

## Appendix 4a: Buckinghamshire Pilot LNRS – stakeholder data processing methodology

### The data generated

The stakeholder engagement process created suggestions for 705 of outcomes, 715 activities and 228 benefits that the pilot LNRS could incorporate.

This data was input into an excel spreadsheet, capturing the stakeholder, their organisation, the area of the county the comment related to, the comment and whether it was an outcome, activity or benefit as identified by the stakeholder.

To process the stakeholder online survey responses, the answer to question ‘What improvements to nature would you like to see?’ was used as the desired outcome, ‘To achieve this recovery, what are the actions that need to happen over the next 2-5 years?’ as the activity/measure. The first two questions were not processed at this time. We did not ask about benefits via the online survey.

The stakeholder workshops asked the participants to list their suggestions under headings of outcomes, activities and benefits. However, where it was felt that a comment was more correctly identified as an outcome, action or benefit, it was amended to this for the purpose of processing the data, highlighting where this occurred.

The responses also included a number of general comments which did not align to an outcome, activity or benefit and were marked as such within the data and not processed further at this time.

The farmer/ land manager online survey asked the question “What elements of nature on your farm or in the local area would you like to see recovered over the next 25 years?” which was taken as the desired outcome and the answers to question “To achieve this recovery what are the actions that need to happen over the next 2-5 years?” taken as the activity/measure.

The farmer workshop responses did not differentiate outcomes, activities and benefits and so these were sorted using professional judgement into the 3 categories.

Outcomes, activities and benefits were also included from the Bucks Biodiversity Action Plan. Had time allowed it would have incorporated outcomes and activities from other key local documents and plans, but this was not achievable within the given timeframe.

Professional judgement was then used to assign a broad category or theme to each response so that they could be consolidated. 18 broad themes were identified from the data.

INNS	Land Management
ANGST	Designated sites
Priority habitat	Education
Species	Engagement with nature
Biodiversity	Water environment
Green Infrastructure	Other
Ecosystem services	Semi-natural habitat

Connectivity	Landscape
Data	Soils

**Table 1. List of broad themes identified from the stakeholder engagement**

### Data consolidation

Stakeholders frequently suggested the same outcomes, activity or benefits as each other. The data was consolidated by grouping all feedback relating to the same outcome, activity or benefit and recording how many stakeholders had mentioned each one as a proxy for helping to identify stakeholder priorities. This process was done by grouping the data into broad themes and using a degree of professional judgement to decide when comments were actually referring to the same thing. Excel was used to process the data and a record was kept of which comments had been combined.

For example, the following separate stakeholder responses were incorporated into the single outcome '**More designated sites for nature conservation**'.

*Original response wording:*

1. *introduce nature reserves to return rare flora and fauna to the Vale*
2. *Increase the area of high quality biodiversity sites and associated buffer and connected to other sites across landscape*
3. *protection of existing habitats*
4. *Increase area of core and high quality biodiversity sites - e.g. LWS, SSSIs, local and national nature reserves, )*
5. *Increase area of core and high quality biodiversity sites (e.g. LWs, SSSIs, NRs)*
6. *"Linford nature reserve is a great example of bio diversity. There should be so many more Site's like this. "*
7. *more nature reserves*

The result of the consolidation process was a list of 107 outcomes and/or benefits and 133 activities which could achieve these outcomes. These made up the 'long list' of outcomes as per the Defra guidelines for the pilot LNRS. They are presented within Appendix 4b.

### Prioritisation of outcomes

The long list of outcomes and/or benefits was sorted based on the national Nature Recovery Network objective<sup>1</sup> (theme) they would achieve, these are:

- To restore protected sites on land (including freshwater) to favourable condition so nature can thrive
- Create or restore additional wildlife-rich habitat outside of protected sites
- Support work to increase woodland cover
- Recover threatened and iconic animal and plant species by providing more, diverse and better connected habitats

<sup>1</sup> Defra (2020) Policy paper: Nature Recovery Network (Updated 26<sup>th</sup> November 2020) accessed online via <https://www.gov.uk/government/publications/nature-recovery-network/nature-recovery-network>

- Achieve a range of environmental, economic and social benefits, such as carbon capture, flood management, clean water, pollination and recreation

The long list of outcomes for the pilot LNRS to achieve can be seen in full in Appendix 4b. Note that as Defra refers to wider environmental benefits as outcomes we included the benefits under this objective and from now on refer to these benefits as outcomes for the wider environment.

To create a short list of outcomes of priority for the pilot LNRS to achieve, we combined technical expertise with stakeholder popularity. We did this by asking each of the seven organisations within the Pilot Area Team (technical experts) to vote for their top 50% of outcomes within each theme.

The technical experts could see how many stakeholders had suggested each outcome to inform their decisions and vote on the outcomes they each thought of highest priority in Bucks.

We completed the voting process using an excel spreadsheet with all of the objectives listed under each theme. Each organisation could then vote for the 50% they considered a priority by entering '1' into an allocated column within the spreadsheet for those outcomes, ensuring they did not vote for more than half within each theme.

The votes were then totalled for each outcome, with the outcomes with the most votes selected as the priorities. Where votes were tied for some outcomes the stakeholder popularity score was used to select the outcomes to be a priority, ensuring that half of the outcomes within each theme were prioritised.

The result was a list of 54 prioritised outcomes for the pilot LNRS.

### **Identifying activities (measures) to achieve the outcomes**

Professional judgement was used to match the activities identified by stakeholders to the outcome(s) they will achieve. These are presented in Appendix 4b. We note that due to time constraints this has not been reviewed by the PAT technical experts and so the lists of activities to achieve each outcome is not considered exhaustive. There were also additional activities which didn't align to an existing outcome and given time to review these it may be that more outcomes were identified from these suggested activities.

### **Linking to the Habitat Map**

As this pilot LNRS process was run on a reduced timeline, the Habitat Map was completed in parallel to the stakeholder engagement. For the final LNRS we anticipate the stakeholder engagement would be completed first so that the identified outcomes and actions feed directly into the Habitat Map.

In this pilot LNRS, conservation features were identified to be included within the Habitat Map by technical experts (see Appendix 6) who had a good understanding of previous strategic nature conservation work in Buckinghamshire, such as the Biodiversity Action Plan and Green Infrastructure Strategies.

We have matched the priority outcomes to the conservation features used in the Habitat Map in table 1 below, to show how many of the outcomes identified by stakeholders were incorporated into

the draft of the Habitat Map for the pilot LNRS. Note that for some outcomes the data doesn't exist to allow them to be mapped.

**Table 1. Pilot LNRS prioritised outcomes and associated conservation features within the Habitat Map**

NRN Objective	Pilot LNRS Outcome	Conservation feature in Habitat Map
Protected Sites	More sites designated for nature conservation	SACs, SPAs, SSSIs, NNR, LNR, LWS,
	Designated sites are protected by suitable habitat buffers	SACs, SPAs, SSSIs, NNR, LNR, LWS,
	Ancient Woodland (and irreplaceable habitats) protected and in favourable management	Ancient & Semi-Natural Woodland, Ancient Replanted Woodland
	Favourable condition of SSSIs	SSSIs
	Reduced pressure on sites of higher nature conservation value due to there being more alternative Accessible Natural Greenspace	data available - not used at this stage
Wildlife rich habitat (other)	More Lowland Calcareous Grassland	PH - Lowland Calcareous grassland
	More ponds	Habitat - water, fresh
	Improve WFD ecological status of Rivers and Streams	Habitat- Water, fresh
	Improved condition of priority habitats	All PH data
	More wildflower verges	Roadside Nature Reserves
	Improve the condition of chalk streams	Habitat- Water, fresh
	More habitat mosaics	All habitat data
	Restoration and Enhancement of the Ray Valley and Bernwood Area	All habitat data, BOAs
	More semi-natural habitats	All habitat data
	Better condition of semi-natural habitats	All habitat data
	More biodiversity in recreation green spaces	Data available – not used at this stage
	Farmland rich in wildlife	Data available – not used at this stage
	More overall biodiversity (minimum of doubling nature)	All data
	Better environmental and wildlife records	Data not available
More wetland wildlife through functioning floodplains	PH – wetland habitats	
Woodland	More native woodland	PH- all woodland habitats, Higher priority woodland creation area
	More hedgerows in better ecological condition	Data not available

	Protect all ancient woodland	Ancient & Semi-Natural Woodland, Ancient Replanted Woodland
	More woodland in favourable management	PH - all woodland habitat, Actively managed woodland- Grants
	More wet woodland	PH- Wet woodland
Species and Connectivity	Good connectivity of woodland habitats	PH- all woodland habitats
	Good connectivity of wetland habitats	PH- Coastal and floodplain grazing marsh
	Improved habitat connectivity, (including cross border) for ecological resilience	All habitat data (could be improved as a next step)
	Better habitat connectivity across farmland	All PH and Semi-natural habitats
	Connectivity of green spaces	All PH and Semi-natural habitats
	Connectivity between priority habitats	All PH data
	Dark corridors for nocturnal wildlife	No available data
	Rivers reconnected to floodplains	data available - not used at this stage
	Fewer invasive, non-native species causing problems for native wildlife	No available data
	Improved connectivity of rivers (fish passage)	data available - not used at this stage
	Protection for, and more Black Poplar	No available data
	Rare or notable (priority) wildlife species are protected	No available data
	Favourable condition of invertebrate assemblages	No available data
	An increase in farmland birds (including objectives for specific species)	data available - not used at this stage
Recovery of wetland birds	data available - not used at this stage	
Ecosystem Services	Better awareness, understanding and engagement with nature and the countryside through achieving ANGSt targets	No available data
	Improved Green Infrastructure (following NEP's GI Vision and principles)	No available data
	Regenerate towns and major urban areas and build biodiversity better into planning	No available data
	Plant and protect urban trees/woodland, 30% Canopy Cover	data available - not used at this stage
	Better physical and mental health and wellbeing resulting from access to Natural Greenspace	Opportunities to increase access to natural greenspace
	Farming and other land management gives greater ecosystem services	All ES Opportunities
	Better flood attenuation through functioning floodplains, and soils	Opportunities to reduce surface runoff,

		Opportunities to reduce soil erosion and improve water quality
	Clean Water	Opportunities to reduce surface runoff, Opportunities to reduce soil erosion and improve water quality
	Clean Air	data available - not used at this stage
	Less air, water, light, noise pollution	Opportunities to ameliorate air pollution
	Mitigate climate change and store carbon with vegetation (especially trees) and soil	Opportunities to regulate local climate (reduce urban heat)
	Control flooding with NFM, catchment base approach	data available - not used at this stage
	More ecosystem services through nature based solutions	All ES Opportunities
	Healthy soil organic matter for carbon sequestration, water retention and soil biology	Carbon Storage Capacity