

Improving Strategic Planning for Nature Conservation

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1. Introduction and Terms of Reference

The project brief was to “research and write a paper that draws on a comprehensive and appropriate range of data and examples that demonstrates how nature conservation matters can add value to a strategic planning approach”.

Consequently, this report is built upon a bedrock of academic and policy reviews of strategic planning literature in general and nature conservation in particular from which the core strategic concepts of mainstreaming and landscape scale are identified to deliver improved nature conservation outcomes.

The report then draws upon the results of a series of workshops and research projects conducted in early 2020, together with intelligence from a Natural Environment Research Council knowledge exchange fellowship on mainstreaming green infrastructure from 2017-2021 conducted by the author. This has been supplemented by select good practice case studies.

All this evidence is then assessed to help define a roadmap for improved strategic planning for nature, mindful of current drivers of change (climate change, Post COVID-19 recovery and biodiversity decline).

The paper concludes with a series of recommendations for local and combined authorities together with a plea for stronger national guidance in any planning reform.

2. What does good strategic planning look like: academic and practice perspectives?

2.1 Academic perspectives

Strategic planning is “*a socio-spatial process through which a range of participants in diverse institutional relations and positions come together to design plan-making processes and develop contents and strategies for the management of spatial change; an opportunity for constructing new ideas and processes that can carry them forward; collective efforts to reimagine a city, urban region, or region and to translate the outcome into priorities for area investment, conservation measures, strategic infrastructure investments, and principles of land-use regulation*” (Albrechts 2015:511).

This useful academic definition is now further unpacked with a focus on necessary actions.

Crucial to managing change successfully is the co-development of a shared vision with strong governance and leadership (Riddell, 2019). Change should be managed proactively to best advantage, reflecting the public interest. Forester (2010) sees this as a deliberative opportunity space where negotiation, dialogue and contestation intersect with diverse interests, needs and perceptions and where core values and power relationships shape increasingly messy outcomes (Haughton et al 2013).

The focus here is on co-design and coproduction; working collectively from the outset within an effective, diverse and inclusive partnership model engaging multiple public(s); crucially going beyond the ‘usual suspects’. Practicing effective co-design and co-production challenges participants to have a real stake in the process and outcomes which also may challenge existing power structures and governance frameworks (Beunen et al., 2013: Scott et al. 2013). This is often seen as threatening to existing governance structures which may be resistant to such changes.

Integration seeks to overcome the predominant sector/agency/policy silo mentality and agency myopia, to better coordinate planning across horizontal (sectors), vertical (spatial) and temporal

(time) scales (Scott et al., 2013; Tewdwr Jones et al., 2010). Scale becomes a key consideration and focus which becomes challenge-led rather than agency-led. Here, Leach et al., (2019) recognise the fallacies of identifying, diagnosing and treating strategic planning challenges separately within established sectoral and professional silos leading to 'disintegrated' outcomes (see also Scott et al., 2013). However, Mommaas and Janssen (2008:27) caution against viewing integration as a panacea given the danger of compromise in which too many things are interwoven resulting in conservatism and risk-averse strategies hindering much needed innovation.

Evidence bases are needed that are proportional to the challenge, which are then assessed and used to inform priorities for policy and decision-making (Carter et al, 2020). Currently, there is a danger of policy-based evidence where policy direction is first agreed and then evidence sought retrospectively to justify it.

Regulation is mistakenly seen as a magic bullet for ensuring strategic planning outcomes. However, regulation needs to be carefully designed within participatory processes supporting its imposition and with necessary guidance and resources for effective delivery and enforcement. It should not drive existing standards down to a required level. If regulation is not welcome, then it may be seen as a hurdle to overcome resulting in a tokenistic tick box culture which will not necessarily deliver positive outcomes. Regulation also works best when used in tandem with other incentive and participatory tools as bundles (Scott et al., 2014).

Strategic planning should lead to outcomes that identify new opportunities to lever funding and investment. All too often the process can become a talking shop with outputs finishing up as reports which deliver little on the ground. This creates a significant policy– delivery gap (Albrechts, 2015: Scott et al., 2009).

Delivery is a key to a successful strategic planning process; its capacity to produce action frameworks and interpretative images capable of mobilizing people to action (Albrechts et al 2003). Action plans within strategic planning outcomes need to identify who does what, when and how (Dryberg, 1997). Cycles of ongoing and regular review are an integral part of this.

2.2 Practice Perspectives

The [Royal Town Planning Institute \(2015\)](#) publication on strategic planning identifies six core ingredients which complements the academic section above.

Focus: This requires being efficient in the use of resources and clarity about its purpose set within a long-term vision. Landscape-scale has become particularly influential here and is highly pertinent to nature conservation considerations (Ahern and Cole, 2012).

Be genuinely strategic: This requires dealing only with matters which require resolution across boundaries. Scale is crucial here as strategic plans may duplicate issues which are covered by local plans and/or national planning policy. Thus, the strategic bounding and framing of such issues whether they be housing, health, transport or nature conservation, become important considerations. It is also recognised that such issues need to be dealt with holistically rather than within their separate silos.

Be spatial: Strategic plans should set out where, and in what form, interventions and investments in housing, transport, environment and economic growth will happen.

Be collaborative: Strategic plans must be joint endeavours meaning that partners work together to not only deliver each other's agendas but crucially work to an overriding vision and holistic agenda where the outcome is greater than the sum of the individual parts (Scott et al., 2018).

Often this means breaking down existing authority silos and not just reproducing them under the guise of a joint strategic umbrella. The collaboration process should also be extended to designing the internal governance arrangements of strategic planning collaborations. Here the concept of subsidiarity becomes a significant component.

Have strong leadership: Leadership is vital at both officer and political levels in order to build traction so that negotiations between places are productive and not protracted and that new approaches are acceptable (Scott et al., 2018; Toderian, 2015). Strong leadership can help functional areas to come together to tackle problems in partnership. In addition, a strong leader will enable people to go outside established comfort zones, overcoming institutional inertia, when embracing change. This is a neglected area of research and practice.

Be accountable to local electorates: Here decisions and interventions need to be located within deliberative processes of consultation and public feedback. The role of local authorities with elected councillors is a key part of local accountability which can be obfuscated by the growth and influence of other bodies without such a mandate such as Local Enterprise Partnerships. Here the operation of governance frameworks and power relationships become influential considerations (Lockwood et al., 2010).

2.3 Summary

Both Albrechts (2015) and the RTPI (2015) contributions reveal the complexity and dynamics of good strategic planning. Here the process of strategic planning (e.g. change management, collaboration, co-design, inclusivity) is as important as the outcome (vision, action plans, investment). This initial understanding is now applied specifically to nature conservation as required in this report.

3. Strategic planning for nature conservation

The project brief was to research and write a paper that draws on a comprehensive and appropriate range of data and examples that demonstrates how nature conservation matters can add value to a strategic planning approach. However, a key tension underlying this brief is the focus on strategic planning for nature conservation when a core ingredient as described above stresses that strategic planning is about securing policy integration and reducing sectoral silos. What follows, therefore, is an initial review of strategic planning literature regarding nature conservation, highlighting key concepts that can best help "bridge" this tension.

3.1 The context for improved strategic planning for nature

'There is compelling evidence that England's collection of wildlife sites are generally too small and too isolated, leading to declines in many of England's characteristic species. With climate change, the situation is likely to get worse.' ([Lawton Review 2011](#)).

"Our statistics demonstrate that the abundance and distribution of the UK's species has, on average, declined since 1970 and many metrics suggest this decline has continued in the most recent decade. There has been NO let-up in the net loss of nature in the UK ([State of Nature, 2019](#))

The two quotes above illuminate that, despite improved evidence, concepts, tools and strategies, the decline in species and ecosystems in England is ongoing, indicating policy and/or delivery failure. Indeed, there is a significant body of research highlighting the ongoing decline in the state of nature globally, nationally and locally with some claiming a nature emergency ([IPBES, 2019; UKNEA 2011, 2014; WWF 2019](#)).

Traditionally, the approach to environmental protection has been through designation of key species and habitats within a designation hierarchy with dedicated management plans and advisory committees for the most important landscapes, sites and species. However, more recently there has been a shift towards a natural capital approach involving the re-conceptualisation of the natural environment as an asset leading to financial valuations of the contribution of nature to society ([MEA, 2005; UKNEA, 2011; Defra 2020](#): Scott et al., 2018).

Another key but associated concept has been the development of landscape-scale conservation. The [Lawton review \(2011\)](#) highlighted the need for nature conservation policy to be "*bigger, better and more joined up*", reflecting a shift away from the protection of nature towards the recovery of nature. This changing focus to recovery involves very different strategic planning responses, crossing traditional administrative boundaries and the creation of new governance frameworks such as local nature partnerships and concepts such as ecological networks. However, operating at this scale poses challenges for wider public engagement which tends to focus at more local scales.

From the above summary two "bridging" concepts can be identified that help us better understand the potential of strategic planning, in its widest sense, with strategic planning for nature conservation.

1. The need to **mainstream nature conservation** more effectively within wider strategic planning processes and subsequent policy and decision making.
2. the need to better **understand and use the landscape scale** concept in strategic planning for nature conservation

These core concepts are now unpacked in turn.

3.2 Mainstreaming as a core component of strategic planning for nature conservation
Mainstreaming involves taking an objective (or knowledge, idea or innovation) in one policy domain such as nature conservation (within the environmental domain) and normalising it within other policy domains such as housing, economy and transport, where it is not (yet) sufficiently understood or accepted (Karlsson-Vinkhuyzen et al., 2017). This necessarily involves a 'messy' and dynamic process of diffusion from initial ideas through persuasion to testing and adoption and or rejection (Figure 1).

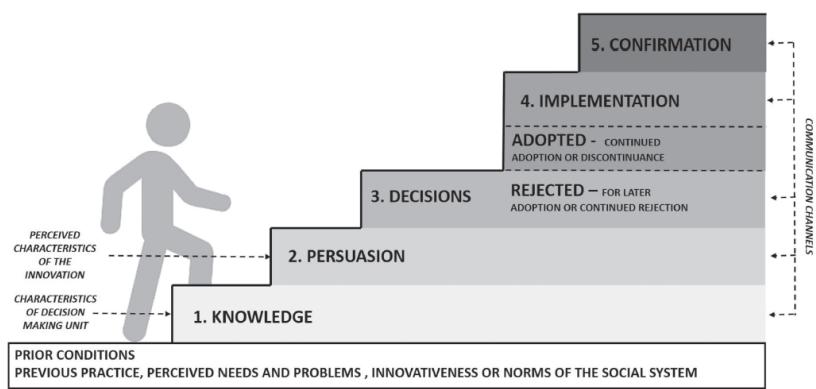


Figure 1: The mainstreaming process: Source (Scott, 2019:424)

Strategic planning currently prioritises the need to plan for a certain number of houses, based on strategic housing market assessments and housing need (SHMA). Nature conservation interests are then incorporated as secondary issues, viewed primarily as constraints. Effective mainstreaming requires nature conservation interests to be inputted at the outset with its inclusion and application across other policy chapters, recognising its potential and capability to deliver benefits on other policy objectives¹. This means challenging the traditional view of nature conservation as simply a constraint to development. Here, the concept of natural capital and ecosystem services help transform nature into an asset that delivers multiple benefits (Scott et al., 2018).

Consequently, the need to work across different spatial, sectoral and temporal scales becomes essential (Cowling, 2005). Furthermore, the efficacy of communication channels and securing the active support of key non-environmental gatekeepers become crucial in the adoption of nature conservation priorities (Jordan and Russel, 2014: Figure 1). However, institutional and gatekeeper inertia can become significant barriers to securing the desired policy and behaviour change (Kingston and Caballero, 2009: Scott et al., 2004).

3.3 Landscape Scale as a strategic planning mechanism for nature conservation.

Henson et al. (2009: 508) describe the goal of landscape-scale as “*to halt or reverse the process of landscape fragmentation*” and “..... *to conserve an area large enough to sustain a majority of conservation targets but that is a manageable size for intervention strategies to be applied effectively*”.

This definition is useful reflecting the dynamic and pragmatic nature of landscape scale according to the focus. However, few studies have scrutinised what landscape scale actually means and its implications for policy-, plan- and decision-making (Selman, 2006; Terkenli, 2005; Sayer et al., 2013). Drawing from the literature that does exist, the following key elements are identified (Carter et al., 2020).

The Spatial Dimension remains the dominant focus of landscape scale research and practice. Authors emphasise the notion of nested scales to describe a “Russian-doll” like array of various functions and processes of a landscape and how awareness and scrutiny within and between the

¹ See <https://mainstreaminggreeninfrastructure.com/project-page.php?green-infrastructure-planning-policy-assessment-tool> where mainstreaming has been embedded in a policy assessment tool

different scales contribute to informing multi-functional and more holistic solutions (e.g. Marshall, 2008; Wyborn & Bixler, 2013).

Multi-functionality operates across landscape scale plans, ranging from biodiversity conservation such as UNESCO's biosphere reserves (Price et al., 2010); to England's Nature Improvement Areas (Natural England, 2014); to catchment management as outlined in the EU Water Framework Directive (Holzkämper, 2012); to ecological networks (Hackett et al. 2019); and economic growth (Pugalis, 2011). Many of these initiatives are embedded in a natural resource management context and feature an explicit goal to move from the narrowly-drawn territorial (administrative and jurisdictional) boundaries of traditional land-use planning and conservation approaches to adopt more holistic and functional approaches which adapt to nature's 'inherent geometry' (Bailey, 2002).

The **temporal dimension** to landscape scale planning shifts focus away from short-term timeframe such as election cycles towards longer-term perspectives to tackle issues such as cumulative impacts (Scott et al., 2014b) and lag effects (Low, 2002).

Governance frameworks are crucial to effective delivery with partnerships often assuming the role of principal delivery vehicles (Carter et al., 2020). These are often heavily prescribed with regulatory and procedural aspects dominating with environmental goals, local knowledge and participatory processes often subservient (Beunen et al., 2009, 2013; Valinia et al., 2012; Toderi et al., 2017). Work on catchment management plans as part of the EU Water Framework Directive provides a contemporary example reflecting a transformative move from agencies previously operating as environmental regulators towards more deliberative and participative roles in co-produced partnership plans (Demetropoulou et al., 2012; Spray & Blackstock, 2013).

Proponents of the landscape scale champion the fusing of natural resource management with more collaborative approaches (Kruger, 2004; Berkes, 2004). This entails collaboration across sectors and administrative boundaries and working with communities and citizens giving rise to the globally established concept of **community-based natural resource management** (CBNRM) (Pailler et al 2015). The active involvement of citizens and/or communities in this institutional context can deliver multiple benefits, such as greater autonomy, equality, social capital and other democratic values (Pateman, 1970; Mansbridge, 1997).

Finally, there is an **emotional dimension**; a much-neglected area in planning research and practice. Yet nature generates important emotional attachments to place at the personal level and shapes social memories and cultural values which lead to contested narratives with top-down notions of landscape scale management and planning often conflicting with more grass roots and personal perspectives (Herbert-Cheshire & Higgins, 2004; Scott, 2002; McMorran et al., 2014). Consequently, personal, social, expert and lay perspectives need capturing and greater scrutiny for policy and decision making (Terkenli, 2005).

When viewing the landscape scale through ALL these different lenses there are **operational challenges and barriers to overcome** (Figure 2). In particular, the governance frameworks need closer scrutiny and reflection to identify how and why certain structures impede effective working and what actions or interventions can be made to reduce or overcome such barriers and take advantages of emerging opportunities.

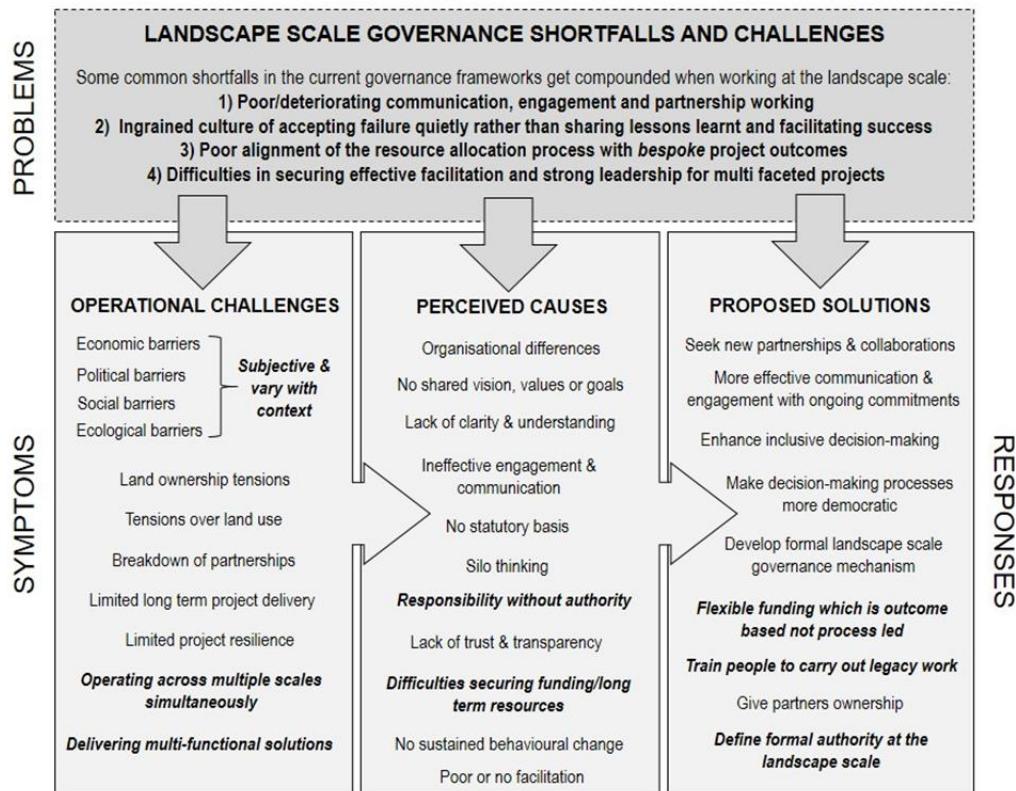


Figure 2: Problems and Challenges for working at the landscape scale Source (Carter et al 2020)

4. The English Policy Perspective for Strategic Planning for Nature Conservation

4.1 Introduction

Natural capital, ecosystem services, green infrastructure, environment (biodiversity) net gain and nature recovery networks collectively form the backbone of an increasingly complex and growing strategic environmental architecture for conceptualising and delivering nature conservation in England. They all feature in some key national guidance and strategies with the notable exception of the [Industrial Strategy](#) (i.e. [HM Government 25 Year Environment Plan](#); [National Planning Policy Framework MHCLG, 2019](#); [Environment Bill 2020](#)), but individually and collectively, and perhaps surprisingly, lack definitional clarity and up to date integrated guidance².

Understanding the English approach and optimising its potential application for strategic planning processes and outcomes poses significant challenges for stakeholders and wider publics as well as representing a major challenge for mainstreaming efforts. First, we need to understand each term individually; not so easy when terms are contested even within the environmental sector itself. Second, we also need to understand how these terms relate to each other. This is not straightforward either, as the terms were introduced at different times and for different purposes and thus were never explicitly designed to work together. Finally, we then need to mainstream

² In July 2019 updated national Planning Practice Guidance was issued for the environment but did not provide integrated guidance <https://www.gov.uk/guidance/natural-environment> [accessed 13 August 2019]

them more effectively in policy and decision-making processes, set within the constraints and opportunities of existing governance frameworks.

The following section addresses these three challenges in turn .

4.2 Natural Capital (NC)

“..it is what nature gives us for free” (Helm 2019:2)

“...the elements of nature that directly or indirectly produce value to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions. Natural capital is a broad term that includes many different components of the living and non-living natural environment, as well as the processes and functions that link these components and sustain life” [Natural Capital Committee \(2013\)](#)

The concept of “stocks” is critical to understanding natural capital. Healthy stocks of renewable natural capital assets must be maintained and enhanced in order to protect and generate flows of ecosystem services to humans. Over-consumption of natural resources depletes both the quality and quantity of natural capital stocks whilst investment in the ecosystem restoration can help to replenish those stocks notwithstanding that some natural capital is irreplaceable and not renewable (Helm, 2019).

The [Natural Environment White Paper](#) (HM Government 2011) highlighted explicitly the value of nature as the source of people’s health and livelihoods. It established the cross-governmental [Natural Capital Committee](#) (NCC) which recommended that improving and restoring nature requires long term planning and delivery that goes beyond political cycles and works closely with private sectors (NCC 2015). Some of this thinking has been translated into governance frameworks such as the creation of local nature partnerships and within the [National Planning Policy Framework](#) (MHCLG, 2012:2019) where its value is recognised. However, wording was relatively weak; “having regard to the value of ecosystem services” (MHCLG, 2012: par 109) and with similar wording relating to NC (MHCLG, 2019: par 168) in the latest revision. **Significantly, natural capital is the only environmental concept to be found collectively in all three national policy documents; the Industrial Strategy (HM Government, 2018); NPPF, MHCLG, 2019 and the 25 Year Environment Plan (HM Government, 2018).**

The language of the financial sector is now commonly applied to the process of measuring NC via ‘natural capital accounting’ (NCA) as evidenced [in Greater Manchester Combined Authority which estimates a value of nearly £1 billion](#) per year (Eftec, 2018). There are typically two main elements to a set of natural capital accounts: i) measurements of the stocks, as the area and condition of different habitats or ecosystems (e.g. forests, freshwater, farmland), and ii) measurement of the flows of benefits, typically estimated as the net present value of the future stream of financial benefits attributable to the various ecosystem services that flow from the natural capital stocks (e.g. carbon storage, timber production, recreation, etc.). The concept of natural capital has become increasingly prevalent in policy in the UK, and NCA and does now feature in cost-benefit-analyses such as recent updates to HM Treasury Green Book ([HM Government, 2019: Annex 2](#)). Work on natural capital has recently been formalised within government within a natural capital approach ([Defra, 2020](#)). This builds capacity among users to better assess and value the natural environment by providing comprehensive information and resources.

4.3 Ecosystem Services (ES)

“the benefits people obtain from ecosystems” ([Millennium Ecosystem Assessment, 2005: V](#))

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Provisioning	Food production	Arable crops, horticulture, livestock, orchards, allotments, urban food, wild food (e.g. gathering berries or mushrooms).
	Wood production	Timber, wood production for paper, woody biofuel crops, coppice wood or wood waste used for biofuel.
	Fish production	Aquaculture, commercial fishing, recreational fishing (recreational fishing is also a cultural service, but the habitat conditions match those for fish production).
	Water supply	Impact of soil and vegetation on rainwater runoff and infiltration, and thus on groundwater recharge or surface water flow.
Regulating	Flood protection	Reduction of surface runoff, peak flow, flood extent and flood depth through canopy interception, evapotranspiration, soil infiltration and physical slowing of water flow.
	Erosion protection	The ability of vegetation to stabilise soil against erosion and mass wastage by protecting the soil from the erosive power of rainfall and overland flow, trapping sediment, and binding soil particles together with roots.
	Water quality regulation	Direct uptake of pollutants by terrestrial or aquatic vegetation; interception of overland flow and trapping / filtration of pollutants and sediment by vegetation before it reaches watercourses; breakdown of pollutants into harmless forms e.g. by denitrifying bacteria that convert nitrates into nitrogen gas. Also infiltration into the ground, allowing pollutants to be filtered out by the soil and preventing pollution of watercourses – though pollutants could enter groundwater supplies.
	Carbon storage	Carbon stored in vegetation and soil. In the context of land use change (with complete loss of habitats and often major soil disturbance), this is more relevant than carbon sequestered annually. The ‘time to reach target condition’ reflects the time taken for a new habitat to reach a typical carbon sequestration rate for a mature habitat.
	Air quality regulation	Removal of air pollutants by deposition, absorption and/or breakdown by vegetation. Fine particles ($PM_{2.5}$) are the most damaging type of pollution, but vegetation can also remove ozone and nitrogen oxides (by absorption into pores).
	Cooling and shading	Shade, shelter and cooling effect of vegetation and water, especially urban trees close to buildings, green roofs and green walls, which can reduce heating and cooling costs, or trees in urban parks which can provide shade on hot days.
	Noise reduction	Attenuation of noise by vegetation.
	Pollination	Pollination of crops (and wild plants, supporting other ES) by wild insects (mainly bees and hoverflies). Excludes pollination by managed honeybees.
	Pest control	Predation of crop or tree pests by invertebrates (e.g. beetles, spiders, wasps), birds and bats.
Cultural	Recreation and leisure	Provision of green and blue spaces that can be used for any leisure activity, e.g. walking, cycling, running, picnicking, camping, boating, playing or just relaxing.
	Aesthetic value	Provision of attractive views, beautiful surroundings, and pleasing, calming or inspiring sights, sounds and smells of nature.
	Education and knowledge	Opportunities for formal education (e.g. school trips), scientific research, local knowledge and informal learning (e.g. from information boards or experiences).
	Interaction with nature	Provision of opportunities for formal or informal nature-related activities, e.g. bird watching, botany, random encounters with wildlife, or feeling ‘connected to nature’. There is some overlap with biodiversity, but access by people can have negative impacts on some wildlife habitats. Excludes recreational fishing, hunting / shooting (not covered); the intrinsic value of nature (covered by the biodiversity metric); existence value (from just knowing that nature exists).
	Sense of place	The aspects of a place that make it special and distinctive – this could include locally characteristic species, habitats, landscapes or features; places related to historic and cultural events, or places important to people for spiritual or emotional reasons.

Figure 3: 18 Key Ecosystem services unpacked (Source Smith 2019)

Ecosystem services (ES) reframe the role of the environment from a constraint to an asset delivering multiple benefits to society from the services they produced (UKNEA, 2011). ES supported an emerging sustainable economic narrative with direct and indirect contributions to human well-being (Figure 3). Here, ES flows allows the beneficiaries and suppliers of valued ES to be identified enabling market-based instruments such as '[payment for ecosystem services' schemes](#)' to be created (Defra, 2013).

As mentioned previously the planning system in England has embraced ES in relatively weak policy guidance by "*recognising the value of ecosystem services*" in the NPPF (CLG 2012: paragraph 109) However, this inclusion did lead to significant work in improving evidence bases for development plans involving ecosystem service mapping and modelling of opportunities as illuminated in [North Devon and Torridge Joint Local Plan](#) (2018); [South Downs National Park Local plan](#) (2019) and [Bridgend SPG19](#). All of these authorities have now embedded ecosystem services within their approved local development plans. Here the mapping of the supply of core ecosystem services also led to the identification of opportunity areas. For example, Smith (2019) produced natural capital maps for Oxfordshire County Council using a habitat scoring system based on a matrix of score (0-10) on the ability of each habitat to deliver ecosystem services. The scores are then applied to a habitat and land use map to produce maps for each ecosystem service (Figure 4) with extra multipliers used for quality, condition and local factors. This provided a simple method to allow spatial patterns and ecosystem potential to be identified.

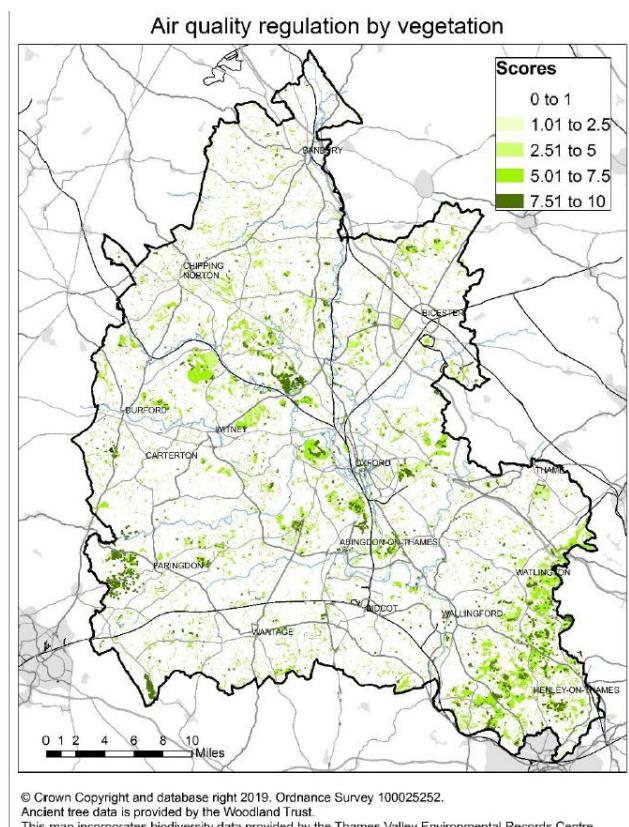


Figure 4: Ecosystem Service Mapping in Oxfordshire: Ability to improve air quality. (Source : Smith (2019))

4.4 Green Infrastructure (GI)

"Green infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services, such as water purification, air quality, space for recreation, and climate mitigation and adaptation. This network of green (land) and blue (water) spaces can improve environmental conditions and therefore citizens' health and quality of life. It also supports a green economy, creates job opportunities and enhances biodiversity". ([EC Commission, No Date](#))

GI plays a key role in delivering [nature-based solutions](#), adding value as a managed multifunctional network of green and blue features, across multiple scales. This network is purposefully designed to deliver multiple benefits, thus contributing more than a collection of individual greenspace assets/features. **If backed up by the necessary scientific evidence, and incorporated at the start of a development, it has the potential to tackle strategic challenges; for example through creating connected green corridors for wildlife and people at the landscape scale; designing and locating GI to provide air pollution barriers between roads and schools or incorporating measures to tackling the climate emergency though nature based solutions.** However, according to [Scott and Hislop \(2020\)](#) at present it does not have strong policy wording in the NPPF leaving it vulnerable to being trumped by other interests. Natural England are currently developing and testing a set of standards to help improve the status and delivery of GI which plays a crucial delivery role in strategic planning for nature.

4.5 Net Gain(s)

Biodiversity Net Gain “is development that leaves biodiversity in a better state than before. It is also an approach where developers work with local governments, wildlife groups, land owners and other stakeholders in order to support their priorities for nature conservation” ([CIEEM, CIRIA and IEMA, 2019](#)).

Environmental Net Gain: “In short, this means improving all aspects of environmental quality through a scheme or project. Achieving environmental net gain means achieving biodiversity net gain first, and going further to achieve net increases in the capacity of affected natural capital to deliver ecosystem services” ([Defra, 2019: 91](#))

The term ‘net environment gain’ was formally introduced by the UK government in its [25 Year Environment Plan \(2018\)](#), where the government stated; “we will ensure that we support development and the environment by embedding the principle that new development should result in net environmental gain”. Net gains³ can be defined as where development leaves the environment in a better state than previous in accordance with the environmental priorities identified in strategic national and local plans, international environmental targets, and the views of wider publics.

At the core of this approach is the UK’s good practice principles for biodiversity net gain ([CIEEM, CIRIA, IEMA, 2019](#)) based on the international principles developed by the [Business and Biodiversity Offsets Programme](#) (BBOP). Here the **mitigation hierarchy** is crucial; first avoiding biodiversity loss as far as possible, and then minimising, restoring, and lastly compensating the loss. Thus, compensation is allowed only as a measure of last resort. The principles also include avoiding losses of irreplaceable habitats. If such habitats are lost, they cannot be offset elsewhere and so Biodiversity or Environment Net Gain should never be claimed for the project. Perhaps more controversially, some believe Biodiversity Net Gain should be undertaken in accordance with good practice for people, which calls for developments to ensure that people’s wellbeing is at least as good as a result of Biodiversity Net Gain as it was than before (Bull et al., 2018: [Bateman and Zonnefeld, 2019](#)).

Biodiversity net gain is generally viewed as a pre-requisite to environmental net gain. In many development situations it will not be possible to deliver net gains in all ecosystem services. Often there will be large losses in food production; for example, if development is on farmland. Nevertheless, by assessing net gains and losses, any trade-offs can be made transparent, helping to inform societal decisions about the most effective use of land and investment. However, there is a tension between a biodiversity gain approach versus a broad assessment of changes in ecosystem services.

In England, the [NPPF 2019](#) requires Local Authorities to identify opportunities for Biodiversity Net Gain and other net gains in their Local Plans and individual planning applications using approved metrics. These ideally should be based on the strategic identification of nature recovery networks which form a core part of GI networks. Biodiversity Net Gain is due to become a statutory obligation in the forthcoming environment bill.

³ I use gains in the plural to avoid presenting the idea that there is any one composite measure that captures the gains from different ecosystem services.

4.6 Nature Recovery Networks

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. ([Towards a Wilder Britain, Wildlife Trusts 2019](#))

The concept for the Nature Recovery Network is based on two key propositions building on ecological networks as envisaged in the Lawton Report (2011) and are also a major commitment in the Government's 25 year environment plan. First, the need to protect our existing nature sites as the best areas for wildlife which provide many other economic and social benefits. These should form the core of any network. Second, for nature to recover we have to also look beyond protected sites and take action to extend and link our existing sites, both to support wildlife and to recover the range of economic and social benefits that nature provides. [Defra \(2019\)](#) have identified six key principles behind this recovery network.

1. Building nature recovery into existing and planned policies;
2. Forging strong national and local partnerships, building on what is already in place
3. Working with private and public landowners to improve, expand and connect wildlife-rich habitats;
4. Broadening the funding base for nature;
5. Developing mapping, data and other decision support tools;
6. Developing monitoring and reporting on progress.

4.7 Fitting the Environmental Pieces together

Having defined the current core components of nature conservation in England, it is important to understand how each piece fits together. As mentioned previously this is not straightforward as the terms have been introduced at different times for different reason.

Conceptually, stocks of natural capital assets produce flows of individual ecosystem services that are desired through agreed green infrastructure interventions to deliver multiple benefits. The development, protection and enhancement of a strategic GI network (including nature recovery networks and green belts) is the key delivery mechanism which can help identify suitable locations for securing biodiversity and other environmental net gains/losses. Losses will necessarily occur in some ecosystem services due to the trade-offs involved and these should be made explicit in any planned interventions. Cumulatively this managed process should deliver on prioritised environmental outcomes which allows reinvestment back into the natural capital asset base.

The success of this process depends on the efficacy of the development plan and its associated policies and how it is considered as a whole within political decision-making processes. In our planned system the approved policies are statutory and thus become primary determinants for decision making. Thus, effective nature conservation policy needs to cover all the multiple functions in terms of their creation, protection and enhancement functions and be backed up with strong policy wording. A recently co-developed [GI policy assessment tool](#) provides a useful resource for these

Improving Strategic Planning for Nature Conservation - Alister Scott

tasks⁴ (Figure 5) . Unfortunately it reveals that policy wording is a key weakness together with an absence of policies addressing stewardship and blue infrastructure ([Scott and Hislop 2020](#)).

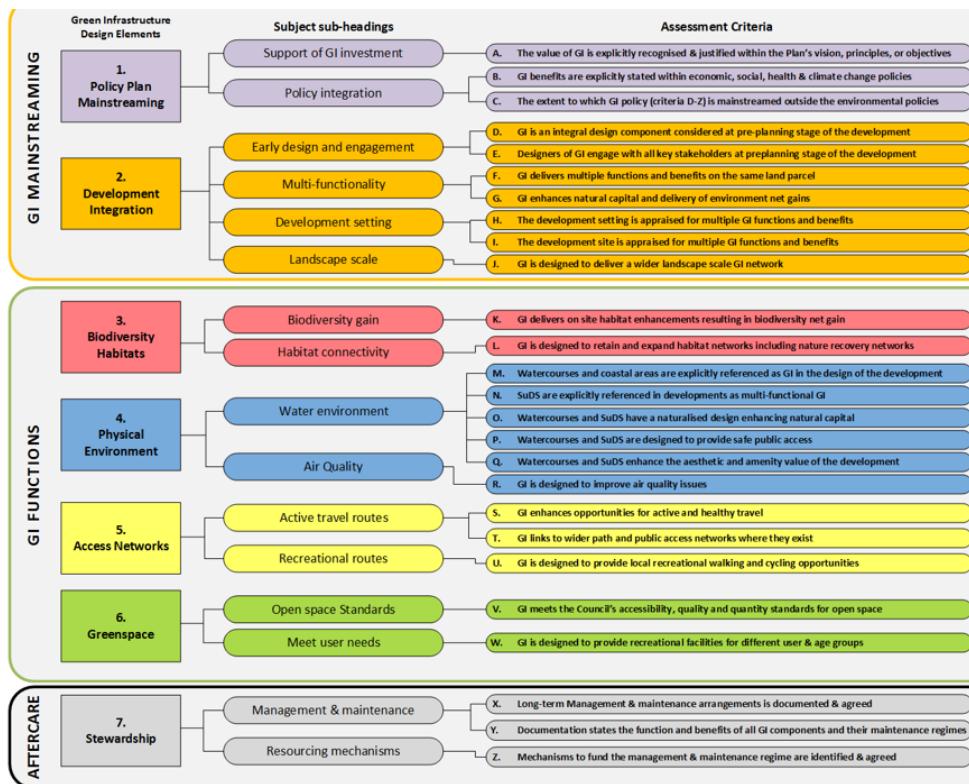


Figure 5: The Green Infrastructure Policy Assessment Tool: Scott and Hislop (2019)

4.8 Fitting these pieces together: the [National Planning Policy Framework](#) (MHCLG, 2019 revised)

The key NPPF paragraphs are summarised below in Table 1, defining the boundaries within which strategic plans/policies operate. Here, nature conservation does, in theory, constitute one of the strategic priorities/objectives and could feature in the duty to cooperate functions. However, decisions as to what aspects to include /exclude are deliberately left to authorities themselves to define, dependent on their local requirements although housing is a non-negotiable. Significantly, the landscape scale is championed with key roles for natural capital, nature recovery networks, GI and net gain. The NPPF also recognises the need to take a long-term perspective (up to 15 years).

⁴ See <https://mainstreaminggreeninfrastructure.com/project-page.php?green-infrastructure-planning-policy-assessment-tool> [accessed 20th March 2020]

11. b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas

17. The development plan must include strategic policies to address each local planning authority's priorities for the development and use of land in its area.

Strategic Policies

20 Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for: a) housing (including affordable housing), employment, retail, leisure and other commercial development; b) infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat); c) community facilities (such as health, education and cultural infrastructure); and conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.

21. Plans should make explicit which policies are strategic policies. These should be limited to those necessary to address the strategic priorities of the area (and any relevant cross-boundary issues), to provide a clear starting point for any non-strategic policies that are needed. Strategic policies should not extend to detailed matters that are more appropriately dealt with through neighbourhood plans or other non-strategic policies. Strategic policies should look ahead over a minimum 15 year period from adoption¹⁴, to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure.

Maintaining effective cooperation

24 Local planning authorities and county councils (in two-tier areas) are under a duty to cooperate with each other, and with other prescribed bodies, on strategic matters that cross administrative boundaries.

25. Strategic policy-making authorities should collaborate to identify the relevant strategic matters which they need to address in their plans.

27 In order to demonstrate effective and on-going joint working, strategic policy-making authorities should prepare and maintain one or more statements of common ground, documenting the cross-boundary matters being addressed and progress in cooperating to address these.

171. Plans should... take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

174. To protect and enhance biodiversity and geodiversity, plans should... 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.

Table 1: Selected Strategic Planning extracts from the NPPF items in bold represent the author's emphases. (Source MHCLG, 2019 adapted)

4.9 Fitting these pieces together: [The 25 Year Environment Plan \(25YEP: HM Government 2018\)](#)

The 25YEP has a clear strategic planning remit and will be the first environmental action plan as envisaged under forthcoming Environmental legislation⁵. Currently, it is only a material

⁵ The Environment Bill is currently going through parliament and has been delayed until late summer 2021 .

consideration in planning matters. Although the 25YEP is signed up to by all government departments, its success depends on its mainstreaming into other government delivery programmes such as the NPPF, local industrial strategies and clean growth strategy as well as through delivery agencies such as Public Health England and Natural England. The summary components involve:-

- **Championing and using a “natural capital” approach** to protecting and enhancing the environment, by recognising its tangible and non-tangible economic benefits.
- Embedding an **‘environmental net gain’ principle** for development, including housing and infrastructure
- Supporting the development of a new Northern Forest
- **Mitigating and adapting to climate change** by doing “what is necessary to adapt to the effects of a changing climate”
- Expanding the **use of natural flood management solutions at the catchment scale.**
- **Developing a Nature Recovery Network**
- Greening our towns and cities : **.Creating more green infrastructure**
- Securing **clean, healthy, productive and biologically diverse seas and oceans**
- Consulting on setting up a new independent body to hold government to account and a **new set of environmental principles to underpin policy-making.**

The following environmental principles within the proposed legislation will have a key impact on strategic planning functions.

- The principle that environmental protection should be integrated into the making of policies;
- The principle of preventative action to avert environmental damage;
- The precautionary principle, so far as relating to the environment;
- The principle that environmental damage should as a priority be rectified at source and
- The polluter pays principle

4.10 Fitting These Pieces Together: [The Industrial Strategy \(HM Government 2018\)](#)

The Industrial Strategy (HM Government 2018) makes little reference to strategic planning for nature conservation explicitly, although it does reference the 25YEP. Significantly, it does mention natural capital and there is recognition of its asset value both to the environment and to economic growth in a long-term circular economy model.

“We will work not just to preserve, but to enhance our natural capital – the air, water, soil and ecosystems that support all forms of life – since this is an essential basis for economic growth and productivity over the long term” (p135).

“..carefully planned and targeted investments in natural capital – such as woodland planting, peatland restoration and wetland creation – can deliver significant economic growth, and generate returns of up to nine times the costs” (p148).

“We are committed to moving towards a more circular economy – to raising productivity by using resources more efficiently, to increasing resilience by contributing to a healthier environment, and to supporting long-term growth by regenerating our natural capital” (p148).

4.11 Fitting these pieces together: [Planning for the Future \(MHCLG, 2020\)](#)

In 2020 the government published a White Paper on proposals for a new planning system to address what it sees as an “*outdated and ineffective planning system*”. The changes proposed are significant with a shift towards zoning of development with local plans setting rules which will replace policies. Within an environmental focus there will be a move to standards and requirements (design codes) for development. This will work within specific areas/zones identified for growth, renewal and protection. Within the white paper there is limited mention of the core environmental terms except with reference to the ambition for delivery of environment net gain and (mandatory) biodiversity net gain in development with a focus on stewardship and protection of countryside and natural assets set within the wider challenges of climate change (par. 1.12). Of particular relevance to this paper is the proposed abolition of the duty to cooperate but with no specific proposals with what should replace it. Rather consultation question 7b asks “*How could strategic, cross-boundary issues be best planned for in the absence of a formal Duty to Cooperate*”.

4.12 Summary

This policy review has charted the different and rapidly expanding environmental concepts that now form part of England’s nature conservation lexicon and how they incrementally have been embedded into policy frameworks. Their largely separate treatment and championing is a cause for concern. Undoubtedly, NC has become most universally used and applied concept across all areas of policy, helped in part, by the work of the natural capital committee. However, its work has now finished in November 2020 potentially leaving a significant gap in cross departmental work relating to nature conservation. Nevertheless, considerable progress has been made in its mainstreaming in areas of development appraisal and planning through development of accounting tools. However, the overall policy approach has been characterised by fragmentation underlined by relatively weak policy wording in strategic/joint local plans and commitment when compared to other infrastructure and limited policy connections.

From this brief review it is important that ALL the environmental concepts introduced here are more joined up in future policy approaches and any decision support tools to have maximum impact in strategic planning.

The research underpinning this report was carried out during October 2019-March 2020 and thus before the Covid pandemic. Covid has shown how important nature is for wider publics and thus helps confirm the priority to fit these environmental pieces together. However, it also highlights a neglected component thus far relating to social justice and to ensure that access to nature is built into strategic planning for nature in a post-covid recovery plan ([Natural England 2020](#): Bateman and Zonnerman 2019).

5. Methodology

Building on the literature and policy review section, 10 interviews/workshops were held in early 2020 with academics, institutes, government departments and policy and practice participants in order to better understand current approaches, barriers and opportunities for strategic planning in general and nature conservation in particular (Table 2)⁶. In total some 100 participants were involved in the process. Whilst the NPPF/25YEP provisions were important, the discussions focussed on good practice approaches to strategic planning and the lessons learnt. Table 2 summarises the different case studies and the primary sources used.

Literature review	Comment Heavily focused to work done as part of mainstreaming green infrastructure project.
Policy review	Comment Key national policy documents summarised with respect to strategic planning components : NPPF 25YEP; Industrial Strategy
Interviews and workshop Case Study	Comment
1. South Downs National park (South Downs)	<ul style="list-style-type: none"> • Telephone interview undertaken with Director of Planning and Local Plan Manager following a workshop event.
2. Greater Manchester Combined Authority (Greater Manchester)	<ul style="list-style-type: none"> • Telephone Interview with Natural Capital Manager and EU natural capital project lead.
3. West of England Combined Authority (WOE)*	<ul style="list-style-type: none"> • Telephone Interview with Heads of Planning across WOE • Workshops with WOE GI working group (25 participants) • Meeting with WOE GI working group
4. Association of Directors of Environment, Economy, Planning and Transport (ADEPT)	<ul style="list-style-type: none"> • Workshop on strategic planning for nature with 30 Senior strategic planners and place makers. • The use of RUFshire hypothetical game used to elicit views
5. NERC Govt/Institute Workshop University of Northumbria (NERC)	Capturing voices of government and professional institutes and academics on strategic planning for nature (32 participants anonymous) 5 separate workshops <ul style="list-style-type: none"> • Biodiversity net Gain • Nature based solutions • The NPPF and strategic planning for nature • Making a business case for nature conservation • Taking a natural capital approach for strategic planning
6. Marine Management Organisation (MMO)	Interview/Discussion with 3 MMO staff.
7. Environmental Consultant (Land Use Consultant)	Telephone Interview with senior consultant working on Biodiversity Net Gain
8. Glasgow Clyde Valley green network (GCVGN)	<ul style="list-style-type: none"> • Interview • Presentation.
9. Cornwall County* Council (CCC)	<ul style="list-style-type: none"> • PERFECT Project • Workshops with Planning Officers.
10. Mainstreaming green Infrastructure project* (Mainstream GI)	This project on mainstreaming GI in the planning system had a series of past, present outputs which collectively help shape important insights. Partnership working on some <ul style="list-style-type: none"> • Workshops, Seminars and workpackages (2017-2020). Used as secondary data. • ICASP business case project

Table 2: Interviews/workshops details. * denotes some workshops/interviews undertaken prior to this project.

⁶ This involves workshops that were held specifically as part of this project but in conjunction with the wider NERC funded Mainstreaming Green Infrastructure project. It is important to note that the workshops were held in January 2020 before the White Paper proposals for planning reform.

From the recorded observations and written summaries, the outputs were subjected to a simple contents analysis to identify five core challenges/opportunities.

1. What does good strategic planning look like?
2. What are the key barriers preventing strategic planning for nature conservation?
3. How and when to identify the key opportunities for improved strategic planning?
4. How to adapt/use existing planning tools more effectively to optimise nature conservation outcomes?
5. How to improve communication and learning about nature conservation to multiple audiences and stakeholders?

These challenges are unpacked in the results section below which provides a narrative referencing workshop/interview material as justification⁷.

6. Results

6.1 What does good strategic planning look like?

All interview and workshop participants expressed concern that strategic planning for nature as a single goal was problematic as good strategic planning was more about integrating different sectors and agencies within a given plan rather than addressing a specific sector's need separately. Indeed, sectoral silos were seen to "*provide safe spaces for retreat when confronted with more 'uncomfortable' holistic dialogues and visions*" (Land Use Consultant).

Both ADEPT and NERC workshops agreed with Albrechts (2015) and RTPI (2015) strategic planning definitions, albeit it with a stronger connection to the impact of the political dimension (with a small and large p). Here the current government priority on delivering 300, 000 homes per year was seen as "*distorting the strategic planning process*" and "*starting from the wrong position*" (NERC). In addition, strong political champions and leaders were needed that could unite disparate interests across political divides from the outset to build long term resilience given the short term electoral cycles where political power changes hands, all too often stifling progress.

A key priority was to **identify and co-develop more holistic visions and narratives such as placemaking and placekeeping** (NERC: ADEPT; GCVGN), abundance (Land Use Consultant) and resilience (NERC) that also engage multiple publics. Here "*being able to articulate clearly your desired outcomes are fundamental but are often neglected*" (ADEPT). In [Greater Manchester, the nature conservation narrative was built around natural capital](#), reflecting its presence/influence in key national policy strategies (particularly the HM Government Industrial Strategy), whilst in [GCVN the concept of a green network](#) was used to help integrate environment, community and economy within their place-based approach.

Ultimately, any narrative needs a clear statement of vision and outcome(s), requiring an upfront and deliberative process of engagement across multiple publics to be successful (ADEPT/NERC). Care needed to be taken, however, to ensure that "*nature conservation interests do not just perpetuate their own silo*" (Mainstream GI).

Key to the successful delivery of all the ingredients above was the building and maintenance of effective and inclusive partnerships. Whilst, there is no shortage of partnerships that evolve, the key challenge is maintaining their membership as well as ensuring that all the legitimate cross-sector

⁷ No names of people are disclosed here. Rather the workshop is named for ethical and confidentiality reasons

voices are heard and represented (NERC; Mainstream GI). **Leadership becomes vital here; negotiating and managing the conflicts and micropolitics of the different agencies and personalities involved** (NERC).

6.2. What are the key barriers hindering strategic planning?

6.2.1 The need for exemplars and living laboratories

One recurrent barrier emerging from all workshops was the **perceived absence of any good strategic planning exemplars that captures what good looks like**. Whilst examples were identified (Manchester and South Downs) that captured pieces of the strategic planning jigsaw, there were few examples identified or known about that covered all the ingredients identified and more importantly contained data and information that could make them “living laboratories”. Here the lack of effective knowledge exchange and social learning opportunities were key barriers to overcome although the [Defra Pioneer projects](#) were potentially useful, but at the time of writing were not available⁸ (NERC: ADEPT; Land Use Consultant).

6.2.2 A disintegrated planning system

(Land Use Consultant; MMO, NERC; ADEPT)

England has multiple delivery systems within the planning system that currently operate differently over the same geographical spaces hindering its successful operation. For example, the NPPF shapes town and country planning responses; [Environmental Land Management Schemes ELMS](#) shape resource planning (agriculture and forestry); [OFWAT](#) and other regulators shape utility planning and [National Infrastructure Commission](#) is responsible for national infrastructure planning and building services have responsibility for [building regulations](#). These delivery systems rarely join up and have different governance frameworks (agencies, goals, objectives, functions and enabling legislation) which fragments planning across the same space. Furthermore, this creates a hugely complex institutional architecture and policy maze within which dedicated agencies diagnose and treat similar challenges separately (Land Use Consultant; MMO; NERC). For example, water and electricity companies have strict terms of reference which hinder more holistic solutions; e.g. well-designed transmission lines or payments for rewetting peatland (South Downs; NERC).

In this disconnected landscape, there are few (if any) agencies with integrated remits that are engaged with managing the bigger strategic picture at national and landscape scales. Some participants argued that local authorities/combined authorities were best placed to do this, but “*currently do not have the necessary resources and capabilities to do so*” (NERC). Equally the separate creation of [Local Enterprise Partnerships](#) and [local industrial strategies](#) with a focus on economic growth and [Local Nature Partnerships](#) with a focus on nature and natural capital were seen as part of the governance problem rather than the solution (NERC).

Viability, as currently defined in the NPPF was also seen as a barrier to strategic planning. Its economic focus on developer profits on a development was seen to compromise nature conservation interests when profits were threatened. Thus, rather than simply costing nature out, it was seen to make more sense to secure quality standards through levering other funding or investment (NERC). Benchmarks such as [Building with Nature](#) certainly help here raising the standards overall within what is a voluntary award scheme.

⁸ At the time of writing June 2020 still awaiting final report on the project. The interim report is available

6.2.3 Better strategic research to inform practice

(Mainstream GI: NERC)

There was an important disconnect identified between the needs of policy/practice and the wider academic research programmes that were being funded by UK Research and Innovation and other bodies on the natural environment. For example, new tools were being developed often without the involvement of key gatekeepers who currently manage existing administrative and decision management systems where they would be used (Mainstream GI). For many strategic planners facing limited resources, their need was for research to assess which current tools are fit for which purpose (Mainstream GI). Of particular concern was the need for funding for long term monitoring which was recognised as a key failing of current strategic planning practice. Ironically this is currently excluded from most UKRI research programmes funding criteria (Mainstream GI).

6.2.4 Strategic Planning and NPPF operation

(NERC, ADEPT)

The NPPF (2019 revised) is the key framework informing strategic planning policy and delivery. **However, current delivery of strategic planning was seen as being dominated by housing need assessments** (ADEPT; NERC; WOE; South Downs; Land Use Consultant). Furthermore, if a local authority fails to maintain a 5-year housing supply, then the plan-led system “*crashes and burns*” which can then compromise strategic plans/policies for biodiversity, climate change and health and wellbeing (Mainstream GI: NERC). **Furthermore, there was also significant concerns raised at the growth of permitted development, where the commercial to residential opportunity was seen to upset strategic planning goals for residential development without the necessary infrastructure and services in place** (ADEPT: Land Use Consultant; NERC).

6.2.5 Sustainable development and the NPPF

(NERC; ADEPT)

The NPPF proposes a definition of sustainable development with a strong economic component rather than adopting the more balanced ad peer reviewed UN Sustainable Goals (2015) (ADEPT: South Downs). Indeed, authorities without a finalised plan or 5 year housing supply have to pursue a sustainable development led system using the NPPF. Concern was apparent that although guidance stated that the NPPF is to be taken as a whole within its 235 paragraphs, the reality was more about participants cherry picking the pieces that most apply to their particular case.

6.2.6 Too many complex environmental terms

(ADEPT NERC; South Downs; Manchester: Land Use Consultant).

The growth in new environmental terms was seen as a key barrier, hindering wider public and political understanding and, arguably, acceptability (NERC; Land Use Consultant). This problem is often replicated across other policy domains, each developing and increasing their own specialist vocabularies which exclude rather than unite. An antidote to this is to identify “hooks” and “bridges”⁹ to help start meaningful and inclusive discussions from which more holistic narratives might emerge (Land Use Consultant; ADEPT; Mainstreaming GI).

⁹ Hooks : identifying key policy or legislative term, duty or priority that relate to a particular user group which can be used to translate key environmental narratives and ‘bridges’ identifying key terms, concept or policy priorities that are used and readily understood across multiple groups and publics) as translational mechanisms for mainstreaming environmental narratives. See Scott et al., 2018 <https://www.sciencedirect.com/science/article/pii/S0264837716306421>

6.2.7 Greenwash and environmental myths.

The ambition and aspiration about the natural environment was recognised in many development plans and supporting guidance, but the problems was that it was rarely backed up with strong enough policy wording/actions. Whilst ambition and aspiration are necessary factors in charting the desired direction of travel, they do need backing with resources if they are to be delivered, particularly when there are other competing policy priorities (NERC; Mainstreaming GI; WOE). It is clear from assessing multiple local plan policies that nature conservation policy wording is often weak (outside statutory protected sites) enabling nature conservation objectives to be somewhat easily overridden (Mainstream GI). Moreover whilst nature recovery networks have potential to assume strategic importance akin to housing market areas it was felt that such areas would not have statutory protection (NERC).

The NERC workshop also identified two powerful myths that potentially threatened good strategic planning for nature. **The first surrounds the fallacy of quantity based environmental metrics such as tree planting** metrics as identified in 25YEP to address the climate change emergency and help biodiversity. Here, many ambitious tree planting targets have been publicised which commit local authorities to planting millions of trees across the country. Yet concern was expressed over whether they have costed future maintenance regimes in, leading to possible failures through lack of management. *"The numbers involved will be very expensive and seem more about a short term being seen to do something factor than good strategic planning per se"* (NERC). Furthermore, there was more support voiced for managing our existing woodland stocks better rather than leaping on a dodgy planting metric (NERC), where there was also a risk that tree planting may not be in the best places and may even create net environmental losses.

The second fallacy surrounded the danger of strategic planning processes being built from simply fusing previously agreed separate authority plans, projects and programmes together rather than rebuilding them at the landscape scale. At one workshop it was observed that some GI projects were being advanced individually within separate local authorities rather than as strategic projects developed jointly (Mainstream GI).

6.3 How and when to identify the key opportunities for improved strategic planning?

This section translates the barriers into opportunities using policy hooks, tools and case studies of good practice.

6.3.1 How to maximise early engagement for nature conservation issues?

Early engagement over all key strategic issues affecting an area with all the right stakeholders together was seen as critical in any good strategic planning process (ADEPT; NERC; South Downs). This necessarily involves an evidence-led dialogue across all policy domains to avoid the dangers of "*policy on presumption*" (Mainstream GI). In terms of best available nature conservation evidence encountered, Greater Manchester have an [open access ecosystem services opportunity mapping framework](#) and natural capital assessment; South Downs have used [ECOSERV mapping assessment of ecosystem services](#) with assessment of environmental opportunity from a detailed landscape character assessment (e.g. Pollination: Figure 6). However, it was also vital to have the necessary staff who could assess, interpret and communicate this evidence to external stakeholders and elected members. Unfortunately, many local authorities do not have such ecological expertise and hence rely on external consultants (NERC).

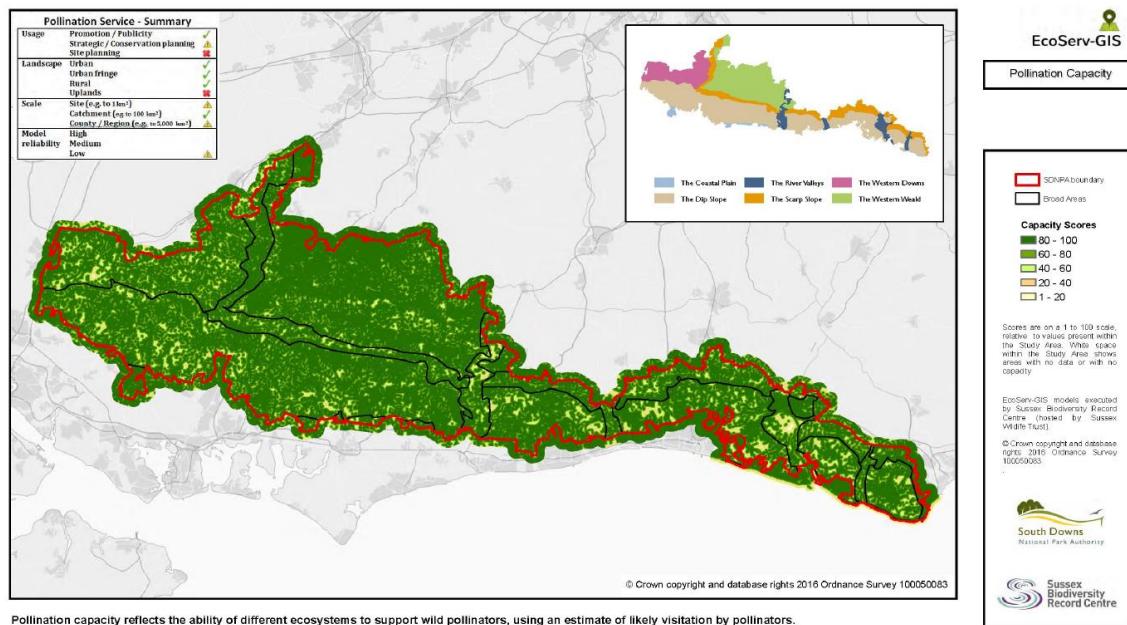


Figure 6: Pollination opportunity map : ECOSENV

6.3.2 Duty to Cooperate (DTC)

For some respondents the revitalisation of the duty to cooperate (NPPF par24-25) represented an important policy opportunity space to enable core nature conservation issues to be discussed and mainstreamed collectively at the early stage of plan design¹⁰ (ADEPT: NERC: Mainstream GI).

However, other participants believed that the duty to cooperate had become too toxic as a replacement for regional planning and that alternative approaches were desirable based around more holistic strategic partnerships (ADEPT)¹¹.

With the UK parliament having declared a climate emergency (November 2019) and with overwhelming evidence of a biodiversity emergency, there was clear support in the workshops for government to embed climate and biodiversity as core strategic issues in all strategic/local plans alongside housing and economic growth (ADEPT, Manchester, MMO, NERC, WOE; South Downs).

The [South Downs National Park DTC statement](#) within their finalised local plan (2019) was widely recognised as an exemplar for nature conservation by workshop participants (Scott et al., 2018: NERC; Mainstream GI). Each DTC theme (below) has generated new dialogues across the 15 local authorities within the park that involved different geographies (e.g across river basins; BAPS, green infrastructure networks) and agencies. Furthermore, each DTC theme was supported by the production of non-statutory plans and guidance to help improve overall delivery.

- Conserving and enhancing the natural beauty of the area.
- Conserving and enhancing the region's biodiversity (including green infrastructure issues).
- The delivery of new homes, including affordable homes and pitches for Gypsies, Travellers and Travelling Showpeople.
- The promotion of sustainable tourism.
- Development of the local economy.

¹⁰ This workshop intelligence was before the recent planning white paper.

¹¹ Since the workshop in January 2020 planning white paper has recommended the replacement of the duty to cooperate.

- Improving the efficiency of transport networks by enhancing the proportion of travel by sustainable modes and promoting policies which reduce the need to travel

Figure 7 shows how water resource management which informs a [river basin management plan](#), might in turn inform a DTC discussion in the Humber basin. In theory such a plan would necessarily involve multiple authorities not just immediate neighbours. **However, such thinking in strategic planning at this scale was seen to be rare and river basin management plans were viewed as a missed opportunity as potential delivery vehicles for strategic planning (NERC).** To address this requires a significant culture change from traditional DTC discussions with new and inclusive dialogues across multiple strategic issues. Here arguments for natural based regional planning were advanced but not seen as universally workable (NERC).

Map of the river basin district and catchments and flood risk areas

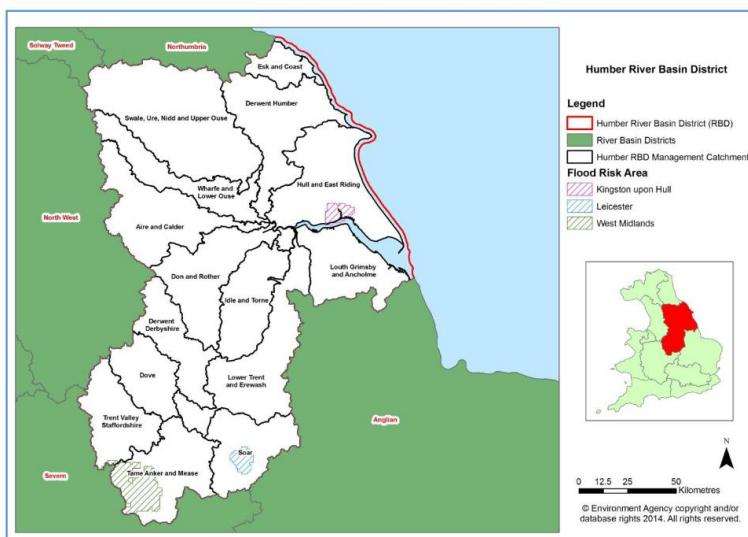


Figure 7: The Humber River Basin Local Authorities

6.3.3 Viability Assessments

(NERC: WOE: Mainstream GI)

Viability was seen as a key opportunity space for strategic planning which should be considered from the outset at the strategic/local plan stage and not at the individual application level. “Where viability cannot be achieved, this should trigger pump-priming of funding rather than driving down the local provision as this usually impacted negatively on environmental interests which were seen as costs/burdens to be reduced” (NERC). Some participants also argued for viability assessments to be extended to include environmental limits associated with climate change and natural capital tipping points although this proved controversial in discussions (NERC).

Viability is also a key factor in the current economic templates where business cases for major developments are made. This formed a dedicated break out group in the NERC workshop. The current forms used by Combined Authorities religiously follow HM [Treasury Green Book](#) five case

model (Figure 8) which does not readily take account of the business case for nature¹². Currently the environment case features within the strategic case on the form which is disconnected from the economic, commercial and financial case. Furthermore, the [NCC \(2019\)](#) discussion paper found little evidence that Natural Capital was being used systematically in any policy appraisal, challenging often made claims for mainstreaming (NERC; WOE).

□

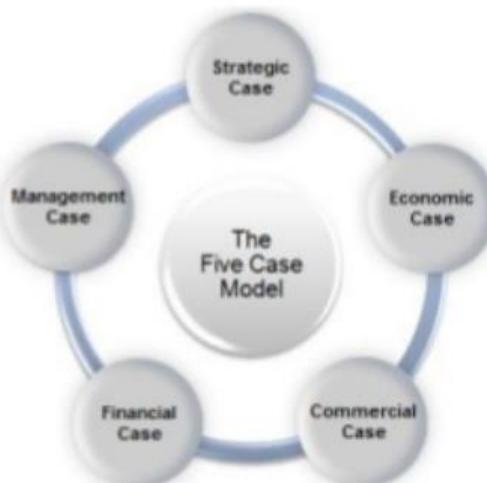


Figure 8: Treasure Green Book 5 Case model (HM Treasury 2019)

A good example of employing just such an approach is found in the [South Downs local plan policy on ecosystem services \(SD2\)](#) which formed part of a wider policy ethos to use the ecosystem approach (Figure 9)¹³. Whilst this policy came from a comprehensive ecosystem service mapping exercise, there was also an important role played by landscape character assessments which provided the place-based contexts within which policy would be executed. SD2 is a higher-level policy (one of only four), which all developments have to meet. The policy reframes the environment within a more positive development-led narrative based on the capacity and capability of development proposals to deliver key ecosystem services as part of a case for support. Crucially, it requires developers and householders to detail both the positive and negative impacts on identified ecosystem services explicitly addressing viability, trade offs and net gain potential. This approach was also seen as effective in enabling biodiversity and wider environmental net gain to be made explicit in developments at whatever scale. Net gain can be seen here as a suitable proxy for a more holistic viability definition. Key to the success of this policy is the development of good plain English guidance for [developers](#) and [households](#) to help them understand how to meet this policy in their applications.

¹² However Annex 2 does recognise value of natural capital

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf

¹³ Background papers to the formation of the policy are here <https://www.southdowns.gov.uk/wp-content/uploads/2018/04/Core-05-Ecosystem-Services-Background-Paper-April-2018.pdf>

Core Policy SD2: Ecosystem Services
<p>1. Development proposals will be permitted where they have an overall positive impact on the ability of the natural environment to contribute goods and services. This will be achieved through the use of high quality design, and by delivering all opportunities to:</p> <ul style="list-style-type: none">a) Sustainably manage land and water environments;b) Protect and provide more, better and joined up natural habitats;c) Conserve water resources and improve water quality;d) Manage and mitigate the risk of flooding;e) Improve the National Park's resilience to, and mitigation of, climate change;f) Increase the ability to store carbon through new planting or other means;g) Conserve and enhance soils, use soils sustainably and protect the best and most versatile agricultural land;h) Support the sustainable production and use of food, forestry and raw materials;i) Reduce levels of pollution;j) Improve opportunities for peoples' health and wellbeing; andk) Provide opportunities for access to the natural and cultural resources which contribute to the special qualities. <p>2. Development proposals must be supported by a statement that sets out how the development proposal impacts, both positively and negatively, on ecosystem services.</p>

Figure 9: South Downs national park (2019) Ecosystem Services Policy

6.3.4 Biodiversity Net Gain and Nature Recovery Networks (NERC; ADEPT; Land Use Consultant: Greater Manchester).

The proposed statutory requirement for BNG in the Environment Bill (2020) was generally welcomed across all participants and was recognised as a priority tool for strategic planning. Here there was a commonly encountered view that having a regulatory aspect helped “*level the playing field*” (ADEPT) However, protections needed to be in place to prevent site damage before net gain assessments were made compromising biodiversity gains (NERC). **Furthermore, there was concern that development should follow the mitigation hierarchy which, all too often was “*being bypassed for candidate sites as reflected in sites to address pollution in the Solent harbour*”** (South Downs). However, there was also concern about its primacy in some urban areas which currently have low biodiversity value (Mainstream GI).

Nature recovery networks advanced in the 25YEP were seen as important strategic opportunity spaces within a wider green infrastructure network to help inform the best strategic decisions about net gain sites, notwithstanding Bateman's and Zonnerfield' (2019) concerns about social justice implications. In most cases attention for BNG is logically centred on new developments. However, enhancement of natural capital assets and ecosystem services in existing developments is critical and often overlooked in part due to a major funding gap (Greater Manchester). The **IGNITION** project in Greater Manchester is seeking to address this through identification of different financing schemes across public and private sectors. In Birmingham this has been recognised with ecosystem service mapping of demand and supply across six key ecosystem services being used to create a composite map identifying areas where demand outstrips supply thus providing clear evidence for targeted investment. Such outcomes enable a more social justice led approach to BNG (Figure 10).

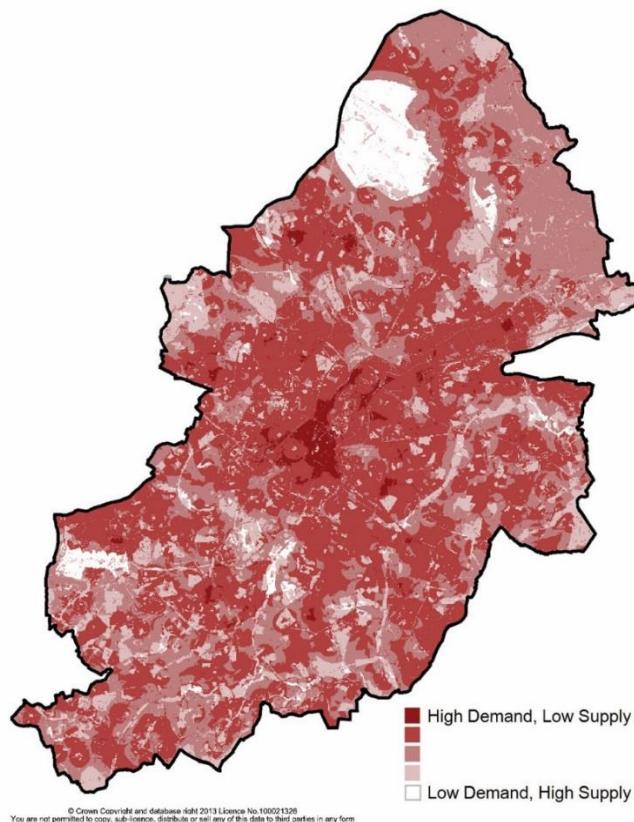


Figure 4: Birmingham City Council: Ecosystem Service Challenge map (Source BCC, 2014: Appendix 2)

6.3.5 Green infrastructure and nature based solutions (WOE; Greater Manchester: GCVGN)

Green infrastructure was recognised as potentially a powerful strategic planning tool for delivering positive nature conservation outcomes. Currently a GI network is identified, protected and enhanced within many local/strategic plans. The policy context for the GI network is important in safeguarding its integrity and also identifying opportunity areas for enhancement as depicted in the [Newcastle Gateshead Joint Local plan](#) (Mainstream GI)¹⁴. Here the multifunctional nature of GI was recognised as important for delivering on climate change flood and drought regulation; biodiversity, recreation and wellbeing and access networks.

The WOE Combined Authority GI working group have co-designed a set of GI principles to inform strategic project development (Figure 11). Crucially, any application for financial support requires a rationale for how a project addresses the principles set within climate and biodiversity emergencies and net gain considerations. The resultant [GI strategy](#) (2020-2030) provides important non statutory guidance about how the principles and outcomes can be achieved. The supporting action plan integrates wider activity to address green infrastructure related requirements of Government's 25 Year Environment Plan and Environment Bill (2019/21) including; developing the West of England's Nature Recovery Network, exploring an approach to develop a West of England Natural Capital Account, understanding ecosystems services and meeting the requirements of Biodiversity Net Gain thus joining up the key environmental concepts unpacked earlier.

¹⁴<https://www.gateshead.gov.uk/article/3251/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle-2010-2030>
See page 109 [accessed 20th March 2020]

THE APPROACH



Figure 5: West of England Combined Authority (2020) Key Principles and Outcomes for green infrastructure p8

The [Glasgow and Clyde Valley Green network](#) have used the concept of a green network to help deliver improved strategic planning (Figure 12). The resultant “[Blueprint](#)” is a framework for the creation of a strategic Green Network for the benefit of the people, economy and wildlife in Glasgow City Region. By focussing on improving connectivity they have enhanced their strategic Green Network for the benefit of the people, economy and wildlife in Glasgow City Region. There are two components: an Access Network; facilitating the off-road movement of people between communities through greenspace and a Habitat Network; facilitating the movement of wildlife through the landscape. The Strategic Access Network is comprised of more than 200 routes over 500 miles, but only 60% of the routes are within the Green Network. The resultant Blueprint identifies opportunities to address the on-road sections of the network. The habitat network comprised nearly 40% of wildlife habitat, but these habitats are not well connected. The Blueprint identifies nearly 800 targeted opportunities to better connect Habitat Networks

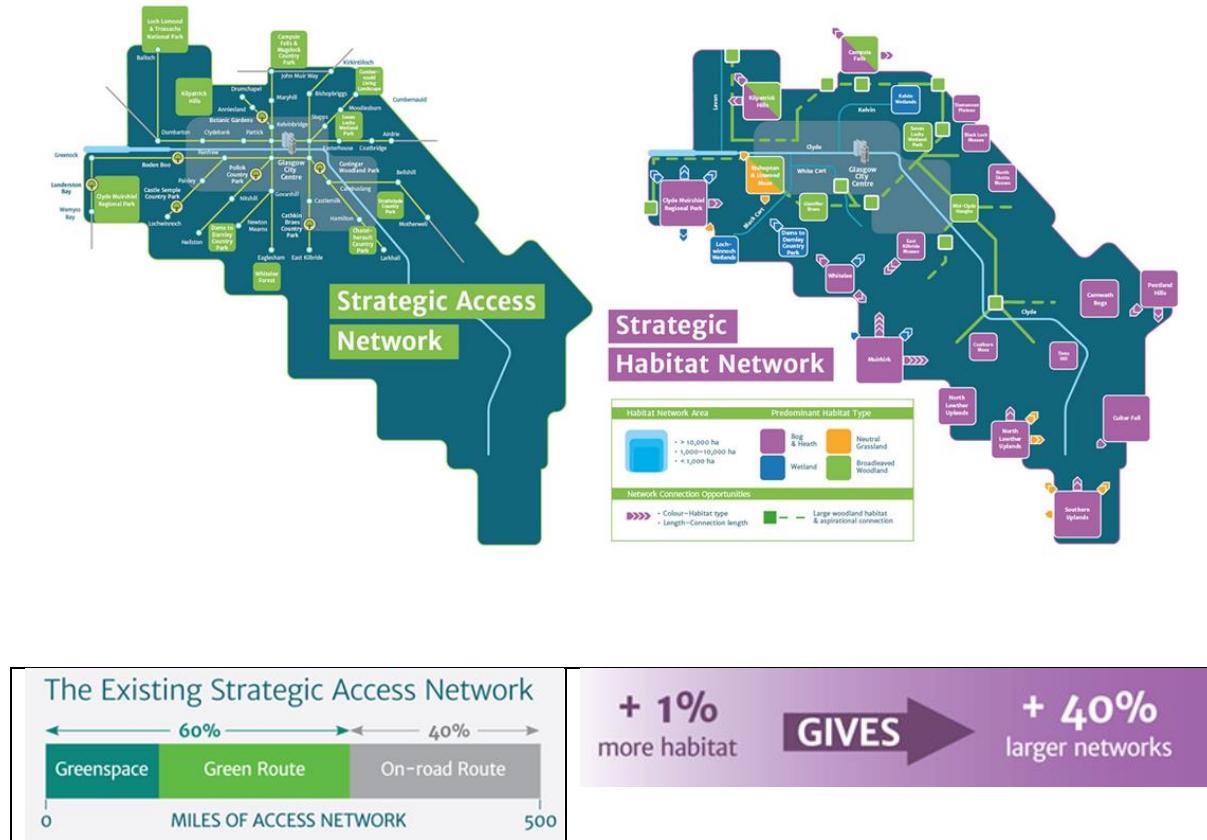


Figure 6: The Blueprint: Glasgow Clyde Valley Green Network Source GCVN 2020¹⁵

The blueprint provides a holistic narrative around sustainable inclusive economic growth and increased health and wellbeing using the concept of placemaking;

- a successful, sustainable place where people want to work and live healthy lives
- a natural, resilient place that improves and protects the environment
- a connected place providing opportunities for exercise and improvements to mental wellbeing
- a place that encourages active travel contributing to a low carbon economy

Delivery is secured via a variety of mechanisms; planned development, Public Sector Programmes, investment in infrastructure and funding opportunities. Key to its impact is the research and evidence base that underpins it; its strong business case and its ease of visual understanding.

¹⁵ <https://www.gcvgreenetwork.gov.uk/what-we-do/our-blueprint>

6.3.6 Building an integrated natural capital narrative (Greater Manchester: NERC)

The [Greater Manchester Natural Capital Group](#) (NCG) was established in 2013 as a result of UK government's 2011 'Natural Environment White Paper' and acts as the Local Nature Partnership for the city region. **Natural capital has become the core narrative for building their strategic planning work; from evidence to plans to delivery to evaluation.** The evidence base involved a [natural capital account](#) undertaken across the whole area and [extensive mapping and assessment](#) of key ecosystem services identifying opportunities with the resultant outputs all being open access.

This robust evidence base feeds into a governance framework where the NCG reports to Green City Region Partnership Board which, in turn, reports back to GMCA. Each leader of the 10 local authorities has a portfolio on these different groups forging a strong partnership approach with political leadership. Securing the active support and championing of Andy Burnham as Mayor from the outset was also critical with a [5 Year Environment Plan](#) launched in 2019 with a commitment to be carbon neutral by 2038. A "Call to Action" enabled a partnership approach to flourish with sign ups demonstrating commitment and enthusiasm. Consequently, challenge (task and finish) groups were set up for each priority area in the 5 Year Environment Plan.

NCG has an action plan and reports back to Green City Partnership Board on delivery of those actions. Actions show who delivers across stakeholder partners and the progress they are making. Here the creation of action plans with clear targets and accountabilities provides good practice. Furthermore, there has been the production of a [natural capital investment plan](#)¹⁶ to help lever the much-needed finance to deliver on natural capital. **One key benefit that has helped the greater Manchester experience is the Defra pioneer programme which allowed them to test out new approaches to the delivery and mainstreaming of natural capital.** This example shows the importance of making connections within and without the formal planning system as well as wider social learning through experimentation in EU funded projects to maximise its strategic potential.

6.4 How to adapt/use existing planning tools more effectively to optimise nature conservation outcomes?

All the previous examples (South Downs, GCVGN, West of England, Birmingham and Greater Manchester) illuminate the delivery of improved strategic outcomes for nature conservation. **Here the way that tools have been used in combination or bundles mixing regulatory, incentive and participatory tools is important. This is a key finding as rarely can any tool in isolation act as a magic bullet.** However, drawing from the barriers section there was recognition that too much research was generating new tools rather than assessing what tools are currently fit for purpose and how existing tools could be adapted for delivering better nature conservation. We now focus on some of these that were identified as offering significant strategic planning potential for nature conservation (ADEPT)¹⁷.

6.4.1 Impact Assessments and Appraisal (MMO; NERC; ADEPT)

¹⁶ See <https://issuu.com/greatermcr/docs/gm-natural-capital-investment-plan-?e=0> [accessed 20th March 2020]

¹⁷ Note that we would include in this section Biodiversity and Environment net gain but these have been addressed previously

One key decision support tool that helps deliver strategic nature conservation outcomes relate to the family of impact assessments (Strategic Environmental Assessment, Habitats Regulatory Assessment, Species Regulatory Assessment and Sustainability Assessments). **These assessments relate to plans, projects, policies and/or programmes. However, there was agreement that these tools were not being used to their maximum potential** (NERC; ADEPT). First, they were often viewed as hurdles to overcome rather than as a tool to improve plan/policy outcomes. Second, and closely allied with this, they often became reduced to tick box exercise. Third, due to cuts in local authority resources, they were often consultant-led, separated from other strategic planning work that the impact assessments were supposed to inform. Fourthly, they were often misused to confirm a preferred policy option rather than to help shape the best policy and planning response. Finally, problems 1-4 seem to combine to result in poorly developed strategic/local plans being found unsound by the Planning Inspectorate due to failings in the impact assessment process; often revolving around an absence of suitable alternatives.

Given the importance of ecosystem services and natural capital within most evidence bases an opportunity was identified to embed a natural capital approach within the scoping exercise of impact assessments. Building from this, maps and statements of environmental opportunities would represent a useful positive aspect here. This is something that the [NERC funded SWEEP project](#) has attempted to do by working with planners in Cornwall County Council. Previous work undertaken for the UKNEAFO project also provided guidance as to how to incorporate ecosystem services into [EIA/SEA](#) (Scott et al. 2014).

6.4.2 Community Infrastructure Levy (CIL) and Payment for Ecosystem Services (PES) schemes (WOE; South Downs)

For many participants the community infrastructure levy represented a missed strategic opportunity for improved nature conservation outcomes (ADEPT; Mainstream GI; NERC; South Downs). **CIL does represent a valuable strategic planning tool as it can be used to invest in infrastructure unrelated to a proposed development and pooled to optimise societal benefit.** This represents a significant difference from Section 106 planning agreements which are tied to a specific development (ADEPT). Participants felt by focussing on the climate, biodiversity and now health emergencies, they now represent powerful political and policy hooks for CIL investment. For example, individual local authorities within WOE Combined Authority have reported a significant use in CIL associated with green infrastructure and nature-based solutions due to their declaration of a climate emergency¹⁸ (WOE). Furthermore, [South Downs National park uniquely have an approved CIL](#) which is focused on nature conservation and biodiversity outcomes which delivers over £1 million per year.

[Payment for Ecosystem Service Schemes](#) (Defra, 2013) also enable improved strategic environmental planning utilising market-based approaches. Building from the mapping of ecosystem services and assessment of opportunity areas now evident in many local plans and across the case studies presented here, payments could be made for improving ecosystem services such as the rewetting of moorlands; tree planting and [visitor payback schemes](#). Hitherto most PES schemes have been based on flood regulation but there is considerable scope for more schemes at the landscape scale.

¹⁸ The CIL regulation 123 list has been deleted under recent changes requiring statements of annual infrastructure funding

6.5 How to improve communication and learning about nature conservation to multiple audiences and stakeholders?

The language and vocabulary around nature conservation is expert-led, unduly complex and contested, even within the nature conservation sector itself (Mainstream GI; ADEPT). So, it does become important to communicate clearly what good nature conservation looks like. To this end, a useful exercise was undertaken by Cornwall County Council across several different development sites including the development of [West Carglaze garden village](#) (Cornwall [PERFECT](#))¹⁹. Previous public and internal feedback had expressed significant dissatisfaction with the coherence and operationalisation of plan policies, so rather than update the plan policies they opted to produce a development on the ground to collectively understand what good looked like and then work back from that to understand what policies were needed to deliver this outcome. Key to the process was the bringing together of key agencies across the council and within the development sector to create an exemplar by co-operation and collaboration. Indeed, the subsequent policies focussed as much on the process by which good planning occurred as the outcome.

In 2016 [Defra created four Pioneer projects](#), working in different strategic contexts to improve the natural environment and to help inform the development and implementation of the Government's 25 Year Environment Plan (25YEP). The four Pioneers, comprising a Catchment Pioneer (in Cumbria), a Landscape Pioneer (in North Devon), a Marine Pioneer (in Suffolk and North Devon) and an Urban Pioneer (in Greater Manchester), were designed as flagship initiatives to trial new and innovative approaches in the application of the natural capital approach, demonstrate integration for planning and delivery, and improve understanding of funding opportunities. From each pioneer there has been significant learning and it is disappointing that the lessons learnt report is not yet in the public domain to help inform this report. However, the pioneers have enabled risk taking and innovation to become embedded in policy and practice, which will provide important lessons for the future trajectory of strategic nature conservation. **One key finding emerging thus far has been the importance of having effective governance structures in place for delivering good nature conservation outcomes (MMO).**

7. A Strategic Planning Policy Route Map for Nature Conservation

This section translates the key policy and practice principles and opportunities emerging from the workshops, interviews and policy/literature reviews into a route map with associated guidance to help strategic planning in general and nature conservation in particular. The key stages are presented in an ‘idealised’ linear policy cycle sequence with a supporting narrative and justification (Figure 13)²⁰. This model cycle is now unpacked with a supporting commentary, justification and lessons learnt. **From the workshops and interviews it is clear that attention should be prioritised to build strategic planning for nature conservation into existing statutory processes and tools (impact assessments) such as strategic plans or joint development plans underpinned by strong national guidance.** Supporting strategies such as green infrastructure strategies, nature recovery networks, natural capital assessments and net gain all have a key role to play informing evidence bases and building a picture of the current state of the environment.

¹⁹ See <https://www.cornwall.gov.uk/environment-and-planning/planning/eco-communities/projects/west-carclaze-garden-village/> [accessed 20th March 2020]

²⁰ The policy map is for illustrative purposes only as in reality policy is much more messy.

7.1 Developing a shared vision and outcomes

Understanding and clarifying what exactly you are seeking to achieve underpins an effective strategic planning process. What does success actually look like? This is a fundamental question but it is rarely discussed enough in terms of specific outcomes and indicators to measure progress within a managed and inclusive dialogue.

7.1.1 What needs to be done?

The vision should denote a general direction of travel related to a specific place context. It needs to command significant stakeholder traction across all policy domains (economic, social and environmental). **Consequently, the outcomes should be identified and co-designed within a carefully managed deliberative participatory process with defined actions to enable future engagement within stages 2-6 of plan development.**

The vision should not be framed within a narrow nature conservation silo. Rather it should be built within a more inclusive and positive narrative within which nature, society and economy combine to design, develop and deliver complementary policy interventions. Hooks²¹ (e.g. placemaking and placekeeping) and bridges²² (e.g. climate change, health and well-being and green recovery) are useful mechanisms to achieve this, but ideally should emerge as part of the participatory processes themselves.

The vision and outcomes emerge from the building of an effective partnership (whether new or existing) as the key delivery vehicle. This partnership should be inclusive and have on board all the different planning interests that impact upon the space being planned for.

7.1.2 Key lessons from interviews/workshops

- The vision should be built into existing statutory processes associated with development plans (strategic and local plans);
- the vision and resultant process needs to be built up from a holistic consideration of the strategic scale and not from a simple integration of the plans within the constituent authorities;
- the process by which the vision is developed is just as important as the outcome. Here there is a need to move away from the idea that nature conservation issues are the preserve of the local nature partnership;
- hence, it is important that the vision is co-produced and inclusive but this can take time and considerable up front investment;
- it is important at the outset to identify bridges and hooks to build traction outside environmental interests and break down usual sectoral silos;
- any partnership or governance structure should have senior political and operational leaders involved from the outset. Their support is key to ongoing success;
- conflict is going to happen in this process and should not be prevented but carefully managed; and
- at this initial stage it is important to identify indicators that will enable progress to be monitored.

²¹ Hooks may be defined as translating nature to a key policy or legislative term, duty or priority that relate to a particular user group

²²Bridges may be defined as translating nature to a term, concept or policy priority that is used and readily understood across multiple groups and publics

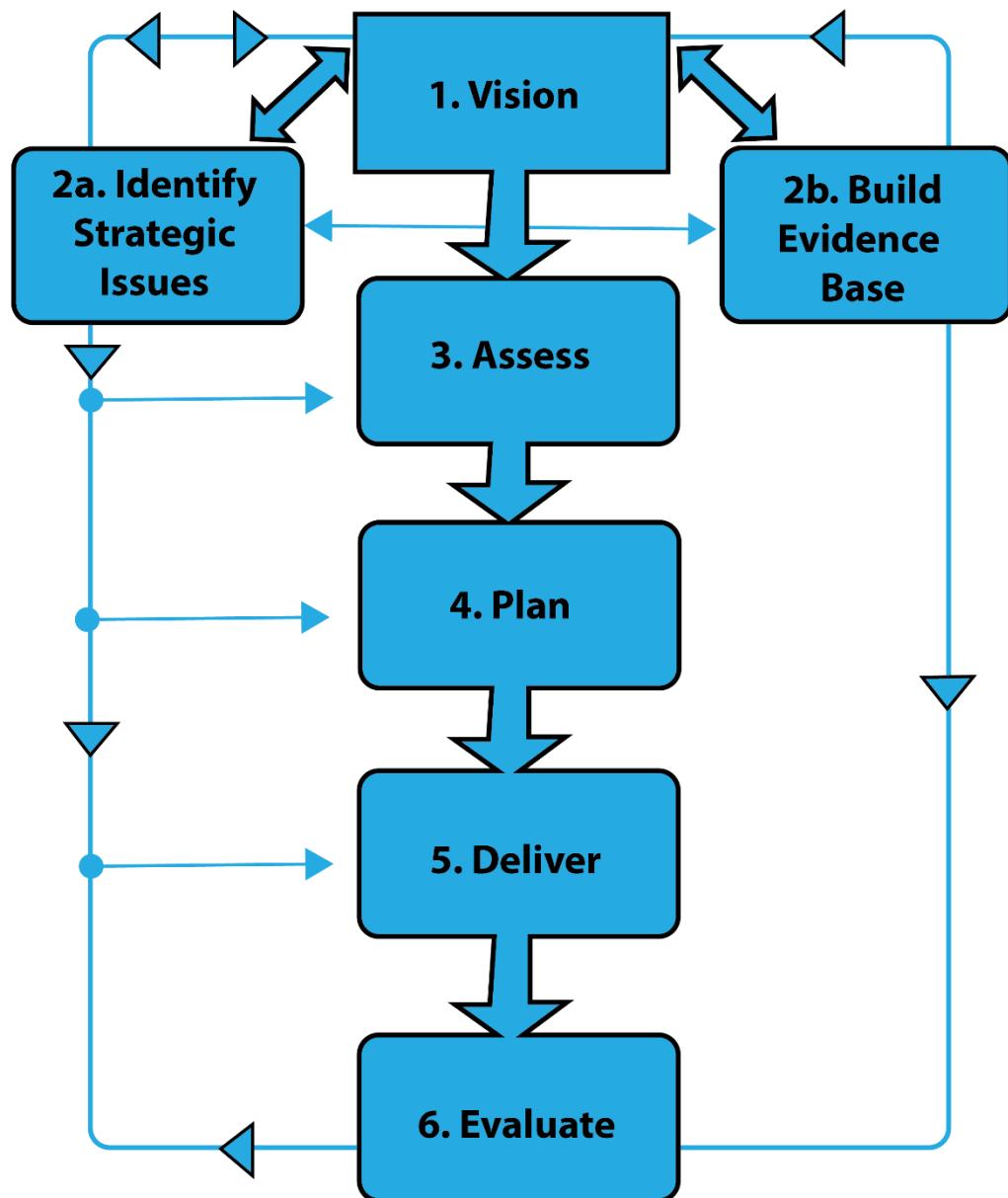


Figure 13: Strategic planning for Nature Conservation

7.2a Identify the key strategic issues for nature conservation that matter

It is important that the partnership includes and works with all key stakeholders across economic , social and environmental agendas so as to identify ALL relevant strategic cross boundary issues within the context of the plan. Here the plan needs to be bounded spatially and functionally to avoid unnecessary duplication with national and local responses. This phase is akin to the scoping exercise of an impact assessment.

7.2.1 What needs to be done?

Discussions concerning nature conservation should involve relevant personnel across the social, economic and environmental agendas in order to better identify and understand interrelationships

and cross sector opportunities to join up planning responses. Here membership needs to involve all the different planning sectors that are currently disintegrated: town and country planning, resource planning, utility and infrastructure planning. For example, ensuring new housing and industrial development areas are protected (flooding and drought) by regulating ecosystem services with good transport and ecological connectivity. **However, the inclusion of these new areas will necessitate new landscape-scale dialogues involving different partners than usually associated with housing markets.**

A strategic planning exercise involving nature conservation would necessarily require new dialogues across different geographies and agencies in response to ecosystem services potential at the landscape scale. These discussions should help build and consolidate the governance structures in stage 1.

Using the current NPPF (MHCLG 2019), the [statement of common ground](#) can operate as a useful hook to reinforce the vision and outcomes from stage 1. Looking further into the future with the loss of the duty to cooperate there is a strategic planning void which may be best addressed by integrating local nature partnerships with local enterprise partnerships and health and well-being boards to join up environmental, well-being and economic agendas.

7.2.2 Key lessons from the interviews/workshops

- The climate, biodiversity and health emergencies provide important political “hooks and bridges” for dialogues linking economic, social and environmental agendas as strategic issues;
- work outside usual silos at the strategic scale building on the partnership developed in Stage 1;
- ensure you have design, develop and update a robust evidence base to enable evidence-based policy discussions and identify data gaps/weaknesses that need filling;
- invest upfront in a series of participatory discussions with both usual and unusual built and natural environment professional and wider stakeholders on all the key strategic issues that have been identified;
- avoid siloed discussions but use facilitators to manage conflict effectively; and
- engage across all the separate planning delivery systems in England at present to ensure that town and country planning, resource planning and wider land use planning and infrastructure planning join up. The scale(s) will depend on the issues being investigated and can be seen as an accordion.

7.2b Build a robust evidence base that is maintained and updated

The evidence base is about collecting the necessary evidence to inform a strategic plan. This should not be just related to a desired goal and policy option but should identify alternative options. Evidence should include relevant secondary and primary data sources. Any data gaps should be identified within a plan for collecting missing information. The scope and suitability of data (and any proxies) needs to be accepted within the partnership.

7.2.3 What needs to be done?

The evidence helps inform stakeholder discussions in subsequent stages of strategic plan assessment and development. **It is important that the evidence base is proportional and not just a domesday (one off) snapshot with significant funds made available for updating at least every 5 years as part of ongoing evaluation practices.**

The evidence base for nature conservation ideally should be based upon the 25YEP natural capital approach involving an assessment of the supply, demand and potential for key ecosystem services across the area. A natural capital account can also help provide an estimate of the current value of environmental assets (both financial and no financial outputs) in an area which is useful political tool.

A detailed and up to date landscape character assessment with statements of environmental opportunity can help inform a comprehensive spatial portrait across the plan area allowing bespoke area-based policies to follow.

The evidence base should also collect qualitative data based on peoples use and value of nature for health and wellbeing.

Collectively the evidence base needs to act as a baseline to accurately capture the current state of the environment and to measure progress within future policy interventions. This links in with the evaluation stage. It also should inform any associated SEA processes and should not be seen as an additional extra.

7.2.4 Lessons learnt from interviews/workshops

- The evidence base should also identify current key gaps in data and limitations;
- the evidence base needs to have sufficient resources for updating and needs to identify key indicators for evaluation of policy interventions;
- the evidence base needs to be proportional to the challenges;
- identifying the key ecosystems and their critical limits of functioning (critical natural capital) is a combined starting point for strategic planning not in response to a planned development;
- this phase should inform the SEA process and not be seen as an additional burden.
- Key exemplars are provided by [South Downs](#) and [Greater Manchester Combined Authority](#).

7.3 Assessment

Assessment involves the analysis and interpretation of evidence collected in the evidence stage. The assumptions and limitations of any assessment techniques should be made explicit. Where possible, a mixed method approach should be used to improve triangulation. The results of this stage should indicate a clear and justified pathway for the strategic plan in keeping with SEA processes. .

7.3.1 What needs to be done?

The data from the ecosystem services, natural capital and landscape character assessment can be assessed in the following ways.

- The identification of nature conservation (ecosystem services) limits, needs and opportunities mapped spatially to identify suitable areas for development and to identify areas for environmental improvement.
- The evidence base can be used explicitly in plan development but also to inform impact assessments as currently carried out for SEA, HRA and SA processes.
- The assessments should be used to identify, manage and enhance a green infrastructure network/green network at a landscape scale with potential improvement areas identified and prioritisation of key benefits that need to be secured.

- Building from the green infrastructure network, nature recovery networks can be identified maximising habitat connectivity on key BAP species and /or habitats and opportunities for biodiversity net gain and wider environmental net gain.

In establishing the core nature conservation priorities for an area the trade offs in terms of other ecosystem services , social and economic losses should be made explicit and justified.

7.3.2 Lessons learnt from interviews/workshops

- The assessments need to be transparent with policy priorities and necessary trade-offs made explicit and justified in line with the evidence base;
- the assessments need to be updated regularly as part of ongoing review and evaluation;
- ensure that key messages and data from assessments are presented to the partnership and wider publics and
- the assessment process should show the different alternative options and their impact as well any preferred option.

7.4 Planning

The planning phase translates the assessment options/actions into a SMART (specific, measurable, attainable, relevant and time-bound) policies for successful delivery. For the strategic plan it is important to identify: what needs to be done, how it will be done, who will do it and by when. The outputs of this stage need to be communicated with those who are charged with the delivery phase. **It is important that those involved with delivery have been involved in preceding stages of the process, ideally from the outset. .**

7.4.1 What needs to be done?

The planning stage involves translating the assessments into the design and production of strategic priorities and policies. Prior to the development of policies in a plan a set of guiding principles can help mainstream investment in nature as evidenced by the West of England Combined Authority; educate, embed, collaborate, communicate, evidence and invest (WOE 2020).

It is important that any policies for the natural environment are not just siloed in the environment chapter but mainstreamed across other economic and/or social sections or elevated to higher level policies as reflected in the South Downs SD2 example.

Building from the spatial portrait in 6.2, the development of area-based policies can reflect distinctive needs and opportunities across a particular area. For example, where there is a mismatch between demand and supply for key ecosystem services. See the case study of Birmingham (p26-27).

Specific policies are needed that protect and enhance individual components of the natural environment (e.g. natural capital, ecosystem services, green infrastructure, nature recovery networks, biodiversity net gain, wider environmental net gain and landscape scale conservation) but also uses the links and interrelationships between them.

Policies need to cover the multiple functions that nature provides across key ecosystem services but equally they need to have strong policy wording in order to be actioned and not trumped by other interests. However, their framing is important; they need to be positive and supportive stressing the need to deliver high quality environments rather than being a constraint to

overcome. [The mainstreaming green infrastructure policy assessment tool](#)²³ contains examples of high scoring policies that have been used in approved national and local plans across the UK.

As well as policies to inform strategic plans, there is also an opportunity to improve environmental mainstreaming; to develop other supporting non statutory strategies associated with green infrastructure, biodiversity, climate change, transport, health and wellbeing and crucially feed into the wider local industrial strategies. However, these should be joined up as an integral part of the strategic plan process resisting the temptation to create additional silos.

7.4.2 Lessons from interviews and workshops

- Use evidence-based policies;
- policies should be positively framed as far as possible supported by guidance to help its delivery (see South Downs National Park p25);
- avoid silo-based nature conservation policies; ensure mainstreaming wherever possible;
- review how the different environmental pieces fit together within specific areas across the plan; and
- bespoke policies are needed to address different priorities across a particular plan area.

7.5 Delivery

The delivery stage is about making the strategic plan a reality on the ground through development management processes and investment strategies. The previous stages should have involved those responsible for delivery in order to ensure that the plan is reality-proofed and ‘shovel-ready’. It is also important to build in flexibility in the delivery phase to accommodate unexpected issues.

7.5.1 What needs to be done?

Key to delivery is ensuring that there are sufficient staff resources on the ground to deliver what is being proposed. Ideally, they should also have been involved in the previous stages of the plan development to ensure join up and limit any possible policy implementation gap.

Action and investment plans should identify and prioritise short, medium- and long-term interventions using the assessment and plan results maximising integration across traditional sectoral silos. Plans also should detail the lead agencies/individuals responsible with clear accountabilities and roles.

Ensuring that chief executive and elected representatives have leadership roles is important for effective delivery and often the creation of task and finish groups is a useful way of ensuring that groups have the right people in them rather than being the preserve of any one department.

Delivery is also about responding to pragmatic opportunities that present themselves. For example, landowners may offer significant opportunities for experiments and adaptation (South Downs). To that end there is a need to identify and undertake risky projects that may fail in order to improve learning about what works and what doesn’t. In areas of uncertainty like climate change this is a vital consideration, but often there is a risk averse approach culture which needs to change. Here the role of the [Defra pioneer projects](#) was important for understanding how to implement a natural

²³ Within the tool you open the excel spreadsheet and then click the tab for policy examples. This gives good and weak examples across the full range of nature conservation policies although its central focus is on green infrastructure.

<https://mainstreaminggreeninfrastructure.com/>

capital approach in different landscapes. The lessons from these projects will be appended to this report as and when they become available.

7.5.2 Lessons learnt from interviews/workshops

- Delivery is evidence based but also opportunity based;
- getting the governance arrangements right is crucial for effective delivery but we currently lack good models (South Downs National park offers an exemplar);
- resources for delivery need to match what is being proposed;
- those who deliver need to be involved in the plan design; and
- delivery needs to be prioritised into short, medium and long timescales.

7.6 Evaluate.

The evaluate stage is not the final stage of this strategic planning process; indeed it should be the starting point in responding to the question: what does success look like? Thus, it is an integral process that should be embedded in all previous stages. From the indicators identified within the vision/evidence phases to specific interventions emerging from the analysis, it provides feedback loops to re-shape or review the vision and outcomes. **Responsibility for monitoring progress should be shared and issues should be addressed before they become problems in a more substantive 5 year review.** Evaluation should not be confined to targets and should incorporate both qualitative and quantitative data crucially including views of those involved or affected by the plan.

7.6.1 What needs to be done?

The evaluate phase is not a standalone phase at the end of a plan cycle. It must run through all previous stages reflecting a cyclical process of ongoing review and adjustment.

Within each phase metrics involving both quantitative and qualitative examples should be used as appropriate and should themselves be co-produced by the partnership rather than imposed.

The metrics should be under continuous review in order to understand where outcomes are being compromised. It is particularly important that the necessary staff and financial resources are made available for evaluation and monitoring as this is often neglected and given the development of new policy approaches associated with net gain and nature recovery networks, we need to understand how well they are working in order to refine approaches. This becomes particularly important when nature conservation outcomes are long term. This in turn will inform and improve evidence bases. It is here that partnerships with university research can be most beneficial.

7.6.2 Lessons learnt from interviews/workshops

- Evaluation does not come at the end of a process; it is ongoing;
- metrics need to be coproduced by the partnership and involve the use of qualitative and quantitative metrics; and
- participants in the process should feed into evaluation processes and metrics.

7.7 A Nature Based Planning approach

Drawing from the above Figure 14 shows how a nature-based approach can be embedded in the strategic planning process.

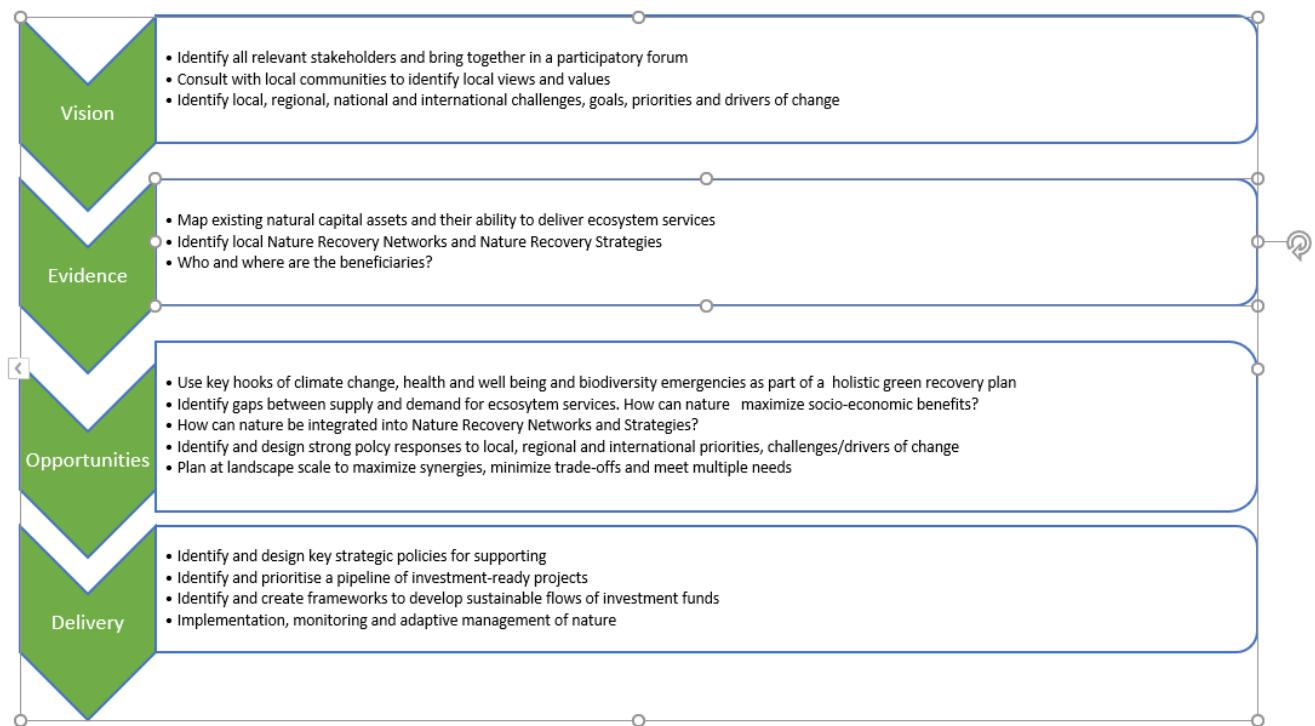


Figure 14: Embedding a Nature Based Solution approach to the strategic planning process.

8. Recommendations

The final section of this report draws together the review, results and route map in a series of recommendations for combined/local authorities. The scope of this review does not lend itself to making specific recommendations to national government. However, the workshop results do signal significant dissatisfaction with the current operation of the NPPF with regard to nature conservation issues which should inform current debates about wider planning reform, ensuring that any future planning system better mainstreams nature into policy and decision making.

8.1 Strategic Planning is a process and an outcome.

It is recommended that combined/local authorities focus equally on the process by which strategic planning takes place as much as the outcomes. In so doing, provision needs to be made for up-front investment to manage a deliberative participatory process involving partnership building and securing the necessary representation and commitment from all key interests. Allied with this it is important that strategic planning for nature conservation does not take place in its own silos but is situated within a much wider cross policy dialogue.

The main ingredients of the process are identified in Section 6 which provides a preliminary road map.

8.2 Mainstreaming the natural environment in strategic planning

It is recommended that combined/local authorities make greater efforts within the strategic planning process to mainstream nature conservation interests moving away from reliance on their environmental credentials alone to highlight, through their evidence bases, their contribution to generating economic, community and health and well-being benefits. Plans should have strong and

positive environmental references and policies outside the environment chapters. Climate change, green recovery, health and well-being provide important bridges to translate nature conservation priorities whilst placemaking, placekeeping and biodiversity net gain provide powerful political hooks to enable this. Whilst each of these concepts can be developed in isolation there is emerging evidence that working in combination may achieve better results. Here the linkages and interdependencies between climate change, post COVID-19 recovery and health and well being with a desire for better and stronger nature recovery networks may lead to improved outcomes and better nature based solutions.

8.3 Nature conservation as a strategic issue within the NPPF

Building on 7.2, it is recommended that combined/local authorities use the opportunities provided by biodiversity, climate change and Covid (health and well being) to strengthen the case for explicit inclusion within the NPPF duty to cooperate discussions and associated statements of common ground. Here the goal is to secure environmental priorities and opportunities into the strategic planning process from the outset. Such ambition needs to be embedded into new governance arrangements associated with reform of the planning system. Here the integration of local nature and local enterprise partnerships and health and well-being boards offers a possible long term way forward.

8.4 Strategic planning for nature needs to be strategic; working at the landscape scale

The RTPI (2015) recognised the need for strategic planning to be strategic and work across boundaries so as to avoid duplication. It is recommended that combined/local authorities use the landscape-scale as the focus for framing and bounding nature conservation evidence and issues making these sources open access within more publicly accessible interactive maps. It is also important that ALL the ingredients of landscape scale; spatial, multifunctional, temporal, governance and emotional are used collectively in the strategic planning process. There are important opportunity spaces to use existing tools such as impact assessments to realise this potential.

8.5 Strategic planning works best with bundles of tools and strong governance and leadership

There are many tools to help deliver strategic planning outcomes. It is recommended that combined/local authorities focus on existing bundles of tools rather than rely on one tool as a magic bullet to achieve their outcomes. Here combining regulatory, incentives and participatory tools produce the most resilient outcomes. However, this needs a strong governance framework that can unite disparate and competing interests across political divides. In particular natural capital assessments, ecosystem assessment opportunity mapping, impact assessments, biodiversity net gain, community infrastructure levy, and wider payment for ecosystem services schemes were identified as suitable candidates for closer scrutiny and use in combination as strategic tools. Concomitantly, there is a need to identify effective nature conservation champions at both officer and elected member level to address the political dimension.

8.6 Harvesting the growing environmental vocabulary

There is a rapid growth in new nature conservation concepts which poses significant challenges for combined/local authorities to respond in a fast-changing policy environment with limited resources. Currently natural capital features most prominently but it is important for strategic planners to understand how ALL these concepts relate to each other and to translate them into effective policies

which effectively support each other. Crucially, policies should be framed positively with strong wording with associated guidance to help their implementation²⁴.

8.7 Monitoring success

Within a strategic planning process there is an urgent need for effective long term monitoring of policy interventions. Combined/local authorities need to invest in enough resource to do this. There is also a role of Research Councils and other funders to help support this with stronger impact agendas as well as resource long-term monitoring programmes.

8.8 Building a strategic planning observatory of good practice

Perhaps key to this brief is the perceived current deficit of good practice examples that are delivering on all the core ingredients of good strategic planning. It is recommended that combined/local authorities consider setting up digital observatories to capture and record good practice, ideally making data available as demonstration projects. Within this project the South Downs National Park, Birmingham City Council, Greater Manchester Combined Authority, West of England Combined Authority and Glasgow and Clyde Valley Green network have all featured as case study exemplars and it is important that such experiences are more effectively captured and monitored to prevent them becoming simply domesday snapshots which stifle learning and knowledge exchange.

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²⁴ Recently Scott et al (2020) have produced a working paper on how these concepts all fit together set within the development plan process <https://mainstreaminggreeninfrastructure.com/project-page.php?understanding-our-growing-environmental-vocabulary-in-england>

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