing existing Local Wildlife Sites the LWS Partnership will include, as part of the documentation supplied to landowners, well-defined management objectives to conserve and enhance the features for which the site was selected.

The minimum content of such documentation will be:

- **details of the site location and boundary**, this should be presented as a simple map and a six-figure grid reference;
- **a site description**, this must include details of the habitats, species or geological features for which the site was selected, their location and details of the value and importance of the features identified; and
- **well-defined management objectives**, to maximise the conservation potential of a site and the features for which it was selected. These will provide the landowner/manager with a clear and justified work programme for the site, including practical tasks, a recommended timetable for delivery and advice on appropriate management techniques.

2 SITE SELECTION CRITERIA

2.1 Introduction

The following methodology is to be used to evaluate sites that are put forward for designation as Local Wildlife Sites (LWS). The selection criteria have been designed to follow the guidance produced by DEFRA in the publication 'Local Sites, Guidance on their Identification, Selection and Management', 2006. The DEFRA guidance defines ten criteria from which measurable thresholds have been developed:

- Size or extent
- Diversity
- Naturalness
- Rare or exceptional feature
- Fragility
- Typicalness
- Connectivity within the landscape
- Recorded history and cultural associations
- Value for appreciation of nature
- Value for learning

The basis for the criteria is the existing framework of nature conservation prioritisation; the habitat and species plans that form part of national, regional and local Biodiversity Action Plans (BAPs). By referencing existing BAPs these site selection criteria specifically follow the advice contained in paragraph 35 of the DEFRA guidance, '*The selection of Local Sites to help sustain biodiversity should be founded on national, regional and local biodiversity priorities.*'

Utilisation of the existing BAP structure ensures that habitat and species priorities are adequately considered, and that the sites selected are representative of those conservation priorities. This approach also ensures that the sites selected are of, '*substantive nature conservation value*', as advised by the DEFRA guidance.

Utilisation of the full range of BAP habitat and species, from national to local priorities, ensures that consideration is given to species and habitats that are regarded as scarce on a national level, through to those that may not be significant nationally but have local significance e.g. at the edge of range. As BAPs are periodically reviewed and amended to reflect changing trends; utilising BAPs as a basis for selection ensures that the criteria will remain truly representative.

2.2 Selection of Sites by Habitat

Any candidate Local Wildlife Sites must contain at least one habitat type that is listed in the relevant national, regional or local BAP (Durham BAP). The habitat types present on a site will be determined by a site survey and must be clearly mapped. The baseline information required to determine the suitability of a candidate LWS is detailed in 2.5 of this protocol.

The baseline information for a candidate site will be compared to the BAP habitat definition, by the LWS Partnership. The LWS Partnership will then determine whether the candidate LWS meets the BAP habitat definition.

Sites can be selected as representative of a single habitat type or as a mosaic of habitat types. Table 1 details the minimum area of BAP habitat or mosaic of BAP habitats that must be present for a candidate site to be selected as a Local Wildlife Site.

In some cases, there will be a mosaic of BAP habitats present on a site but individually they may not reach the minimum area/length as defined in this criteria. In such cases the proportion of the minimum size for each habitat should be calculated and then combined, if the summed total is equal to or greater than 1 then the site will qualify as a candidate LWS. Please see the worked example below:

Proportion of Defined Habitat = Actual Habitat Size/Minimum Defined Area-Length

For example

- Site contains 1.2ha of Wood Pasture and Parkland where the minimum area is 2ha. The proportion of the minimum size is 0.6
- Site also contains 0.125ha of Lowland Meadow and Pasture where the minimum area is 0.25ha. The proportion of the minimum size is 0.5

The proportions for each habitat are then summed:

- $0.6 + 0.5 = 1.1$

As the summed total is equal to or greater than 1 this site would qualify as a candidate LWS.

The rationale for the score equal to or greater than 1 is that the combination of adjacent BAP habitats brings diversity and edge effect benefits.

For reasons of practicality and to provide sites with some degree of physical protection, a LWS can be designated that does not contain BAP habitats in its entirety if the minimum area/length requirement for BAP habitat is met. For example, a field may contain sufficient area of BAP grassland habitat to qualify as a LWS, but the overall area of the field is larger in extent, containing additional non-BAP habitat. The total area of the field should be designated to facilitate ease of management and provide an easily definable site boundary.

Where candidate sites perform an important ecological function in addition to the intrinsic value of the habitat they provide, for example as 'stepping stones' or 'corridors' that increase the ecological connectivity of a landscape (henceforth referred to as connectivity features), the minimum area or length of BAP habitat making up the feature can be up to 50% lower than the usual minimum permitted for qualification as a LWS.

A suite of areas that enhance connectivity by forming a chain of 'steppingstones' across the landscape can be designated as a single LWS, even though they are formed by areas that individually fall below the minimum area or length requirement. As outlined above, the total minimum area of a suite of such sites can be up to 50% lower than the minimum permitted for qualification as a LWS.

All habitat types listed in the Durham Biodiversity Action Plan (DBAP) have been classified into one of the five categories listed in Table 1. To ensure that local biodiversity priorities are given due weighting there are variations in minimum area requirement for habitat categories that refer to Durham BAP habitat action plans.

The minimum value for area or length of habitat to qualify as a LWS has been devised after consultation with specialists who have expert knowledge of the partnership area. In order to reflect changes in conservation status the minimum area requirements for LWS will be reviewed on an annual basis.

By basing designation on the BAP process assessment of candidate sites against thresholds set against the Ratcliffe criteria, as advocated by DEFRA guidance, has been partly achieved. The process by which BAP habitats are prioritised takes into account Ratcliffe criteria such as diversity, naturalness, rarity, fragility and representative value. The threshold value for size and extent, connectivity and local BAP priorities, is given in Table 1.

Table 1: Threshold Values for DBAP Habitats

Habitat Category	Minimum Area/Length	Connectivity Feature Minimum Area or Length
Woodland		
Native Hedgerow	100m	50m
Ancient Semi-Natural Woodland (including PAWS)	1ha	0.5ha
Other Broadleaf Woodland	2ha	1ha
Wet Woodland	0.5ha	0.25ha
Scrub	1ha	0.5ha
Wood Pasture	2ha	1ha
Parkland	2ha	1ha
Veteran Trees	Valuable	Potentially Interesting
Upland		
Blanket Bog and Upland Wet Heath	5ha	2.5ha
Calaminarian Grassland	0.125ha	0.0625ha
Species-rich Upland Acid Grassland	0.5ha	0.25ha

Upland Scree and Rock Vegetation	0.5ha	0.25ha
Upland Calcareous Grassland	0.5ha	0.25ha
Upland Dry Heath	5ha	2.5ha
Upland Hay Meadows	0.5ha	0.25ha
Lowland		
Early Successional Brownfield Land	0.5ha	0.25ha
Lowland Acid Grassland	0.5ha	0.25ha
Lowland Heath	0.5ha	0.25ha
Lowland Meadows and Pastures	0.25ha	0.125ha
Magnesian Limestone Grassland	0.25ha	0.125ha
CG8 Grassland	0.125ha	0.0625ha
Road Verges of Conservation Importance	50m	25m
Waxcap Grasslands	0.2ha	0.1ha
Coastal soft cliffs and slopes	0.1ha	0.05ha
Wetlands		
Phragmites australis Reedbed	0.25ha	0.125ha
Lowland Fen Habitats	0.125ha	0.0625ha
Ponds	5m ²	2.5m ²
Rivers & Streams (Excluding Canals & Ditches)	0.5km	0.25km
Floodplain Grazing Marsh	2ha	1ha
Exposed Riverine Sediments	0.25ha	0.125ha
North East Marine and Coastal Biodiversity Action Plan Priority Habitats		
Coastal salt marsh	0.25ha	0.125ha
Coastal sand dune	1ha	0.5ha
Mudflat	1ha	0.5ha

Table 2. Durham Biodiversity Action Plan and North East Marine and Coastal Biodiversity Action Plan habitat definitions

<i>Durham Biodiversity Action Plan Priority Habitats</i>		
Woodland	Defined in DBAP 11/5/07	Alternative/additional definition
Ancient semi-natural woodland (including PAWS)	Yes	
Other broadleaf woodland	Yes, but to be checked for suitability	
Native hedgerow	Yes, but use DEFRA definition	Define as per 'Ancient and/or species-rich hedgerow' F02 – see DEFRA HLS-FEP handbook 2005
Parkland	Yes	
Scrub	Yes	
Veteran trees	Yes	

Wet woodland	No	Define as per 'Wet woodland' T13 – see DEFRA HLS-FEP handbook 2005
Wood pasture	No	
Wetland		
Exposed riverine sediments	Yes	
Floodplain grazing marsh	Yes	(Spp-rich examples to be additionally recorded as lowland meadows and pasture)
Lowland fen habitats	Yes	
Phragmites australis reedbed	Yes	
Ponds	Yes, but use Durham version of the UK one.	DBAP definition under review. In interim use document "Pond Definition October 09" (Appendix 3.3) based on the UK BAP Definition amended for the Durham. 15 plant species take from DEFRA FEP Handbook for a pond of high value.
Rivers and streams	Yes	Positive features include – minimum water quality, minimum proportion of unmodified riverbank, exposed riverine sediments, dead wood, use by otters, suitable breeding habitat for water vole, kingfisher and sand martin.
Upland heath and grassland		
Calaminarian Grassland	Yes	
Lowland heath and grassland		
CG8 grassland	Yes	
Coastal soft cliffs and slopes	No	
Early successional brownfield land	Yes, but use UK BAP definition	DBAP definition under review. Use UK BAP in interim.
Lowland acid grassland	Yes	
Lowland heath	Yes	
Lowland meadows and pasture	Yes	
Magnesian limestone grassland	Yes	
Road verges of conservation importance	Yes	
Waxcap grassland	Yes	
North East Marine and Coastal BAP Priority Habitats		
Coastal salt marsh	-	Define as per 'Coastal salt-marsh' C01 – see DEFRA HLS-FEP handbook 2005
Coastal sand dune	-	Define as per 'Coastal sand dune' C02 – see DEFRA HLS-FEP handbook 2005
Mudflat	-	Define as per 'Mudflats' C06 – see DEFRA HLS-FEP handbook 2005

2.3 Rationale for the Value of Local Wildlife Sites for the Appreciation of Nature and Learning

The remaining three criteria - recorded history and cultural associations, value for appreciation of nature and value for learning, will only be considered when sites fall outside the habitat requirements previously identified in terms of minimum area/length.

In the event of a site having at least 75% of total habitat area required, evidence concerning the above three criteria may be submitted and where there is clear value concerning one or more of the criteria a site will qualify as a LWS.

2.4 Selection of Sites by Species

Ideally, species conservation is achieved by the conservation of habitats, so in many cases LWS designation on BAP habitat grounds will protect species of conservation concern. Some BAP species can also be relatively widespread and abundant, so LWS selection on grounds of inclusion in species plans at UK or local level could result in the designation of large areas of land, not only those sites of substantive ecological interest. For this reason, BAP status for species has not been used as the main criteria for designation.

However, sometimes the selection of sites on species grounds can be based on the presence of a species or species assemblage that is rare, threatened or important/significant at the national, regional or sub-regional level. For example, where bird populations are present in nationally important numbers the site will qualify as a LWS. National importance is defined by the British Trust for Ornithology e.g. 1% of the British wintering population. A species will be regarded as being present at a location if there is a record submitted to, and accepted by, the appropriate County Recorder within ten years of the designation proposal. Identification of species that are rare or threatened will be done from information obtained from existing documents and publications that are produced for that purpose. Reference documents to be used for different species are listed in Appendix 2.

To ensure ease of documentation and management, and some degree of protection, a site with a species or species assemblage of national or regional importance/significance will be defined by adopting a site boundary that utilises existing features e.g. an existing field boundary may be used even if the species of interest is supported in only a small area of the field.

2.5 Selection Information for Meetings

Organisations or individuals wishing to propose a new LWS at a LWS Partnership meeting must attempt to supply the relevant information, for habitat-based proposals this is:

- A completed LWS Citation using the template in Appendix 3.2;
- details of the site location and boundary;
- species lists including abundance (e.g. DAFOR);
- condition assessment of BAP habitats, using DBAP definitions when available and DEFRA definitions when not;

- a map of the BAP habitats present including total areas of BAP habitats. None BAP habitats must also be mapped;
- connectivity arrows illustrating links to surrounding habitats.

For proposed sites based on a single species or species assemblages, the additional information must to be supplied:

- evidence that the species is present (validated record); and
- evidence that the species is rare or threatened at a national, regional or sub-regional level.

3 APPENDICES

APPENDIX 3.1: Reference Documents

UK and Regional Biodiversity Action Plan Habitat Definitions

Durham Biodiversity Action Plan priority habitat definitions

<http://www.durhambiodiversity.org.uk/>

UK Biodiversity Action Plan habitat definitions

<http://www.ukbap.org.uk/default.aspx>

DEFRA HLS-FEP handbook 2005

<http://www.naturalengland.org.uk/ourwork/farming/funding/es/hls/fep.aspx>

‘Local Sites, guidance on their identification, selection and management’ DEFRA 2006 – available as pdf download

<http://www.defra.gov.uk/rural/protected/localsites.htm>

Mammals

LWS designation covered by habitat criteria only.

Birds

LWS designation covered by habitat criteria only.

Invertebrates

- All species listed in the applicable, current IUCN Red Data Book.
- All Biodiversity Action Plan species
- Those species regarded by Butterfly Conservation North East as high priority.

Vascular plants

- All species listed in appropriate, current IUCN Red Data Book.
- All species listed in the current BSBI list as critically endangered, endangered, near threatened, rare, vulnerable and scarce.
- All species listed in Scarce Plants in Britain (1994) - Stewart, Pearman and Preston.
- All native species recorded in three or less sites in Vice County 66, with the definition of site as per Wells i.e. a site is a floating 1km square. This definition is as used in the Durham Rare Plant Register by J. L. Durkin.

Non-vascular plants

- All species listed in appropriate, current IUCN Red Data Book.

Fungi

- All species listed in appropriate, current IUCN Red Data Book.

APPENDIX 3.2: LWS Citation Template

SITE NAME

SITE No.

LOCATION – (nearest place and grid reference)

STATUS – (history of the site designation)

AREA – (total area of LWS)

DATE(S) OF SITE VISIT(S)

OWNERSHIP – (e.g. Private, Council, etc.)

REASONS FOR DESIGNATION

National and Local BAP Habitats: – (list habitats)

Or Species: – (list species)

SITE DESCRIPTION – (brief description of the site, e.g. ancient semi-natural woodland and plantation woodland with unimproved neutral meadow)

DETAIL – (further detail given, relating to species composition, on-site fauna and important features of the site)

CONNECTIVITY – (description of the site in terms of connecting to the wider environment, corridors and other sites)

LANDSCAPE – (how the site contributes to the landscape character of the area)

RECORDED HISTORY AND CULTURAL ASSOCIATIONS – (details of any recorded history, including ecological, and cultural significance of the site)

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING – (refer to section 2.3 of the criteria)

SITE MANAGEMENT ADVICE AND OBJECTIVES – (clear core management objectives for the management of the features the site was designated for)

APPENDIX 3.3

Pond Definition October 2009

A pond is defined as a permanent or seasonal water body up to 2ha in surface area which meet one or more of the following criteria:

- Provide habitats of international importance: Ponds that meet criteria under Annex I of the Habitats Directive. In Durham this includes H3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.
- Supports species of high conservation importance: Ponds supporting Red Data Book species, UK BAP species, Durham BAP priority species, species fully protected under the Wildlife and Countryside Act Schedule 5 and 8, Habitats Directive Annex II species, one County Rare and Scarce wetland plant species, or three County Scarce aquatic invertebrate species.
- Ponds supporting significant numbers of key species. i.e. supporting 15 wetland plant species from the list below.
- Ponds of high ecological quality: Ponds classified in the top PSYM category (“fair” or “high”) for ecological quality (i.e. having a PSYM score 51% or above).
- Other important ponds: Individual ponds or groups of ponds with a limited geographic distribution recognised as important because of their age, rarity of type or landscape context e.g. ponds in disused quarries, ponds which are part of a mosaic of other habitats, ponds of geological value

The definition excludes domestic garden ponds. The limit of a pond is defined as the winter high water mark.

<i>Achillea ptarmica</i>	Sneezewort
<i>Alisma plantago-aquatica</i>	Water plantain
<i>Alopecurus geniculatus</i>	Marsh foxtail
<i>Angelica sylvestris</i>	Wild angelica
<i>Apium nodiflorum</i>	Fool’s water-cress
<i>Berula erecta</i>	Lesser water-parsnip
<i>Callitriche hamulata</i>	Intermediate water-starwort
<i>Callitriche platycarpa</i>	Various-leaved water-starwort
<i>Callitriche stagnalis</i>	Common water-starwort
<i>Caltha palustris</i>	Marsh marigold
<i>Carex acutiformis</i>	Lesser pond-sedge
<i>Carex hirta</i>	Hairy sedge
<i>Carex otrubae</i>	False fox-sedge
<i>Carex riparia</i>	Greater pond-sedge
<i>Carex rostrata</i>	Bottle sedge
<i>Carex vesicaria</i>	Bladder sedge
<i>Cirsium palustre</i>	Marsh thistle
<i>Crepis paludosa</i>	Marsh hawk’s-beard
<i>Eleocharis palustris</i>	Common spike-rush
<i>Elodea Canadensis</i>	Canadian pondweed
<i>Epilobium hirsutum</i>	Greater hairy willowherb
<i>Epilobium parviflorum</i>	Hoary willowherb
<i>Equisetum fluviatile</i>	Water horsetail
<i>Equisetum palustre</i>	Marsh horsetail

<i>Eupatorium cannabinum</i>	Hemp-agrimony
<i>Filaginella uliginosa</i>	Marsh cudweed
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Galium palustre</i>	Common marsh-bedstraw
<i>Galium uliginosum</i>	Fen bedstraw
<i>Glyceria fluitans</i>	Floating sweet-grass
<i>Glyceria maxima</i>	Reed sweet-grass
<i>Glyceria plicata</i>	Plicate sweet-grass
<i>Hippuris vulgaris</i>	Mare's-tail
<i>Hydrocotyle vulgaris</i>	Marsh pennywort
<i>Iris pseudacorus</i>	Yellow flag
<i>Juncos bufonius</i>	Toad rush
<i>Juncos bulbosus</i>	Bulbous rush
<i>Juncus inflexus</i>	Hard rush
<i>Lemna minor</i>	Common duckweed
<i>Lemna trisulca</i>	Ivy-leaved duckweed
<i>Lychnis flos-cuculi</i>	Ragged robin
<i>Lycopus europaeus</i>	Gipsywort
<i>Lysimachia vulgaris</i>	Yellow loosestrife
<i>Lythrum salicaria</i>	Purple loosestrife
<i>Mentha aquatica</i>	Water mint
<i>Menyanthes trifolia ta</i>	Bogbean
<i>Myosotis laxa</i>	Tufted forget-me-not
<i>Myosotis scorpioides</i>	Water forget-me-not
<i>Myriophyllum spicatum</i>	Spiked water-milfoil
<i>Nasturtium spp</i>	Water-cresses
<i>Nuphar alba</i>	Yellow water-lily
<i>Nymphaea alba</i>	White water-lily
<i>Oenanthe crocata</i>	Hemlock water-dropwort
<i>Oenanthe fistulosa</i>	Tubular water-dropwort
<i>Phalaris arundinacea</i>	Reed canary-grass
<i>Phragmites australis</i>	Common reed
<i>Polygonum amphibium</i>	Amphibious bistort
<i>Potamogeton spp</i>	Pondweeds
<i>Potentilla palustris</i>	Marsh cinquefoil
<i>Pulicaria dysenterica</i>	Common fleabane
<i>Ranculus spp</i>	Water crowfoots
<i>Ranunculus flammula</i>	Lesser spearwort
<i>Ranunculus lingua</i>	Greater spearwort
<i>Ranunculus sceleratus</i>	Celery-leaved buttercup
<i>Rumex hydrolapathum</i>	Water dock
<i>Schoenoplectus lacustris</i>	Common club-rush
<i>Scirpus lacustris</i>	Common club-rush
<i>Scrophularia auriculata</i>	Water figwort
<i>Scutellaria galericulata</i>	Skullcap
<i>Senecio aquaticus</i>	Marsh ragwort
<i>Sparganium emersum</i>	Unbranched bur-reed
<i>Sparganium erectum</i>	Branched bur-reed
<i>Stachys palustris</i>	Marsh woundwort
<i>Stellaria uliginosa</i>	Bog stitchwort
<i>Triglochin palustris</i>	Marsh arrowgrass

<i>Typha latifolia</i>	Great reedmace
<i>Valeriana officinalis</i>	Common valerian
<i>Veronica beccabunga</i>	Brooklime
<i>Veronica scutellata</i>	Marsh speedwell
<i>Zannichellia palustris</i>	Horned pondweed

