Mapping a Nature Recovery Network in Sussex at the District Level
Sussex Nature Partnership and Sussex Biodiversity Record Centre
April 2021

Findings and Recommendations

Project aims
- To develop a methodology for developing a spatial/strategic map of potential nature recovery networks at the district level;
- To work with key stakeholders to identify a process for moving from a 'strategic' to map to a 'delivery' map, to guide action and investment in nature.

Approach
This project was led by Sussex Nature Partnership (SxNP) and had two distinct phases:
1. To develop a strategic 'nature recovery map' for three neighbouring districts within East Sussex. Mapping at this scale will allow development and testing of a mapping methodology which could be more widely applied at a county scale at a later date.
2. Engagement with the strategic planners within each local authority to discuss possible future use of the mapping outputs (and related future Local Nature Recovery Strategies) particularly within the context of local plan making, housing allocation decisions and the application of 'net gain for biodiversity'.

Sussex Biodiversity Record Centre (SxBRC) led the mapping work for the project.

Project area
The project area within East Sussex, included Wealden District Council, Eastbourne Borough Council and Rother District Council (Figure 1). These are contiguous districts which together cover approximately 140 000 ha. The project area contains part of the High Weald Area of Outstanding Natural Beauty (AONB) and a small area of the South Downs National Park (SDNP). These districts are all subject to high housing targets which they are struggling to deliver, and are covered by significant existing constraints (designations and protected landscapes e.g. 60% of Wealden district is covered by protected landscape designation). All three are in the process of reviewing their local plans.

Executive Summary

Developing a strategic 'nature recovery map' for three neighbouring districts within East Sussex

Q. Who is best placed locally to lead mapping, data collation and reporting against progress?
Sussex Nature Partnership (SxNP), in partnership with **Sussex Biodiversity Record Centre (SxBRC)**, is well placed to lead on developing the required evidence base and strategic thinking to underpin production of LNRSs within the wider Sussex area. Both the SxNP and SxBRC work across three Tier 1 authorities (ESCC, WSCC, BHCC[1]) and a significant area of the South Downs National Park and High Weald AONB. The LNP brings together >30 organisations, including all of the above, and has strong links with all local planning authorities. Their leadership in this space will ensure a common approach to LNRS development within contiguous Tier 1 areas, integration of views and objectives of the relevant protected landscapes and greater coordination of delivery on the ground. SxNP works with other LNPs within a wider 'South East Nature Partnership' and this will also help to ensure coherence of approach across the region.

Q. Can a 'local habitat map' be easily created at the county and district level with existing data?
Two key maps can be created now in Sussex at the county and district level using a combination of existing local and national data, to provide a foundation for initial stakeholder engagement:
- **Core areas map**
- **'Lawton Recovery' map** i.e. strategic areas where creation and enhancement of priority habitats would help deliver a 'more, bigger, better and joined' network across Sussex. See Figures 2 and 3 below.

Q. What 'components' can be identified using existing and historic analysis of ecological needs?
Across the South-East[2], recovery areas should draw on historic work to identify **Biodiversity Opportunity Areas (BOAs).** These reflect the main concentrations of core areas and priority habitats across each county (>95% of most PHs are captured within BOAs in Sussex), and remain relevant as a sub-county component for targeting effort. Other existing strategic work, such as B-Lines, capture important areas of habitat outside BOAs and also have some traction locally.

Ecological mapping is needed as a starting point for LNRS preparation but **can only go as far as production of a theoretical Lawton Recovery Map.** This is the current 'comfort zone' and is familiar to LNP members and local authorities. Moving beyond this - towards a **practical delivery map -** will require a new approach. It must integrate wider objectives and provide a realistic blueprint for where delivery efforts should be targeted based on likelihood of success, resources available, alignment with local planning processes, existing landowner interest and so on. Little of this type of information has been collated locally in the form of a spatial map.

In order to move towards this, this project started to map 'factors facilitating delivery' (Figure 3) which indicates where land may be available and where stakeholder interest and engagement might lie. The next step will be to map 'existing project and partnership activity' across Sussex to understand spatially where resources are currently being deployed and could act as the basis of expanded local activity. All of these initial mapped layers will provide useful information for future stakeholder engagement and can be collated for the wider Sussex area as part of the 'readiness' for future LNRS preparation. However, funding for the SxNP and SxBRC to complete this work will be required.

Q. Has existing analysis been done locally that can help to inform where and how investment in habitats can deliver multiple benefits for people and nature?

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[1] East Sussex County Council, West Sussex County Council, Brighton and Hove City Council
[2] This has been endorsed by South East Nature Partnership (2021)

The 'Natural Capital Investment Strategy[3]' for Sussex (2019) provides an understanding of where investment in habitats will delivery key benefits and services such as water quality, water quantity and flood risk reduction, and can be brought directly into the LNRS process locally. Work will be needed to fill gaps with regard to other benefits and services.

Q. Are there any other significant data/analysis gaps that should be addressed ahead of a LNRS process?

Gaps include local up-to-date data for key priority habitats in Sussex, habitat connectivity modelling, **condition data**, and the location of existing nature-recovery projects and partnerships. This data is required to ensure the Lawton core areas/recovery areas can be mapped with accuracy - and to ensure that a sound baseline is created for future monitoring of progress. It can be gathered locally by SxBRC if funding is available. Ahead of the LNRS process starting, guidance on how monitoring and reporting of the implementation of LNRSs and net gain will be carried out (and by whom) is required urgently. This is imperative to enable all involved locally to build the resources and capacity required.

<u>Feedback from strategic planners - initial thoughts on LNRS and local planning processes</u>

Q. What is the awareness level of 'Environment Bill' and its contents among strategic planners?

Understanding of Environment Bill, its contents and its relevance to local planning was low across the strategic planners, although there was more knowledge and understanding of <u>net gain</u> than LNRS. There was little understanding as to how LNRS, net gain and green infrastructure strategies were expected to interact or how net gain would link to LNRS in practice.

Q. What is needed to embed LNRS in local plans?

Recognition of a LNRS within a local plan will require **specific reference in local plan policies**. This point needs to be communicated clearly to all local authorities, otherwise core areas will not carry any additional protections via the planning process and recovery areas will not be identified as strategically important for receiving net gain. Much more detail is needed on how a LNRS should be used to inform local plan making (across a wide range of objectives) and in particular, how it should inform development decisions and implementation of net gain.

Q. What happens if all local plans are approved before a LNRS is prepared?

Of particular concern for East Sussex, is that all local plans are currently in the process of being reviewed and are likely to be completed before the Environment Bill is rolled out, and therefore before a LNRS is in place for East Sussex. **Action is therefore needed now to help these districts to understand how to future-proof their local plans** so that they can play a role in delivering a future LNRS. If this is not done before the plans are 'made' - it will render the LNRS ineffective in relation the local planning system for many years to come. A possible solution is to develop suitable policy hooks for inclusion in the emerging plans across East Sussex - to ensure that a later LNRS can be recognised. Acknowledgement of this problem at the national level is vital and formal guidance for local authorities is needed <u>now</u> to ensure that any wording included is sufficiently robust. With suitable policy hooks in place, the LNP can develop a template **SPD on Nature Recovery** (at a county scale) which could later be customised and adopted by each planning authority. This county-wide approach would support coherence of approach across all districts within a Tier 1 area.

Q. How might a local habitat map help to inform development planning and delivery of net gain?

- Identification of sites for receiving off-site net gain <u>within their district </u>was seen as a local 'democratic imperative'.

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[3] http://sussexlnp.org.uk/sussex-natural-capital-investment-strategy/

- There was very little understanding as to how to identify or secure suitable sites for off-site net gain. However, the need to do this was recognised to ensure off-site net gain can be located where it would deliver the most benefit. Local authorities were just unsure how to proceed to make this happen in practice.
- Principles for targeting net gain (which could be included in local plans) were suggested:
  o locating it within the closest relevant BOA/recovery area. This would help to keep its impact local.
  o Housing allocations within/adjacent to core areas and recovery areas could be accompanied by policies requiring a much greater % net gain of specific habitats - as a reflection of their importance.
  o In urban areas, a higher % net gain could be requested where this is to be targeted on a local community asset (existing or new greenspace).
- Small scale maps (Figure 4) help identify the precise core/recovery areas that might be impacted by housing development which suggests a 'risk-based' approach might be helpful to target those areas for which further mapping, stakeholder engagement and identification of habitat-creation opportunities would be needed to underpin development decisions and delivery of net gain (both on and off-site)
- Capacity in local planning authorities to work with and interrogate GIS information is limited and may need to be invested in if LNRS maps are to be used and embedded in their evidence base and decision-making processes.

Q. How influential might a LNRS be in a high-growth area?

It was noted that within these areas of high-growth pressure - particularly where a high % of land is already covered by conservation constraints - it was unlikely that all core and recovery areas could be exempt from development. The relatively small areas of these districts outside conservation and protected landscape protections will have to take the lion's share of the required development. The key test for the Environment Act (once passed) and the LNRS/ net gain processes in particular - is whether they can ensure that the overall impact on these 'squeezed' areas is not ecological impoverishment, but new development that is located, designed and delivered in a way that will make a strong contribution to a local nature recovery network and positive benefits for biodiversity. These areas require more attention and scrutiny in terms of how LNRS and net gain should be applied in practice via the planning process. The local authorities responsible for them should be given particular guidance (as soon as possible) to assist them in implementing an ambitious approach that can deliver high quality solutions under very difficult circumstances. Otherwise, the areas 'between' protected landscapes in the pressurised South East, risk becoming gaps in the national NRN were the trend is one of biodiversity decline rather than recovery.

The conversations with these strategic planners also highlighted a question as to how much the Environment Bill - and in particular the concept of creating and securing a NRN on the ground - is currently being integrated with emerging planning policy. In particular, how can high housing targets continue to be set in areas where the ecological carrying capacity is already low and where core/recovery areas will have to be compromised in order to meet them? How will a future LNRS help to influence the interpretation of 'sustainable growth' for these highly constrained areas?

Key recommendations for future work leading from this project

- Production of maps of core areas and 'Lawton Recovery Areas' for all of Sussex using the framework identified in this project (but updated in the future as required) - and disseminated to all local planning authorities as part of initial engagement on LNRS 'readiness'
- Development of sound local policies to 'future proof' local plans in relation to a LNRS plus development of a county-wide SPD for biodiversity for customisation/adoption by LPAs at a later stage.
- Continued investigation of the level of detail needed to link LNRSs to net gain delivery - through production of detailed core and recovery maps for a sample BOA/Recovery area adjacent to an area targeted for significant housing development within each district involved in this project. This deeper analysis will provide a more refined scale of spatial mapping and engage a range of stakeholders in identifying interest and opportunities for habitat creation and application of 'off-site net gain'. Lessons can be disseminated across all local planning authorities.
- Identification of a sound baseline evidence base against which LNRS delivery can be measured, and to inform the need and deliverability of a higher than 10% BNG in some cases. A detailed costed project setting out how this should be achieved for Sussex can be produced by SxBRC and SxNP in consultation with NE and other stakeholders.
- Continuation of engagement with LPAs across Sussex about LNRS development and delivery. This should remain a core element of the work of the SxNP who are best placed to develop an overarching framework for mapping, stakeholder engagement and identifying local delivery opportunities that can be applied to any relevant LNRS areas within Sussex in the future.

Figures

Wealden is the largest district in East Sussex (83 502 ha). Existing population of 160 000 people, half of which live within the five main towns with the remainder divided between 37 rural parishes.
60% of the district falls within a protected landscapes (>50% in the High Weald AONB, the remainder in South Downs National Park) . There are over 40 sites that carry conservation designations.
Annual housing need: 1231 homes per year. Achieved 87% of housing targets 2016-17 and 2018-19. There is therefore significant pressure on the emerging local plan to identify sites needed to achieve housing targets.
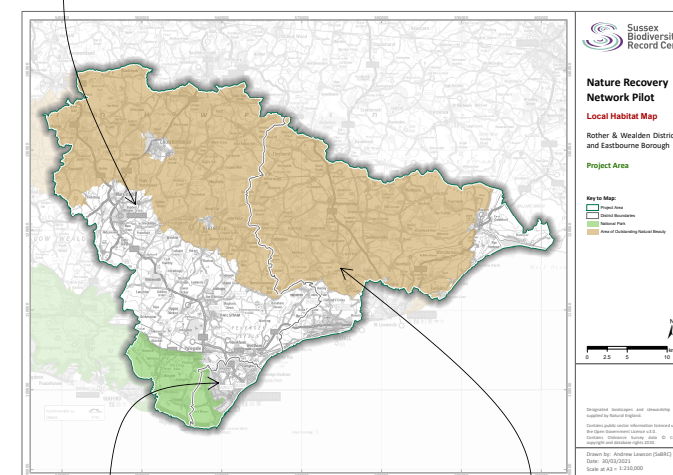

Figure 1: Project Area

Eastbourne Borough is a mostly urban local authority with a population of approx. 100 000. 37% of its area lies within the South Downs National Park (1,755 ha of open downland in the west of the borough). At its centre is Eastbourne Park, an extensive areas of urban greenspace (400ha). A significant area of the town suffers from high flood risk. To meet housing demand and a growing population, over 700 homes per year may be required within a heavily constrained landscape and brownfield sites that may only offer sites for 3000 homes up to 2035.

Rother District is a predominantly rural district with a population of just over 92,000 - over half of which live within Bexhill-on-sea. 82% falls within the High Weald AONB. A further 7 % is protected by national/international conservation designations. Ancient woodland covers >15% of the district, more than any district in the SE. Within this context, the district was required to create 1,006 dwellings over the last three years, but delivered 706 (70% of target). As for Wealden, there is thus pressure to increase housing delivery in the coming years

The area is characterised by several very large designated sites (shown in purple) (including Ashdown Forest, Dungeness and Pevensey Levels) - with a scattering of smaller designated sites between these (smaller SSSIs and Local Wildlife Sites).

Priority habitats are categorised into: ancient woodland (a key feature of Sussex, particularly in the north); 'assets at risk' which are PH types identified in the Natural Capital Investment Strategy for Sussex as being particularly vulnerable and fragmented within Sussex; and other PHs). This categorisation allows the local importance and distribution of certain types of PHs to be seen. Those within designated sites are not shown on the map to improve its clarity.
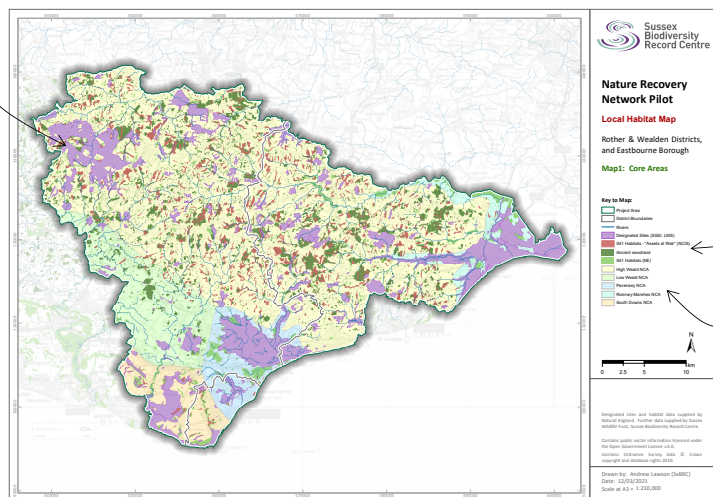

The five National Character Areas found within the project areas are included as a way of reflecting the spatial and geological grouping of core areas. This will also help to link to work being done by the South Downs National Park on landscape character areas as a component of NRN mapping.

Figure 2: Proposed 'core areas' for the project area

Initial feedback on this map from LNP members reflected that having 'white on the map' implies that areas not covered by a zone do not have a 'value' for habitat recovery. The final delivery map should rectify this and ensure that all areas have sufficient information to inform appropriate action on the ground.
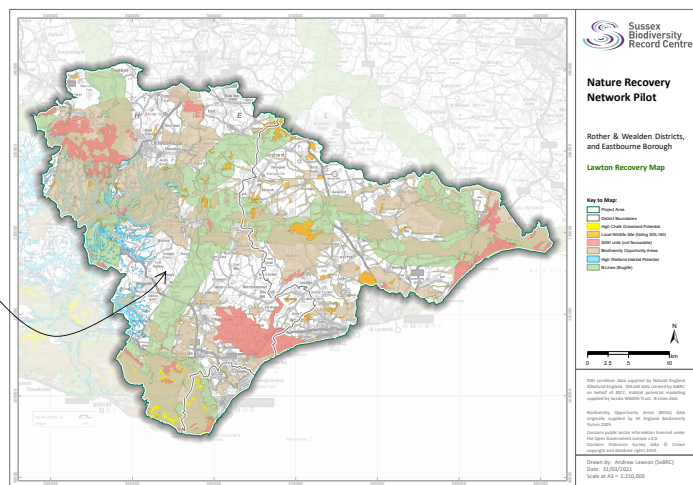
Proposed components include **Biodiversity Opportunity Areas** (as identified for Sussex in 2009). These remain relevant as ecological important concentrations of priority habitats. B-Lines help to connect and expand these. Together these broad areas can target activity for expansion and connection of PHs. Together these two components include >95% of priority habitats in the project area. Other components include areas of habitat potential (partial datasets for the area). Measures of poor condition (SSSIs and LWSs) have also been included to flag those areas where the priority should be to improve habitat quality. Woodland is not considered and will require an alternative approach.

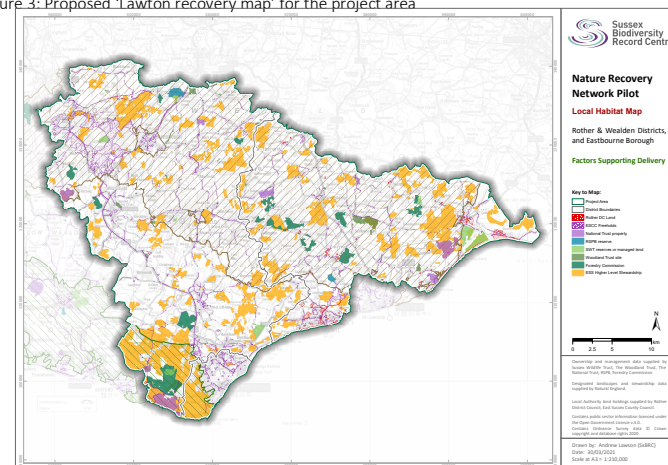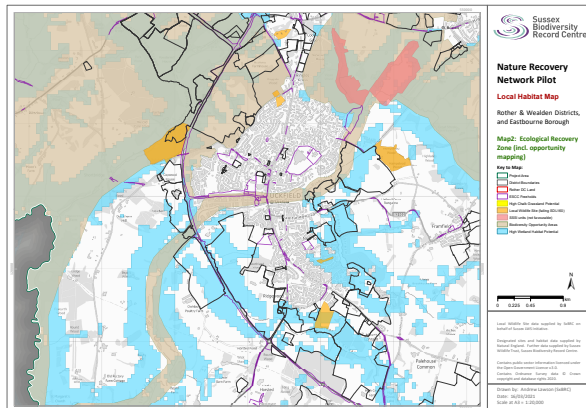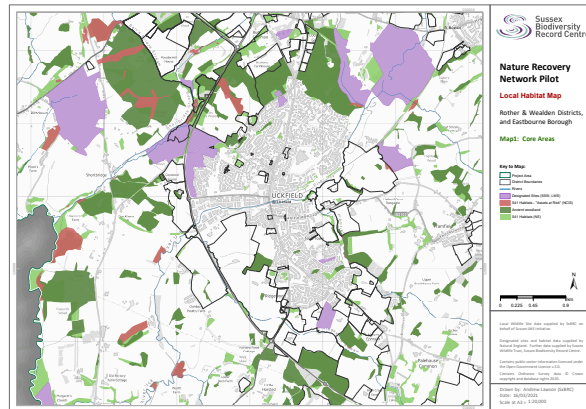Figure 3: Proposed 'Lawton recovery map' for the project area

Figure 4: Factors supporting delivery (preliminary/incomplete)

This figure starts to identify spatial data-sets that could be used to identify locations where there may be factors that would support or facilitate habitat creation or improvement. These might include:

- Areas within protected landscapes (AONB/NP). These areas carry greater protections, are covered by a management plan and will have additional resources to facilitate delivery on the ground
- Areas of land in public ownership (county and district) - on the premise that local authorities could be encouraged to do more to manage their assets for biodiversity
- Areas in eNGO and state ownership (FC). Again, these owners may already be managing these areas for biodiversity and are likely to want to do more if possible. They could also act as local exemplars and sources of expertise.
- Areas currently under Higher Level Stewardship - as a proxy for landowners who are already engaged in habitat management on their land and who therefore might be receptive to doing more.

This is a very early iteration and more work needs to be done to understand how existing or new datasets could be used to map the factors that will be important in targeting initial efforts on the ground.

These maps simply overlay district 'SHELAA' sites (Strategic Housing and Economic Land Availability Assessment) on top of the core areas and Lawton recovery areas.

These were used to guide the discussions with strategic planners and help to illustrate where there may be overlap between possible housing sites and elements of a local NRN.

This can help to understand possible ecological impact of development, guide site selection and inform any specific policies required to protect sensitive sites or leverage additional net gain from development.

The recovery map can help to identify local areas where more investigation should be focused to identify sites where off-site net gain could be created strategically in order to expand areas of habitat or enhance connectivity.

The habitat potential modelling data helps to identify areas where specific habitat types could be readily created.

Note: these maps still need to have additional 'natural capital' and accessible nature detail added to them, but despite being incomplete help to illustrate the benefit of having detailed scale spatial maps on-hand for use by strategic plan

Figures 5a and 5b. Uckfield area (Wealden DC) showing Core Areas (11a) and Lawton Recovery Areas (11b) with SHELAA sites