

# LEWES NEIGHBOURHOOD PLAN CASE STUDY

## AN ECOSYSTEM APPROACH TO NEIGHBOURHOOD PLANNING

### INTRODUCTION

The Lewes Neighbourhood Plan seeks to practically implement an ecosystem approach to planning in the largest town in the South Downs National Park <sup>1</sup>. The ecosystem approach is an emerging field, increasingly used by government and local planning authorities, to consider the environment when making planning decisions.

At the outset of the Lewes Neighbourhood Plan, the Town Council agreed to incorporate an ecosystem approach. The town's location within the National Park and strong environmental awareness within the town (and memories of recent flooding from the River Ouse) provided the initial motivation. We soon realised that no neighbourhood plan had ever done this before; we were pioneers and had to navigate our own path towards integrating ecosystem services across the Lewes Neighbourhood Plan.

This case study outlines what we achieved, the challenges we met along the way, and suggests actions for other communities embarking on their own neighbourhood plan.

This account was written by Kirsten Firth and Transition Town Lewes, a community organisation which led on the sustainability policies of the Lewes Neighbourhood Plan. It is based on the practical experience of bringing an ecosystem services approach to a neighbourhood plan. For more comprehensive advice on preparing a neighbourhood plan, and about ecosystem services in planning, see the references at the end of this document.

The Lewes Neighbourhood Plan passed its referendum with a 92% 'yes' vote in March 2019. We believe that this is the first time that ecosystem services policies have been so comprehensively integrated in a neighbourhood plan.

### KEY POINTS

- An ecosystems services approach to planning seeks to recognise the many essential – and often irreplaceable – benefits or 'services' that the natural environment provides to people and communities and therefore seeks to ensure that these are recognised, safeguarded and enhanced in any new development.
- In planning policies, an ecosystem approach can strengthen the three pillars of sustainable development – social, economic and environmental.
- Lewes' was the first neighbourhood plan in the UK to explicitly incorporate an ecosystem approach. The steering group therefore had little precedent for the challenges it encountered and had to navigate its own route towards achieving its goals.

- Explaining and gaining support for an ecosystem services approach initially proved challenging for those drawing up the Lewes Neighbourhood Plan. Useful strategies included: drawing on practical local examples of ecosystem services and the benefits they provide; getting local organisations and community groups involved; and showing how environmental policies could address current local residents' concerns about flooding or preserving public access to green spaces.
- Particular effort was needed to show that ecosystem principles would not affect the cost or viability of housing development.
- The relatively small geographical size of neighbourhood plan areas limits how far an ecosystem approach may be applied.

## COMMUNITIES: HOW TO INTEGRATE ECOSYSTEM SERVICES IN YOUR NEIGHBOURHOOD PLAN

1. Enlist the support of your planning authority. Seek planning consultants who understand the ecosystem approach and how it could affect the development of specific sites.
2. Talk with your planning authority about how ecosystem services such as natural flood management or special habitats are dealt with in their Local Plan, especially in your neighbourhood plan area.
3. Consider the most important issues for your local community (farming, recreation, health, flood risks)? How are ecosystem services relevant to these themes? What are the opportunities and constraints? Are there issues which go beyond the development boundaries of your neighbourhood plan area? These questions could point you towards ways of integrating ecosystem services in different policies such as design guidelines or the street scene.
4. Engage local groups to ensure community backing for your neighbourhood plan.
5. Recognise that brown-field development sites are likely to have significant scope to enhance natural capital, biodiversity and flood resilience through good design and green infrastructure provision on site.

## KEY LOCAL ISSUES IN LEWES

Lewes is a town of 17,000 people situated in the South Downs National Park, making it one of the largest towns in a UK national park. An ancient county town with good transport links to London and Brighton, it has seen house prices rise dramatically in the last 10 years. Key local issues addressed in the Lewes Neighbourhood Plan are:

- A lack of locally affordable housing in a town with a high house-price: income ratio
- Very few sites where the town can expand its boundaries (because of the geographical constraints of flood plains and National Park protection for the Downs) so that new housing must be built on small infill sites distributed throughout the town
- A strong wish to preserve the fine-grained streets and independent character of this historic market and manufacturing town

## WHO WAS INVOLVED, AND WHO HELPED ALONG THE WAY?

The Lewes Neighbourhood Plan was prepared for Lewes Town Council by a steering group that brought together representatives of many local groups including residents' associations, civic societies and councillors. In the steering group, Transition Town Lewes <sup>2</sup> took the lead on sustainability policies, with the support of Dr Colin Tingle, a national expert on community engagement on ecosystem services <sup>3</sup>.

Lewes Town Council prepared the Neighbourhood Plan and steered it through the formal stages. The South Downs National Park Authority (SDNPA), the planning authority for the town, were supportive of introducing an ecosystem approach into the neighbourhood plan. FERIA Urbanism, an independent firm of neighbourhood planning consultants, were engaged by the Town Council, and enthusiastically took up the challenge of working with us to embed ecosystem services into the Lewes Neighbourhood Plan.

Many organisations and individuals offered their support on technical and policy matters – Natural England, Sussex Wildlife Trust, the Environment Agency, academics and more.

We were lucky that much work had already been done to map an evidence base of local ecosystem services by SDNPA and Sussex Biodiversity Record Centre<sup>11</sup>.

## WHAT IS AN ECOSYSTEM APPROACH?

The ecosystem approach helps to identify the benefits we get from nature, value them and build them into planning, decision making and management. It is a way of making decisions in order to manage our activities sustainably. It recognises that humans are part of the ecosystem and that our activities both affect the ecosystem and depend on it. The ecosystem approach requires:

- An integrated approach that considers all ecosystem components (e.g. human activities, habitats and species).
- Consideration of the value of the benefits that ecosystems provide for people (ecosystem services).
- Strong participation of stakeholders (those who manage the natural environment and those who benefit from it) <sup>4</sup>

## WHAT ARE ECOSYSTEM SERVICES?

'Ecosystem services' are the many and varied benefits that people gain from the natural environment, whether it's agricultural land, forest, chalk grassland or seas and rivers. These natural ecosystems provide a wealth of services that are essential to human life such as drinking water, clean air, natural pollination of crops, healthy soil as well as the beauty and inspiration of nature that make our lives worthwhile <sup>5</sup>.

In Lewes, to take one example, the town's drinking water comes from rain filtered through the chalk downland and captured in underground aquifers. Rainwater feeds the springs that fill the open-air lido Pells Pool, and Harvey's Brewery draws spring water from its own borehole to brew its renowned beer. In other words, these age-old natural processes have a huge social and economic value to the town.

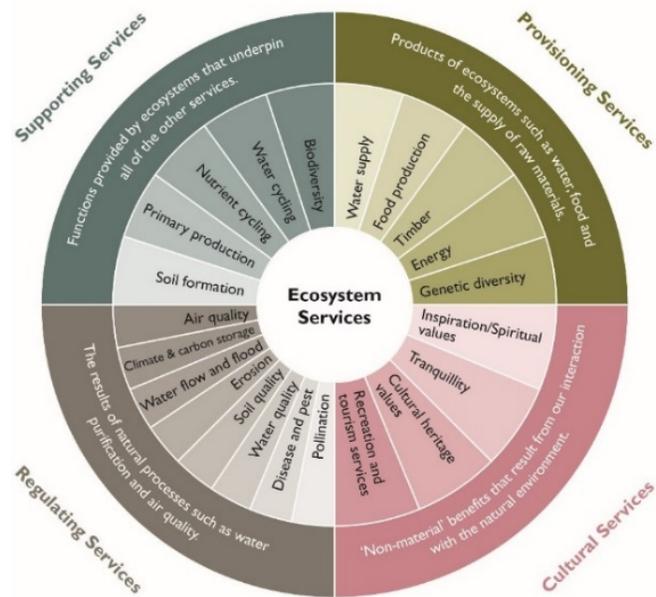
The value of ecosystem services is not yet widely acknowledged outside policy and academic circles. However, the concept is starting to appear in public debates, for example in discussions about paying farmers to manage land to reduce flood risks.

### Why are ecosystem services relevant to neighbourhood planning?

Ecosystem services are emerging as a consideration in planning at a national and regional level, including support within National Planning Policy and the Natural Capital Committee <sup>6</sup>.

Through the planning system, an ecosystem approach strengthens the three pillars of sustainable development – social, economic and environmental. It can ensure that the environment is properly valued for its contribution to sustaining human livelihoods and well-being. Most of all, it can improve the quality of land-use and development decisions, providing a framework to clarify opportunities, conflicts, and trade-offs for the environment, economy and society <sup>7</sup>.

For example, in 2006 Lewes Town Council commissioned an extensive hydrogeological survey to identify reasons for the drying-up of the bourne (stream) that fed Pells Pond. The research went back 100 years and proved that growth in abstraction of water for public consumption, and drainage engineering, had led to that effect. If planning rules had included consideration of ecosystem services during that period, things might have been different.



## CHALLENGES – AND HOW WE MET THEM

The main challenges of introducing an ecosystem services approach to the Lewes Neighbourhood Plan were:

- Finding ways to communicate what an ecosystem approach is and what ecosystem services are, and why they are relevant to neighbourhood planning.
- Making ecosystem services relevant to a specific town and its potential development sites.
- Addressing fears that environmental policies could make development more expensive or unviable
- Building support within the community for an ecosystem approach
- Identifying evidence to support neighbourhood plan policies on natural capital, biodiversity and local green spaces.

### **Challenge: Explaining ecosystem services to the steering group, professionals and public**

Although the Town Council's steering group strongly supported environmental protection, and some members had extensive experience in the field of sustainability, few had encountered the concept of ecosystem services or an ecosystem approach before and found the concepts difficult to grasp <sup>8</sup>.

The first task then was to raise awareness and understanding of ecosystem services within the steering group and the professional planning consultants engaged to work with us. We ran workshops with the steering group and its sustainability sub-group to develop understanding of natural capital and ecosystem services and to identify local priorities. Birmingham University ran a workshop for the steering group to identify planning issues related to countryside / urban links, based on their RUFopoly tool-kit (one of very few tools for public engagement on ecosystem services) <sup>9</sup>.

Another issue was how to find a simple, direct way to express the importance of ecosystem services to the wider public. Initial feedback from public consultation on the draft Lewes Neighbourhood Plan was that people found the language used to communicate the concept obscure, preachy and off-putting.

However, residents could see the point when the abstract concept was translated into practical policies using specific examples of familiar locations and features in Lewes.

### **Challenge: Adapting ecosystem services to a specific town**

We aimed to apply ecosystem services concepts both to the whole town, and also to individual potential development sites. We needed to devise policies at the local level that did not simply mirror national and regional policies, but added to them, and would also be relevant for the 18-year life of this neighbourhood plan.

Applying ecosystem services to a small, specific geographical unit – the town of Lewes with its surrounding landscape of chalk downs and river meadows – was a challenge that we had to invent our own way of approaching. Most available guidance on ecosystem services and planning speaks of large-scale landscape issues. On the other hand, there is much knowledge about environmental issues in urban settings, such as increasing biodiversity or water management. We needed to work out how to translate all this to specific local outcomes that could be easily understood.

Neighbourhood plans operate within their town or parish administrative boundary, which means that important interdependencies between the town and the wider landscape may be missed. A key example of this in Lewes was the limited options for addressing water quality and risk of flooding from the River Ouse, which is highly dependent on what happens up and downstream as well as on development within the town itself (especially sites on the flood plain). The Lewes Neighbourhood Plan can't influence development outside the town boundary. However, it does refer to local water management plans and flood risk policies, including sustainable urban drainage systems (SUDS).

Even more fragmented are the many small potential housing development sites spread across Lewes. The small size of the sites made the challenge of using planning policy to join up habitats and create green corridors through the town somewhat harder. The Lewes Neighbourhood Plan calls for natural capital and biodiversity to be delivered and enhanced on-site (not off-site), but the overall effect of this across multiple isolated locations, that will be developed at different times, remains to be seen.

### **Challenge: Perceived impact of an ecosystem approach on cost and viability of developments**

A heartfelt concern in Lewes is that high house prices, fueled by the London housing market, are pricing out anyone on a modest income. Among the steering group, there was anxiety that environmental policies would impose higher costs and make new housing developments unviable for developers, or unaffordable for local residents. Specifically, the policies favouring net gains in natural capital and biodiversity were feared to be potentially in conflict with the need for housing for people on lower incomes.

We wanted to delve deeper into these concerns, so we reviewed all the sites put forward for development in the Lewes Neighbourhood Plan. We found that all the (non-strategic) development sites are brown-field and many have no existing green infrastructure at all. Therefore, there was significant scope to enhance natural capital, biodiversity and flood resilience through good design and green infrastructure on-site, without imposing additional costs on developers.

### **Challenge: Balancing nature and people in the neighbourhood plan**

A concern for some of the steering group was that the ecosystem approach might be seen to prioritise nature above people, and this would risk alienating community opinion and

jeopardise the outcome of the Neighbourhood Plan referendum. Our approach was to emphasise balance rather than conflict, and to show how the policies will benefit people by protecting well-loved parks, recreation grounds and views, enhancing the street scene, and promoting good design.

In the event, feedback from public consultation on the Lewes Neighbourhood Plan was extremely positive about the environmental policies, with comments focused on nature conservation and green spaces (but not specifically ecosystem services). The referendum passed with a 92% 'yes' vote in March 2019.

### **Challenge: Identifying evidence to support ecosystem services policies**

We drew on the knowledge of many experts in developing policies and an evidence base, including SDNPA <sup>10</sup>, Sussex Wildlife Trust, the Sussex Biodiversity Records Office <sup>11</sup>, the Environment Agency, Friends of Lewes, the Ecosystems Knowledge Network, Birmingham University, and many more.

An important source of data was the SDNPA EcoServ GIS mapping <sup>12</sup>, which had been developed as supporting evidence for the South Downs Local Plan. The EcoServ maps provided evidence on ecosystem services across the Lewes Neighbourhood Plan area, including the historic environment, priority habitats for biodiversity, landscape character, public rights of way, and protected areas such as Sites of Special Scientific Interest. We used this to support Local Green Spaces designation and other policies. However, these maps are not very fine-grained, so local knowledge and site visits were also needed to assess individual sites.

## CONCLUSIONS: THE FINAL LEWES NEIGHBOURHOOD PLAN

The Lewes Neighbourhood Plan builds a common understanding about ecosystem services with the South Downs Local Plan, taking landscape-scale policies and applying them to a town.

An ecosystem approach is woven through the Lewes Neighbourhood Plan, integrated into its vision and objectives. A chapter on Our Environment presents policies on natural capital and biodiversity, seeking a net gain in both from any development. There are also policies on resilience against flood risk, sustainable urban drainage, renewable energy, local green spaces, sustainable tourism, active travel (e.g. cycling and walking) and public transport. A policy on development along the river identifies further opportunities for active travel, green corridors and public enjoyment of the river frontage.

We devised our own evidence base for designating Local Green Spaces, building on the minimal guidance available in the National Planning Policy Framework (NPPF) and Locality advice for communities<sup>13</sup>. The NPPF stipulates that Local Green Spaces must be demonstrably special with regard to historic value, wildlife, beauty, tranquility and recreation, and we made sure that the evidence was as robust and objective as possible, as well as drawing on local knowledge and opinion. The full evidence base is in the supporting documentation to the Neighbourhood Plan. We considered creating our own ecosystems services criteria for Local Green Spaces, but this would have taken too long to develop, and would not be recognised by the planning inspectors as it is not included in the NPPF.

The allocated housing development sites are all within Lewes' urban area and are distributed throughout the town. All sites are on previously developed land (brownfield sites) and avoid incursion into greenfield areas around the edge of the town. The assessment of each potential housing development site includes a short ecosystem design response to clarify, for planners and developers, how environmental policies apply to the site and how natural capital and biodiversity may be enhanced on site. The panel (*right*) shows an example of the ecosystem design response for one site.

### ECOSYSTEM DESIGN RESPONSE FOR AN ALLOCATED HOUSING SITE

#### **Land at Garden Street Auction Rooms**

**Gross site area** 0.15 hectares

#### **Site address**

Auction Rooms, Garden Street,  
Lewes, BN7 1TJ

**Current land use** Auction rooms

**Site conditions** Brownfield

**Expected no. of dwellings** 11

#### **Other land uses to be included**

None

#### **Ecosystem design response**

This site offers potential to extend the green corridor between Southover Grange Gardens and railway embankment through roof gardens, trees, green walls, pollinator-friendly planting and water butts.

#### **Flood zone SPZ2.**

The majority of the site is in Flood Zone 2 and a very small part in Flood Zone 3. This designation should be considered further at the planning application stage

## IMPLEMENTATION

At April 2019 the Lewes Neighbourhood Plan has just been successful in its referendum, following examination by an independent planning inspector. So it has not yet been through a practical test.

Implementation of neighbourhood plans occurs through the normal planning process, with neighbourhood plan policies being considered alongside policies in the Local Plan and the overarching National Planning Policy Framework. The Lewes Neighbourhood Plan includes an ecosystem design response for each development site, which goes some way toward providing guidance for developers and planners (*see example above*).

A possible model for assessing ecosystem policies is the SDNPA's Design Review Panel. This Panel includes a range of experts including architects and landscape architects and meets monthly to advise on planning applications and encourage high-quality design. A similar panel of experts with local knowledge could be set up to advise on ecosystem aspects of new developments.

Since the Lewes Neighbourhood Plan was drafted, the SDNPA has published guidance notes on how to implement its Local Plan Ecosystem Services policy, which provides examples of simple interventions in small urban sites that could help enhance ecosystem services<sup>14 15</sup>.

## BEYOND IMPLEMENTATION

Our experience points to several areas for future development:

- Finding a language to communicate ecosystem services to non-specialist readers, which is simple, illuminating and engaging
- Developing an ecosystem services tool for designating Local Green Spaces in neighbourhood plans
- Developing a Natural Capital Assessment tool for developers and planners to use for small sites in urban areas<sup>16</sup>.

## IN MEMORY OF COLIN TINGLE

This case study, and the Lewes Neighbourhood Plan, is dedicated to the late Dr Colin Tingle, who proposed the ecosystem services approach, developed the policies and patiently encouraged the steering group along that journey.

A self-guided walk around Lewes, Tingle's Way<sup>17</sup>, is being developed in his memory, which highlights some of the ecosystem service features in and around Lewes that we hope to support and strengthen through the policies in the Lewes Neighbourhood Plan.

## REFERENCES

- <sup>1</sup> The Lewes Neighbourhood Plan – all documentation <http://www.lewes4all.uk/>
- <sup>2</sup> Transition Town Lewes <https://www.transitiontownlewes.org/>
- <sup>3</sup> Lewes and Ouse Valley eco-nomics Group case study – Ecosystems Knowledge Network <https://ecosystemsknowledge.net/resources/examples/love>
- <sup>4</sup> Ecosystems Knowledge Network – what drives us [https://ecosystemsknowledge.net/ecosystem\\_approach](https://ecosystemsknowledge.net/ecosystem_approach)
- <sup>5</sup> What are ecosystem services? <http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/EcosystemServices/tabid/103/Default.aspx>
- <sup>6</sup> How to do it – a Natural Capital workbook – Natural Capital Committee 2017 <https://www.gov.uk/government/groups/natural-capital-committee>
- <sup>7</sup> Applying the ecosystems approach <http://neat.ecosystemsknowledge.net/principles.html>
- <sup>8</sup> For an excellent, approachable explanation of ecosystem services: The invisible economy, Pavan Sukhdev (2011) [http://www.youtube.com/watch?v=VZWnMaX\\_bsY](http://www.youtube.com/watch?v=VZWnMaX_bsY)
- <sup>9</sup> RUFopoly: the decision-making game that conquers jargon and boundaries in the rural-urban fringe - <http://www.bcu.ac.uk/research/-centres-of-excellence/centre-for-environment-and-society/projects/relu/rufopoly>
- <sup>10</sup> For an ample range of background evidence on ecosystems, biodiversity, habitats, protected designations, from the South Downs National Park Authority (scroll down to ‘Evidence by policy area or chapter’) <https://www.southdowns.gov.uk/planning/national-park-local-plan/local-plan-examination/core-document-library/>
- <sup>11</sup> Sussex Biodiversity Record Centre - <https://sxbrc.org.uk/home/>
- <sup>12</sup> Mapping of Ecosystem Services within the South Downs National Park using the EcoServ GIS Tool, South Downs National Park Authority (2016) <https://www.southdowns.gov.uk/wp-content/uploads/2016/12/EcoServ-GIS-Mapping-Tool-Evidence-Report-Draft.pdf>
- <sup>13</sup> Making Local Green Space Designation in your Neighbourhood Plan - Locality 2017 - <https://neighbourhoodplanning.org/toolkits-and-guidance/making-local-green-space-designations-neighbourhood-plan/>
- <sup>14</sup> SDNPA – Ecosystem Services and Household Planning Applications guidance note 2018 <https://www.southdowns.gov.uk/wp-content/uploads/2018/04/Core-06-Ecosystem-Services-Technical-Advice-Note-householder.pdf>
- <sup>15</sup> SDNPA – Ecosystem Services Technical Advice Note (non-householder) 2018 <https://www.southdowns.gov.uk/wp-content/uploads/2018/04/Core-07-Ecosystem-Services-Technical-Advice-Note-non-householder.pdf>
- <sup>16</sup> For example, this Natural Capital Planning Tool has been developed since the drafting of the Lewes Neighbourhood Plan <http://ncptool.com/>
- <sup>17</sup> Tingle’s Way <https://friends-of-lewes.org.uk/2018/12/14/tingles-way-an-eco-walk-through-lewes/>