Walsall Council

You are hereby summoned to attend a meeting of the Council of the Metropolitan Borough of Walsall to be held on **MONDAY the 6th day of November 2023 at 6.00 p.m.** at the Council House, Walsall.

Public access via: www.WalsallCouncilWebcasts.com

Dated this 27th day of October, 2023.

Yours sincerely,

Chief Executive.

The business to be transacted is as follows:

1. To elect a person to preside if the Mayor and Deputy Mayor are not present.

2. Apologies.

3. To approve as a correct record and sign the minutes of the meeting of the Council held on 18th September, 2023 **– (pages 7 – 12)**

4. Declarations of interest.

5. **Local Government (Access to Information) Act, 1985 (as amended)**:

   To agree that the public be excluded from the private session during consideration of the agenda items indicated for the reasons shown on the agenda.

6. Mayor's announcements.

7. To receive any petitions

8. To answer any questions in accordance with Council procedure rules:

(a) From the public: None

(b) From members of the Council:

Councillor Smith

Walsall Town Hall, located in Leicester Street, which opened 120 years ago in 1903 and designated a Grade II listed building in 1986, is a landmark feature of our town, with which so many people, perhaps especially those who have lived the whole or much of their lives in Walsall, have had a connection with at one time or another.

Given this and also that apart from the nostalgic significance, there is a great deal of local historical significance to the Town Hall, some examples of which include:

- The famous pipe organ, made by the local firm of Nicholson & Lord and installed in 1908 to commemorates the Diamond Jubilee of Queen Victoria

- The matched pair of pictures by Frank O. Salisbury which were installed at the back of the stage, commissioned by a former local member of Parliament and Freeman of the Borough Joseph Leckie "to commemorate the never to be forgotten valour of the South Staffordshire Regiments in the Great War 1914 - 1918" and completed in 1920.

- The memorial plaque to Walsall's three recipients of the Victoria Cross, John Carless, James Thompson and Charles George Bonner unveiled there in December 2009: and

The countless memorable events and personalities at the Town Hall over the years including the famous organist Harold Britton recording a concert “Organist Extravaganza in 1991, the presence of the Antiques Roadshow in 1997, the performance of Rock musicians there including Slade in 1966, The Who in 1966, Robert Plant of Band of Joy (later of Led Zeppelin) in 1967, Black Sabbath in the late 1960s, the heavy metal band, Jameson Raid, in 1980 and the rock band Reverend and the Makers performed there in 2012,

Given all that and much more, can the appropriate Portfolio Holder inform me, this Council and the citizens of Walsall, why this beautiful building is standing unused most of the time and what plans there are for ensuring that our Town Hall has a future as the town centre’s Number One community asset, owned by the Council and vibrant with activities and events as it has been for most of the past 120 years?

Councillor Cheema

With many families struggling to heat or eat, and given the cold winter months are drawing in, will Walsall MBC follow in the footsteps of neighbouring local authorities, to provide additional help during the cost-of-living crisis to struggling residents?

Councillor Smith

Given that at a meeting of the Social Care and Health OSC on 13/7 23. I asked a question about the extent of debt with regard to outstanding client contributions to Adult Social Care packages, with the Committee then being informed that as at January 2023 the debt stood at approximately £9million broken down into three key cohorts:

(i) One cohort amounting to £2m being “not real debt” as it represented the bills sent out from the Council that clients may not even have yet received,

(ii) A second cohort of approximately 60% (approx. £5.4m) of the total (£9m) being a figure that may not be accurate as it represents all those recipients of care packages where circumstances could change regularly and therefore where original invoices may be incorrect and therefore possibly needing a long process to credit those individuals, and

(ii) The third cohort which was described as “real debt” (the remainder of the debt, approx. £1.6m) where clients may be in dispute or where a death may have occurred resulting in delays over Probate/Estate matters,

and given that it was also stated that a Report on this would be going to Cabinet CMT “later this month” and a report “will then go on to Cabinet” within the next couple of months” and be in the public domain, can the appropriate Portfolio holder inform me, this Council and the public, given that 3 months has elapsed since then, what is the present level of debt regarding client contributions towards Adult Care package costs and what level of debt is being anticipated as the Council prepares for its 2024/5 Budget?

Councillor Cheema

What percentage of goods and services procured by Walsall MBC come from the borough itself and what checks are being carried out on procurement contracts to ensure cost effectiveness and value for money, and how often are these checks carried out?

Councillor Cheema

Given the huge popularity of Willenhall Bonfire celebrations, can the Portfolio Holder inform me why the decision was made to axe Willenhall Bonfire Night, and why only Bloxwich and Walsall were given consideration and the go ahead.

Councillor Cheema

Considering the increasing number of electric vehicles on the road, does Walsall MBC have any plans to introduce a fixed number of electric vehicles charging points at Council car parks across the borough.

9. To confirm the following recommendation of Audit Committee:-

Annual Audit Report 2022/23

1.1 That Audit Committee review and provide feedback on the proposed Annual Report; and

1.2 That, subject to any changes arising from recommendation 3.1, the Annual Report of the Audit Committee 2022/23 be approved and that the Vice Chair of the Audit Committee for that year present the report to the next meeting of Council.

(Note: Report to Audit Committee held on 25th September, 2023 reproduced for this meeting (**pages 13 to 31**))

10. To confirm the following recommendations of **Cabinet**:

(a) Biodiversity Net Gain

1.1 That the legal requirement to deliver biodiversity net gain from January 2024 and the planning processes required for its effective implementation, is noted.

1.2 That Council adopt and publish biodiversity net gain guidance for Walsall, as set out in **Appendix 1**.

1.3 That Council adopt and publish the Black Country Local Nature Recovery Map and Strategy, as set out in **Appendix 2**, to be used as guidance and evidence in the planning process.

(Note: Report to Cabinet held on 18th October, 2023 reproduced for this meeting (**pages 32 to 201**))

(b) Food Law Enforcement Plan

That Council approves and adopts the Food Law enforcement plan for the year 2023/24.

(Note: Report to Cabinet held on 18th October, 2023 reproduced for this meeting (**pages 202 to 247**))

11. **Appointment of the Independent Remuneration Panel** - **(pages 248 – 251)**

12. **Portfolio holder briefings**. To receive a 5 minute presentation from the following portfolios:

    a. Deputy Leader and Regeneration – Councillor Andrew ***(To follow)***
    b. Adult Social Care – Councillor Pedley **(pages 252 - 257)**

(Note: A member of the Council may ask the portfolio holder any question and another associated question without notice upon each report. Questioning by members is limited to 10 minutes for each report presented.)

13. To consider the following motion, notice of which has been duly given by Councillor **Smith**:

It has recently been made public that Noddy Holder, a "Walsall –born Rock legend" as the Express & Star has recently described him, with his roots in Caldmore and Beechdale and who holds the Freedom of the Borough of Walsall, has been battling throat cancer for 5 years.

On behalf of the people of Walsall, this Council sends it thoughts and very best wishes to Noddy and his family and wishes him well for the future.

14. To consider the following motion, notice of which has been duly given by Councillor **Nawaz**:

This Council recognises

- The importance of secure and stable housing for our residents, their families, and their children.
- The number of residents in Private Rented Housing has increased hugely in the borough of Walsall
- That the cost of renting a property has increased exponentially in Walsall and that this has had a major impact on our resident's quality of life
- The importance of ensuring that tenants are protected from unscrupulous landlords and the continued threat of eviction

- The impact that an eviction has on a family and particularly children and their mental wellbeing.

- The increased cost to the tax payer to find housing for those that are made homeless.

This Council calls upon the leader to write to the Government to express this Councils concern and opposition to the delay in outlawing section 21 – i.e No fault evictions and other housing reforms and to stress that the impact of this will be felt most strongly by the children of Walsall, who need a stable and safe home free from the risk of no fault eviction.

Walsall Council

Minutes of the **ORDINARY MEETING** of the Council of the Walsall Metropolitan Borough held on **Monday 18 September, 2023, at 6.00 p.m.** at the Council House, Walsall.

Present

Councillor C.D.D. Towe (Mayor) in the Chair

Councillor G. Ali
" B. Allen
" A. Andrew
" B. Bains
" H. Bashir
" M.A. Bird
" P. Bott
" R. Burley
" S. Cheema
" S.J. Cooper
" S.K. Ditta
" S. Elson
" G. Flint
" M. Follows
" N. Gandham
" A. Garcha
" P. Gill
" N. Gultasib
" A. Harris
" F. Hassan
" A.J. Hicken
" A. Hussain
" I. Hussain
" K. Hussain

Councillor T. Jukes
" P. Kaur
" R. Larden
" E. Lee
" R. Martin
" R. K Mehmi
" E. Morgan
" J. Murray
" S. Nasreen
" A.A. Nawaz
" A. Nazir
" A. Parkes
" K. Pedley
" L.J. Rattigan
" K. Sears
" G. Singh Sohal
" P. Smith
" C.A. Statham
" M.A. Statham
" A. Underhill
" M. Ward
" V.J. Waters
" J. Whitehouse
" R.V. Worrall

40. **Apologies**

Apologies were received on behalf of Councillors Murphy, Perry, Rasab, Harrison, Ferguson, Samra, Latham, S. Hussain, C. Bott and, Wilson.

41. **Minutes**

Resolved

That the minutes of the meeting held on 10 July, 2023, a copy having been sent to each member of the Council, be approved as a correct record.

42. **Declarations of interest**

There were no declarations of interest.

43. **Local Government (Access to Information) Act, 1985 (as amended)**

Resolved

There were no items in private session.

44. **Mayor's announcements**

Come Dine with the Mayor

The Mayor welcomed all members to attend his 'Come Dine with the Mayor' event taking place on Sunday 1st October, 2023 at 6.30 p.m. An email with full details of the event having been circulated to all members.

Tributes to the Interim Chief Executive

The Mayor explained that Deborah Hindson would be leaving her role as Chief Executive and thanked her for her hard work and dedication during her time as Interim Chief Executive at Walsall. In doing so, he wished her all the very best.

Councillors M. Bird and A. Nawaz concurred with the sentiments expressed by the Mayor and added further tributes.

45. **Petitions**

The following Petitions were received: -

(1) Councillor Underhill	–	To reopen the basketball court for the children in Whitton Street, Darlaston.
(2) Councillor Sears	–	Chester Road safety campaign.

46. **Questions**

(a) From the public:

Dr Fiona Macmillan

In light of the understandable delays in developing the Walsall Borough Local Plan, when might a revised timetable be available?

Councillor Andrew replied as follows:

As many will be aware the delays are due to the uncertainty over the planning reforms, especially the proposed changes to the plan making system. The Government is currently carrying out a consultation on the reforms which will close on the 18th of October this year. Once this process is concluded, the Council will be in a position to set out a timetable for the Walsall Borough Local Plan, as government has not indicated how long it will take to consider the consult consultation responses, make decisions, and implement any challenges. I am unable to confirm when a revised timetable will be available.

Dr Fiona Macmillan asked the following supplementary question:

Is there any possibility of establishing, assuming the government comes to a conclusion, how long the time gap would be between that and the emergence of a local timetable?

Councillor Andrew replied as follows:

Not at this current time, no.

Lee Jeavons

Whilst I appreciate the reassuring statement made on 01/09/2023 with regard to Reinforced Aerated Autoclaved Concrete in schools controlled by Walsall MBC, many of our schools are now academies. Would the relevant portfolio holder, bearing in mind the responsibility of Walsall MBC for general school performance, be able to provide me, this council and Walsall people with the same assurances for academy schools in the borough?

Councillor Statham replied as follows:

Walsall Council can confirm that it has reviewed and undertaken inspections in its schools and that reinforced autoclaved aerated concrete (RAAC) is not present in any maintained school that the council is responsible for.

RAAC is a lightweight form of concrete used widely in roof, floor, cladding and wall construction in the UK from the mid-1950 to the mid-1990s,

especially for panels on flat roofs. Following the DfE published guidance, an inspection was undertaken at all schools within this scope.

This inspection consisted of an initial visual inspection which was then followed by a physical intrusive inspection where this was deemed necessary to give assurance.

No maintained schools in the borough have been required to close following the Government's announcement highlighting the potential risks of RAAC.

Local authorities, diocese boards of education and academy trusts are responsible for their school buildings.

Although Walsall Council is not the responsible body for diocese and academy schools, we requested assurance from those organisations that RAAC is not present. We have not received any notifications of RAAC being present in any Walsall school.

For further assurance, we also contacted the DfE Regional Directors team and were informed that they are not aware of any confirmed RAAC issues which have been reported involving Walsall schools, either maintained or academies.

Ensuring the safety of students and teaching staff in our schools is our priority. We have been aware of the RAAC issue for some time, so we have undertaken due diligence and already completed a review of Walsall maintained schools. Inspections and reviews have found that none of these schools have used RAAC.

Lee Jeavons asked the following supplementary question:

Could the relevant portfolio holder tell me, with potential for Reinforced Aerated Autoclaved Concrete (RACC) to exist in other buildings of the period, such as the Gala Baths, E.M Flint Gallery and our Civic Centre, if a register has been compiled of Council owned buildings with RAAC?

Councillor Bird replied as follows:

RAAC assurance inspections are underway and will be completed for all maintained schools by Friday 22nd September 2023. For corporate buildings a desktop assessment exercise will be completed by 15th September 2023. This exercise utilises images and technical data held which enabled officers to identify those buildings where the presence of RAAC could be ruled out due to the building age and/or construction type.

Through this process, we have identified 29 properties that require intrusive surveys to verify roof structure types and a further 54 properties where a visual inspection is recommended. These inspection requirements do not indicate that RAAC is present, but it is the systematic risk-based approach

that has been implemented to ascertain whether RAAC may be present. The inspections will commence on 25th September, and it is anticipated these will be completed by 12th October, subject to not requiring any Refurbishment and Demolition Asbestos Surveys prior to undertaking the intrusive tests.

(b) From members of the Council: None

46. **Members Criminal Record Checks**

The report to Standards Committee on 17th July, 2023 was submitted.

It was **moved** by Councillor Martin, seconded by Councillor Andrew and:

Resolved

That Councillors involved in decisions on the provision of services for vulnerable adults undertake an enhanced DBS Check.

47. **Review of the Constitution**

A report was submitted (see annexed).

It was **moved** by Councillor Bird, seconded by Councillor Andrew and:

Resolved

That the following wording be added to Part 3.5, Table 5, paragraph 18.25 of the Constitution:-

- The Anti-social Behaviour, Crime and Policing Act 2014; and
- The Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020 S.I. 1095

48. **Appointment of Returning Officer and Electoral Registration Officer**

A report was submitted (see annexed).

It was **moved** by Councillor Bird, seconded by Councillor Andrew and:

Resolved

That the Chief Executive be appointed as the Council's Returning Officer and Electoral Registration Officer in accordance with Section 35 of the Representation of the People Act 1983, with effect from 9th October, 2023.

49. **West Midlands Fire Authority**

It was **moved** by Councillor Nawaz, seconded by Councillor K. Hussain and:

Resolved:

That Councillor Ward be appointed to the West Midlands Fire Authority.

50. **Portfolio Holder Briefing**

Education and Skills

Councillor M. Statham gave a presentation.

Members asked questions in relation to the presentation which were responded to by Councillor M. Statham.

The meeting terminated at 6:41 p.m.

Mayor:

Date:

Audit Committee **Agenda Item No.9**

25 September 2023

Annual Report of the Audit Committee to Council for 2022/23

Ward(s): All

Portfolios: All

Purpose: Approve

1. Aim

1.1 To provide Council with oversight of the work of the Audit Committee during 2022/23 in accordance with good practice.

1.2 To provide assurance that the Audit Committee continues to provide robust and effective challenge to the council's governance arrangements and internal control framework.

1.3 To confirm that the Audit Committee complies with the CIPFA Position Statement 2022 and provide the outcome of the Audit Committee's review of its effectiveness.

1.3 To provide an opportunity for Council members to provide feedback or query the work of the Committee.

2. Summary

2.1 This report presents the proposed Annual Report of the Audit Committee 2022/23 and seeks approval for the Vice Chair of Audit Committee for that year to present this report to full Council.

3. Recommendations

3.1 That Audit Committee review and provide feedback on the proposed Annual Report.

3.2 That, subject to any changes arising from recommendation 3.1, the Annual Report of the Audit Committee 2022/23 be approved and that the Vice Chair of the Audit Committee for that year present the report to the next meeting of Council.

4. Report detail – know

4.1 The Council is not obliged by law to appoint an Audit Committee; however this has been done in line with good governance practice and guidance from the Chartered Institute of Public Finance & Accountancy (Audit Committees: Practical Guidance for Local Authorities and Police).

4.2 Audit Committee's work is a major aspect of the council's corporate governance and internal control framework. Its wide-ranging remit includes providing independent assurance on the adequacy of the internal control environment. It provides an independent review of governance, risk management, financial reporting and other governance processes, as well as overseeing the work of

internal and external audit. This provides assurance to local taxpayers and other stakeholders on the adequacy of the council's arrangements in these regards.

4.3 The production of an Annual Report to Council on Audit Committee's work strengthens assurance reporting and governance. This is further strengthened by the Vice-Chair of the Audit Committee reporting to Council on the activities of the Committee.

4.4 The CIPFA Position Statement (the "Statement") on Audit Committees sets out the key principles that CIPFA recommends for Audit Committees operating in local government. This Statement is supported by further guidance. The Statement and guidance were updated in 2022. The Statement provides greater prominence to the Annual Report to full Council, including that the Committee should *"report annually on how the Committee has complied with the Statement, discharged its responsibilities, and include an assessment of its performance.*" This report therefore incorporates an assessment of this.

5. Financial information

5.1 There are no direct financial implications arising from this report.

6. Reducing Inequalities

6.1 Effective governance arrangements ensure a focus on delivering of Council Plan objectives, a key driver of which is reducing inequalities.

7. Decide

7.1 The Committee can approve the Annual Report as set out or make suggestions for improvement.

8. Respond

8.1 Following consideration of this report, it will be presented to Council at the next available meeting.

9. Review

9.1 Any feedback received from Council members will be utilised in further Annual Reports going forward.

10. Background papers

Chartered Institute of Public Finance & Accountancy (CIPFA) Position Statement: Audit Committees in Local Authorities and Police 2022
CIPFA Audit Committees: Practical Guidance for Local Authorities and Police – The Audit Committee Member in a Local Authority
Guiding the Audit Committee - Supplement to Audit Committee Member in a Local Authority guidance (CIPFA)
Audit Committee agendas, minutes and reports for the municipal year 2022/23.

Author
Vicky Buckley**,** Head of Finance and Assurance**,** ✉ vicky.buckley@walsall.gov.uk
13 September 2023

Walsall Council
Annual Report of the Audit Committee
Municipal Year 2022/23

1. Introduction from the Chair of the Audit Committee

This is the ninth Annual Report of the Audit Committee and relates to its work programme for the 2022/23 municipal year.

The Council, like all other local authorities and public services continues to face significant challenges, including the impact of inflationary and cost of living pressures and increasing demand for services from residents and businesses which in turn impact on the financial position of the Council.

In such difficult times it is recognised that strong organisational governance is of even more importance. It is therefore both pleasing and important that the Council continues to support the Audit Committee, recognising the significance of the Committee's role and the positive contribution it makes to the council's overall governance and accountability arrangements for the benefit of the residents of the borough, other stakeholders, and indeed the Council itself.

I am pleased to report that Group Leaders have listened and acted upon Audit Committee's request for consistency in membership through municipal years and for 2023/24 the Committee membership remains unchanged. In the Committee's view, this will enable it to provide more consistent and effective support to the Council to discharge its governance responsibilities.

Section 4 of this report provides a summary of the work undertaken during 2022/23, and I hope that this will reassure Council as to the comprehensive level of oversight of governance arrangements provided by the Audit Committee.

Our last Annual Report to Council (for 2021/22) recognised the considerable change in the membership of the Committee for 2022/23, and therefore it was agreed to postpone its review of its own effectiveness so as to enable the six new Councillor Members to experience as much of the full cycle of work programme responsibilities as possible. Since then updated CIFPA guidance on Audit Committees has been published, placing increased importance on this Annual Report to Council, including on how the Committee has discharged its responsibilities and an assessment of its performance. As such, the Committee undertook a review of its effectiveness using CIPFA's best practice checklist over the Summer, asking for and welcoming input into this from senior officers, External and Internal Audit.

The outcome is that the Committee is substantially compliant with CIPFA guidance and is considered effective overall, with some minor improvements identified. The assessment against the best practice checklist is set out at Appendix C for completeness.

A further review will be undertaken at the end of the 2023/24 municipal year in time for the next Annual Report and this will include an assessment of progress against identified improvement actions.

Looking ahead to 2023/24 an extensive programme of work has been approved for the Committee. The terms of reference and work programme remit have also been assessed against the updated CIPFA guidance and these were approved by full Council on 10 July 2023.

Finally, I would like to take this opportunity to thank all those members and officers for their invaluable contributions to and support of the work of the Audit Committee in the past year.

Mr Andy Green,
Independent Chair of the Audit Committee 2022/23

25 September 2023

1. Terms of Reference

The terms of reference within which the Committee operated in the 2022/23

municipal year are detailed at the following link:

Audit Committee Role and Remit 2022/23

Congruent to the important principle of transparency in governance, Audit Committee meetings are open to members of the public and it has been encouraging to see the public continue to follow its meetings remotely during the past year.

2. Member and Officer Attendance

The Audit Committee met 5 times during 2022/23.

Membership of the Audit Committee during 2022/23 and their attendance is detailed at Appendix A.

A number of Audit Committee members also sat on various other Council Committees and panels. There were no matters debated at Audit Committee during the year that created a conflict of interest and necessitated members absenting themselves from meetings. Members considered whether there was a conflict of interest by sitting on both a Scrutiny Committee and the Audit Committee. Members felt that the simple matter of exempting themselves from any item under discussion, which had or was being considered by a Scrutiny Committee of which they were a member, was sufficient to manage any conflict.

The Audit Committee is intended to be "a-political" in nature and members are expected to be independent in mind and thought when present. This important concept, as recognised by the Council is further strengthened by the appointment of Independent Members on the Audit Committee. Following the standing down of one Independent Member in 2022/23, there are now two vacancies on the Committee and recruitment will be undertaken with a view to further strengthening the knowledge and skill set available to support governance oversight.

Senior officers from the Council also attended the Audit Committee as required, including the Chief Executive, the S151 Officer and deputies, Executive Directors and Directors/Heads of Service. Both the Head of Internal Audit to the Council and appointed External Auditor also attend each meeting and in accordance with good practice may be required to meet the Committee without other officers being present.

3. Training & Effectiveness

Members of the Audit Committee are provided with training appropriate to the role of the Committee. During the year training was made available in matters such as the function of the Audit Committee, the nature of the internal control environment; risk management and assurance framework; the role of Internal and External Audit; accounting policies and financial statements; and counter fraud. Induction sessions were also provided for new members of the Committee.

4. The Work of the Audit Committee during 2022/23

In fulfilling its terms of reference, a summary of the business conducted by the Audit Committee during 2022/23 is detailed at Appendix B, and covers the following broad themes:

- Internal Audit;
- External Audit (and Inspection);
- Financial Reporting;
- Risk Management;
- Corporate Governance.

These are discussed in more detail below:

4.1 Internal Audit

Internal Audit remains the prime source of assurance for the Committee.

In respect of the 2022/23 financial year, the following Head of Internal Audit Opinion has been given:

> *"On the basis of our audit work, our opinion on the framework of governance, risk management, and control is Moderate in its overall adequacy and effectiveness. Some improvements are required to enhance the adequacy and effectiveness of the framework of governance, risk management and control.*
>
> *Whilst weaknesses and exceptions were highlighted by our audit work, none of our reviews concluded with unsatisfactory assurance. Of the 40 reviews for which an assurance opinion was provided, 13 provided substantial assurance, 17 moderate assurance and 10 limited assurance. We have raised 7 high priority recommendations, 120 medium priority recommendations and 72 low priority recommendations during the period. These matters have been discussed with management, to whom we have made several recommendations. All of these have been, or are in the process of being addressed, as detailed in our individual reports.*
>
> *Our Follow up work confirmed that good progress has been made on implementing outstanding high priority recommendations, although some medium priority recommendations raised from prior years are yet to be fully implemented. These will continue to be followed up as part of the follow up programme for 2023/24".*

During 2022/23, the outcome of all Internal Audit reports was provided to the Audit Committee. Those reports that were afforded a limited assurance opinion were submitted to Audit Committee for consideration.

The Committee also received reports on the performance of the Internal Audit function which indicated that the service was performing well against the majority of its performance measures; notably all key financial systems and high priority audits were completed within the plan.

The Audit Committee also endorsed Internal Audit's work plan for 2023/24.

4.2 External Audit / Inspection

The main responsibilities of the External Auditor are to obtain and report on whether the council's financial statements have been properly prepared and are free from material misstatement, and whether the council has made proper arrangements for securing economy, efficiency and effectiveness in its use of resources.

Grant Thornton LLP, the Council's appointed Auditor provided an unqualified opinion in their Audit Findings Report on the 2021/22 accounts and reported that:

- The financial statements gave a true and fair view of the financial position of the Council as at 31 March 2022 and of its expenditure and income for the year then ended;
- The financial information in the Financial Report was consistent with the financial statements.

In addition Audit Committee and subsequently Council received the second Annual Audit Report (2021/22) on the council's value for money arrangements in relation to:

- Improving economy, efficiency and effectiveness;
- Governance; and
- Financial sustainability.

No significant weaknesses were identified by the Auditor. Furthermore no improvement recommendations were made in relation to Governance and a total of four recommendations were made across the remaining two criteria for the council to consider. Progress in dealing with these recommendations are reported to the Audit Committee.

4.3 Financial Reporting

During 2022/23, the Committee scrutinised the 2021/22 statement of accounts and also received reports on accounting policies adopted by the Council.

The Committee also received and reviewed progress against recommendations of the External Auditor contained in its Annual Audit Findings Report; the Committee's oversight of the council's governance arrangements to support the External Auditor's annual risk assessment for financial reporting; and received regular updates in relation to the Overview of Local Audit and Transparency of Local Authority Reporting (Redmond Review).

4.4 Risk management

Audit Committee received reports on risk management and reviewed the Strategic Risk Register at its meetings in September 2022, March 2023 and April 2023.

A review of the Risk Management Strategy was undertaken in 2022/23 and the Committee received and commented on the outcome of that review in November 2022. Recommendations from the review have been fed into an updated Strategy. Further work is being undertaken to establish the 'risk appetite' of the organisations which will lead to a further review of the Strategy at the end of 2023/24.

Audit Committee asked for additional reports in relation to two specific strategic risks (relating to firstly the "Proud" transformational programme and then the arrangements for Financial Resilience within the Council) and called relevant accountable officers to provide re-assurance that actions were being taken to manage the identified risks.

4.5 Corporate governance

The Annual Governance Statement (AGS) and review of effectiveness of the Council's system of internal control for the 2021/22 financial year was presented to the Audit Committee by the Chief Executive (Head of Paid Service) and Leader of the Council and concluded with reference to the opinion of the Head of Internal Audit, and the work of the Audit Committee that the effectiveness of the system of internal control was adequate overall.

Reports on progress in relation to the Counter Fraud Response Plan have been considered in November 2022 and April 2023. A council wide fraud risk register has been developed which is now being refined, with counter fraud awareness training due to be rolled out in 2023/24. A review of the existing Counter Fraud Policy is also planned.

The Committee considered a number of other reports in relation to corporate governance;

- Grant Thorntons second report on Lessons from Public Interest Reports and other Interventions, and;
- The Council's Corporate Peer Challenge (CPC) Report and action plan.

It was pleasing that there were no significant areas of improvement identified arising from these reports for the council to act on in relation to internal control or governance.

Indeed, the CPC report provided favourable feedback in relation to governance and internal controls and the Audit Committee itself.

"Through the Peer Review process, the team were presented with evidence of strong governance arrangements."

The Committee was consulted on the Council's update to its Local Code of Governance and provided feedback and suggestions for improvement, which are

currently being incorporated into the revised Code.

A Committee decision tracking report was again utilised in 2022/23 to track all of its decisions for which a follow-up is required, to enable Committee members to monitor any outstanding actions and seek updates at future meetings where applicable.

5. Conclusion

The Audit Committee is an important element of a strong governance system and as can be seen has undertaken a comprehensive work programme in furtherance of its duties and objective to provide assurance of the satisfactory operation of the control system at the Council.

The Committee will continue to focus on supporting the Council to demonstrate strong corporate governance. It has assessed its own effectiveness against CIPFA's best practice guidance and will ensure improvement actions identified are implemented and will report progress on this in the next Annual Report to Council.

Appendix A

Audit Committee Meetings and Member Attendance

	Mr A Green Independent Member (Chair)	Cllr S Johal (Vice-Chair)	Cllr B Bains	Cllr S Elson *	Cllr L Harrison *	Cllr S Hussain	Cllr R Larden	Cllr x Mehmi	Cllr A Nawaz	Ms S Ajaz Independent Member
22.06.2022	✓	✓	✓	✓	N/A	N/A	✓	✓	N/A	x
26.09.2022	✓	✓	✓	✓	N/A	N/A	✓	✓	x Cllr Worrall substituted	x
21.11.2022	✓	x	x	x	N/A	x	✓	✓	✓	x
02.03.2023	✓	✓	✓	N/A	x	✓	✓	x	✓	N/A**
09.04.2023	✓	✓	✓	N/A	✓	✓	✓	x	✓	N/A**
% Attendance	100%	80%	80%	66%	50%	66%	100%	60%	75% & 25% substitute attendance	0%

*Councillor S. Elson stood down after the November 2022 meeting as she became a member of the Cabinet and Councillor L. Harrison replaced Councillor S. Elson on 9 January 2023.

**Mrs S. Ajaz stood down as an independent member on 1 January 2023, leaving 2 vacant posts (out of 3).

Appendix B

Summary of Audit Committee Work Plan 2022/23

Meeting Date	Report Subject	Assurance Theme				
		Internal Audit	External Audit/Inspection	Financial Reporting	Risk Management	Corporate Governance
22 June 2022	Committee Decision Tracking Chart					✓
	Audit Committee role, remit and work programme 2022/23					✓
	Internal Audit Annual Report and Opinion for the year ending 31 March 2022	✓				✓
	Pre-Audit draft Statement of Accounts 2021/22			✓		✓
	Annual Review of Effectiveness of the System of Internal Control 2021/22	✓	✓	✓	✓	✓
	Annual Governance Statement 2021/22	✓	✓	✓	✓	✓
	Amendments to Planning and Building Control Delegations under Part 3.5 of the Council's Constitution					✓
	Internal Audit Progress Report 2022/23	✓				
	Redmond Review Update – Oversight of Local Audit and the Transparency of Local Authority Financial Reporting		✓	✓		
	Follow Up of High Priority Recommendations (Private)	✓				

Meeting Date	Report Subject	Assurance Theme				
		Internal Audit	External Audit/Inspection	Financial Reporting	Risk Management	Corporate Governance
26 September 2022	Committee Decision Tracking Chart					✓
	Statement of Accounts Progress 2021/22		✓	✓		
	Internal Audit Progress Report 2022/23	✓				
	Internal Audit Performance (KPI) 2022/23	✓				
	Risk Management update – Strategic Risk Register (SRR2 and SRR7)				✓	
	Risk Management update – Strategic Risk Register				✓	
	Follow Up of High Priority Recommendations (Private)	✓				
21 November 2022	Committee Decision Tracking Chart					✓
	Annual Report of the Audit Committee 2021/22				✓	
	Statement of Accounts Progress 2021/22		✓	✓		
	External Audit Annual Report 2021/22		✓			✓
	Internal Audit Progress Report 2022/23	✓				
	Internal Audit Performance Quarter 2 (KPI) 2022/23	✓				
	Risk Management Strategy Review				✓	
	Counter Fraud and Corruption Arrangement Update			✓	✓	✓

Meeting Date	Report Subject	Assurance Theme				
		Internal Audit	External Audit/Inspection	Financial Reporting	Risk Management	Corporate Governance
21 November 2022 (continued)	Overview of Local Audit and Transparency of Local Authority Reporting (Redmond Review) Update		✓	✓		
	Report of Grant Thornton Lessons from Public Interest Reports and other Interventions	✓	✓	✓	✓	✓
	Follow Up of High Priority Recommendations (Private)	✓				
2 March 2023	Committee Decision Tracking Chart					✓
	Post Audit Statement of Accounts 2021/22 and Audit Findings Report		✓	✓		
	External Audit - Informing the Audit Risk Assessment 2022/23 Accounts		✓	✓	✓	✓
	Internal Audit Progress Report 2022/23	✓				
	Internal Audit Performance Quarter 3 (KPI) 2022/23	✓				
	Risk Management update – Strategic Risk Register				✓	
	Internal Audit Work Plan and Charter 2023/24	✓				
	Follow Up of High Priority Recommendations (Private)	✓				
11 April 2023	Committee Decision Tracking Chart					✓
	Voter Identification				✓	✓

Meeting Date	Report Subject	Assurance Theme				
		Internal Audit	External Audit/Inspection	Financial Reporting	Risk Management	Corporate Governance
11 April 2023 (continued)	Internal Audit Work Progress Report 2022/23	✓				
	Strategic Risk Register				✓	
	Local Code of Governance Review					✓
	Review of the Effectiveness of the Audit Committee	✓	✓	✓	✓	✓
	Counter Fraud and Corruption Arrangements Update			✓	✓	✓
	Accounting Policies 2022/23			✓		
	External Audit Plan 2022/23 Accounts		✓			
	Corporate Peer Challenge Report				✓	✓
	Internal Audit Work Plan 2023/24	✓				
	Follow Up of High Priority Recommendations (Private)	✓				

Self-assessment of Good Practice **Appendix C**

This appendix provides a high-level review that incorporates the key principles set out in CIPFA's Position Statement and supporting guidance. Where an audit committee has a high degree of performance against the good practice principles, it is an indicator that the committee is soundly based and has in place a knowledgeable membership. These are the essential factors in developing an effective audit committee.

Where the committee does not fully comply with an element, three options are available to allow distinctions between aspects that require significant improvement and those only requiring minor changes.

Good Practice Questions		Does not comply	Partially complies and extent of improvement needed			Fully complies	Improvement Actions	Comments
		Major improvement	Significant improvement	Moderate improvement	Minor improvement	No further improvement		
Audit Committee Purpose and Governance								
1	Does the authority have a dedicated audit committee that is not combined with other functions (e.g. standards, ethics, scrutiny)?					★		Fully complies
2	directly to the governing body (full council)?					★		Fully complies.
3	Has the committee maintained its advisory role by not taking on any decision-making powers?					★		Fully complies.
4	Do the terms of reference clearly set out the purpose of the committee in accordance with CIPFA's 2022 Position Statement?					★		Fully complies.
5	Do all those charged with governance and in leadership roles have a good understanding of the role and purpose of the committee?				★		This will be tested to ensure understanding is complete. A review of member and officer training and induction will be completed to ensure sufficient coverage of role and purpose.	
6	Does the audit committee escalate issues and concerns promptly to those in governance and leadership roles?					★		Fully complies.

Good Practice Questions		Does not comply	Partially complies and extent of improvement needed			Fully complies	Improvement Actions	Comments
		Major improvement	Significant improvement	Moderate improvement	Minor improvement	No further improvement		
7	Does the governing body hold the audit committee to account for its performance at least annually?					★		Fully complies.
8	Does the committee publish an annual report in accordance with the 2022 guidance, including:							
	- Compliance with the CIPFA Position Statement 2022					★		The 2023 Annual Report will satisfy this requirement.
	- Results of the annual evaluation, development work undertaken and planned improvements					★		
	- How it has fulfilled its terms of reference and the key issues escalated in the year?					★		
Functions of the Committee								
9	Do the committee's terms of reference explicitly address all the core areas identified in CIPFA's Position Statement as follows?							The Committee's terms of reference (TOR) was reviewed alongside the revised CIPFA Position Statement and the updated TOR approved by Council.
	Governance arrangements					★		
	Risk management arrangements					★		
	Internal control arrangements, including: - Financial management - Value for money - Ethics and standards - Counter fraud and corruption					★		

Good Practice Questions		Does not comply	Partially complies and extent of improvement needed			Fully complies	Improvement Actions	Comments
		Major improvement	Significant improvement	Moderate improvement	Minor improvement	No further improvement		
	Annual governance statement					★		
	Financial reporting					★		
	Assurance framework					★		
	Internal audit					★		
	External audit					★		
10	Over the last year, has adequate consideration been given to all core areas?					★		The work programme covered all core areas.
11	Over the last year, has the committee only considered agenda items that align with its core functions or selected wider functions, as set out in the 2022 guidance?					★		Fully complies.
12	Has the committee met privately with the external auditors and head of internal audit in the last year?					★		Meetings have been held with external audit and in previous years, with internal audit. There is provision within the agenda for a private meeting.
Membership and Support								
13	Has the committee been established in accordance with the 2022 guidance as follows?							
	- Separation from executive					★		Fully complies.

Good Practice Questions		Does not comply	Partially complies and extent of improvement needed			Fully complies	Improvement Actions	Comments
		Major improvement	Significant improvement	Moderate improvement	Minor improvement	No further improvement		
	- A size that is not unwieldy and avoids use of substitutes					★		Fully complies.
	- Inclusion of lay/co-opted independent members in accordance with legislation or CIPFA's recommendation					★		Fully complies.
14	Have all committee members been appointed or selected to ensure a committee membership that is knowledgeable and skilled?	N/A						processes and constitutional requirements concerning balance that this is not fully realisable and is therefore not scored. Skills and knowledge is discussed and training arranged as per the approved training plan and with the agreement of committee members.
15	Has an evaluation of knowledge, skills and the training needs of the chair and committee members been carried out within the last two years?	N/A						Formal use of the assessment within the CIPFA Guidance is not felt to be the most relevant mechanism to use and is therefore not scored. Skills and knowledge development is a priority of the Committee and is discussed and training arranged as per the approved training plan and with the agreement of committee members. Individual 121 sessions are held with members to assess and agree any further training and support needs.
16	Have regular training and support arrangements been put in place covering the areas set out in the 2022 guidance?				★		An agreed training plan is in place. A feedback mechanism will be implemented to support continuous improvement.	
17	Across the committee membership, is there a satisfactory level of knowledge, as set out in the 2022 guidance?	N/A						As per 14&15, not scored. Training is a priority as set out above.

Good Practice Questions		Does not comply	Partially complies and extent of improvement needed			Fully complies	Improvement Actions	Comments
		Major improvement	Significant improvement	Moderate improvement	Minor improvement	No further improvement		
18	Is adequate secretariat and administrative support provided to the committee?					★		Fully complies.
19	working relations with key people and organisations, including external audit, internal audit and the CFO?					★		Fully complies.
Effectiveness of the Committee								
20	Has the committee obtained positive feedback on its performance from those interacting with the committee or relying on its work?					★		provided from interviewees and the CPC process. Audit contributed to the self assessment process. The AGS review will be used to assess this in future.
21	Are meetings well chaired, ensuring key agenda items are addressed with a focus on improvement?					★		this along with feedback from contributors to the self assessment process.
22	Are meetings effective with a good level of discussion and engagement from all the members?				★		Some minor improvement to ensure that discussions do not stray into scrutiny, however this is managed via the Chair and continued support and training as appropriate.	
23	Has the committee maintained a non-political approach to discussions throughout?					★		Fully complies.
24	Does the committee engage with a wide range of leaders and managers, including discussion of audit findings, risks and action plans with the responsible officers?					★		Fully complies. Officers attend meetings to cover these areas.

Good Practice Questions		Does not comply	Partially complies and extent of improvement needed			Fully complies	Improvement Actions	Comments
		Major improvement	Significant improvement	Moderate improvement	Minor improvement	No further improvement		
25	Does the committee make recommendations for the improvement of governance, risk and control arrangements?					★		Fully complies. Robust evidence is in place of recommendations from audit committee across its areas of core responsibility.
26	Do audit committee recommendations have traction with those in leadership roles?					★		Fully complies. Robust evidence is in place of recommendations from audit committee across its areas of core responsibility and from tracking chart.
27	Has the committee evaluated whether and how it is adding value to the organisation?				★		Formal evaluation has not taken place. This will be undertaken as part of the annual AGS.	Positive feedback has been received from CPC along with feedback from contributors to the self assessment process.
28	Does the committee have an action plan to improve any areas of weakness?				★		The outcome of this checklist forms that plan.	An engagement and participation plan was agreed by the committee to address improvements including training, reporting to the committee. The majority have been implemented.
29	Has this assessment been undertaken collaboratively with the audit committee members?				★		The workshop format will be built on for future assessments.	A workshop approach was taken to do this, attended by 4 out of 7 members of the Committee (including the independent Chair). Senior officers contributed to the self assessment along with audit. The draft assessment will be considered by audit committee members at its September 2023 meeting.

Cabinet – 18 October 2023

Biodiversity Net Gain (BNG)

Portfolio: Councillor A. Andrew - Deputy Leader and Regeneration

Related portfolios: Councillor M. Bird - Leader of the Council
Councillor G. Flint - Wellbeing, Leisure and Public Spaces

Service: Planning and Building Control

Wards: all

Key decision: Yes

Forward plan: Yes

1. Aim

1.1. Biodiversity net gain (BNG) is a national approach to development that aims to leave the natural environment in a better state than it was beforehand by delivering measurable improvements for biodiversity by creating or enhancing habitat. BNG sits separately to all other existing legal protections for protected habitat, sites and species.

2. Summary

2.1. In January 2024, the Environment Act 2021, through upcoming secondary legislation, is expected to bring into effect the requirement for most new major developments to provide a minimum of 10% BNG, strengthening the current requirements stated within national planning policy. This will extend to small sites of less than 1 hectare in April 2024. There will also be a requirement to secure the management and monitoring of land on which BNG has been delivered for 30 years using legal agreements and planning obligations.

2.2. The council is still awaiting details on guidance and the secondary legislation to enact the statutory requirement from DEFRA and Natural England. This is likely to be released at the end of November 2023. Members will be updated at the meeting as necessary. A BNG guidance document has been created and is attached at **Appendix 1**.

2.3. As the formal West Midlands Local Nature Recovery Strategy is expected to be completed in 2025. The Black Country Local Nature Recovery Map and Strategy has been produced as an interim guidance document (See **Appendix 2**) to aid in the delivery of BNG, through the planning decision making and plan making processes.

3. Recommendations

3.1. That the legal requirement to deliver biodiversity net gain from January 2024 and the planning processes required for its effective implementation, is noted.

3.2. That Council be recommended to adopt and publish biodiversity net gain guidance for Walsall, as set out in **Appendix 1**.

3.3. That Council be recommended to adopt and publish the Black Country Local Nature Recovery Map and Strategy, as set out in **Appendix 2**, to be used as guidance and evidence in the planning process.

4. Report detail – know

4.1. Over the last century, the state of nature in UK has declined dramatically as habitats have become increasingly degraded and fragmented. Robust evidence has identified that the UK has lost nearly half of its biodiversity and that 56% of our species are in decline, with 15% threatened with extinction.

4.2. The Environment Act 2021 seeks to enable nature to recover by committing to halt species decline by 2030 and increase species abundance by the end of 2042. This will be achieved by mandating development to achieve at least 10% BNG alongside other duties.

4.3. In addition, national planning policy, in the form of the National Planning Policy Framework (NPPF) (2023), requires plans to promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity. As well as realising opportunities to improve biodiversity in and around developments which should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

4.4. Through secondary legislation, enacted by the Environment Act, from January 2024, with an exact date yet to be confirmed, most new developments will be required to provide a minimum of 10% BNG. There will be a few exemptions which will include development sites with no existing habitat areas, householder applications, permitted development and small-scale self-build housing development.

4.5. To allow a staged commencement of the requirement, proposed developments which meet the threshold to be classified as ‘small sites’ have an extension until April 2024 before being subject to this statutory requirement. Small sites can be defined as either those proposed for residential development, including application sites of less than 1 hectare in size and consisting of less than 10 units, or those proposed for non-residential development with a floor space of less than 1,000 square metres.

4.6. BNG will be secured by way of a new statutorily worded planning condition attached to a planning approval, that cannot be removed, modified or

disapplied: development may not be begun unless (a) a biodiversity gain plan has been submitted to the planning authority, and (b) the planning authority has approved the plan.

4.7. It is expected that at the planning application determination stage, the applicants will be required to submit a biodiversity gain statement to provide details of the proposed net gain approach, with final details agreed and confirmed in a biodiversity gain plan, for compliance with this condition.

4.8. The statutory 10% BNG will be calculated by assessing the current habitats and landscaping present within an application site and assigning a proxy value to each habitat based on their size, condition, quality and strategic significance, using a metric spreadsheet designed by DEFRA. This is then repeated for the development proposal in consideration with proposed habitat retention, creation and enhancement. Both total proxy values are then compared against each other to determine whether a 10% biodiversity net increase has been delivered.

4.9. To deliver biodiversity net gain, developers have the following options:

a) The preferred option is for developers to achieve the 10% net gain within the development site, and they will be encouraged to accommodate this net gain into the early design stages of their schemes, especially as part of the pre-application process.

b) Where it is evidenced as being not possible to achieve the 10% net gain within a development site, developers can look to deliver provision offsite to meet this target, through legal agreements called conservation covenants or planning obligations.

c) The final, last resort, option for developers is to purchase statutory biodiversity credits through a national government scheme. These will be expensive and could be spent anywhere nationally and consequently with potentially no local benefits accruing.

4.10. All land placed under an agreement to be managed to meet BNG targets will be subject to a 30-year management period, formalised through a habitat management and monitoring plan. This plan will sit alongside any legal agreement and will require regular monitoring by the council or an alternative ‘responsible body’. The council will include a relevant BNG monitoring fee within future planning obligations to secure this ongoing monitoring requirement.

4.11. One of the major commitments in the government’s 25-year Environment Plan and the follow up Environment Improvement Plan 2023, is the delivery of the national Nature Recovery Network (NRN). The delivery of the NRN will provide 500,000 hectares of additional wildlife habitat, and link existing protected sites and landscapes, while providing wider environmental benefits including greater public appreciation and enjoyment, carbon capture, and water quality improvement and flood risk management. The NRN will be created by 48 interlinked Local Nature Recovery Strategies (LNRS), forming part of the Environment Act 2021, with the extent of the LNRS areas determined by the Secretary of State.

4.12. In June 2023, the secretary of state determined that Walsall Borough would be part of the West Midlands Local Nature Recovery Strategy, with the West Midlands Combined Authority (WMCA), formerly appointed by DEFRA, as the Responsible Authority for producing the strategy. Walsall are listed as a Supporting Authority by DEFRA to assist in its production. From a recent meeting with WMCA, it was stated that the WMCA are in the early stages of planning for the LNRS delivery and in line with government expectations, it is anticipated that the West Midlands LNRS will be completed in 2025.

4.13. However, with mandatory BNG coming into effect from November 2023, the Black Country Authorities commissioned the Wildlife Trust for Birmingham and the Black Country (WTBBC) and EcoRecord to develop the Black Country LNRM+S for use in the interim period until the West Midlands LNRS can be adopted.

4.14. The Black Country Local Nature Recovery Map and Strategy (LNRM+S) has been produced and can be found at Local Nature Recovery Strategy (LNRS) | Birmingham & Black Country Wildlife Trust (bbcwildlife.org.uk). It is a locally led spatial strategy designed to align with, and help deliver, the requirements of the Environment Act, including the delivery of mandatory biodiversity net gain, and provide a focus for a strengthened duty on all public authorities to conserve and enhance biodiversity.

4.15. The map and strategy were produced by:

- mapping the most valuable existing habitat for nature by comparing existing mapping data and satellite habitat derived data against land use, species records, protected sites and priority habitat, in order to evaluate the ecological importance of landscape units across the whole of the Black Country.

- mapping specific proposals for creating and/or improving habitat for nature and wider environmental goals.

- setting out a framework for agreed priorities for nature's recovery by the identification of core landscapes and priority network restoration zones.

4.16. Five core landscape areas are identified within Walsall Borough that support the highest abundance and diversity of semi-natural and priority habitat. They are considered a priority for investment in ecological recovery. These five areas are:

1. Rough Wood Chase and Sneyd Reservoir

2. Brownhills Common and Pelsall

3. Barr Beacon, Druid's Heath and Shire Oak

4. Park Lime Pits, Cuckoo's Nook, The Dingle and Great Barr Park

5. the northern portion of Sandwell Valley

4.17. In addition, priority network restoration zones are identified within the strategy. These are areas where support should be given to the creation of ecological corridors across the wider landscape to improve connectivity and where investment in nature recovery outside of the core areas should be prioritised.

Council Plan priorities

4.18. The implementation of BNG through the development management process, will help deliver the following Council Plan 2022/2025 priorities:

a. encouraging our residents to lead more active, fulfilling and independent lives to maintain or improve their health and wellbeing

b. the people of Walsall feeling safe in a cleaner, greener Borough

c. regenerating the Borough to support places where people are proud to live and work

Risk management

4.19. Unless satisfactory measures are put in place to secure, deliver, manage and monitor biodiversity net gain effectively, the council could be challenged as to not exercising its legal duty to conserve and enhance biodiversity in an appropriate manner.

4.20. The provision of the additional mandatory 10% BNG requirement could be argued to have implications on the viability of development schemes. This may mean that developers will seek to evidence that, by taking on the BNG requirement as part of the scheme, they would have to forego the provision of other planning measures, such as an appropriate number of affordable homes. Should this matter arise, the overall viability of the scheme will need to be assessed and the planning balance, within the planning decision making process, applied with the mandatory requirement of net gain in mind.

Financial implications

4.21. In May 2022, the council employed an ecology officer to lead on this matter within the planning and building control service which was funded from existing revenue resources.

4.22. The government has provided grant funding to assist with the council in being ready for the statutory requirement, with £10,047 in 2021/22 and £26,807 being made available for both financial years 2022/23 and 2023/24. The government has not yet committed to long term funding for the additional duties imposed by the act however the ongoing ask is around staffing and monitoring arrangements which can be achieved within existing resources.

4.23. Additional monitoring fees can be incorporated within the legal agreements and planning obligations however secondary legislation is required for further guidance on this matter.

Legal implications

4.24. The Environment Act 2021 includes a provision for BNG to be a condition of planning permission in England and provides a legal framework for a biodiversity gain site register, biodiversity credits and local nature recovery strategies in England, as well as a general duty to conserve and enhance biodiversity.

4.25. The new statutory requirement will place increased duties on the council as part of the planning system. These will include:

- discharging the statutory BNG planning condition;
- monitoring and enforcing legal obligations placed on landowners providing registered offsite biodiversity gain and significant onsite biodiversity gain;
- review monitoring reports submitted by the developer over the 30-year management period; and
- regularly publishing a biodiversity report summarising the actions that the council has taken over the past reporting period and plans for action over the subsequent period.

Procurement Implications/Social Value

4.26. Evidence has already been produced by external bodies to produce an interim LNRM+S to deliver on BNG on identify and location strategic ecological sites.

4.27. Ongoing review of legal aspects and relevant aspects of the planning process will require assessment internally, but could require the potential procurement of evidence externally, in order to meet the requirements in an efficient and legal compliant manner.

4.28. Further evidence on this matter may be procured as part of the progression of the Walsall Borough Local Plan, with an emphasis on setting out a potential policy on net gain. While such a policy would need to align with the net gain provisions, it will sit separately to the mandatory BNG requirement, and could for instance, be targeted to meet local circumstances.

Property implications

4.29. The minimum 10% statutory requirement will place new obligations and legal requirements on development, which will require additional actions throughout the process, from early design stages to 30 years post completion. This will include council projects and council land, unless any exemptions apply.

4.30. Should the council choose to offer its land to be a sink for off-site compensation, this would allow developments to fund habitat enhancement and management within our land. An internal working group is currently looking at legal requirements and ramifications of taking this direction.

Health and wellbeing implications

4.31. The net gain approach plans to leave the environment in a better condition for the next generation by protecting, enhancing and creating habitat areas for wildlife, while also creating more green areas for residents and increasing green infrastructure and travel routes.

Reducing Inequalities

4.32. With the use of the strategic significance weighting of the biodiversity scoring, the LNRM+S and future potential development plan policies, green space creation can be directed to areas within the borough, which currently have a lack of open space areas or along wildlife corridors. This could result in improving health and wellbeing in areas of relative deprivation, thereby tackling the inequality of access to green space within the borough, while improving landscape corridors.

Staffing implications

4.33. This new statutory requirement will place an additional workload on planning officers, enforcement officers and the ecology officer, with support from service areas such as Healthy Spaces and legal services. This will include the task of assessing biodiversity gain plans, implementing the 30-year monitoring requirement for application and reporting on this duty.

Climate Impact

4.34. The mandatory 10% net gain requirement for development in both the urban and rural areas of the borough can be seen to form part of a package of proposals on habitat creation and enhancement to help tackle the climate emergency through other ecosystem services and link directly to the council's future climate change strategy.

Consultation

4.35. No formal public consultation is required as this matter relates to the implementation of a legal requirement and has been overseen by an internal BNG working group.

5. Decide

5.1. For the Council to adopt guidance, provided in **Appendix 1**, on how BNG will be implemented in order to comply with the legal requirement expected to be implemented in January and April 2024, respectively.

5.2. As this looks to implement guidance to meet new national legislation, no other alternatives are available.

5.3. For the Council to adopt the LNRM+S as guidance and evidence to be used in the planning process.

5.4. The alternative option would be to not utilise the documentation and await the formal West Midlands LNRS to be produced in 2025. While Walsall Council would still see the benefits of the creation of green spaces through offsite compensation areas, the lack of a landscape led strategy would prevent the habitat creation being directed to areas to provide additional wider ecosystems benefits and borough wide ecological corridors.

5.5. In addition, without the evidence base for plan making, further evidence may be required to be produced for the Local Plan or a delay created to awaiting the West Midlands LNRS.

6. Respond

6.1. The proposed response is to adopt and implement the biodiversity net gain guidance, as set out in **Appendix 1**, and the LNRM+S, as set out in A**ppendix 2**.

7. Review

7.1. Development plan policies on the theme of nature conservation and biodiversity net gain in particular, along with any new internal BNG processes and monitoring regimes, will be kept under regular review to ensure they achieve the necessary outcomes.

7.2. The electronic mapping systems and additional services required to deliver BNG effectively will be reviewed, including the measures needed to deliver, manage and monitor net gain on council owned land as off-site compensation areas.

7.3. The Black County Local Nature Recovery Map and Strategy will be retained as a live document, to be reviewed and kept up to date on a regular basis with current and future biodiversity work and projects.

Appendices

Appendix 1: Biodiversity net gain guidance document
Appendix 2: Black Country Local Nature Recovery map and strategy: an emerging approach – March 2022

Background papers

- Planning advisory service website https://www.local.gov.uk/pas/topics/environment/biodiversity-net-gain-local-authorities
- The government biodiversity net gain website – https://www.gov.uk/government/collections/biodiversity-net-gain#:~:text=Biodiversity%20net%20gain%20(%20BNG%20)%20is,than%20it%20was%20before%20development

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Signed

Kathryn Moreton
Interim Director
On behalf of Dave Brown

6 October 2023

Signed

Councillor Andrew
Portfolio holder

6 October 2023

Walsall Council

Biodiversity Net Gain Guidance Note

Biodiversity Net Gain (BNG) is a national approach to development, planning and land management that aims to leave the natural environment in a better state than it was beforehand, by delivering measurable improvements for biodiversity, by creating or enhancing habitat.

Why is BNG necessary?

Over the last century, the state of nature in our country has declined dramatically as the pressure of our demands has made our habitat increasingly degraded and fragmented. With a report completed by the Natural History Museum, in collaboration with the RSPB, stating that the UK has lost nearly half of its biodiversity (UK has 'led the world' in destroying the natural environment | Natural History Museum (nhm.ac.uk)), while the 2019 State of Nature report revealed that 56% of our species are in decline and 15% threatened with extinction (State-of-Nature-2019-UK-full-report.pdf (nbn.org.uk)).

Biodiversity Net Gain alongside other duties within the Environment Act 2021, will enable nature to recover by committing to halt species decline by 2030 and increase species abundance by the end of 2042.

At a local level, Walsall are committed to protecting and conserving the natural environment and see the statutory requirement as a pursuant to that aim.

You can find more information on the BNG on Understanding biodiversity net gain - GOV.UK (www.gov.uk) website.

National Policy

Amendments made to the National Planning Policy Framework (2023) in 2022 included revisions to para 174 and 180 to stipulate that planning policies and decisions should contribute to and enhance the natural and local environment by .... minimising impacts on and providing net gains for biodiversity. As this is currently in affect between now and November 2023, Walsall are requesting that planning proposals demonstrate at least a net gain in biodiversity.

The Environment Act (2021) contains a statutory BNG condition for planning permission that will enforce the delivery of mandatory 10% BNG with development. This is set to come into effect for most major applications in November 2023, while small sites will be brought in from April 2024. This will directly affect any application submitted after these dates. The exact date for both commencements has yet to be confirmed.

The Government will be providing secondary legislation, guidance, and tools to support its implementation of this policy.

BNG and your application

After November or April, respectively, any development covered by the Town and Country Planning Act, will be required to demonstrate, and deliver a measurable minimum 10% uplift for biodiversity, which cannot be avoided.

This uplift needs to be secured via a legally binding agreement with the applicant demonstrating how the biodiversity uplift is managed and monitored over the 30-year period.

This new requirement will not alter existing protections for the natural environment including protections for sites, priority habitats and species. These will still be required by all developments and should be achieved alongside this new requirement.

A major application is any application that involves:

- Mineral extraction
- Waste development
- Residential development of between 10 or dwellings
- Residential development on a site area of 0.5ha or more and the number of dwellings is unknown.
- Development of floorspace of 1,000 square metres or more
- Development on sites over 1 ha or more
- Change of use over 1,000 square metres or more

A small site is defined as:

- Residential development of fewer than 10 residential units with an area less than 1 hectare
- Residential development of an unknown number of residential units with an area less than 0.5 hectare
- Non-residential development of less than 1 hectare
- Non-residential development with a floor space of less than 1,000 square metres.

There are number of exemptions to the requirement for mandatory BNG. These including:

- Permitted development;
- Urgent crown development;
- Temporary impacts that can be restored within 2 years;
- Existing sealed surfaces (such as tarmac or existing buildings) a zero score;
- Development impacting habitat of an area below a 'de minimis' threshold of 25 metre squared, or 5m for linear habitats such as hedgerows;
- Householder applications;
- Biodiversity gain sites (where habitats are being enhanced for wildlife); and
- Small scale self-build and custom housebuilding.

Developments exempt from BNG are still covered by local natural environment policies, as such we would seek for biodiversity to be considered within the proposals to deliver habitat and species enhancements. This could include protected species features such as bird and bat boxes or hedgehog highways or the integration of native species within landscape proposals.

How it will be implemented?

The statutory requirement will be implemented through a planning condition. Therefore, once an application is approved a statutory condition will be automatically attached to the approval, requiring the submission of a Biodiversity Gain Plan. This will describe how the 10% BNG will be achieved and secured and must include the following information:

1. Information about the steps taken or to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat.
2. The pre-development biodiversity value of the onsite habitat.
3. The post-development biodiversity value of the onsite habitat.
4. Any registered offsite biodiversity gain allocated to the development and the biodiversity value of that gain in relation to the development.
5. Any biodiversity credits purchased for the development.
6. Such other matters as the Secretary of State may by regulations specify.

To achieve mandatory BNG, should the development undertake ‘significant’ onsite habitat creation or enhancement and or utilise offsite land, there will be an additional pre-commencement condition to produce a Habitat Management and Monitoring Plan (HMMP). This will detail the 30 years management prescription proposed, how it will be secured, and the monitoring requirement agreed upon by the Local Planning Authority / Responsible Body. The monitoring requirement and schedule will include the submission of monitoring report to the LPA / Responsible body at intervals, likely 1, 3, 5, 10, 15, 20, 25 30 years.

Both reports and BNG will be secured under legal agreements or planning obligations.

Walsall will monitor commitments within the documentation, any conditions attached from assessment stage and the purchase of any credits.

Please not that while the statutory requirement will be met at discharge of condition stage, development will still need to provide sufficient supporting documentation within the application to provide evidence on how the statutory measures will be met on site and or offsite at determination stage. While not confirmed by national guidance at this stage, it is highly likely that a Biodiversity Gain Statement with a completed up to date DEFRA metric will be required at validation stage to provide this evidence.

How will BNG be measured?

Measurable BNG is calculated using a biodiversity metric spreadsheet, devised by DEFRA, which assigns a proxy value to habitats called 'biodiversity units'.

This allows a calculation to be made of the existing habitat present within an application and the habitats proposed as part of the development or management. The comparison of these scores can then be used to determine whether there is a 10% uplift in biodiversity from the existing site value. When utilised as part of the design process of a development it can be used to help design, place make and determine land management decisions to support biodiversity and other wide ecosystem benefits.

The proxy value for each habitat is determined based on four factors:

- Condition,
- Distinctiveness
- Size,
- Strategic significance

Walsall will be releasing guidance on the strategic significance shortly. This will be initially based on the interim Black Country Local Nature Recovery Map and Strategy from November 2023. However, this will be altered to align with the future Walsall Local Plan and the formal West Midlands Local Nature Recovery Strategy.

Download the latest version of the DEFRA biodiversity metric, for both a major applications and small sites, and guidance document here: LINK

The BNG reports and assessment requirements should only be undertaken by a Suitably Qualified Ecologist and utilised the current up to date Metric spreadsheet. Walsall recommends that BNG calculation are brought in a site selection stage of any development through to post development.

How to achieve Biodiversity Net Gain

Any application should look to achieve BNG onsite and this should be a key consideration at the early stages of a development and the design process. As per the mitigation hierarchy that is embedded in the national planning policy, where the impact on biodiversity must first be:

- Avoided, then
- Minimised, then
- Compensated for on-site

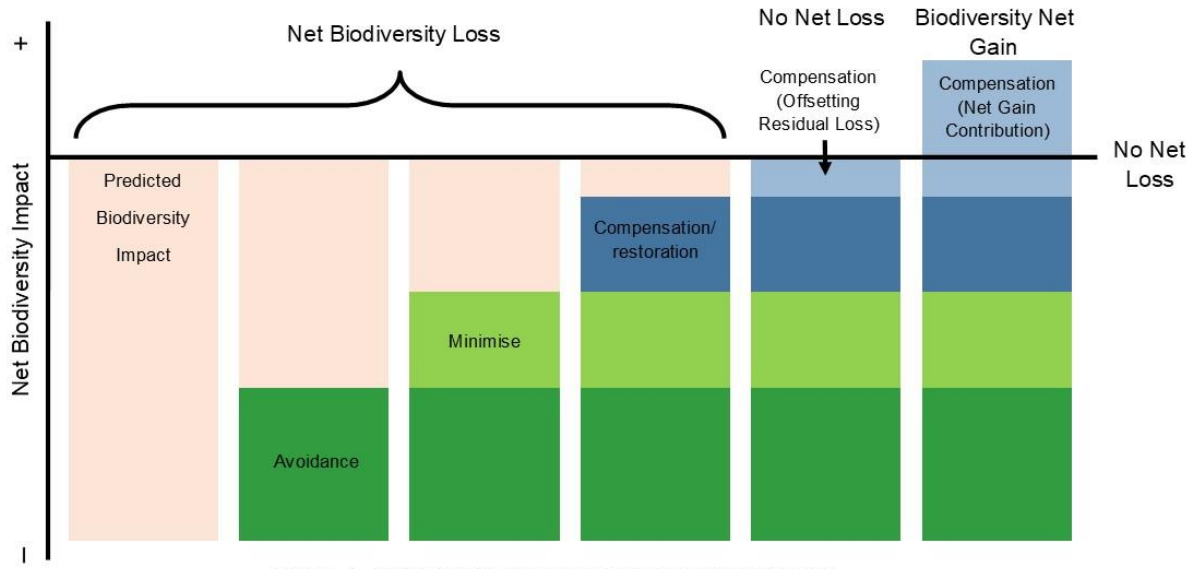


Figure 1. Mitigation hierarchy and Biodiversity Net Gain

In the event, that a completed biodiversity metric indicates that the development will not achieve 10% uplift, consideration of the following options should be undertaken:

a) Review the proposed site layout and landscape proposals to assess whether further biodiversity improvement could be undertaken to achieve 10% uplift;
b) Look to secure offsite land to undertake habitat enhancement or creation works to meet the 10% requirement.
    i. This area can be owned by the same developer / landowner or a third party however, it would need to be secured and a planning obligation or conservation covenant.
    ii. These offsite areas should be in close proximity to the application site, with local weighting towards sites with high strategic significance / within the core landscape and priority network restoration zones as identified within the Black Country Local Nature Recovery map and Strategy.
c) Purchase statutory biodiversity credits through a national government scheme. Any applicant looking to go down this route should get in contact with LPA to discuss. This will be hosted by Natural England and further information available: https://www.gov.uk/guidance/statutory-biodiversity-credit-prices.

Please note that very high distinctiveness habitat are habitats, such as Ancient woodland, which are classified as high threatened and internationally scarce. Any loss of these habitat from development should be avoided. However, development could choose to enhance this areas.

Bespoke compensation would be required for any loss and would need to be agreed on a case by case basis with the planning authority.

Offsite compensation in Walsall

Within Walsall, applicants will have the option to offset their biodiversity losses within their application utilising their own land or through a third party, should the management be legally secured for a minimum of 30 years.

We are unable to recommend third part offset providers and at this stage as a local list of such providers is not available. All applicants, however, may wish to approach BNG brokers, habitat banks, local landowners or nature conservation trust to help you achieve your BNG requirements.

We're currently looking to the potential to utilise Council owned land towards offsetting. The option will be informed by government advice. Further information on this option will be provided on the planning page when available.

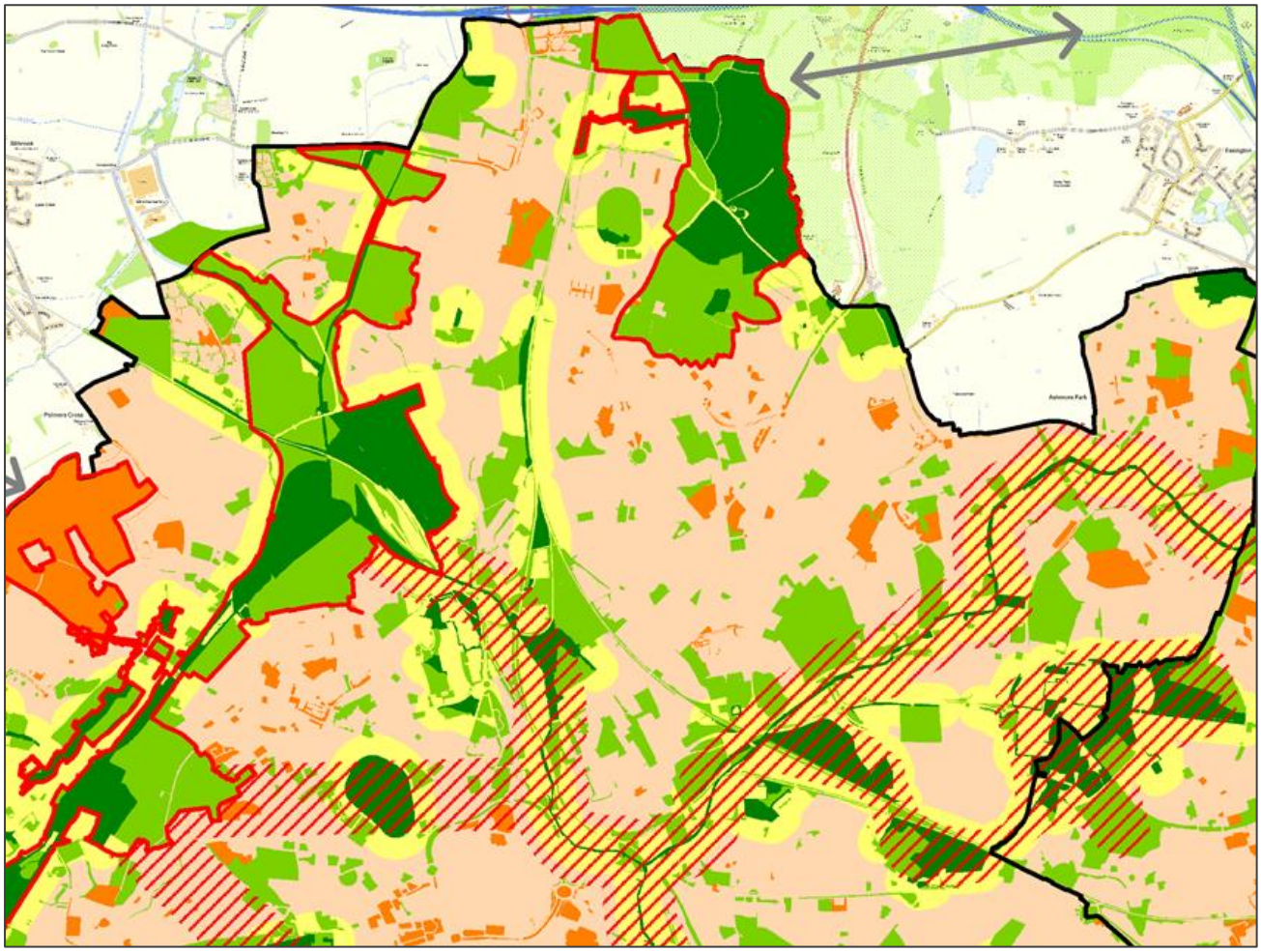
You can contact us if you are a provider of biodiversity offsets or would like more information on the options available.

Birmingham & Black Country Wildlife Trust

EcoRecord

Black Country

Local Nature Recovery map and strategy: an emerging approach



March 2022

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1. Introduction

1. The Wildlife Trust for Birmingham and the Black Country and EcoRecord (the Local Environmental Record Centre for Birmingham and the Black Country) have been commissioned by the four Black Country local authorities (Dudley MBC, Sandwell MBC, Walsall MBC and Wolverhampton City Council, supported by the Black Country Consortium) to undertake an analysis of evidence to produce a draft Local Nature Recovery map and develop a Local Nature Recovery Strategy (LNRS) approach for the Black Country.

2. The commission comprised of three broad tasks:

   Task 1: Development of a habitat baseline for the Black Country

   Task 2: Produce a draft Nature Recovery Map for the Black Country

   Task 3a: Produce a draft Black Country Local Nature Recovery Opportunity Map

   Task 3b: Develop draft Priority Biodiversity Actions (Statement of Biodiversity Priorities)

3. In this report are presented the methodology developed to date, as well as a series of map images and tabulated outputs that represent the approach and direction taken. It is proposed, however, that the Local Nature Recovery Strategy should not comprise a static document, rather this should be a 'live' digital (map-based) freely accessible resource that can be utilised to guide action and investment in nature's recovery.

4. A maintained online portal will provide local planning authorities, the West Midlands Combined Authority, developers, government agencies, health providers, farmers, community groups and others with the information they need to help them understand how transport, housing, employment, open space, agricultural and green investment decisions can be maximised to deliver a range of biodiversity and socio-environmental benefits.

5. Examples of how the portal will aid the planning of investment in nature's recovery and deliver ecosystem services benefits include:

   - Targeted investment in habitat creation and enhancement, helping to create a coherent ecological network across the whole of the Black Country landscape.
   - Planning tree planting where it will best mitigate the impacts of climate change, flooding and poor air quality.
   - Identifying deficits and investment opportunities in accessible natural green space to support the delivery of improvements to the health and wellbeing of those communities most in need.
   - Providing guidance on urban green infrastructure needs and supporting investment in the regeneration of built-up areas.

6. It is proposed that data should be regularly updated and mapped to reflect changes to the habitats and species populations of the Black Country, enabling monitoring and reporting on both positive and negative change.

7. The Local Nature Recovery Strategy could additionally support the Black Country in achieving the best outcomes from the mandatory requirement for 10% biodiversity gain from development schemes. The Environment Act (2021) makes provision for a register of biodiversity gain sites, and for the purchasing of biodiversity credits for the purpose of meeting the biodiversity gain objective. It is proposed that the map portal could be utilised as both the repository/database of the registry, and to target the investment of biodiversity credits to maximise delivery of LNRS objectives and biodiversity priorities.

1.1 The Nature Recovery Network

8. The development of a Nature Recovery Network (NRN) covering the whole of England is a major commitment in the Government's 25 Year Environment Plan (2018). The plan states that the development of the NRN will provide 500,000 hectares of additional wildlife habitat, more effectively linking existing protected sites and landscapes, as well as urban green and blue infrastructure; and that as well as helping wildlife thrive, the NRN could be designed to bring a wide range of additional benefits: greater public enjoyment; pollination; carbon capture; water quality improvements and flood management.

9. The Nature Recovery Network will help restore many ecosystem functions and improve the services upon which society depends; benefitting nature, people and the economy. Such a network will deliver on the recommendations from Professor Sir John Lawton in Making Space for Nature (Lawton et al. 2010) that recovering wildlife will require more habitat; in better condition; in bigger patches that are more closely connected.

10. Making Space for Nature recommended the development of a 'coherent ecological network in England to help counter habitat loss and fragmentation, and declining habitat quality as a result of a range of pressures including land use change, the intensification of agricultural management, disturbance, pollution, nutrient enrichment and climate change'.

11. The government have stated that establishing the NRN will help deal with three of the biggest challenges society faces: biodiversity loss, climate change and wellbeing (Defra, 2020), and will:

    - Enhance sites designated for nature conservation and other wildlife-rich places - newly created and restored wildlife-rich habitats, corridors and stepping stones will help wildlife populations to grow and move.
    - Improve the landscape's resilience to climate change, providing natural solutions to reduce carbon and manage flood risk, and sustaining vital ecosystems such as improved soil, clean water and clean air.
    - Reinforce the natural and cultural diversity of our landscapes, and protect our historic natural environment.
    - Enable us to enjoy and connect with nature where we live, work and play - benefiting our health and wellbeing.

1.2 Local Nature Recovery Strategies

12. The Environment Act 2021 made Local Nature Recovery Strategies mandatory in England. Together the strategies are to cover the whole of the country, and the Secretary of State is to determine the areas within England to which individual Local Nature Recovery Strategies are to relate.

13. A Local Nature Recovery Strategy is to be prepared and published by the responsible authority as appointed by the Secretary of State, and is such one of the following:

    - A local authority whose area is, or is within, the strategy area
    - The Mayor of London
    - The mayor for the area of a combined authority established under section 103 of the Local Democracy, Economic Development and Construction Act 2009
    - A National Park authority in England
    - The Broads Authority
    - Natural England.

14. The Act states that a LNRS relating to an area ("the strategy area") is to include:

    A statement of biodiversity priorities for the strategy area, and a local habitat map for the whole strategy area (or two or more local habitat maps which together cover the whole strategy area).

    The statement of biodiversity priorities is to include:

    - A description of the strategy area and its biodiversity
    - A description of the opportunities for recovering or enhancing biodiversity, in terms of habitats and species, in the strategy area
    - The priorities, in terms of habitats and species, for recovering or enhancing biodiversity (taking into account the contribution that recovering or enhancing biodiversity can also make to other environmental benefits)
    - Proposals as to potential measures relating to those priorities.

    A local habitat map is a map identifying:

    - National conservation sites in the strategy area
    - Any nature reserves in the strategy area provided under section 21 of the National Parks and Access to the Countryside Act 1949
    - Other areas in the strategy area which in the opinion of the responsible authority:
        - are, or could become, of particular importance for biodiversity, or
        - are areas where the recovery or enhancement of biodiversity could make a particular contribution to other environmental benefits.

1.3 Nature Recovery Network vs. Ecological Networks

15. Whilst an ecological network can be understood as a number of core, well connected, high quality areas of well-functioning ecosystems, together with those parts of the intervening landscape that are 'wildlife-friendly' and which, collectively, allow wildlife to thrive; the Nature Recovery Network should also enhance natural beauty, heritage and conserve geodiversity, and opportunities should be taken to deliver benefits for people, such as flood alleviation, recreational opportunities and provide nature-based solutions to climate change adaptation and mitigation.

16. These joint aims, for nature and people, are at the heart of the Nature Recovery Network and are inter-dependent: networks for wildlife that also deliver benefits for and are valued by people. Thus they are likely to receive greater investment and protection by society, and consequently provide more for nature and be more sustainable in the long-term.

1.4 The principles for planning a Nature Recovery Network

17. A number of underlying principles that are key to the successful creation of a Nature Recovery Network have been identified and are described below (taken from Crick, H. et all, 2020):

    1. Understand the place: Recognise where the nature network will sit, in terms of how the natural characteristics of the area generate conditions for different habitats and how the cultural landscape character has evolved and is valued. Identify what the area is special for, from a national and local perspective, how nature has changed and the potential for its restoration. This assessment should include biodiversity and ecosystem function, geodiversity, landscape and the historical environment. Understand where people live and work and how ecosystems provide benefits to them. This enables us to identify priorities and opportunities, and to be sympathetic to the current character of the landscape, while not being constrained from accommodating what the future might hold.

2. Create a vision: for your nature network and be clear about your objectives: specify what the ultimate goals are for the network, identify the spatial scale, and the environmental and societal aspects that are important.

3. Involve people: People both benefit from and create nature networks: plans should engage and be created with the community; recognising that the landscapes and the ecosystems that support species also provide multiple benefits to people.

4. Create core sites: Core sites are the heart of nature networks; these are places that sustain thriving wildlife populations that may expand across the network. It will often be best to build core areas of nature networks by enlarging, connecting and improving existing high quality wildlife sites, to make well-functioning ecosystems. However, on occasion, it will be appropriate to fill gaps in a network by creating core sites where little wildlife currently remains. Within landscapes, working with functional ecological units will provide the building blocks to support abundant and diverse wildlife and ecosystem services.

5. Build resilience: Enhance the resilience of landscapes, ecosystems and their ecosystem services through restoration that reinstates natural processes, accommodates desirable change, improves low quality habitat and includes areas that provide buffering from the causes of current and potential future environmental degradation. Take opportunities to deliver nature-based solutions to climate change and reduce external pressures (such as diffuse pollution).

6. Embrace dynamism: Remember that in a natural state, ecosystems and landscapes change and are inherently dynamic over short and long time scales; allow natural processes to operate whenever possible, as they will aid restoration of ecosystem function and enhance the sustainability of conservation efforts.

7. Encourage diversity: Nature networks need to include a diverse physical structure, influenced by the underlying geodiversity, to accommodate the widest variety of opportunities (niches) for species. Biological complexity and landscape diversity are important to facilitate resilience. Such diversity is best founded on the restoration of natural environmental processes where this is possible, overlain by vegetation management regimes that encourage further diversity.

8. Think 'networks': Networks need to be planned at multiple spatial scales and address multiple issues. Joined-up actions across adjacent landscapes help to deliver integrated outcomes and ensure that the network acts as a coherent whole for all species (especially for those that live in the wider countryside), ecosystems and people within the area.

9. Start now but plan long-term: Identify the locations that can deliver a coherent nature network, but prioritise those locations that provide the best opportunities for action now, while developing longer term solutions.

10. Monitor progress: evaluate actions and adapt management in the light of results, to achieve long-term aims at local and national scales.

2. Task 1: Creating a habitat baseline for the Black Country

18. Understanding the distribution and condition of habitats is key to understanding the current state of the natural environment and the status of the services that the environment is able to provide to society.

19. The available evidence should be as current and comprehensive as possible, and this evidence forms the baseline against which future improvements/change will be measured.

20. Prior to this work, evidence on habitats in the Black Country was limited to a small proportion of its landscape, and current data on habitat extent and condition was only available for a small proportion of designated sites.

21. The most comprehensive habitat data set previously available for the Black Country was collated c. 30 years ago (West Midlands County Council & Urban Wildlife Trust, 1982-1988), and even then, a significant proportion of the more heavily built-up parts of the landscape were not included in the survey.

22. The use of satellite imagery in conjunction with existing habitat data generated from field survey has enabled us to achieve a comprehensive map of the vegetation cover present in the Black Country, thus ensuring a reasonable baseline to use as a means of measuring future change. These data are also key in assessing habitat connectivity.

23. In time the satellite derived habitat data set will be further processed, complemented by field survey data and updated, as we deliver on the commitment to the LNRS vision of making more space for nature in the conurbation.

24. The work undertaken as part of this commission builds on previous work carried out by EcoRecord and Spottitt in 2019 (Kennedy L. et al. (2020). Following that work, a number of possible improvements were identified, which required improvements to the algorithm and original analysis. These have not only helped to increase the accuracy of some of the classes, but also enabled the identification of a heathland/scrub class which is of particular significance in parts of the Black Country that support ecologically valuable lowland heathland habitat. Post processing of these data is currently progressing as this is a large, complex data set and their processing and analysis is time consuming.

25. The UK Habitat Classification (UKHab) (Butcher, B. *et al.*, 2020) classes that the satellite-derived habitat data set has identified are shown in Table 1.

Table 1: UKHab classes identified by the satellite-derived habitat analysis

Level 2 Code	Level 2 label	Level 3 code	Level 3 label
g	Grassland		
w	Woodland and forest	w1	Broadleaved mixed and yew woodland
w	Woodland and forest	w2	Coniferous woodland
h	Heathland and shrub		
c	Cropland		
u	Urban		
s	Sparsely vegetated land		
r	Rivers and Lakes	r1	

The most recently produced satellite derived habitat data set is shown in Figure 1.

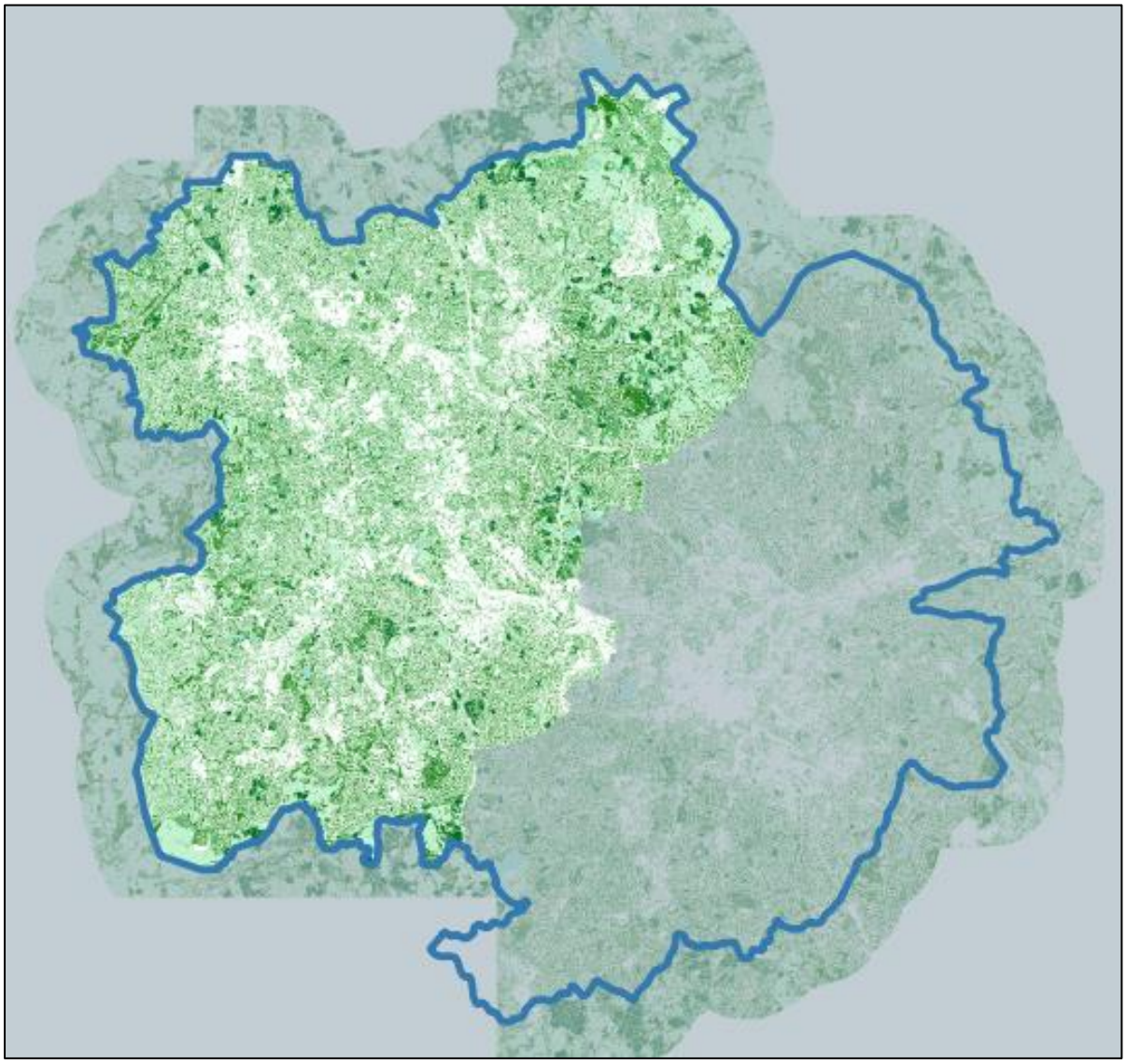

Figure 1. Map showing Satellite derived habitat classification results (habitat/vegetation classes shown in green/blue; built up areas in white).

3. Task 2: Produce a draft Nature Recovery Map for the Black Country

26. The task of producing a starting point for a Black Country-wide Nature Recovery Network map involved the following stages:

    1. An ecological evaluation of the Black Country landscape was produced, based on the methodology described in chapter 3.1.

    2. An analysis of habitat connectivity was carried out using Condatis v1.1, a software designed to assist with the planning of habitat restoration (Wallis, D.; Hodgson, J. 2021) as described in chapter 3.2.

    3. A review of available NRN guidance, national data sets and tools was carried out as summarised in chapter 3.3.

    4. Using all the available evidence and guidance, a Nature Recovery Map for the Black Country was produced (approach described in chapter 3.4).

3.1 Black Country-wide ecological evaluation

27. In 2012 Birmingham and the Black Country was declared a Nature Improvement Area (NIA) by the Department for Environment, Food & Rural Affairs (Defra). The Birmingham and Black Country NIA Ecological Strategy (The Wildlife Trust for Birmingham and the Black Country & EcoRecord, 2017) identifies the conurbation's Core Ecological Areas, Ecological Linking Areas and Ecological Opportunity Areas. This approach was informed by that described in the Making Space for Nature report (Lawton, 2010). The NIA ecological strategy was developed through the use of ecological network mapping which utilised a combination of botanical data, mapped on a 1km x 1km grid (monad) scale, and statutory and locally-designated wildlife sites mapped on a 250m x 250m grid (quarter monad) scale.

28. The NIA ecological strategy has proven a useful and influential tool in targeting available resources for the restoration, enhancement and creation of semi-natural habitats. The development of the strategy meant that valuable ecological areas had begun to be identified at a landscape scale, but due to the resolution of the data used, it was difficult to relate this to individual landscape units.

29. The information that exists for the network of existing statutory (SAC, SSSI, LNR) and locally-designated wildlife sites (SINC, SLINC) enables an assessment of the ecological value of these individual sites to be made. However, that assessment was proven more difficult for the wider landscape. The methodology described below was developed to utilise the best available evidence to more comprehensively describe the relative ecological value of the wider landscape across the Black Country.

3.1.1 Ecological Evaluation Methodology

30. The methodology used for undertaking an ecological evaluation of the Black Country area is based on attributing a relative value to individual landscape units using a range of currently available data sets that are relevant, systematic and comprehensively collected for the whole of the study area. A total of seven data sets were used in the assessment and the rationale for using each individual data set is presented and discussed below. Each landscape unit was assigned a value ranging from 1 (Low Ecological Value) to 5 (Very High Ecological Value) using the different criterion as described below. A base score (from 1 – Low Ecological Value, to 5 – Very High Ecological Value) was devised for each land use as set out in 4.1, and this score was then modified based on a number of parameters and determined by the known influence that those have on increasing ecological value when present.

31. Table 8 (Evaluation Matrix) describes the evaluation process and the rule base used to determine the final value ascribed to each land use unit as follows: 1 – Low Ecological Value; 2 – Medium Low Ecological Value; 3 – Medium High Ecological Value; 4 – High Ecological Value and 5 – Very High Ecological Value.

32. The evaluation was undertaken using GIS software to run a series of queries following the rule base described in Table 8.

33. The final output of this assessment is a GIS layer containing a set of landscape units, each assigned an ecological value based on the application of the rule base developed, using the parameters/criterion as described below.

34. For ease of use, two separate GIS layers have been produced, one for areas of greenspace/undeveloped land and another GIS layer for the built environment.

3.1.1.1 Land Use

35. ***Rationale**: Land use will significantly affect the ecological value of a landscape unit.*

36. As a starting point for the analysis the study area was classified into a series of landscape units, each one relatively uniform in character.

37. The decision to use a land use classification was taken for the following reasons:
    - The habitat data that are currently available for the study area are not comprehensive nor sufficiently up to date, especially for those areas outside designated nature conservation sites.
    - Land use has a significant impact on the likely ecological value of the habitats present.
    - Mapping areas by land use type tends to produce larger landscape units than mapping areas according to habitats. This makes it easier to analyse an area at a landscape scale, rather than at the scale of individual sites or habitat features.

Creating a Land Use Data set

38. The study area was mapped using a combination of Ordnance Survey MasterMap, aerial photography and existing/available open space layers.

39. Each land parcel of the study area was assigned to one of the land use categories shown in Table 2. The land use categories defined were those relevant to the study area. Should a different study area be chosen then additional land use categories will be considered and mapped.

40. The following rules were followed in mapping land parcels:

    - Each mapped land parcel was assigned to a single land use category and merged with any adjoining land parcels of the same type to form larger landscape units.
    - Any associated buildings were included within the wider landscape unit.
    - Land parcels of the same type separated by a road were not merged.
    - Roads, active railway lines and roadside footpaths were not mapped.
    - There was no minimum mappable unit set, as some of the land parcels within certain land use categories may be naturally quite small, such as individual detached gardens surrounded by other land use types or a small canal section dissected by roads.
    - Ponds/Lakes were only classified separately if they were not clearly contained within another defined wider land use unit (e.g. Golf Course, School Ground etc.).
    - Woodland and Semi-natural Habitat Mosaic land parcels that appeared significantly distinct from the wider land use unit were mapped as a separate unit unless they would normally be expected to be a component feature within that wider land use type (e.g. Golf Course).
    - Land parcels in the following categories were classified in the 'Semi-natural Habitat Mosaic' category if they formed part of a wider landscape unit of that type:
        - Pond/Lake
        - Woodland
        - Meadow

Table 2: Land use categories

Land Use Category	Notes
FARMLAND	
Arable	Areas that appear from aerial photography to be under cultivation for crops. This includes fields cut for silage and those under an arable/pasture rotation.
Pasture	Areas that appear from aerial photography to be permanent pasture. Google Earth has aerial images dating back to 1999 which have been used to help determine this category. Areas under an arable/pasture rotation regime are included in the Arable category.
Meadow	Grassland under a hay meadow management regime. It is difficult to identify hay meadows from aerial photography alone. Local Wildlife Site (SINC/SLINC) survey reports and citations were used to help assign land parcels to this category.
Farmyard	Farm buildings and yard.
PARKLAND/OPEN SPACE	
Allotment	Allotment gardens.
Amenity Grassland	This category includes land parcels that are predominantly close-mown amenity grassland with few other features, and which don't form part of a wider land unit of another category (e.g. Parkland, Golf Course). This category does not include playing fields, which are instead mapped in the '**Playing Fields**' category.
Canal	Canals, including any associated towpaths and banks
Cemetery	Cemeteries
Crematorium	Crematoriums and their surrounding grounds
Churchyard - historic	Churchyard dating from before 1840.
Churchyard - other	Churchyard dating from after 1840.
Golf Course	Golf Course, Including areas of woodland, pond etc. within the course.
Hospital Grounds	Hospitals and their surrounding grounds
Orchard	Areas populated with fruit or nut-bearing trees.
Park or Open Space – formal	Publicly-accessible areas with a high level of formal management. These are characterised by being mostly comprised of intensely-mown grassland with scattered trees, with more 'semi-natural habitats' being largely absent. Other features such as boating lakes and formal flowerbeds may also be present.
Park or Open Space – informal	Publicly-accessible areas with a mixed management regime, which may include areas of grassland subject to a lower intensity of mowing. This category includes sites that appear to be partly managed for amenity but include some areas of 'semi-natural habitat' (e.g. woodland, tall herb, hedgerows, scrub or ponds) If the mixture of habitats is more 'semi-natural' in character (i.e. most of the grassland is left to grow long) then the site would instead be placed in the '**Semi-natural Habitat Mosaic**' category.
Parkland - historic	This category includes sites included on the Wood-pasture & Parkland Natural England habitat inventory unless their land-use has changed to another specific type e.g. Golf Course.
Playing Field	Includes public playing fields, private playing fields, school playing fields, sports grounds
Pond/Lake	Land parcels are only mapped in this category if not clearly contained within another wider land use unit and will mostly be mapped as part of a wider landscape unit (e.g. Pasture or Semi-natural Habitat Mosaic).

Land Use Category	Notes
School Grounds	Excludes large school playing fields as these are mapped in the **Playing Field** category
University/College Grounds	Excludes playing fields as these are mapped in the **Playing Field** category
Semi-natural Habitat Mosaic	Areas containing semi-natural habitats including ponds, woodland, scrub, tall herb, grassland, stream corridors etc. These habitats may exist as a matrix. This category may include both areas that appear to be managed for wildlife, or which appear subject to no management at all.
Woodland	Land parcels are only mapped in this category if not clearly contained within another wider land use unit. Areas of woodland that exist in a mosaic with other semi-natural habitats are mapped as Semi-natural Habitat Mosaic.
GARDENS	
Garden - large, mature	Large detached, semi-detached houses. Many of these will have mature trees and possibly ponds.
Garden – other	Smaller gardens
UTILITIES, COMMERCIAL & INDUSTRIAL	
Building Site	Previously-developed sites that have recently been cleared and consist of predominantly bare ground or are sites in the process of being built upon.
Caravan Park	Caravan parks.
Open Mosaic Habitat	Sites, that have been cleared or disturbed fairly-recently, but are now developing a mix of primary successional species/habitats.
Premises	Areas that are predominantly hard-standing and contain little or no semi-natural features, e.g. car-parks, commercial premises, industrial buildings.
Premises with Parkland	Areas of landscaped grounds surrounding private premises. This category may include gardens/landscaping associated with apartment blocks, public houses, sections of industrial estate. This category can include buildings but if the amount of hard-standing area (buildings, car parks etc.) comprises a significant amount of the land unit (say, over 50%), then this element should be mapped separately in the Premises category.
Quarry – active	Quarries in active use.
Quarry – Inactive	Quarries that have been inactive for a long-enough period of time for natural vegetation to develop are included in the relevant land use category.
Railway Bank	Banks of active railways or tramways. Banks of disused railways are included in the 'Semi-natural Habitat Mosaic' category.
Sewage Works	Sewage works.
Telecommunications	Transmitting stations and their associated grounds
Power Plant/Sub Station Grounds	Power plants or electricity sub-stations and their associated grounds
Water Treatment Works	Water Treatment Works and their associated grounds

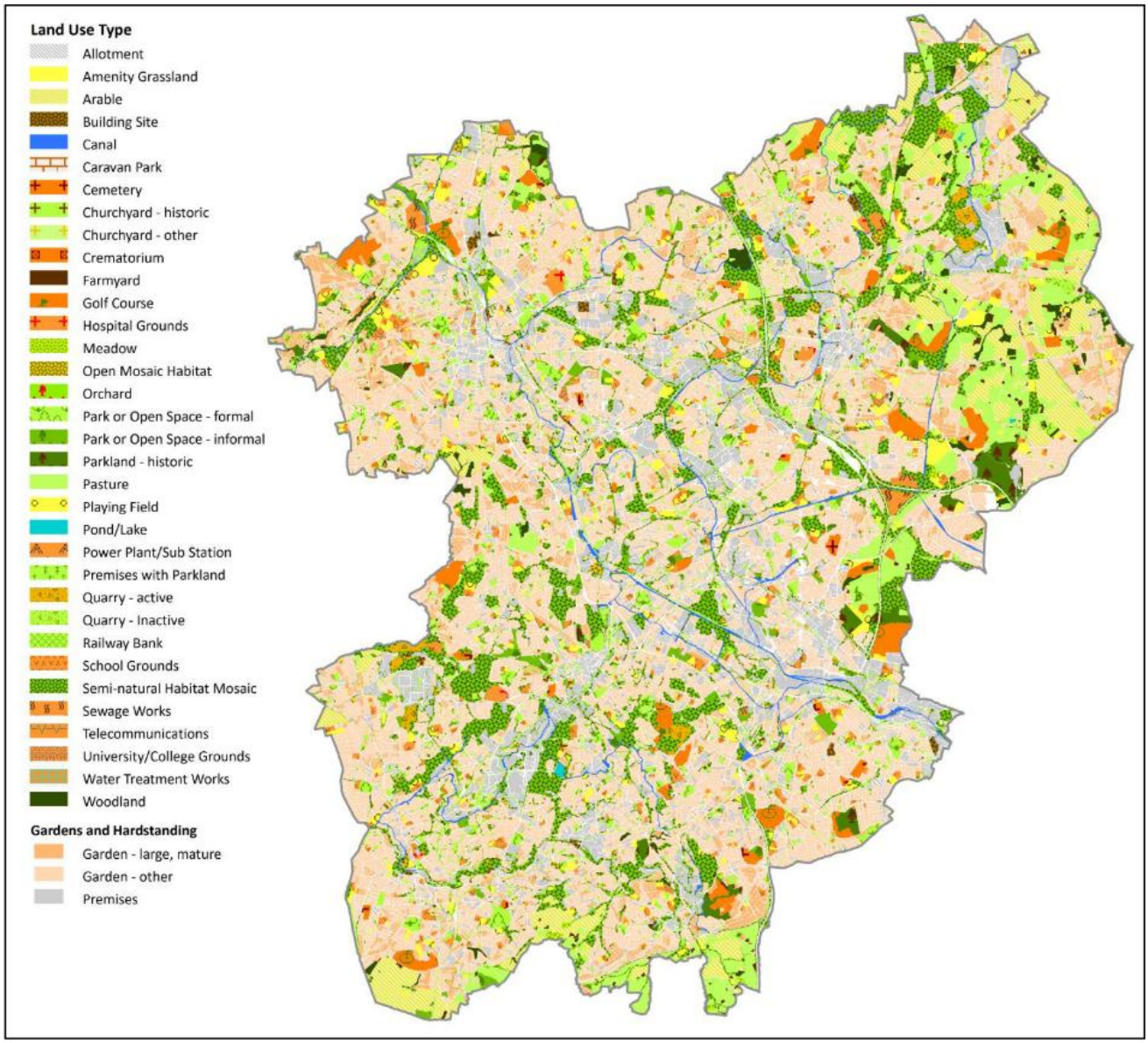

Figure 2. Map showing land use categories

Assigning Ecological Values to each Land Use Category

41. Within each land use category there is likely to be a range in the ecological quality of individual landscape units, depending on what habitat features are present. For example, a golf course with a stream and woodland is likely to be of higher ecological value than a golf course without these features.

42. For each of the land use categories two scores were devised:
    - Minimum Land Use Category (LUC) Score to reflect the likely minimum ecological value of a unit of that land use type.
    - Maximum Land Use Category (LUC) Score to reflect the likely maximum ecological value of that land use type.

43. These scores were assigned based on expert knowledge of the area, including evidence gathered for sites within the current designated site network. The scores for all mapped land use categories are presented in Table 2.

44. ***Rationale***

Table 3: Land use category Value scores

Land Use Category	Min LUC Value	Max LUC Value
FARMLAND		
Arable	1	4
Pasture	2	5
Meadow	3	5
Farmyard	1	3
GARDENS		
Garden - large, mature	2	4
Garden – other	1	2
PARKLAND/OPEN SPACE		
Parkland - formal	2	4
Parkland - informal	1	4
Parkland - historic	2	5
Allotment	2	4
Amenity Grassland	1	2
Canal	3	5
Cemetery	1	4
Churchyard	1	4
Golf Course	1	4
Hospital Grounds	1	4
Playing Field	1	3
Pond/Lake	2	5
School Grounds	1	4
University/College Grounds	1	4
Semi-natural Habitat Mosaic	2	5
Woodland	2	5
UTILITIES, COMMERCIAL & INDUSTRIAL		
Caravan Park	1	2
Premises	1	2
Quarry – active	1	3
Quarry – Inactive	2	4
Railway Bank	2	4
Sewage Works	1	4
Power Plant/Sub Station Grounds	1	4

3.1.1.2 Habitat Features

45. ***Rationale**: Landscape units that contain certain habitat features are likely to have a higher ecological value than those which do not.*

46. Landscape units containing an element of water, including streams, ponds or wetland tend to be of higher ecological value than those which do not contain those features, whilst the presence of woodland and species-rich hedgerows is also considered important.

47. Features used in this assessment:
    - Ponds and lakes
    - Rivers and streams
    - Woodland
    - Species-rich hedgerows

48. EcoRecord currently has a reasonably comprehensive GIS layer containing the first three of these features.

49. For 'Species-rich hedgerows' EcoRecord's habitat coverage is less comprehensive so the 'SLINC-designated hedgerows' data set was used as a proxy for this feature.

3.1.1.3 Nature Conservation Designations

Statutory and Non-Statutory Sites

50. ***Rationale**: Landscape units identified as either Statutory or Locally-designated are those known to be of higher ecological value.*

51. The designated site network, made up of statutory sites (SACs, SSSIs), and non-statutory Local Wildlife Sites (SINCs, SLINCs), represent the individual sites that are of the highest ecological value in Birmingham and the Black Country. These sites are designated for their nature conservation value according to a robust set of standards, using the best available evidence.

52. A score was assigned to each of the four designation types encountered in the study area, reflecting the hierarchical nature of the site designation system (see Table 8).

Ancient Woodland

53. ***Rationale**: Landscape units designated as Ancient Woodland are of high ecological value.*

54. Areas of designated Ancient Woodland represent some of the most valuable habitats present in Birmingham and the Black Country.

55. It was therefore decided that landscape units containing Ancient Woodland would always score 5 (Very High) (see Table 7. Evaluation matrix).

56. In order to be comprehensive, the evaluation used a combination of designated Ancient Woodland sites included on the latest Natural England Ancient Woodland Inventory (Natural England, 2019) and EcoRecord's Inventory of 'Probable' and 'Potential' Ancient Woodlands (EcoRecord, 2009).

Wood Pasture and Parkland

57. ***Rationale**: Landscape units designated as Wood Pasture and Parkland are of higher ecological value*

58. Wood Pasture and Parkland is identified as a Habitat of Principal Importance (NERC act 2006).

59. These sites can be of value for hole-nesting birds, saproxylic invertebrates, lichens, fungi on the trees or in the surrounding grassland (Natural England, 2015).

60. It was decided that the presence of Wood Pasture and Parkland would increase the score of those landscape units that contain it in accordance to the rule base outlined in Table 7.

61. The latest Natural England Wood Pasture and Parkland Inventory (Natural England, 2019) data set was used to identify areas of Wood Pasture and Parkland within the study area.

3.1.1.4 Adjacency

62. ***Rationale**: Landscape units directly adjacent to areas of high value (SAC, SSSI, Ancient Woodland) are likely to be of higher ecological value themselves, namely as buffer areas.*

63. SACs, SSSIs and Ancient Woodland sites are considered to contain some of the most valuable habitats of Birmingham and the Black Country.

64. Landscape units directly adjoining SACs, SSSIs and Ancient Woodland perform an important buffer function and may themselves be of higher value as a result of their proximity to a high-quality site.

65. The score of these adjacent landscape units was increased to reflect this, as described in Table 7.

3.1.1.5 Age of the Landscape – Historic Landscape Characterisation

66. ***Rationale**: Farmland which has had a continuous land use for a longer time will be of a higher ecological value than more recently-enclosed farmland.*

67. Due to the way in which ancient farmland was created and the period of time over which it has evolved, it frequently contains features and a level of structural complexity not found in more recently enclosed-farmland. In addition, ancient farmland will often support a higher number of slow-colonising species. Age is often therefore an important factor in determining the likely ecological value of farmland.

68. Birmingham's Landscape Characterisation (reference) was used to attribute an HLC Type to each farmland landscape unit.

69. This criterion is only applied to the following Land Use Categories:
    - Arable
    - Pasture

70. Values were assigned to the HLC Type farmland categories as shown in Table 4:

Table 4: Values assigned to each HLC category

HLC Type Name	Value
Ancient unenclosed pasture	5 (Very High)
Irregular enclosure	5
Piecemeal enclosure	5
Other enclosed fields	4 (High)
Paddocks & closes	4
Squatter enclosures	4
Planned enclosure	(Medium)

71. The following are the reasons why HLC categories have only been used to modify the score of farmland (land use categories: Arable and Pasture) and not that of other land use types:

    - Where land-use has changed, the HLC type only recognises the most recent change, and not the history before that, e.g. some historic parklands have been assigned the HLC Type of 'Country Park/nature reserve' as they have been designated as such in more recent times (i.e. mid-late 20th century).
    - Most of the land use categories are already defined by some degree by age, e.g. canals and churchyards, and an ecological value has been assigned to take account for this.
    - The Ancient Woodland and Wood-pasture and Parkland inventories were found to be a more useful age-determiner than HLC for other land use categories (see section 0).

3.1.1.6 Position in the Landscape

72. ***Rationale****: Landscape units within areas of higher recorded botanical value are likely to be of higher ecological value than those in areas of lower recorded botanical value.*

73. In addition to the network of sites designated for their conservation value, it is necessary to understand and evaluate the ecological value of the wider landscape.

74. To achieve this, comprehensive survey data that covers the whole area is required.

75. In Birmingham and the Black Country this has been achieved through a comprehensive survey of vascular plant diversity which took place between 1995-2012 for the production of the Flora of Birmingham and the Black Country (Trueman et al., 2013). This data set is especially useful given that there is no comprehensive and current habitat data available for the area.

76. The Flora of Birmingham and the Black Country described and analysed a data set containing 240,000 plant records gathered during systematic recording of the area during the recording period.

77. This set of comprehensive botanical data is referred to here, for ease of reference, as the Flora data set.

78. A list of all the spontaneously present species recorded during the survey period was prepared for every one of the 715 one-kilometre squares ('monads') which make up the recording area – the Birmingham and Black Country (B&BC) conurbation.

79. Many of the 1449 species recorded in the Flora survey are widely distributed in the landscape and are therefore not appropriate markers of biodiversity. Others may be much scarcer but represent recent incursions from cultivation or other forms of introduction and do not characterise vegetation of nature conservation value. Other relatively uncommon species, designated as 'axiophytes', tend to be associated with sites with nature conservation value and constitute a good surrogate for indicating habitat richness.

Axiophyte Analysis

80. The BSBI axiophyte project (http://www.bsbi.org.uk/axiophytes.html) defines axiophytes as the 40% of species that are "indicators of habitat that is considered important for conservation, such as ancient woodlands, clear water and species-rich meadows."

81. Analysis of the Flora data set identified 192 axiophyte species and five associated hybrids which are strongly associated with natural and semi-natural sites in B&BC.

82. In addition, 55 axiophyte species, one hybrid and two subspecies were identified to be associated with important artificial and secondary sites. This includes some aquatic and wetland plants associated with canals, plus a small number associated with cultivation.

83. A coincidence map of axiophyte species showed that axiophyte diversity varies considerably across the conurbation and helped to identify areas with strong focuses of axiophyte diversity.

84. The analysis of the Flora data set in this way provides a valuable proxy for identifying areas of higher habitat quality/value across the entire conurbation, albeit on a 1km^2/monad basis.

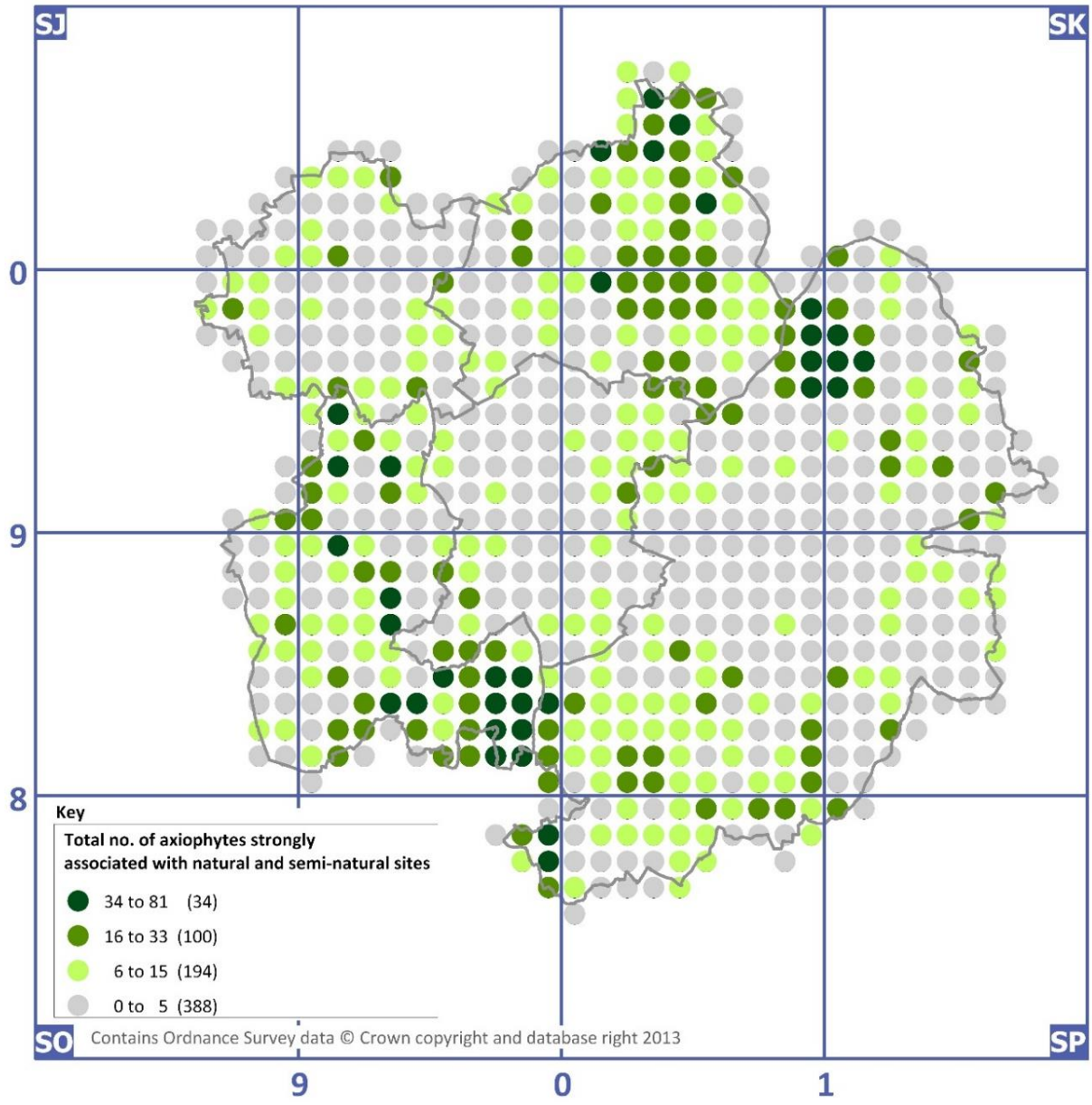

Figure 3. Map showing total no. of axiophytes strongly associated with natural and semi-natural sites

85. This map (Figure 3) is thus a surrogate for habitat richness across the conurbation, albeit at the monad (100 hectares) level (and therefore not every area within the monad will necessarily be equally valuable habitat).

86. The analysis of the number of axiophytes present per monad showed that the majority of monads have relatively low numbers of axiophyte species. Just over 390 monads have 8 axiophytes or less and are considered to be in the Low Axiophytes Range (8 axiophytes or less). At the other extreme, there are 80 monads that have 28 (90th centile) or more axiophyte species, thus these are considered to contain the

most valuable habitats in the area – High Axiophytes Range (28+ axiophytes present). The remaining 245 monads are therefore in the Medium Axiophytes Range (9 to 27 axiophytes present). The axiophyte category (Low, Medium or High Axiophyte Range) of a monad is used to determine the final ecological value of a particular landscape unit as described below (see Table 5).

TWINSPAN Analysis

87. The Flora data set was also analysed to compare each of the 1km squares (monads) in the conurbation with one another, on the basis of all taxa recorded in each of those monads.

88. The analysis was carried out using TWINSPAN (Hill 1979; Hill & Šmilauer 2005) which identifies the strongest numerical trend in different monads and divides them into groups at the average position on the trend (based on how similar the vegetation is when comparing monads with each other). The result is a classification of each monad into one of seven, similar character, ecological divisions – see table and map below taken from pg. 144 of the Flora of Birmingham and the Black Country (Trueman et al., 2013):

Table 5: The principal botanical/ecological divisions of B&BC at the monad level

Name		TWINSPAN groups	No. monads	No. spp. per monad	Description of groups of monads
Suburban	Habitat-poor	000	207	168	Residential and intensive agricultural land use predominates, markedly semi-natural habitats lacking.
	Habitat-rich	001	109	201	Residential and intensive agricultural land use predominates, semi-natural habitats, especially old woodlands, present.
Industrial	Industrial/Suburban	010	164	185	Industry a predominant feature in the flora, species-rich open water habitats absent.
	Industrial/Open-water	011	73	170	Industry a predominant feature in the flora, moderately species-rich open water habitats (usually canals) present.
Rich Semi-natural	Heath & Mire	11	12	212	Significant amounts of rich semi-natural vegetation present, typically with a species-rich flora of wet and dry heaths and often of more mesotrophic mires and wet grassland.
	Open-water Semi-natural	100	53	224	Significant amounts of rich semi-natural vegetation present, characteristically species-rich open water flora (typically canal flora).
	Wooded Semi-natural	101	37	253	Significant amounts of rich semi-natural vegetation present, typically species-rich woodland flora.

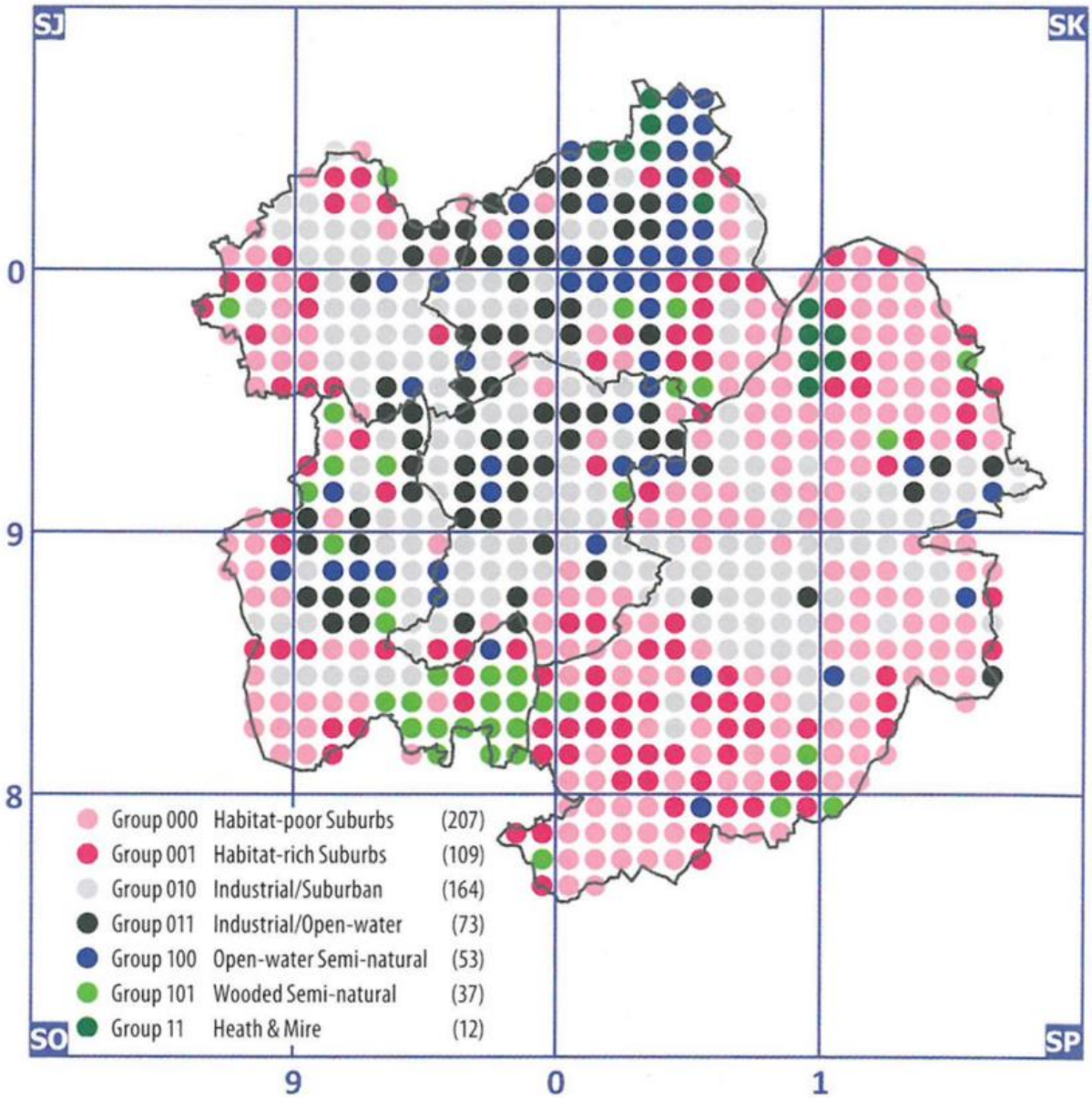

Figure 4: Division of the B&BC monads into seven TWINSPAN groups: monads classified in the Rich Semi-natural category (TWINSPAN groups 100, 101 and 11) represent the areas in B&BC with the highest ecological value.

Combination of Axiophyte and TWINSPAN analysis

89. The numbers of axiophytes recorded in a particular monad have a positive correlation with the intrinsic richness of the ecological division or TWINSPAN group in which that monad has been classified.
90. Whilst the TWINSPAN analysis provides a description of the overall ecological character of each monad (defined by the TWINSPAN group), the number of axiophytes (defined by the Axiophyte Range) indicates the degree to which valuable habitats are present in that monad.
91. Therefore, by considering the combination of the TWINSPAN and Axiophyte categories a relative evaluation/score (Twinspan-Axiophyte Value – TAV) for each individual monad can be arrived at.

Assigning an Twinspan-Axiophyte Value (TAV) score to each monad

92. The TAV value score was used in modifying the values of individual landscape units as described in Table 8.
93. A score from 1 – Low Ecological Value to 5 – High Ecological Value was derived from the combination of the TWINSPAN group and number of axiophyte species recorded for each monad as outlined in Table 5.
94. Monads classified in a 'Rich Semi-natural' category (TWINSPAN groups 100, 101, 11) and with a high number of axiophytes or were considered to be those of the highest ecological value.
95. This combined score (TAV) was therefore used to modify the score of individual landscape units according to the TAV value of the overlapping monad following the rule base described in Table 6.

Table 6: Table showing show the TAV values were assigned

TWINSPAN group	Axiophyte Range	TAV Value
000 (Habitat-poor Suburbs)	28+ 9-27 1-8	* 2 1
001 (Habitat-rich Suburbs)	28+ 9-27 1-8	4 3 2
010 (Industrial/Suburban)	28+ 9-27 1-8	3 2 1
011 (Industrial/Open-water)	28+ 9-27 1-8	* 3 2
100 (Open Water Semi-natural	28+ 9-27 1-8	5 4 *
101 (Wooded Semi-natural)	28+ 9-27 1-8	5 4 *
11 (Heath & Mire)	28+ 9-27 1-8	5 * *

* = there were no monads in this TWINSPAN group that fell into this axiophyte range

- Part Monads - i.e. those which were only partly in B&BC - weren't included in the original TWINSPAN analysis. These part monads inherited the TAV value of the adjacent monad(s).
- Each landscape unit inherited the TAV value of the monad that contained it.
- Where a landscape unit overlapped more than one monad, it inherited the highest TAV value of the overlapping monads.

3.1.1.7 Farmland Birds

96. ***Rationale**: Arable fields in tetrads (2km x 2km squares) with a higher number of recorded breeding farmland bird species, are likely to be important for these species.*

97. A number of bird species are dependent on arable land, to a greater or lesser extent. This makes them particularly good indicators of the value of this type of land use, which is one whose ecological value isn't especially well described by botanical interest alone (as is generally the case with other land use types). Some species of farmland birds have shown very significant declines in the UK since the 1970s. With species, like Grey Partridge, Tree Sparrow and Corn Bunting declining by 90% over this period (Newton, 2017).

98. Table 6 shows the species of farmland birds considered in the study, with those species currently declining in the UK (Eaton et al., 2015) identified by their current UK conservation concern status, published in the most recent Birds of Conservation Concern (BoCC4) (December 2015). Eight out of the 11 species considered are currently on the Red List of Birds of Conservation Concern (Eaton et al., 2015). One other species, Little Owl, despite not being currently listed has suffered declines of over 50% between 1970 and 2013, according to data from the British Trust for Ornithology (BTO) (Newton, 2017).

99. To better reflect the ecological value of arable land the Breeding Bird Survey (Clements, 2003) data set was used. This was a systematic survey carried out from 1998 to 2003 that recorded all birds breeding/seen in each tetrad (2km x 2km square) of Birmingham and the Black Country.

100. A coincidence map of farmland bird species, which are particularly dependant on arable fields for breeding habitat, was produced to identify those areas of which contain arable fields of greater ecological value on the basis of the presence of these indicator species.

Table 7: List of 11 farmland bird species used in the analysis:

Farmland Birds
Red-legged Partridge
Grey Partridge
Lapwing
Skylark
Corn Bunting
Yellow Wagtail
Barn Owl
Tree Sparrow
Little Owl
Linnet
Yellowhammer

- Arable landscape units within higher-scoring breeding farmland bird tetrads were scored more highly than those in lower scoring tetrads (see Table 7).

3.1.1.8 Assigning a Final Combined Ecological Value

101. The rule base used to calculate the final ecological value score for each landscape unit based on the various criteria is described in Table 7 – The Evaluation Matrix.

102. The criteria used:

- Land Use Type
- Habitat Features
- Nature Conservation Designation Value
- Adjacency to SACs, SSSIs or Ancient Woodland
- Historic Landscape Characterisation (HLC) Type Value
- Twinspan-Axiophyte Value (TAV)
- Breeding Farmland Birds Value

103. In broad terms, the application of the rule base is as follows:

- A landscape unit is first assigned an ecological value based on a combination of the land use category/habitat features and where that unit is located in the landscape (TAV categories) (Table 7, Part 1).
- This ecological value may then be modified upwards (but not downwards) if the landscape unit qualifies against any of the criteria in parts 2, 3 or 4 (Table 7, Parts 2, 3 & 4).
- If the landscape unit qualifies against multiple criteria it will inherit the highest of the possible values.

Table 8: Evaluation Matrix

LAND USE

Land Use Category	Condition	TAV1	TAV2	TAV3	TAV4	TAV5
Allotments	All	2	2	3	4	4
Amenity Grassland	With stream	2	2	2	2	2
	1+ features	1	1	2	2	2
	No features	1	1	1	1	1
Arable	SLINC hedge and HLC5 or HLC4	2	2	2	3	4
	1+ features and HLC5 or HLC4	2	2	2	3	4
	SLINC hedge and HLC3	1	2	2	3	3
	No features and HLC5 or HLC4	1	2	2	2	3
	1+ features and HLC 3	1	2	2	2	3
	No features and HLC3	1	1	1	1	1
Canal	All	3	3	3	4	5
Caravan Park	With stream	2	2	2	2	2
	1+ features	1	1	2	2	2
	No features	1	1	1	1	1
Cemetery	With stream	2	2	3	3	4
	1+ features	2	2	2	3	4
	No features	1	1	1	2	3
Churchyard - other	With stream	2	2	3	3	4
	1+ features	2	2	2	3	4

Land Use Category	Condition	TAV1	TAV2	TAV3	TAV4	TAV5
	No features	1	1	1	2	3
Churchyard - historic	With stream	2	2	3	3	4
	1+ features	2	2	2	3	4
	No features	2	2	2	3	3
Crematorium	With stream	2	2	3	3	4
	1+ features	1	1	2	3	3
	No features	1	1	1	2	3
Building Site	No features	1	1	1	1	1
Farmyard	With stream	2	2	2	3	3
	1+ features	2	2	2	2	2
	No features	1	1	1	2	2
Garden – Large, Mature	With stream	2	2	2	3	3
	1+ features	1	1	2	3	3
	No features	1	1	1	2	2
Garden - Other	With stream	2	2	2	2	2
	No stream	1	1	1	2	2
Golf Course	With stream	2	2	3	4	4
	1+ features	2	2	3	3	4
	No features	1	1	1	2	3
Hospital Grounds	With stream	2	2	3	3	4
	1+ features	1	1	2	3	3
	No features	1	1	1	2	3
Meadow	All	3	3	3	4	5
Open Mosaic Habitat	With stream	2	2	3	3	4
	1+ features	2	2	2	3	4
	No features	2	2	2	3	3
Orchard	All	2	2	3	3	4
Park or Open Space - formal	With stream	2	2	3	3	4
	1+ features	2	2	2	3	3
	No features	1	1	1	2	3
Park or Open Space - informal	With stream	2	2	3	4	4
	1+ features	2	2	2	3	4
	No features	2	2	2	2	3
Parkland - historic	All	2	3	3	4	5
Pasture	HLC4&5 plus Stream or Standing Water	3	3	3	5	5
	HLC4&5 plus SLINC hedge	2	2	3	4	4
	HLC4&5 plus Woodland	2	2	3	3	4
	HLC4&5 with no features	2	2	3	3	3
	HLC<=3 plus Stream or Standing water	3	3	3	3	4
	HLC<=3 plus SLINC hedge	2	2	3	3	3
	HLC<=3 plus Woodland	2	2	2	3	3
	HLC<=3 with no features	2	2	2	3	3

Land Use Category	Condition	TAV1	TAV2	TAV3	TAV4	TAV5
Playing Field	With stream	2	2	2	3	3
	1+ features	1	1	2	2	2
	No features	1	1	1	2	2
Pond/Lake	All	2	3	3	4	5
Power Plant/Sub Station Grounds	With stream	2	2	3	3	4
	1+ features	2	2	2	3	3
	No features	1	1	1	2	3
Premises	With stream	2	2	2	2	2
	No stream	1	1	1	1	1
Premises with Parkland	With stream	2	2	3	3	4
	1+ features	1	1	2	3	3
	No features	1	1	1	2	3
Quarry - active	With stream	2	2	3	3	3
	1+ features	2	2	2	3	3
	No features	1	1	2	2	2
Quarry - inactive	With stream	2	2	3	3	4
	1+ features	2	2	2	3	4
	No features	2	2	2	3	3
Railway Bank	All	2	2	2	3	4
School Grounds	With stream	2	2	3	3	4
	1+ features	1	1	2	3	3
	No features	1	1	1	2	3
Semi-natural Habitat Mosaic	All	2	3	3	4	5
Sewage Works	With stream	2	2	3	3	4
	1+ features	2	2	2	3	3
	No features	1	1	1	2	3
Telecommunications	With stream	2	2	3	3	4
	1+ features	1	1	2	3	3
	No features	1	1	1	2	3
University/College Grounds	With stream	2	2	3	3	4
	1+ features	1	1	2	3	3
	No features	1	1	1	2	3
Water Treatment Works	With stream	2	2	3	3	4
	1+ features	2	2	2	3	3
	No features	1	1	1	2	3
Woodland	All	2	3	3	4	5

DECLINING FARMLAND BIRDS

Land Use Category	Condition	FB1 (0-2sp)	FB2 (3-5 sp)	FB3 (6-8 sp)
Arable	All	1	2	3

DESIGNATIONS

Designation Type	Condition	TAV1	TAV2	TAV3	TAV4	TAV5
SAC	All	5	5	5	5	5
SSSI	All	5	5	5	5	5
SINC	All	3	3	4	5	5
SLINC	All	3	3	3	4	5
Ancient Woodland	Ancient Woodland (and landscape units of other Land Use Categories containing Ancient Woodland)	5	5	5	5	5
Wood pasture and Parkland	Sites on Natural England's Wood pasture and Parkland inventory	2	3	3	4	5

ADJACENCY

Feature	Value Score
Adjacent to SAC or SSSI	Treat as if landscape unit is in TAV 5 but with an upper category cap of 4
Adjacent to Ancient Woodland	Treat as if landscape unit is in TAV 5 but with an upper category cap of 4

3.1.2 Ecological evaluation results

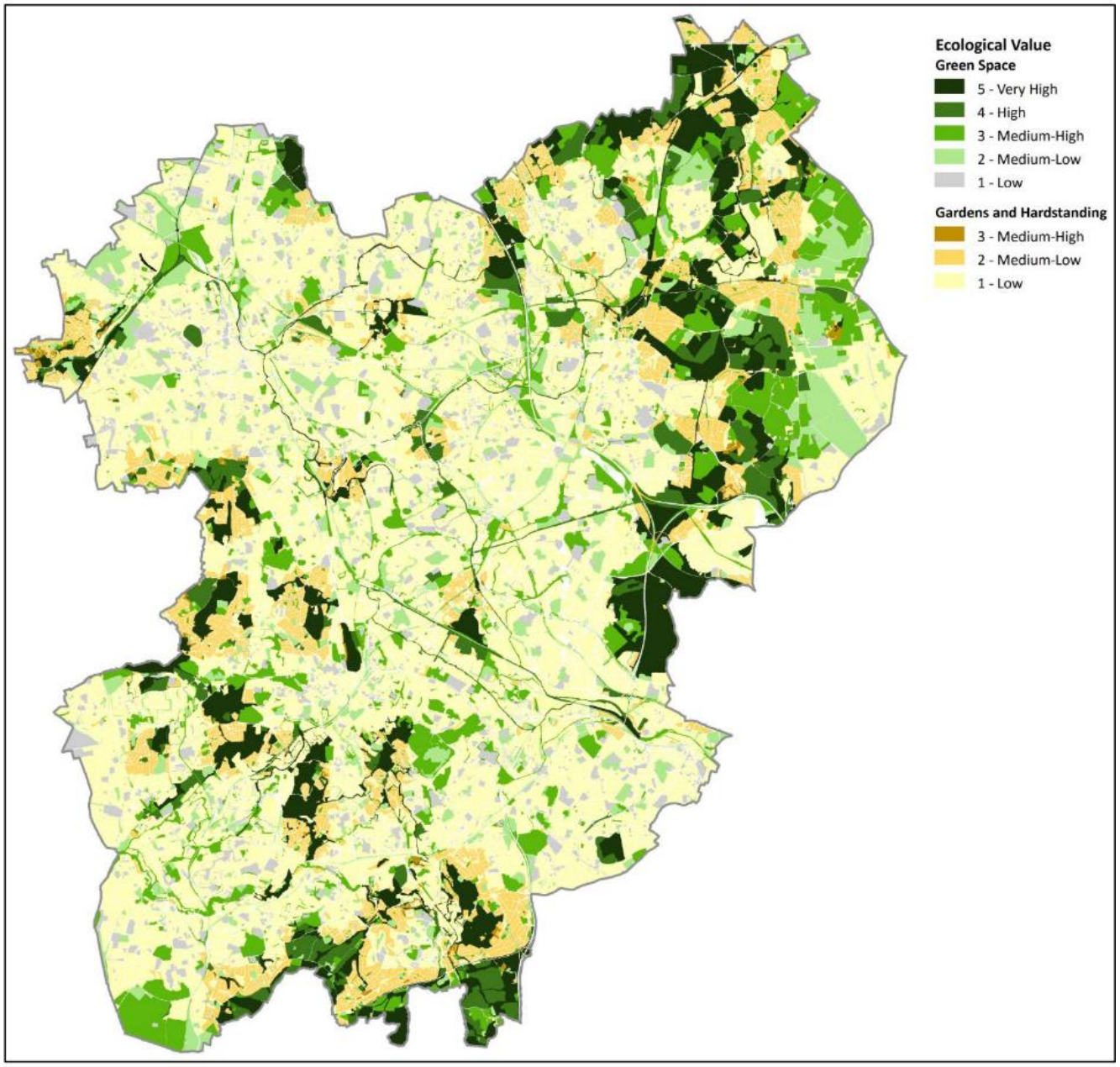

Figure 5. Ecological evaluation of the Black Country results map

3.2 Habitat connectivity analysis

104. A preliminary analysis of woodland habitat connectivity was carried out using the satellite derived habitat data set produced in 2019. A further analysis was carried out using core areas as well as an analysis of heathland connectivity in the Walsall area, as part of a wider ambition of improving/restoring habitat connectivity between Cannock Chase SSSI and Sutton Park SSSI. As previously mentioned Condatis v1.1. was used for this purpose.

105. Condatis is a decision support tool that assists with the identification of the best locations for habitat creation and restoration to help enhance existing habitat networks and increase connectivity across landscapes.

106. As a decision support tool, Condatis:

- Highlights pathways that allow both dispersal and multiplication of species as they cross a landscape
- Pinpoints bottlenecks in the habitat network (where current opportunities for colonisation are being restricted)
- Ranks the feasible sites for habitat creation and restoration to enhance the existing habitat network efficiently
- Allows new habitat to be added to test the impact of habitat creation in precise locations

107. So far this analysis has, for example, enabled the identification of woodland habitat bottleneck areas which, if affected, can have a very significant impact on the permeability of the landscape and a severe negative impact on the ability species have to move through the landscape. An example of such bottleneck areas is shown in Figure 6. The land units that overlap these areas have been identified and included as a key component of the NRN map as described below (see Figure 7). Additional analysis is still being carried out/due for other habitats and the wider area, namely using the more recently available version of the satellite derived habitat data set.

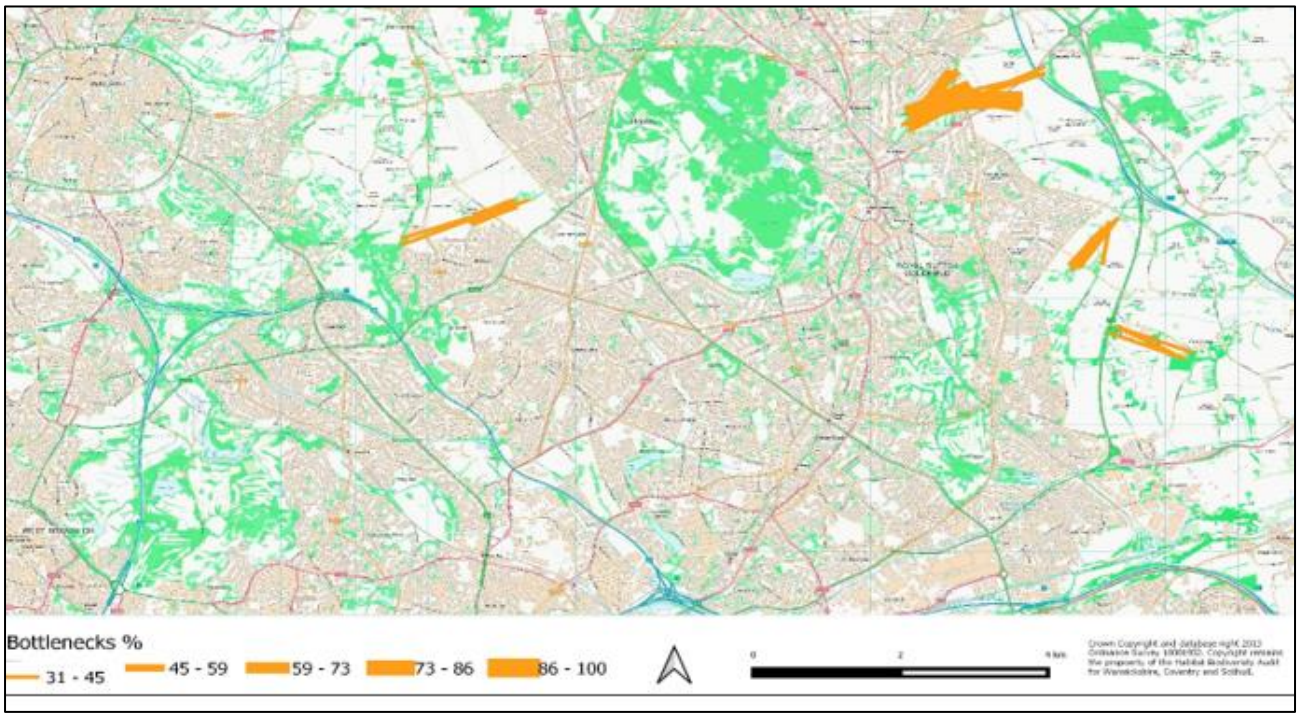

Figure 6. Woodland bottleneck areas

3.3 Review of NRN guidance, national data sets and tools

108. A comprehensive review of the current guidance was carried out. Data and tools available were researched and used as applicable at this stage (main reference used in this work: NE NRN Toolkit V1), namely the England Combined Habitat Networks Data set. This was used not only to identify important habitat/habitat enhancement/restoration within the conurbation but also, and more importantly, to provide the wider network context beyond the Black Country's boundary. This data set describes the geographic extent and location of Habitat Networks for 18 priority habitats based primarily, but not exclusively, on the priority habitat inventory, with additional data added in relation to habitat restoration-creation, restorable habitat, plus fragmentation action, and network enhancement and expansion zones. The maps are created following a standardised process that incorporates a range of data layers and identifies specific locations for a range of actions to help improve the ecological resilience for each of the habitats/habitat networks.

3.4 Producing a Nature Recovery Network Map for the Black Country

109. Guidance on the components of the Nature Recovery Network map are yet to be available. Further guidance from Defra is expected in due-course and will be incorporated in the future development of the Black Country's Nature Recovery Network map.

110. The starting point of the approach taken is the Ecological Evaluation map, which describes the relative ecological value of the Black Country's landscape. The evaluation work was primarily focused in areas of green space, though a broad assessment of residential areas has also been carried out.

3.4.1 Components of the Black Country Nature Recovery Network Map

111. As specific NRN development guidance is not yet available, the approach taken builds on previous approaches and terminology used in ecological network mapping. The description of the components as well as the criteria for land parcels to be assigned to each of these is below:

112. **Core Habitat Zone**
The Core Habitat Zone is comprised of the land use parcels that contain the most ecologically valuable habitats. The zone includes all parcels with an ecological value score of 4 or above (see ecological evaluation methodology); all sites with a nature conservation designation not included in the above (e.g. some Sites of Local Importance for Nature Conservation); and any additional areas identified in Natural England's Combined Habitat Network data set. The Core Habitat Zone is a priority for protection and restoration.

113. **Core Expansion Zone 1**
Core Expansion Zone 1 comprises those land use parcels that are of lower ecological value than those in the Core Habitat Zone but, due to inherent value or location, have the most potential to contribute to a coherent ecological network. These sites are frequently within Core Landscapes and Priority Network Restoration Zones and are a priority for investment in the restoration and creation of new habitats. Included in this zone are all areas of green space scoring 3 in the ecological evaluation; all green space scoring 1 or 2 lying within 150 metres of a Core Habitat Zone; those areas identified as habitat bottlenecks; and vegetated railway cuttings and embankments.

114. **Core Expansion Zone 2**
Core Expansion Zone 2 comprises all areas of greenspace that do not meet the criteria for inclusion in Zone 1. These sites provide an opportunity for the restoration and creation of new habitats but investment in these areas is a lower priority than in Zone 1.

115. **Urban Matrix Recovery Zone 1**
Urban Matrix Recovery Zone 1 comprises all features of the built environment within 150 metres of the Core Habitat Zone, and may include residential and commercial properties, gardens, road verges, street trees and minor watercourses. Due to their proximity to sites of ecological value these features have the most potential of their type to contribute to a coherent ecological network. The protection, enhancement and creation of green infrastructure within these areas is a priority.

116. **Urban Matrix Recovery Zone 2**
Urban Matrix Recovery Zone 2 comprises all features of the built environment outside of Zone 1. These areas provide an opportunity for the protection, enhancement and creation of green infrastructure but investment in these areas is of a lower priority than in Zone 1.

117. **National Habitat Network**
Natural England's Combined Habitat Networks data set (see 3.3).

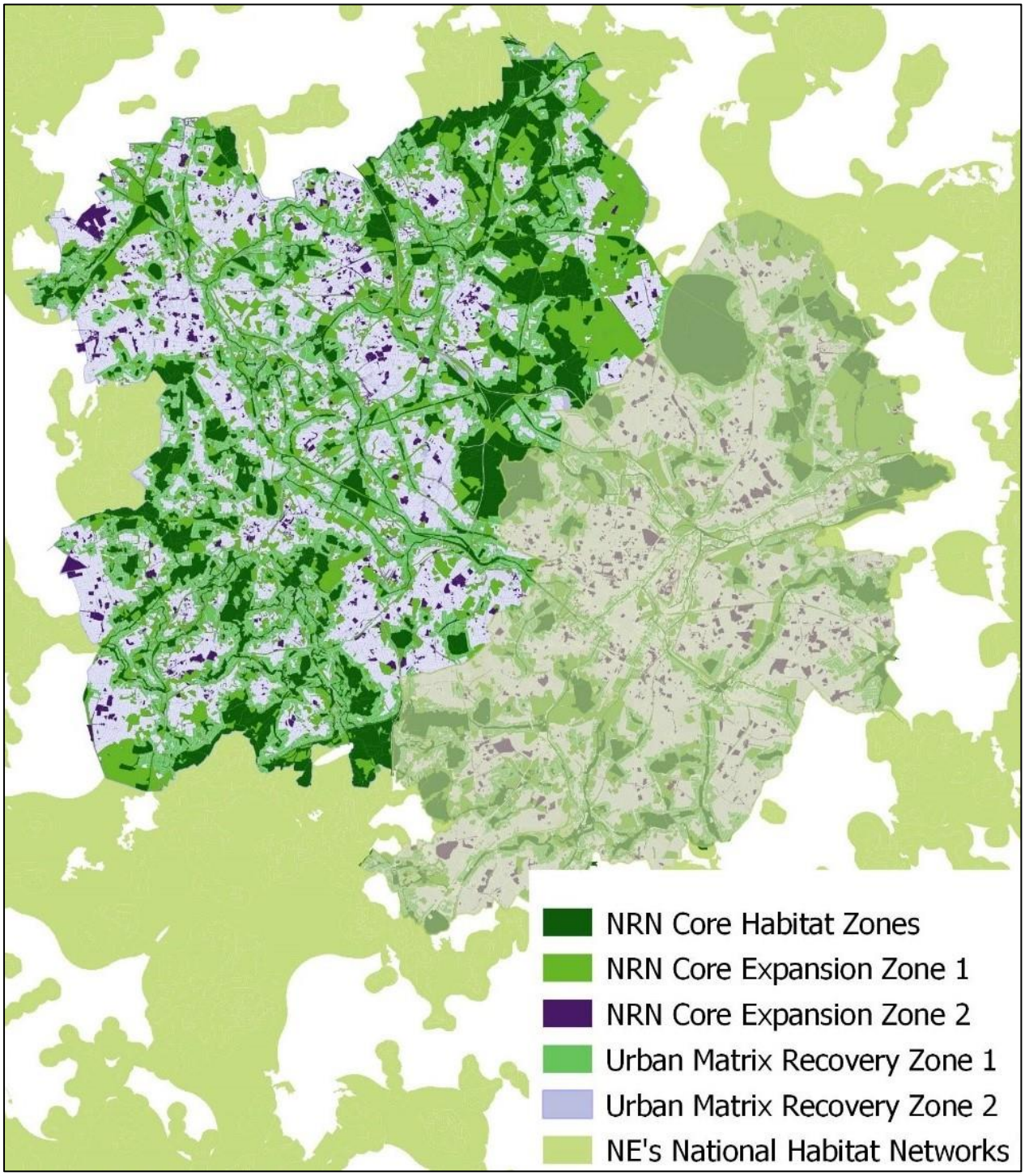

Figure 7. Draft Black Country Nature Recovery Network Map

4. Task 3: Draft Black Country Local Nature Recovery Opportunity Map & Priority Biodiversity Actions

4.1 Background to Local Nature Recovery Strategies

118. LNRSs are a new system of spatial strategies for nature, contained in the government's flagship Environment Bill [made mandatory by the Environment Act, November 2021]. The strategies have been designed to work closely alongside other measures in the Bill [Act]. They will, for example, support delivery of mandatory biodiversity net gain and provide a focus for a strengthened duty on all public authorities to conserve and enhance biodiversity. They will also underpin the Nature Recovery Network, alongside work to develop partnerships and to integrate nature into our [Defra's] incentives and land management activities (Defra, 2021).

119. LNRS are designed as tools to drive more coordinated, practical and focussed action to help nature. Each strategy will, for the area that it covers:

- Map the most valuable existing habitat for nature.
- Map specific proposals for creating or improving habitat for nature and wider environmental goals.
- Agree priorities for nature's recovery (Defra, 2021).

120. The production of each LNRS will be evidence based, locally led and collaborative, to help create a network of shared plans that public, private and voluntary sectors can all help to deliver. This will provide a locally-owned foundation to the developing Nature Recovery Network, identifying the places which, once action has been taken on the ground, will enable the network to grow over time. This is turn will help achieve wider environmental objectives, like carbon sequestration to mitigate climate change or managing flood risk, and contribute to green economic recovery objectives (Defra, 2021).

121. The government anticipates each strategy will cover an area roughly county sized and they will cover the entirety of England with no gaps or overlaps. The Defra Secretary of State will appoint a "responsible authority" to lead production of each strategy from the list of potential public bodies set out in the Bill [Act]. They are public bodies that, by and large, have a strong knowledge of the local area and democratic mandates, ensuring necessary legitimacy and local ownership (Defra, 2021).

122. The core purpose of LNRSs is to help reverse an ongoing decline of nature and biodiversity in England. To do this, a key feature of the strategies is that they will identify areas that are already of importance for nature, along with areas that could become of particular importance and where the recovery or enhancement of biodiversity could make a particular contribution to other environmental benefits. In other words, LNRSs will identify where we should take action for nature's recovery as well as where nature-based solutions can help address wider environmental problems (Defra, 2021).

123. Key examples of environmental issues where LNRSs and nature-based solutions could play a role are:

- Climate change mitigation through tree planting and peat restoration.
- Natural flood management.
- Improved water quality.

(Defra, 2021)

4.2 National LNRS Pilots

124. From August 2020 to May 2021 Defra ran five Local Nature Recovery Strategy (LNRS) pilots to test the preparation process, produce prototype strategies and look at how LNRSs can align with other environmental strategies at a local level. The five pilots were coordinated by Natural England and hosted by Greater Manchester Combined Authority, Buckinghamshire Council, Cornwall Council, Northumberland County Council and Cumbria County Council.

125. The pilots had three main objectives:

- Test a new process for preparing a LNRS based on the requirements set out in the Bill and to share experience to help develop future policy.
- Create prototype LNRSs to demonstrate what an LNRS could look like, to support national rollout.
- Consider how LNRSs will fit with existing spatial planning tools, such as National Park management plans, local plans, river basin management plans, and increasingly bring priorities together into a single strategy over time.

126. The pilots contained the two key LNRS elements, as laid out in the Bill:

- A statement of biodiversity priorities
- A local habitat map

127. The pilot leads worked collaboratively with existing local partnerships and stakeholders to agree the top priorities for nature recovery in their area (statement of biodiversity priorities) and to map where action might be taken to delivery those priorities (local habitat map).

128. The pilots followed a six-step process:

- Step 0: Defra group provides a map of each LNRS area, including habitats and national conservation sites
- Step 1: locally held data is added to the map, including locally identified wildlife sites
- Step 2: description of the LNRS area, including its key habitats and potential opportunities to create or improve them, based on ecological sub-areas
- Step 3: identification of outcomes, achieved through creation or improvement of habitat, and categorisation of those outcomes into priority and other
- Step 4: potential measures for creating or improving habitat to achieve the priority and other outcomes (a statement of biodiversity priorities is produced)
- Step 5: mapping of suitable locations for the delivery of the potential measures onto map of existing habitat (established in Steps 0 and 1) (Defra, 2021)

4.2.1 LNRS Pilots – Lessons Learned

129. Individual pilot prototypes are to be shared online by the local authority leads in due-course and these will be valuable in shaping the next steps of the approach to be taken in the Black Country.

130. In July 2021 Defra published lessons learned grouped into five themes:

Preparation of Local Nature Recovery Strategies

The pilots showed how responsible authorities can best set up for the LNRS process:

- strong leadership and transparency from the responsible authority was crucial in getting others involved from the outset
- establishing good governance quickly was important - all of the pilots had a 'pilot area team' which included Defra group arm's-length bodies, environmental non-governmental organisations, National Parks, Areas of Outstanding Natural Beauty, other local planning authorities and Local Nature Partnership representatives.
- tapping into existing networks was crucial given the time constraints, but LNRSs require a wide range of inputs and no single existing group can provide this

Resources and capacity

LNRSs need to be adequately resourced with appropriate expertise and capacity to have the required impact:

- LNRSs require contributions from different parts of an organisation at different stages - for instance, Natural England and the Environment Agency required input from several different specialist officers
- existing capacity within the responsible authority is important to completing the process quickly and effectively - the pilot areas had existing capacity, but we recognise that this is not likely to be the case everywhere. The skills required included project management, stakeholder engagement as well as technical skills
- responsible authorities have to draw on partners to give them the capacity and expertise they need - they will not have everything they need 'in-house' so will need to draw on others, for instance by bringing in ecology, data analysis and geographic information system expertise
- resource needs will be different between responsible authorities depending on local circumstances like geography or administrative set up

Data and evidence

Good and accessible data is essential to the preparation of LNRSs. There were a number of important lessons here, including:

- national-level habitats information provided to the pilots by Defra and Natural England was too voluminous and hard to use locally - Defra will further consider how best to support responsible authorities with the information it provides to them, including via a national habitat map (a requirement in the Environment Bill [Act])

- there is a need for guidance on what data responsible authorities should ideally be seeking to use to prevent LNRS partnerships spending too long gathering data
- assessing habitat quality was difficult due to a lack of recent data - similarly, trend data for some species and habitat types were hard to ascertain
- presentation of data needs to be accessible enough to empower non-specialists to make informed suggestions about what their priorities are
- data licensing is a significant issue but it is possible to include datasets whilst protecting their commercial value

Collaboration

The pilots took different approaches to collaboration. The main lessons include:

- early engagement of a wide range of people and organisations is crucial to secure genuine engagement - effective collaboration takes time, so it is one of the first things to think about in preparing an LNRS
- there cannot be 'one-size-fits-all' engagement - different stakeholders need to be engaged differently. In particular, land managers' role as stakeholders and key delivery partners must be recognised
- local conveners performed a valuable role in bringing land managers into the LNRS process - aligning LNRSs with future schemes that reward environmental land management would likely require a local convener function
- professional facilitation expertise was brought in in several pilots to support stakeholder engagement workshops and was valuable
- use of stakeholder inputs needs to be transparent so individuals can see their priorities and views reflected
- establishing a common understanding of the purpose of LNRSs and the process with all stakeholder groups is essential to gathering constructive inputs.

Using the products

The end users of the strategies were an important consideration throughout the process:

- the prototypes will appeal to a range of potential end users (including local authorities, Defra group, public bodies, landowners, Local Nature Partnerships, environmental organisations and developers) as they cover a broad set of potential environmental benefits as well as more specific habitats and species requirements
- LNRS products should look to achieve consistency across boundaries to make it easier to use more than one at a time
- certain end users require specific guidance on how to use the LNRS products for their means, such as planners or land managers
- a delivery plan is wanted by stakeholders to set out how to implement the potential measures identified in the LNRS - some pilots are investigating what a delivery plan might entail (Defra, 2021).

4.3 Introduction to the approach taken towards a draft Black Country LNRS

131. The two key elements of a Local Nature Recovery Strategy, as laid out in the Environment Act, are:

- A Statement of Biodiversity Priorities.
- A Local Habitat Map.

132. Most of the work undertaken in the Black Country towards the production of a draft Local Nature Recovery Strategy was undertaken during the period that the five national pilots were running and in lieu of published guidance. The six-step process subsequently published by Defra (outlined in 4.2) has not therefore been followed per se, rather many of the various elements of this have been achieved through a distinct process that seeks to produce similar outcomes.

133. The broad relationship between the process followed in the Black Country and the six-step Defra process is summarised in Table 8.

Table 9: Broad relationship between the process followed in the Black Country and the six-step Defra process

Black Country approach	Defra pilot six-step process
Task 1: Development of a habitat baseline for the Black Country	**Step 0:** Defra group provides a map of each LNRS area, including habitats and national conservation sites **Step 1:** locally held data is added to the map, including locally identified wildlife sites
Task 2: Produce a draft Nature Recovery Map for the Black Country	
Task 3a: Produce a draft Black Country Local Nature Recovery Opportunity Map	**Step 5:** mapping of suitable locations for the delivery of the potential measures onto map of existing habitat
Task 3b: Develop draft priority biodiversity actions (Statement of Biodiversity Priorities)	**Step 2:** description of the LNRS area, including its key habitats and potential opportunities to create or improve them, based on ecological sub-areas **Step 3:** identification of outcomes, achieved through creation or improvement of habitat, and categorisation of those outcomes into priority and other **Step 4:** potential measures for creating or improving habitat to achieve the priority and other outcomes (a statement of biodiversity priorities is produced) **Step 5:** mapping of suitable locations for the delivery of the potential measures onto map of existing habitat

4.4 Task 3a: Draft Black Country Local Nature Recovery Opportunity Map

134. The work undertaken for Tasks 1 and 2 enabled the production of a map (Figure 7. Draft Black Country Nature Recovery Network Map) of the ecological network of the Black Country. This identifies a number of components (3.4.1) that depict the variation in relative ecological value across the landscape. The map also outlines where the prioritisation of investment in nature's recovery would provide the most benefit in ecological network terms.

135. Task 3a seeks to utilise and build upon this output to produce a draft Black Country Local Nature Recovery Opportunity Map. The purpose of this stage of the draft LNRS process is to further understand and depict the nature of the landscape, whilst undertaking an additional stage of investment prioritisation.

4.4.1 Core Landscapes

136. The first stage of this process was to identify the Black Country's Core Landscapes. Core Landscapes are defined as large areas of land comprised of multiple land use parcels that are ecologically coherent, often sharing similar geology, soil types, habitats, landscape character and land-use history. Core Landscapes typically support the highest abundance and diversity of semi-natural and Priority Habitats. They provide significant opportunity and are a priority for investment in ecological recovery (e.g. habitat restoration and creation).

137. A total of 13 Core Landscapes have been identified and mapped. These cover the entire Black Country green belt as well as major river corridors and aggregations of significant areas of undeveloped land within the most urban parts of the conurbation. The 13 Core Landscapes range in size from 1.8 km^2 to 12.4 km^2 and collectively cover an area of 78.3 km^2 - 22 % of the total Black Country area of 357 km^2. The Core Landscapes are shown in Figure 8.

4.4.2 Priority Network Restoration Zones

138. The second stage of the process was to identify Priority Network Restoration Zones. These are those parts of the urban Black Country landscape that contain the highest density of Core Habitat and Core Expansion land use parcels, and which collectively link Core Landscapes. The purpose of Priority Network Restoration Zones is to support the creation of a coherent ecological network across the Black Country landscape, and are where investment in nature's recovery outside of Core Landscapes has been prioritised.

139. Collectively the Priority Network Restoration Zones cover an area of 63.2 km^2, 17.7 % of the total Black Country area of 357 km^2. The Priority Network Restoration Zones are shown in Figure 8.

4.4.3 The Draft Black Country Local Nature Recovery Opportunity Map

140. To produce the Draft Black Country Local Nature Recovery Opportunity Map, the Core Landscapes and Priority Network Restoration Zones (Figure. 8) have been overlain on the components of the Nature Recovery Network Map (3.4.1 and Figure. 7). Locations where the Core Landscapes directly link with the Natural England's National Habitat Network in adjoining local authority areas are indicated as National Habitat Network Connections.

    The Draft Black Country Local Nature Recovery Opportunity Map is shown in Figure 9.

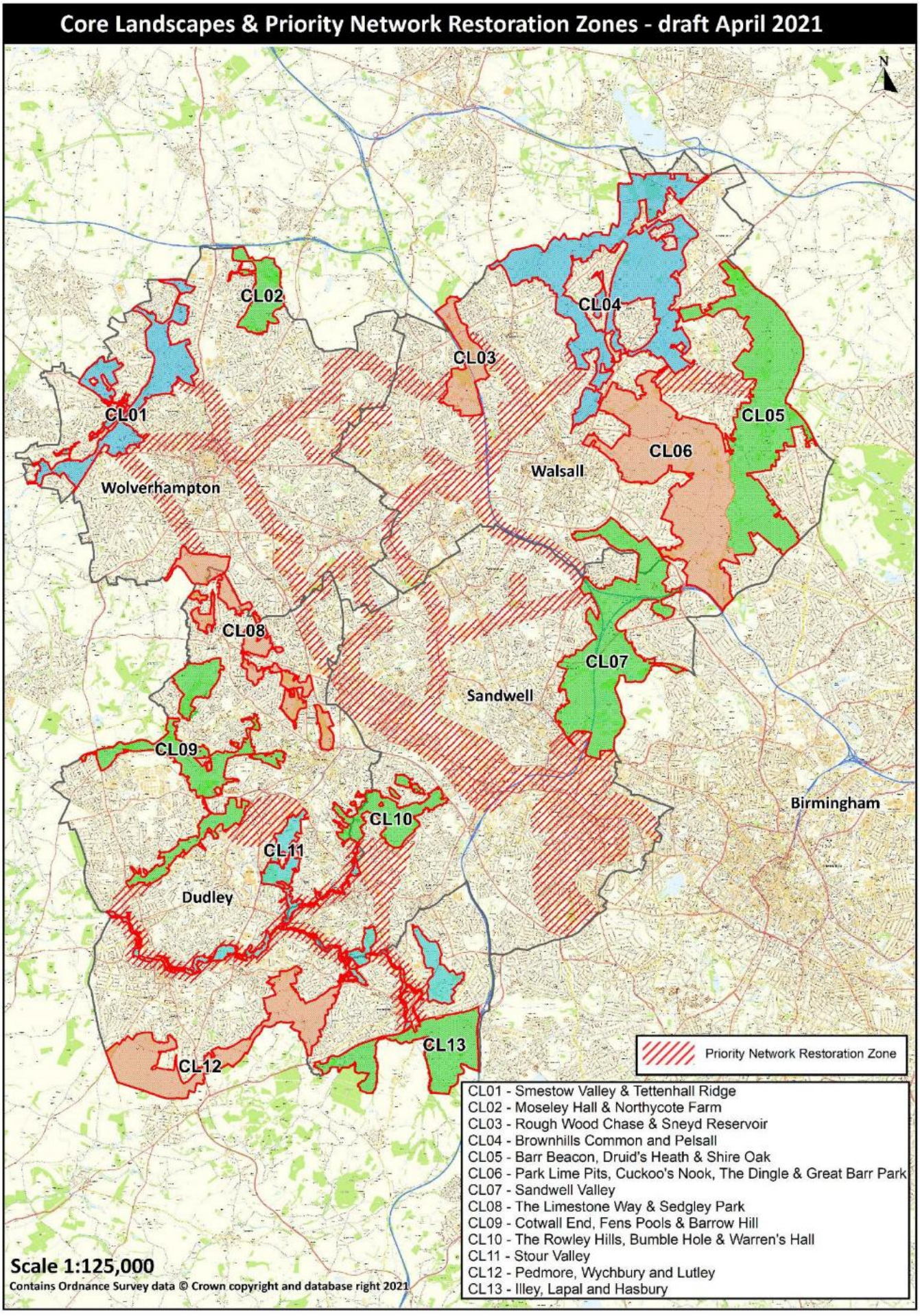

Figure 8. Core Landscapes & Priority Network Restoration Zones

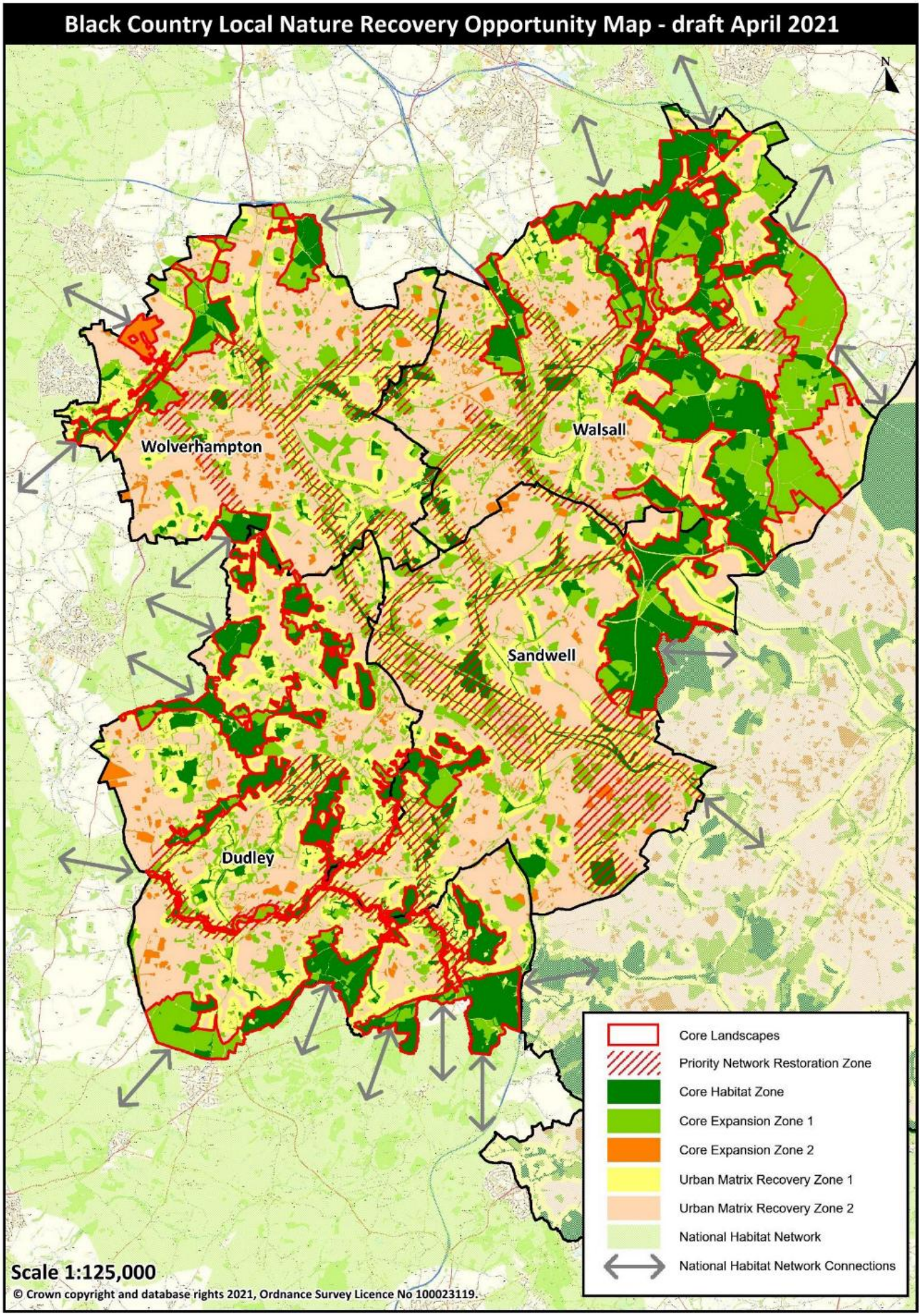

Figure 9. Draft Black Country Local Nature Recovery Opportunity Map

4.5 Task 3b: Draft Black Country Priority Biodiversity Actions

141. The guidance provided by Defra to the five Local Nature Recovery Strategy pilots was drawn upon for the formulation of draft priority biodiversity actions for the Black Country.

4.5.1 Statement of Biodiversity Priorities

141. The Local Nature Recovery Strategy pilots were provided with the following guidance for producing a Statement of Biodiversity Priorities:

I. An overall description of the strategy area – drawing on existing planning documents.

II. A description of ecological sub-areas based on geology, topography and soil type (possibly using National Character Area boundaries), the key habitats and species associated with each sub-area, how their distribution has changed over time and anticipated future changes due to climate change and other known pressures.

III. A broad assessment of the opportunity for linking, increasing or improving the condition of each key habitat, taking into account habitat characteristics and practical constraints.

IV. A description of the wider environmental issues for which the creation or improvement of habitats could help provide a nature-based solution (e.g. climate and flood mitigation).

V. The outcomes – both for nature and the wider natural environment – that the LNRS is seeking to achieve, the identification of which outcomes are considered 'priority' and the process by which these outcomes have been identified. Outcomes can be specific (e.g. X pairs of nightingales) or strategic (e.g. sequester carbon by planting native trees).

VI. The potential measures by which the creation or improvement of key habitats can deliver both priority and other desired outcomes (e.g. rotational coppicing of native woodland to provide nightingale habitat or ditch-blocking to re-wet degraded peat).

4.5.2 Identification of Ecological Sub-areas in the Black Country

142. The 13 Core Landscapes defined and delineated (4.4.1) in the Black Country comprise the main ecological sub-areas that have so far been identified (see 5, Next Steps). These typically support the highest abundance and diversity of semi-natural and Priority Habitats, and provide significant opportunity - and are a priority - for investment in ecological recovery.

4.5.3 Ecological Sub-area Statement of Biodiversity Priorities

143. A Statement of Biodiversity Priorities has been produced for each of the ecological sub-areas (Core Landscapes). These meet many of the Defra guidance points for producing a Statement of Biodiversity Priorities:

- A description of the ecological sub-area based on geology, topography and soil type.
- The key habitats and species associated with each sub-area.
- A broad assessment of the opportunity for linking, increasing or improving the condition of each key habitat.
- The outcomes that the LNRS is seeking to achieve, the identification of which outcomes are considered 'priority', and the process by which these outcomes have been identified.
- The potential measures by which the creation or improvement of key habitats can deliver both priority and other desired outcomes.

4.5.4 Presentation of Ecological Sub-area Statement of Biodiversity Priorities

144. Each of the 13 ecological sub-area Statements of Biodiversity Priorities (for examples see appendices 1-4) contains the following information:

General Information:

Ecological sub-area name, reference code, the National Character Area (NCA) it lies within, the NCA reference code, local authority area and total area in km^2.

Ecological Sub-area Description

I. Overview description
II. Landuse description
III. Topography description
IV. Geology description
V. A list of any UNESCO Black Country Geopark sites
VI. Soils description
VII. An ecological sub-area land use map (see 3.1.1.1).
VIII. Name, reference code and description of the Historic Landscape Character Areas that cover the ecological sub-area.
IX. Name, reference code and description of any Historic Environment Area Designations within the ecological sub-area.
X. Waterbody Catchment information (from the Environment Agency's Catchment Data Explorer):
    a. River Basin District name
    b. Management Catchment name
    c. Waterbody Catchment name
    d. Overall Classification
    e. Ecological Classification
    f. Chemical Classification
XI. Key Habitats:
    a. Broad Habitat type name
    b. Priority Habitat type name (if any)
    c. Habitat type description
XII. Key Species:
    a. Key fauna species recorded since 2000 (birds, amphibians & reptiles, mammals, fish, invertebrates – see appendices notes for details)
    b. Key flora species (Birmingham and Black Country axiophytes) recorded since 1995
XIII. Ecological Connectivity:
    a. A description of ecological sub-area connections to the Local Habitat Network
    b. A description of ecological sub-area connections to the National Habitat Network
XIV. An ecological sub-area Components and Connectivity map showing data from the Draft Black Country LNRS Opportunity Map (Figure 9) at an appropriate scale.

Ecological Sub-area Opportunities

XV. Identification of Focus Habitats with:
   a. A list of actions designed to improve, enhance or create the Focus Habitat
   b. A measure of success for each action

XVI. Identification of Target Species and Species Groups with measures of success.

XVII. Geodiversity site actions and measures of success.

XVIII. Connectivity Opportunities:
   a. Identification of actions to improve Local Habitat Network Connections
   b. Identification of actions to improve National Habitat Network Connections

Information and Data Sources

XIX. Information and data sources are referenced.

5. Next Steps

145. The work described in this document comprises significant progress towards a Local Nature Recovery Strategy for the Black Country.

146. This work has, however, been undertaken by the Wildlife Trust and EcoRecord without the benefit of collaboration with additional stakeholders and partners, and in lieu of published guidance from Defra. There remains significant work that needs to be undertaken to progress further towards a Local Nature Recovery Strategy, and for this to be ready for adoption by the (yet to be determined) responsible authority.

147. Whilst we await the publication of detailed guidance on all aspects of Local Nature Recovery Strategies from Defra, there are a number of important next steps that can be undertaken locally:

- Undertaking consultation with stakeholders, partners and partnerships on the work carried out to date.
- Forming a partnership of organisations that will work in collaboration with the responsible authority on the next stages and ongoing development and management of the LNRS.
- Producing Statements of Biodiversity Priorities for the defined Black Country Priority Network Restoration Zones.
- Defining ecological sub-areas and producing Statements of Biodiversity Priorities for the urban Black Country outside the Core Areas and Priority Network Restoration Zones.
- Undertaking an ecosystem services assessment of the Black Country landscape, understanding the value of the services provided by existing habitats, and identifying deficits in the network and actions to address these.
- Identifying and prescribing generic green infrastructure investment opportunities that will have the most impact in terms of addressing ecosystem services deficits.

Glossary of terms

Ancient Woodland – defined by Natural England as land that has had a continuous woodland cover since at least 1600 AD and may be ancient semi-natural woodland (ASNW), which retains a native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally, or plantation on ancient woodland sites (PAWS) where the original tree cover has been felled and replaced by planting, often with conifers, and usually over the last century

Axiophyte - Axiophytes are indicators of habitat that is considered important for conservation, such as ancient woodlands, clear water and species-rich meadows. The Botanical Society of Britain and Ireland (BSBI) has attempted to define axiophytes as follows:

- Species 90% restricted to habitats of nature conservation importance
- Species recorded in fewer than 25% of tetrads in a vice-county
- Very rare species should be considered for omission as chance occurrences

See http://bsbi.org/axiophytes for more information.

Bird of Conservation Concern (BoCC4): The list is produced by the UK's leading conservation organisations who worked together to review the status of birds in the UK, Channel Islands and Isle of Man. Criteria is used to assess the historical decline, trends in population and range, population size, localisation and international importance of each species as well as their global and European threat status; and uses up-to-date information on the status of birds in the UK and elsewhere in their ranges, drawing on data collated through the UK's bird monitoring schemes. Species are placed on the Green, Amber or Red list – indicating an increasing level of conservation concern (Red being those of highest concern).

Farmland Birds - Bird indicators based on population trends of wild birds are part of the government's suite of biodiversity indicators and show how the fortunes of birds of farmland, woodland, waterways and wetlands, and marine and coastal areas have fared between 1970 and 2017. Farmland birds are used as an indicator of the general quality of the farmed environment because birds sit near the top of the food chain and trends have been well monitored by the British Trust for Ornithology since 1967. The latest updates in the UK and England were published on 8 November 2018.

Habitat of Principal Importance - The Natural Environment and Rural Communities (NERC) Act came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

Land Parcel – In this evaluation this refers to individual units of land i.e. individual fields (often defined by OS Mastermap polygons) which were later merged with adjacent land parcels with the same land use type to form larger Landscape Units.

Landscape Unit – In this evaluation these were created by merging adjoining similar Land Parcels to form larger units of the same land use type. It was these units that formed the main basis of the evaluation.

Nature Improvement Area (NIA) - Nature Improvement Areas (NIA) were established to create joined up and resilient ecological networks at a landscape scale. They are run by partnerships of local authorities, local communities and landowners, the private sector and conservation organisations with funding provided by the Department for the Environment, Food and Rural Affairs (Defra) and Natural England. The 12 winning NIA projects were chosen after a competitive process announced in the Natural Environment White Paper.

Nature Recovery Network - A Nature Recovery Network is a joined-up system of places important for wild plants and animals, on land and at sea. It allows plants, animals, seeds, nutrients and water to move from place to place and enables the natural world to adapt to change. It provides plants and animals with places to live, feed and breed. It creates the corridors and areas of habitat they need to move in response to climate change (The Wildlife Trusts, 2018).

Special Area of Conservation (SAC) - This is an area containing habitat types and/or species, which are rare or threatened within a European context. These areas are designated under the European Directive commonly known as the 'Habitats' Directive.

Site of Importance for Nature Conservation (SINC) - Non-statutory designation for sites of Birmingham and the Black Country importance, identified by the Local Sites Partnership.

Site of Local Importance for Nature Conservation (SLINC) - Non-statutory designation for sites of Borough importance, identified by the Local Sites Partnership.

Site of Special Scientific Interest (SSSI) - Statutory designation relating to sites of interest for their flora, fauna, geological, or physiographical features, notified by Natural England.

TWINSPAN - Two Way Indicator Species Analysis is a method for hierarchical divisive classification of communities, based on progressive refinement of a single ordination axis obtained by Correspondence Analysis (CA) or Detrended Correspondence Analysis (DCA) of a (sites × species) data matrix.

Wood-pasture & Parkland - described in Joint Nature Conservation Committee's (JNCC) UK Biodiversity Action Plan (BAP) priority habitat pages as: areas that have been managed by a long established tradition of grazing allowing, where the site is in good condition, the survival of multiple generations of trees, characteristically with at least some veteran trees or shrubs. The tree and shrub component may have been exploited in the past and can occur as scattered individuals, small groups, or as more or less complete canopy cover. Other semi-natural habitats, including grassland, heathland, scrub etc, may occur in mosaic beneath the trees. While oak, beech, alder, birch, ash, hawthorn, hazel or pine are often the dominant tree species, a wide range of other tree and shrub species may occur as part of wood pasture systems.

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Appendices 1 - 4: Example Ecological Sub-area Statements of Biodiversity Priorities

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Smestow Valley & Tettenhall Ridge	**Sub-area ref.**	CL01
Natural Character Area	Mid Severn Sandstone Plateau	**NCA ref.**	66
Local Authority Area	Wolverhampton	**Area km²**	4.97

Ecological Sub-area Description

Overview

The ecological sub-area comprises a connected network of open spaces in the north-west of Wolverhampton, close to the Black Country's boundary with rural Staffordshire. With the exception of a number of direct connections to Staffordshire via watercourses and canals, suburban settlement surrounds the ecological sub-area including the historic villages of Tettenhall, Tettenhall Wood and Compton (formerly in the Staffordshire parishes of Tettenhall and Bushbury). The ecological sub-area is dominated by open spaces that follow the valley of the Smestow Brook and the canal network of western Wolverhampton, along with the mature woodlands and historic greens of the sandstone Tettenhall Ridge.

Land Use

The valley of the Smestow Brook is dominated by Smestow Valley Local Nature Reserve (LNR) which follows the former Wolverhampton & Kingswinford Railway line for 4.5 kilometres from Aldersley in the north to Wightwick in the south. Covering an area of approximately 51 hectares, the site comprises the dismantled railway line and a number of areas of former farmland with retained field-boundary hedgerows, grassland and recent secondary and plantation woodland. The Staffordshire & Worcestershire Canal follows the valley and forms the boundary to the LNR for much of its length. There are also short lengths of the Birmingham Main Line and Shropshire Union canals. Other areas of open space in the valley include public open space, playing fields, sports grounds, a golf course, a racecourse and a sewage treatment works. The only agricultural land lies in the very south of the ecological sub-area on the boundary with the South Staffordshire countryside and comprises pastures to the north and south of the Smestow Brook.

The south-east facing slopes of Tettenhall Ridge are occupied by mature broad-leaved woodland, parts of which are designated as ancient, whereas others were planted in the 19th century. Tettenhall Upper Green occupies land to the north of Tettenhall village and comprises public open space, with to the north of this Danescourt Cemetery and South Staffordshire Golf Course.

Topography

The Smestow valley lies at an elevation of 100 m in the north, falling away to 90 m in the south, with the surrounding level land at an elevation of 110 to 120 m. The Tettenhall Ridge runs on a north-east – south-west axis with a south-east aspect and is approximately 30 to 40 metres in height, with the villages of Tettenhall and Tettenhall Wood lying to the west at an elevation of 140 – 150 metres.

Geology

The entire ecological sub-area is located on bedrock of sedimentary sandstone and conglomerate, interbedded, formed approximately 200 to 251 million years ago in the Triassic Period. This is partially overlain with superficial deposits of diamicton till formed up to 3 million years ago in the Quaternary Period; undifferentiated river terrace deposits of sand and gravel formed up to 3 million years ago in the Quaternary Period; and in the valley of the Smestow brook, clay, silt and sand alluvium formed up to 2 million years ago in the Quaternary Period.

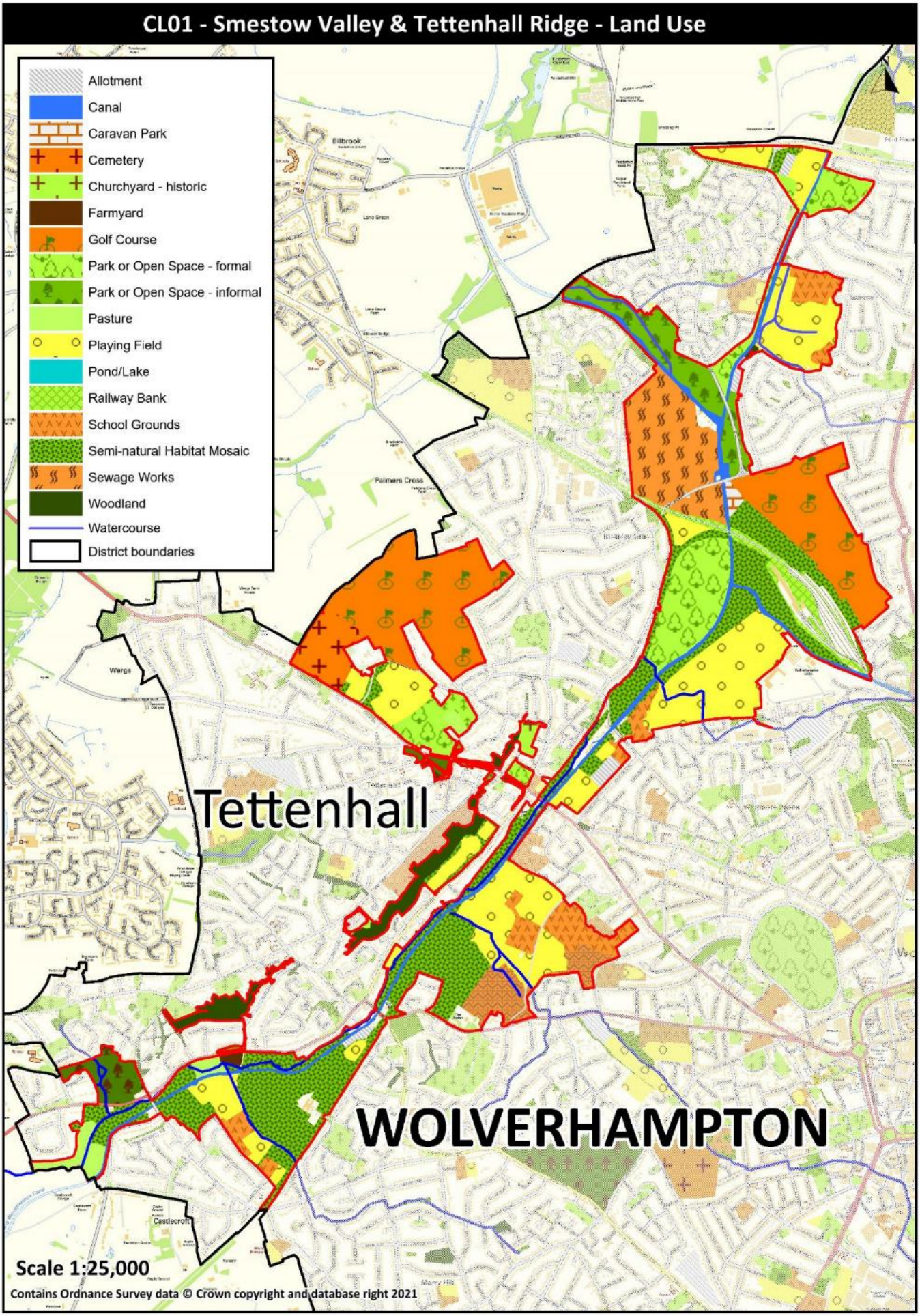
Geopark Sites

- Compton and Tettenhall Ridge (GR SJ88900013)
- Wightwick Wedge and Smestow Valley Local Nature reserve (GR SO887994)

Soils

The valley of the Smestow Brook is dominated by naturally wet very acid sandy and loamy soils, whilst in the north there are areas of slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, loamy soils

with naturally high groundwater, and freely draining slightly acid loamy soils. The Tettenhall Ridge is comprised of slightly acid loamy and clayey soils with impeded drainage, and freely draining slightly acid loamy soils.


CL01 - Smestow Valley & Tettenhall Ridge - Land Use
Allotment
Canal
Caravan Park
Cemetery
Churchyard - historic
Farmyard
Golf Course
Park or Open Space - formal
Park or Open Space - informal
Pasture
Playing Field
Pond/Lake
Railway Bank
School Grounds
Semi-natural Habitat Mosaic
Sewage Works
Woodland
Watercourse
District boundaries
Tettenhall
WOLVERHAMPTON
Scale 1:25,000
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Historic Landscape Character Areas			
Reference	WV02	**Name**	Wolverhampton Outer Western Suburbs
The ecological sub-area is dominated by WV02 Wolverhampton Outer Western Suburbs, which is predominately comprised of 20th century residential development. The Character Area contains the site of the medieval settlements of Tettenhall (first mentioned AD 910), Wightwick, Compton, Wergs and Aldersley. During the medieval period these settlements were likely to have been surrounded by open fields. The settlement of Tettenhall was fairly large, centred around two large greens. The heathland that existed at Tettenhall Wood until the early 19th century had probably been there since the medieval period. Once the heath was enclosed the development of houses soon took over.			
Reference	WV10	**Name**	Pendeford, Fordhouses & Moseley
The northern part of the ecological sub-area lies within WV10 Pendeford, Fordhouses & Moseley. The modern landscape is characterised by late 20th century residential development, industrial sites, public services and recreational facilities (public parks and nature reserves), which also date to the period after 1938. Prior to the 19th century, this area was mainly agricultural with some fields being medieval in origin and with some early settlements located in the west of the Character Area at Pendeford Farm, Pendeford Hall and Barnhurst Farm. Pendeford Aerodrome was opened in 1938 and later became a 1980s housing estate. The Staffordshire and Worcestershire Canal is one of the earliest features in this landscape, constructed in 1770.			

Historic Environment Area Designations [1]			
Reference	APA 28	**Name**	Land adjacent to Smestow Brook
The APA contains part of the route of the Smestow Brook, there is considered to be potential for previously unknown prehistoric activity (including Bronze Age burnt mounds) and environmental evidence present associated with the former water course.			
Reference	AHHLV 22	**Name**	Upper Green Tettenhall
The AHHLV contains Upper Green, an area of surviving common ground associated with the settlement at Tettenhall. Contains an old millpond (now a paddling pool) and a 20th C clock tower. Possible shallow ridge and furrow earthworks to the N of the pool.			
Reference	AHHLV 24	**Name**	Wightwick Wedge and Smestow Valley
The AHHLV contains an area of earthwork ridge and furrow, the remains of a medieval holloway and Wightwick Mill. It is situated within the Smestow Valley which is a major geomorphological feature of the Black Country on its western margin.			
Reference	AHHLV 59	**Name**	Tettenhall Wood
The AHHLV is an area of semi-natural ancient woodland. it has the potential to contains well preserved archaeological remains and features associated with medieval and post-medieval woodland management.			
Reference	APA 83	**Name**	Graveyard of St Michael's and All Angels Church
The APA contains the late 19th century extent of the grave yard associated with the Grade II listed St Michael's and All Angels Church. It has the potential to contain burials and mortuary monuments dating back to the medieval period.			
Reference	AHHTV 129	**Name**	Mount Street, Tettenhall
The AHHTV contains the south side of Mount Street, Tettenhall. The settlement at Tettenhall Wood expanded along Mount Street during the 19th century and the AHHTV contains a range of 19th century buildings associated with this expansion.			
Reference	APA 82	**Name**	Tettenhall Historic Settlement
The APA covers the historic core of Tettenhall as shown on the 1816 Ordnance Surveyors Drawings.			

Waterbody Catchments			
River Basin District	Severn	**Management Catchment**	Severn Middle Worcestershire
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Smestow Brook - source to conf Wom-Penn Brook	Moderate (2021)	Moderate (2021)	Fail (2021)
River Basin District	Humber	**Management Catchment**	Trent Valley Staffordshire
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Penk from Source to Saredon Brook	Poor (2019)	Poor (2019)	Fail (2019)

Key Habitats [2]			
Broad Habitat Type	Boundary & Linear Features	**Priority Habitat**	Hedgerows
Remnant field boundary hedgerows exist in many of the areas of open space and, less frequently, along roadsides. These are typically Hawthorn-dominated with varying diversity of woody component and field-layer, with some containing mature standards of species including Pedunculate Oak.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	Eutrophic Standing Waters
The Staffordshire & Worcestershire Canal runs north-south through the entire ecological sub-area, following the valley of the Smestow Brook for much of its length and linking directly with the Staffordshire countryside at each end. Towards the north of the sub-area are junctions with the Shropshire Union and Birmingham Mainline Canal, the former running west and into the Staffordshire countryside, the latter west into the urban Black Country and on to Birmingham city centre. The canals comprise a significant network of wildlife corridors and are an important component of the ecological network. A variety of habitat types and a number of species of note including Otter and Water Vole are present.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	Ponds
In the north of the ecological sub-area within the track of Dunstall Racecourse is a large artificial flood alleviation pond (c. 1.4 ha) associated with the Smestow Brook. This is steep sided and supports little aquatic flora but is well-recorded and notable for a broad-range of passage migrant water and wetland birds. In the south of Smestow Valley LNR there is a former field pond and nearby a recently created pond that support a breeding population of Great Crested Newt.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
The Pendeford Brook and a tributary of this rise within the north of the ecological sub-area but are entirely within culvert. The Smestow Brook rises to the east of the ecological sub-area but lies within a > 4 kilometre culvert from which it emerges at a notable aqueduct over the Staffordshire & Worcestershire Canal to the south of the racecourse. From here the watercourse flows south within a highly modified channel for several hundred metres, from which point the channel is more natural, though still modified and over-widened. There are two small tributaries of the Smestow Brook: the Graisley Brook which is culverted for its entire length with the exception of a short section (c. 240m) of artificial channel that flows alongside and the canal, and the Finchfield Brook, which emerges from a culvert into a mostly unmodified channel for approximately 450 m before again entering a culvert.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	

Periodically cut rank neutral grassland dominates much of the Smestow valley. Species diversification and the implementation of annual management has been undertaken within areas of the LNR, however, to date this has had only limited success in increasing floral diversity.

In the very south of the ecological sub-area there are areas of rank neutral grassland to the north and south of the Smestow Brook which are occasionally grazed.

There are numerous areas of regularly mown amenity grassland throughout, including areas of public open space, golf courses, Dunstall Racecourse, school grounds, sports fields and at the National Trust's Wightwick Manor site in the south of the ecological sub-area.

Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	

There are numerous blocks of planted trees within the valley of the Smestow Brook and in areas of open space adjoining the canal corridors. These are predominantly comprised of native broadleaved species and date to the latter part of the 20th century. Most of the blocks are typically structurally poor and support a field-layer flora comprised of ubiquitous species, however, in recent years a number of projects have been undertaken to enhance these areas and both these structural and species diversity is increasing.

Recent secondary woodland has colonised a number of formerly developed sites including the 4.5 km length of the dismantled Wolverhampton & Kingswinford Railway line, a former tennis court close to the Tettenhall Road and former railway sidings at Oxley in the north of the ecological sub-area.

There are a number of mature plantation woodlands associated with large 18th and 19th century houses along the Tettenhall Ridge including at the National Trust's Wightwick Manor site in the south of the ecological sub-area. These are typically dominated by UK-native species including Beech and Pedunculate Oak.

Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	Lowland Mixed Deciduous Woodland

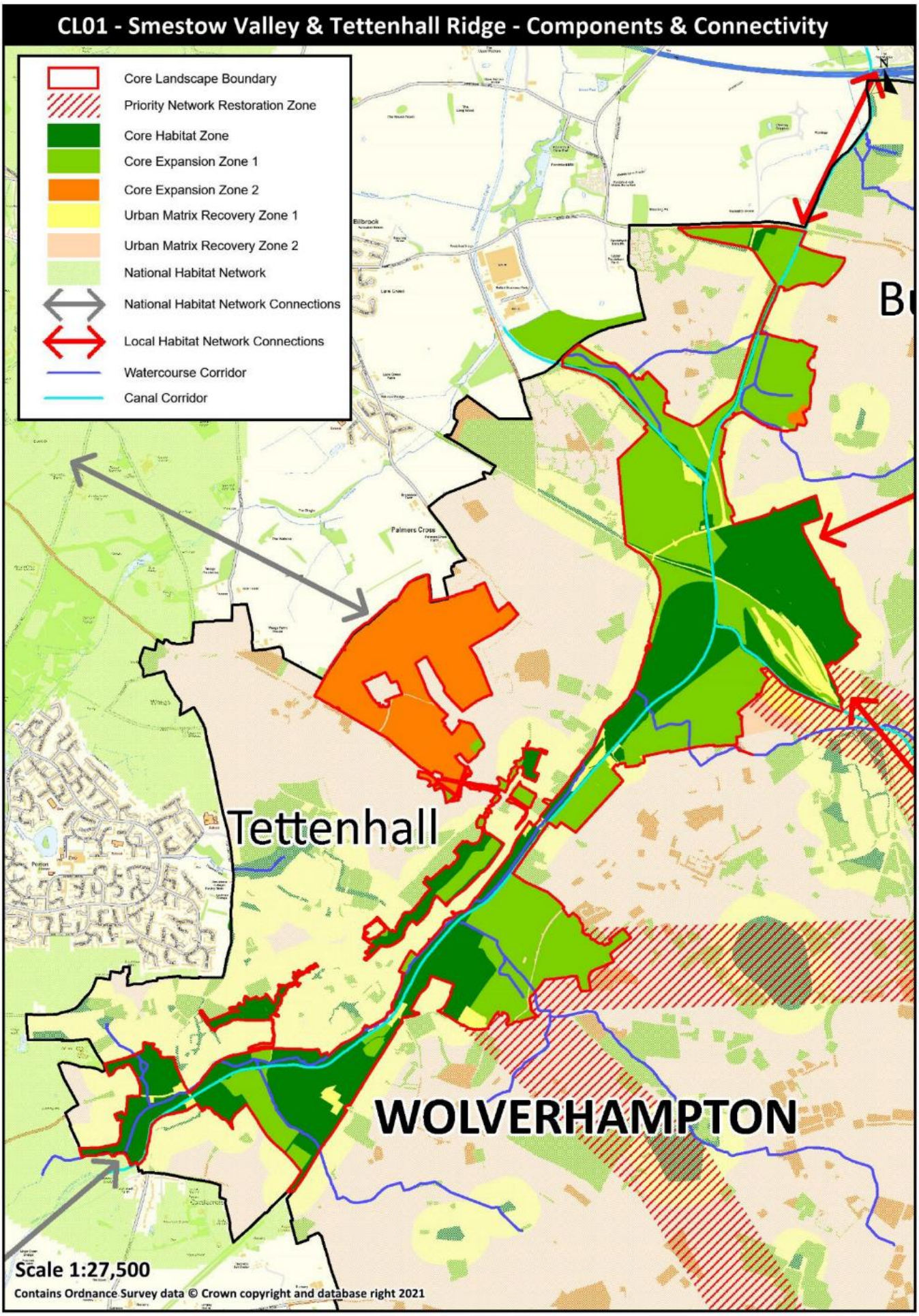
The south-east facing scarp slope of the Tettenhall Ridge is dominated by mature woodland and is a significant feature of the local landscape. Woodland is depicted in this area on maps dating back to 1613 and most of this is recorded on Natural England's ancient woodland inventory as ancient semi-natural woodland. There is a significant planted component to the woodlands and an abundance of introduced ornamental plants, however, and the true extent of ancient semi-natural woodland is not clear.

Key Species [3]	
Bird indicators	
Farmland	Goldfinch, Greenfinch, Jackdaw, Kestrel, Linnet, Rook, Starling, Stock Dove, Whitethroat, Woodpigeon
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Long-tailed Tit, Robin, Song Thrush, Sparrowhawk, Tawny Owl, Treecreeper, Willow Warbler.
Water & Wetland	Eurasian Coot, Grey Heron, Grey Wagtail, Kingfisher, Little Grebe, Mallard, Moorhen, Mute Swan.
Other	Buzzard, Carrion Crow, Collared Dove, Common House Martin, Eurasian Magpie, House Sparrow, Mistle Thrush, Northern Raven, Swift.
Amphibians & Reptiles	
Amphibians	Common Frog, Common Toad, Great Crested Newt, Smooth Newt.
Reptiles	none
Mammals	
Bats	Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Horseshoe Bat, Lesser Noctule, Natterer's Bat, Noctule Bat, Soprano Pipistrelle, Whiskered Bat.
Other	Eurasian Badger, European Otter, European Water Vole, West European Hedgehog.

Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Butterflies	
Moths	
Other Invertebrates	
Flora (axiophytes)	
Woodland	*Adoxa moschatellina, Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Blechnum spicant, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Carex remota, Carex sylvatica, Chaerophyllum temulum, Chrysosplenium oppositifolium, Deschampsia flexuosa, Dioscorea communis, Epipactis helleborine, Festuca gigantea, Filipendula ulmaria, Fragaria vesca, Frangula alnus, Galium odoratum, Geum rivale, Lysimachia nemorum, Lysimachia vulgaris, Malus sylvestris, Melica uniflora, Mercurialis perennis, Milium effusum, Moehringia trinervia, Oxalis acetosella, Poa nemoralis, Quercus petraea, Solidago virgaurea, Stellaria holostea, Teucrium scorodonia, Tilia cordata, Torilis japonica, Valeriana officinalis, Veronica montana, Viola reichenbachiana.*
Grassland	*Agrostis canina, Ajuga reptans, Alchemilla filicaulis subsp. vestita, Blechnum spicant, Brachypodium sylvaticum, Bromopsis erecta, Caltha palustris, Dactylorhiza praetermissa, Daucus carota subsp. carota, Deschampsia flexuosa, Filipendula ulmaria, Fragaria vesca, Geum rivale, Lathyrus nissolia, Leontodon hispidus, Lotus pedunculatus, Odontites vernus, Persicaria bistorta, Potentilla sterilis, Rhinanthus minor, Sanguisorba officinalis, Silene flos-cuculi, Solidago virgaurea, Stachys officinalis, Stellaria holostea.*
Heathland	*Agrostis canina, Aira praecox, Blechnum spicant, Carex nigra, Deschampsia flexuosa, Teucrium scorodonia.*
Mires	*Agrostis canina, Alchemilla filicaulis subsp. vestita, Angelica sylvestris, Athyrium filix-femina, Caltha palustris, Carex acutiformis, Carex nigra, Carex riparia, Dactylorhiza praetermissa, Filipendula ulmaria, Galium palustre, Geum rivale, Glyceria declinata, Hypericum tetrapterum, Juncus acutiflorus, Lotus pedunculatus, Lysimachia vulgaris, Menyanthes trifoliata, Potentilla palustris, Pulicaria dysenterica, Ranunculus aquatilis, Ranunculus flammula, Silene flos-cuculi, Sparganium emersum, Stachys palustris, Valeriana officinalis, Veronica beccabunga, Veronica scutellata.*
Open Water	*Butomus umbellatus, Carex acutiformis, Carex riparia, Galium palustre, Menyanthes trifoliata, Potamogeton perfoliatus, Ranunculus aquatilis, Sagittaria sagittifolia, Schoenoplectus lacustris, Veronica catenata, Veronica scutellata.*
Post-industrial (water-stressed)	*Aira praecox, Anthyllis vulneraria, Arenaria serpyllifolia, Blechnum spicant, Clematis vitalba, Daucus carota subsp. carota, Deschampsia flexuosa, Erigeron acris, Fragaria vesca, Reseda lutea, Silene vulgaris, Trifolium arvense, Vicia tetrasperma.*
Cultivation	*Vicia tetrasperma.*

Ecological Connectivity
Local Habitat Network
There are no direct links to other ecological sub-areas. The main ecological links to the rest of the Black Country landscape are via identified Priority Network Restoration Zones. Most significant of these is from the junction of the Staffordshire and Worcestershire Canal with the Birmingham Main Line canal which links Smestow Valley & Tettenhall Ridge to the rest of the Black Country's canal network. Further indirect 'stepping-stone' Priority Network Restoration Zones have been mapped which, via areas of green space (including mature parks) and mature gardens, link the ecological sub-area to other parts of the canal network and to Core Landscape 09 Sedgley Park, Sedgley Escarpment & The Limestone Way.

Ecological Connectivity
National Habitat Network
Smestow Valley & Tettenhall Ridge links directly to the national habitat network in rural South Staffordshire via the Smestow Brook and canal corridors at the south of the ecological sub-area. There are indirect connections to the national habitat network in South Staffordshire via South Staffordshire Golf Course, a distance of approximately 1 km. Further ecological connections to rural South Staffordshire via the Staffordshire & Worcestershire Canal and the Shropshire Union Canal corridors in the north of the ecological sub-area.


CL01 - Smestow Valley & Tettenhall Ridge - Components & Connectivity
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Billbrook
Palmers Cross
Tettenhall
WOLVERHAMPTON
Scale 1:27,500
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Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Hedgerows	Improve management of existing	Habitat in good condition
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels)	Improved ecological status
	Reduce artificial inputs	Improved chemical status
Eutrophic Standing Waters	Enhance marginal and emergent vegetation	Increased floral diversity and habitat structure improved
Neutral Grassland	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland Mixed Deciduous Woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Diversify field-layer component of plantations	Increased floral diversity
	Create new	New habitat at existing and new sites

Target Species	
Species/Species Group	**Measure**
Atlantic Salmon	Confirmed recent records
Bats	Increased abundance of confirmed species
Breeding farmland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown/Sea Trout	Confirmed recent records
European Otter	Increased signs, confirmed breeding population
European Water Vole	Increased population
Great Crested Newt	Increased abundance and number of breeding ponds
Hedgehog	Confirmed recent records

Geodiversity		
Site	**Action**	**Measure**
n/a		

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL01	Restoration of modified channel of the Smestow Brook and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.
National Habitat Network	
Connection	**Action**
Priority Network Restoration Zone (Birmingham Main Line Canal)	Increased marginal vegetation through the installation of coir roles along hard banks.
	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of standard trees (including fruit trees) along canal corridor.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html	2021
	Black Country UNESCO Global Geopark sites names and location information https://blackcountrygeopark.dudley.gov.uk/bcg/	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: http://www.landis.org.uk/soilscapes/	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) *Draft Black Country Local Nature Recovery Opportunity Map*	2021
	EcoRecord et al. (2021) *Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping*.	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) *Black Country Historic Landscape Characterisation* [data-set]. York: Archaeology Data Service [distributor] https://doi.org/10.5284/1000030	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

[1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

Archaeological Priority Areas (APA): sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

Areas of High Historic Townscape Value (AHHTV): areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

Designed Landscapes of High Historic Value (DLHHV): landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

Areas of High Historic Landscape Value (AHHLV): these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

[2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

[3] KEY SPECIES

Bird Indicators: Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Fish: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area ref.	CL05	**Sub-area name**	Barr Beacon, Druid's Heath and Shire Oak
NCA ref.	67	**Natural Character Area**	Cannock Chase & Cank Wood
Area km²	10.79	**Local Authority Area**	Walsall

Ecological Sub-area Description

Overview

Barr Beacon, Druid's Heath and Shire Oak comprises the rural eastern part of both the borough of Walsall and of the Black Country, with Staffordshire to the north and east, the Black Country Settlements of Brownhills, Walsall Wood and Aldridge to the north-west, rural parts of Great Barr to the south-west and the modern settlements of Pheasey and Streetly to the south and south-east. Sutton Park (Birmingham) lies approximately 1 km to the south-east beyond Streetly.

Historically parts of the parishes of Shenstone and Aldridge (including the township of Great Barr), the landscape is dominated by rectilinear fields and some plantation woodlands that were enclosed from commons and open fields through Parliamentary Acts in the late 18th and early 19th centuries. Close to historic settlements there are earlier piecemeal and irregular enclosed fields.

Land Use

Predominantly arable agricultural with areas of pasture and dispersed farms. There are smaller areas of woodland and semi-natural mosaic habitat. There are a number of disused sand quarries including those at what are now Shire Oak Park Local Nature Reserve and Pinfold Lane Quarry Local Nature Reserve. Barr Beacon Local Nature Reserve is in the south of the sub-area comprising acid grassland, scrub, plantation woodland and recently created dry heathland. Druid's Heath Golf Course and Streetly Crematorium are also within the sub-area.

Topography

In the south of the sub-area Barr Beacon is the highest point in Walsall at 236 metres. From here the land falls away and levels out to the north and east to 130 metres, before rising again to 180 m at Shire Oak Park.

Geology

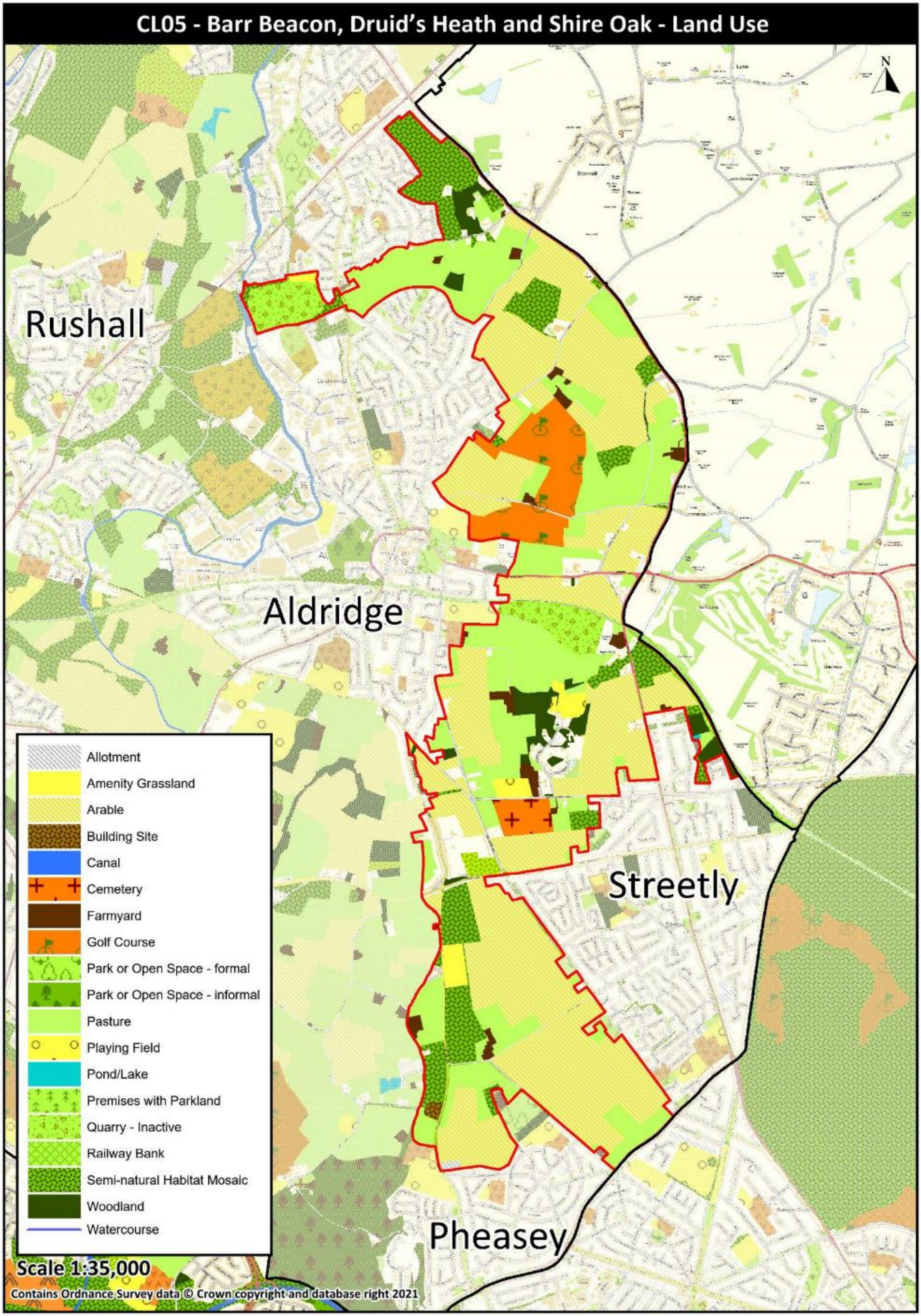
Dominated by Triassic Rocks (undifferentiated) Sandstone and Conglomerate, Interbedded sedimentary bedrock formed approximately 200 to 251 million years ago in the Triassic Period. In the north-west of the sub-area are Warwickshire Group Siltstone and Sandstone with Subordinate Mudstone. These sedimentary bedrocks formed approximately 271 to 312 million years ago in the Permian and Carboniferous Periods.

Geopark Sites

- Shire Oak Quarry Local Nature Reserve (GR SK060037)
- Barr Beacon Local Nature Reserve and Pinfold Lane Quarry (GR SP06099723)

Soils

The ecological sub-area is dominated by freely draining slightly acid sandy soils, whilst in the south-west is an area of freely draining very acid sandy and loamy soils. There are also small areas of freely draining slightly acid loamy soils, slightly acid loamy and clayey soils with impeded drainage, and in the east around the Footherley Brook loamy and sandy soils with naturally high groundwater and a peaty surface.


CL05 - Barr Beacon, Druid's Heath and Shire Oak - Land Use
N
Rushall
Aldridge
Streetly
Pheasey
Allotment
Amenity Grassland
Arable
Building Site
Canal
Cemetery
Farmyard
Golf Course
Park or Open Space - formal
Park or Open Space - informal
Pasture
Playing Field
Pond/Lake
Premises with Parkland
Quarry - Inactive
Railway Bank
Semi-natural Habitat Mosaic
Woodland
Watercourse
Scale 1:35,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Historic Landscape Character Areas			
Reference	WL09	**Name**	Barr Beacon & Aldridge Fields
The ecological sub-area is dominated by the eastern part of WL09 Barr Beacon & Aldridge Fields. This Character Area is situated in the east of the borough and is the most rural landscape in Walsall, with field systems covering 66% of its area. It has a mixed geology situated on mudstone and limestone in the west, sandstone, mudstone and conglomerate in the in the centre and sandstone in the east. Rushall Hall in the west lies on coal measures. The modern character of the area is defined largely by agricultural land and dispersed farms. The area also includes modern recreational land (golf courses), woodland, two areas of settlement, and an area of surviving ancient heathland (Barr Beacon). Historically the Character Area was in use as medieval open fields associated with Walsall, Aldridge, Rushall, Stonnal and Great Barr. In the centre of the Character Area there were several medieval moated sites and many of the trackways and roads in this area are likely to be medieval in origin. The earliest settlements in the area are Great Barr, which was mentioned in a charter of AD 957, and Rushall, which was recorded in the Domesday Survey of 1086. The surviving field systems in the Character Area were enclosed by either piecemeal enclosure in the late medieval/ early post-medieval periods from open field or were enclosed out of Aldridge Heath by Parliamentary Act.			

Historic Environment Area Designations [1]			
Reference	AHHLV 19	**Name**	Shire Oak Quarry
A large former sand and gravel extraction site which started as a marl pit in the early 19th century.			
Reference	AHHLV 15	**Name**	Kings Hayes Historic Field System
A well-preserved historic field system, which contains evidence of medieval strip fields and a mixture of cropmark and earthwork ridge and furrow.			
Reference	APA 5	**Name**	Castlefort
A scheduled Iron Age hillfort called Castlefort (NHLE ref: 1017244). The scheduled hillfort covers a 1.5ha area and is set in a naturally defensible position.			
Reference	APA 19	**Name**	Earthwork Mound at Aldridge
A small Tumulus, possibly the remains of a Bronze Age Barrow or a Windmill mound.			
Reference	AHHLV 3	**Name**	Bourne Vale
Was part of the open fields associated with Aldridge during the medieval period. It has a high potential to contain prehistoric remains and contains an area of ancient woodland, eroded ridge and furrow.			
Reference	APA 3	**Name**	Bourne Pool Area
Contains a range of archaeological remains including the site of a medieval iron mill and pool, a 15th-century charcoal burning site, a possible burnt mound and a Mesolithic - Neolithic flint scatter.			
Reference	AHHLV 11	**Name**	Great Barr Beacon
Contains an isolated north-south ridge of Bunter Pebble Beds and is the possible site of an Anglo-Saxon beacon. A number of prehistoric and Roman finds have been recorded within the area and the AHHLV contains the proposed location of an Iron Age Hillfort although no evidence of the hillfort has been discovered here.			
Reference	AHHTV 1	**Name**	Scattered Settlement at Over End
Comprises the remains of a dispersed linear settlement formed from a cluster of buildings probably built in the 18th century.			

Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame, Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Crane Brook - source to Footherley Brook	Poor (2019)	Poor (2019)	Fail (2019)
Footherley Brook from Source to Black-Bourne Brook	Poor (2019)	Poor (2019)	Fail (2019)
Plants Brook Catchment (trib of Tame)	Moderate (2019)	Moderate (2019)	Fail (2019)
Ford Brook from Source to River Tame	Moderate (2019)	Moderate (2019)	Fail (2019)
Tame - conf two arms to R Rea	Moderate (2019)	Moderate (2019)	Fail (2019)

Key Habitats [2]			
Broad Habitat Type	Arable & Horticultural	**Priority Habitat**	
Arable agriculture dominates much of the sub-area. These fields are mostly of 18th and 19th century Parliamentary enclosure origin. No Priority Habitat Arable Field Margins have been recorded.			
Broad Habitat Type	Boundary & Linear Features	**Priority Habitat**	Hedgerows
Numerous field boundary hedgerows throughout the sub-area associated with mostly rectilinear fields created through Parliamentary enclosure, though some may be from earlier piecemeal enclosure in the late medieval/ early post-medieval periods. Only a small proportion of the hedgerows have been assessed against the Local Wildlife Sites selection criteria and of these a number in the central and northern parts of the sub-area have been selected as SLINCs. These are described as having a diverse woody component with mature standards and an acidic field-layer. The designated hedgerows form the boundaries to roads and tracks and are likely to be of more ancient origin than the more numerous rectilinear field boundary hedgerows of 18th and 19th century enclosures.			
Broad Habitat Type	Standing Open Waters	**Priority Habitat**	Ponds
A number of ponds have been recorded within designated SINCs.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
Two headwater streams have been recorded in the sub-area. These are a tributary of the Anchor Brook which rises in the north-west of the sub-area and flows west, and the Footherley Brook which rises in the centre of the sub-area in Corporation Wood and flows east.			
Broad Habitat Type	Acid Grassland	**Priority Habitat**	Lowland Dry Acid Grassland
Species-poor lowland dry acid grassland is present at Barr Beacon Local Nature Reserve. A small number of pastures within the sub-area are described as unimproved and supporting acid to neutral grassland with a diverse flora. Pastures are frequent throughout the sub-area and further areas of acidic grassland may be present. Some roadside grasslands may also support the Priority Habitat.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	
Areas of grazed pastures, roadside grasslands and grasslands of more recent origin - such as at inactive quarries - may be neutral.			
Broad Habitat Type	Dwarf Shrub Heath	**Priority Habitat**	Lowland Heathland
There are small areas of lowland heathland at Barr Beacon Local Nature Reserve which have been created via the strewing of cuttings from nearby semi-natural lowland heathland sites. There are records of Heather and other heathland species at Branton Hill Quarry and Shire Oak Local Nature Reserve.			

Key Habitats [2]			
Broad Habitat Type	Improved Grassland	**Priority Habitat**	Coastal and Floodplain Grazing Marsh
There are potentially areas of coastal and floodplain grazing marsh along the Footherley Brook.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	
The woodlands in the sub-area are mostly of planted or recent secondary origin and are described as having a botanically poor acidic field-layer. A number of these sites are designated as SLINC.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	Traditional Orchards
A number of small orchards associated with houses have been recorded on the Traditional Orchards HAP Inventory 2020.			

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Jackdaw, Kestrel, Lapwing, Linnet, Rook, Starling, Stock Dove, Whitethroat, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Garden Warbler, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Lesser Redpoll, Long-tailed Tit, Robin, Siskin, Song Thrush, Sparrowhawk, Treecreeper, Willow Warbler.
Water & Wetland	Common Reed Bunting, Eurasian Coot, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Grebe, Mallard, Moorhen.
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Cuckoo, Eurasian Magpie, Greylag Goose, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Pied Wagtail, Swallow, Swift, Whinchat.
Amphibians & Reptiles	
Amphibians	*Common Frog, Common Toad, Great Crested Newt, Smooth Newt.*
Reptiles	none
Mammals	
Bats	*Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Noctule, Natterer's Bat, Noctule Bat, Soprano Pipistrelle, Whiskered/Brandt's Bat.*
Other	*Eurasian Badger, West European Hedgehog.*
Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Carex paniculata, Carex remota, Carex sylvatica, Chaerophyllum temulum, Deschampsia flexuosa, Dioscorea communis, Equisetum sylvaticum, Equisetum telmateia, Frangula*

	alnus, Lysimachia nemorum, Malus sylvestris, Mercurialis perennis, Moehringia trinervia, Oxalis acetosella, Persicaria hydropiper, Quercus petraea, Stellaria holostea, Teucrium scorodonia.
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Aira caryophyllea, Ajuga reptans, Brachypodium sylvaticum, Caltha palustris, Campanula rotundifolia, Centaurium erythraea, Cerastium semidecandrum, Cirsium dissectum, Cirsium palustre, Dactylorhiza praetermissa, Danthonia decumbens, Daucus carota subsp. carota, Deschampsia flexuosa, Equisetum sylvaticum, Galium saxatile, Isolepis setacea, Leontodon hispidus, Lotus pedunculatus, Nardus stricta, Odontites vernus, Phleum bertolonii, Potentilla erecta, Potentilla sterilis, Rhinanthus minor, Sherardia arvensis, Silene flos-cuculi, Stellaria holostea, Succisa pratensis, Trifolium medium, Trifolium arvense, Trifolium medium, Vicia tetrasperma.*
Heathland	*Aira praecox, Calluna vulgaris, Campanula rotundifolia, Carex nigra, Carex pilulifera, Danthonia decumbens, Deschampsia flexuosa, Erica cinerea, Galium saxatile, Luzula multiflora, Nardus stricta, Potentilla erecta, Salix aurita, Teucrium scorodonia, Ulex gallii.*
Mires	*Achillea ptarmica, Angelica sylvestris, Athyrium filix-femina, Caltha palustris, Carex nigra, Carex panicea, Carex paniculata, Carex viridula subsp. oedocarpa, Cirsium dissectum, Cirsium palustre, Dactylorhiza praetermissa, Dryopteris carthusiana, Eleocharis palustris, Galium palustre, Glyceria declinata, Isolepis setacea, Juncus acutiflorus, Juncus bulbosus, Lotus pedunculatus, Luzula multiflora, Mentha arvensis, Persicaria hydropiper, Pulicaria dysenterica, Ranunculus hederaceus, Silene flos-cuculi, Stellaria alsine, Succisa pratensis, Triglochin palustre, Veronica beccabunga.*
Open Water	*Butomus umbellatus, Carex paniculata, Eleocharis palustris, Galium palustre.*
Post-industrial (water-stressed)	*Agrimonia eupatoria, Aira caryophyllea, Aira praecox, Centaurea scabiosa, Centaurium erythraea, Cerastium semidecandrum, Daucus carota subsp. carota, Deschampsia flexuosa, Filago vulgaris, Jacobaea erucifolia, Reseda lutea, Senecio viscosus, Sherardia arvensis, Trifolium arvense, Trifolium medium, Vicia tetrasperma.*
Cultivation	*Apera spica-venti, Fumaria muralis subsp. boraei, Thlaspi arvense, Vicia tetrasperma.*

Ecological Connectivity

Local Habitat Network

Direct ecological connection to the local habitat network in Core Landscape 04 (Brownhills Common & Pelsall) and Core Landscape 06 (Park Lime Pits, Cuckoo's Nook & Great Barr Hall).

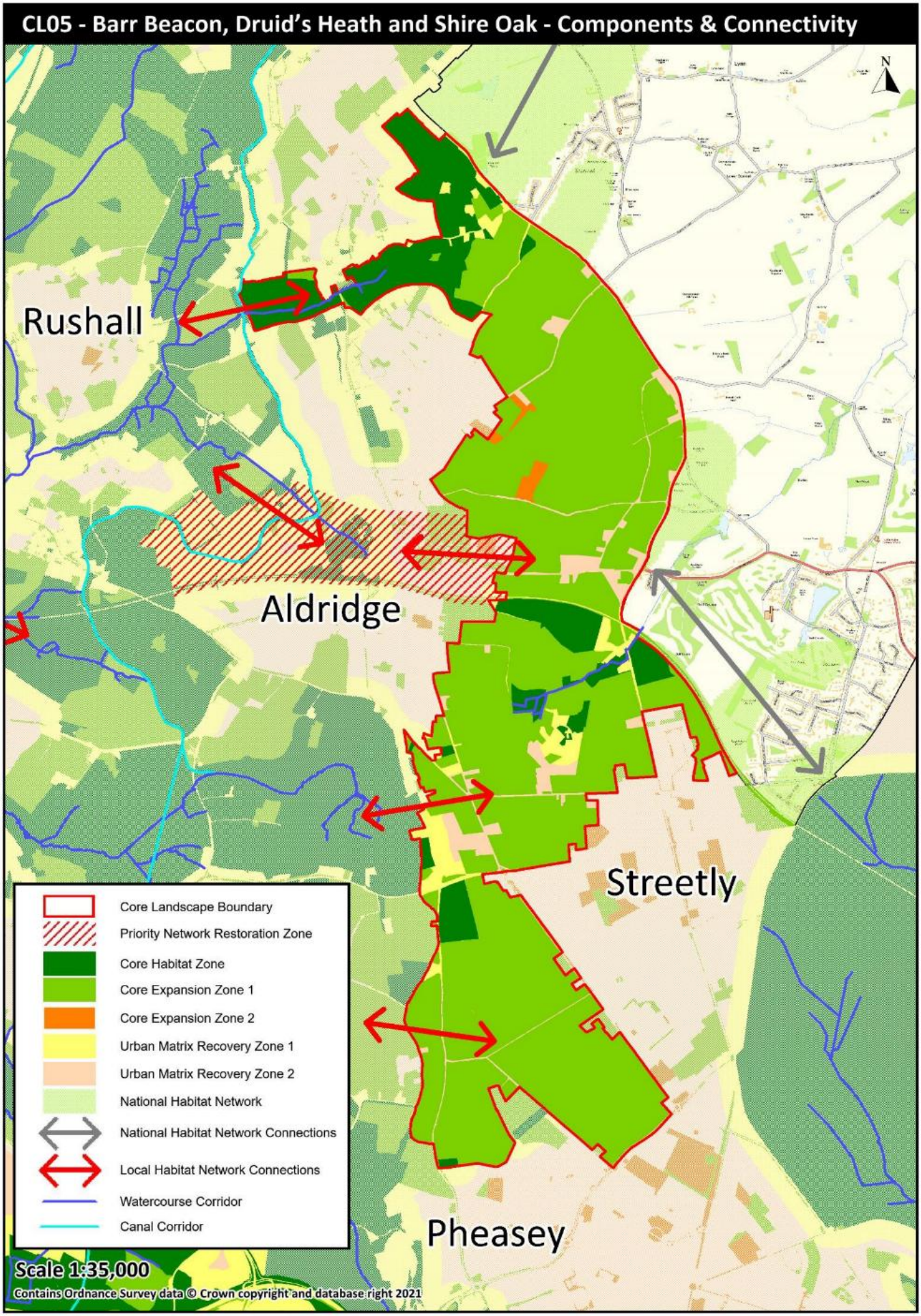
Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping (EcoRecord and Staffordshire Ecological Record, 2021) identifies a heathland connectivity bottleneck between the two main heathland sites within the ecological sub-area (Shire Oak Park and Barr Beacon) which are located at the north and south of the sub-area respectively.

National Habitat Network

Direct ecological connection to the National Habitat Network in rural South Staffordshire.

Indirect connection to Sutton Park NNR (Birmingham) via Little Aston Golf Course and approximately 0.5 km urban development (Garden - large, mature). Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping identifies a heathland connectivity bottleneck between Shire Oak Park and Sutton Park NNR (Birmingham).

Indirect connection to Cannock Chase SAC (Staffordshire) via rural heathland sites in Walsall and Staffordshire (inc. Chasewater and The Southern Staffordshire Coalfield Heaths SSSI) identified in Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping.


CL05 - Barr Beacon, Druid's Heath and Shire Oak - Components & Connectivity
N
Rushall
Aldridge
Streetly
Pheasey
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Scale 1:35,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Arable Field Margins	Create new	New habitat
Hedgerows	Improve management of existing	Habitat in good condition
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Lowland Heathland	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland dry acid grassland	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Create new	New habitat at existing and new sites
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Improve soil management	Reduced silt inputs to watercourses
	Reduce artificial inputs	Improved chemical status
	Restore hydromorphology (naturalise modified channels)	Improved ecological status

Target Species	
Species/Species Group	**Measure**
Adder	Confirmed recent records
Breeding farmland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown Long-eared Bat	Confirmed recent records
Common Lizard	Confirmed recent records
Cuckoo	Confirmed recent records
Great Crested Newt	Increased abundance and number of sites
Heather	Increased abundance and number of sites
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance
Post-industrial axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
Pinfold Lane Quarry	Vegetation removal/alternative Focus Habitat restoration or creation	Improved access to exposures/ alternative Focus Habitat restored or created
Shire Oak Quarry	Vegetation removal/alternative Focus Habitat restoration or creation	Improved access to exposures/ alternative Focus Habitat restored or created

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL05	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Woodland enhancement and planting on non-grassland or heathland sites.
	Field boundary hedgerow restoration and creation.
Priority Network Restoration Zone linking CL04 and CL05	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of street trees along urban roads.
	Planting of standard trees in parks, green spaces and school grounds.
	Creation of new ponds.
	Enhancement of Daw End Branch Canal corridor including increasing extent of adjoining terrestrial habitats.
National Habitat Network	
Staffordshire Heathlands inc. Chasewater and The Southern Staffordshire Coalfield Heaths SSSI	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Field boundary hedgerow restoration and creation.
	Planting of street trees along urban roads.
	Creation of new ponds and wetlands.
Sutton Park	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Field boundary hedgerow restoration and creation.
	Planting of street trees along urban roads.
	Creation of new ponds and wetlands.

Information and Data Sources		
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Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Fish: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Sandwell Valley	**Sub-area ref.**	CL07
Natural Character Area	Cannock Chase and Cank Wood	**NCA ref.**	67
Local Authority Area	Sandwell and Walsall	**Area km^2**	9.01

Ecological Sub-area Description

Overview

Sandwell Valley comprises a large area of open space at the approximate centre of the Birmingham and Black Country conurbation, and forms part of the Black Country's eastern boundary with Birmingham. The ecological sub-area is bisected by the M5 and M6 motorways, and almost entirely surrounded by urban development. A section of the River Tame flows west-east through the area and there are numerous small tributaries of this. The Tame Valley Canal traverses the northern part of the area (through the M5/M6 motorway junction), as does an active railway line.

The landscape of the ecological sub-area remains dominated by the pre-urban field pattern, though only parts of this remain actively farmed. In the south of the area are the remains of Sandwell Hall country house and earlier Benedictine priory, as well as features such as pools associated with the 18th century designed landscape. Ancillary buildings, stables and parts of a walled garden remain standing and have been restored for use as Sandwell Park Farm visitor centre. To the north of Swan Pool are the remains of Sandwell Park Colliery which was operational in the early 20th century.

A large floodwater storage lake (Forge Mill Lake) was constructed alongside the River Tame in the east of the ecological sub-area in the early 1980s. Part of the lake and the surrounding area are managed as RSPB Sandwell Valley nature reserve.

Land Use

Much of the southern part of Sandwell Valley is accessible open space including at Forge Mill Lake, Priory Woods and Sot's Hole Local Nature Reserves, as well as the more formal Dartmouth Park and King George Playing Fields in the south-west. There are also two golf courses (Sandwell Park and Dartmouth Golf Course) and West Bromwich Crematorium. The remainder of the southern section is farmed, with ley pasture, arable and permanent pasture all present.

Further north is the large triangular junction of the M5 and M6 motorways within which is a sewage treatment works, whilst to the north of the M6 is an electivity sub-station. The remainder of the northern section is comprised of further informal accessible open space, school grounds, Walsall Golf Course and a number of sports pitches, as well as Peak House Farm field system of irregular pre-enclosure fields which are actively farmed (see Historic Environment Area Designations).

Topography

The highest elevations within Sandwell Valley are at the southern and close to the northern end at an elevation of 170 meters. From these points the land slopes gently down to the valley of the River Tame which is at an elevation of 100 metres.

Geology

The southern part of the ecological sub-area is dominated by sedimentary Alveley Member mudstone bedrock formed between 309.5 and 308 million years ago during the Carboniferous period. The northern part is dominated by Coalbrookdale Formation mudstone formed between 433.4 and 427.4 million years ago during the Silurian period, with a small area of Pennine Lower Coal Measures Formation Mudstone, siltstone and sandstone formed between 319 and 318 million years ago during the Carboniferous period. In the central area there is a formation of Pennine Middle Coal Measures Formation mudstone, siltstone and sandstone formed between 318 and 309.5 million years ago during the Carboniferous period.

Parts of the southern area are overlain with superficial deposits of Devensian diamicton till formed between 116 and 11.8 thousand years ago during the Quaternary period, and Mid Pleistocene Diamicton till formed between

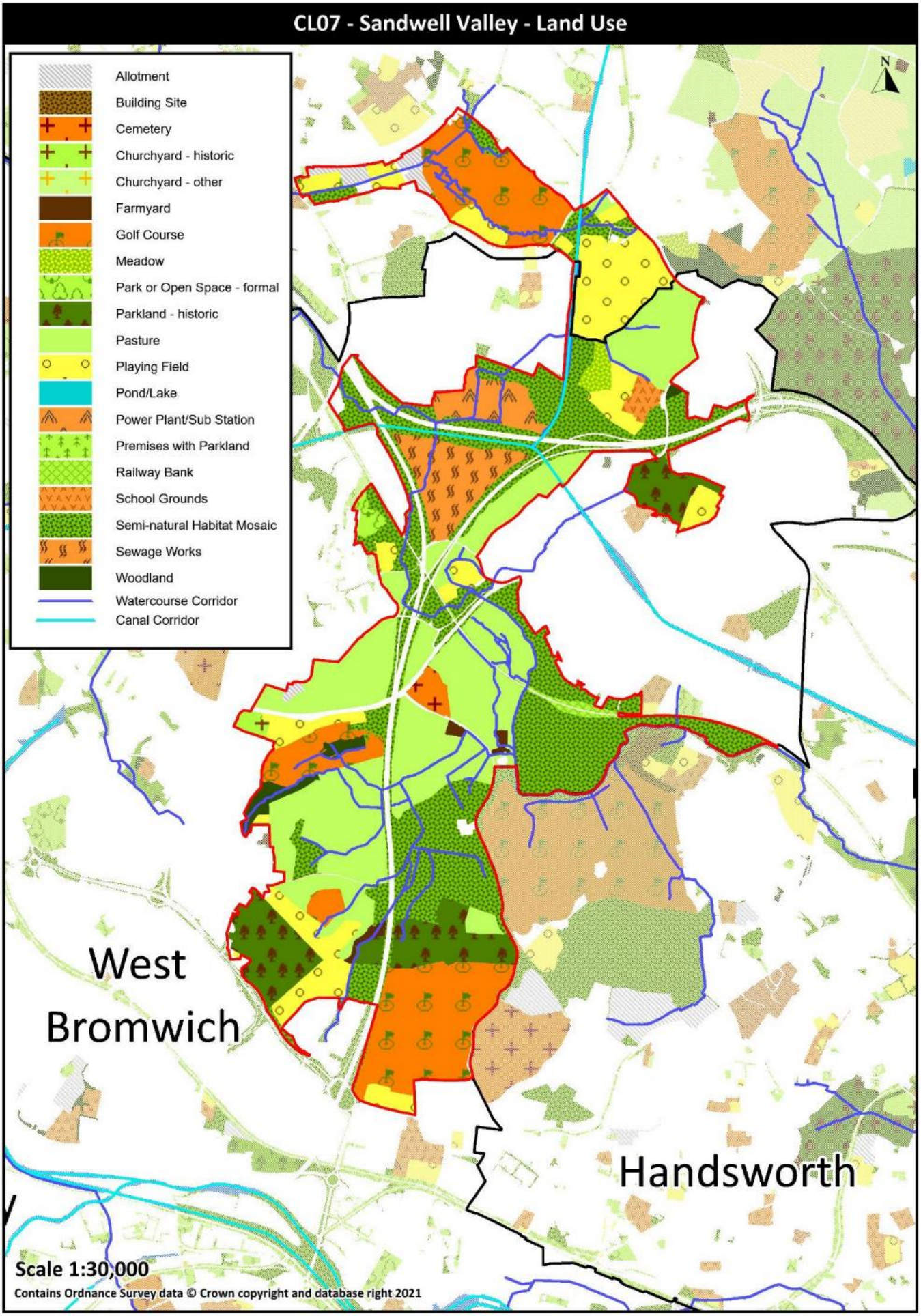
860 and 116 thousand years ago during the Quaternary period. Following the course of the River Tame there are river terrace deposits of sand and gravel formed between 2.588 million years ago and the present during the Quaternary period, and more recent alluvial clay, silt, sand and gravel formed between 11.8 thousand years ago and the present.

Geopark Sites

- Sandwell Valley Country Park (GR SP01939149)

Soils

The ecological sub-area is dominated by slowly permeable seasonally wet, slightly acid but base-rich loamy and clayey soils with moderate fertility and impeded drainage. In the north the soils are slowly permeable, seasonally wet acid loamy and clayey soils with low fertility and impeded drainage, and in the central area around Forge Mill Lake the soils are naturally wet, very acid sandy and loamy soils with very low fertility.


CL07 - Sandwell Valley - Land Use
Allotment
Building Site
Cemetery
Churchyard - historic
Churchyard - other
Farmyard
Golf Course
Meadow
Park or Open Space - formal
Parkland - historic
Pasture
Playing Field
Pond/Lake
Power Plant/Sub Station
Premises with Parkland
Railway Bank
School Grounds
Semi-natural Habitat Mosaic
Sewage Works
Woodland
Watercourse Corridor
Canal Corridor
N
West Bromwich
Handsworth
Scale 1:30,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Historic Landscape Character Areas			
Reference	SD07	**Name**	Sandwell Valley
The central and southern part of the ecological sub-area is coterminous with character areas SD07 Sandwell Valley, which is dominated by Sandwell Valley Country Park and agricultural land. The Character Area was originally part of the estate owned by the Earls of Dartmouth from the early 18th century. Sandwell Hall (demolished in 1928) was built by the first Earl on the site of the 12th century Benedictine priory close to the Sand Well spring. The Character Area contains the Registered Park and Garden Dartmouth Park which became public park in 1877.			
Reference	SD02	**Name**	Newton, Hamstead & Great Barr
Lying to the north of Sandwell Valley and comprising the north-eastern part of the ecological sub-area id SD02 Newton, Hamstead & Great Barr. The modern character of the area is dominated by 20th century residential housing, with areas of surviving fields in the north-west of the character area that continue beyond the Borough boundary into Walsall (WL09). Until the 20th century this area was largely agricultural, crossed by the Tame Valley Canal which opened in 1844.			
Reference	SD05	**Name**	Yew Tree
A small part of the ecological sub-area to the north of the M5/M6 junction lies within SD05 Yew Tree. The historic character of the area was defined almost entirely of agricultural land much of it worked from Delves Farm and Yew Tree Farm. Residential development began to cover this area after the First World War. The Tame Valley Canal, on the southern edge of the area, was opened in 1844 and, as such was one of the last Black Country canals.			
Reference	WL11	**Name**	South East Walsall
The northern part of the ecological sub-area lies within WL11 South East Walsall. During the medieval period this area was dominated by open fields with a small manor house or settlement at The Delves. There was also a large deer park to the west of Great Barr, although its extent is unknown. By the mid-18th century a mill had been established at New Mills in the south-west of the area and a country house has been constructed by the Delves. At this time the landscape was still largely agricultural and by the late 18th century- early 19th century woodland had been established in the south-east of the area near Great Barr and two further country houses had been built.			

Historic Environment Area Designations [1]			
Reference	APA 14	**Name**	Shustoke Farm Moated site
The APA contains earthworks remains of a possible medieval moated site. The moat is shown on the 1841 Tithe map. LiDAR shows remnants of the moat to the north and west and its survival was confirmed by a field survey carried out in 2001. There is therefore the potential for archaeological remains associated with the moat and potential medieval and post-medieval buildings. To the north of the moated site are the earthwork remains of three fish ponds linked to the moated site by leats. The moat, fish ponds and leats have the potential to contain waterlogged remains and there is potential for organic preservation.			
Reference	AHHLV 25	**Name**	Peak House Farm Field System
The AHHLV contains a well-preserved example of a pre-enclosure field system. Evidence of ridge and furrow is visible across the site as cropmarks (but no earthworks appear to survive). Prehistoric finds have been recovered within this area and cropmarks indicative of below-ground archaeological remains have also been identified, highlighting the archaeological potential of the area. Many of the field boundaries are marked by drainage ditches linked to the moated site to the south (APA 24) and a number of hedgerows are recorded as ancient hedgerows. LiDAR shows a small mound in the AHHLV (NGR 403764 295377).			
Reference	APA 24	**Name**	Peak House Farm Moated Site
The APA contains the remains of a possible moated site. The Environment Agency LiDAR shows the earthwork remains of a moat and a possible building platform within the APA. There is no building at this location on the 1817 OSD map, or 1st-4th edition OS maps, suggesting that the moated site is of medieval or early post-medieval date. The APA has the potential to contain below-ground archaeological remains associated with the manor house			

Historic Environment Area Designations [1]			
and the moat. The moat may contain waterlogged deposits, which would provide insight into land use in the area during the medieval period.			
Reference	APA 27	**Name**	The River Tame
The APA contains part of the route of the River Tame; there is considered to be potential for previously unknown prehistoric activity (including Bronze Age burnt mounds) and environmental evidence present associated with the former water course. Prior to the industrial revolution the land adjacent to the river would have been utilised for mills and other water-based industries. Accordingly, there is potential for archaeological remains associated with these features to survive. Aerial photographs show a number of tributaries and drainage channels associated with the river, which may be possible mill leats. The APA contains the infilled Old Forge Mill pool. There is potential for archaeological remains associated with the Old Forge and Mill. Part of the area was disturbed during the 19th century by the Grand Union Line Railway. However, the majority of the area remains relatively undisturbed. Some ridge and furrow earthworks are present within the APA.			
Reference	AHHLV 26	**Name**	Wigmore Farm Ridge and Furrow
The AHHLV contains the several areas of surviving earthwork ridge and furrow and a (possibly) medieval holloway. These features are surviving remnants of the open field system within the area. The field system in this area appears to date back to at least the 19th century, and may form part of a pre-enclosure field system that has been subject to some more recent boundary loss. Remnants of a watercourse and two ponds (fish ponds?) of unknown date are present within the AHHLV.			
Reference	APA 25	**Name**	All Saints Church
The APA contains All Saints Church and Graveyard. All Saints Church is situated on the site of a medieval church, elements of the 14th or 15th century tower survive within the present day Church. The church is surrounded by a graveyard, which has the potential to contain human remains dating from the medieval to post-medieval periods.			
Reference	APA 26	**Name**	Sot's Hole Stream
The APA contains the remains of a burnt mound and a stone mound as well as several recorded scatters of prehistoric flints. The APA is situated upon sand and gravel deposits resulting in the formation of natural springs in prehistoric times, which would have made it a focus for activity. The HER records a number of patches of ridge and furrow within the APA although these were not visible on the Environment Agency LiDAR survey of the site. Several drainage channels are evident within the APA and fish ponds and a dam are recorded in the very western part of the area (shown on 1817 Ordnance Survey drawings of the area) near Parsons Farm. The ponds and dams were used to control the flow of water supplied to the dams along the River Tame and its tributaries.			
Reference	AHHLV 48	**Name**	Chambers Wood
The AHHLV is an area of semi-natural ancient woodland. Accordingly, it has the potential to contain well preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Areas of semi-natural ancient woodland are areas of natural woodland which may have been subject to some previous woodland management and have been in use as woodland since at least the 1600s. Accordingly these areas have the potential to contain well preserved archaeological remains. Areas of ancient woodland represent surviving patches of the historic landscape that date back to the medieval or early post-medieval periods.			
Reference	AHHLV 50	**Name**	Dartmouth Golf Course Wood
The AHHLV is an area of semi-natural ancient woodland. Accordingly, it has the potential to contain well preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Areas of semi-natural ancient woodland are areas of natural woodland which may have been subject to some previous woodland management and have been in use as woodland since at least the 1600s. Accordingly these areas have the potential to contain well preserved archaeological remains. Areas of ancient woodland represent surviving patches of the historic landscape that date back to the medieval or early post-medieval periods.			
Reference	DLHHV 1	**Name**	Sandwell Park
The DLHHV was originally part of the estate associated with Sandwell Priory. It was later sold to the Earl of Dartmouth, who in turn sold it to West Bromwich Council in 1947. The park today contains remnants of the mid-18th century designed landscape although the original design has been eroded by the construction of later			

Historic Environment Area Designations [1]
transport infrastructure. During the inter-war period, parts of the site were used as a colliery. Several earlier features associated with the parkland including ornamental pools (Swan and Pleasure pools), an ice house and a ha-ha (a bank and ditch used to keep out animals) survive within the present day landscape. Swan Pool started life as a mill pool before being extended twice, firstly to take the extra water from the adjacent mines and secondly as a leisure facility. Earlier archaeological remains such as the scheduled remains of Sandwell Hall and the earlier Benedictine Priory, which is a scheduled monument (NHLE 1017763) and areas of non-designated ridge and furrow are also present, highlighting various land uses within the park over time. A number of archaeological features including a prehistoric burnt mound have been recorded within the site, further highlighting the archaeological interest of the area. The scheduled monument has a high level of archaeological interest, and could be directly impacted by unsympathetic development e.g. ground works.

Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Tame - confluence two arms to R Rea Water Body	Moderate (2019)	Moderate (2019)	Moderate (2019)

Key Habitats [2]			
Broad Habitat Type	Woodland	**Priority Habitat**	Lowland mixed deciduous woodland
There are two areas of woodland designated as Ancient Semi-natural Woodland in the south-west of the ecological sub-area (Chambers Wood and Bluebell Wood). There are further small areas of mature Oak woodland scattered through the south-west which may be ancient or old plantations.			
Broad Habitat Type	Woodland	**Priority Habitat**	
Younger woodland is frequent throughout Sandwell Valley, either as plantations or spontaneous woodland on abandoned sites. Planted areas include around Forge Mill Lake, along fairways in the area's many golf courses, around the sewage works and along some of the motorway embankments. Older ornamental plantations are found around the parkland of the former Sandwell Hall. Young woodland now occupies the site of the former Sandwell Park Colliery, though it is not known if this is planted or spontaneous.			
Broad Habitat Type	Grassland	**Priority Habitat**	Lowland meadows
There are small areas of remnant meadow in Priory Woods Local Nature Reserve, though the extent or condition of this habitat is not known. The irregular fields of the Peak House Farm field system have in recent years been cut for hay, however, these are not floristically diverse and are likely to have been managed as pasture prior to this.			
Broad Habitat Type	Grassland	**Priority Habitat**	
Grassland of various sward types dominates much of Sandwell Valley. Permeant pasture exists in the southern part of the ecological sub-area, with the surviving ridge and furrow at the Wigmore Farm being a notable surviving remnant of the former open field system of the area. Throughout the publicly accessible parts of Sandwell Valley there are areas of irregularly managed grassland that is relatively species-poor and rank. There are also significant areas of regularly mown grassland in the formal parks and on the golf course fairways.			
Broad Habitat Type	Boundary	**Priority Habitat**	Hedgerows
Numerous field boundary hedgerows exist throughout the ecological sub-area, either demarcating the boundaries of existing fields or as remnants within areas now used for alternative purposes. It is thought that most of Sandwell Valley was enclosed from mediaeval open fields (see Wigmore Farm), however, the fields at Peak House Farm are considered to be an uncommon example of earlier enclosure. Here the field-pattern is notably more irregular and the hedgerows have been allowed to grow to a substantial size.			
Broad Habitat Type	Freshwater	**Priority Habitat**	Rivers

A stretch of the River Tame runs through Sandwell Valley, entering the ecological sub-area in the north-west adjacent to the M6 and meandering south and then eastwards around Forge Mill Lake and exiting into Birmingham. The channel is heavily modified, being of uniform width and with raised flood banks, with few natural erosion and depositional features, and very little aquatic vegetation. The catchment is classified Moderate status by the Environment Agency and suffers from urban diffuse pollution.

There are numerous minor channels which flow into the River Tame from across the ecological sub-area. These range from unmodified watercourses to artificial drainage channels.

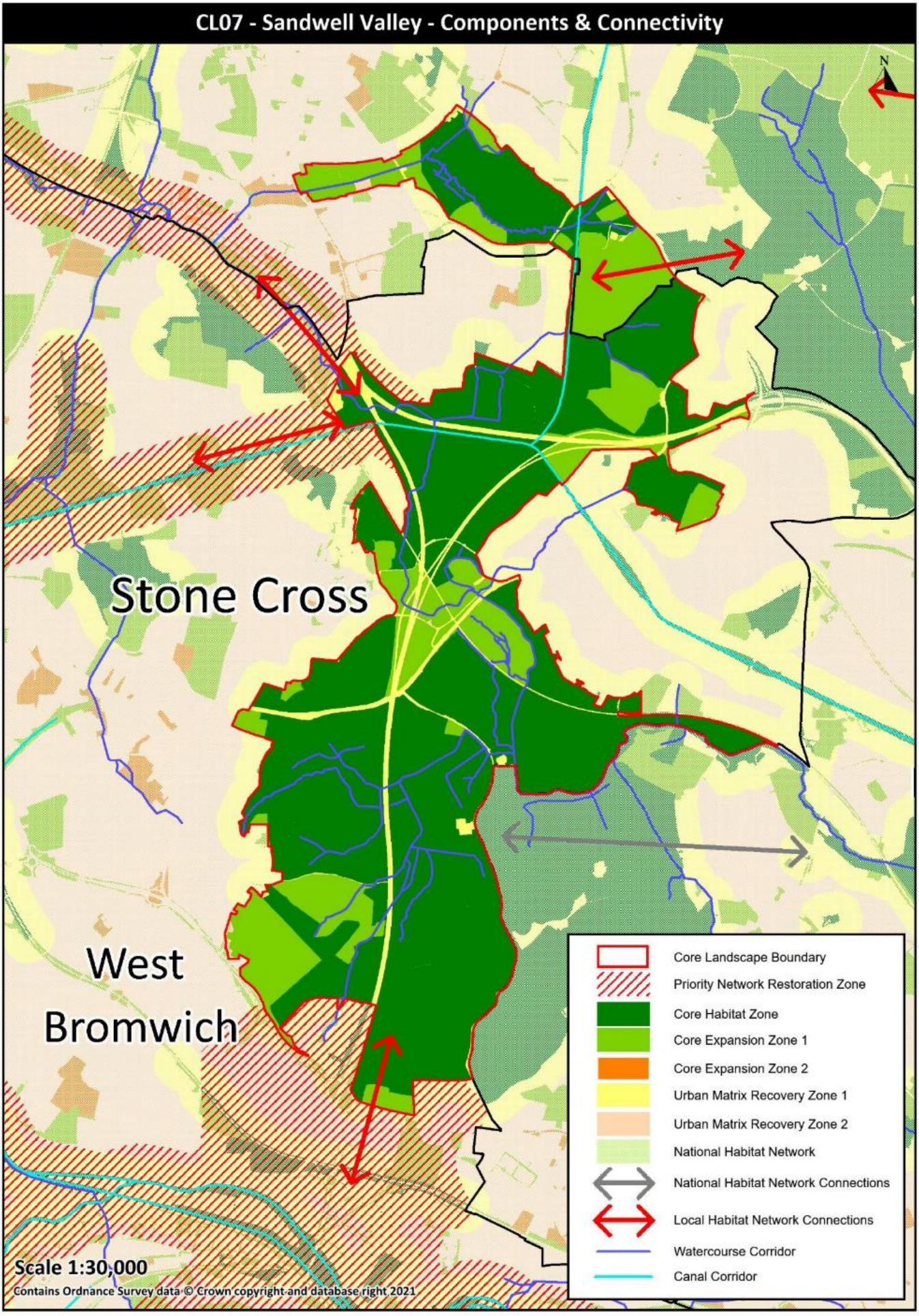
Broad Habitat Type	Freshwater	**Priority Habitat**	Eutrophic standing waters

There are a number of artificial standing waters throughout Sandwell Valley. These include an ornamental pool and boating lake in Dartmouth Park, the large floodwater storage lake Forge Mill Lake, and those associated with the former grounds of Sandwell Hall (Pleasure Pool and Swan Pool). These vary significantly in ecological value, with significant works having been undertaken for the benefit of wetland birds at RSPB Sandwell Valley (parts of Forge Mill Lake), and wetland and adjacent terrestrial vegetation having developed at the Pleasure Pool. Conversely the boating lake has artificial banks, and very few naturalised features and associated species.

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Jackdaw, Kestrel, Lapwing, Rook, Starling, Stock Dove, Western Yellow Wagtail, Whitethroat, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Garden Warbler, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Lesser Redpoll, Lesser Whitethroat, Long-tailed Tit, Marsh Tit, Redstart, Robin, Siskin, Song Thrush, Sparrowhawk, Spotted Flycatcher, Tawny Owl, Treecreeper, Willow Tit, Willow Warbler.
Water & Wetland	Cetti's Warbler, Common Merganser, Common Reed Bunting, Common Sandpiper, Eurasian Coot, Great Crested Grebe, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Egret, Little Grebe, Mallard, Moorhen, Mute Swan, Oystercatcher, Redshank, Reed Warbler, Sand Martin, Sedge Warbler, Snipe, Teal, Tufted Duck, Western Yellow Wagtail.
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Eurasian Magpie, Gadwall, Golden Plover, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Peregrine, Pied Wagtail, Pochard, Red Kite, Shelduck, Shoveler, Stonechat, Swallow, Swift, Whinchat.
Amphibians & Reptiles	
Amphibians	Common Frog, Common Toad, Great Crested Newt, Smooth Newt.
Reptiles	none
Mammals	
Bats	Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Noctule, Nathusius's Pipistrelle, Noctule Bat, Soprano Pipistrelle.
Other	Eurasian Badger, Eurasian Common Shrew, European Water Vole, Harvest Mouse, West European Hedgehog.
Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Blechnum spicant, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Carex paniculata, Carex remota, Carex sylvatica,*

	Chrysosplenium oppositifolium, Deschampsia flexuosa, Dioscorea communis, Dryopteris affinis, Epipactis helleborine, Equisetum telmateia, Festuca gigantea, Filipendula ulmaria, Fragaria vesca, Frangula alnus, Galium odoratum, Lysimachia vulgaris, Malus sylvestris, Melica uniflora, Mercurialis perennis, Milium effusum, Molinia caerulea, Oxalis acetosella, Persicaria hydropiper, Quercus petraea, Sorbus torminalis, Stellaria holostea, Teucrium scorodonia, Tilia cordata, Torilis japonica, Valeriana officinalis, Veronica montana.
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Agrostis canina, Aira caryophyllea, Ajuga reptans, Blackstonia perfoliata, Blechnum spicant, Brachypodium sylvaticum, Caltha palustris, Carex disticha, Centaurium erythraea, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza fuchsii x praetermissa = D. x grandis, Dactylorhiza praetermissa, Daucus carota subsp. carota, Deschampsia flexuosa, Euphrasia officinalis agg., Festuca filiformis, Filipendula ulmaria, Fragaria vesca, Galium mollugo subsp. erectum, Galium saxatile, Lathyrus nissolia, Leontodon hispidus, Linum catharticum, Lotus pedunculatus, Nardus stricta, Odontites vernus, Ornithopus perpusillus, Persicaria bistorta, Phleum bertolonii, Potentilla anglica, Potentilla erecta, Potentilla sterilis, Rhinanthus minor, Sanguisorba officinalis, Silene flos-cuculi, Stachys officinalis, Stellaria holostea, Succisa pratensis, Trifolium medium.*
Heathland	*Agrostis canina, Aira praecox, Blechnum spicant, Calluna vulgaris, Carex nigra, Deschampsia flexuosa, Festuca filiformis, Galium saxatile, Juncus squarrosus, Molinia caerulea, Nardus stricta, Ornithopus perpusillus, Potentilla erecta, Salix aurita, Teucrium scorodonia, Ulex gallii.*
Mires	*Achillea ptarmica, Agrostis canina, Angelica sylvestris, Athyrium filix-femina, Caltha palustris, Carex acutiformis, Carex nigra, Carex paniculata, Carex riparia, Carex viridula subsp. oedocarpa, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza fuchsii x praetermissa = D. x grandis, Dactylorhiza praetermissa, Dryopteris carthusiana, Eleocharis palustris, Epilobium palustre, Equisetum fluviatile, Equisetum palustre, Filipendula ulmaria, Galium palustre, Glyceria declinata, Glyceria notata, Hydrocotyle vulgaris, Hypericum tetrapterum, Jacobaea aquatica, Juncus acutiflorus, Juncus squarrosus, Lotus pedunculatus, Lysimachia vulgaris, Menyanthes trifoliata, Molinia caerulea, Persicaria hydropiper, Potentilla palustris, Pulicaria dysenterica, Ranunculus aquatilis, Ranunculus aquatilis, Ranunculus flammula, Ranunculus hederaceus, Silene flos-cuculi, Sparganium emersum, Stachys palustris, Stellaria alsine, Succisa pratensis, Thalictrum flavum, Valeriana officinalis, Veronica beccabunga.*
Open Water	*Bidens tripartita, Butomus umbellatus, Carex acutiformis, Carex paniculata, Carex riparia, Eleocharis palustris, Equisetum fluviatile, Galium palustre, Glyceria notata, Luronium natans, Menyanthes trifoliata, Potamogeton perfoliatus, Ranunculus aquatilis, Ranunculus aquatilis, Sagittaria sagittifolia, Schoenoplectus lacustris.*
Post-industrial (water-stressed)	*Agrimonia eupatoria, Aira caryophyllea, Aira praecox, Anthyllis vulneraria, Asplenium adiantum-nigrum, Blackstonia perfoliata, Blechnum spicant, Centaurea scabiosa, Centaurium erythraea, Daucus carota subsp. carota, Deschampsia flexuosa, Erigeron acris, Filago vulgaris, Fragaria vesca, Jacobaea erucifolia, Linum catharticum, Ophrys apifera, Ornithopus perpusillus, Orobanche minor, Reseda lutea, Senecio viscosus, Silene vulgaris, Trifolium arvense, Trifolium medium, Trifolium micranthum, Trifolium striatum, Vicia tetrasperma.*
Cultivation	*Chenopodium polyspermum, Orobanche minor, Stachys arvensis, Thlaspi arvense, Vicia tetrasperma.*

Ecological Connectivity
Local Habitat Network
Sandwell Valley links directly with Core Landscape 06 Park Lime Pits, Cuckoo's Dingle & Great Barr Hall which is located to the north. There are additional links to the Priority Network Restoration Zones M6 Motorway Corridor and Tame Valley Canal to the north-west, and Birmingham Canal to the south.
National Habitat Network
Sandwell Valley links to the national habitat network in Birmingham to the north-east.


CL07 - Sandwell Valley - Components & Connectivity
N
Stone Cross
West Bromwich
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Scale 1:30,000
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Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Hedgerows	Improve management of existing	Habitat in good condition
	Reinstate historic/grubbed-out	New habitat
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Ponds	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels)	Improved ecological status
	Reduce artificial inputs	Improved chemical status
Eutrophic Standing Waters	Enhance marginal and emergent vegetation	Increased floral diversity and habitat structure improved
Lowland meadows	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Diversify field-layer component of plantations	Increased floral diversity

Target Species	
Species/Species Group	**Measure**
Barn Owl	Confirmed recent records
Bats	Increased abundance of confirmed species
Breeding farmland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown Hare	Confirmed recent records
Brown Long-eared Bat	Confirmed recent records
Brown/Sea Trout	Confirmed recent records
European Otter	Increased signs, confirmed breeding population
European Water Vole	Confirmed recent records
Great Crested Newt	Increased abundance and number of breeding ponds
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Heathland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
Sandwell Valley Country Park	Unknown	n/a

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL07	Restoration of modified channel of the River Tame and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow recreation, restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.
Priority Network Restoration Zones (Tame Valley Canal and Birmingham Canal)	Increased marginal vegetation through the installation of coir roles along hard banks.
	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of standard trees (including fruit trees) along canal corridor.
Priority Network Restoration Zone (M6 Motorway Corridor)	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting in adjacent areas of open space.
National Habitat Network	
Connection	**Action**
Birmingham section of Sandwell Valley (to south-east)	Restoration of modified channel of the River Tame and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow recreation, restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html	2021
	Black Country UNESCO Global Geopark sites names and location information https://blackcountrygeopark.dudley.gov.uk/bcg/	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: http://www.landis.org.uk/soilscapes/	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) *Draft Black Country Local Nature Recovery Opportunity Map*	2021
	EcoRecord et al. (2021) *Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping*.	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) *Black Country Historic Landscape Characterisation* [data-set]. York: Archaeology Data Service [distributor] https://doi.org/10.5284/1000030	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

[1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

Archaeological Priority Areas (APA): sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

Areas of High Historic Townscape Value (AHHTV): areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

Designed Landscapes of High Historic Value (DLHHV): landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

Areas of High Historic Landscape Value (AHHLV): these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

[2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

[3] KEY SPECIES

Bird Indicators: Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Fish: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Illey, Lapal and Hasbury	**Sub-area ref.**	CL13
Natural Character Area	Arden	**NCA ref.**	97
Local Authority Area	Dudley	**Area km^2**	4.04

Ecological Sub-area Description

Overview

Illey, Lapal and Hasbury comprises an area of countryside in the south of the borough of Dudley and encompasses parts of the former parishes and townships of Lutley, Hasbury, Hunnington, Illey, Lapal and Northfield. The ecological sub-area forms part of a large rural landscape which predominantly lies in Worcestershire, with the western and southern boundaries (between Dudley and rural Bromsgrove) following the historic parish/township boundaries. To the north lie the modern suburbs of Halesowen, whilst to the east is the M5 motorway.

The landscape is comprised of an historic pattern of small irregular fields and woodlands with numerous unmodified headwaters of the River Stour, and contains extensive prehistoric, Roman and medieval remains. There are a large number of sites designated for their nature conservation value, including two ancient meadows designated as Illey Pastures Site of Special Scientific Interest.

Land Use

The land use is almost entirely agricultural, with numerous small pastures and permanent grasslands, and with some larger fields (frequently where historic field divisions have been removed) arable. Small dingle woodlands occupy a number of the shallow valleys of the numerous small watercourses. Settlements include approximately 15 farms (or former farms), the small village of Illey and the hamlet of historic Lapal.

There is a small athletics stadium, velodrome and tennis club in the north of the ecological sub-area off Manor Way.

Topography

Illey, Lapal and Hasbury has an undulating landscape, generally sloping from the highest elevations at the eastern, western and southern boundaries (at the highest an elevation of 180 metres) towards the centre and north of the ecological sub-area where both the River Stour and Illey Brook flow northwards into Core Landscape 11, Stour Valley, at an elevation of 120 metres.

Geology

Sedimentary bedrock of the Halesowen Formation - mudstone, siltstone and sandstone, formed approximately 308 to 310 million years ago. This is partially overlain with superficial deposits of head - clay, silt, sand and gravel formed up to 3 million years ago in the Quaternary Period; alluvium - clay, silt, sand and gravel formed up to 2 million years ago in the Quaternary Period; and diamicton till formed up to 2 million years ago in the Quaternary Period.

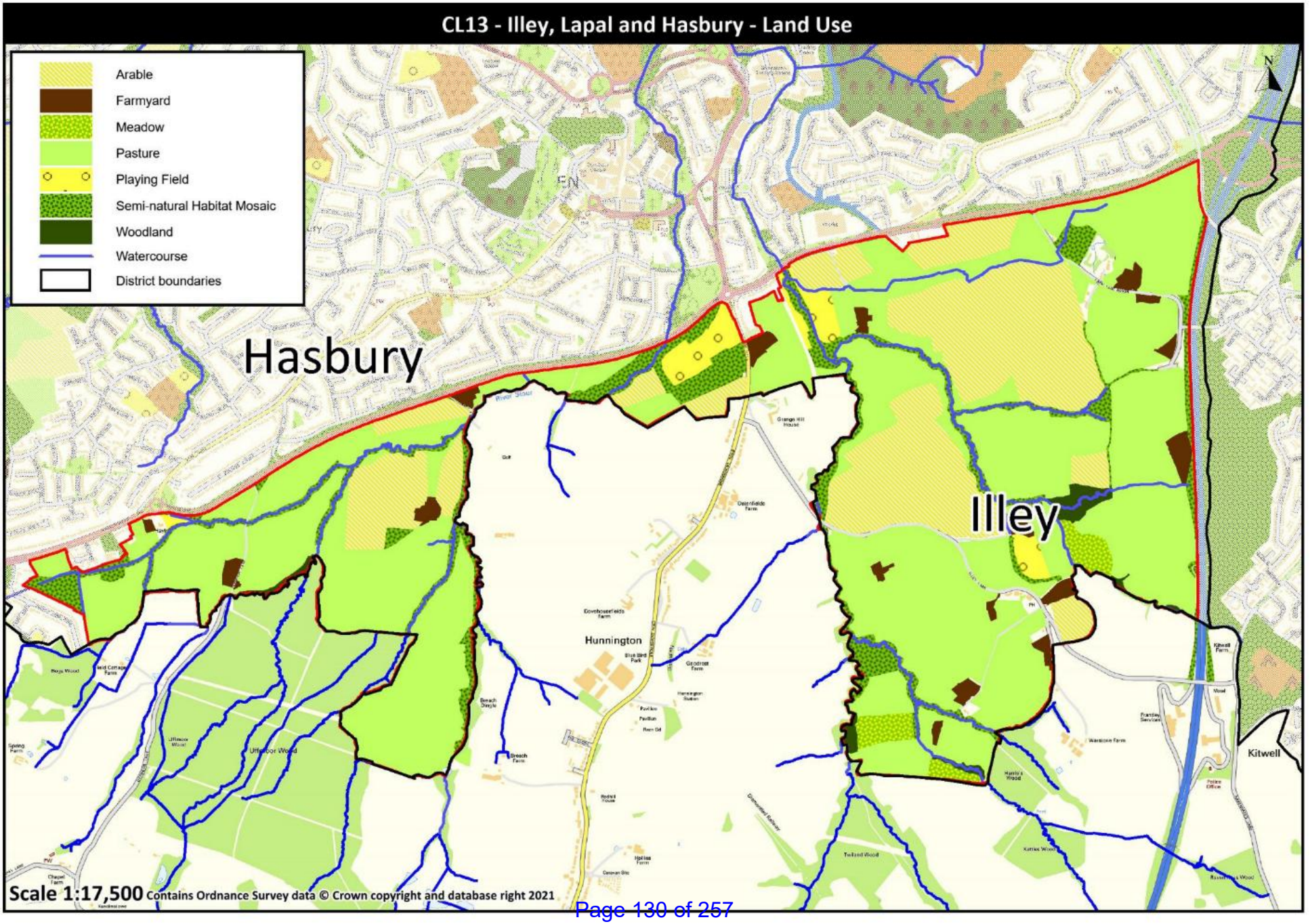
Geopark Sites

n/a

Soils

Predominantly slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, with an approximately 1 km^2 area with freely draining slightly acid loamy soils in the eastern part of the ecological sub-area.

CL13 - Illey, Lapal and Hasbury - Land Use



Historic Landscape Character Areas			
Reference	DY03	**Name**	Haley Fields & Illey

The ecological sub-area is almost coterminous with HLC area DY03 Hayley Fields & Illey. The Character Area is dominated by scattered settlement and fields (90%) and is situated on an underlying geology of sandstone, mudstone and conglomerate. Settlement comprises small farmsteads and hamlets which predate the early 19th century. Historically the Character Area was dominated by agriculture associated with St Marys Abbey, which dates from the 13th century. The creation of granges within the area was part of the Abbey's efforts to develop its supply of agricultural goods. Many of the fields in the area contains traces of ridge and furrow associated with this early land use. While the area did not have an industrial phase it is crossed by the [disused] Dudley Number 2 Canal and a now disused railway line.

A small part of the ecological sub-area (c. 0.1 km^2), including the athletics ground, lies within the large HLC area DY02 Halesowen.

Historic Environment Area Designations [1]			
Reference	AHHLV 31	**Name**	Uffmoor ridge and furrow

AHHLV 31 Uffmoor ridge and furrow is coterminous with the entire western section of the Illey, Lapal and Hasbury from Hayley Park Road to Grange Hill.

The AHHLV falls within the historic townships of Hasbury and Lutley and contains the head waters of the River Stour and is predominantly agricultural. The fields in this area contain large areas of surviving ridge and furrow earthworks enclosed by substantial hawthorn hedges. The landscape was enclosed by the late 19th century, and the field pattern has been subject to some modern alteration. An ancient parish boundary forms the eastern boundary of the area. The AHHLV contains possible medieval ridge and furrow, which provides a tangible link to the former land use in the area and can provide information about the medieval open field system in the area.

Heat crazed stones (potboilers) have been recorded in the area, possibly remnants of prehistoric burnt mounds, highlighting the archaeological potential of this area.

Visually the AHHLV is part of the rolling North Worcestershire landscape and it is set against the continued open landscape whose views are closed to the south and west by the North Worcestershire Hills. The southern boundary of the heritage area retains the ancient parish boundary line which is consistent with the Illey/Lapal heritage area southern boundary to the east. The AHHLV is traversed by public footpaths which follow an enclosed stream bed and wooded copse aligned in a north-south direction.

Reference	AHHLV 32	**Name**	Illey and Lapal

AHHLV 32 Illey and Lapal is coterminous with almost the entire eastern section of the Illey, Lapal and Hasbury from Grange Hill to the M5 motorway.

The AHHLV is one of the largest in the borough and is inseparably part of the North Worcestershire Countryside and forms a foreground to the North Worcestershire hills which terminate views to the south and west. It is of considerable scenic value and contains a complex mix of landscape elements.

The AHHLV falls within the historic townships of Illey and Frankley and can be divided into three areas with the topography to the east and west of Lapal Lane South and north of Illey, falling to the west to Illey brook and then rising to the south to Illey Lane. The bowl between the A456 and Illey Lane is dominated by the monastic ruins and infirmary of the ruined 13th century St Mary's Abbey. The abbey system of fishponds and dams, although dry, are clearly visible to the east and south of the abbey precinct and provides evidence of medieval watercourse management. The abbey and surrounding land form a scheduled monument (NHLE 1009770) while the abbey ruins are a Grade I listed building. Halesowen Abbey is in the guardianship of the Secretary of State and English Heritage and a detailed Conservation Management Plan has been published for the site by Historic England. The area to the west of Lapal Lane, and north of Illey Lane is within the curtilage of Manor Farm. The scheduled abbey has a high level of archaeological interest, and could be directly impacted by unsympathetic development e.g. ground works. Outside of the scheduled area large blocks of masonry were recorded during the construction of Manor Way, these remains may be associated with the abbey and could suggest that the abbey landscape extends outside the scheduled area. Development within the surrounds of the scheduled monument could impact upon its setting.

Historic Environment Area Designations [1]			
Ridge and furrow earthworks have also been recorded in the area to the east of Lapal Lane South associated with Green Lane which is a possible holloway. The ridge and furrow earthworks providing visible evidence of previous land management and agricultural practice. The field boundaries within the AHHLV preserve the route of old parish boundaries providing evidence of early administrative boundaries. There may be earthwork banks and ditches associated with the parish boundary preserved in these areas. The AHHLV also derives archaeological interest from the site of the former Manor Colliery and the course of the former Lapal Canal and Lapal Tunnel. These remains could provide evidence about the industrial development within this area during the 19th century. The AHHLV is inseparably part of the North Worcestershire Countryside and forms a foreground to the North Worcestershire hills which terminate views to the south and west. It is of considerable scenic value and contains a complex mix of landscape elements. The AHHLV contains nationally rare archaeological remains associated with St Mary's Abbey. It also contains extensive prehistoric, Roman and medieval remains. Such remains are rare within the Black Country, as much of the area has been affected by ground disturbance associated with the high level of urbanisation and development that has occurred. This AHHLV is particularly rare as it represents one of the few areas within the Black Country that has been less affected by the industrial and residential development of the area.			
Reference	APA 42	**Name**	Lutley Lane Roman Villa
The APA contains the suggested site of Lutley Lane Roman Villa. The site has been identified as a cropmark visible upon aerial photographs. While the presence of archaeological remains in this area has yet to be ground truthed by excavation, the morphology of the APA suggest that the archaeological remains of a Roman villa site are present. There is limited evidence of Roman activity within Dudley, probably due to later industrial activity and residential development. The APA is thus considered to contain a regionally rare example of archaeological remains associated with a Roman rural settlement. These remains could inform understanding of Roman rural settlements and land use in the area. Unsympathetic development i.e. groundworks would detrimentally affect archaeological remains within the APA.			
Reference	APA 176	**Name**	Illey Township
The APA contains the site of the historic settlement of Illey in the parish of Halesowen. The place-name is derived from two elements Hilla and leah. These elements are Anglo-Saxon and refer to a woodland estate belonging to a man called Hilla. The earliest reference to Illey is in the Manor Court Book in 1270 (Hemmingway 2005). There were two open fields in the high land in the centre of the township, Hilley Field to the north of main road between Halesowen and Fingal Field and Fingall Field so the south of the road. The open fields were surrounded by a large number of meadows aligned on the brooks (ibid). The settlement dates back to at least the early post-medieval period, and is first shown on the 1845 Tithe map of the area. The buildings within the APA date to the 19th and 20th century, however the APA is considered to have the potential to contain below ground archaeological remains associated with the earlier settlement. The site of a medieval tithe barn (HER 4325) is recorded in the southern part of the APA, the APA has the potential to contain archaeological remains associated with the barn, further contributing to the archaeological interest of the APA.			
Reference	APA 203	**Name**	Dudley No. 2 Canal
The APA contains the line of the Dudley No. 2 Canal, which ran from Bumble Hole to the Lapal Tunnel. The Canal was built in 1798. The APA contains the Lapal Tunnel which is first shown on a to the map of Lapal dated to 1841. The APA has been included as the area contains below ground archaeological remains associated with the 18th century canal.			

Waterbody Catchments			
River Basin District	Severn	**Management Catchment**	Severn Middle Worcestershire
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Stour (Worcs) source to confluence with Smestow Brook	Poor (2019)	Poor (2019)	Fail (2019)

Key Habitats [2]			
Broad Habitat Type	Arable and horticulture	**Priority Habitat**	
A number of the larger fields are arable, with some field boundaries within these having been removed since the Ordnance Survey County Series mapping of the 1880s. No Priority Habitat field margins have been recorded.			
Broad Habitat Type	Boundary & Linear Features	**Priority Habitat**	Hedgerows
There are numerous field boundary hedgerows throughout the ecological sub-area associated with the mostly small irregularly-shaped fields and along trackways. These frequently sit atop bank and ditch systems and contain mature Pedunculate Oak standards. The hedgerows are predominantly Hawthorn-dominated and support a diverse range of tree and shrub species, as well as a diverse field-layer of woodland-associated species. Only a small proportion of the hedgerows have been assessed against the Local Wildlife Sites selection criteria and of these a number have been selected as SLINCs.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
Numerous small headwaters rise within or just outside the ecological sub-area in Worcestershire. These flow northwards to form the River Stour and Illey Brook (itself a tributary of the Stour). The watercourses are predominantly unmodified and support a diversity of features associated with the processes of erosion and deposition. Most of the channels are lined by trees and some dingle woodlands where the watercourse has incised the soft sedimentary bedrock. This part of the waterbody catchment is ecologically isolated from the wider downstream catchment by urban features including man-made in-channel structures and high pollution levels.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	Ponds
There are a small number of garden and field ponds in the ecological sub-area, including one in Illey Pastures SSSI described in the citation as a small basin mire dominated by Bog Mosses with Bog Pondweed and marginal species such as Water-plantain, Branched Bur-reed and Water Forget-me-not. In the west of the sub-area are Tack Farm Ponds SLINC described as two farm ponds with relatively diverse flora and forb rich adjacent neutral grassland.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	Lowland Meadows
In the south of the ecological sub-area Illey Pastures SSSI consists of two fields of species-rich unimproved neutral grassland. The grassland has developed on ridge and furrow of loamy soils with subsoils where the drainage is partially impeded. The sward contains an abundance of forbs such as Field Scabious, Betony, Dyer's Greenweed and Common Spotted-orchid. There are also other less diverse Lowland Meadows in the sub-area.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	
Many of the smaller fields within the ecological sub-area are pastures that are variously cattle, sheep and horse grazed. Some of these have developed on ridge and furrow and are of some age, whereas others have been cultivated in recent decades. There are no pastures that are designated for their nature conservation value.			

Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	Priority Habitat	Lowland mixed deciduous woodland

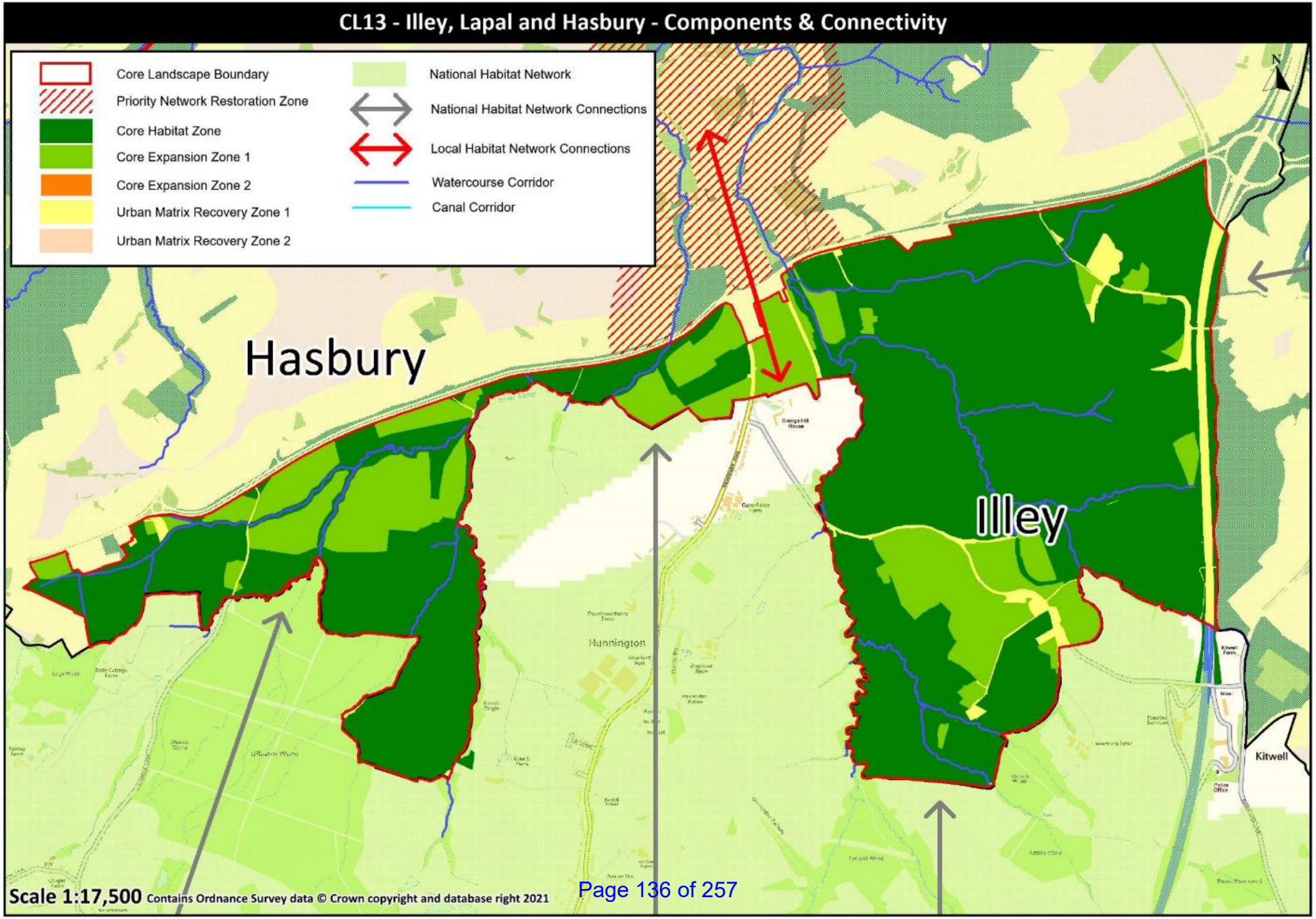
There are a number of small dingle woodlands occupying the valleys of the watercourses which are of some age and likely to be ancient (woodland since at least AD 1600). These are variously designated as SINC or SLINC and include Cooper's Wood, Paddock Wood, Manor Abbey Woodland and Kitswell Dingle. The woodlands support a diverse woody and field-layer flora associated with ancient woodlands.

Narrow strips of woodland/trees have colonised the banks of most of the ecological sub-area's watercourses and these areas frequently support a similarly diverse woodland flora.

Key Species [3]	
Bird indicators	
Farmland	Eurasian Skylark, Goldfinch, Greenfinch, Jackdaw, Kestrel, Linnet, Stock Dove, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Nuthatch, Eurasian Wren, Great Spotted Woodpecker, Great Tit, Jay, Long-tailed Tit, Robin, Song Thrush, Tawny Owl, Treecreeper.
Water & Wetland	Mallard
Other	Buzzard, Carrion Crow, Common House Martin, Eurasian Magpie, House Sparrow, Mistle Thrush, Northern Raven, Swallow, Whinchat.
Amphibians & Reptiles	
Amphibians	Common Frog.
Reptiles	none
Mammals	
Bats	Brown Long-eared Bat, Common Pipistrelle, Nathusius's Pipistrelle, Natterer's Bat, Noctule Bat, Soprano Pipistrelle.
Other	Eurasian Badger, European Otter, European Water Vole, West European Hedgehog.
Fish	
Bony Fish	Brown Trout
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Adoxa moschatellina, Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Brachypodium sylvaticum, Bromopsis ramosa, Cardamine amara, Carex remota, Carex sylvatica, Chrysosplenium oppositifolium, Deschampsia flexuosa, Dioscorea communis, Dryopteris affinis, Epipactis helleborine, Equisetum telmateia, Festuca gigantea, Filipendula ulmaria, Fragaria vesca, Galium odoratum, Hordelymus europaeus, Hypericum pulchrum, Lamiastrum galeobdolon subsp. montanum, Lathraea squamaria, Lysimachia nemorum, Lysimachia vulgaris, Malus sylvestris, Melica uniflora, Mercurialis perennis, Milium effusum, Oxalis acetosella, Poa nemoralis, Polystichum aculeatum, Polystichum setiferum, Sanicula europaea, Stellaria holostea, Taraxacum nordstedtii, Valeriana officinalis, Veronica montana, Viola reichenbachiana.*
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Ajuga reptans, Alchemilla filicaulis subsp. vestita, Brachypodium sylvaticum, Briza media, Campanula rotundifolia, Carex caryophyllea, Centaurium erythraea, Cirsium palustre, Dactylorhiza fuchsii, Danthonia decumbens, Deschampsia flexuosa, Filipendula ulmaria, Fragaria vesca, Galium mollugo subsp. erectum, Genista tinctoria, Hypericum pulchrum, Lathyrus linifolius, Leontodon hispidus, Linum catharticum, Lotus pedunculatus, Persicaria bistorta, Phleum bertolonii, Pimpinella saxifraga, Potentilla anglica, Potentilla erecta, Potentilla sterilis, Rhinanthus minor, Sanguisorba officinalis, Serratula tinctoria, Silaum silaus, Stachys officinalis, Stellaria holostea, Succisa pratensis, Trifolium medium, Veronica officinalis.*

Heathland	*Campanula rotundifolia, Carex nigra, Danthonia decumbens, Deschampsia flexuosa, Potentilla erecta, Veronica officinalis.*
Mires	*Achillea ptarmica, Alchemilla filicaulis subsp. vestita, Angelica sylvestris, Athyrium filix-femina, Briza media, Cardamine amara, Carex nigra, Carex panicea, Cirsium palustre, Dactylorhiza fuchsii, Dryopteris carthusiana, Eleocharis palustris, Epilobium palustre, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Glyceria declinata, Glyceria notata, Hypericum tetrapterum, Jacobaea aquatica, Juncus acutiflorus, Lotus pedunculatus, Lysimachia vulgaris, Potamogeton polygonifolius, Ranunculus flammula, Stachys palustris, Stellaria alsine, Succisa pratensis, Valeriana officinalis, Veronica beccabunga, Veronica scutellata.*
Open Water	*Eleocharis palustris, Equisetum fluviatile, Galium palustre, Glyceria notata, Potamogeton polygonifolius, Schoenoplectus lacustris, Veronica scutellata.*
Post-industrial (water-stressed)	*Agrimonia eupatoria, Centaurium erythraea, Deschampsia flexuosa, Fragaria vesca, Jacobaea erucifolia, Linum catharticum, Trifolium medium, Vicia tetrasperma.*
Cultivation	*Vicia tetrasperma.*

Ecological Connectivity
Local Habitat Network
There is a direct link from the ecological sub-area to Core Landscape 11 Stour Valley via the corridors of the River Stour and Illey Brook.
National Habitat Network
Illey, Lapal and Hasbury forms part of a wider rural landscape that is predominantly in Worcestershire and therefore links directly with the National Habitat Network. This landscape includes a similar pattern of small irregular-shaped grassland fields with lesser amounts of arable, and numerous small watercourses and ancient woodlands including Uffmoor Wood and Twiland Wood.


CL13 - Illey, Lapal and Hasbury - Components & Connectivity
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Hasbury
Illey
Hunnington
Kitwell
N
Scale 1:17,500
Contains Ordnance Survey data © Crown copyright and database right 2021

Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Hedgerows	Improve management of existing	Habitat in good condition
	Restore through gapping up	Habitat in good condition
	Reinstate lost field-boundary hedgerows	New habitat
	Establish hedgerow trees	Habitat structure improved
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels) downstream (CL11)	Improved ecological status
	Reduce artificial inputs	Improved chemical status
	Improve soil management	Reduced silt inputs to watercourses
Lowland meadows	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create new	New habitat at existing and new sites

Target Species	
Species/Species Group	**Measure**
Breeding farmland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Dipper	Confirmed recent records
Barn Owl	Confirmed recent records
Brown Hare	Confirmed recent records
Hedgehog	Confirmed recent records
Bats	Increased abundance of confirmed species
European Otter	Increased signs
European Water Vole	Confirmed recent records
Grassland axiophytes	Increased abundance
Woodland axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
n/a		

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL13	Species-rich neutral grassland enhancement and creation.
	Creation of new ponds.
	Field boundary hedgerow restoration and creation.
Core Landscape CL11 Stour Valley	Restoration of modified channel and removal/mitigation of artificial in-channel barriers.
National Habitat Network	
Connection	**Action**
With wider rural landscape (Worcestershire)	Species-rich neutral grassland enhancement and creation.
	Creation of new ponds.
	Field boundary hedgerow restoration and creation.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
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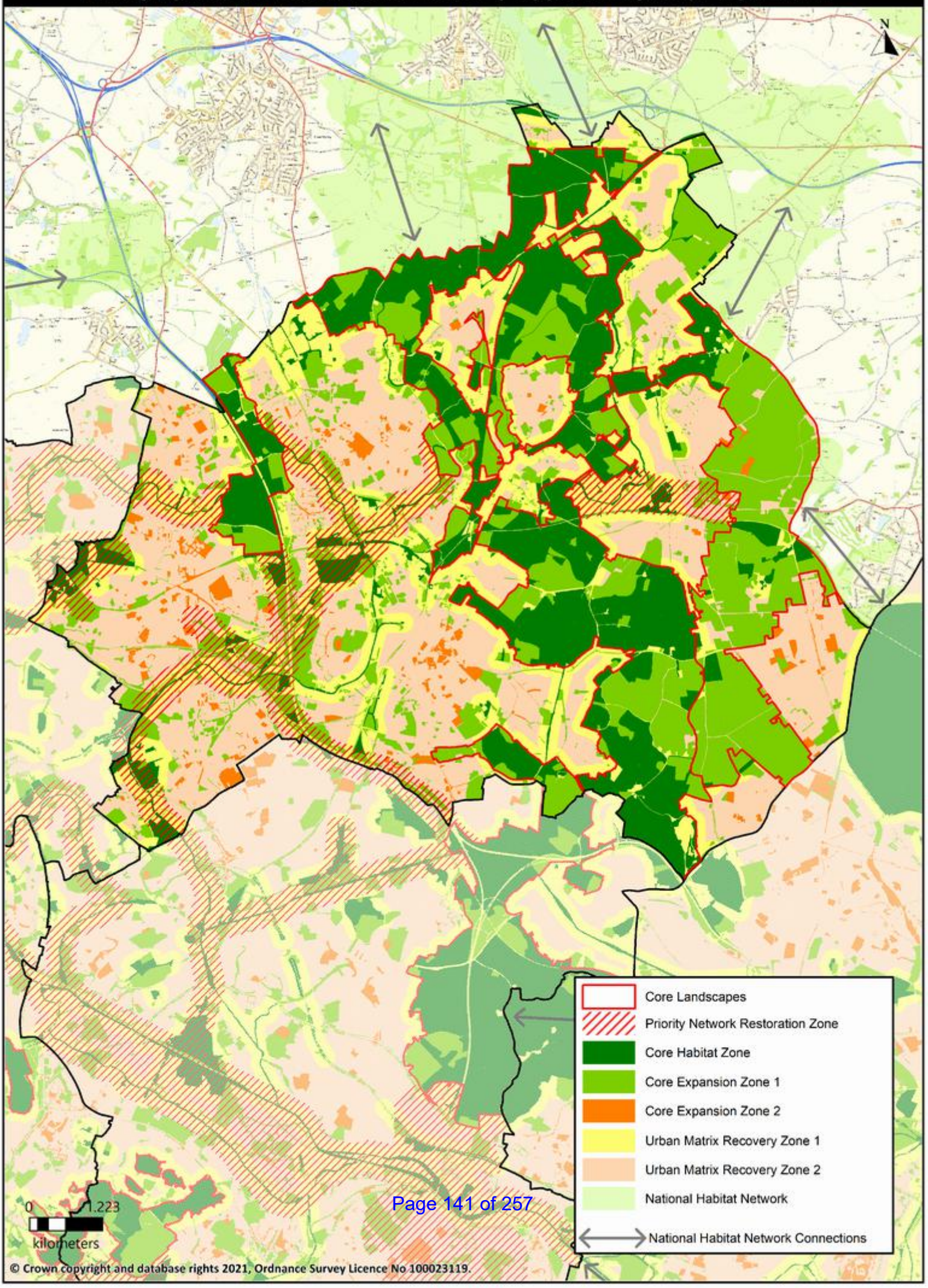
Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Fish: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Emerging Walsall Local Nature Recovery Opportunity Map - April 2021



Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Rough Wood Chase & Sneyd Reservoir	**Sub-area ref.**	CL03
Natural Character Area	Cannock Chase and Cank Wood	**NCA ref.**	67
Local Authority Area	Walsall	**Area km^2**	2.08

Ecological Sub-area Description

Overview

Rough Wood Chase & Sneyd Reservoir was significantly impacted by coal mining in the 19th and early 20th centuries, and the landscape today is dominated by areas of open space that have developed spontaneously or have been landscaped on former collieries. A significant feature of the ecological sub-area is the Wyrley and Essington Canal corridor and the associated Sneyd Reservoir (canal feeder) which bisects the area.

Historic mapping depicts that prior to industrialisation the area comprised a complex of small fields, however, very little of this landscape remains. Areas of Rough Wood in the south of the ecological sub-area are designated by Natural England as Ancient Semi-natural Woodland, however, how much of this escaped the impact of industrial activity is not clear.

Semi-natural habitats within the ecological sub-area include numerous subsidence pools, mature woodland, scrub and rough grassland.

Land Use

Just under 50% of the ecological sub-area is public open space designated as Rough Wood Chase Local Nature Reserve. This is comprised of woodland, scrub, grassland and ponds, and includes Sneyd Reservoir in the north. This area is well accessed for recreation by the local community.

In the north of the ecological sub-area are a community centre (former secondary school) and primary school with associated sports grounds, areas of planted woodland, scrub, rough grassland and a large artificial pool. The remainder of the ecological sub-area comprises playing fields, school grounds and the Wyrley and Essington Canal corridor.

Topography

Rough Wood Chase & Sneyd Reservoir is naturally relatively level with elevations ranging from 130 to 150 metres. The topography of the area has been modified by industrial activity including mining.

Geology

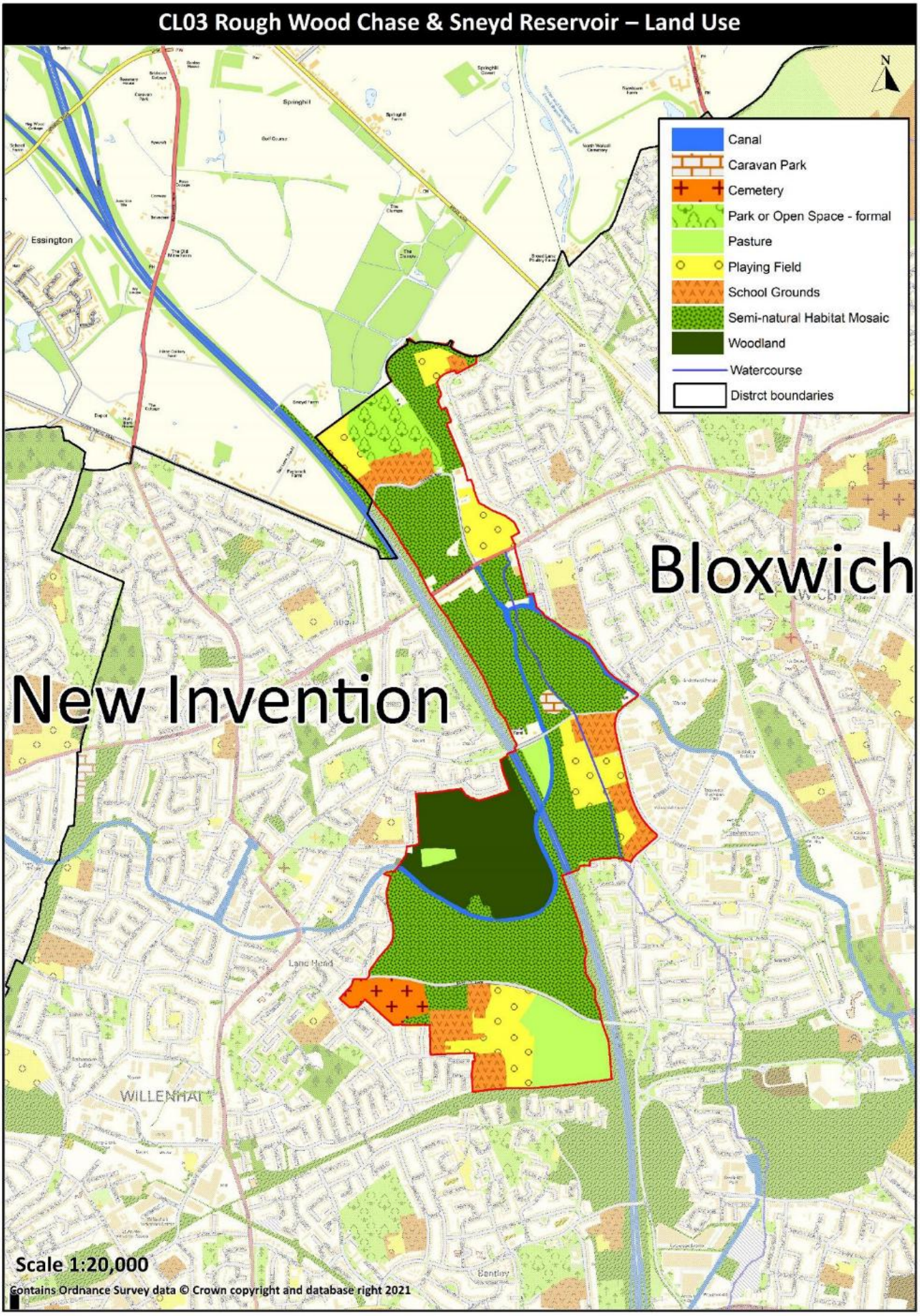
The entire ecological sub-area is located on bedrock of sedimentary Pennine Middle Coal Measures Formation, Mudstone, siltstone and sandstone formed between 318 and 309.5 million years ago during the Carboniferous period, overlain with superficial deposits of Devensian diamicton till formed between 116 and 11.8 thousand years ago during the Quaternary period.

Geopark Sites

n/a

Soils

In the northern section of the ecological sub-area the soils are restored, mostly from quarry and opencast spoil, loamy, and with low to moderate fertility and variable drainage. In the southern section the soils are slowly permeable, seasonally wet and slightly acid but base-rich loamy and clayey, with moderate fertility and impeded drainage.


CL03 Rough Wood Chase & Sneyd Reservoir – Land Use
N
Canal
Caravan Park
Cemetery
Park or Open Space - formal
Pasture
Playing Field
School Grounds
Semi-natural Habitat Mosaic
Woodland
Watercourse
Distrct boundaries
Bloxwich
New Invention
Essington
Springhill
Land Head
WILLENHALL
Bentley
Scale 1:20,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Historic Landscape Character Areas			
Reference	WL07	**Name**	Bentley

The entire ecological sub-area is within WL07 Bentley. The Character Area lies in the north-west of the Walsall borough. It is dominated by areas of modern housing and is situated almost wholly on the coalfield. Few pre-19th century houses survive in the borough, and these are concentrated in Bescot and the Birchills area of Walsall. Further 18th and 19th century houses survive in the historic settlement cores of the area. There are a number of important recreation areas within the Character Area, including the Rough Wood Country Park, which was established in the mid/late 20th century from reclaimed coal extraction sites.

The medieval character of the area was a combination of open field and common (which was part of Cannock Forest) with small medieval settlements at Bescot and Bentley. By the late 19th century the area was dominated by coal mining and collieries, resulting in the expansion of the 17th- and 18th-century settlements of Lane Head, New Invention and Short Heath.

Historic Environment Area Designations [1]			
Reference	AHHTV 127	**Name**	Wyrley and Essington Canal

The AHHTV contains the Wyrley and Essington Canal which was built along the northern boundary of Pelsall in 1794 to carry coal and other raw materials necessary to the development of industry in the Black Country. The canal was built following the 1790s Act authorising a canal from Wolverhampton to the collieries and Wyrley Bank and Essington. The canal was built using the early contour construction method, where by the canal followed the natural contours of the landscape. However, land subsidence caused by the surrounding mining activity and continual repair work along the canal has caused some parts of the present-day canal to run on high embankments.

The AHHTV has the potential to contain non-designated historically important buildings such as locks, canal bridges and industrial buildings associated with the early usage of the canal. These nationally and locally important buildings are directly associated with the creation and development of the canal and make a positive contribution to the quality of the historic environment.

Reference	AHHLV 31	**Name**	Rough Wood Country Park

The AHHLV contains a number of mines and shafts associated with the Rough Wood Colliery. The workings were situated to the west and east of the canal, to the east of Rough Wood. The site of a cluster of buildings thought to be associated with the mine workings is recorded to the south of the Canal. The Wyrley and Essington Canal (built 1794) passes through the AHHLV and was directly associated with the coal mining in this area. The area to the north contains the 18th/early 19th century Sneyd Reservoir, which supplied water to the canal.

The AHHLV contains two areas of semi-natural ancient woodland, Rough Wood and Rough Wood South. The woodland has the potential to contain well-preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Ancient Woodlands represent surviving patches of the historic landscape that date back to the early post-medieval period.

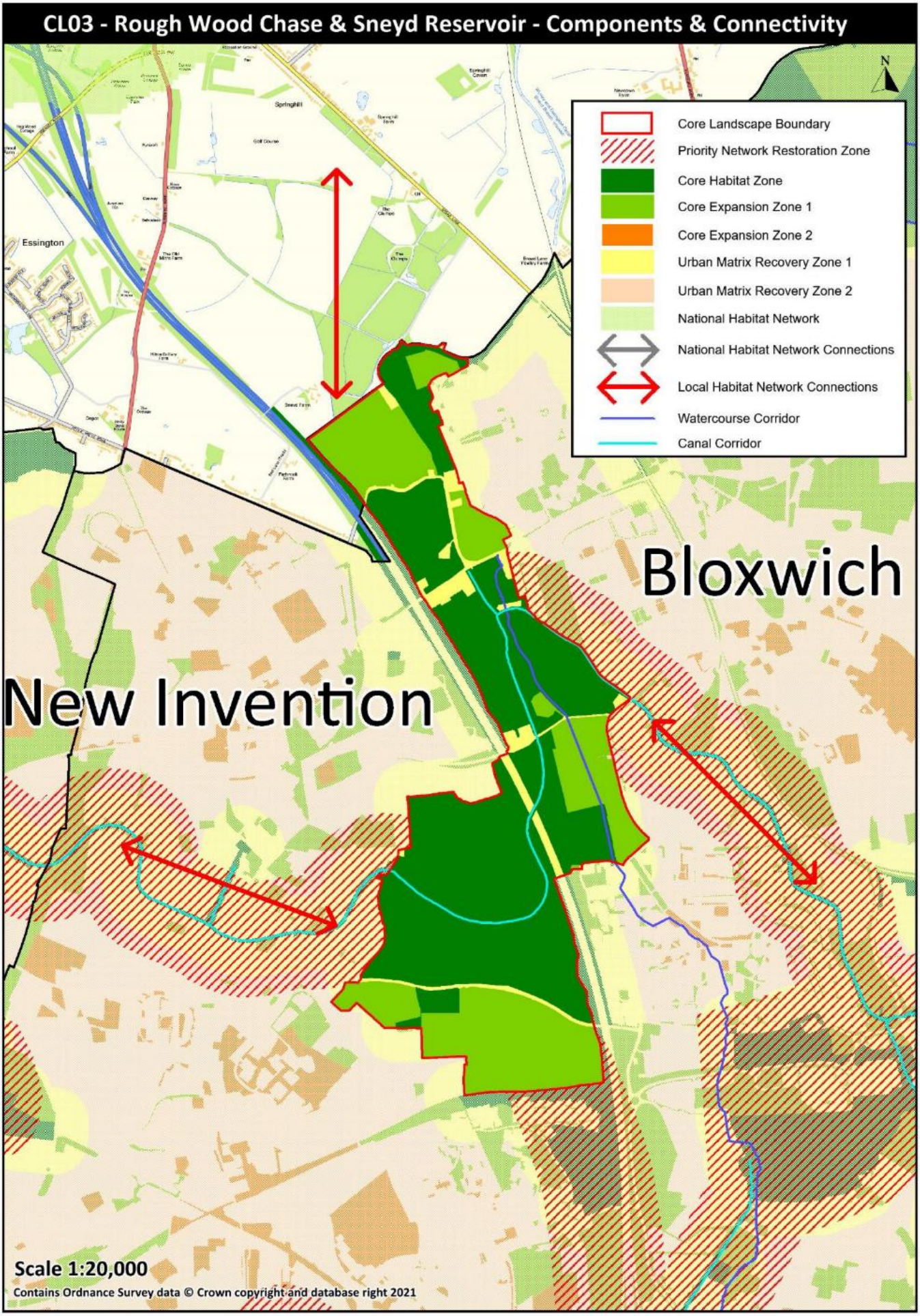
Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Sneyd Brook from Source to Tame	Bad (2019)	Bad (2019)	Fail (2019)

Key Habitats [2]			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	Lowland mixed deciduous woodland
Areas of Rough Wood in the south of the ecological sub-area are designated by Natural England as Ancient Semi-natural Woodland. Historic mapping and habitat descriptions of the area suggest, however, that much of this area was subject to industrial activity and it is not clear how much of the area meets the definition of ASNW. The mature woodland that does remain on site is dominated by Oak with frequent Birch and Hawthorn, with some Guelder-rose, Alder Buckthorn and Wild Privet occur in the shrub layer.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	
Scrub and young woodland cover have increased significantly since the middle of the 20th century through both planting (in Rough Wood Chase) and natural succession. The composition and structure of these habitats is not known.			
Broad Habitat Type	Acid Grassland	**Priority Habitat**	Lowland Dry Acid Grassland
There are thought to be areas of remnant acid grassland within Rough Wood Chase, the extent and condition of which is not known.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	
Much of the semi-natural grassland habitats in the ecological sub-area are unmanaged, tussocky and rank, and are dominated by species that ubiquitous in habitats of this type. The habitat type has decreased significantly in recent decades through woodland planting and natural succession.			
Broad Habitat Type	Dwarf Shrub Heath	**Priority Habitat**	Lowland Heathland
There are records of small areas of lowland heathland at Rough Wood Chase, the extent and condition of which is not known.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	Ponds
There are numerous mining subsidence pools throughout the ecological sub-area that support important amphibian populations. The condition and number of waterbodies has, however, apparently reduced over recent decades through seral succession to reedswamp and scrub/woodland.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	Eutrophic Standing Waters
In the north of the ecological sub-area is a small canal feeder reservoir (Sneyd Reservoir) that is entirely surrounded by scrub/woodland but retains a large area of open water. To the north of this there is more recent artificial pool which is used for recreational activities.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	
A section of the Wyrley & Essington Canal bisects the ecological sub-area. The canal is fed by Chasewater reservoir and is of low chemical and nutrient status, consequently being of high ecological value in the context of the Black Country canal network. The canal supports a diverse assemblage of aquatic vegetation, as well of populations of coarse fish, freshwater invertebrates and wetland birds.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
The Sneyd Brook flows north-south through the ecological sub-area. This is situated either within a highly modified channel or culverted along the entire section within the ecological sub-area and is classified as Bad status by the Environment Agency.			

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Goldfinch, Greenfinch, Kestrel, Rook, Starling, Stock Dove, Tree Sparrow, Western Yellow Wagtail, Woodpigeon.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Wren, European Green Woodpecker, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Long-tailed Tit, Robin, Song Thrush, Sparrowhawk, Willow Tit.
Water & Wetland	Common Reed Bunting, Eurasian Coot, Great Crested Grebe, Grey Heron, Grey Wagtail, Kingfisher, Little Grebe, Mallard, Moorhen, Mute Swan, Western Yellow Wagtail.
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Eurasian Magpie, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Pied Wagtail, Swallow.
Amphibians & Reptiles	
Amphibians	Common Frog, Great Crested Newt, Smooth Newt
Reptiles	Common Lizard
Mammals	
Bats	Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Noctule Bat, Soprano Pipistrelle, Whiskered/Brandt's Bat
Other	Eurasian Badger, European Otter, European Water Vole, West European Hedgehog
Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Allium ursinum, Angelica sylvestris, Blechnum spicant, Brachypodium sylvaticum, Caltha palustris, Deschampsia flexuosa, Dryopteris affinis, Equisetum sylvaticum, Frangula alnus, Galium odoratum, Luzula pilosa, Malus sylvestris, Mercurialis perennis, Milium effusum, Molinia caerulea, Populus nigra subsp. betulifolia, Stellaria holostea, Torilis japonica.*
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Agrostis canina, Blechnum spicant, Brachypodium sylvaticum, Caltha palustris, Centaurium erythraea, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza praetermissa, Daucus carota subsp. carota, Deschampsia flexuosa, Equisetum sylvaticum, Euphrasia, Euphrasia officinalis agg., Leontodon hispidus, Lotus pedunculatus, Nardus stricta, Odontites vernus, Odontites vernus subsp. serotinus, Ononis repens, Parentucellia viscosa, Phleum bertolonii, Potentilla anglica, Potentilla erecta, Sanguisorba officinalis, Silene flos-cuculi, Stellaria holostea, Trifolium medium.*
Heathland	*Agrostis canina, Blechnum spicant, Calluna vulgaris, Carex nigra, Deschampsia flexuosa, Luzula multiflora, Luzula multiflora subsp. congesta, Molinia caerulea, Nardus stricta, Potentilla erecta, Vaccinium myrtillus.*
Mires	*Achillea ptarmica, Agrostis canina, Angelica sylvestris, Apium inundatum, Calamagrostis epigejos, Caltha palustris, Carex acutiformis, Carex nigra, Carex panicea, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza praetermissa, Eleocharis palustris, Equisetum fluviatile, Equisetum palustre, Galium palustre, Galium palustre subsp. palustre, Glyceria notata, Hydrocotyle vulgaris, Hypericum tetrapterum, Jacobaea aquatica, Lotus pedunculatus, Luzula multiflora, Luzula multiflora subsp. congesta, Molinia caerulea, Pulicaria dysenterica, Ranunculus aquatilis, Ranunculus circinatus, Ranunculus flammula, Silene flos-cuculi, Sparganium emersum, Veronica beccabunga.*
Open Water	*Apium inundatum, Butomus umbellatus, Carex acutiformis, Eleocharis palustris, Equisetum fluviatile, Galium palustre, Galium palustre subsp. palustre, Glyceria notata, Potamogeton perfoliatus, Potamogeton pusillus, Ranunculus aquatilis, Ranunculus circinatus, Sagittaria sagittifolia, Schoenoplectus lacustris.*

Post-industrial (water-stressed)	*Agrimonia eupatoria, Asplenium adiantum-nigrum, Blechnum spicant, Centaurium erythraea, Chaenorhinum minus, Clematis vitalba, Daucus carota subsp. carota, Deschampsia flexuosa, Erigeron acris, Jacobaea erucifolia, Ophrys apifera, Parentucellia viscosa, Poa compressa, Reseda lutea, Silene vulgaris, Trifolium medium.*
Cultivation	None

Ecological Connectivity
Local Habitat Network
There are links from the ecological sub-area to the Priority Network Restoration Zones Wyrley & Essington Canal and M6 Motorway Corridor. These link Rough Wood Chase & Sneyd Reservoir to Core Landscapes CL01 Smestow Valley & Tettenhall Ridge, CL04 Brownhills Common and Pelsall and CL07 Sandwell Valley.
National Habitat Network
The north of the ecological sub-area links directly with the South Staffordshire countryside but not the National Habitat Network as defined by Natural England.


CL03 - Rough Wood Chase & Sneyd Reservoir - Components & Connectivity
N
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Springhill
Essington
Bloxwich
New Invention
Scale 1:20,000
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Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels)	Improved ecological status
	Reduce artificial inputs	Improved chemical status
Eutrophic Standing Waters	Enhance marginal and emergent vegetation	Increased floral diversity and habitat structure improved
	Reduce artificial inputs	Improved chemical status
Canals	Identify and reduce artificial inputs	Improved chemical status
Lowland meadows	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland Heathland	Confirmed extent and improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland dry acid grassland	Confirmed extent and improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Diversify field-layer component of plantations	Increased floral diversity

Target Species	
Species/Species Group	**Measure**
Bats	Increased abundance of confirmed species
Breeding farmland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
European Otter	Increased signs, confirmed breeding population
European Water Vole	Confirmed recent records
Great Crested Newt	Increased abundance and number of breeding ponds
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
n/a		

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL03	Restoration of modified channel of the Sneyd Brook.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Planting of standard trees in parks, green spaces and school grounds.
Connection	**Action**
Priority Network Restoration Zone (M6 Motorway Corridor)	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting in adjacent areas of open space.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html	2021
	Black Country UNESCO Global Geopark sites names and location information https://blackcountrygeopark.dudley.gov.uk/bcg/	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: http://www.landis.org.uk/soilscapes/	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) *Draft Black Country Local Nature Recovery Opportunity Map*	2021
	EcoRecord et al. (2021) *Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping*.	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) *Black Country Historic Landscape Characterisation* [data-set]. York: Archaeology Data Service [distributor] https://doi.org/10.5284/1000030	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

[1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

Archaeological Priority Areas (APA): sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

Areas of High Historic Townscape Value (AHHTV): areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

Designed Landscapes of High Historic Value (DLHHV): landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

Areas of High Historic Landscape Value (AHHLV): these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

[2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

[3] KEY SPECIES

Bird Indicators: Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

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Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Brownhills Common & Pelsall	**Sub-area ref.**	CL04
Natural Character Area	Cannock Chase and Cank Wood	**NCA ref.**	67
Local Authority Area	Walsall	**Area km²**	12.43

Ecological Sub-area Description

Overview

Brownhills Common & Pelsall comprises the northern Walsall green belt around the settlements of Brownhills, Pelsall and Aldridge, along with the undeveloped valleys of the Ford Brook and its tributaries which flow southwards towards Walsall town centre. To the north lies the open countryside of South Staffordshire, whilst to the south is Core Landscape CL06 Park Lime Pits, Cuckoo's Dingle & Great Barr Hall.

Historically part of Cannock Forest and later the parishes and townships of Norton Canes, Walsall Foreign, Pelsall and Bloxwich, the area contains a number of commons that were formally surrounded by open fields. Today the landscape is dominated by mostly rectilinear fields that were enclosed during the late medieval and post medieval periods.

Brownhills Common & Pelsall is the only area in the Black Country with surface peat which is present along the eastern boundary and to the west of Pelsall.

Land Use

The land use in the northern part of Brownhills Common & Pelsall is dominated by agriculture (permeant grassland and arable) with substantial areas of semi-natural habitat including woodland, heathland, grassland and wetland, much of which is public open space or de facto accessible green space, and primarily post-industrial. Bloxwich Golf Club is situated in the north-west of the ecological sub-area. In the south-east there are a number of active quarries from which clay is extracted for brick manufacture. The land use in the south-eastern section is more diverse and modified through proximity to the urban environment, but retains a significant area of agricultural permanent grassland comprised of small fields, often with defunct or removed hedgerows. Other land use includes allotments, playing fields, Ryecroft Cemetery, a sewage treatment works and semi-natural green space including Mill Lane nature reserve and Goscote Wedge.

Topography

The highest points in the ecological sub-area at an elevation of 150 metres are in the north-west and at Brownhills Common in the north. From here the levels gradually fall away to the bottom of watercourse valleys of the Rough Brook, Ford Brook and Anchor Brook along which ecological sub-area is focused. These lie at an elevation of 140 to 120 metres.

Geology

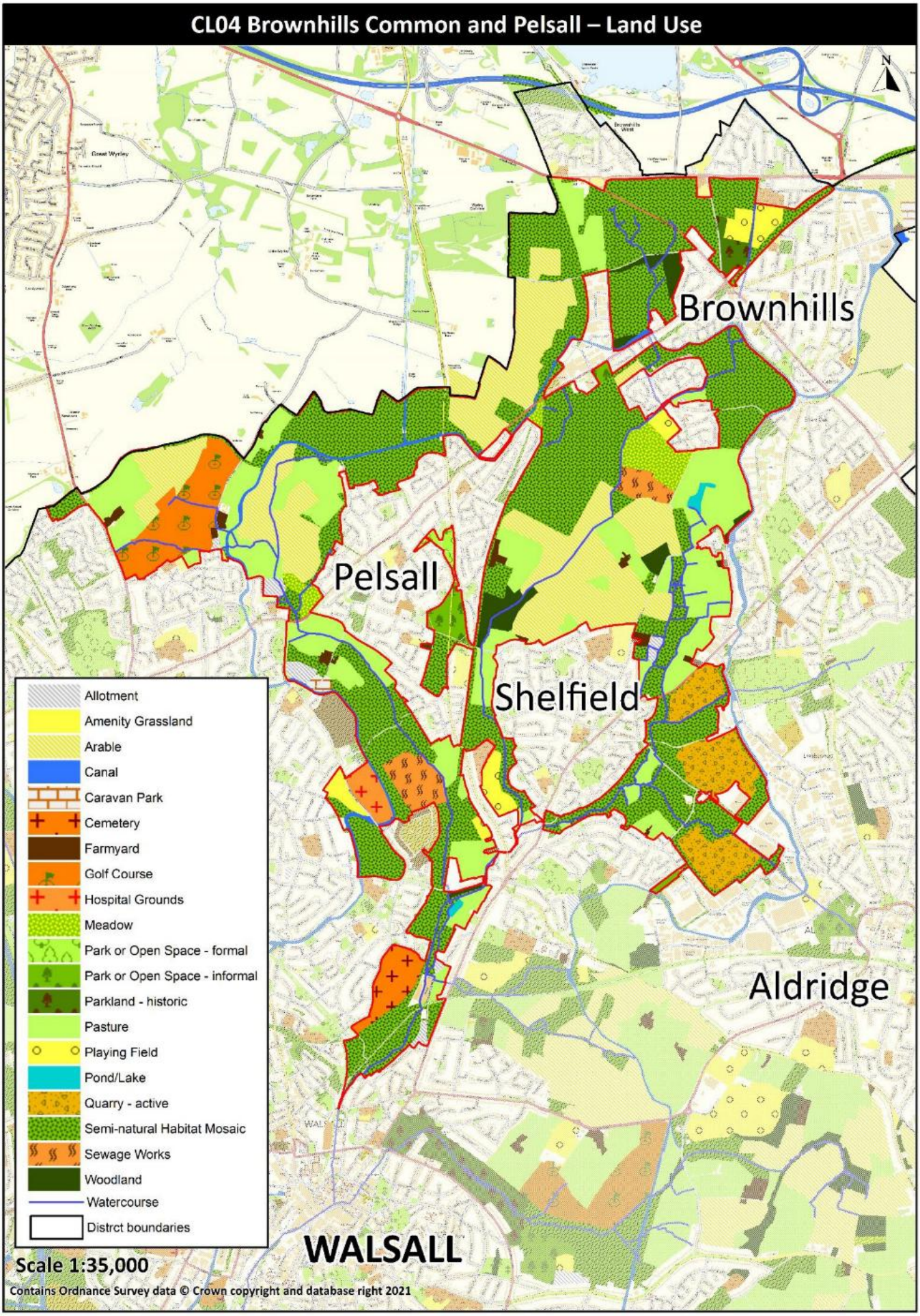
The bedrock in of the north-western part of the ecological sub-area is sedimentary mudstone, siltstone and sandstone of Pennine Middle Coal Measures Formation formed between 318 and 309.5 million years ago during the Carboniferous period. The central and southern area is mudstone, siltstone and sandstone of the Pennine Lower Coal Measures Formation and Pennine Middle Coal Measures Formation formed between 319 and 309.5 million years ago during the Carboniferous period. The eastern section is Alveley Member sandstone formed between 309.5 and 308 million years ago during the Carboniferous period. In the north-east there is a small area of Chester Formation sandstone and conglomerate, interbedded, formed between 250 and 247.1 million years ago during the Triassic period.

Most of the ecological sub-area is overlain with superficial deposits of Devensian diamicton till, with some areas of glaciofluvial sand and gravel in the central and north-eastern sections, formed between 116 and 11.8 thousand years ago during the Quaternary period.

Geopark Sites

n/a

Soils
The soils in the western section of the ecological sub-area are predominantly slowly permeable, seasonally wet and slightly acid, but base-rich loamy and clayey, with moderate fertility and impeded drainage. The eastern section is dominated by naturally wet loamy and sandy soils with naturally high groundwater and a peaty surface, with low to high fertility. There are areas throughout the ecological sub-area where, as a legacy of industrial activity including coal mining, the soils are restored, mostly from quarry and opencast spoil, loamy, and with low to moderate fertility and variable drainage.


CL04 Brownhills Common and Pelsall – Land Use
N
Brownhills
Pelsall
Shelfield
Aldridge
WALSALL
Allotment
Amenity Grassland
Arable
Canal
Caravan Park
Cemetery
Farmyard
Golf Course
Hospital Grounds
Meadow
Park or Open Space - formal
Park or Open Space - informal
Parkland - historic
Pasture
Playing Field
Pond/Lake
Quarry - active
Semi-natural Habitat Mosaic
Sewage Works
Woodland
Watercourse
Distrct boundaries
Scale 1:35,000
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Historic Landscape Character Areas			
Reference	WL13	**Name**	Pelsall
Most of the ecological sub area lies within HLCA WL13 Pelsall. This Character Area is situated in the north of the Walsall borough, on the eastern edge of the South Staffordshire coalfield. The modern character of the area is defined by field systems, open land, and dispersed settlements. The largest settlement, Pelsall, occupies the centre of the Character Area and has a large central common. Pelsall is first mentioned in a charter of AD 994, when it was granted to the church at Wolverhampton. The early settlement is likely to have been situated around Pelsall Hall. Medieval Pelsall was likely to have been surrounded by open fields that were enclosed during the late medieval and post medieval periods. Several parts of the area have been used for 19th and 20th century coal extraction although most of the collieries in the area were closed by 1900. The Character Area is crossed by several railways, all of which have fallen out of use.			
Reference	WL04	**Name**	Brownhills & Walsall Wood
The eastern part of the ecological sub-area includes a small part of WL04 Brownhills & Walsall Wood comprising a school playing field and SINC WA017 Walsall to Lichfield Railway Line.			

Historic Environment Area Designations [1]			
Reference	APA 4	**Name**	Watling Street
The APA contains the remains of the Roman road, Watling Street, the Wroxeter to Wall (*Letocetum*) section. The road runs in a westerly direction from Wall to Brownhills Common, marked by the present-day road, which is raised in places (Margary 1967). The modern road was extensively widened during the 1970s, revealing archaeological evidence of the Roman road suggesting that the road had developed from an earlier prehistoric route way. The road continued in use from the Roman period and in the 17th century was the alternative road between London and Chester.			
Reference	AHHLV 8	**Name**	Brownhills Common
The AHHLV is located on Brownhills Common, a tract of ancient waste land. The common was subject to intensive industrial activity during the post-medieval period and contains a concentration of industrial remains associated with Coppice and Watling Street Collieries. A brick works is shown immediately to the north of Coppice Colliery on the 1883 Ordnance Survey (OS) map. The remains of an area of open cast mining (up to 15 pits), including bell pits representing an older phase of mining activity, are present in this area. The earlier workings were largely replaced by deeper pits when the Wyrley & Essington Canal was built in 1794 and the earlier bell pits could no longer meet the demand for coal. The remains of railway lines and tramways associated with the industrial usage of the site are also present and the AHHLV contains the site of the Brownhills Midland Railway Station, which opened in 1882.			
Reference	AHHLV 2	**Name**	Birch Grove Coppice
The AHHLV is semi-natural ancient woodland. Accordingly, it has the potential to contain well-preserved prehistoric archaeological remains (although none are currently known) and may contain features associated with medieval and post-medieval woodland management.			
Reference	APA 17	**Name**	Slough Colliery Lime Kilns
The APA contains the site of the Slough Colliery Lime Kilns. The kilns are marked on the 1st edition Ordnance Survey map as old kilns, and buildings are shown at this location on the 1816 Ordnance Surveyors drawings. The area is now overgrown but it may contain upstanding remains associated with the lime kilns. The Slough Colliery was served by three canal wharves (no longer present). The APA may contain archaeological remains associated with the canal. The site is shown as flooded on the 1827 Parish Map.			
Reference	AHHLV 1	**Name**	Pelsall Works
The AHHLV is situated upon the coal measures, and contains areas of ridge and furrow which may date back to the medieval period and could provide archaeological evidence for medieval and early post-medieval land use. The area also contains the remains of the Pelsall Iron Works. The AHHLV contains several extant remains associated with the industrial use of the area, including the listed Wyrley and Essington Canal foot bridge at Pelsall Junction, the Pelsall Works Bridge and the locally listed buildings of Friar Bridge, Pelsall Common Bridge and the stables adjacent to the Cannock Extension Canal. The last are a nationally rare example of stables originally used to house canal tow horses. In addition, the area contains non-designated archaeological remains associated with the Pelsall Works and colliery and parts of the Cannock Extension Canal (1821-1880) and Wyrley and Essington Canal (1791-1800).			

Historic Environment Area Designations [1]			
The Pelsall Iron Works was opened in 1832 by Mr Richard Fryer, and after his death (1846) it was sold to Davis and Bloomer. It is listed in William White's 1851 History, Gazetteer and Directory of Staffordshire as producing the highest quality bar and sheet iron. The Pelsall Iron Works grew into an extensive facility with two blast furnaces, forty puddling furnaces, seven mills and forges, a gashouse and gasometer, and a large tramway with locomotive and wagon sheds. While none of these buildings are visible within the AHHLV, the area has the potential to contains previously unidentified structures and below ground archaeological remains associated with the ironworks (History Website 2018).			
Reference	AHHLV 18	**Name**	Fishley Farm
The AHHLV contains evidence of past mineral extraction and also contains a possible medieval moated site, which could provide evidence about the pre-industrial land usage in the area. The moat appears to have been infilled but could still contain waterlogged remains, which could reveal further information about the medieval landscape. A locally listed late 18th century barn also survives within the moated site. A number of industrial buildings associated with Fishery Colliery and Shaft are also present within the AHHLV providing evidence of former coal extraction. A watermill is also recorded within the AHHLV. Some of the structures associated with the Colliery appear to survive, including a mid-19th century former engine and boiler house (now locally listed). The Wyrley and Essington Canal Extension passes through the eastern part of the AHHLV.			
Reference	AHHLV 43	**Name**	Pelsall Common
The AHHLV contains Pelsall Common. Pelsall was first mentioned in a charter of 994 AD amongst various lands granted to the monastery at Wolverhampton. The land was still part of the monastery lands at the time of the Domesday Survey in 1086, which describes the area as wasteland (probably an area of lowland heath similar to that found at Brownhills Common or Cannock Chase). The common is shown as unenclosed on Yates' 1798 map of Staffordshire and continues to be so marked until the 1920-24 Ordnance Survey map, when it appears to have been utilised as parkland, although it is still referred to as Pelsall Common. The tree lined avenues were present by the 1902-1904 Ordnance Survey map while the routes that they line are present on the 1st edition Ordnance Survey map of 1887-89. The first known settlement in the area is recorded in the 14th century and was focused in the area now known as Old Town outside the AHHLV. Common edge settlement appeared on the edges of the common during the 19th century as a result of the industrialisation of the area. The northern part of the common was used as an iron works during the 19th century, and a gravel pit is shown within the common from the 1st edition Ordnance Survey map, highlighting the early industrial exploitation of it. The AHHLV draws archaeological interest from the industrial features within it. It also represents a surviving expanse of common land that does not appear to have been developed or farmed. Away from the disturbance caused by mineral activities within the common there is the potential for well-preserved archaeological remains to survive.			
Reference	AHHLV 12	**Name**	Rails Wood
Rails Wood is an area of semi-natural ancient woodland. It has the potential to contain well preserved prehistoric and Roman archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Ancient woodlands represent surviving patches of the historic landscape that date back to the early post-medieval period.			
Reference	APA 1	**Name**	Pelsall Burnt Mound
The APA contains black earth and burnt stones, which have been recorded in the area since the early 20th century. These remains are thought to be the surviving elements of a prehistoric burnt mound. A mound was recorded at this location but this has since been eroded by the stream. The APA has the potential to contain below-ground archaeological remains associated with the burnt mound. These remains are rare as there is very little surviving prehistoric archaeology in Walsall.			
Reference	AHHTV 3	**Name**	Wyrley and Essington Canal extension through Bloxwich, Pelsall and Brownhills
The AHHTV contains the Wyrley and Essington Canal Extension. The canal extension was opened in 1794 as an extension to link the original Wyrley and Essington Canal (opened in 1794) to the Birmingham and Fazeley canal. This extension linked the Bloxwich, Pelsall and Brownhills areas with the rest of Staffordshire. The canal was used to export coal from the Wolverhampton area. The presence of this new transport link led to the development and industrialisation of this part of Walsall.			

Historic Environment Area Designations [1]			
The AHHTV contains Four Grade II listed buildings (the Wyrley and Essington Canal Foot Bridge at Pelsall Junction, the Pelsall Works Bridge, the aqueduct over the railway line to the north of Number 50 Raymond Close, and the Railway bridge, approximately 100m south east of Backs Bridge, Pelsall Road) and two locally listed buildings (Yorks Bridge and Coopers Bridge). These nationally and locally important buildings are directly associated with the creation and development of the canal and make a positive contribution to the quality of the historic environment. The AHHTV interacts with the industrial landscapes at Brownhills Common, Pelsall Works and Fishley Farm showcasing the connection between the canal and the industrial development of the area. The listed buildings within the AHHTV are all directly associated with the canal which makes a significant contribution to the setting of these buildings.			
Reference	APA 23	**Name**	Coal Pool Mill
The APA contains an old mill pool (now dried up) and the earthwork remains of a dam. The dam stretches across the valley floor and there is a general scatter of forge cinder surrounding it. Yates' 1778 map shows a pond at this location. It is thought to be the site of a possible medieval bloomery and later post-medieval mill. The area has the potential to contain evidence of medieval iron working. Bloomery sites were widely spread across the country but physical remains are rare and often represented by concentrations of ironworking debris.			
Reference	APA 20	**Name**	Goscote Bloomery
The APA contains a mound of ash cinder and early bloomery slag of suggested medieval date and has been interpreted as the remains of a medieval bloomery. Bloomery sites were widely spread across the country but physical remains are rare and often represented by concentrations of ironworking debris.			

Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame, Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Ford Brook from Source to River Tame	Moderate (2019)	Moderate (2019)	Fail (2019)

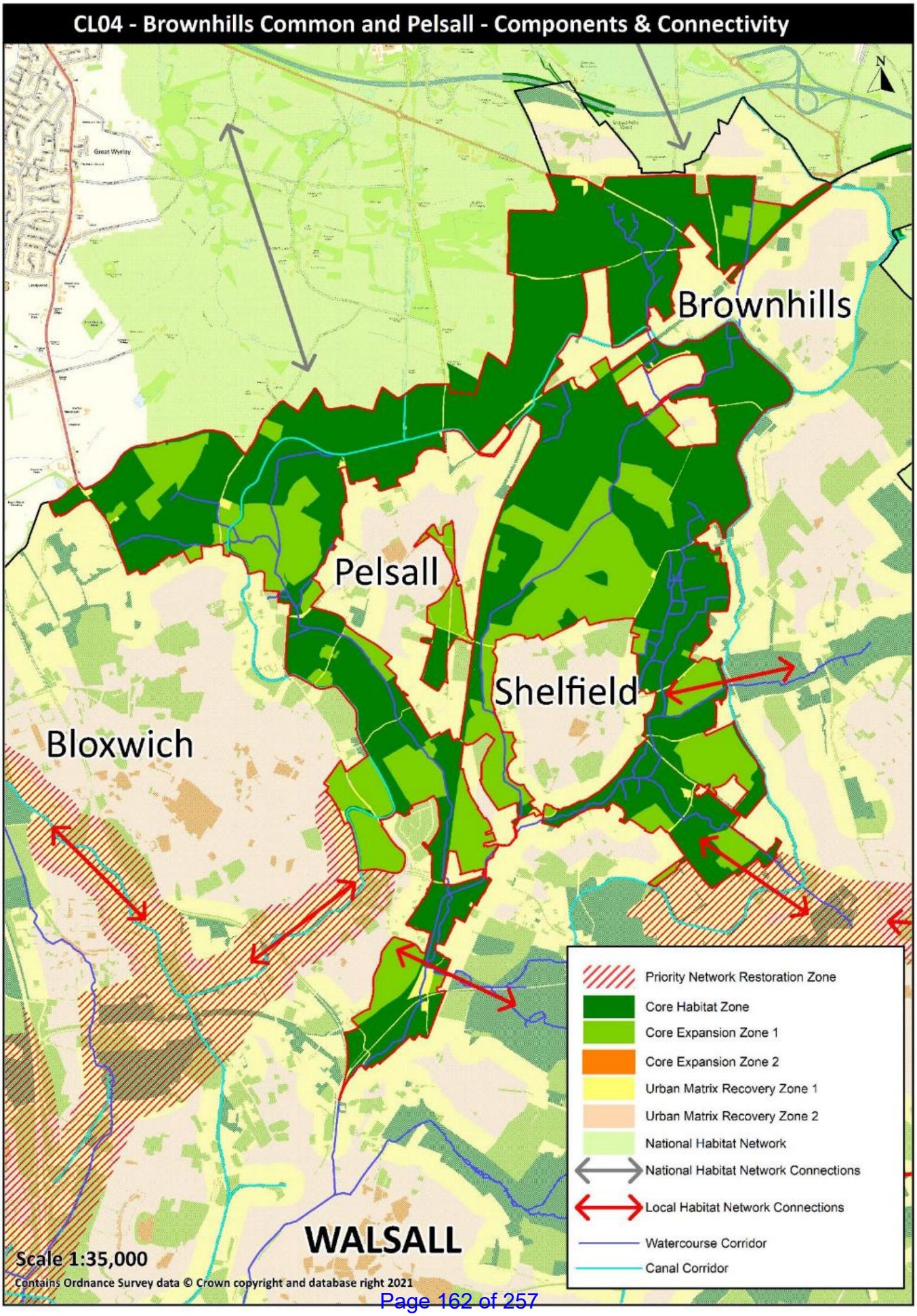
Key Habitats [2]			
Broad Habitat Type	Arable & Horticultural	**Priority Habitat**	
There is a concentration of arable fields in the north of the ecological sub-area which are mostly rectilinear and therefore of later enclosure origin, however, in the north-east there is an area of irregular fields which may be earlier. Many of the arable fields have been created though the amalgamation of a number of smaller fields, and in some cases the former hedgerows are represented by field trees.			
Broad Habitat Type	Boundary & Linear Features	**Priority Habitat**	Hedgerows
Numerous field boundary hedgerows throughout the sub-area associated with rectilinear fields created through Parliamentary enclosure, and in the north-west some which may be from earlier piecemeal enclosure in the late medieval/ early post-medieval periods. Hedgerow trees are scare in the former but frequent in the latter. Only a small proportion of the hedgerows have been assessed against the Local Wildlife Sites selection criteria and of these a number in the northern (e.g. Farmland at Yorks Bridge) and central parts (High Heath Common Farmland) of the ecological sub-area have been selected as SLINCs. Assessment of aerial photography suggests many of the hedgerows are defunct and there is significant variation in hedgerow size (i.e. management practice).			
Broad Habitat Type	Standing Open Water	**Priority Habitat**	Ponds
There is a relatively high number of ponds within the ecological sub-area, many of which are within sites designated for their ecological value (SSSI, LNR, SINC and SLINC). Some of the ponds are likely to be field ponds of pre-industrial origin and are depicted on historic mapping (19th century OS) in areas unaffected by 19th and 20th century industry. Many are, however, associated with former industrial land use including mine subsidence and other extraction industries. Due to both the underlying geology/soil conditions and the legacy of industrial activity, the vegetation communities of many of the ponds are likely to be influenced by acidic conditions.			
Broad Habitat Type	Standing Open Water	**Priority Habitat**	Eutrophic Standing Waters
There are two waterbodies in Brownhills Common & Pelsall which are over 2 hectares in extent and which, although the trophic status of these isn't confirmed, are likely to meet the definition of Eutrophic Standing Waters. These are Ryders Hayes Mere in the north of the ecological sub-area which was created in the 1990s on the site of an opencast coal mine, and The Swag in south-east, part of which is designated as a SSSI for its value to roosting hirundines.			
Broad Habitat Type	Standing Open Water	**Priority Habitat**	
The Wyrley & Essington Canal is a significant feature in Brownhills Common & Pelsall, with a substantial section of this meandering through the northern and western parts of the ecological sub-area. The canal is fed by Chasewater reservoir and is of low chemical and nutrient status, consequently being of high ecological value in the context of the Black Country canal network. The canal supports a diverse assemblage of aquatic vegetation, as well of populations of coarse fish, freshwater invertebrates and wetland birds. A short stretch of the Cannock Extension Canal is situated within Pelsall North Common in the north of the ecological sub-area from its junction with the Wyrley & Essington. The canal is designated as both a SSSI and SAC for its rich aquatic flora.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
There are three watercourses (the Grange Brook and Ford Brook which rise in the north, and the Anchor Brook that rises in the east) along with numerous minor tributaries and drains within Brownhills Common & Pelsall. The confluences of the three watercourses are in the south of the ecological sub-area, eventually becoming the Ford Brook which flows southwards towards Walsall town centre. The channels of the watercourses are frequently modified and support few natural features associated with sediment erosion and deposition, however, some stretches within parts of the agricultural landscape are less modified and support more diverse natural features. There is a known barrier to fish movement at the confluence of the Ford Brook and Rough Brook in the south of the ecological sub-area.			
Broad Habitat Type	Acid Grassland	**Priority Habitat**	Lowland Dry Acid Grassland
Lowland dry acid grassland is present within Brownhills Common & Pelsall on both undisturbed and post-industrial substrates, more frequently on the latter at sites including Pelsall North Common and Brownhills Common.			

Key Habitats [2]			
Pastures are frequent throughout the sub-area and further areas of acidic grassland may be present. Some roadside grasslands may also support the Priority Habitat.			
Broad Habitat Type	Dwarf Shrub Heath	**Priority Habitat**	Lowland Heathland
There are areas of remnant lowland heathland dominated by Common Heather at Pelsall North Common, Brownhills Common and Pelsall Common. Heather and other associated heathland species have also become established on post-industrial substrates at Pelsall North Common and Brownhills Common.			
Broad Habitat Type	Bog	**Priority Habitat**	Lowland raised bog
Stubber's Green Bog SSSI in the south-east of the ecological sub-area is a heavily degraded area of peat bog which has been partially drained and is heavily scrubbed over.			
Broad Habitat Type	Fen, Marsh and Swamp	**Priority Habitat**	Purple Moor Grass and Rush Pasture
Areas of floristically diverse damp and marshy grassland, some of which meets the description of Purple Moor Grass and Rush Pasture, are present on poorly drained acidic soils on both undisturbed and post-industrial substrates at sites including Jockey Fields, Brownhills Common, Pelsall North Common and Clayhanger.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	Lowland mixed deciduous woodland
There are two areas of woodland within Brownhills Common & Pelsall that are designated as Ancient Semi-natural Woodland by Natural England, both of which are remnants of larger sites as depicted on 19th century OS mapping. Birch Coppice in the north of the ecological sub-area is Oak and Birch-dominated, has been heavily disturbed by historic industrial activity including tipping of colliery waste, and supports a typical acidic woodland flora. Rails Wood in the south is Birch-dominated, supports a similar flora and may have been clear-felled in the early 20th century.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	
There are several small mature Oak-dominated woodlands in the ecological sub-area which are considered to be old plantations and not ancient. These include Grange Farm Wood and Turner's Wood off Pelsall Common. There are substantial areas of secondary woodland in the north of the ecological sub-area, with a concentration at Brownhills Common that has colonised large areas of colliery workings and spoil. This is predominantly Birch-dominated and supports a species-poor field-layer. Young Birch woodland has also colonised parts of Pelsall North Common and Mill Lane nature reserve in the south of the ecological sub-area. There are a number of areas of young planted woodland throughout Brownhills Common & Pelsall, predominantly of native broad-leaved species, at sites including Ryder's Hayes Mere, Goscote Wedge, Clayhanger Common and to the south of Rails Wood, as well as between the fairways of Bloxwich Golf Club.			

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Grey Partridge, Jackdaw, Kestrel, Lapwing, Linnet, Rook, Starling, Stock Dove, Tree Sparrow, Whitethroat, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Great Spotted Woodpecker, Great Tit, Jay, Lesser Spotted Woodpecker, Lesser Whitethroat, Long-tailed Tit, Robin, Song Thrush, Sparrowhawk, Tawny Owl, Tree Pipit, Treecreeper, Willow Tit, Willow Warbler, Wood Warbler.
Water & Wetland	Common Merganser, Common Reed Bunting, Common Sandpiper, Eurasian Coot, Great Crested Grebe, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Grebe, Mallard, Moorhen, Mute Swan, Oystercatcher, Reed Warbler, Sand Martin, Snipe, Teal, Tufted Duck
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common Firecrest, Common House Martin, Cuckoo, Eurasian Magpie, Gadwall, Hobby, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Pied Wagtail, Pied Wagtail, Pochard, Shoveler, Stonechat, Swallow, Swift, Whinchat.
Amphibians & Reptiles	
Amphibians	Common Frog, Common Toad, Great Crested Newt, Smooth Newt.
Reptiles	Common Lizard
Mammals	
Bats	Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Noctule Bat, Soprano Pipistrelle.
Other	Brown Hare, Eurasian Badger, European Otter, European Water Vole, Polecat, West European Hedgehog.
Fish	
Bony Fish	Barbel
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Ajuga reptans, Angelica sylvestris, Athyrium filix-femina, Blechnum spicant, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Cardamine amara, Carex remota, Deschampsia flexuosa, Dryopteris affinis, Festuca gigantea, Filipendula ulmaria, Fragaria vesca, Frangula alnus, Lysimachia vulgaris, Malus sylvestris, Mercurialis perennis, Milium effusum, Molinia caerulea, Persicaria hydropiper, Poa nemoralis, Polystichum setiferum, Quercus petraea, Scirpus sylvaticus, Stellaria holostea, Teucrium scorodonia, Tilia cordata, Torilis japonica, Veronica montana*
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Agrostis canina, Aira caryophyllea, Ajuga reptans, Blechnum spicant, Brachypodium sylvaticum, Briza media, Caltha palustris, Campanula rotundifolia, Carex caryophyllea, Centaurium erythraea, Cerastium semidecandrum, Cirsium dissectum, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza fuchsii x praetermissa = D. x grandis, Dactylorhiza praetermissa, Dactylorhiza praetermissa x purpurella = D. x insignis, Danthonia decumbens, Daucus carota subsp. carota, Deschampsia flexuosa, Euphrasia, Euphrasia nemorosa, Euphrasia officinalis agg., Festuca filiformis, Filipendula ulmaria, Fragaria vesca, Galium saxatile, Isolepis setacea, Lathyrus nissolia, Leontodon hispidus, Linum catharticum, Lotus pedunculatus, Nardus stricta, Odontites vernus, Ononis repens, Persicaria bistorta, Plantago media, Potentilla erecta, Poterium sanguisorba subsp. sanguisorba, Rhinanthus minor, Sanguisorba officinalis, Sherardia arvensis, Silene flos-cuculi, Stachys officinalis, Stellaria holostea, Succisa pratensis, Taraxacum sect. Erythrosperma, Trifolium medium.*
Heathland	*Agrostis canina, Agrostis vinealis, Aira praecox, Blechnum spicant, Calluna vulgaris, Campanula rotundifolia, Carex nigra, Carex pilulifera, Dactylorhiza maculata, Danthonia decumbens, Deschampsia flexuosa, Erica cinerea, Erica tetralix, Festuca filiformis, Galium saxatile, Juncus squarrosus, Luzula multiflora, Luzula multiflora subsp. congesta, Molinia caerulea, Nardus stricta, Oreopteris limbosperma, Pedicularis sylvatica, Polygala serpyllifolia, Potentilla erecta, Salix aurita, Senecio sylvaticus, Teucrium scorodonia, Ulex gallii, Vaccinium myrtillus, Vaccinium vitis-idaea.*

Mires	*Achillea ptarmica, Agrostis canina, Agrostis vinealis, Anagallis tenella, Angelica sylvestris, Apium inundatum, Athyrium filix-femina, Briza media, Calamagrostis epigejos, Caltha palustris, Cardamine amara, Carex acuta, Carex acutiformis, Carex nigra, Carex panicea, Carex pseudocyperus, Carex riparia, Carex rostrata, Carex viridula subsp. oedocarpa, Cirsium dissectum, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza fuchsii x praetermissa = D. x grandis, Dactylorhiza maculata, Dactylorhiza praetermissa, Dactylorhiza praetermissa x purpurella = D. x insignis, Dryopteris carthusiana, Eleocharis palustris, Eleogiton fluitans, Epilobium palustre, Equisetum fluviatile, Equisetum palustre, Erica tetralix, Eriophorum angustifolium, Eriophorum vaginatum, Filipendula ulmaria, Galium palustre, Galium palustre subsp. palustre, Glyceria declinata, Glyceria notata, Hydrocotyle vulgaris, Hypericum tetrapterum, Isolepis setacea, Jacobaea aquatica, Juncus acutiflorus, Juncus bulbosus, Juncus squarrosus, Lotus pedunculatus, Luzula multiflora, Luzula multiflora subsp. congesta, Lysimachia vulgaris, Lythrum portula, Molinia caerulea, Pedicularis sylvatica, Persicaria hydropiper, Potamogeton polygonifolius, Potentilla palustris, Pulicaria dysenterica, Ranunculus aquatilis, Ranunculus aquatilis, Ranunculus circinatus, Ranunculus flammula, Ranunculus hederaceus, Scirpus sylvaticus, Silene flos-cuculi, Sparganium emersum, Stachys palustris, Stellaria alsine, Succisa pratensis, Triglochin palustre, Veronica beccabunga, Veronica scutellata.*
Open Water	*Apium inundatum, Bidens cernua, Bidens tripartita, Butomus umbellatus, Carex acuta, Carex acutiformis, Carex pseudocyperus, Carex riparia, Eleocharis palustris, Equisetum fluviatile, Galium palustre, Galium palustre subsp. palustre, Glyceria notata, Luronium natans, Lythrum portula, Potamogeton friesii, Potamogeton lucens, Potamogeton perfoliatus, Potamogeton polygonifolius, Ranunculus aquatilis, Ranunculus aquatilis, Ranunculus circinatus, Sagittaria sagittifolia, Schoenoplectus lacustris, Veronica catenata, Veronica scutellata.*
Post-industrial (water-stressed)	*Agrimonia eupatoria, Aira caryophyllea, Aira praecox, Anthyllis vulneraria, Arenaria serpyllifolia, Arenaria serpyllifolia, Arenaria serpyllifolia subsp. serpyllifolia, Asplenium adiantum-nigrum, Blechnum spicant, Centaurea scabiosa, Centaurium erythraea, Cerastium semidecandrum, Chaenorhinum minus, Daucus carota subsp. carota, Deschampsia flexuosa, Erigeron acris, Erophila verna, Erophila verna, Filago vulgaris, Fragaria vesca, Jacobaea erucifolia, Linum catharticum, Ophrys apifera, Polygala serpyllifolia, Poterium sanguisorba subsp. sanguisorba, Reseda lutea, Senecio viscosus, Sherardia arvensis, Silene vulgaris, Silene vulgaris subsp. vulgaris, Taraxacum sect. Erythrosperma, Trifolium arvense, Trifolium medium, Vicia tetrasperma.*
Cultivation	*Chenopodium polyspermum, Vicia tetrasperma.*

Ecological Connectivity
Local Habitat Network
Direct ecological connection to the local habitat network in Core Landscape 05 (Barr Beacon, Druid's Heath & Shire Oak) and Core Landscape 06 (Park Lime Pits, Cuckoo's Nook and Great Barr Hall). Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping (EcoRecord and Staffordshire Ecological Record, 2021) identifies a heathland connectivity bottleneck within the ecological sub-area and this and between Core Landscape 05. Link via Priority Network Restoration Zone Daw End Branch Canal & Aldridge Town linking CL04 to CL05 and CL06.
National Habitat Network
There is a direct ecological connection along almost the entire northern boundary to the National Habitat Network in rural South Staffordshire. Indirect connection to Cannock Chase SAC (Staffordshire) via rural heathland sites in Walsall and Staffordshire (inc. Chasewater and The Southern Staffordshire Coalfield Heaths SSSI) identified in Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping.


CL04 - Brownhills Common and Pelsall - Components & Connectivity
N
Great Wyrley
Brownhills
Pelsall
Shelfield
Bloxwich
WALSALL
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Scale 1:35,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Arable Field Margins	Create new	New habitat
Hedgerows	Improve management of existing	Habitat in good condition
	Restore through gapping up	Habitat in good condition
	Reinstate lost field-boundary hedgerows	New habitat
	Establish hedgerow trees	Habitat structure improved
Lowland Heathland	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland dry acid grassland	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Purple Moor Grass and Rush Pasture	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Improve soil management	Reduced silt inputs to watercourses
	Reduce artificial inputs	Improved chemical status
	Restore hydromorphology (naturalise modified channels and mitigate barriers)	Improved ecological status

Target Species	
Species/Species Group	**Measure**
Adder	Confirmed recent records
Breeding farmland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown Long-eared Bat	Confirmed recent records
Common Lizard	Confirmed recent records
Cuckoo	Confirmed recent records
Great Crested Newt	Increased abundance and number of sites
Heather	Increased abundance and number of sites
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance
Post-industrial axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
None	n/a	

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL04	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Woodland enhancement and planting on non-grassland or heathland sites.
	Field boundary hedgerow restoration and creation.
	Restoration and creation of peat-forming habitats.
Priority Network Restoration Zone Wyrley & Essington Canal linking CL04 to CL03 and wider ecological network.	Reduction of artificial inputs to canal waterbody.
	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of standard trees (including fruit trees) along canal corridor.
Priority Network Restoration Zone Daw End Branch Canal & Aldridge Town linking CL04 to CL05 and CL06.	Reduction of artificial inputs to canal waterbody.
	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of standard trees (including fruit trees) along canal corridor.
National Habitat Network	
Staffordshire Heathlands inc. Chasewater and The Southern Staffordshire Coalfield Heaths SSSI	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Field boundary hedgerow restoration and creation.
	Planting of street trees along urban roads.
	Creation of new ponds and wetlands.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html	2021
	Black Country UNESCO Global Geopark sites names and location information https://blackcountrygeopark.dudley.gov.uk/bcg/	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: http://www.landis.org.uk/soilscapes/	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) *Draft Black Country Local Nature Recovery Opportunity Map*	2021
	EcoRecord et al. (2021) *Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping*.	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) *Black Country Historic Landscape Characterisation* [data-set]. York: Archaeology Data Service [distributor] https://doi.org/10.5284/1000030	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

[1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

Archaeological Priority Areas (APA): sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

Areas of High Historic Townscape Value (AHHTV): areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

Designed Landscapes of High Historic Value (DLHHV): landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

Areas of High Historic Landscape Value (AHHLV): these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

[2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

[3] KEY SPECIES

Bird Indicators: Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

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Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area ref.	CL05	**Sub-area name**	Barr Beacon, Druid's Heath and Shire Oak
NCA ref.	67	**Natural Character Area**	Cannock Chase & Cank Wood
Area km²	10.79	**Local Authority Area**	Walsall

Ecological Sub-area Description

Overview

Barr Beacon, Druid's Heath and Shire Oak comprises the rural eastern part of both the borough of Walsall and of the Black Country, with Staffordshire to the north and east, the Black Country Settlements of Brownhills, Walsall Wood and Aldridge to the north-west, rural parts of Great Barr to the south-west and the modern settlements of Pheasey and Streetly to the south and south-east. Sutton Park (Birmingham) lies approximately 1 km to the south-east beyond Streetly.

Historically parts of the parishes of Shenstone and Aldridge (including the township of Great Barr), the landscape is dominated by rectilinear fields and some plantation woodlands that were enclosed from commons and open fields through Parliamentary Acts in the late 18th and early 19th centuries. Close to historic settlements there are earlier piecemeal and irregular enclosed fields.

Land Use

Predominantly arable agricultural with areas of pasture and dispersed farms. There are smaller areas of woodland and semi-natural mosaic habitat. There are a number of disused sand quarries including those at what are now Shire Oak Park Local Nature Reserve and Pinfold Lane Quarry Local Nature Reserve. Barr Beacon Local Nature Reserve is in the south of the sub-area comprising acid grassland, scrub, plantation woodland and recently created dry heathland. Druid's Heath Golf Course and Streetly Crematorium are also within the sub-area.

Topography

In the south of the sub-area Barr Beacon is the highest point in Walsall at 236 metres. From here the land falls away and levels out to the north and east to 130 metres, before rising again to 180 m at Shire Oak Park.

Geology

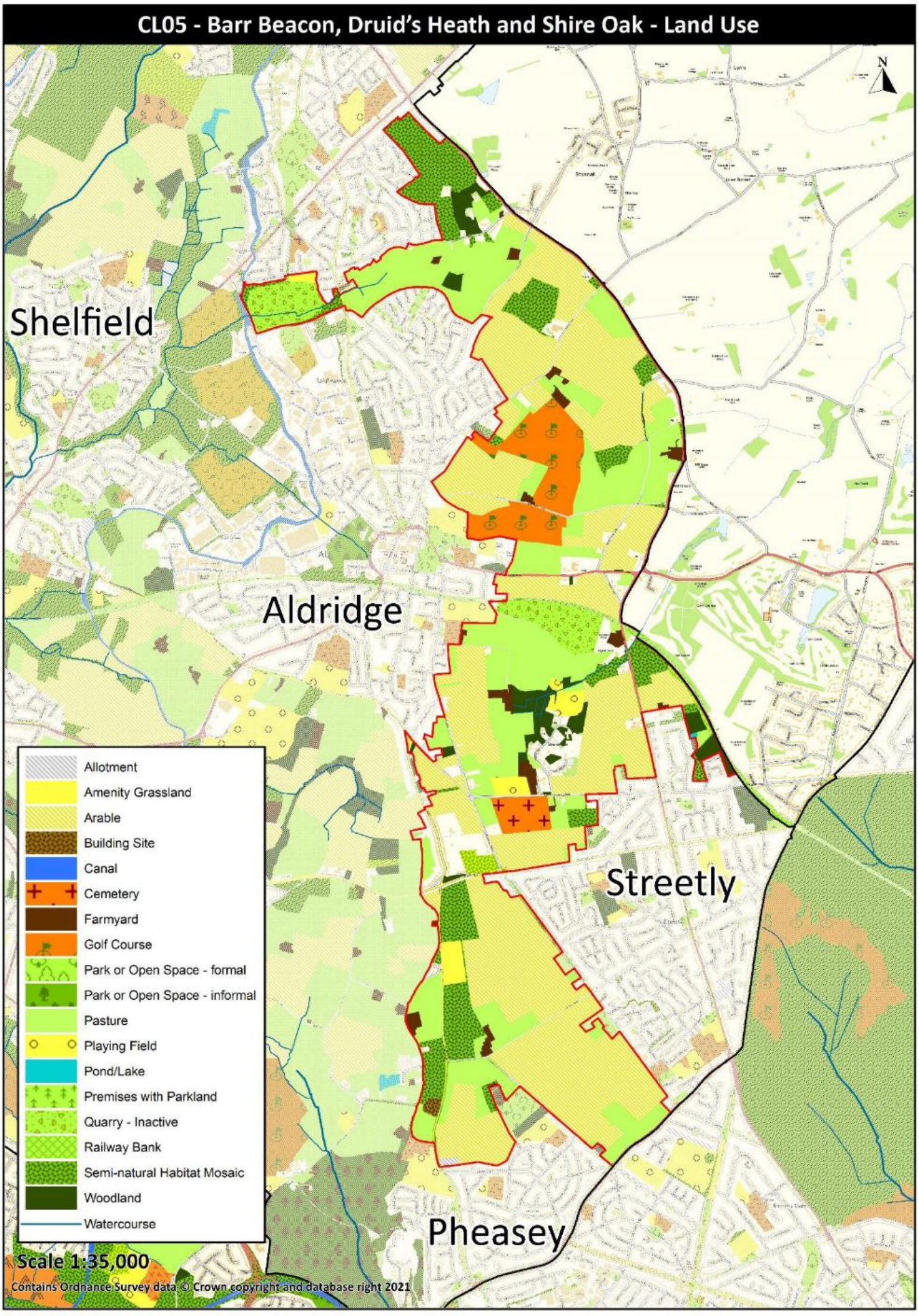
Dominated by Triassic Rocks (undifferentiated) Sandstone and Conglomerate, Interbedded sedimentary bedrock formed approximately 200 to 251 million years ago in the Triassic Period. In the north-west of the sub-area are Warwickshire Group Siltstone and Sandstone with Subordinate Mudstone. These sedimentary bedrocks formed approximately 271 to 312 million years ago in the Permian and Carboniferous Periods.

Geopark Sites

- Shire Oak Quarry Local Nature Reserve (GR SK060037)
- Barr Beacon Local Nature Reserve and Pinfold Lane Quarry (GR SP06099723)

Soils

The ecological sub-area is dominated by freely draining slightly acid sandy soils, whilst in the south-west is an area of freely draining very acid sandy and loamy soils. There are also small areas of freely draining slightly acid loamy soils, slightly acid loamy and clayey soils with impeded drainage, and in the east around the Footherley Brook loamy and sandy soils with naturally high groundwater and a peaty surface.


CL05 - Barr Beacon, Druid's Heath and Shire Oak - Land Use
N
Shelfield
Aldridge
Streetly
Pheasey
Allotment
Amenity Grassland
Arable
Building Site
Canal
Cemetery
Farmyard
Golf Course
Park or Open Space - formal
Park or Open Space - informal
Pasture
Playing Field
Pond/Lake
Premises with Parkland
Quarry - Inactive
Railway Bank
Semi-natural Habitat Mosaic
Woodland
Watercourse
Scale 1:35,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Historic Landscape Character Areas			
Reference	WL09	**Name**	Barr Beacon & Aldridge Fields
The ecological sub-area is dominated by the eastern part of WL09 Barr Beacon & Aldridge Fields. This Character Area is situated in the east of the borough and is the most rural landscape in Walsall, with field systems covering 66% of its area. It has a mixed geology situated on mudstone and limestone in the west, sandstone, mudstone and conglomerate in the in the centre and sandstone in the east. The modern character of the area is defined largely by agricultural land and dispersed farms. The area also includes modern recreational land (golf courses), woodland, two areas of settlement, and an area of surviving ancient heathland (Barr Beacon). Historically the Character Area was in use as medieval open fields associated with Walsall, Aldridge, Stonnall and Great Barr. In the centre of the Character Area there were several medieval moated sites and many of the trackways and roads in this area are likely to be medieval in origin. The earliest settlement in the area is Great Barr, which was mentioned in a charter of AD 957. The surviving field systems in the Character Area were enclosed by either piecemeal enclosure in the late medieval/ early post-medieval periods from open field or were enclosed out of Aldridge Heath by Parliamentary Act.			

Historic Environment Area Designations [1]			
Reference	AHHLV 19	**Name**	Shire Oak Quarry
A large former sand and gravel extraction site which started as a marl pit in the early 19th century.			
Reference	AHHLV 15	**Name**	Kings Hayes Historic Field System
A well-preserved historic field system, which contains evidence of medieval strip fields and a mixture of cropmark and earthwork ridge and furrow.			
Reference	APA 5	**Name**	Castlefort
A scheduled Iron Age hillfort called Castlefort (NHLE ref: 1017244). The scheduled hillfort covers a 1.5ha area and is set in a naturally defensible position.			
Reference	APA 19	**Name**	Earthwork Mound at Aldridge
A small Tumulus, possibly the remains of a Bronze Age Barrow or a Windmill mound.			
Reference	AHHLV 3	**Name**	Bourne Vale
Was part of the open fields associated with Aldridge during the medieval period. It has a high potential to contain prehistoric remains and contains an area of ancient woodland, eroded ridge and furrow.			
Reference	APA 3	**Name**	Bourne Pool Area
Contains a range of archaeological remains including the site of a medieval iron mill and pool, a 15th-century charcoal burning site, a possible burnt mound and a Mesolithic - Neolithic flint scatter.			
Reference	AHHLV 11	**Name**	Great Barr Beacon
Contains an isolated north-south ridge of Bunter Pebble Beds and is the possible site of an Anglo-Saxon beacon. A number of prehistoric and Roman finds have been recorded within the area and the AHHLV contains the proposed location of an Iron Age Hillfort although no evidence of the hillfort has been discovered here.			
Reference	AHHTV 1	**Name**	Scattered Settlement at Over End
Comprises the remains of a dispersed linear settlement formed from a cluster of buildings probably built in the 18th century.			

Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame, Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Crane Brook - source to Footherley Brook	Poor (2019)	Poor (2019)	Fail (2019)
Footherley Brook from Source to Black-Bourne Brook	Poor (2019)	Poor (2019)	Fail (2019)
Plants Brook Catchment (trib of Tame)	Moderate (2019)	Moderate (2019)	Fail (2019)
Ford Brook from Source to River Tame	Moderate (2019)	Moderate (2019)	Fail (2019)
Tame - conf two arms to R Rea	Moderate (2019)	Moderate (2019)	Fail (2019)

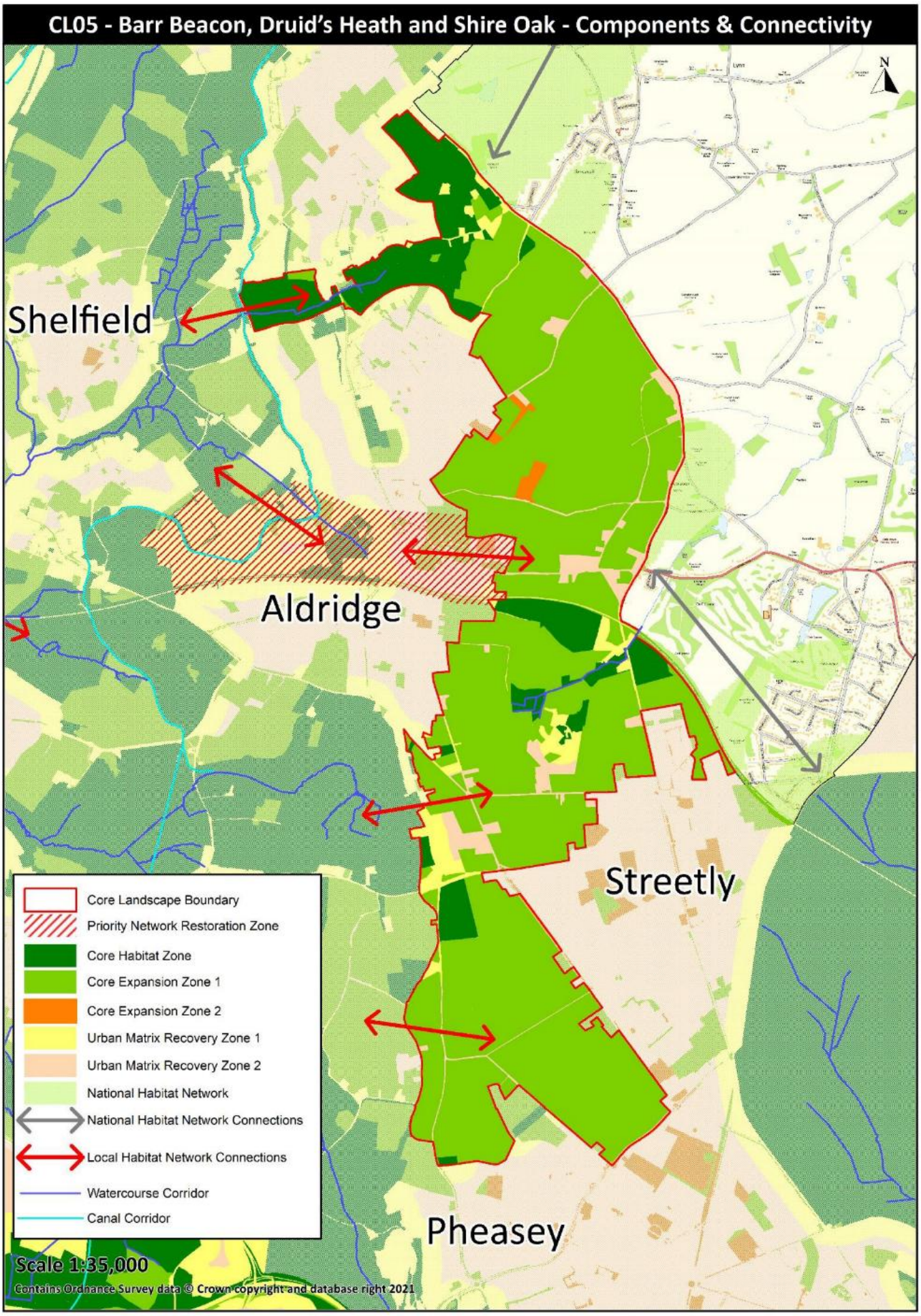
Key Habitats [2]			
Broad Habitat Type	Arable & Horticultural	**Priority Habitat**	
Arable agriculture dominates much of the sub-area. These fields are mostly of 18th and 19th century Parliamentary enclosure origin. No Priority Habitat Arable Field Margins have been recorded.			
Broad Habitat Type	Boundary & Linear Features	**Priority Habitat**	Hedgerows
Numerous field boundary hedgerows throughout the sub-area associated with mostly rectilinear fields created through Parliamentary enclosure, though some may be from earlier piecemeal enclosure in the late medieval/ early post-medieval periods. Only a small proportion of the hedgerows have been assessed against the Local Wildlife Sites selection criteria and of these a number in the central and northern parts of the sub-area have been selected as SLINCs. These are described as having a diverse woody component with mature standards and an acidic field-layer. The designated hedgerows form the boundaries to roads and tracks and are likely to be of more ancient origin than the more numerous rectilinear field boundary hedgerows of 18th and 19th century enclosures.			
Broad Habitat Type	Standing Open Waters	**Priority Habitat**	Ponds
A number of ponds have been recorded within designated SINCs.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
Two headwater streams have been recorded in the sub-area. These are a tributary of the Anchor Brook which rises in the north-west of the sub-area and flows west, and the Footherley Brook which rises in the centre of the sub-area in Corporation Wood and flows east.			
Broad Habitat Type	Acid Grassland	**Priority Habitat**	Lowland Dry Acid Grassland
Species-poor lowland dry acid grassland is present at Barr Beacon Local Nature Reserve. A small number of pastures within the sub-area are described as unimproved and supporting acid to neutral grassland with a diverse flora. Pastures are frequent throughout the sub-area and further areas of acidic grassland may be present. Some roadside grasslands may also support the Priority Habitat.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	
Areas of grazed pastures, roadside grasslands and grasslands of more recent origin - such as at inactive quarries - may be neutral.			
Broad Habitat Type	Dwarf Shrub Heath	**Priority Habitat**	Lowland Heathland
There are small areas of lowland heathland at Barr Beacon Local Nature Reserve which have been created via the strewing of cuttings from nearby semi-natural lowland heathland sites. There are records of Heather and other heathland species at Branton Hill Quarry and Shire Oak Local Nature Reserve.			
Broad Habitat Type	Improved Grassland	**Priority Habitat**	Coastal and Floodplain Grazing Marsh

Key Habitats [2]			
There are potentially areas of coastal and floodplain grazing marsh along the Footherley Brook.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	
The woodlands in the sub-area are mostly of planted or recent secondary origin and are described as having a botanically poor acidic field-layer. A number of these sites are designated as SLINC.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	Traditional Orchards
A number of small orchards associated with houses have been recorded on the Traditional Orchards HAP Inventory 2020.			

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Jackdaw, Kestrel, Lapwing, Linnet, Rook, Starling, Stock Dove, Whitethroat, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Garden Warbler, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Lesser Redpoll, Long-tailed Tit, Robin, Siskin, Song Thrush, Sparrowhawk, Treecreeper, Willow Warbler.
Water & Wetland	Common Reed Bunting, Eurasian Coot, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Grebe, Mallard, Moorhen.
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Cuckoo, Eurasian Magpie, Greylag Goose, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Pied Wagtail, Swallow, Swift, Whinchat.
Amphibians & Reptiles	
Amphibians	*Common Frog, Common Toad, Great Crested Newt, Smooth Newt.*
Reptiles	none
Mammals	
Bats	*Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Noctule, Natterer's Bat, Noctule Bat, Soprano Pipistrelle, Whiskered/Brandt's Bat.*
Other	*Eurasian Badger, West European Hedgehog.*
Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Carex paniculata, Carex remota, Carex sylvatica, Chaerophyllum temulum, Deschampsia flexuosa, Dioscorea communis, Equisetum sylvaticum, Equisetum telmateia, Frangula alnus, Lysimachia nemorum, Malus sylvestris, Mercurialis perennis, Moehringia trinervia, Oxalis acetosella, Persicaria hydropiper, Quercus petraea, Stellaria holostea, Teucrium scorodonia.*
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Aira caryophyllea, Ajuga reptans, Brachypodium sylvaticum, Caltha palustris, Campanula rotundifolia, Centaurium erythraea, Cerastium semidecandrum, Cirsium dissectum, Cirsium palustre, Dactylorhiza praetermissa, Danthonia decumbens, Daucus carota subsp. carota, Deschampsia flexuosa, Equisetum sylvaticum, Galium saxatile, Isolepis setacea, Leontodon hispidus, Lotus pedunculatus, Nardus stricta,*

	Odontites vernus, Phleum bertolonii, Potentilla erecta, Potentilla sterilis, Rhinanthus minor, Sherardia arvensis, Silene flos-cuculi, Stellaria holostea, Succisa pratensis, Trifolium medium, Trifolium arvense, Trifolium medium, Vicia tetrasperma.
Heathland	*Aira praecox, Calluna vulgaris, Campanula rotundifolia, Carex nigra, Carex pilulifera, Danthonia decumbens, Deschampsia flexuosa, Erica cinerea, Galium saxatile, Luzula multiflora, Nardus stricta, Potentilla erecta, Salix aurita, Teucrium scorodonia, Ulex gallii.*
Mires	*Achillea ptarmica, Angelica sylvestris, Athyrium filix-femina, Caltha palustris, Carex nigra, Carex panicea, Carex paniculata, Carex viridula subsp. oedocarpa, Cirsium dissectum, Cirsium palustre, Dactylorhiza praetermissa, Dryopteris carthusiana, Eleocharis palustris, Galium palustre, Glyceria declinata, Isolepis setacea, Juncus acutiflorus, Juncus bulbosus, Lotus pedunculatus, Luzula multiflora, Mentha arvensis, Persicaria hydropiper, Pulicaria dysenterica, Ranunculus hederaceus, Silene flos-cuculi, Stellaria alsine, Succisa pratensis, Triglochin palustre, Veronica beccabunga.*
Open Water	*Butomus umbellatus, Carex paniculata, Eleocharis palustris, Galium palustre.*
Post-industrial (water-stressed)	*Agrimonia eupatoria, Aira caryophyllea, Aira praecox, Centaurea scabiosa, Centaurium erythraea, Cerastium semidecandrum, Daucus carota subsp. carota, Deschampsia flexuosa, Filago vulgaris, Jacobaea erucifolia, Reseda lutea, Senecio viscosus, Sherardia arvensis, Trifolium arvense, Trifolium medium, Vicia tetrasperma.*
Cultivation	*Apera spica-venti, Fumaria muralis subsp. boraei, Thlaspi arvense, Vicia tetrasperma.*

Ecological Connectivity
Local Habitat Network
Direct ecological connection to the local habitat network in Core Landscape 04 (Brownhills Common & Pelsall) and Core Landscape 06 (Park Lime Pits, Cuckoo's Nook & Great Barr Hall). Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping (EcoRecord and Staffordshire Ecological Record, 2021) identifies a heathland connectivity bottleneck between the two main heathland sites within the ecological sub-area (Shire Oak Park and Barr Beacon) which are located at the north and south of the sub-area respectively.
National Habitat Network
Direct ecological connection to the National Habitat Network in rural South Staffordshire. Indirect connection to Sutton Park NNR (Birmingham) via Little Aston Golf Course and approximately 0.5 km urban development (Garden - large, mature). Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping identifies a heathland connectivity bottleneck between Shire Oak Park and Sutton Park NNR (Birmingham). Indirect connection to Cannock Chase SAC (Staffordshire) via rural heathland sites in Walsall and Staffordshire (inc. Chasewater and The Southern Staffordshire Coalfield Heaths SSSI) identified in Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping.


CL05 - Barr Beacon, Druid's Heath and Shire Oak - Components & Connectivity
N
Shelfield
Aldridge
Streetly
Pheasey
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Scale 1:35,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Arable Field Margins	Create new	New habitat
Hedgerows	Improve management of existing	Habitat in good condition
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Lowland Heathland	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland dry acid grassland	Improve habitat at existing sites	Habitat in good condition
	Create new	New habitat at existing and new sites
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Create new	New habitat at existing and new sites
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Improve soil management	Reduced silt inputs to watercourses
	Reduce artificial inputs	Improved chemical status
	Restore hydromorphology (naturalise modified channels)	Improved ecological status

Target Species	
Species/Species Group	**Measure**
Adder	Confirmed recent records
Breeding farmland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown Long-eared Bat	Confirmed recent records
Common Lizard	Confirmed recent records
Cuckoo	Confirmed recent records
Great Crested Newt	Increased abundance and number of sites
Heather	Increased abundance and number of sites
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance
Post-industrial axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
Pinfold Lane Quarry	Vegetation removal/alternative Focus Habitat restoration or creation	Improved access to exposures/ alternative Focus Habitat restored or created
Shire Oak Quarry	Vegetation removal/alternative Focus Habitat restoration or creation	Improved access to exposures/ alternative Focus Habitat restored or created

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL05	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Woodland enhancement and planting on non-grassland or heathland sites.
	Field boundary hedgerow restoration and creation.
Priority Network Restoration Zone linking CL04 and CL05	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of street trees along urban roads.
	Planting of standard trees in parks, green spaces and school grounds.
	Creation of new ponds.
	Enhancement of Daw End Branch Canal corridor including increasing extent of adjoining terrestrial habitats.
National Habitat Network	
Staffordshire Heathlands inc. Chasewater and The Southern Staffordshire Coalfield Heaths SSSI	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Field boundary hedgerow restoration and creation.
	Planting of street trees along urban roads.
	Creation of new ponds and wetlands.
Sutton Park	Heathland associated habitat enhancement and creation at arable and other undeveloped land including golf courses, school grounds and substantial road verges.
	Field boundary hedgerow restoration and creation.
	Planting of street trees along urban roads.
	Creation of new ponds and wetlands.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2021
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Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Park Lime Pits, Cuckoo's Nook, The Dingle & Great Barr Park	**Sub-area ref.**	CL06
Natural Character Area	Cannock Chase and Cank Wood	**NCA ref.**	67
Local Authority Area	Walsall	**Area km²**	11.38

Ecological Sub-area Description

Overview

Park Lime Pits, Cuckoo's Nook, The Dingle & Great Barr Park comprises an area of the Walsall green belt that stretches from Aldridge in the north to Great Barr in the south, and to the north-west reaches almost to Walsall town centre at Walsall Arboretum. To the east of the ecological sub-area lies Core Landscape CL05 Barr Beacon, Druid's Heath & Shire Oak, whilst the remainder of the area is surrounded by the urban settlements of Aldridge, Rushall, Walsall, Great Barr and Pheasey.

Historically within the parishes of Rushall, Walsall and the township of Great Barr, the field systems in the area were enclosed by either piecemeal enclosure in the late medieval/early post-medieval periods from open fields, or were enclosed by later Parliamentary Acts. There are a number of former limestone quarries which now comprise public open spaces and are designated for their wildlife value. A section of the Daw End Branch Canal and linked Rushall Canal bisect the northern part of the ecological sub-area.

Park Lime Pits, Cuckoo's Nook, The Dingle & Great Barr Park is distinguished from the adjoining Core Landscape CL05 Barr Beacon, Druid's Heath & Shire Oak by its underlying geology and derived soils which are less acidic and did not historically support heathland.

Land Use

Predominantly arable and pastoral agricultural with dispersed farms. There are clusters of small woodlands in the central and southern parts of the area, and newly planted woodland at public open space sites including Aldridge Airport and Walsall Arboretum Extension. Semi-natural mosaic habitat has developed at sites including Hay Head Wood and the former quarry at Park Lime Pits Local Nature Reserve. There are two golf courses (Calderfields Golf & Country Club and Great Barr Golf Club) and the formal urban park Walsall Arboretum is located in the north-west. In the south of the ecological sub-area are the landscaped grounds of Great Barr Hall which are managed as farmland and public open space.

Topography

Generally sloping from highest elevations of 190 meters in the east and south-west to the valleys of the Rough Brook, Hoar Brook and Perry Brook which lie at an elevation of 150-120 meters.

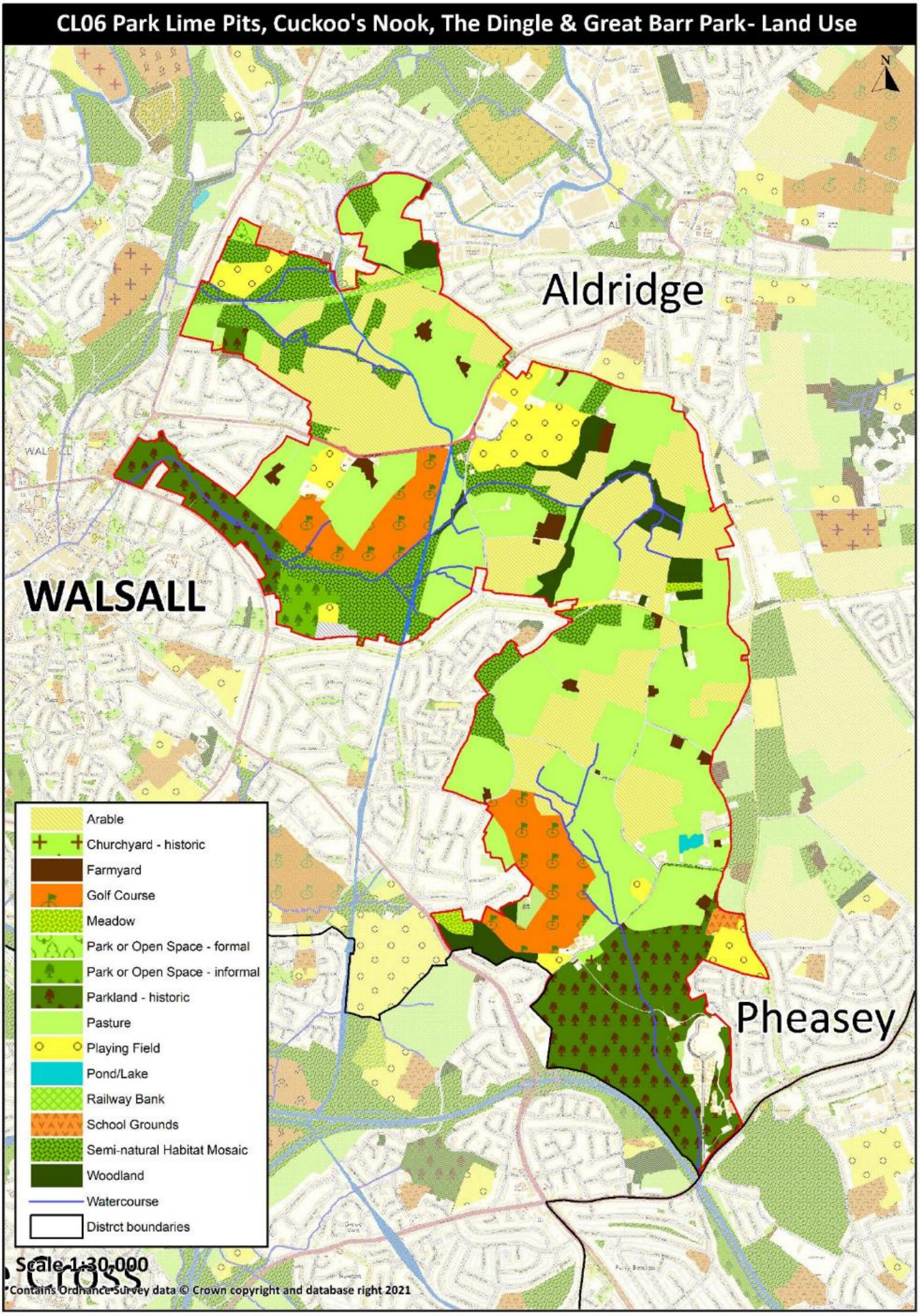
Geology

The bedrock in of the north-western part of the ecological sub-area is sedimentary mudstone, siltstone and sandstone of Pennine Lower Coal Measures Formation formed between 319 and 318 million years ago during the Carboniferous period. The central area is Coalbrookdale Formation mudstone formed between 433.4 and 427.4 million years ago during the Silurian period, and the southern area Enville Member sandstone, conglomerate and argillaceous rocks formed between 309.5 and 272.3 million years ago during the Carboniferous and Permian periods.

Between the north-western and central areas there are several small formations of Lower Quarried Limestone formed between 430.5 and 427.4 million years ago during the Silurian period, and between the central and southern area a formation of Barr Limestone formed between 433.4 and 430.5 million years ago during the Silurian period.

The northern part of the ecological sub-area is overlain with superficial deposits of Devensian diamicton till, with some areas of glaciofluvial sand and gravel in the central and north-eastern sections, formed between 116 and 11.8 thousand years ago during the Quaternary period.

Geopark Sites
• Park Lime Pits Local Nature reserve (GR SK032001) • Daw End Railway Cutting and Linley wood (GR SK035002) • Walsall Arboretum (GR SP01959906) • Hay Head and The Dingle LNR (GR SP050990)
Soils
The soils in the eastern section of the ecological sub-area are predominantly slowly permeable, seasonally wet and slightly acid, but base-rich loamy and clayey, with moderate fertility and impeded drainage. In the western section the soils are lowly permeable seasonally wet acid loamy and clayey soils, with low fertility and impeded drainage.


CL06 Park Lime Pits, Cuckoo's Nook, The Dingle & Great Barr Park- Land Use
N
Aldridge
WALSALL
Pheasey
Arable
Churchyard - historic
Farmyard
Golf Course
Meadow
Park or Open Space - formal
Park or Open Space - informal
Parkland - historic
Pasture
Playing Field
Pond/Lake
Railway Bank
School Grounds
Semi-natural Habitat Mosaic
Woodland
Watercourse
Distrct boundaries
Scale 1:30,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Historic Landscape Character Areas			
Reference	WL09	**Name**	Barr Beacon & Aldridge Fields

The ecological sub-area is dominated by the western part of WL09 Barr Beacon & Aldridge Fields. This Character Area is situated in the east of the borough and is the most rural landscape in Walsall, with field systems covering 66% of its area. It has a mixed geology situated on mudstone and limestone in the west, sandstone, mudstone and conglomerate in the in the centre and sandstone in the east. Rushall Hall in the west lies on coal measures. The modern character of the area is defined largely by agricultural land and dispersed farms. The area also includes modern recreational land (golf courses), woodland, two areas of settlement, and an area of surviving ancient heathland (Barr Beacon).

Historically the Character Area was in use as medieval open fields associated with Walsall, Aldridge, Rushall, Stonnal and Great Barr. In the centre of the Character Area there were several medieval moated sites and many of the trackways and roads in this area are likely to be medieval in origin. The earliest settlements in the area are Great Barr, which was mentioned in a charter of AD 957, and Rushall, which was recorded in the Domesday Survey of 1086. The surviving field systems in the Character Area were enclosed by either piecemeal enclosure in the late medieval/ early post-medieval periods from open field or were enclosed out of Aldridge Heath by Parliamentary Act.

Historic Environment Area Designations [1]			
Reference	AHHLV 16	**Name**	Daw End Lime Works

The AHHLV contains the remains of the Daw End, Winterley Lane, Phoenix, and Linley Limeworks and the associated Daw End Canal Branch. The limeworks were active in the area from the late 18th/early 19th century. A number of old tramways are recorded within the AHHLV (no longer visible) and there are records of Roman lime working within Linley Wood, although these may have been destroyed by later activity. The area is currently in agricultural use but evidence of the old lime workings pits can still be seen on the ground and there is a clear relationship between these features and the canal.

The AHHLV also contains a nationally important geoscientific site, featuring a reef formation from the marine Silurian. In the south east of the AHHLV there is an important unconformity within the Pennine Lower Coal Measures Strata and a geological fault.

Reference	APA 18	**Name**	Winterley Limeworks

The APA is situated in an area formerly occupied by the Winterley Limeworks. The APA covers the site of eight limekilns fronting the canal, as shown on the 1st edition Ordnance Survey map and an extant stable building formerly associated with works. Archaeological work associated with the limeworks showed that there were still extant remains here in 2013, but the area has subsequently been cleared without archaeological monitoring. The extent of the clearance is unknown and It is possible that the area containing the limekilns was not part of the land clearance. Accordingly, the APA has the potential to contain archaeological deposits associated with limekilns. Upstanding remains of the stables associated with the limeworks are present in the west part of the APA.

Reference	APA 7	**Name**	Rushall Hall Moated Manor Site

The APA contains the remains of a 13th to 14th century moated manor site, a medieval to post-medieval graveyard and earthworks associated with mining activities within the area. To the north west of the manor site, there are cropmark remains of a ring ditch and an enclosure, which are suggestive of below-ground archaeological remains. There is potential for archaeological remains associated with the manor site to be present and also some potential for organic preservation within the infilled moat. The graveyard has the potential to contain 17th -19th century burials. The site of the manor house, Rushall Hall (NHLE ref: 1013153) is a scheduled monument and dates to at least the 13th century. A scheduled burial mound (hlaew) with an encircling ditch (NHLE ref: 1009772) is also present within the APA.

Reference	APA 8	**Name**	Lavender Limeworks

The APA contains the surviving remains of the Lavender Limestone Pit, including the site of a late 19th or early 20th century engine house, mine shafts and condensers pits. These features are associated with the Lavender Mine, which was opened in 1902 to extract 'Fuller's Earth' (a deposit of benthonic (green) clay). The APA covers the area of the limeworks shown on the first edition OS map. The area contains surviving remains of an old works and has the potential to contain further archaeological evidence of post-medieval lime working.

Reference	APA 9	**Name**	Iron Furnace at Ladypool

Historic Environment Area Designations [1]			
The APA contains the site of an iron furnace, which is recorded as standing in a park near Mill Meadow. The APA covers Ladypool and an area of slag, cinder and charcoal to the west of the pool. Ladypool, is believed to be a medieval fishpond that was later used to power the iron forge. The APA contains a concentration of finds, which suggests the location of an early post-medieval forge that was still standing in the 17th century. The APA has the potential to contain archaeological remains associated with the forge. There is also potential for archaeological evidence associated with the creation of Ladypool, although no trace of the original sluice or other structures associated with the pool or iron works has been observed. The APA has the potential to contain waterlogged deposits which may contain preserved organic remains.			
Reference	AHHLV 17	**Name**	Park Lime Pits
The AHHLV contains a flooded limestone quarry adjacent to the Daw End Branch Canal (opened in 1800). The area is thought to have been in use for mineral extraction during the Roman and medieval periods and fell out of use in the mid-19th century when it was converted into a park. The quarry pits were flooded at this time. Old brick kilns are recorded within the park on the 1st edition Ordnance Survey (OS) map. The AHHLV has the potential to contain evidence of quarrying activity from many periods, which may provide insight into technological development.			
Reference	APA 10	**Name**	Cropmarks north of Berryfields Farm
The APA demarks an area of cropmarks recorded on the HER. These remains suggest the presence of surviving archaeological remains. While the presence of the remains has not been ground truthed by excavation, the morphology of the cropmarks suggests the presence of a large prehistoric enclosure.			
Reference	AHHTV 14	**Name**	Daw End Branch Canal
The AHHTV covers part of the Daw End Branch Canal (opened in 1800), which runs off from the Wyrley and Essington Canal Extension at Catshill down to the Longwood Junction. The canal has suffered from mining subsidence and now the embankments are much taller than when they were constructed. The AHHTV contains the Grade II listed building Brawns Work Bridge, and the Grade II listed Riddion Bridge. It also contains the locally listed buildings Stone House and a 19th century Lock-Keepers Cottage. In addition, the AHHTV has the potential to contains non-designated historically important buildings such as locks, canal bridges and industrial buildings associated with the early usage of the canal. These nationally and locally important buildings are directly associated with the creation and development of the canal and make a positive contribution to the quality of the historic environment.			
Reference	AHHLV 14	**Name**	Bosty Lane, Ridge and Furrow and Settlement
The AHHLV contains the remains of Aldridge Lodge (now Lodge Farm) and the Grade II listed buildings Bosty Lane Farmhouse and its associated barn. Both settlements are shown on the 1817 Ordnance Surveyors Drawings (OSD) of the area. Aldridge Lodge was originally an early 19th century shooting lodge; the lodge was demolished in 1958 but associated outbuildings may survive within the AHHLV. The remains of a ha-ha are recorded within the mature trees in the AHHLV. A prominent earthwork bank appears on LiDAR along the eastern boundary of the APA, perhaps marking the extent of the Park. Bosty Lane Farmhouse lies to the east and has been dated to the mid-18th century. Both settlements are surrounded by land that contains well-preserved ridge and furrow earthworks, surviving relics of the pre-enclosure landscape			
Reference	APA 22	**Name**	Aldridge Airfield
The APA covers the extent of Aldridge Airfield, which was in use between 1935 and 1956 and still retains an aircraft hangar as a heritage asset. Aerial photographs show circular cropmark remains and an old field system within the area. The cropmarks suggest that there may be surviving features such as ring-ditches within the airfield. The line of the runway can also be observed as a cropmark running through the APA and there is potential for archaeological evidence relating to the WWII airfield.			
Reference	AHHLV 26	**Name**	Wigmore Farm Ridge and furrow
The AHHLV contains the several areas of surviving earthwork ridge and furrow and a (possibly) medieval holloway. These features are surviving remnants of the open field system within the area. The field system in this area appears to date back to at least the 19th century, and may form part of a pre-enclosure field system that has been subject to some more recent boundary loss. Remnants of a watercourse and two ponds (fish ponds?) of unknown date are present within the AHHLV.			
Reference	APA 11	**Name**	Calderfields Moated Site
The APA contains earthwork remains of a possible medieval moated site. The moat is depicted on the 1st edition OS Map but no associated buildings are present. There is no evidence of the site on Yates' 1778 map of Staffordshire or the Ordnance Surveyors Drawings (OSD) of the area. Earthwork remains and water channels associated with the moated site are shown on the Environment Agency LiDAR survey of the area and the APA has			

Historic Environment Area Designations [1]			
the potential to contain below-ground archaeological remains associated with a medieval /post medieval building. The infilled water channel/moat may contain rare preserved organic remains and could contain environmental evidence that would provide insight into the local environment and land use in the area during the medieval period. To the south of the moated site is an area of associated ridge and furrow earthworks.			
Reference	AHHLV 4	**Name**	Cuckoo's Nook and Hay Head Lime Works
The AHHLV contains the remains of the Hay Head Lime Works and an area of Ancient Woodland (Cuckoo's Nook). The ancient woodland has the potential to contain features associated with medieval and post-medieval woodland management. A scatter of Neolithic finds was recorded in the field to the south, highlighting the potential for the preservation of earlier remains in this area away from the former quarry pits. The AHHLV has the potential to contain archaeological remains associated with the limeworks, and contains the earthwork remains of several quarry pits and spoil heaps associated with the limeworks. The pond within the woodland was part of the canal network until it was cut off from the main line in the 1930s. The woodland has been subject to limited modern disturbance and has the potential for below ground archaeological remains such as kilns and other industrial structures.			
Reference	AHHLV 6	**Name**	Birch Wood
Birch Wood is primarily an oak woodland overcrowded with birch and rowan. The AHHLV is semi-natural ancient woodland and on the western side of the woodland there is a large pool. The AHHLV has the potential to contain well-preserved prehistoric and Roman archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Ancient woodlands represent surviving patches of the historic landscape that date back to the early post-medieval period.			
Reference	AHHLV 7	**Name**	Potters Wood and Moat Farm Ridge and Furrow
The AHHLV contains an area of ridge and furrow earthworks centred on APA 13 Moat Farm Moated site. The ridge and furrow earthworks are possible remnants of the medieval open field system, and are directly associated with the medieval moated site. To the north of APA 13 is Potters Wood, an area of semi-natural ancient woodland, which has the potential to contain well-preserved prehistoric and Roman archaeological remains (although none are currently known). The woodland may contain features associated with medieval and post-medieval woodland management.			
Reference	APA 13	**Name**	Moat Farm Moated site
The APA contains the scheduled moated site at Moat Farm (NHLE ref: 1008547). The site encloses an area of around 0.25ha. Access to the interior is via a brick bridge across the eastern arm of the moat, which is thought to mark the site of the original entrance. During the early 14th century the site, known as the Moat House at Heyhead, was in the possession of Robert Stapleton. Nineteenth century sources indicate that at this date there was a house, the southern end of which was half-timbered, within the moated area. LiDAR clearly shows earthwork remains associated with the moat. The APA has been extended to cover the area around the moated site, which may contain associated archaeological remains.			
Reference	AHHLV 10	**Name**	Great Barr Deer Park
The AHHLV contains the remains of Great Barr Deer Park which is predominantly in use as a golf course. The western part of the former deer park has been developed for housing. Ground works associated with the housing development would have removed any archaeological remains and earthworks associated with deer park, and accordingly this part of the deer park has been excluded from the AHHLV. The golf course contains archaeological remains and earthworks associated with the medieval landscape, including areas of ridge and furrow and the remains of the later park pale. These archaeological features contribute to the archaeological interest of the AHHLV and illustrate the development of this landscape throughout the medieval and post-medieval period. Great Barr Deer Park is first mentioned in 1335 and the 1850s Tithe Map of Aldridge shows a number of fields labelled as 'Old Barr Park'. The probable extent of the park is visible on the 1st edition Ordnance Survey (OS) map which shows a series of hedgerows enclosing all but the south-east of an oval area, five furlongs long by five furlongs wide. This oval shape is typical of a medieval deer park and surviving elements of the park pale are present within the modern hedgerows of the AHHLV, including a large bank (5m wide by 0.5m). The modern hedgerows within the area preserve the form and extent of the medieval deer park allowing it to be appreciated within the modern landscape. The hedgerows contain earthwork remains of the park pale which are of archaeological interest.			

Historic Environment Area Designations [1]			
The AHHLV also contains archaeological evidence of medieval and post-medieval agricultural activity. Cropmark remains indicative of below ground archaeological features show the extent of possible enclosure or an early field system within the golf course and earthwork remains of ridge and furrow cultivation are recorded in places across the former park. The line of the stream passing through the former deer park is also of archaeological interest as it was apparently imposed during landscaping works associated with the Great Barr Estate. The earthwork and below ground archaeological remains within the golf course provide evidence for past land usage and animal management and contribute to the archaeological and historic interests of the AHHLV. The AHHLV contains area of ridge and furrow, which could represent the pre-parkland landscape.			
Reference	APA 15	**Name**	Site of Great Barr medieval settlement
The APA contains the possible site of the medieval village of Great Barr. A settlement is recorded at Great Barr in the Domesday Survey. The exact location of the settlement is unknown but it is believed to be in the vicinity of the Church and Manor House, which both fall within the APA. There is a large bank and ditch in the field to the north of Chapel Farm and this may be the remains of either a park pale associated with the deer park or a holloway and possible house platforms. The APA contains the 19th Century Great Barr Chapel, which is believed to be built on the site of a 12th century chapel. The site of a medieval manor is also recorded at this location although there are no above ground remains present. The APA has the potential to contain early medieval or medieval settlement remains, medieval to post medieval burials and remains of a park pale associated with the medieval deer park.			
Reference	AHHTV 1	**Name**	Scattered Settlement at Over End
The AHHTV comprises the remains of a dispersed linear settlement formed from a cluster of buildings probably built in the 18th century. The buildings labelled as Over End are shown on the 1816 Ordnance Surveyors Drawings of the area. The AHHTV contains four Grade II listed buildings Old Hall Farmhouse, Barn Approximately 20m north of Old Hall Farmhouse, The Pinfold and Coxfold Farmhouse. In addition, it contains several non-designated buildings, which are shown on the early 19th century Ordnance Survey maps including Crook Farm (formerly Brook Farm now called Old Court Farm), Beacon Farm and Crook Cottage Farm. These traditional farm buildings survive within the AHHTV with some modern additions preserving the historic layout of the farmsteads. An area of ridge and furrow lies to the west of Old Hall Farmhouse; this has been included in the AHHTV as it is a relic of an earlier land use within the area and can shed light on past land management and use.			
Reference	APA 16	**Name**	Great Barr Moated site
The APA contains the remains of a possible medieval moated site. The eastern part of the moat is still water-filled but the rest is dry. Ordnance Surveyors drawings of the site show a building at approximately this location, Barr Hall, but this is not shown on the 1st edition Ordnance Survey map. The APA contains earthwork remains of a moat, and has the potential to contain the remains of medieval or post-medieval buildings. The moat has the potential to contain waterlogged deposits.			

Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame, Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Ford Brook from Source to River Tame	Moderate (2019)	Moderate (2019)	Fail (2019)
River Basin District	Humber	**Management Catchment**	Tame, Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Tame - conf two arms to R Rea	Moderate (2019)	Moderate (2019)	Fail (2019)

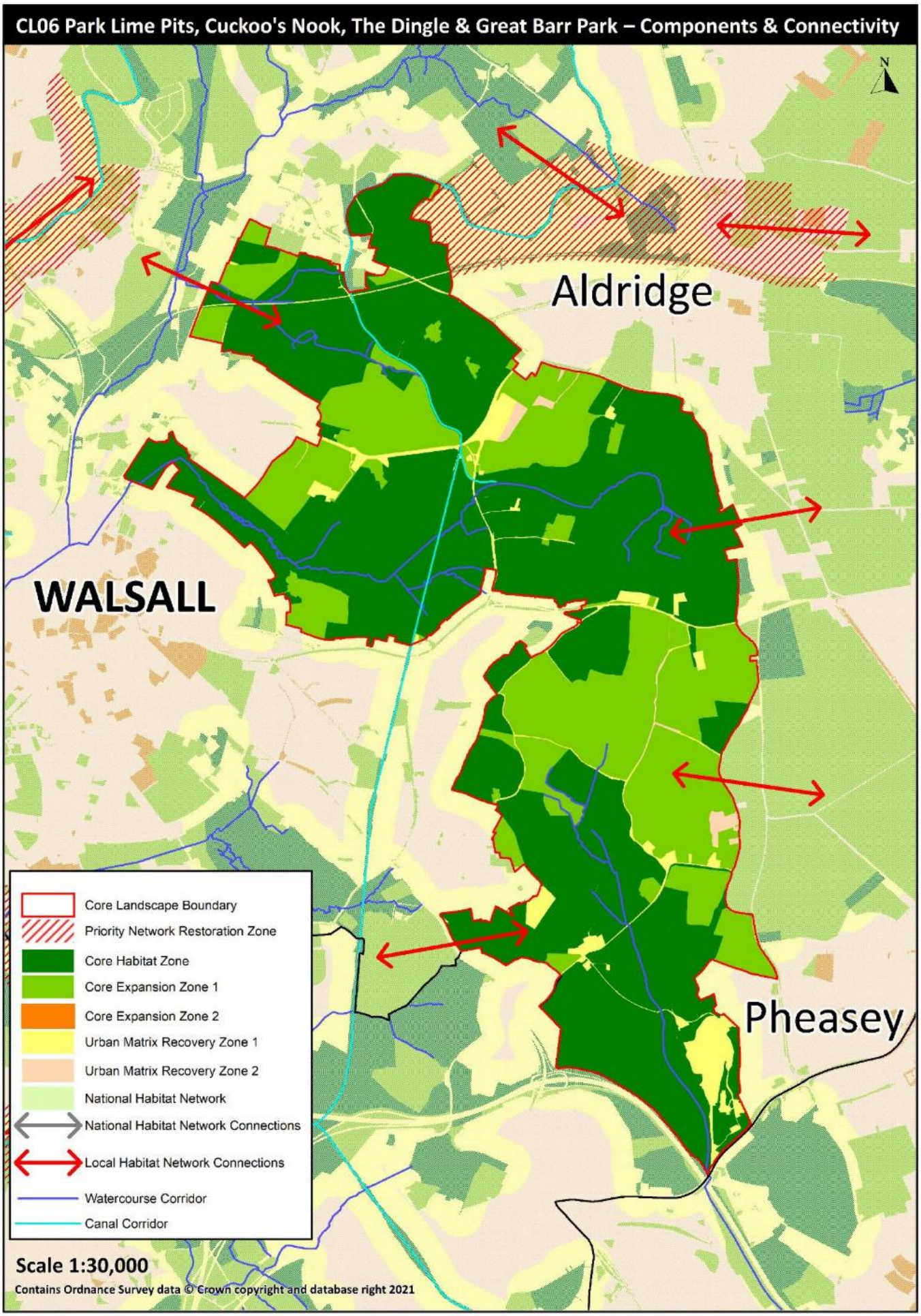
Key Habitats [2]			
Broad Habitat Type	Arable & Horticultural	**Priority Habitat**	
Arable agriculture covers about 20% of the sub-area. These fields are mostly of 18th and 19th century Parliamentary enclosure origin. No Priority Habitat Arable Field Margins have been recorded.			
Broad Habitat Type	Boundary & Linear Features	**Priority Habitat**	Hedgerows
Numerous field boundary hedgerows throughout the sub-area associated with piecemeal enclosure in the late medieval/early post-medieval periods or later Parliamentary enclosure. Early enclosures are represented by irregular field patterns and these are likely to be the more ecologically valuable hedgerows in the area. The remaining field pattern is more regular and planned, though significantly less rectilinear than the adjoining Core Landscape 05 Barr Beacon, Druid's Heath and Shire Oak and therefore likely pre-dates this. Hedgerows trees are frequent throughout, with these apparently more abundant in areas of earlier enclosure. Only a small proportion of the hedgerows have been assessed against the Local Wildlife Sites selection criteria, and of these a number in the northern and central parts of the sub-area have been selected as SLINCs. These are described as well-maintained mature hedgerows with traditional bank and ditch systems and good species-richness.			
Broad Habitat Type	Standing Open Waters	**Priority Habitat**	Ponds
There are a number of field and farm ponds scattered throughout the ecological sub-area, with a concentration in the south, a number of which are designated as SLINC. Ponds at Park Lime Pits LNR and Walsall Arboretum are flooded lime workings. There are large ornamental pools in the landscaped former grounds of Great Barr Hall that are fed by the Perry Brook.			
Broad Habitat Type	Rivers and Streams	**Priority Habitat**	Rivers
Three watercourse and their minor tributaries rise in the ecological sub-area. These are an unnamed tributary of the Ford Brook in the north which feeds the ponds at Park Lime Pits; the Hoar Brook which flows east-west through the northern part of the area and feeds the ponds at Walsall Arboretum; and the Perry Brook which flows north-south through the southern part of the area and feeds the pools in the landscaped former grounds of Great Barr Hall. Survey information for the watercourses is not known, however, each of these appears artificially straightened along at least some of its length.			
Broad Habitat Type	Neutral Grassland	**Priority Habitat**	
Permanent pastures comprise up to approximately 40% of the ecological sub-area. A number of these are designated as SINC or SLINC and are described as neutral, dry to marshy, relatively species-rich and with associated features including ponds and hedgerows.			
Broad Habitat Type	Calcareous Grassland	**Priority Habitat**	Lowland calcareous grassland
There are small areas of calcareous grassland at the former limestone extraction sites Park Lime Pits LNR, Jack Holes and Hay Head Wood. These have developed on lime-rich spoil and are described as botanically-rich with assocaited species including Quaking Grass, Woolly Thistle, Greater Knapweed and Hoary Ragwort.			
Broad Habitat Type	Broadleaved, Mixed and Yew Woodland	**Priority Habitat**	Lowland mixed deciduous woodland
A number of woodlands in the ecological sub-area are designated by Natural England as ancient woodland. In the central area there is a group of woodlands that are described as botanically-rich and influenced by the presence of lime. One of these, The Dingle, is thought to be of more recent origin and to have developed spontaneously on the site of a former limestone quarry. In the landscaped former grounds of Great Barr Hall in the south of the ecological sub-area is a further group of woodlands. These may be ancient and modified and extended for aesthetic landscape purposes, or may be of wholly recent planted origin.			
Broad Habitat Type	Standing Open Water and Canals	**Priority Habitat**	
A section of the Daw End Branch Canal and linked Rushall Canal bisect the northern part of the ecological sub-area. The Daw End Branch was constructed to transport extracted lime and is linked to the Wyrley and Essington Canal to the north. The canal has generally good quality water supporting a diverse aquatic flora, with a range of associated habitats within the corridor. The Rushall Canal was constructed later to link the Daw End Branch to the			

Key Habitats [2]
Tame Valley Canal and follows a linear route. Sharing a water source with the Daw End Branch, this supports a similarly diverse aquatic flora.

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Grey Partridge, Jackdaw, Kestrel, Lapwing, Linnet, Rook, Starling, Stock Dove, Tree Sparrow, Western Yellow Wagtail, Whitethroat, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Lesser Spotted Woodpecker, Lesser Whitethroat, Long-tailed Tit, Marsh Tit, Redstart, Robin, Siskin, Song Thrush, Sparrowhawk, Spotted Flycatcher, Tawny Owl, Treecreeper, Willow Tit, Willow Warbler.
Water & Wetland	Common Reed Bunting, Common Sandpiper, Eurasian Coot, Great Crested Grebe, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Grebe, Mallard, Moorhen, Mute Swan, Reed Warbler, Sand Martin, Sedge Warbler, Snipe, Teal, Tufted Duck, Western Yellow Wagtail.
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Cuckoo, Eurasian Magpie, Greylag Goose, Hobby, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Pied Wagtail, Pied Wagtail, Swallow, Swift, Whinchat.
Amphibians & Reptiles	
Amphibians	Common Frog, Common Toad, Great Crested Newt, Smooth Newt.
Reptiles	none
Mammals	
Bats	Brandt's Bat, Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Horseshoe Bat, Lesser Noctule, Nathusius's Pipistrelle, Natterer's Bat, Noctule Bat, Serotine, Soprano Pipistrelle, Whiskered Bat.
Other	Eurasian Common Shrew, European Otter, European Water Vole, Polecat, West European Hedgehog.
Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Adoxa moschatellina, Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Cardamine amara, Carex remota, Carex sylvatica, Chaerophyllum temulum, Deschampsia flexuosa, Dioscorea communis, Dryopteris affinis subsp. affinis, Equisetum sylvaticum, Equisetum telmateia, Festuca gigantea, Filipendula ulmaria, Fragaria vesca, Frangula alnus, Galium odoratum, Lamiastrum galeobdolon subsp. montanum, Lysimachia nemorum, Malus sylvestris, Melica uniflora, Mercurialis perennis, Milium effusum, Moehringia trinervia, Oxalis acetosella, Poa nemoralis, Quercus petraea, Sanicula europaea, Stellaria holostea, Teucrium scorodonia, Tilia cordata, Torilis japonica, Valeriana officinalis, Veronica montana, Viola reichenbachiana.*
Grassland	*Agrostis canina, Ajuga reptans, Alchemilla filicaulis subsp. vestita, Brachypodium sylvaticum, Briza media, Caltha palustris, Centaurium erythraea, Cerastium semidecandrum, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza praetermissa, Danthonia decumbens, Daucus carota subsp. carota, Deschampsia flexuosa, Equisetum sylvaticum, Euphrasia officinalis agg., Filipendula ulmaria, Fragaria vesca, Galium saxatile, Leontodon hispidus, Linum catharticum, Lotus pedunculatus, Odontites vernus, Parentucellia viscosa, Persicaria bistorta, Phleum bertolonii, Pimpinella saxifraga, Plantago media, Polygala vulgaris, Potentilla anglica, Potentilla erecta, Potentilla sterilis, Rhinanthus minor, Sanguisorba officinalis, Silaum silaus, Silene flos-cuculi, Stachys officinalis, Stellaria holostea, Succisa pratensis, Trifolium medium,*

Heathland	*Agrostis canina, Calluna vulgaris, Carex nigra, Danthonia decumbens, Deschampsia flexuosa, Galium saxatile, Potentilla erecta, Salix aurita, Teucrium scorodonia, Ulex gallii, Vaccinium myrtillus.*
Mires	*Agrostis canina, Alchemilla filicaulis subsp. vestita, Angelica sylvestris, Athyrium filix-femina, Briza media, Caltha palustris, Cardamine amara, Carex acutiformis, Carex nigra, Carex panicea, Carex pseudocyperus, Carex rostrata, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza praetermissa, Epilobium palustre, Equisetum fluviatile, Equisetum palustre, Filipendula ulmaria, Galium palustre, Galium palustre subsp. palustre, Glyceria notata, Hypericum tetrapterum, Jacobaea aquatica, Juncus acutiflorus, Lotus pedunculatus, Pulicaria dysenterica, Ranunculus aquatilis, Ranunculus hederaceus, Silene flos-cuculi, Sparganium emersum, Stachys palustris, Stellaria alsine, Succisa pratensis, Valeriana officinalis, Veronica beccabunga.*
Open Water	*Bidens cernua, Bidens tripartita, Butomus umbellatus, Carex acutiformis, Carex pseudocyperus, Equisetum fluviatile, Galium palustre, Galium palustre subsp. palustre, Glyceria notata, Potamogeton lucens, Potamogeton perfoliatus, Ranunculus aquatilis, Sagittaria sagittifolia, Schoenoplectus lacustris.*
Post-industrial (water-stressed)	*Centaurea scabiosa, Centaurium erythraea, Cerastium semidecandrum, Daucus carota subsp. carota, Deschampsia flexuosa, Erophila verna, Fragaria vesca, Jacobaea erucifolia, Linum catharticum, Ophrys apifera, Parentucellia viscosa, Silene vulgaris, Silene vulgaris subsp. vulgaris, Trifolium arvense, Trifolium medium, Trifolium micranthum, Vicia tetrasperma.*
Cultivation	*Stachys arvensis, Thlaspi arvense, Veronica polita, Vicia tetrasperma*

Ecological Connectivity
Local Habitat Network
Direct ecological connection to the local habitat network in Core Landscape 05 Barr Beacon, Druid's Heath & Shire Oak with which it shares an extensive boundary. Direct connection via narrow corridors to Core Landscape 04 Brownhills Common & Pelsall and Core Landscape 07 Sandwell Valley.
National Habitat Network
Park Lime Pits, Cuckoo's Nook, The Dingle & Great Barr Park is entirely surrounded by other core landscapes or urban settlements and therefore does not link directly to the National Habitat Network.


CL06 Park Lime Pits, Cuckoo's Nook, The Dingle & Great Barr Park – Components & Connectivity
N
Aldridge
WALSALL
Pheasey
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Scale 1:30,000
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Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Canals	Identify and reduce artificial inputs	Improved chemical status
Lowland calcareous grassland	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Hedgerows	Improve management of existing	Habitat in good condition
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Lowland meadows	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
Ponds	Restore existing	Habitat in good condition
	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels)	Improved ecological status
	Reduce artificial inputs	Improved chemical status

Target Species	
Species/Species Group	**Measure**
Barn Owl	Confirmed recent records
Bats	Increased abundance of confirmed species
Breeding farmland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Cuckoo	Confirmed recent records
European Otter	Increased signs, confirmed breeding population
European Water Vole	Confirmed recent records
Great Crested Newt	Increased abundance and number of breeding ponds
Hedgehog	Confirmed recent records
Grassland axiophytes	Recent records and increased abundance
Heathland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance
Post-industrial axiophytes	
Woodland axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
n/a		

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL06	Restoration of modified channel watercourse.
	Species-rich calcareous neutral grassland enhancement and creation.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow restoration and creation.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html	2021
	Black Country UNESCO Global Geopark sites names and location information https://blackcountrygeopark.dudley.gov.uk/bcg/	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: http://www.landis.org.uk/soilscapes/	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) *Draft Black Country Local Nature Recovery Opportunity Map*	2021
	EcoRecord et al. (2021) *Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping*.	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) *Black Country Historic Landscape Characterisation* [data-set]. York: Archaeology Data Service [distributor] https://doi.org/10.5284/1000030	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

[1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

Archaeological Priority Areas (APA): sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

Areas of High Historic Townscape Value (AHHTV): areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

Designed Landscapes of High Historic Value (DLHHV): landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

Areas of High Historic Landscape Value (AHHLV): these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

[2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

[3] KEY SPECIES

Bird Indicators: Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Fish: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix			
Sub-area name	Sandwell Valley	**Sub-area ref.**	CL07
Natural Character Area	Cannock Chase and Cank Wood	**NCA ref.**	67
Local Authority Area	Sandwell and Walsall	**Area km^2**	9.01

Ecological Sub-area Description

Overview

Sandwell Valley comprises a large area of open space at the approximate centre of the Birmingham and Black Country conurbation, and forms part of the Black Country's eastern boundary with Birmingham. The ecological sub-area is bisected by the M5 and M6 motorways, and almost entirely surrounded by urban development. A section of the River Tame flows west-east through the area and there are numerous small tributaries of this. The Tame Valley Canal traverses the northern part of the area (through the M5/M6 motorway junction), as does an active railway line.

The landscape of the ecological sub-area remains dominated by the pre-urban field pattern, though only parts of this remain actively farmed. In the south of the area are the remains of Sandwell Hall country house and earlier Benedictine priory, as well as features such as pools associated with the 18th century designed landscape. Ancillary buildings, stables and parts of a walled garden remain standing and have been restored for use as Sandwell Park Farm visitor centre. To the north of Swan Pool are the remains of Sandwell Park Colliery which was operational in the early 20th century.

A large floodwater storage lake (Forge Mill Lake) was constructed alongside the River Tame in the east of the ecological sub-area in the early 1980s. Part of the lake and the surrounding area are managed as RSPB Sandwell Valley nature reserve.

Land Use

Much of the southern part of Sandwell Valley is accessible open space including at Forge Mill Lake, Priory Woods and Sot's Hole Local Nature Reserves, as well as the more formal Dartmouth Park and King George Playing Fields in the south-west. There are also two golf courses (Sandwell Park and Dartmouth Golf Course) and West Bromwich Crematorium. The remainder of the southern section is farmed, with ley pasture, arable and permanent pasture all present.

Further north is the large triangular junction of the M5 and M6 motorways within which is a sewage treatment works, whilst to the north of the M6 is an electivity sub-station. The remainder of the northern section is comprised of further informal accessible open space, school grounds, Walsall Golf Course and a number of sports pitches, as well as Peak House Farm field system of irregular pre-enclosure fields which are actively farmed (see Historic Environment Area Designations).

Topography

The highest elevations within Sandwell Valley are at the southern and close to the northern end at an elevation of 170 meters. From these points the land slopes gently down to the valley of the River Tame which is at an elevation of 100 metres.

Geology

The southern part of the ecological sub-area is dominated by sedimentary Alveley Member mudstone bedrock formed between 309.5 and 308 million years ago during the Carboniferous period. The northern part is dominated by Coalbrookdale Formation mudstone formed between 433.4 and 427.4 million years ago during the Silurian period, with a small area of Pennine Lower Coal Measures Formation Mudstone, siltstone and sandstone formed between 319 and 318 million years ago during the Carboniferous period. In the central area there is a formation of Pennine Middle Coal Measures Formation mudstone, siltstone and sandstone formed between 318 and 309.5 million years ago during the Carboniferous period.

Parts of the southern area are overlain with superficial deposits of Devensian diamicton till formed between 116 and 11.8 thousand years ago during the Quaternary period, and Mid Pleistocene Diamicton till formed between 860 and 116 thousand years ago during the Quaternary period. Following the course of the River Tame there are river terrace deposits of sand and gravel formed between 2.588 million years ago and the present during the

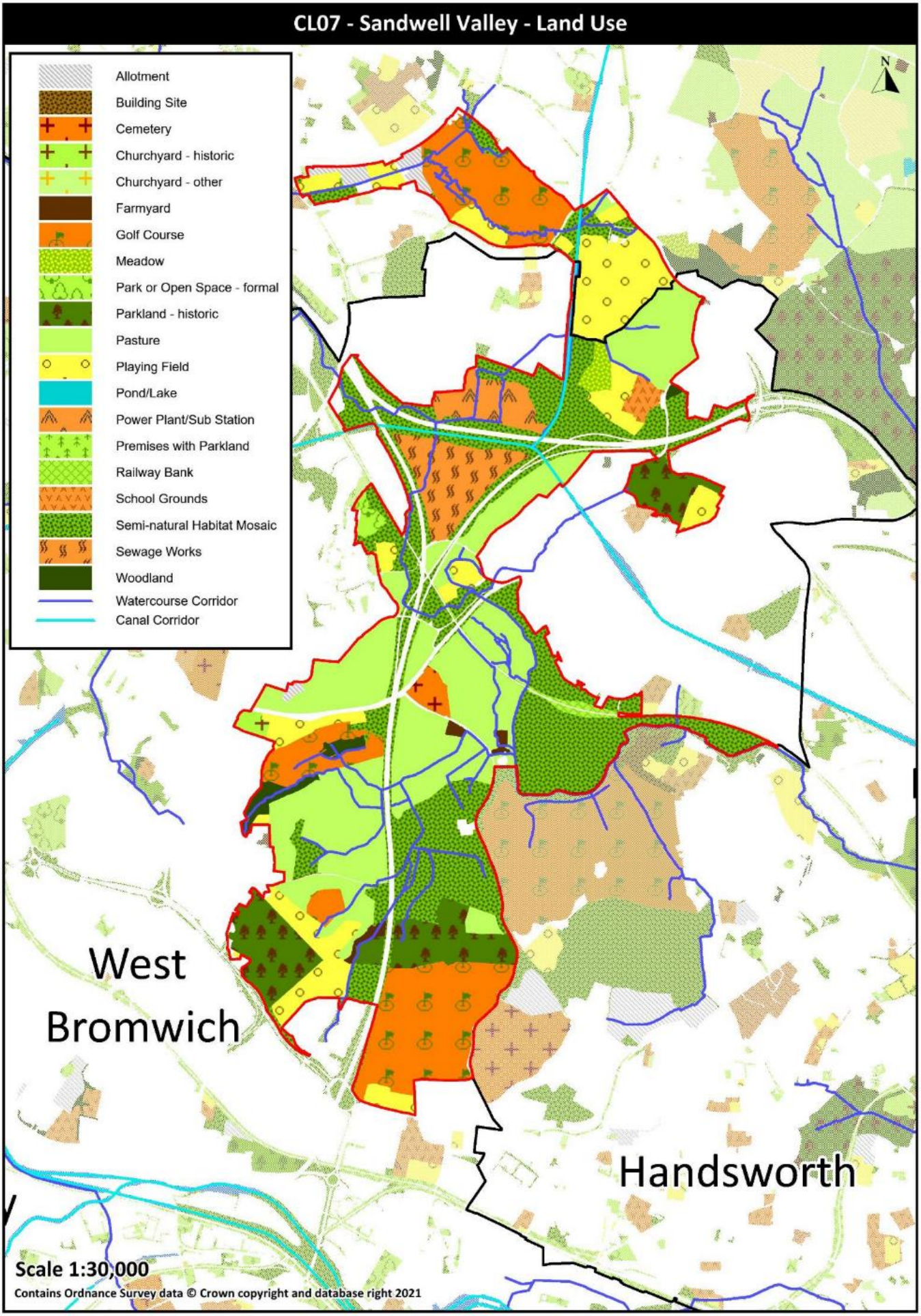
Quaternary period, and more recent alluvial clay, silt, sand and gravel formed between 11.8 thousand years ago and the present.

Geopark Sites

- Sandwell Valley Country Park (GR SP01939149)

Soils

The ecological sub-area is dominated by slowly permeable seasonally wet, slightly acid but base-rich loamy and clayey soils with moderate fertility and impeded drainage. In the north the soils are slowly permeable, seasonally wet acid loamy and clayey soils with low fertility and impeded drainage, and in the central area around Forge Mill Lake the soils are naturally wet, very acid sandy and loamy soils with very low fertility.


CL07 - Sandwell Valley - Land Use
Allotment
Building Site
Cemetery
Churchyard - historic
Churchyard - other
Farmyard
Golf Course
Meadow
Park or Open Space - formal
Parkland - historic
Pasture
Playing Field
Pond/Lake
Power Plant/Sub Station
Premises with Parkland
Railway Bank
School Grounds
Semi-natural Habitat Mosaic
Sewage Works
Woodland
Watercourse Corridor
Canal Corridor
N
West Bromwich
Handsworth
Scale 1:30,000
Contains Ordnance Survey data © Crown copyright and database right 2021

Historic Landscape Character Areas			
Reference	SD07	**Name**	Sandwell Valley
The central and southern part of the ecological sub-area is coterminous with character areas SD07 Sandwell Valley, which is dominated by Sandwell Valley Country Park and agricultural land. The Character Area was originally part of the estate owned by the Earls of Dartmouth from the early 18th century. Sandwell Hall (demolished in 1928) was built by the first Earl on the site of the 12th century Benedictine priory close to the Sand Well spring. The Character Area contains the Registered Park and Garden Dartmouth Park which became public park in 1877.			
Reference	SD02	**Name**	Newton, Hamstead & Great Barr
Lying to the north of Sandwell Valley and comprising the north-eastern part of the ecological sub-area id SD02 Newton, Hamstead & Great Barr. The modern character of the area is dominated by 20th century residential housing, with areas of surviving fields in the north-west of the character area that continue beyond the Borough boundary into Walsall (WL09). Until the 20th century this area was largely agricultural, crossed by the Tame Valley Canal which opened in 1844.			
Reference	SD05	**Name**	Yew Tree
A small part of the ecological sub-area to the north of the M5/M6 junction lies within SD05 Yew Tree. The historic character of the area was defined almost entirely of agricultural land much of it worked from Delves Farm and Yew Tree Farm. Residential development began to cover this area after the First World War. The Tame Valley Canal, on the southern edge of the area, was opened in 1844 and, as such was one of the last Black Country canals.			
Reference	WL11	**Name**	South East Walsall
The northern part of the ecological sub-area lies within WL11 South East Walsall. During the medieval period this area was dominated by open fields with a small manor house or settlement at The Delves. There was also a large deer park to the west of Great Barr, although its extent is unknown. By the mid-18th century a mill had been established at New Mills in the south-west of the area and a country house has been constructed by the Delves. At this time the landscape was still largely agricultural and by the late 18th century- early 19th century woodland had been established in the south-east of the area near Great Barr and two further country houses had been built.			

Historic Environment Area Designations [1]			
Reference	APA 14	**Name**	Shustoke Farm Moated site
The APA contains earthworks remains of a possible medieval moated site. The moat is shown on the 1841 Tithe map. LiDAR shows remnants of the moat to the north and west and its survival was confirmed by a field survey carried out in 2001. There is therefore the potential for archaeological remains associated with the moat and potential medieval and post-medieval buildings. To the north of the moated site are the earthwork remains of three fish ponds linked to the moated site by leats. The moat, fish ponds and leats have the potential to contain waterlogged remains and there is potential for organic preservation.			
Reference	AHHLV 25	**Name**	Peak House Farm Field System
The AHHLV contains a well-preserved example of a pre-enclosure field system. Evidence of ridge and furrow is visible across the site as cropmarks (but no earthworks appear to survive). Prehistoric finds have been recovered within this area and cropmarks indicative of below-ground archaeological remains have also been identified, highlighting the archaeological potential of the area. Many of the field boundaries are marked by drainage ditches linked to the moated site to the south (APA 24) and a number of hedgerows are recorded as ancient hedgerows. LiDAR shows a small mound in the AHHLV (NGR 403764 295377).			
Reference	APA 24	**Name**	Peak House Farm Moated Site
The APA contains the remains of a possible moated site. The Environment Agency LiDAR shows the earthwork remains of a moat and a possible building platform within the APA. There is no building at this location on the 1817 OSD map, or 1st-4th edition OS maps, suggesting that the moated site is of medieval or early post-medieval date. The APA has the potential to contain below-ground archaeological remains associated with the manor house and the moat. The moat may contain waterlogged deposits, which would provide insight into land use in the area during the medieval period.			

Historic Environment Area Designations [1]			
Reference	APA 27	**Name**	The River Tame
The APA contains part of the route of the River Tame; there is considered to be potential for previously unknown prehistoric activity (including Bronze Age burnt mounds) and environmental evidence present associated with the former water course. Prior to the industrial revolution the land adjacent to the river would have been utilised for mills and other water-based industries. Accordingly, there is potential for archaeological remains associated with these features to survive. Aerial photographs show a number of tributaries and drainage channels associated with the river, which may be possible mill leats. The APA contains the infilled Old Forge Mill pool. There is potential for archaeological remains associated with the Old Forge and Mill. Part of the area was disturbed during the 19th century by the Grand Union Line Railway. However, the majority of the area remains relatively undisturbed. Some ridge and furrow earthworks are present within the APA.			
Reference	AHHLV 26	**Name**	Wigmore Farm Ridge and Furrow
The AHHLV contains the several areas of surviving earthwork ridge and furrow and a (possibly) medieval holloway. These features are surviving remnants of the open field system within the area. The field system in this area appears to date back to at least the 19th century, and may form part of a pre-enclosure field system that has been subject to some more recent boundary loss. Remnants of a watercourse and two ponds (fish ponds?) of unknown date are present within the AHHLV.			
Reference	APA 25	**Name**	All Saints Church
The APA contains All Saints Church and Graveyard. All Saints Church is situated on the site of a medieval church, elements of the 14th or 15th century tower survive within the present day Church. The church is surrounded by a graveyard, which has the potential to contain human remains dating from the medieval to post-medieval periods.			
Reference	APA 26	**Name**	Sot's Hole Stream
The APA contains the remains of a burnt mound and a stone mound as well as several recorded scatters of prehistoric flints. The APA is situated upon sand and gravel deposits resulting in the formation of natural springs in prehistoric times, which would have made it a focus for activity. The HER records a number of patches of ridge and furrow within the APA although these were not visible on the Environment Agency LiDAR survey of the site. Several drainage channels are evident within the APA and fish ponds and a dam are recorded in the very western part of the area (shown on 1817 Ordnance Survey drawings of the area) near Parsons Farm. The ponds and dams were used to control the flow of water supplied to the dams along the River Tame and its tributaries.			
Reference	AHHLV 48	**Name**	Chambers Wood
The AHHLV is an area of semi-natural ancient woodland. Accordingly, it has the potential to contain well preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Areas of semi-natural ancient woodland are areas of natural woodland which may have been subject to some previous woodland management and have been in use as woodland since at least the 1600s. Accordingly these areas have the potential to contain well preserved archaeological remains. Areas of ancient woodland represent surviving patches of the historic landscape that date back to the medieval or early post-medieval periods.			
Reference	AHHLV 50	**Name**	Dartmouth Golf Course Wood
The AHHLV is an area of semi-natural ancient woodland. Accordingly, it has the potential to contain well preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Areas of semi-natural ancient woodland are areas of natural woodland which may have been subject to some previous woodland management and have been in use as woodland since at least the 1600s. Accordingly these areas have the potential to contain well preserved archaeological remains. Areas of ancient woodland represent surviving patches of the historic landscape that date back to the medieval or early post-medieval periods.			
Reference	DLHHV 1	**Name**	Sandwell Park
The DLHHV was originally part of the estate associated with Sandwell Priory. It was later sold to the Earl of Dartmouth, who in turn sold it to West Bromwich Council in 1947. The park today contains remnants of the mid-18th century designed landscape although the original design has been eroded by the construction of later transport infrastructure. During the inter-war period, parts of the site were used as a colliery. Several earlier features associated with the parkland including ornamental pools (Swan and Pleasure pools), an ice house and a ha-ha (a bank and ditch used to keep out animals) survive within the present day landscape. Swan Pool started life as a mill pool before being extended twice, firstly to take the extra water from the adjacent mines and secondly as a leisure facility. Earlier archaeological remains such as the scheduled remains of Sandwell Hall and the earlier Benedictine Priory, which is a scheduled monument (NHLE 1017763) and areas of non-designated ridge and			

Historic Environment Area Designations [1]
furrow are also present, highlighting various land uses within the park over time. A number of archaeological features including a prehistoric burnt mound have been recorded within the site, further highlighting the archaeological interest of the area. The scheduled monument has a high level of archaeological interest, and could be directly impacted by unsympathetic development e.g. ground works.

Waterbody Catchments			
River Basin District	Humber	**Management Catchment**	Tame Anker and Mease
Waterbody Catchment	**Overall Classification**	**Ecological**	**Chemical**
Tame - confluence two arms to R Rea Water Body	Moderate (2019)	Moderate (2019)	Moderate (2019)

Key Habitats [2]			
Broad Habitat Type	Woodland	**Priority Habitat**	Lowland mixed deciduous woodland
There are two areas of woodland designated as Ancient Semi-natural Woodland in the south-west of the ecological sub-area (Chambers Wood and Bluebell Wood). There are further small areas of mature Oak woodland scattered through the south-west which may be ancient or old plantations.			
Broad Habitat Type	Woodland	**Priority Habitat**	
Younger woodland is frequent throughout Sandwell Valley, either as plantations or spontaneous woodland on abandoned sites. Planted areas include around Forge Mill Lake, along fairways in the area's many golf courses, around the sewage works and along some of the motorway embankments. Older ornamental plantations are found around the parkland of the former Sandwell Hall. Young woodland now occupies the site of the former Sandwell Park Colliery, though it is not known if this is planted or spontaneous.			
Broad Habitat Type	Grassland	**Priority Habitat**	Lowland meadows
There are small areas of remnant meadow in Priory Woods Local Nature Reserve, though the extent or condition of this habitat is not known. The irregular fields of the Peak House Farm field system have in recent years been cut for hay, however, these are not floristically diverse and are likely to have been managed as pasture prior to this.			
Broad Habitat Type	Grassland	**Priority Habitat**	
Grassland of various sward types dominates much of Sandwell Valley. Permeant pasture exists in the southern part of the ecological sub-area, with the surviving ridge and furrow at the Wigmore Farm being a notable surviving remnant of the former open field system of the area. Throughout the publicly accessible parts of Sandwell Valley there are areas of irregularly managed grassland that is relatively species-poor and rank. There are also significant areas of regularly mown grassland in the formal parks and on the golf course fairways.			
Broad Habitat Type	Boundary	**Priority Habitat**	Hedgerows
Numerous field boundary hedgerows exist throughout the ecological sub-area, either demarcating the boundaries of existing fields or as remnants within areas now used for alternative purposes. It is thought that most of Sandwell Valley was enclosed from mediaeval open fields (see Wigmore Farm), however, the fields at Peak House Farm are considered to be an uncommon example of earlier enclosure. Here the field-pattern is notably more irregular and the hedgerows have been allowed to grow to a substantial size.			
Broad Habitat Type	Freshwater	**Priority Habitat**	Rivers
A stretch of the River Tame runs through Sandwell Valley, entering the ecological sub-area in the north-west adjacent to the M6 and meandering south and then eastwards around Forge Mill Lake and exiting into Birmingham. The channel is heavily modified, being of uniform width and with raised flood banks, with few natural erosion and depositional features, and very little aquatic vegetation. The catchment is classified Moderate status by the Environment Agency and suffers from urban diffuse pollution. There are numerous minor channels which flow into the River Tame from across the ecological sub-area. These range from unmodified watercourses to artificial drainage channels.			

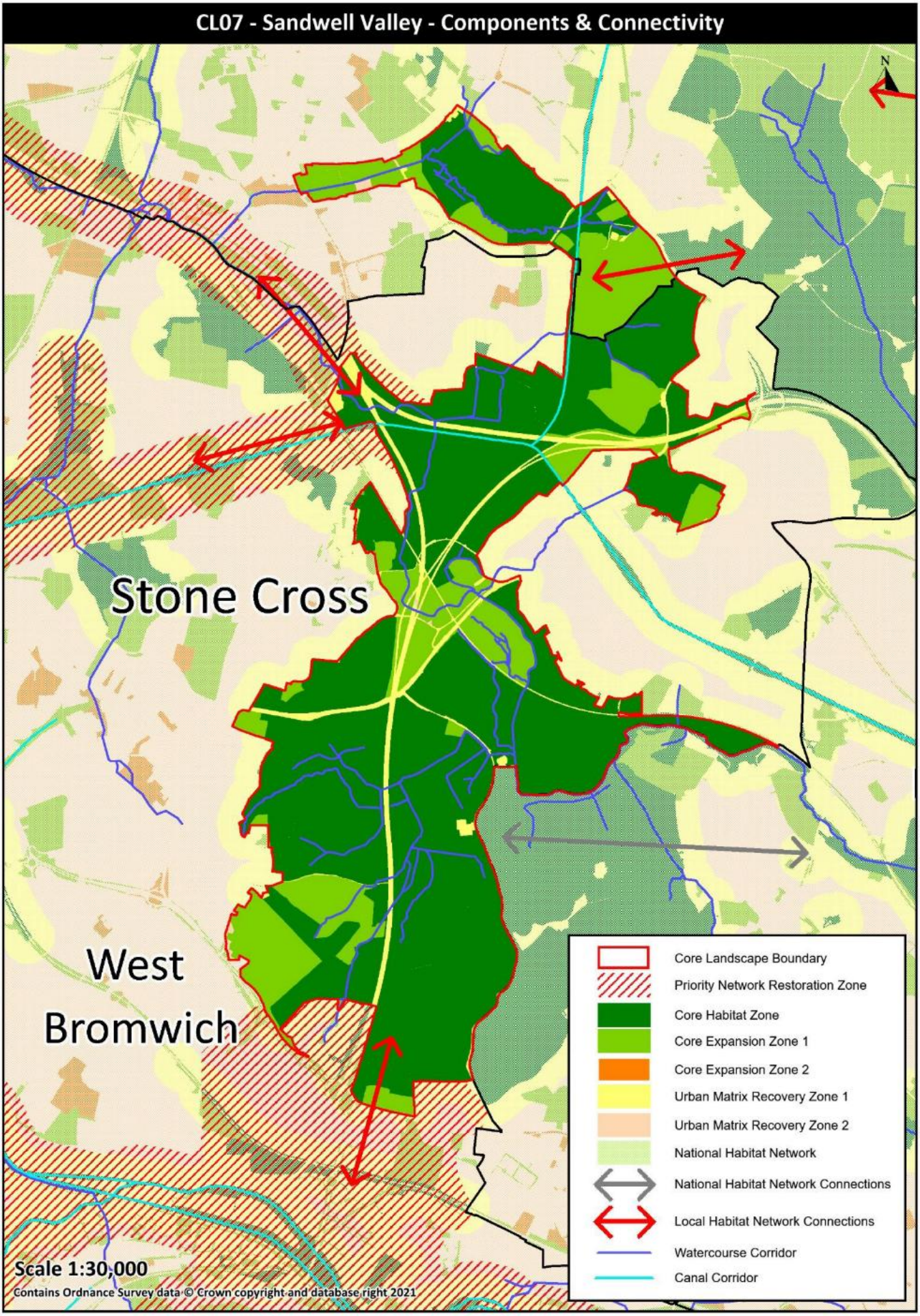
Broad Habitat Type	Freshwater	Priority Habitat	Eutrophic standing waters

There are a number of artificial standing waters throughout Sandwell Valley. These include an ornamental pool and boating lake in Dartmouth Park, the large floodwater storage lake Forge Mill Lake, and those associated with the former grounds of Sandwell Hall (Pleasure Pool and Swan Pool). These vary significantly in ecological value, with significant works having been undertaken for the benefit of wetland birds at RSPB Sandwell Valley (parts of Forge Mill Lake), and wetland and adjacent terrestrial vegetation having developed at the Pleasure Pool. Conversely the boating lake has artificial banks, and very few naturalised features and associated species.

Key Species [3]	
Bird indicators	
Farmland	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Jackdaw, Kestrel, Lapwing, Rook, Starling, Stock Dove, Western Yellow Wagtail, Whitethroat, Woodpigeon, Yellowhammer.
Woodland	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Garden Warbler, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Lesser Redpoll, Lesser Whitethroat, Long-tailed Tit, Marsh Tit, Redstart, Robin, Siskin, Song Thrush, Sparrowhawk, Spotted Flycatcher, Tawny Owl, Treecreeper, Willow Tit, Willow Warbler.
Water & Wetland	Cetti's Warbler, Common Merganser, Common Reed Bunting, Common Sandpiper, Eurasian Coot, Great Crested Grebe, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Egret, Little Grebe, Mallard, Moorhen, Mute Swan, Oystercatcher, Redshank, Reed Warbler, Sand Martin, Sedge Warbler, Snipe, Teal, Tufted Duck, Western Yellow Wagtail.
Other	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Eurasian Magpie, Gadwall, Golden Plover, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Peregrine, Pied Wagtail, Pochard, Red Kite, Shelduck, Shoveler, Stonechat, Swallow, Swift, Whinchat.
Amphibians & Reptiles	
Amphibians	Common Frog, Common Toad, Great Crested Newt, Smooth Newt.
Reptiles	none
Mammals	
Bats	Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Noctule, Nathusius's Pipistrelle, Noctule Bat, Soprano Pipistrelle.
Other	Eurasian Badger, Eurasian Common Shrew, European Water Vole, Harvest Mouse, West European Hedgehog.
Fish	
Bony Fish	none
Jawless Fish	none
Invertebrates	
Assemblage type	
Flora (axiophytes)	
Woodland	*Ajuga reptans, Allium ursinum, Anemone nemorosa, Angelica sylvestris, Athyrium filix-femina, Blechnum spicant, Brachypodium sylvaticum, Bromopsis ramosa, Caltha palustris, Carex paniculata, Carex remota, Carex sylvatica, Chrysosplenium oppositifolium, Deschampsia flexuosa, Dioscorea communis, Dryopteris affinis, Epipactis helleborine, Equisetum telmateia, Festuca gigantea, Filipendula ulmaria, Fragaria vesca, Frangula alnus, Galium odoratum, Lysimachia vulgaris, Malus sylvestris, Melica uniflora, Mercurialis perennis, Milium effusum, Molinia caerulea, Oxalis acetosella, Persicaria hydropiper, Quercus petraea, Sorbus torminalis, Stellaria holostea, Teucrium scorodonia, Tilia cordata, Torilis japonica, Valeriana officinalis, Veronica montana.*
Grassland	*Achillea ptarmica, Agrimonia eupatoria, Agrostis canina, Aira caryophyllea, Ajuga reptans, Blackstonia perfoliata, Blechnum spicant, Brachypodium sylvaticum, Caltha palustris, Carex disticha, Centaurium erythraea, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza fuchsii x praetermissa = D. x grandis, Dactylorhiza praetermissa, Daucus carota subsp. carota, Deschampsia flexuosa, Euphrasia officinalis agg., Festuca filiformis, Filipendula ulmaria, Fragaria vesca, Galium mollugo subsp. erectum, Galium saxatile, Lathyrus nissolia, Leontodon hispidus, Linum catharticum, Lotus pedunculatus, Nardus stricta, Odontites vernus, Ornithopus perpusillus, Persicaria bistorta,*

	Phleum bertolonii, Potentilla anglica, Potentilla erecta, Potentilla sterilis, Rhinanthus minor, Sanguisorba officinalis, Silene flos-cuculi, Stachys officinalis, Stellaria holostea, Succisa pratensis, Trifolium medium.
Heathland	*Agrostis canina, Aira praecox, Blechnum spicant, Calluna vulgaris, Carex nigra, Deschampsia flexuosa, Festuca filiformis, Galium saxatile, Juncus squarrosus, Molinia caerulea, Nardus stricta, Ornithopus perpusillus, Potentilla erecta, Salix aurita, Teucrium scorodonia, Ulex gallii.*
Mires	*Achillea ptarmica, Agrostis canina, Angelica sylvestris, Athyrium filix-femina, Caltha palustris, Carex acutiformis, Carex nigra, Carex paniculata, Carex riparia, Carex viridula subsp. oedocarpa, Cirsium palustre, Dactylorhiza fuchsii, Dactylorhiza fuchsii x praetermissa = D. x grandis, Dactylorhiza praetermissa, Dryopteris carthusiana, Eleocharis palustris, Epilobium palustre, Equisetum fluviatile, Equisetum palustre, Filipendula ulmaria, Galium palustre, Glyceria declinata, Glyceria notata, Hydrocotyle vulgaris, Hypericum tetrapterum, Jacobaea aquatica, Juncus acutiflorus, Juncus squarrosus, Lotus pedunculatus, Lysimachia vulgaris, Menyanthes trifoliata, Molinia caerulea, Persicaria hydropiper, Potentilla palustris, Pulicaria dysenterica, Ranunculus aquatilis, Ranunculus aquatilis, Ranunculus flammula, Ranunculus hederaceus, Silene flos-cuculi, Sparganium emersum, Stachys palustris, Stellaria alsine, Succisa pratensis, Thalictrum flavum, Valeriana officinalis, Veronica beccabunga.*
Open Water	*Bidens tripartita, Butomus umbellatus, Carex acutiformis, Carex paniculata, Carex riparia, Eleocharis palustris, Equisetum fluviatile, Galium palustre, Glyceria notata, Luronium natans, Menyanthes trifoliata, Potamogeton perfoliatus, Ranunculus aquatilis, Ranunculus aquatilis, Sagittaria sagittifolia, Schoenoplectus lacustris.*
Post-industrial (water-stressed)	*Agrimonia eupatoria, Aira caryophyllea, Aira praecox, Anthyllis vulneraria, Asplenium adiantum-nigrum, Blackstonia perfoliata, Blechnum spicant, Centaurea scabiosa, Centaurium erythraea, Daucus carota subsp. carota, Deschampsia flexuosa, Erigeron acris, Filago vulgaris, Fragaria vesca, Jacobaea erucifolia, Linum catharticum, Ophrys apifera, Ornithopus perpusillus, Orobanche minor, Reseda lutea, Senecio viscosus, Silene vulgaris, Trifolium arvense, Trifolium medium, Trifolium micranthum, Trifolium striatum, Vicia tetrasperma.*
Cultivation	*Chenopodium polyspermum, Orobanche minor, Stachys arvensis, Thlaspi arvense, Vicia tetrasperma.*

Ecological Connectivity
Local Habitat Network
Sandwell Valley links directly with Core Landscape 06 Park Lime Pits, Cuckoo's Dingle & Great Barr Hall which is located to the north. There are additional links to the Priority Network Restoration Zones M6 Motorway Corridor and Tame Valley Canal to the north-west, and Birmingham Canal to the south.
National Habitat Network
Sandwell Valley links to the national habitat network in Birmingham to the north-east.


CL07 - Sandwell Valley - Components & Connectivity
N
Stone Cross
West Bromwich
Core Landscape Boundary
Priority Network Restoration Zone
Core Habitat Zone
Core Expansion Zone 1
Core Expansion Zone 2
Urban Matrix Recovery Zone 1
Urban Matrix Recovery Zone 2
National Habitat Network
National Habitat Network Connections
Local Habitat Network Connections
Watercourse Corridor
Canal Corridor
Scale 1:30,000
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Ecological Sub-area Opportunities

Focus Habitats		
Habitat	**Action**	**Measure**
Hedgerows	Improve management of existing	Habitat in good condition
	Reinstate historic/grubbed-out	New habitat
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Ponds	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels)	Improved ecological status
	Reduce artificial inputs	Improved chemical status
Eutrophic Standing Waters	Enhance marginal and emergent vegetation	Increased floral diversity and habitat structure improved
Lowland meadows	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Diversify field-layer component of plantations	Increased floral diversity

Target Species	
Species/Species Group	**Measure**
Barn Owl	Confirmed recent records
Bats	Increased abundance of confirmed species
Breeding farmland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown Hare	Confirmed recent records
Brown Long-eared Bat	Confirmed recent records
Brown/Sea Trout	Confirmed recent records
European Otter	Increased signs, confirmed breeding population
European Water Vole	Confirmed recent records
Great Crested Newt	Increased abundance and number of breeding ponds
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Heathland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance

Geodiversity		
Site	**Action**	**Measure**
Sandwell Valley Country Park	Unknown	n/a

Connectivity Opportunities	
Local Habitat Network	
Connection	**Action**
Within Core Landscape CL07	Restoration of modified channel of the River Tame and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow recreation, restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.
Priority Network Restoration Zones (Tame Valley Canal and Birmingham Canal)	Increased marginal vegetation through the installation of coir roles along hard banks.
	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of standard trees (including fruit trees) along canal corridor.
Priority Network Restoration Zone (M6 Motorway Corridor)	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting in adjacent areas of open space.
National Habitat Network	
Connection	**Action**
Birmingham section of Sandwell Valley (to south-east)	Restoration of modified channel of the River Tame and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow recreation, restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.

Information and Data Sources		
	Source	**Date**
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html	2021
	Black Country UNESCO Global Geopark sites names and location information https://blackcountrygeopark.dudley.gov.uk/bcg/	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: http://www.landis.org.uk/soilscapes/	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) *Draft Black Country Local Nature Recovery Opportunity Map*	2021
	EcoRecord et al. (2021) *Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping*.	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) *Black Country Historic Landscape Characterisation* [data-set]. York: Archaeology Data Service [distributor] https://doi.org/10.5284/1000030	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

[1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

Archaeological Priority Areas (APA): sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

Areas of High Historic Townscape Value (AHHTV): areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

Designed Landscapes of High Historic Value (DLHHV): landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

Areas of High Historic Landscape Value (AHHLV): these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

[2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

[3] KEY SPECIES

Bird Indicators: Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

Amphibians & Reptiles: All amphibian and reptile species native to the UK are included.

Mammals: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Fish: Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

Invertebrates: Pantheon Assemblage Types Analysis.

Flora (axiophytes): Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.

Cabinet – 18 October 2023

Walsall Council Food Law Enforcement Service Plan 2023/24

Portfolio: Councillor G. Perry – Deputy Leader and Resilient Communities

Related portfolios:

Service: Community Safety and Enforcement

Wards: All

Key decision: No

Forward plan: Yes

1. Aim

1.1 The aim of food law is to protect the public from preventable food and water borne disease, contamination and undeclared allergens. It also aims to ensure the integrity of food quality, labelling and compositional standards and to protect consumers from food fraud, food substitution and adulteration.

1.2 The Food Law Enforcement Service Plan (the plan) attached as **Appendix A** describes how the authority will enforce statutory controls regarding food safety and monitor food, premises and personnel in a structured manner. The plan will also be used as the basis for any inspection or audit by the Food Standards Agency (FSA).

2. Summary

2.1 The Covid-19 pandemic restricted the delivery of official food controls creating an increase in the number of unrated businesses and rated businesses whose inspections were overdue. Consequently, the FSA introduced a national recovery plan in July 2021 directing local authorities to re-start their intervention programmes using a phased approach. The recovery plan formed the basis of the 2022/23 service plan. The FSA ended its recovery plan in March 2023. In order for services to re-align with the Food Law Code of Practice and to catch up the FSA now expects local authorities will carry out due interventions for establishments that are back in the routine programme of interventions in accordance with the frequencies set out in the Code. (This is reflected in the 2023/24 service plan.)

2.2 Through the work of its environmental health and trading standards services, Walsall Council ensures that its statutory responsibilities in the respect of regulating the food industry are fulfilled.

2.3 Through the work of the director of public health, issues around health and wellbeing are at the centre of policy development. The link between the health of residents and the local economy is seen as a key issue in Walsall and is enshrined

in the joint strategic needs assessment, health and wellbeing strategy and Council Plan. The aims and objectives of the plan, contribute significantly to both the health and economy agendas.

3. Recommendations

3.1 That That Cabinet receive the plan for the year 2023/24 as evidence of the Council's compliance with its statutory duties in relation to food law and recommend it to Full Council for approval and adoption.

4. Report detail - know

Context

4.1 The provision of safe food and water, the prevention of outbreaks of food and water borne disease and the investigation of allegations of food fraud are fundamental principles of protecting public health and the economy. Environmental health and trading standards officers work directly with businesses, residents and partner agencies and are constantly striving to provide a balance between the economic success of the business against the need to always protect the health of customers and staff.

4.2 The plan sets out the council's commitment to the implementation of food safety enforcement for the year ahead.

Council Plan priorities

4.3 The strategic priorities and the ways in which environmental health and trading standards contribute to them are detailed below.

4.4 **Economic growth for all people, communities and businesses** - the work of the service supports economic growth in a number of ways:

- New and existing businesses are given advice and support to not only survive but thrive despite difficult economic conditions.
- Consumers are given confidence when shopping in Walsall.
- Introducing competition into regulatory standards through the national food hygiene rating scheme, empowering residents to choose which business should receive their custom and motivating businesses to improve their standards so they gain new and retain existing customers.
- The service promotes those businesses which sign up to and achieve the Health Switch Awards and encourages residents to visit and enjoy their healthier food.
- We take robust enforcement action against those businesses or individuals who seek to gain an unfair advantage over competitors by not complying with regulations thereby putting their staff and customers at risk.

4.5 **People have increased independence, improved health and can positively contribute to their communities:**

- The service ensures that unsafe practices and foodstuffs are identified and robustly tackled. This ensures that the health of the public is protected thereby preventing ill health that places a negative burden on the economy and people's lives.
- The skills and opportunities available within the service are used to promote and implement key aspects of the Health and Well Being Strategy for example through Healthy Workplace Awards, Making Every Contact Count, the Health Switch Award and tobacco control/smoking cessation projects.
- The service strives to prevent outbreaks of communicable disease and where such disease outbreaks take place use the statutory powers available to control and stop their spread as well as bringing to justice those who may be responsible.

4.6 **Children have the best start and are safe from harm, happy, healthy and are learning well**

- The work the service undertakes has a bearing on the health of children as it does all other members of the community. Premises that deal exclusively with children such as schools and nurseries are at present given a higher risk rating score because of the vulnerability or age of the children.
- Trading standards will respond quickly and effectively to national, regional or local food alerts around compositional standards for infant formula and similar foods necessary for or targeted at children.
- Trading standards conduct age restricted sales investigations around alcohol, cigarettes and knives in order to ensure young people are not at risk from unscrupulous traders.

4.7 **Communities are prospering and resilient with all housing needs met in safe and healthy places that build a strong sense of belonging and cohesion**

- Food businesses are often at the centre of their community and their success and regulatory compliance can have a beneficial impact on communities. Likewise poorly run premises with overflowing bins, noisy equipment, late opening and badly prepared food can have a detrimental impact on the image or self-esteem of communities.
- Issues such as child sexual exploitation, modern day slavery, illegal immigration and other organised criminal activities can be associated with food businesses, staff therefore work closely with internal services and external agencies where they believe issues such as this exist.
- Regulatory activity is prioritised based on risk and where serious non-compliance is found robust enforcement action is taken against those businesses having the most detrimental impact on communities.

4.8 Without a plan that sets out a commitment to food safety and standards and a strategic review of the delivery of that service the authority could be challenged by the FSA. Any audit or formal investigation by the Food Standards Agency would be more difficult for the authority to defend without such a plan.

4.9 The plan highlights the good work carried out by the service to ensure food safety is maintained and to protect residents from harm. There have and continue to be pressures from other areas of work such as reactive pressures from infectious disease, emergency prohibitions and other serious incidents. These pressures have led to a number of predominantly low risk food premises not receiving their

programmed inspection. Whilst this is not ideal, it is a consequence of prioritisation of workload based on resource and ensuring wherever possible serious incidents and high-risk premises receive most attention.

4.10 The need for the service to continue to place a major emphasis on allergen control as a consequence of several high-profile deaths (outside of Walsall) means that a significant amount of Officer time is being dedicated to this area of work so that it is properly considered and regulatory controls implemented as effectively as possible having regard to current guidance and best practice. This is increasing the time taken to complete inspections but is a key issue for the service to prioritise at present.

Financial implications

4.11 There is a revenue budget of £372,337 in place that supports the funding of this council service, and the plan will be delivered within this budget. Details as to the costs associated with the service can be found at section 4 of the plan.

Legal implications

4.12 By virtue of section 12 of the Food Standards Act 1999 the FSA has the function of monitoring the performance of enforcement authorities in enforcing relevant legislation. This function includes, in particular, setting standards of performance (whether for enforcement authorities generally or for particular authorities) in relation to the enforcement of any relevant legislation. The Framework Agreement on Official Feed and Food Controls by Local Authorities is the mechanism by which the FSA puts into effect the powers contained in the Food Standards Act 1999. It provides for the following:

- published local service plans to increase transparency of local enforcement services;
- clear agreed standards for local authority feed and food law enforcement;
- local authority monitoring data used to select authorities for audit where there are concerns about enforcement performance; and
- an audit scheme aimed at securing improvements and sharing good practice.

4.13 Any plan produced by the authority should comply with the framework agreement.

4.14 The FSA's audits of local authority food and feed law enforcement are conducted against the requirements of the framework agreement and, more specifically, a document called the Standard.

4.15 The Standard sets out the minimum levels of performance expected in relation to the full range of a local authority's feed and food law enforcement activity, including food hygiene, food standards, imported food and feeding stuffs law enforcement.

4.16 The Standard draws together the obligations placed on local authority food and feed law enforcement services arising from legislation and related guidance, and codes of practice. This includes local authority performance in relation to inspections, sampling, complaints, formal enforcement, promotion and advice to business.

4.17 The work of the division pertinent to this report is undertaken pursuant to the provisions of the Food Safety Act 1990 and associated codes of practice, the Food Safety and Hygiene (England) Regulations 2013 and any other such regulations which were developed from the European Communities Act 1972

4.18 The Food Safety Act 1990 states that every food authority shall enforce and execute within their area the provisions of this Act with respect to which the duty is not imposed expressly or by necessary implication on some other authority.

Procurement Implications/Social Value

4.19 The council is part of a national agreement/service level agreement with Public Health England for the analysis of any microbiological food samples taken. There is no cost for this service. The authority has to appoint a public analyst for food and an agricultural or deputy agricultural analyst for animal feed and fertilisers. Depending upon the nature of any samples taken and the type of analysis required the service will use on an ad hoc basis those companies or other local authorities outlined in Section 2.2

Property implications

4.20 There are no property implications arising from this report.

Health and wellbeing implications

4.21 The council has a statutory duty to promote health and wellbeing. Through the work of the director of public health, issues around health and wellbeing are at the centre of policy development. The link between the health of residents and the local economy is a key issue in Walsall and is enshrined in the joint strategic needs assessment, health and Wellbeing Strategy and council plan. The aims and objectives of the plan, contribute significantly to both the health and economy agendas.

4.22 The services contribution to the corporate priorities also sets out how it contributes to the Marmot principles.

Staffing implications

4.23 There are no direct impacts upon staffing arising from the report.

Reducing Inequalities

4.24 The implications for reducing inequalities have been taken into account and assessed as set out below.

4.25 The regulation of the food industry affects all members of society. With the resources available the service will always prioritise those matters that more directly affect vulnerable persons. The service will assist where it can with

translated material, interpreters or by coaching those who require it in the production or sale of safe food.

4.26 Implementation of the plan will have no adverse equality implications as the same levels of advice and support are provided to all food business proprietors from all sections of the community.

4.27 Certain sectors of the food trade are predominantly owned by one or other ethnic groups. In order to ensure a consistent and proportionate approach all decisions are based solely on consideration of risk, public safety, evidence, and public interest. All enforcement policies reflect this approach.

Climate Change

4.28 The report may have some indirect climate change and environmental implications in so far as it affects the working and commercial environment in Walsall.

Consultation

4.29. This plan has never been traditionally consulted upon with the communities of Walsall. It is a document setting out the council's commitment based upon statutory guidelines and responsibilities and therefore not subject to influence or change based upon formal consultation responses.

5. Decide

5.1 Cabinet is being asked to receive this service plan for the year 2023/24 as evidence of the council's compliance with its statutory duties in relation to food law and recommend it to full Council for approval and adoption.

5.2 The plan is required by statutory guidance. Should the Council decide not to adopt the plan and fail to meet its statutory obligations the FSA can invoke powers conferred under Section 42 of the Food Safety Act 1990 to discharge a local authority's duties where they are satisfied that duty is not being met.

5.2 The plan reflects a balance between the requirements of central government through the Code and the local situation in Walsall. Resources are no longer such that the authority can guarantee a fully compliant inspection regime. The plan indicates that the service will use risk, intelligence and the local knowledge and experience of inspectors to ensure high risk activities are dealt with as a priority.

6. Respond

6.1 Although the plan is brought to cabinet and council for approval it is a living document. Therefore, from the 1st April 2023 all works relating to food safety have continued and this generates the programme for 2023/24 and so on. If agreed, then the plan will reinforce the direction of travel and the priorities for the service or if there are different suggestions forthcoming allow the service to consider and implement and recommendations given.

7. Review

7.1 Monitoring and review of the plan is built into the document and includes regular team meetings, 121's, APC's, portfolio briefings, statutory annual returns to government and a fortnightly refresh of the food hygiene rating scheme. The annual review brought before cabinet and council fulfils a significant part of the review process.

Background papers

None

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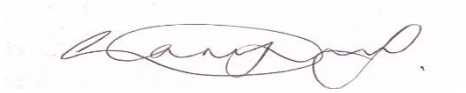

Kathryn Moreton
Interim Director

6 October 2023

Councillor Perry
Portfolio holder

6 October 2023

Walsall Council

Food Law Enforcement Service Plan 2023-24

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1.0 AIMS AND OBJECTIVES OF THE FOOD SERVICE

1.1 Aims of the Food Service

- To protect the public health from preventable food and water borne disease.
- To protect public health from contaminated food and undeclared allergens, ensure the integrity of food quality, labelling and compositional standards and to protect consumers from food fraud, food substitution and adulteration.
- To carry out the Food Standard Agency (FSA) Animal Feed Delivery Programme
- To promote and implement key aspects of the Public Health agenda
- To comply with the FSA Framework Agreement and relevant codes of practice.
- To have regard to the Regulation Policy when considering enforcement action
- To support those we regulate comply and grow.

1.2 Objectives of the Food Service

- To carry out a programme of interventions at food premises allocating resources to those premises posing the most significant risk.
- To assist new or existing businesses through frontline advice or Home or Primary Authority schemes to achieve compliance.
- To publish food hygiene ratings so consumers can make informed choices and businesses are encouraged to invest in raising standards and become profitable.
- Use intelligence to ensure that food particularly imported food offered or exposed for sale is fit for human consumption and to expedite the removal of hazardous products from the food chain.
- To investigate cases of food poisoning and tackle practices and processes identified as sources of infection.
- To investigate complaints relating to food and food premises and take appropriate, timely and where necessary robust enforcement action.
- To undertake a microbiological sampling programme proactively at manufacturing premises and where necessary in connection with outbreaks of disease or service requests.
- To undertake a sampling programme to ensure that food complies with legal standards relating to presentation, labelling and advertising, compositional standards and the absence of non-permitted or excessive levels of additives, contaminants and residues.
- To undertake an animal feed delivery programme in line with FSA requirements.

1.3 Links to Corporate Objectives and Plans

The Council has a Council Plan for 2022/25, which sets out the Council's ambitions until 2025. It sets out outcomes and explains how progress towards their achievement will be measured. The Plan is aligned to the Council's four-year Budget Plan and has the following key areas of focus:

Economic - Enable greater local opportunities for all people, communities and businesses
People - Encourage our residents to lead more active, fulfilling and independent lives to maintain or improve their health and wellbeing
Internal focus - Council services are customer focused effective, efficient and equitable
Children - Have the best possible start and are safe from harm, happy, healthy and learning well
Communities - Empower our communities so that they feel they are connected and belong in Walsall, creating safe and healthy places whilst building a strong sense of community

The plan can be viewed via the following link:
https://go.walsall.gov.uk/corporate-plan

The Strategic Priorities and the ways in which Environmental Health and Trading Standards contribute to them are:

Economic - Enable greater local opportunities for all people, communities and businesses

- Our work supports new and existing businesses to not only survive but thrive despite difficult economic conditions.
- Our work gives consumers confidence when shopping in Walsall
- Our work continues to introduce competition into regulatory standards through the National Food Hygiene Rating Scheme, empowering residents to choose which business should receive their custom
- We confront those businesses or individuals who seek to gain an unfair advantage over competitors by not complying with regulations thereby putting their staff and customers at risk.

People - Encourage our residents to lead more active, fulfilling and independent lives to maintain or improve their health and wellbeing

- Ensuring that unsafe practices and foodstuffs are identified and robustly tackled to ensure the health of the public is protected therefore preventing ill health that places a negative burden on the economy and the lives of people.
- To use the skills and opportunities available to the service to promote and implement key aspects of the Health and Well Being Strategy for example through Healthy Workplace Awards, Making Every Contact Count and tobacco control/smoking cessation projects.

- To prevent outbreaks of communicable disease and where such disease outbreaks take place using the statutory powers available to control and stop their spread as well as bringing to justice those who may be responsible.

Internal Focus – Council services are customer focused effective, efficient and equitable

We will work with internal partners to give advice and expertise in relation to those matters that fall within our area of expertise. This could be as being a member of the Safety Advisory Group, Health Protection Forum, Training Forum, Directorate Health and Safety Committee, Exploitation Delivery Group, Transformation Groups and Walsall Proud Programme etc.

Children - Have the best possible start and are safe from harm, happy, healthy and learning well

- The work we undertake has a bearing on the health of children, premises that deal exclusively with children such as schools and nurseries are at present given a higher risk rating score because of the vulnerability or age of the children. Complaints and infectious disease incidents involving children would also receive a higher degree of response or scrutiny on the basis of a potential higher impact on their lives.

Communities - Empower our communities so that they feel they are connected and belong in Walsall, creating safe and healthy places whilst building a strong sense of community

- Food businesses are often at the centre of each community and their success and regulatory compliance can have a beneficial impact on communities. Likewise poorly run premises with overflowing bins, noisy equipment, late opening and badly prepared food can have a detrimental impact on the image or self-esteem of communities. Our services will therefore focus regulatory activity against those businesses having such a detrimental impact on communities.

2.0 BACKGROUND

2.1 Profile of Walsall MBC

Walsall is a unitary authority in the West Midlands region. The Census 2021 reported that its population size has increased by 5.5%, from around 269,300 in 2011 to 284,100 in 2021. Whilst the Borough is predominantly urban, it does have significant areas of open space mainly in the east. Along with Sandwell, Dudley and Wolverhampton, Walsall forms part of the Black Country sub region, which was, designated a Local Enterprise Partnership in 2010.

Walsall lies at the heart of the national road and rail networks with the M6, M6 toll, M5 and M54 all running through or close to the Borough. Rail and bus routes feed into national networks meaning 5 million people are within 45 minutes of Walsall by public transport. (*Walsall Borough Local Economic Assessment, V1 July 2011*)

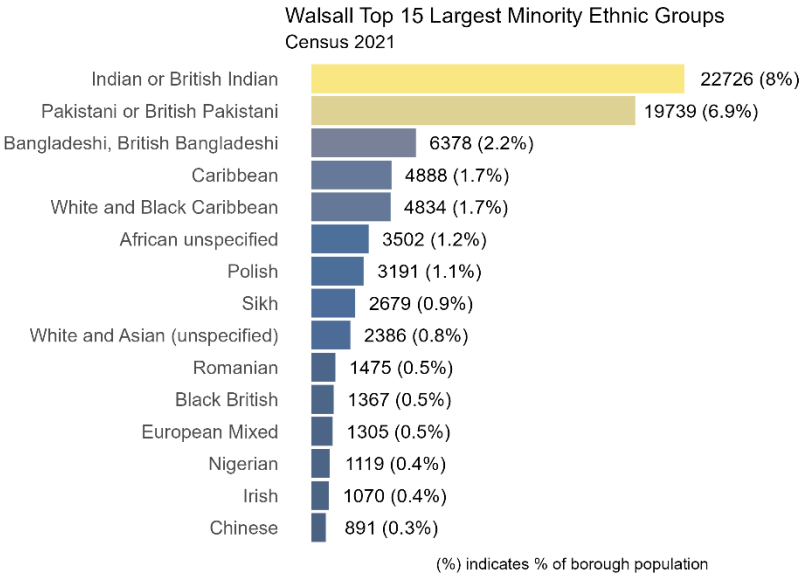
Walsall town centre is the strategic and economic centre of the borough, but there are also five key district centres: Aldridge, Bloxwich, Brownhills, Darlaston and Willenhall. All of these have distinct histories and identities and are important retail hubs serving their local communities.

Four out of five businesses surveyed serve clients locally in Walsall and around two in three serve the Black Country or West Midlands. Over 60% of businesses have customers in the rest of the UK and over 30% have customers overseas. Only a third of sales are outside the region meaning Walsall Companies are very reliant on the local economy. Over half of working residents are employed in the borough and it is estimated around 4.7% of the Boroughs residents are employed in the food and accommodation sectors. Walsall has a variety of manufacturing and service industries and is an operational base for a number of food wholesalers. There are also several companies producing a variety of food products which are distributed throughout the UK. (*Walsall Borough Local Economic Assessment, V1 July 2011*)

The 2019 Index of Multiple Deprivation ranks Walsall as the 25th most deprived English local authority (out of 317), placing Walsall within the most deprived 10% of districts in the country. The labour market profile for claimants in Walsall (May 2023) show that 5.7% of the working population claim out of work benefits compared to 4.9% in the West Midlands and 3.7% in Great Britain.
(https://www.walsallintelligence.org.uk/home/demographics/deprivation/)
https://www.nomisweb.co.uk/reports/lmp/la/1946157191/report.aspx#tabidbr

Walsall is a culturally diverse town where people of Indian, Pakistani and Bangladeshi background form the largest minority ethnic groups. White British comprise the largest ethnic group at approximately 67.4% of the borough population, and more broadly the wider White ethnic category at 71.4%. Minority ethnic groups have seen substantial increases,

now accounting for 32.6% (1 in 3) of Walsall's population, compared to 23.1% (1 in 4) a decade prior in 2011. The chart below visualises this in greater detail.



Minority ethnic groups are highly concentrated in certain parts of the borough, predominantly in Southern and Central Walsall (wards including Pleck, Palfrey St. Matthews, Paddock and southern Birchills Leamore).

(https://www.walsallintelligence.org.uk/home/demographics/diversity/)

In the past decade, there has been a rapid change in the eating habits of the UK population with there being a considerable growth in the consumption of food from outside of the home. (*Rand Europe – Food Consumption in the UK 2020*) Studies have found that takeaway food outlets are often located in areas of higher socio-economic deprivation and that there is a strong association between deprivation and the density of fast food outlets, with more deprived areas having more fast food outlets per 100,000 population. (*Public Health England - Using the planning system to promote healthy weight environments, 2020*) There is also evidence that adults with lower income tend to consume more takeaway meals eaten at home , compared to those with higher income and that there is an evident health inequality (*Rand Europe – Food Consumption in the UK 2020*)

The food service plays an important role in bridging the link between health and economy by protecting and improving the health of residents whilst also having regard to the economic prosperity of the business sector.

2.2 Organisational Structure

The Framework Agreement on Official Feed and Food Controls by Local Authorities provides the Food Standards Agency with a mechanism for implementing its powers under

the Food Standards Act to influence and oversee local authority enforcement activity. The Food Safety Act 1990 states that every food authority shall enforce and execute within their area the provisions of this Act with respect to which the duty is not imposed expressly or by necessary implication on some other authority.

Walsall Council's constitution, Part 2, Article 4.01 (a)(ii) lists the Food Law Enforcement Service Plan as a plan or strategy that must be approved by full Council before it can become operational. This Plan will therefore be submitted on an annual basis to Cabinet with a recommendation that it is sent to full Council for approval and adoption

The Director of Resilient Communities may authorise members of staff to act on behalf of the Council and to enforce and administer relevant legislation. They are also authorised to appoint or recommend for appointment:

- Lead Officers for Food (Safety and Standards)
- The Chief and Deputy Chief Inspector of Weights and Measures
- An Inspector to institute legal proceedings in respect of the Health and Safety at Work etc. Act 1974
- Public Analyst for the purpose of Section 27 of the Food Safety Act 1990

The Head of Community Safety and Enforcement is responsible for:

1. Managing Environmental Health, Trading Standards and Licensing with respect to enforcing relevant legislative requirements.

2. Acting as a Lead Officer for the Food Safety Act and its codes of practice.

3. To authorise enforcement action including, the institution of legal proceedings, serving of legal notices and the issuing, suspension and revocation of licences and permits.

4. To ensure the service operates and performs in line with its various statutory responsibilities and that evidence of performance is submitted to Central Government for oversight in a timely fashion upon request.

The Team Leader Environmental Health and Team Leader Trading Standards are responsible for delivery of their respective services in line with current corporate, regional and national priorities.

Presently there are 11 permanent Environmental Health posts, of which 10 require a qualification to undertake food safety duties of which 5.7 FTE's work predominantly on Food Safety, 2.02 FTE's work on Health and Safety related matters the remaining 2.3 FTE's work on animal licensing, nuisance, licensing and other regulatory activity. Additionally, 1 FTE Food Safety Support Officer undertakes food safety duties and is subject to a temporary

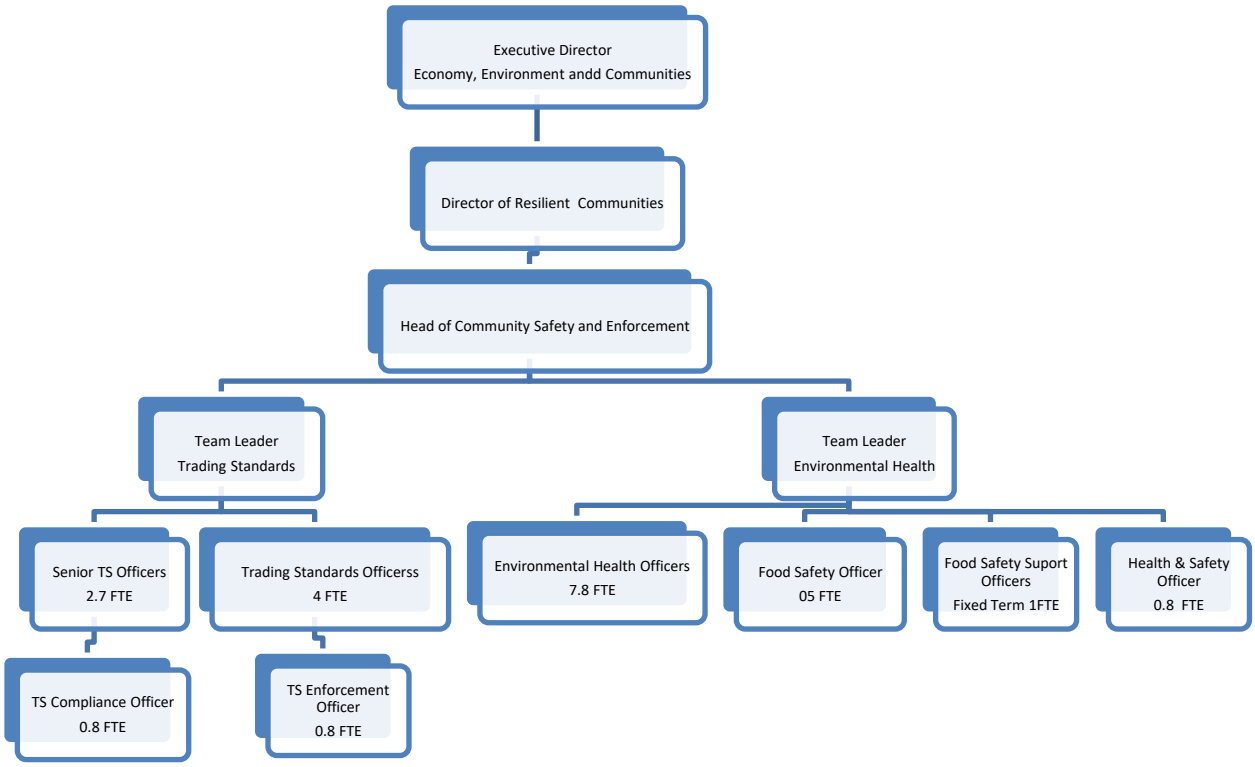
fixed term contract which will expire during the course of 2023/24 and which can only be extended if funding is secured to support the post.

There are presently 4.7 FTE trading standards officers qualified to undertake food standards duties alongside their other trading standards work of which approximately 1 FTE officer time is spent enforcing food standards.

Environmental Health use the UK Health Security Agency Food, Water and Environmental Microbiology Laboratory, London for any samples taken.

Trading Standards use Public Analyst Scientific Services (PASS) based in Wolverhampton for compositional analysis of food samples

2.2 Structure of Service and Contact Details



Delivery of the Food Service	
Service Delivery Point	Civic Centre, Darwall Street, Walsall, WS1 1TP.
Hours of Opening	Monday to Thursday 8.45am to 5.15pm Friday 8.45pm to 4.45pm
Telephone numbers	EH 01922 650000 TS 0845 330 3313 Out of Hours 01922 650000
E mail	environmentalhealth@walsall.gov.uk trading_standards@walsall.gov.uk
Website	www.walsall.gov.uk
Social Media	www.facebook.com/makemeasavvyshopper Twitter: @ehwalsall @savvyshopper

2.3 Scope of the Food Service

The enforcement of food related legislation is a joint responsibility between Environmental Health and Trading Standards: All services are provided by officers employed by Walsall Council.

Environmental Health provide the following services relating to Food:

1. Food safety/hygiene inspections.
2. Infectious disease investigations (food poisoning and water borne disease).
3. Microbiological food sampling.
4. Food safety advice to new and existing businesses including promotional and educational activities.
5. Food and food hygiene complaint investigations.
6. Private drinking water supply - monitoring and assessment.
7. Operation of the National Food Hygiene Rating Scheme.
8. Commercial complaints in respect of odour, noise, waste & drainage.
9. A statutory consultee in the respect of planning.
10. A Responsible Authority in terms of licence applications.
11. Export Certificates for food and interventions relating to Imported Foods.
12. Core member of Walsall Council Safety Advisory Group.

Trading Standards provide the following services relating to Food:

1. Food Standards inspections.
2. Feed Hygiene Inspections.
3. The investigation of complaints in relation to food fraud, labelling, contamination and composition.
4. Food sampling for compositional, nutritional and labelling conformity.
5. Food Standards advice to business.
6. Food Standards education to consumers.
7. Import certificates for food & interventions relating to imported foods.
8. A Responsible Authority in terms of licence applications.
9. Underage sales of alcohol and tobacco.

Licensing regulate the following Food related matters:

1. Late Night Refreshment Licences.
2. Street Trading Licences and Consents.
3. Personal and Premises Licences for Alcohol.

2.4 Demands on the Food Service

A profile of the 2318 food businesses registered with Walsall Council is as follows:

FSA CODE	PREMISES TYPE	NO. OF PREMISES
A	Primary Producer	27
C	Manufacturer and Packer	29
E	Importer/exporter	4
F	Distributors/transporters	59
G01	Supermarket/hypermarket	53
G02	Small retailer	493
G03	Other retailer	89
H01	Restaurant/cafe/canteen	331
H02	Hotel guest house	13
H03	Pub/club	213
H04	Takeaway	327
H05	Caring premises	159
H06	School/college	132
H07	Mobile unit	143
H08	Restaurant/caterer other	327
	Total	2458

There are 21 premises approved by the local authority to produce products of animal origin for distribution throughout the UK and Europe. There are no red meat slaughterhouses in the borough. The FSA Regulates a small-scale Halal poultry slaughterer in Walsall,.

There are 29 agricultural feeding-stuff (animal feed) establishments registered under the EU Feed Hygiene Regulation (183/2005) with the following breakdown of registration activities:

R6	Manufacture of pet foods	1 establishment
R7	Manufacture and/ or placing on the market of feed materials	20 establishments
R12	Food businesses selling co-products of the food industry which are destined as feed materials	1 establishment
R13	Livestock farms which do not mix feeds or mix feeds without additives	6 establishments
R14	Arable farms growing or selling crops for feed	1 establishment

Walsall as a Borough has a significant number of premises where English is not the primary language spoken by many of the staff. Within certain sectors of the food

industry there also tends to be a relatively high turnover of Food Business Operators meaning officers may not see the same person twice when carrying out visits. This is not conducive to building long-term positive relationships where compliance can be improved with mutual-cooperation.

Many food premises are opened in buildings not originally designed for such a purpose and therefore do not allow easy or economically viable compliance with the structural elements of food hygiene.

2.5 Regulation Policy

The Regulatory Services Enforcement Policy was approved by Cabinet on the 25th April 2018 it is available at this link https://tinyurl.com/yb39zvt6

3.0 SERVICE DELIVERY

3.1 Interventions at Food Establishments

Interventions are defined as activities designed to monitor, support and increase food law compliance within a food establishment. Interventions also include activities that are effective in supporting food businesses to achieve compliance, such as targeted education and advice or information and intelligence gathering.

The FSA considers that an intervention programme is central to a local regulatory and enforcement regime, and local authorities must ensure that such a programme is appropriately resourced.

Trading Standards Food Standards Interventions.

Food Standards interventions are applied in accordance with the Intelligence Operating Model, in a risk-based intelligence-led manner, so that resources are effectively targeted and directed at those businesses that present the greatest risk.

Interventions will also be based upon and result from the national, regional and local sampling programmes that we contribute to. A flexible approach to resourcing enables the service to respond appropriately to incidents and to ensure the necessary protection to the Borough's food chain. Additionally under the FSA's Recovery Plan all premises identified as high risk will receive an intervention.

Environmental Health Food Hygiene Interventions Risk-based Interventions

The pandemic restricted the delivery of Official Controls because of restrictions and the diversion of Officers from food onto Covid-19 enforcement duties. Consequently, a backlog of unrated food businesses or businesses whose inspections were overdue

increased. Therefore, the FSA introduced a national Recovery Plan (effective from 1st July 2021 to 31st March 2023) which required local authorities to re-start their food hygiene intervention programmes following the restrictions of the pandemic. The Recovery Plan directed the authority to complete on-site interventions for all establishments rated A, B, C (less than Broadly Compliant), D (less than Broadly Compliant) and C (Broadly Compliant). Implementation of Phase 2 of the Recovery Plan formed the basis of the authority's 2022/23 service plan.

On 31st March 2023, the FSA ended its Recovery Plan and announced its intention to take a risk-based and pragmatic approach to performance management as services work to realign with the Food Law Code of Practice (the Code) and to 'catch up' on backlogs of lower risk premises created by the pandemic. For this purpose, the FSA expects that from 1st April 2023 local authorities will:

- Carry out due interventions for establishments that are back in the routine programme of interventions in accordance with the frequencies set out in the Code.
- Work towards realigning with the provisions set out in the Code from 1 April 2023 using the full range of flexibilities already offered by the Code.
- Continue to exercise a risk-based approach to the requirements set out in the Code based on available resource.

The table below shows the frequencies of interventions set by the intervention-rating scheme in the Code.

Category	Score	Minimum intervention frequency
A	92 or higher	At least every 6 months
B	72 to 91	At least every 12 months
C	52 to 71	At least every 18 months
D	31 to 51	At least every 24 months
E	0 to 30	A programme of Alternative Enforcement Strategies or interventions every three years

During 2023/24, prioritisation of interventions will be in accordance with milestones outlined in the last period of the Recovery Plan and in conjunction with local risk assessment and available intelligence having due regard to the Code.

The programmed number of interventions programmed for 2023/24 is as follows:

Risk Category	A	B	C (0-2)	C (3-5)	D (0-2)	D (30/40)	Unrated	Total
Number of interventions	10	58	33	240	11	138	110	600
Target	100%	100%	100%	Risk	100%	Risk	Risk	

NOTE: Risk = Inspection prioritised according to highest risk.

There are approximately 290 unrated businesses awaiting an inspection. The table below shows the breakdown of the type of these food businesses. Newly registered businesses are immediately prioritised for inspection and are categorised as either high, medium or low priority for inspection. There are substantial numbers of restaurants, takeaways and small retailers, which are likely to be categorised as high priority. Therefore, these businesses will also place a pressure on the capability of the service to complete planned interventions for rated business in accordance with the frequencies set out in the code.

Businesses A waiting Inspection (20th June 2023)	
Small Retailer	40
Mobile Food Unit	33
Restaurant/Cafe/Canteen	34
Take-Away	19
Pub/Club	6
Caring Premises	9
Restaurant/Caterer - Others	125
Distributors/Transporters	9
School/College	3
Retailer - Other	3
Importers/Exporters	3
Manufacturers and Packers	2
Manufacturers selling by retail	1
Supermarket/Hypermarket	3

In addition to the implementation of an intervention programme the service will respond to food related complaints and enquiries concerning food, food borne diseases, premises and practices during 2023/24. Based on an average calculated from the number of complaints and enquiries received during the periods 2021/22 and 2022/23 approximately 300 can be expected to be received during 2022/23.

Prioritisation

Should a situation occur whereby demand outstrips staffing levels our priority will be matters of highest risk to ensure the greatest level of protection to the public. These matters include:

- an unsafe practice is occurs which represents a significant hazard to health;

- a particular food handling or food preparation practice is found to entail a previously unsuspected hazard to public health;
- a foodstuff previously thought to be safe is found to be hazardous to health;
- a food with widespread distribution is found to be contaminated and thereby presents a significant hazard to public health;
- widely distributed foodstuff is the subject of fraud in labelling or presentation
- Notifications of single cases of significant infectious disease e.g. E coli 0157
- Outbreaks of infectious disease of any type

Consequently, this would have an adverse impact on lower risk work and would necessitate the development of a secondary strategy to deal with the backlog of work arising from the realignment of priorities. This could include:

- Lesser qualified Officers making a first response
- Qualified agency staff brought in on a temporary basis
- Response by phone/letter/email only
- Signposting to other agencies or legal advisors.

Walsall Council implemented the Food Hygiene Rating Scheme on the 1st April 2011: It is encouraging to see that the proportion of businesses that are ranked "Broadly Compliant" (scoring 3, 4 or 5) has generally increased year upon year, despite the continued financial pressure on businesses.

Rating	**Number of Businesses**									
	April 2013	April 2014	April 2015	April 2016	April 2017	April 2018	April 2019	April 2021	April 2022	April 2023
5 (Very Good)	328	373	585	565	679	725	751	785	768	884
4 (Good)	308	349	347	368	390	355	349	372	358	370
3 (Generally Satisfactory)	336	353	321	306	295	298	307	294	292	325
2 (Improvement Necessary)	130	121	98	91	91	89	67	51	58	36
1 (Major Improvement Necessary)	180	149	153	153	118	84	75	54	57	38
0 (Urgent Improvement Necessary)	10	8	15	11	8	8	4	1	0	2
% achieving satisfactory ratings	75.2	79.5	81	83	86.5	88.4	90.6	92.9	92.5	95.4

There are 2130 businesses are recorded on the FHRS, 1655 are rated with the other 475 being classified as either exempt, excluded, sensitive or awaiting inspection.

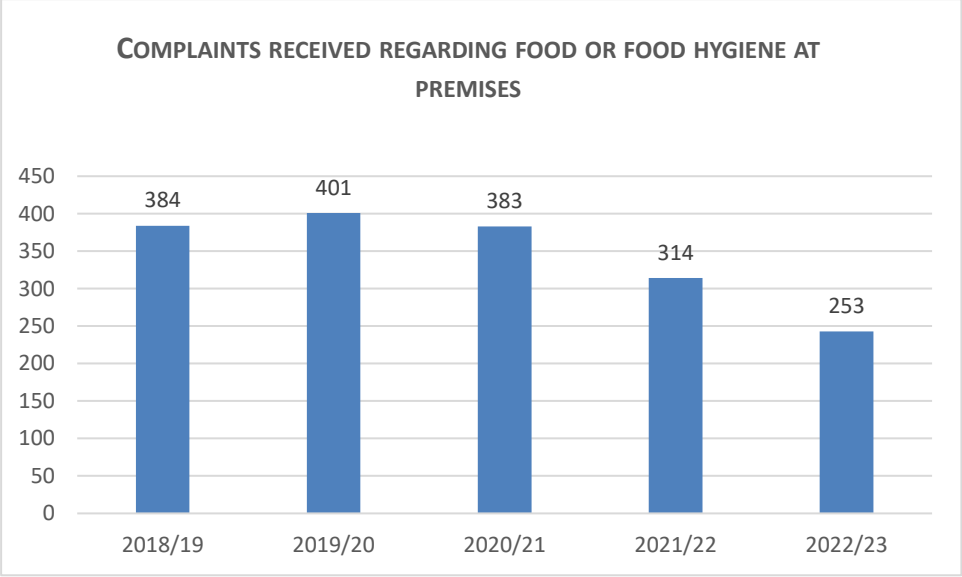
Taking ratings as 3 and above as satisfactory then 95.4% of rated Walsall Businesses are at least satisfactory with 4.6% requiring varying levels of improvement. Staff have receive training in the consistent rating of food premises and have attended a number of FSA training sessions relating to this matter. Therefore, these results should accurately reflect standards within the Borough.

We continue to support the introduction of legislation requiring the mandatory display of ratings stickers.

3.2 Food Complaints

Complaints are prioritised on the basis of the nature and severity of the matter reported. Many complaints relate to dissatisfaction with the condition of food and often fail because the continuity of evidence has been broken i.e. it is possible the contamination entered the food after opening. To allow staff to focus on areas of highest priority information will be made available to complainants on actions they may be able to take to resolve low risk complaints.

Environmental Health received 243 complaints relating to the condition of food and concerns over food practices or the hygiene of food premises in 2022/23 and 314 in 2021/22.



Trading Standards received 140 food and drink related complaints in 2021/22 and 129 in 2022/23 relating to out of date, food fraud, improperly described, contaminated and incorrectly labelled food.

3.3 HOME AUTHORITY PRINCIPLE AND PRIMARY AUTHORITY SCHEME

PRIMARY AUTHORITY

The Primary Authority Principle has its basis in law and is a government priority. The authority is permitted to recover its costs for advice given under the scheme and if the business follows, the "assured advice" then enforcement action such as a prosecution by other authorities is not likely to be successful. On the 2nd July 2014, Cabinet approved the adoption and charging regime for this scheme. To date no Primary Authority partnerships have been signed up to.

Home Authority Principle

This principle was developed as an aid to good enforcement practice and aims to:

- Encourage Authorities to place special emphasis on goods and services originating within their area.
- Provide businesses with a Home Authority source of guidance and advice.
- Support efficient liaison between Local Authorities.
- Provide a system for the resolution of problems and disputes.

The principle has the support of local authorities, Government, trade and industry associations, consumer and professional regulatory bodies.

3.4 Advice to Business

The authority has always provided appropriate and competent advice, to local businesses and residents, within available resource constraints.

In recent times there has been an increase in the number of people wanting to prepare food for sale in their domestic kitchens. Officers recognise that certain low risk food items such as cakes can be prepared in a domestic kitchen and a number of factsheets for domestic caterers have been produced.

The services website has been made easier to use, with information about setting up a food business and application forms that businesses and members of the public can download free of charge. Additional work is needed to update and amend older information in line with proposals set out in Walsall Councils Proud Programme work streams.

Where possible advice is given to businesses before they commence trading. It is easier to give advice on layout, equipment and practices at the planning stage before a business commences trading. Under the FHRS, a business that does not have a fully implemented Food Safety Management System cannot score higher than 1 (Major Improvement Necessary) so where time permits, officers carry out coaching visits to Food Business Operators to ensure they understand the importance of this requirement.

The Environmental Health twitter account @EHWalsall has 1006 followers and over 6428 messages have been 'tweeted'.

The Trading Standards Twitter account @Savvyshopper6 has 562 followers and has tweeted over 2883 messages with 48300 impressions in the past year [1st June to 31st May 2023].

We will continue to use social media for communicating food safety, trading standards, infectious disease and health and safety messages. The Tweets are made by officers and managers within the team and are regularly retweeted by other councils, businesses and members of the public.

3.5 Food Sampling

Microbiological Food Sampling

Microbiological food sampling is carried out to meet four main objectives:

- To determine the current state of food safety in the Borough
- To improve the effectiveness of food hygiene inspections.
- To investigate suspect cases of food poisoning linked with local businesses.
- To investigate complaints about food.

Microbiological examinations will be carried out using credits allocated by Public Health (England). Samples will be taken by qualified staff.

Should an outbreak of food borne disease or some major issue be identified at a manufacturer or other food business Officers will undertake relevant reactive sampling.

Sampling Programme 2022/23 Sandwich Manufacturers.

The Food Safety team conducted a proactive study to examine the safety of extended shelf lives (beyond industry guidance) applied to sandwiches by sandwich manufacturers. The study involved the sampling of sandwiches to carry out microbiological durability testing. The team linked with the UK Health Security Agency to conduct microbiological testing of a range of sandwiches from each manufacturer within the borough.

Food Sampling (Food Standards)

The Trading Standards Service targets its proactive sampling at locally produced foods, those products/ingredients from companies that manufacture in, are based in,

or import into Walsall. In addition, foods are targeted which are causing current concerns. These are identified through communication with the Food Standards Agency, the National Food Crime Unit, the Department of the Environment, Food and Rural Affairs and the European Commission; through local, regional and national intelligence held by local authorities; and through consultation with the Public Analyst.

Emerging food fraud risks can also be identified by looking at economic drivers: High value/high volume products, products in short supply; products with rising prices; products with a complex global food chain. Looking at some of these factors gives us a chance of identifying the next 'horsegate'.

All sampling undertaken by officers is in accordance with relevant legislation and all formal food and animal feed samples are taken in accordance with the relevant Food or Feed Law Codes of Practice.

Samples are analysed and/or examined by the Service's Public/Agriculture Analyst appointed in accordance with the procedures laid down in Regulations and relevant Food and Feed Law Codes of Practice. Alternatively, some samples are examined/tested in house, if it is appropriate to do so.

Food Standards Sampling Projects 2020/21

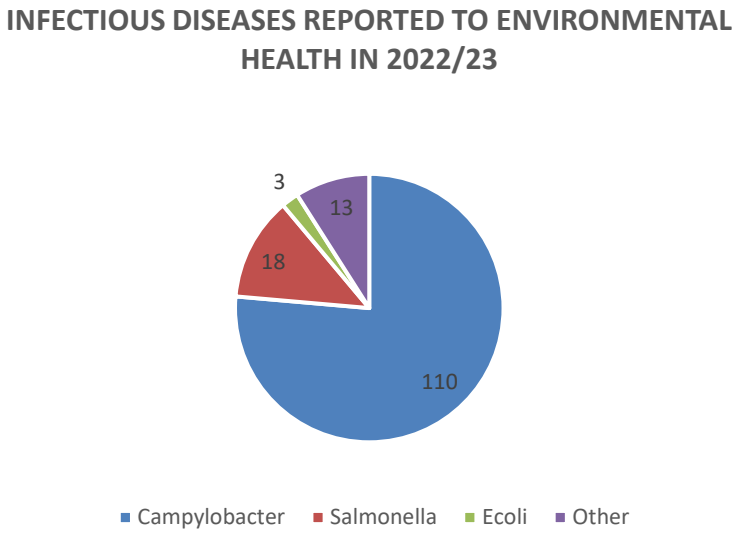
The Trading Standards service took 38 samples during 2021/22 with 74% being analysed as unsatisfactory. This mainly related to the authenticity of Yellow Tale wine but also included issues with undeclared allergens, labelling and meat substitution. Investigations are ongoing with a number of these issues.

3.6 Control and Investigation of Food Related Infectious Disease

The UK Health Security Agency (UKHSA) is appointed to act as Proper Officer for Walsall Council in respect of infectious disease notifications. UKHSA notify Environmental Health of food poisoning cases in the Borough via secure electronic communication. Environmental Health have a statutory duty to carry out an investigation to ascertain the source of the illness and check to ensure that there is no risk of the illness spreading further.

Environmental Health staff work closely with colleagues in UKHSA and have powers to formally exclude people from work or school if they are classed as a high-risk case and their actions place other people at risk of catching communicable disease.

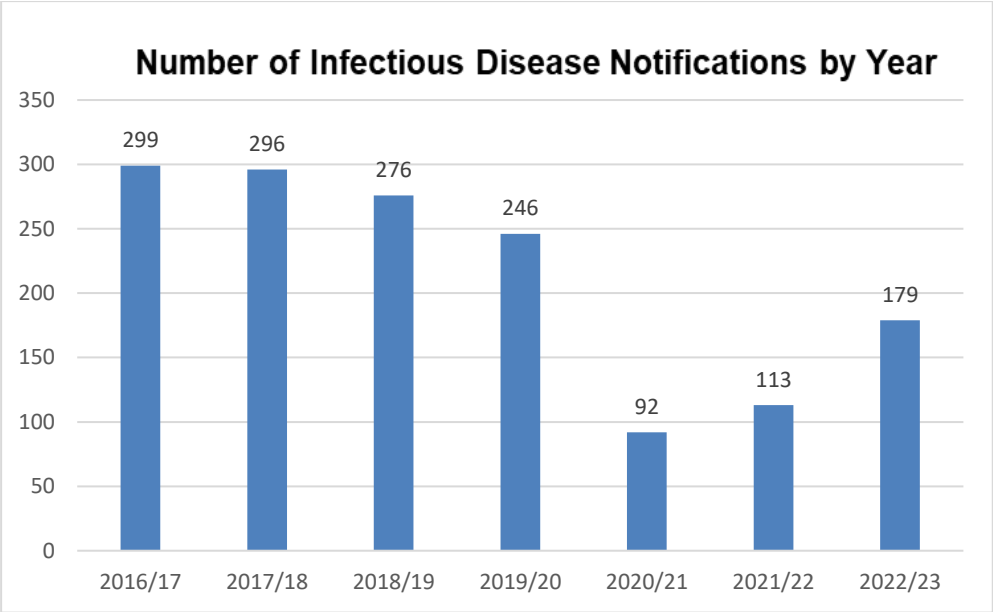
Campylobacter remains the primary pathogen with 110 notified cases in the Borough in 2022/23. A breakdown of all notified cases of infectious diseases is shown in the pie chart below. During this period, the service also received allegations of food poisoning where people claim to have been ill but have not had a formal diagnosis. This led to an additional 52 cases of potential food poisoning highlighting the large amount of undiagnosed food borne illness that may be present in society but not formally identified and recorded.



Responses to infectious disease notifications are measured against the PHE document - Roles and Responsibilities for Investigation of Gastrointestinal Infectious Diseases. Having no specific out of hour's duty staff for responding to infectious disease notifications does however pose a difficulty in dealing with emergency notifications i.e. those required within 24 hours.

This issue is currently addressed by invoking the Emergency Planning procedure of identifying and contacting relevant Senior Managers. The services response rate to infectious disease notifications which is agreed with UK-Health Security Agency currently stands at 90%

In a large-scale outbreak, the Council could draft in staff from other services to assist in some of the basic duties. For additional resource from expert or qualified officers assistance may have to be requested from other West Midlands Councils through the Memorandum of Understanding that all seven Councils have signed up to.



3.7 Food Safety Incidents

The Food Standards Agency issues information about product withdrawals and recalls to let consumers and local authorities know about problems associated with food. This information is issued electronically to Environmental Health and Trading Standards.

A Product Withdrawal Information Notice or a Product Recall Information Notice is issued where a solution to the problem has been put in place – the product has been, or is being, withdrawn from sale or recalled from consumers, for example.

A Food Alert for Action is issued where enforcement by authorities is required. These notices and alerts are often issued in conjunction with a product withdrawal.

During 2022/23 Trading Standards instigated 2 food alerts and corresponding product withdrawals

3.8 Liaison with other organisations

The Authority works in partnership with the following organisations either on an ongoing basis or as the result of targeted work programmes:

1. Food Standards Agency (FSA)
2. UK Health Security Agency (UKHSA)
3. Director of Public Health
4. Eurofins – Public Analyst
5. Central England Trading Standards Authorities Management Board
6. Central England Environmental Health Management Board (CEEHMB)

7. Department of Health, DEFRA and the Animal and Plant Health Agency (APHA)

CEEHMB Food Liaison Group

This Group represents the seven West Midlands councils but is also linked by a coordinating board to Food Liaison Groups in Staffordshire and Shropshire, Warwickshire and Worcestershire. It aims to provide consistency of enforcement, acts as a facilitator for benchmarking activities and provides 'standardisation' exercises to facilitate consistency. It provides comments on consultations on behalf of the region and provides a valuable link between local authorities and the FSA.

CEnTSA Food Standards Liaison Group

The above Group is made up of food standards lead officers plus the regional Public Analysts. Walsall's Food Standards Lead officer is Chair of this group and as such is responsible for leading on regional projects including sampling, guidance to business, legislative consultations and sharing best practice.

National Food Standards and Labelling Focus Group

Walsall's Food Standards Lead officer also sits on the National Food Standards and Labelling Focus Group, which gives guidance to regulators and industry as well as working with FSA, DEFRA and DoH on consultations and codes of practice.

Knowledge Hub

The Knowledge Hub is the LGA's professional network, which helps people in local government connect and share in a secure environment. It is used as a vital tool for sharing intelligence and best practice, both regionally and nationally.

Rapid Alert System for Food and Feed (RASFF) and the European Commission

This system provides EU food and feed authorities with an effective tool to exchange information about measures taken responding to serious risks. This exchange of information helps Member States to act more rapidly and in a coordinated manner in response to a health threat caused by food or feed. However, the EU-UK trade agreement does not provide the UK with access to the RASFF but it does ensure exchange of food safety information, which the FSA can then use as part of its incident detection and management system.

IDB and FSA Intelligence Databases

Intelligence on food issues is also collected by Trading Standards departments in the CEnTSA region through the national Intelligence Database - IDB which also inputs into

the Food Standards Agency food fraud database. Data from IDB and the FSA database is used to produce a Regional Control Strategy.

Walsall Council Safety Advisory Group

A representative from Environmental Health, Trading Standards and Licensing attends the Safety Advisory Group to provide advice and direction to event organisers so that events operate safely – food safety is a significant part of the application form and discussions at the meetings.

3.9 Food Safety and Standards Promotional Work

Social Media Campaigns

Environmental Health and Trading Standards use Social Media such as Twitter and Facebook to communicate current messages of local, regional or national importance. This can include checking Food Ratings, Food Alerts, safe summer food, BBQ's, picnic safety, Christmas food preparation etc.

Presentations

From time to time and where resources allow staff will carry out presentations to schools, colleges or other forums to promote the work of the service and the profession.

Trading Standards Business News.

CEnTSA publish a quarterly online business newsletter covering a range of regulatory articles. Walsall Environmental Health and Trading Standards are regularly contributors notably for food safety, allergens, food labelling and have also contributed to articles in relation to waste duty of care, licensing of events and pest control.

The articles can be found at http://tsbn.org.uk/.

4.0 RESOURCES

4.1 FINANCIAL ALLOCATION

The table below shows the cost of Food Safety for 2012/22, 2022/23 and includes an estimate of its cost for 2023/2024.

	2021/22	2022/23	2023/24 Estimate
Staffing Costs	347,787	301,955	363,573
Support Services	0	0	0
Supplies and Services	13,818	11,446	12,068
Transport Costs	3,512	944	3,799
Income	-9,241	-7,057	-7,042
Expenditure	**355,876**	**307,287**	**372,337**

4.2 Staffing Allocation

Environmental Health and Trading Standards staff also undertake a great deal of work in relation to health and safety, animal health and welfare, skin piercing, public funerals, product safety, rogue trading, weights and measures, age restricted sales, counterfeiting etc.

The allocation below relates primarily to the food safety function.

The Team Leader Environmental Health and Team Leader Trading Standards are responsible for delivery of their respective services in line with current corporate, regional and national priorities.

Presently there are 11 permanent Environmental Health posts, of which 10 require a qualification to undertake food safety duties of which 5.7 FTE's work predominantly on Food Safety, 2.02 FTE's work on Health and Safety related matters the remaining 2.3 FTE's work on animal licensing, nuisance, licensing and other regulatory activity. Additionally, 1 FTE Food Safety Support Officer undertakes food safety duties and is subject to a temporary fixed term contract which will expire during the course of 2023/24 and which can only be extended if funding is secured to support the post

Trading Standards is delivered in one Borough-wide team of 2.7 FTE Senior TSO's, 4 FTE TSO's, 1 FTE Enforcement Officer and 1 Compliance Officer (0.8 FTE) supervised by a Team Leader. The amount of resource dedicated to Food Standards equates to 1 FTE members of staff.

The amount of resource dedicated to Feed Hygiene equates to 0.1 FTE members of staff. The service also uses a contractor to undertake certain aspects of work coordinated regionally using national funding.

Income received from a Service Level Agreement with Public Health supports commissioned work relating to seven objectives as priority work areas including increasing local intelligence relating to the capability opportunity and motivation of takeaway outlets to provide health options.

The qualifications and competency of food officers is set out in legislation (Regulation (EC) No.882/2004 on Official Controls) and implemented in the Food Law Code of Practice published by the FSA.

The Code has clarified the requirements for suitably qualified and competent officers and this will be reviewed each year. This could result in additional training costs and time out of the Office attending training courses or similar.

Environmental Health Officers all possess a BSc. or MSc. in Environmental Health and are registered with the Environmental Health Officers Registration Board (EHORB). The Food Safety Officer has a Higher Certificate in Food Premises Inspection from the EHORB. Trading Standards Staff working in food and feed law enforcement possess the relevant qualifications required by the Food/Feed Law Code of Practice.

For both services the level of staffing described above allows for compliance with a basic statutory service or relevant and agreed national or regional priorities. Where work is required beyond that basic service the service will either not be able to fulfil that additional requirement or have to stop other statutory functions in order to carry out the work. In the event of a major emergency all staff will be directed to work to control the emergency and basic work will cease for an agreed period - recovery from this will inevitably take time.

4.3 Staff Development

Walsall Council has a regime of Annual Performance Conversations where action plans including training requirements are drawn up for each staff member. These reviews will take account of the food law code of practice requirements as set out above. This may pose an additional cost to the service to ensure all staff are fully qualified and competent.

External and internal training provision will then be identified in accordance with staff and service requirements. To maximise budgetary provision wherever possible support is given to courses provided by CEnTSA or other Local Authorities who have proven to be cost effective training suppliers. The FSA has recently withdrawn much of its free training due to their own budget constraints and so alternative providers will need to be sought. Officers are also able to identify forthcoming training via the CEnTSA annual training plan. In house development in the form of workshops and cascade training is also utilised where appropriate.

4.4 Officer Training Programme

- Legalities and Technicalities of Food Law Enforcement
- Traceability e learning
- Licensing and Street Trading Training Workshop
- Outbreak Investigation and Management
- Vacuum Packing e learning
- Nutritional Health Claims
- Food Allergens
- Labelling and Compositional Standards

5.0 QUALITY ASSESSMENT AND INTERNAL MONITORING

5.1 Quality Assessment and Internal Monitoring

The Team Leader makes periodic accompanied visits with Environmental Health Staff this includes the checking of formal notices and paperwork.

Officers will participate in national and regional standardisation exercises, benchmarking and peer reviews as and when they are organised.

It will be the Management Team's responsibility to react swiftly to performance monitoring reports. This will include reflection on inspections where non-compliant premises are found to ensure the right level of intervention has taken place.

The Head of Community Safety and Enforcement will undertake a regular assessment of the work of the service culminating in the Annual Review, which is part of the Food Law Enforcement Service Plan process.

The Councils Internal Audit Team last inspected Environmental Health in 2012 giving an assurance level of Significant.

The FSA last audited Environmental Health in 2010 with a revisit in 2011 on the subject of Local Authority Assessment of Hazard Analysis and Critical Control Points (HACCP) Compliance in Food Business Establishments.

Prior to the introduction of the Recovery Plan the Service provided data to the FSA each May through the LAEMS return. The FSA scrutinised this data and reported it on its web site. During 2022/23, the FSA conducted periodic Food Hygiene – Local Authority "temperature check surveys" to monitor the implementation of the Recovery Plan by local authorities. Presently, LAEMS is under review and the FSA is exploring new data collection mechanisms. As part of this process, the FSA is currently undertaking a "new burdens assessment" in respect of proposed new annual and quarterly surveys for local authority returns.

6.0 WORKPLAN AND REVIEW

Action	Target		Action lead
Implement the Food Law Enforcement Service Plan	Target 23/24	Plan to be submitted to Cabinet and Council for approval Quarterly monitoring of the Plan shared with Management team and staff.	David Elrington/ Stuart Powell/ Paul Rooney
	Review	To be approved at Cabinet on 6th September 2023	
Identify and carry out appropriate interventions at high risk premises in relation to food standards	Target 23/24	Premises requiring intervention to be agreed. 100% of identified high risk premises to receive an appropriate intervention	David Elrington/ Stuart Powell
	Review	All high risk premises have received intervention alongside others agreed as above.	
Review all new food premises and send Food Standards advice/questionnaire as appropriate. Results from questionnaires will be used to prioritise interventions in line with the Recovery Plan	Target 23/24	Review all new food registrations. Send advice/questionnaire to all premises identified as potential food standards risk Prioritise interventions as necessary	David Elrington/ Stuart Powell
	Review	All new food standards premises to receive advice/questionnaire or physical intervention	
Realign inspections with the Food Law Code of Practice (the Code) and to 'catch up' on backlogs of lower risk premises created by the pandemic	Target 23/24	Due interventions for establishments rated Category A, B, C and less than Broadly Compliant and D and less than Broadly Compliant that are back in the routine programme of interventions to be undertaken in accordance with the frequencies set out in the Code. Implementation of an ongoing programme of interventions in respect of establishments rated C and Broadly Compliant and unrated establishments adopting a risk based approach and using flexibilities offered by the Code	David Elrington/ Paul Rooney

	Review	On-site interventions undertaken for establishments rated Category A, B, C and less than Broadly Compliant and D and less than Broadly Compliant that are back in the routine programme of intervention in accordance with the frequencies set out in the Code. Implement an ongoing programme of interventions in respect of establishments rated C and Broadly Compliant and unrated establishments adopting a risk based approach and using flexibilities offered by the Code	
Maintain the Food Hygiene Rating System	Target 23/24	Fortnightly uploads to the national database Results reported back to Inspecting officers All appeals dealt with in compliance with the brand standard.	David Elrington/ Paul Rooney
	Review	Uploads completed fortnightly.	
Carry out a reactive microbiological food sampling programme focusing on high risk premises and manufacturers	Target 23/24	Obtain and test food samples from high-risk premises and manufacturers where failures or issues are identified and implement appropriate follow up action.	David Elrington/ Paul Rooney
	Review	Ongoing	
Respond to complaints relating to hygiene or condition of food premises.	Target 23/24	Investigate complaints in accordance with current service standards and enforcement policy Respond to anonymous complaints on a risk assessed basis.	David Elrington/ Paul Rooney
	Review	Number of responses Response times	
Conduct a review of documented policies and procedures relating	Target November 2023	Number of documented policies and procedures reviewed.	Paul Rooney

to enforcement activities covered by this Standard.	Review	Monthly	
Implement the CEnTSA regional food standards sampling programme	Target 22/23	Premises requiring sampling to be agreed. 100% of premises receive a sampling visit 100% of premises where failures or issues identified receive a follow up intervention	David Elrington/ Stuart Powell
	Review	CEnTSA did not produce a regional sampling programme so no action possible	
Implement a local food standards sampling programme	Target 22/23	Premises requiring sampling to be agreed. 100% of premises receive a sampling visit 100% of premises where failures or issues identified receive a follow up intervention	David Elrington/ Stuart Powell
	Review	Sampling and follow-ups completed	
Implement the FSA Feed delivery programme	Target 22/23	Premises requiring inspection to be agreed. 100% of premises receive an inspection 100% of premises where failures or issues identified receive a follow up intervention	David Elrington/ Stuart Powell
	Review	All premises inspected and follow-ups completed	
Respond to all disease notifications using timescales developed by UK-Health Security Agency	Target 23/24	100% response within UK-Health Security Agency recommended timescales	David Elrington/ Paul Rooney
	Review	Responses made within UK-Health Security Agency recommended timescales.	
Respond to requests for advice and visits to new premises within 21 days.	Target 23/24	Written, verbal or on-site response to requests for advice/enquiries to be made within 21 days (Due to resources limitations it is not possible to generally grant visits to new premises if requested)	David Elrington/

		Re-establish web authors and a quarterly check of business advice on walsall.gov.uk Regular Tweets of relevant business advice.	Stuart Powell/ Paul Rooney
	Review	Number of responses TS response to all requests within 21 days EH response to requests within 21 days. .	
	Review		
Review training opportunities and number of CPD hours per Officer quarterly.	Target 23/24	Number of hours per officer and competency submissions submitted, reviewed and action determined. Officers to complete required 20 hours of CPD.	David Elrington/ Stuart Powell/ Paul Rooney
	Review	Training opportunities are reviewed weekly and CPD hours reviewed quarterly	

Enforcement Actions 1st April 2022 to 31st March 2023

Action	Number	Description
Food Improvement Notices	3	Enforcement Notice
Hygiene Emergency Prohibition Notices	5	Closure of food premises
Emergency Prohibition Orders	5	Court Order confirming closure of food premises
Simple Cautions	2	Formal caution as alternative to prosecution
Prosecutions	2	Conviction secured in Court
Written Warnings	686	Informal letter

CLOSURES

During 2022/2023, 5 premises were found to present an imminent risk to health and were closed immediately until all necessary works were carried out.

Closures	Premises	Health Risk Condition
5th April 2022	Unique Jamaican Food Store	Mouse infestation
15th September 2022	The Tannery Fish Bar	Rat infestation
11th October 2022	Chicken Palace	Cockroach infestation
27th October 2022	SM Butchers	Cockroach infestation
31st December 2022	Pit Stop	Mouse infestation

PROSECUTIONS

On 30th September 2022, Dixy Chicken, 30 Bradford Street, Walsall was prosecuted at Dudley Magistrates' Court after Environmental Health Officers had served a Hygiene Emergency Prohibition Notice requiring the closure of the premises in August 2021 following the discovery of infestations of rats and mice. The Food Business Operator was sentenced at Wolverhampton Crown Court where the Court imposed a 4-month curfew with electronic tagging on the defendant who was also required to pay £400 costs.

On 18th January 2023, Lazeeza Hayat Sweet Centre, 136 Caldmore Road, Walsall was prosecuted at Dudley Magistrates' Court after Environmental Health Officers had served a Hygiene Emergency Prohibition Notice requiring the closure of the premises in February 2022 following the discovery of infestations of rats and mice. The Court imposed a 4-month suspended prison sentence on the Food Business Operator who was also fined £1864, required to pay costs of £675.88 and pay a victim surcharge of £738.

6.1 Review against the Service Plan

The requirement to implement Phase 2 of the Recovery Plan determined the formulation of the Food Service Plan 2022/23. In particular, it required that:

1 All establishments rated Category A should have received an on-site intervention in accordance with the 6-month inspection frequency set out in the Food Law Code of Practice.
2 All establishments rated Category B should have received an on-site intervention by 30th June 2022.
3 All establishments rated Category C and less than Broadly Compliant should have received an on-site intervention by 30th September 2022.
4 All establishments rated Category D and less than Broadly Compliant should have received an on-site intervention by 31st December 2022.
5 All establishments rated Category C and Broadly Compliant or better should have received an on-site intervention by 31st March 2023.
6 New and refreshed food hygiene ratings given following appropriate interventions during the course of 2022/23.

The Food Service Plan 2022/23 was aligned to these requirements. Generally, the service met the targets set in the Recovery Plan for Category B, Category C and less than Broadly Compliant, and Category D and less than Broadly Compliant establishments. In particular, the service reported the following outputs at the end of 2022/23:

1 7 Category A establishments received an inspection and no establishments in this category were overdue an inspection on 1st April 2023.
2 59 Category B establishments received an inspection and only one establishment in this category was overdue an inspection on 1st April 2023.
3 26 Category C and less than Broadly Compliant establishments received an inspection and only one establishment in this category was overdue an inspection on 1st April 2023.
4 30 Category D and less than Broadly Compliant establishments received an inspection and only one establishment in this category was overdue an inspection on 1st April 2023.

5 98 rated Category C and Broadly Compliant establishments received an inspection and 239 establishments in this category were overdue an inspection on 1st April 2024.
6 175 unrated establishments received initial inspections and were subsequently rated during 2022/23. Inspections were allocated on a prioritised risk basis. On 1st April 2022/23, there remained 301 unrated establishments.

During 2022/23, Officers noted a deterioration in standards because of prolonged inspection inactivity during the pandemic, which increased the average inspection time. Consequently, this reduced the extent of the food hygiene inspection programme.

Other areas of reported food related work undertaken by Environment Health during 2022/23 included:

1 The registration of 301 new food businesses.
2 Responding to 253 enquiries/complaints relating to hygiene, practices and premises.
3 Responding to 179 food related infectious disease notifications received from UK-Health Security Agency.
4 The emergency closure of 5 food businesses following the service of Hygiene Emergency Prohibition Notices
5 The service of 3 Food Hygiene Improvement Notices.
6 The issue of 686 inspection reports/written warnings.
7 The completion of 2 Food Hygiene prosecutions.
8 The collection of 18 food samples in conjunction with the service's sandwich manufacturers initiative.

6.2 Identification of any variation from service plan

2022/23 was a challenging year and the target set by the Recovery Plan to undertake on-site interventions at all establishments rated Category C and Broadly Compliant or better by 31st March 2023 could not be met. This was attributable to a combination of factors including insufficient Officers, inspections taking longer to complete because of a deterioration of standards in some businesses following the suspension of inspections during the pandemic and because of other non-food demands on the service. The demand for inspections also increased because of a large number of new registrations (301 in 2022/23). The challenge was reflected by there still being 301 unrated establishments and 239 Category C and Broadly Compliant establishments overdue an inspection on 1st April 2023.

Cooperative working between Trading Standards, Environmental Health and Licensing will continue to stop the creation of duplicate premises and other anomalies

Improvements to the services ICT system including linking to the corporate address gazetteer should also assist with reducing duplicate or inaccurately recorded premises.

The number of compliant businesses using the FHRS system is 95.4% this is lower than regional (95.7%) or national average (96.8%). We believe our figures are accurate and representative. They have continued to improve each year since the start of the FHRS system. Walsall has a higher percentage of total rated premises (77.9%) in comparison to the West Midlands regional average (74.4%). The national average is 80%.

The following strains on the service, during 2023/24, have been identified:

- Following the ending of the Recovery Plan the FSA now expects local authorities to re-align their services with the Code and catch up on the backlogs created by the pandemic. The service does not have the capacity or the resilience to undertake the number of interventions required to do this. In order to meet these requirements approximately 470 Category A, B, C and non-compliant businesses and 70 high and medium risk unrated businesses require an onsite intervention.

- Hygiene standards have deteriorated in some businesses following the pandemic, inspections are taking longer and this has increased the need for formal action. For example, during a two-week period in May 2023, three businesses were closed using emergency powers because of rodent infestations. Although formal enforcement action is a key component of the Food Law Service Plan it has a major impact on programmed inspection work. It is estimated that closures and prosecution equate to 30 or more programmed inspections. However, it is considered that they are equally, if not more, significant than programmed work since they identify and tackle the most serious premises or products.

    - The backlog of unrated businesses is likely to be sustained by the registration of new business registrations. It is projected that the authority will receive approximately 300 new registrations during 2023/24.

    - Other service demands have prevented officers from undertaking food safety duties. Since July 2022, it has been necessary to deploy a food safety officer in the Health and Safety team to assist with a criminal investigation relating to serious and multiple cases of lead poisoning. This deployment is likely to continue in 2023/24.

    - An Officer is currently taking maternity leave until early in 2024, which will reduce the team's capacity.

    - The 'churn' of Food Businesses is an issue within Walsall where more than 10% of businesses change hands in any given year – some businesses change hands 2-3 times per year. Whilst this can lead to improvements in the operation of a

business (if investment is made) it can also lead to inconsistent approaches, poor compliance levels and a decline in standards, which the officers must repeatedly deal with.

- The development and introduction of protocols to deal with allergens will continue to be an ongoing issue during 2023/24 because their implementation will increase the time to complete inspections. Additionally, the introduction in October 2021 of a law on allergen labelling for pre-packed foods for direct sale has increased regulatory controls that have to be verified during inspections.

- The authority has been engaged in a transformation programme aimed at making it more able to respond to future and ongoing challenges. However, the implementation of the programme has yet to benefit the food service and make a positive impact on service delivery.

The following actions to mitigate these strains during 2023/24 have been identified:

- As an interim measure, in order to help mitigate the vacancies arising from the retirement of a Food Safety Officer and an EHO taking maternity leave it is hoped to continue the temporary employment of Food Safety Support Officers to undertake food inspections until recruitment issues can be resolved.

- The shortfall in inspections has been is listed on the Services Risk Register in terms of the impact it could have in terms of the view of the Food Standards Agency but also in terms of the impact on traders and the public.

- The shortfall in inspections has been reported to the Health Protection Forum, which meets to provide assurance to the Director of Public Health that the health of the public in Walsall is being adequately safeguarded.

- Matters relating to food safety are regularly discussed and updates provided at monthly Portfolio Holder meetings where service and senior managers and the elected member for this area of work meet to discuss issues within the service.

6.3 Areas of Improvement

In addition to those activities that will mitigate strains on the service the following areas of improvement or activities will be necessary for 2023/24:

- Reducing the administrative burden of food inspections by reviewing and streamlining inspection protocols, developing documentation to expedite the preparation of inspection reports and facilitating a greater use of electronic filing

systems. This will include a review by the Team Leader – Environmental Health of documented policies and procedures relating to enforcement activities.

- The majority of food businesses are involved in catering and have commercial premises from which they trade. Increasingly, many businesses in the retail and catering sectors are moving to domestic and on-line services. This means that many of these businesses, which are subject to the same regulatory compliance rules and checks, require greater resource to track and monitor such activities.

- Dark kitchens, which are businesses operating under the radar of Food Authorities from domestic premises and non-registered food premises, continue to be a high- risk concern. Any complaints or intelligence identifying the existence of such premises will be assigned a high priority for intervention.

- Ghost businesses trading under a variety of different names are also regulated effectively by maintaining the M3 database and retaining a single registration and property index for all the trader names.

- The Environmental Health Information Management system (Northgate M3) is used to maintain and manage all food premises records, all inspections and other related activities. A new additional software system (Assure) will be brought in on-line within the next 12 months to supplement the existing database and provide more functionality to better facilitate customer interaction with the service.

- Continue to monitor and develop a priority rating/intelligence based system for existing businesses that can be used to target work effectively taking into account statutory responsibilities in relation to the Food Law Code of Practice and FHRS Brand Standard

- Ongoing review of training and development needs in order to identify how staff can continue to be compliant with the Food Law Code of Practice Competency Framework. Specifically during 2023/24 focussed training and policy development is needed around allergens

- Continue to review the various registration and licensing processes internally so that businesses are identified and recorded appropriately e.g. Street Trading Permits, Late Night Refreshment and Premises Licences, Food Registrations and that intelligence flows around the Regulatory Services appropriately and effectively.

- Identifying efficient work methods to cope with diminishing resources using resources available as part of the Proud Programme – customer contact, income and IT development.

- Continue developing relationships with other services and partners to assist with identification of Modern Day Slavery and human trafficking and other community safety priorities.

Council **Agenda Item No. 11**

6 November, 2023

Appointment of Independent Renumeration Panel

Ward(s): All

Portfolios: Leader

1. Aim

To appoint an Independent Renumeration Panel as required by the Local Authorities (Members' Allowances) (England) Regulations 2003.

2. Recommendations

That:

1. the following persons be appointed to the Independent Renumeration Panel:

    a. Philip Tart
    b. Richard Hood
    c. Indra Cheema

2. the allowance issues to be considered by the Independent Renumeration Panel, as set out in Part 6 to this report, be noted.

3. Report detail – know

The legislative framework for members allowances is contained in the Local Government and Housing Act 1989, the Local Government Act 2000 and the Local Authorities (Members Allowances) (England) Regulations 2003. Local authorities must establish a members allowances scheme that provides for the payment of a basic allowance, which is intended to recognise the time commitment of all members, including such inevitable engagements as meeting with officers and constituents and attendance at political group meetings. It is also intended to cover incidental costs such as the use of their homes.

The scheme may also include:

- a special responsibility allowance (payable to the leader of the council, portfolio holders, overview and scrutiny chairs, opposition leaders, etc)
- a dependants' carers' allowance
- a co-optees' allowance
- travel and subsistence allowances

Local authorities must set up an Independent Remuneration Panel to recommend the level of basic allowance for all members as well as the levels of any discretionary allowances and to whom they should be paid. The Panel must

consist of at least three members, none of whom may be a member of the local authority or of its committees, or a council employee.

4. Financial information

The existing Member Allowances scheme can be found at Appendix 1.

5. Reducing Inequalities

A Members Allowance Scheme is not meant to act as a salary. Members enter politics to serve the community, not for financial gain. However, the payment of allowances enables members to be recompensed for their roles and assists in attracting local people to stand for election.

6. Decide

Members are asked to appoint the three individuals to the Panel. Council could decide to reject any or all of the appointments in which case a further recruitment exercise would take place.

Subject to confirmation of the Panel membership the IRP will be convened and meet to consider the following outstanding issues:

- What, if any allowance, should be paid to the new role of Cabinet Support Assistants;
- What, if any, allowance, should be paid to independent members on the Standards Committee;
- Review the suitability of the £750 allowance paid to independent members on the Audit Committee;
- What, if any, allowance, should be paid to the Independent Chair of the Audit Committee;
- What, if any, additional allowance should be paid to the Leader of the Council for duties required at the West Midlands Combined Authority. This is considering a recommendation from the WMCA that recommended that the Leaders allowance at Constituent Councils reflects WMCA duties.

7. Respond

Once the IRP has met and drafted its report and recommendations it will be presented to Council for consideration. The recommendations can be accepted in full, partially or rejected.

8. Review

It is the responsibility of the IRP to review the Members Allowances scheme periodically or when changes are required. The IRP can only make recommendations to Council.

Background papers

None

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Appendix 1 - Existing Allowances Scheme

(a)	**Basic Allowance**	£12,638
(b)	**Special Responsibility Allowances:**	
	Leader of the Council	£35,278
	Deputy Leader of the Council:	£21,822
	*Other Group Leaders:	£11,812
	Cabinet members	£17,771
	Regulatory Committees Chairs:	
	Audit Committee	£9,053
	Personnel Committee	£5,662
	Planning Committee	£11,651
	Employment Appeals Subs	£5,662
	Licensing & Safety Committee	£11,092
	Taxi Licensing Sub-Committees	£5,662
	Standards Committee	£5,662
	Health and Wellbeing Board	£5,662
	Corporate Parenting Board	£5,662
	Scrutiny Committee Chairs	£11,455

* The Group must hold a minimum of 6 seats or 10% whichever is greater of the Council membership.

Cabinet Member Briefing - The Adult Social Care portfolio

Introduction

'Our Council Plan' – Priorities

It is very challenging times for Adult Social Care (ASC) Nationally, Regionally and Locally. ASC has seen unprecedented growth in demand, teamed with significantly increased costs and workforce pressures. That said, despite these significant challenges, great progress has been made since the last ASC Portfolio holder report.

Walsall ASC has bucked regional and national trends and has had successful Social Work and Occupational Therapy recruitment campaigns. Waiting lists for services have more than halved and statutory, annual reviews are on schedule to be completed. Discharge from hospital, for people with care and support needs, continues to be an area of outstanding practice, this is cited in the recently published 'NHSE Good Practice Guidance' and the health and care integration arrangements have been shortlisted for a Health Service Journal (HSJ) Award to be judged next month.

There is good progress against the 6 key projects in the ASC Continuous Improvement programme. Additional capacity had helped to support the transformational work and financial and other benefits are being realised. The Programme infrastructure is now well established providing clear and appropriate governance to the programme. Other Directorates from across the council are engaged in the CIP and are providing additional challenge and support where required.

ASC budgets for 23/24 and projections for 25/25 are showing significant overspends. This is largely due to less people leaving the service, a higher number than projected starting a service and increased costs of providing a service to individuals due to complexity of need and higher provider costs. Measures are being taken to mitigate this overspend, such as the creation of a Community Reablement and Enablement service who will support people to achieve a greater level of independence, the use of technology in individual support plans and revised commissioning arrangements for provision for Adults with a Learning Disability.

Our Service Delivery

Locality Social Care Teams

Since the height of the Covid 19 Pandemic, locality teams have seen a year-on-year increase in the number of referrals into the service. In 2021/22 there were 1517 referrals received for social workers, which increase in 2022/23 by 14.75%. The first half of 2023/24 has already seen an increase of 6.25% based on the previous year's figures.

Whilst the number of referrals has increased in the past three years, the number of conversions to s9 Care Act Assessments has been low; 36% in 21/22, 41.5% in 22/23 and in the first 6 months on 23/24 it is 40.75%. This can be attributed to the strengths-based conversations practitioners are having with clients and their families, providing the right advice at the right time. The launch of the Wellbeing later this year will also provide citizens of Walsall and practitioners with additional resource to support of Care Act duties to prevent, reduce and delay individuals to remain in the community for longer.

Due to the high demand and reduced staffing capacity in 2022/23, the focus was on new referrals, unscheduled reviews and safeguarding enquiries, therefore planned reviews were not prioritised. To support the teams, 150 of the oldest annual reviews were undertaken by an external organisation. These have now been completed.

As most teams now have all vacant posts filled, they have been able to focus on all areas of statutory responsibility. This means they are on target to complete all annual reviews in 2023/24.

At the beginning of the year, ASC undertook a successful recruitment campaign for social workers and social care facilitators, with all successful candidates now in post. Recruiting to these vacancies has supported locality teams to reduce number of individuals waiting and the timescales for a Care Act Assessment.

Commissioning

With the ongoing financial pressures that many Providers and Councils face, we have recently seen ASC Providers hand back contracts or stop trading. The Council has a Provider Failure Procedure that was enacted to ensure everyone impacted was moved safely and in a timely way to other support providers. We are developing arrangements to have closer oversight on the sector as intelligence is indicating financial pressures are becoming more problematic for providers. This is a complicated landscape and is impacted by overall funding to the sector, fees and cost of living pressures.

We continue to see an increase in demand and complexity in the level of support and this will form the basis for discussions with providers. Capacity availability in the market remains in a very positive position, with Walsall continuing to perform well around hospital discharges and intermediate care, however, we are seeing a pressure around the costs associated with care home beds that are used in this service which contributes to wider system financial challenges.

The nationally directed 'Fair Cost of Care' exercise, undertaken as part of ASC reform to better understand provider costs, as reported previously at Cabinet, continues to be a focus for commissioning as we keen to strike the right balance between quality and costs. Quality will be a key area of focus over the next period, and we will work with health colleagues on this.

Occupational Therapy

The Principal Occupational Therapist was appointed in March 2023. Since then, the Trusted Assessor approach for low level equipment and minor adaptations has been re-introduced. The training programme has been updated along with a supporting handbook. The occupational therapy assistants have delivered training to 41 Locality based social workers and social care facilitators. This staff group are now able to prescribe and provide equipment and minor adaptations meaning that there are less hand offs across different professions within the teams and individuals are receiving the equipment and minor adaptations they need in a much timelier manner. Plans are now in place for this to be extended to the Learning Disabilities and Mental Health teams. To support this, a clinic-based approach to assessment for low level equipment and minor adaptations has been introduced at the Goscote Centre for those people approaching ASC for the first time. Staff within the Customer Experience Centre screen incoming calls and where appropriate can book a clinic-based assessment for the individual at their first point of contact. The clinics are run by the occupational therapy assistants. A review of this service is planned for the end of October with a view to identifying other community locations for clinics to be held.

Work has been completed on major adaptations pathways provided via the Disabled Facilities Grant (DFG) and therapy teams within our Intermediate Care Service. This service is now able to refer directly to our Housing Standards and Improvement Team rather than having to go via ASC occupational therapy. This has removed duplication of assessment and provided a more streamlined service to those in need of adaptations to their home.

ASC recently concluded a successful campaign for Occupational Therapy recruitment. We know there is a national shortage of Occupational Therapists, and this is an area we have struggled to recruit to; therefore, it is a great achievement to have recruited to all 6 vacancies. It is hoped they will all be in post before Christmas.

This time last year, there were approximately 290 individuals waiting for an assessment, with some waiting nearly 10 months before seeing a social care worker. Since then, the teams have reduced the number of individuals waiting to 141, of which only 54 have been waiting over 28 days for an assessment. Going forward, we are developing opportunities to schedule appointments sooner to ensure everyone is seen within 28 days.

An Assessed and Supported Year in Practice programme has been developed for newly qualified OTs alongside an enhanced induction programme for OTs new to ASC or returning to practice after a break. These new programmes have proven to be immensely popular with 6 new OTs (including 3 newly qualified and 2 new to ASC) being recruited at a time when most local authorities are struggling to recruit OT staff. In addition, we have recruited 3 Advanced Practitioner OTs to support our Locality Teams. Further OT recruitment to support our Learning Disabilities and Mental Health teams is now being considered.

Today (6th November) marks the start of National Occupation Therapy week, please see our Social Media pages to see the fantastic work of our Occupational Therapists in Walsall.

Mental Health Services & Approved Mental Health Professional

Mental Health Services continue to make sound improvements following a period of instability within its overall staffing structure with successful recruitment to the Mental Health Team Manager and Advanced Practitioner posts, coupled with a change in senior management it can demonstrate marked improvements in both staffing moral and service user engagement.

Additional progress is being made with its partnership arrangements with NHS Partners with reconciliation work gaining traction within its financial governance processes particularly within the context of S117 and joint funding arrangements.

The service continues to develop in response to national Mental Health Agendas and Priorities and is forging positive working relationships at a local and regional level following a period of instability.

Walsall Council in response to its statutory responsibilities provides a 24hr Approved Mental Health Professional (AMHP) Hub carrying out the full range of statutory mental health practice.

This service continues to develop and is supported by additional AMHP capacity with AMHPs co located across Adult and Childrens Services. Whilst there continues to be a national shortage with AMHP's Walsall Council has 16 AMHPs in practice and a regular intake of AMHP candidates with partnership arrangements with Wolverhampton University and service level agreements with Birmingham Council for ongoing refresher Training for existing AMHP practitioners

Walsall Council within the context of its Continuous Improvement Programme is looking at a range of options in terms of smarter ways of working and this is in collaboration with range of partners, service users and carers in order to build upon the success to date.

Our Projects

The Adult Social Care Continuous Improvement Programme (CIP) is central to our ongoing improvement journey; delivering change; adapting and adopting to national reforms including the introduction of CQC assurance regime and of course delivering benefits aligned to wider council savings and transformation.

We are currently ensuring our current programme continues to underpin the evolving national landscape and that our deliverables continue to underpin the aspirations described in the last portfolio briefing.

The Adult Social Care CIP objectives are:

- Strength based assessment/approach in all service areas, including positive risk-taking approach.
- Improve joint working and co-production with residents, voluntary and community sector to develop strengths-based outcome focused services. (Resilient Communities).
- Increase the numbers of residents who self-assess or are able to make informed choices about their care and support needs at the first point of contact with the Council. By ensuring the right information support and advice is accessible to all.
- All new individuals in the community coming into Adult Social Care will be assessed to determine reablement/enablement potential and if appropriate will receive reablement care before receiving a long-term service.
- A joint carers strategy will be developed and implemented to provide the right level of care and support for carers.
- Develop leaders across the organisation that encourage a positive attitude to risk and empowers the workforce to take control and ownership over the provision of social care support, to facilitate innovation and creativity.
- Increase the use of assistive technology to maximise independence and reduce the need for long-term care.
- Reduce the number of adults and young people with a learning disability or mental health in long-term institutional settings including residential education placements.
- Increase in residents accessing community-based opportunities through the development of more resilient communities.
- Increase the number of people with mental health and learning disabilities living in their own accommodation or shared accommodation via a tenancy agreement.
- Increase the opportunity for more people to access ‘shared lives’ support.
- Commissioning of services which are outcome based. The Development of a new Adult Social Care Commissioning Strategy that focuses on “outcomes” for service user groups in our community.

Cabinet Member Briefing - The Adult Social Care portfolio

Future works

Further work with Housing colleagues is being planned to look at how DFG can be used more effectively and imaginatively to support people to remain in their own homes for as long as possible.

Work is also underway to develop a community based re-ablement and enablement service, Pathways to Independence, which again will support people to remain in their own homes and live as independently as possible.

Safeguarding adults is a priority function for the directorate, and due to demand increasing year on year, we have established a safeguarding adult's team, which has been running since August 2023. A Safeguarding Adults Improvement Plan is being developed and will focus on developing a Multi-Agency Safeguarding Hub (MASH), as well as a focus on Making Safeguarding more Personal and implementing a Quality Assurance Framework (QAF).

Adult Social Care continues to support the broader health system as part of The Walsall Together Partnership. Despite workforce challenges, the partnership continues to lead as a good national example of integrated working at a local level. Work has commenced exploring opportunities for further joined up working with health colleagues including integrated services where appropriate.

Thank you

The Adult Social Care sector is seeing unprecedented pressures in both demand and implementation of government reforms, however, despite these, teams work alongside informal carers, partners and providers to ensure that the most vulnerable people in Walsall are supported and safeguarded. I would like to extend my thanks to all staff who work across Adult Social Care, our Colleagues in finance and across the Council.

Councillor Keir Pedley
Portfolio Holder for Adult Social Care