

Appendix 6- Overview of SCP process for Buckinghamshire Local Nature Recovery Strategy Trial

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Structured workshops

Whilst Systematic Conservation Planning (SCP) is a well-developed approach, it requires significant adaptation to each new context. The way in which stakeholders are engaged, the decision-making process and the spatial prioritisation analysis itself must be tailored according to the situation. To this end the Biodiversify team worked with the Buckinghamshire pilot teams to develop a series of five stages, focused around decision-making workshops. These provided the general structure needed to effectively undertake the spatial prioritisations in the time available and so represent a relatively rapid schedule. Whilst the timescales and stages will need to be adjusted considerably to develop non-pilot Local Nature Recovery Strategy (LNRS), the structure and sequence would be expected to remain the same.

Stage 1 – Data sharing

Early in the process Biodiversify worked with Buckinghamshire LNRS' mapping team to understand and source data available for the county. A large number of datasets were shared, together with the rationale behind their choice. This mapping team was not the same as Buckinghamshire LNRS' prioritisation team, which was involved in the prioritisation decision-making process.

Stage 2 – Introduction

Introducing the SCP approach

In this stage the Biodiversify team introduced the fundamental concepts of SCP and outlined the general approach to Buckinghamshire LNRS' prioritisation team. A presentation was used to provide examples of potential outputs and illustrate the underlying principles.

Reviewing data and stakeholder guidance

Once stakeholders had a grasp of the potential use of SCP, we then moved on to discussing the pilot context, in particular the data available. This presented an opportunity to talk through local resources, priorities and issues, or anything else of interest to the pilot team. In particular, this discussion helped identify key datasets that the pilot teams wished to see included. Talking through the options and their potential implications provided a useful exercise for helping the teams better understand how SCP could be used to represent their vision for the landscape.

An overview of key decisions

Once there was a basis of shared understanding, the Biodiversify team used a presentation to walk the pilot teams through the decisions they could expect to make over the following sessions. This

provided specific details of the prioritisation analysis and the choices that could be made to tailor it to the context.

Preparation for the next session

The pilot team was then asked to prepare for the next session by establishing draft lists of constraints and conservation features. To facilitate this, they were provided with a framework for processing the stakeholder input gathered in LNRS Steps 3&4. As this data was stored in a spreadsheet, additional columns were added to provide guidance as to the processing required.

Conservation features are mappable elements of nature which are either important or are proxies for significant aspects of biodiversity. Priority habitats are a good example of conservation features; they are important in their own right and suitable proxies for many threatened species.

Constraints are limitations that we put on the spatial prioritisation analysis by forcing it to either include or exclude planning units as part of the solution, something we refer to as 'locking in' or 'locking out', respectively. For example, we might lock in Sites of Special Scientific Interest (SSSIs) and lock out urban areas with limited natural capital potential.

Stage 3 – Discuss and finalise constraints and features

Reviewing pilot preparation

The session began with a discussion about the constraints, conservation features and data analysis undertaken by the pilot teams between sessions.

Reviewing the stakeholder led identification of outcomes

Conservation features are chosen based on data availability and the outcomes and measures identified by stakeholders. The pilot team produced an outcomes and measures table that would facilitate the choice of conservation features based on guidance from Biodiversify. In many cases, the list of outcomes and measures prepared by the pilots were too extensive to review in detail. Instead, we reviewed their efforts and provided feedback on how the data could be refined for use in a spatial prioritisation. In most cases this entailed providing a list of steps and rules of thumb for the pilot teams to follow.

Selecting data

Ultimately the outcomes identified by stakeholders must be linked to appropriate datasets if they are to be included in the prioritisation. One of the key tasks of the pilot teams is therefore to draw the connections between the qualitative stakeholder inputs and the quantitative data used to represent these views in the analysis. This multidisciplinary exercise is a critical connection between the nuances of the social process and the rigour of the ecological science.

Biodiversify produced a list of potential conservation features based on all data shared, as well as additional data identified as desired. We worked through the list with the pilot team to support decision making regarding the final conservation features list. The large number of additional data sets required extensive additional work to process and resolve.

Preparation for the next session

Pilot teams

The pilot team agreed on a final conservation features list.

Biodiversify

Once the list of constraints, conservation features and datasets were finalised, the Biodiversify team produced analysis for the extent of each conservation feature within the region and the extent in protected sites and nature reserves. This included both the areas currently existing and the areas where habitat could potentially be restored or created. This provided the evidence base needed for informed target setting.

Stage 4 – Presentation of conservation feature data and initial target setting

Zones

In order to produce a plan which can readily support implementation, SCP groups actions into one to five zones. These zones are bespoke, they are created and defined by the stakeholder input. Due to time pressures we were limited to two zones in this instance: core and recovery. The core zone identifies areas where there are currently good quality important habitats whilst the recovery zone identifies where habitats could be restored or established.

Setting targets

In this stage the teams communally set targets for each of the conservation features. Target setting is inherently about identifying and articulating values, so the team used the evidence base created by Biodiversify to interpret the stakeholder guidance and identify the relative importance of different conservation features. Under normal circumstances this would be an involved discussion with stakeholders discussing appropriate values for each feature in detail. Given the time constraints of the pilot, however, we used a more streamlined approach. As a group we worked through the conservation features one by one and grouped them into high, medium and low importance categories as detailed in the excel spreadsheets which accompany this document. Each category was ascribed a proportion, for example high was assigned 80%, and then this was applied to the potential for each conservation feature in each zone. This allows us to change all of the targets rapidly by changing the proportion assigned to categories, for example by changing the high category from 80% to 70%.

Running multiple scenarios

A key part of SCP is the repeated iteration of the spatial prioritisation analysis. This allows stakeholders to understand the implications of their target setting decisions and revise their positions accordingly. To provide a streamlined version of this process it was agreed that the Biodiversify team would run the analysis three times. The three runs would represent overall high, medium and low targets. The proportions assigned to the target categories were altered for each scenario as detailed in Table 1.

	Scenario		
Target category	A – Low	B – Medium	C - High
Low	20%	30%	40%
Medium	50%	60%	70%
High	80%	90%	100%

Stage 5 – Preliminary Marxan results for discussion

Results

Biodiversify produced plans A, B and C. Table 2 provides details of the results of these plans.

Zone	Area (km ²)	Percentage of Buckinghamshire	scenario
Protected sites & NRs	159.48	10.19%	All
Maintain & enhance	268.55	17.16%	A
Restore or recover	264.70	16.91%	A
Maintain & enhance	360.30	23.02%	B
Restore or recover	325.74	20.81%	B
Maintain & enhance	537.25	34.33%	C
Restore or recover	387.70	24.77%	C

Discussion

At this stage we shared the first spatial prioritisation outputs, scenarios A (low), B (medium) and C (high). Whilst the discussion was broad ranging, key topics included:

1. Stakeholders felt the plan should identify a scenario which represented a well-connected network
2. Biodiversify explained that where conservation features appeared isolated, this was because there was no habitat which could be cost effectively restored or conserved in order to provide the desired connectivity. Providing direct connectivity to the isolated areas would require extensive action for that sole purpose, reducing the resources available for nature conservation elsewhere, thus reducing the ability to cost effectively deliver the targets across the county
3. Stakeholders felt it was preferable to identify a plan which included a larger area of the county as priority areas (i.e. 69% of the county rather than 44%)
4. Biodiversify recommended reducing targets for conservation features which were common (such as broad-leafed woodland) however stakeholders were reticent to adjust the targets of individual features. Instead of reducing BOAs' target across scenarios, Biodiversify proposed to test this in an additional scenario (E).
5. Biodiversify recommended reducing the targets for the Biodiversity Opportunity Areas (BOAs) due to their large area and low degree of overlap with other conservation features, the BOA targets were causing significant areas of the county to be identified as priorities. The stakeholders were reticent to adjust the targets, reflecting that significant work had been invested in the development of the BOAs. Instead of reducing BOAs' target across scenarios, Biodiversify proposed to test this in an additional scenario (E).
6. Stakeholders requested that Area of Outstanding Natural Beauty (AONB) targets should be raised, tested in additional scenario E.

7. Biodiversify noted that plans which identified high proportions of the county as priorities for nature would likely receive resistance from other stakeholders not represented at the meeting. The stakeholder team indicated a preference for high targets.

Direction from the PAT meeting

The Buckinghamshire team presented Biodiversify with the following feedback:

“There was almost universal agreement that the basis of the map should show our big ambition for nature’s recovery - Scenario C. We acknowledge this doesn’t necessarily show where the immediate priorities (eg for the next 5 years) should be. We are wondering if it would be possible to show Scenario C map with the recovery zone of Scenario A map overlaid to show some higher priority areas for natures recovery. Here is what a key of this would look like (with some requested colour changes):

- *Locked in C (dark green with hatching) – name change request: ‘Protected sites & nature reserves’*
- *Core C (dark green) – name change request: ‘Maintain and Enhance*
- *Recovery A (dark blue) – name change request: ‘Restore or Recover (short-term priority)’ or ‘Restore or Create (short-term priority)*
- *Recovery C (light blue) – name change request: ‘Restore or Recover (long-term priority)’ or ‘Restore or Create (long-term priority)’*

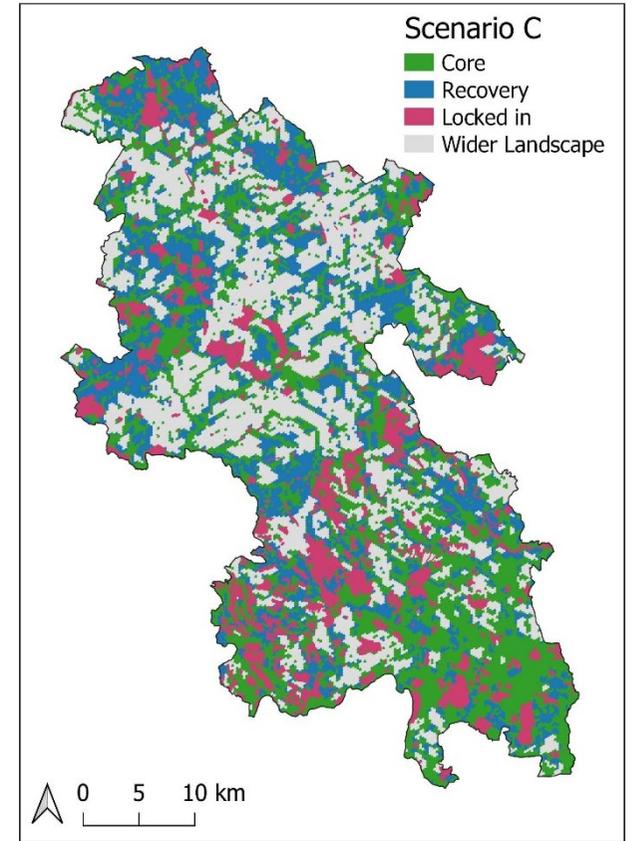
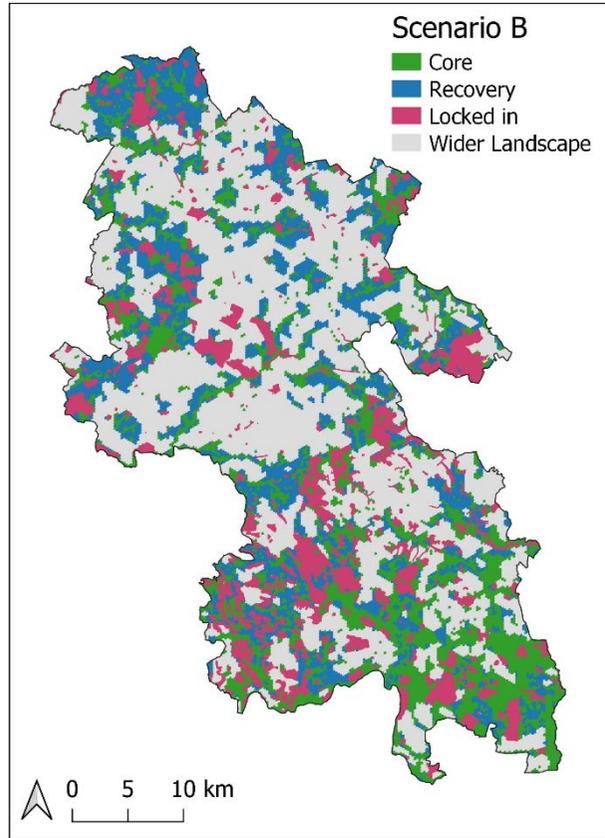
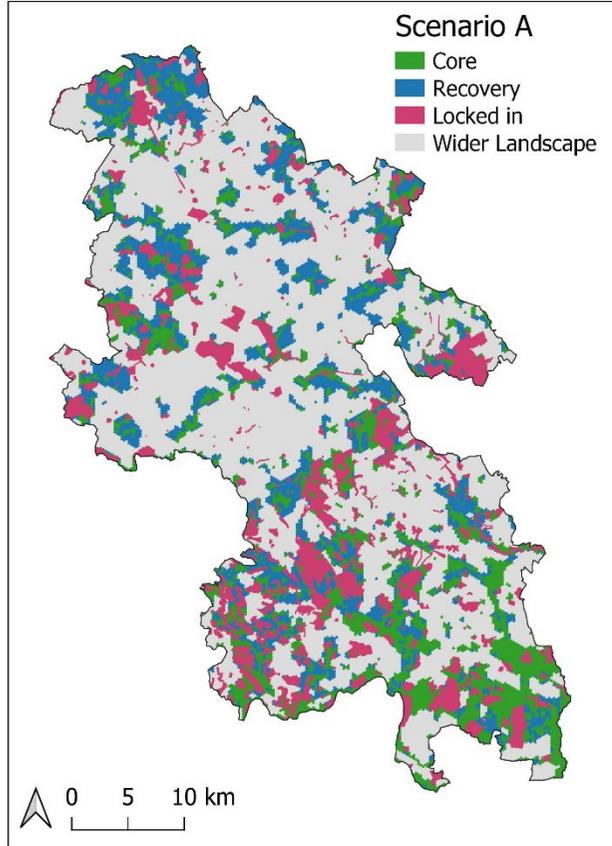
It may be that we choose to use the recovery zone from Scenario D (rather than A), but will have to see what that looks like on Tuesday.

I hope this feedback is constructive. We are very much thinking about this in terms of how we share it with stakeholders and explain it in a relatively simple way (hence aiming for one map, with changed colours, and renaming of zones).”

Final Scenarios

Based on the feedback provided, Biodiversify set targets for scenarios D and E (Table 3) as well as developing a method for producing a “combined” scenario.

	Scenario				
Target group	A (Low)	B (Med)	C (High)	D	E
L	0.2	0.3	0.4	0.2	0.2
M	0.5	0.6	0.7	0.5	0.5
H	0.8	0.9	1	0.7	0.8



Stage 5 – Present revised plans and discuss final results

Presenting the process

Biodiversify presented a comprehensive overview of the SCP process undertaken in the course of this project. This included details of the decisions made by stakeholders which are collectively reflected in the plans produced.

Scenario	Area in network (km2)	Area in network (% of Bucks)
A	692.73	44.27%
B	845.52	54.03%
C	1,084.42	69.29%
D	639.35	40.85%
E	527.81	33.73%
Combined	1,084.42	69.29%

Zone	area_km2	prop.bucks	scenario
Protected sites & NRs	159.48	10.19%	All
Maintain & enhance	268.55	17.16%	A
Restore or recover	264.70	16.91%	A
Maintain & enhance	360.30	23.02%	B
Restore or recover	325.74	20.81%	B
Maintain & enhance	537.25	34.33%	C
Restore or recover	387.70	24.77%	C
Maintain & enhance	212.64	13.59%	D
Restore or recover	267.23	17.08%	D
Maintain & enhance	68.20	4.36%	E
Restore or recover	300.13	19.18%	E
Maintain & enhance	537.25	34.33%	Combined
Restore or recover (I)	146.73	9.38%	Combined
Restore or recover (II)	240.97	15.40%	Combined

