



**RTPI  
Practice  
Advice**

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# **STRATEGIC ENVIRONMENTAL ASSESSMENT**

Improving the effectiveness and efficiency of  
SEA/SA for land use plans

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# Introduction

This practice note provides advice for planners who are involved in preparing land use plans on how strategic environmental assessment / sustainability appraisal (SEA/SA)<sup>1</sup> can be carried out more effectively and efficiently. Our advice focuses on the particularly influential or problematic stages of SEA/SA. It emphasises that SEA/SA is a positive tool supporting the preparation of local and neighbourhood plans, which play such an important role in shaping the future of our environment.

This note explains the key components of SEA/SA<sup>2</sup>. It assumes that SEA/SA will continue to be required post Brexit under the Aarhus Convention, and the Espoo Convention and its Protocol on SEA. This advice note is based on existing European and UK Government guidance and applies to England, Scotland, Wales and Northern Ireland.

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<sup>1</sup> SEA is required for certain plans and programmes, including local plans and some supplementary planning documents and neighbourhood plans, by the European SEA Directive of 2001 and implementing regulations (e.g. Environmental Assessment of Plans and Programmes Regulations 2004 in England). SA is required for English and Welsh local plans under the Planning and Compulsory Purchase Act, 2004, and for Northern Ireland plans under the Planning Act (Northern Ireland) 2011. For plans that require both SEA and SA, a joint SEA/SA is normally carried out.

<sup>2</sup> See [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7657/practicalguidesea.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf), [www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal](http://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal), relevant planning regulations, and Appendix A of this note.

## Key points for SEA/SA<sup>3</sup>

- SEA/SA aims to make a plan more sustainable and more responsive to its environmental effects, by identifying the plan's significant impacts and ways of minimising its negative effects;
- It also documents the 'story' of the plan – why the plan is the way it is and not something else. This is for the public, statutory consultees and examiners/inspectors;
- SEA/SA can best influence the plan at the alternatives and mitigation stages, so these require particular focus;
- SEA/SA should focus on key issues and effects, scope out insignificant effects, and not include unnecessary information.

# 1. Integration with decision-making

## 'Telling the plan-making story'

The SEA/SA 'tells the story' of the plan-making process: it documents how planning decisions have been made, and how they have been informed by environmental and sustainability concerns. This is important for the public, the examination/inquiry, and the post-adoption statement. The SEA/SA report should discuss:

- How the reasonable alternatives were identified and assessed, why the preferred alternatives have been chosen, and why others were rejected;
- What changes have been made as a result of the SEA/SA;
- What comments the statutory consultees and the public have made on the scoping (and any assessment reports), and what changes have been made in response to these comments.

It may be useful to consider "Where were we, where are we now, where will we be, and how did we get from one to the other?"

## Who should carry out the SEA/SA?

SEA/SA is one of the main documents scrutinised at the plan examination/inquiry, and should be a key input to the plan-making process. It is a legal requirement that can be subject to challenge, so

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<sup>3</sup> This is document constitutes RTPI practice advice only and should not be taken to constitute legal advice.

professional and legal advice may be needed to ensure risks are understood and minimised. Although there are no formal legal requirements around production of an SEA (unlike an EIA), the identification of issues and potentially key sensitive receptors, reasonable alternatives, choice of preferred alternatives, documentation of the plan 'storyline', and agreement on mitigation measures require the depth of insight and understanding that come with relevant professional expertise. We recommend that SEAs and SAs should be carried out by chartered town planners (or their equivalent in other related environmental professions) or by staff under their supervision.

Elected members, statutory consultees and key planning officers (notably development management) can be involved in deliberating on the pros and cons of alternatives through SEA/SA workshops. Politicians' local knowledge can be a positive addition. Involving politicians in the SEA/SA of crucial and controversial planning decisions is particularly helpful.

## Integration with other forms of appraisal

The SEA/SA report can act as an 'umbrella' report, which summarises and integrates the findings of other assessments and studies including:

- Strategic Housing Market Assessment (SHMA); Housing Needs and Demand Assessment (HNDA) in Scotland;
- Flood risk assessment / sequential test;
- Green Belt assessment to show that all other alternatives have been considered;
- Equalities assessment;
- Health assessment;
- Air quality strategy or action plan;
- Landscape and/or heritage sensitivity study.

This 'integrated effect assessment' is already routinely carried out in some authorities, notably those in London. Habitats Regulations Assessment (HRA) should not be integrated with SEA/SA, because the test that it uses (a precautionary approach to the integrity of internationally important nature conservation areas) is quite different from those of SEA/SA. However the SEA/SA should summarise the HRA findings as part of its assessment of effects on biodiversity.

## Timing

SEA/SA scoping should begin early in the plan-making process. There are at least two assessment stages, shown in Figure 1: of reasonable alternatives (e.g. issues and options draft plan) and the draft plan. There may be additional assessment stages, e.g. the preferred draft plan.

Bring together a 'scoping' evidence base early in the plan-making to identify significant problems, act as a base for future assessment and monitoring of effects, and inform the identification of reasonable alternatives. Consult statutory and other consultees, leaving at least five weeks for their response. Update the evidence base again nearer the end of the plan-making process. This could be in the form of a stand-alone scoping report or an update in the SEA/SA report.

Identify, assess and then choose the preferred reasonable alternatives. The SEA/SA can help to identify reasonable alternatives/options to demonstrate the different ways of achieving the plan's objectives. The alternatives must be assessed, keeping in mind the scoping evidence, before the preferred strategy is determined. It is good practice to consult on this alongside the issues and options plan.

Assess the draft plan once it is ready for consultation. Focus on mitigation of significant negative effects. The SEA/SA report should inform the consultation and plan finalisation. It can also be helpful to add additional steps, e.g. appraise working drafts of the plan. Consultation on this alongside the draft plan is required.

Finalise the SEA/SA report in time to inform deliberation by politicians. Assess any significant changes made to the plan during that deliberation.

Publish the SEA/SA report alongside the draft plan<sup>4</sup>.

Figure 1. Stages in SEA/SA

<sup>4</sup> For Neighbourhood Plans in England, this means the Regulation 14 version of the plan. For Local Plans, the situation is less clear. The Local Planning Regulations state that the SA report should be published at Regulation 19; however, this is too late to give the public "an early and effective opportunity within appropriate time frames to express their opinion on the draft plan [and SEA/SA report]" as required by Article 6.2 of the SEA Directive. There is a strong case to publish the SA report alongside a Draft Plan at Regulation 18, if it is to fulfil its public participation remit.

## 2. Scoping

The scoping process is integral to the SEA/SA process. The issues identified as requiring particular attention should inform the plan-making process, including the subsequent SEA/SA assessment stages. They should inform the framework of SEA/SA objectives that will be used to assess the effects of the plan policies and proposals.

### General principles

**The ‘so what’ test** - Many current scoping reports for land use plans are encyclopedic, and contain a great deal of information that is not directly relevant to land use planning decisions, e.g. detailed employment categories, breakdown of educational attainment, waste recycling levels. Instead, the scoping report should focus on key issues for the plan, and that the plan can have a significant effect on. Planners should be able to explain why scoping information is included: ‘so what’. Where issues are scoped out of the assessment, an explanation should be provided of why this has been done.

**Spatial information** - Many of the key decisions for a local plan will be spatial: Where should housing go? Where are additional services needed? What areas should be protected? The scoping report’s information should be similarly spatial. As a minimum, maps of constraints and opportunities should be prepared, see (Figure 2)<sup>5</sup>.

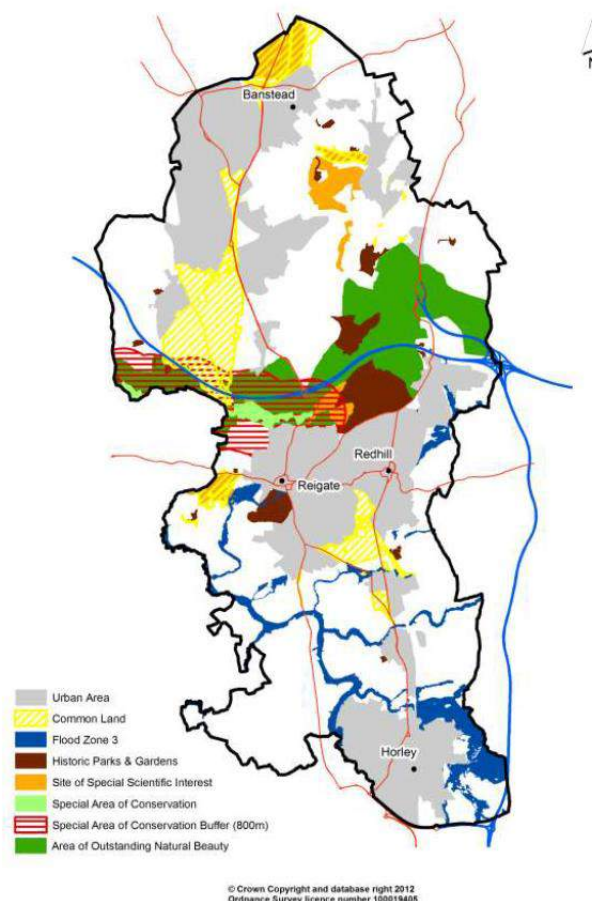


Figure 2. Reigate: Map of designated areas that ‘do not have a realistic chance of being developed’<sup>6</sup>

<sup>5</sup> MAGIC [www.magic.gov.uk](http://www.magic.gov.uk) provides a way of doing this if the authority does not have a GIS system.

<sup>6</sup> [www.reigate-banstead.gov.uk/download/downloads/id/2774/sustainable\\_urban\\_extensions\\_stage\\_1\\_technical\\_report.pdf](http://www.reigate-banstead.gov.uk/download/downloads/id/2774/sustainable_urban_extensions_stage_1_technical_report.pdf)

The level of detail should correspond to the level of detail of the plan<sup>7</sup>. A plan-wide focus may be adequate for general plan policies, but for site-specific or neighbourhood plans there should be a 'site' level of detail, including constraints maps.

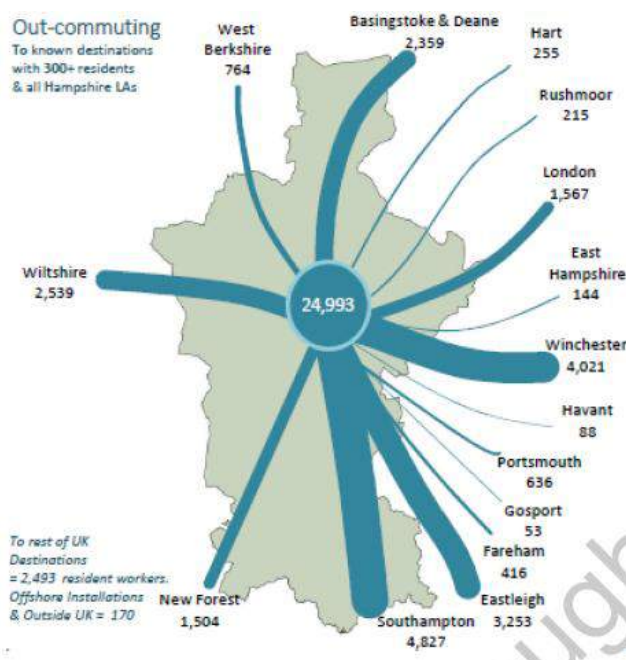


Figure 3. Test Valley: Out-commuting (beyond the plan boundary)

**Going beyond the plan boundary** - The SEA/SA should set the plan in its wider context, for instance: Where do residents shop and work? What is the housing market area? Where does drinking water come from? Does the plan area have a strong functional relationship with any nearby conurbations? The SEA/SA should identify issues beyond the plan area in the scoping report, and should later assess the plan's effects beyond the plan area. Maps (Figure 3) may be helpful in describing such effects.

The SEA/SA scoping report and the consultation on it provides an opportunity for local authorities to contribute to the 'duty to cooperate' by engaging with other authorities where there are cross-boundary issues.

**Challenging the policy team to think about what they do and don't know** - Although planners should be aware of most of the issues facing their authority, the scoping stage may reveal issues that are important in plan-making, but planners were not aware of. For instance, in South-East England the quality of water in chalk streams are major environmental issues which may require the construction of (and planning for) new reservoirs and wastewater treatment facilities. For instance:

**Test Valley: Water resource data (extract)<sup>8</sup>**

"The amount of water available for additional abstraction within the catchments of the Rivers Test and Itchen is documented through abstraction licensing strategies. The most recent abstraction licensing strategy indicated that at low flows there would be either restricted water available for licensing or that water would not be available for licensing for the majority of the

<sup>7</sup> Article 5.2 of the SEA Directive states that "the environmental report... shall include the information that may reasonably be required taking into account... the contents and level of detail in the plan..."

<sup>8</sup> [www.testvalley.gov.uk/assets/attach/4967/Scoping%20Report%202017%20FOR%20CONSULTATION.pdf](http://www.testvalley.gov.uk/assets/attach/4967/Scoping%20Report%202017%20FOR%20CONSULTATION.pdf)

catchment... additional provisions will need to be planned for in a water supply area serving part of the Borough (within Southern Water's Hampshire South water supply area)."

## Policy context

The policy context aims to show how the plan is affected by, and affects, other policies, plans, programmes and initiatives. Simply listing policies does not do this; nor does providing giant appendices of policy analyses without a focused discussion of their implications for the plan.

Planners should use the 'so what' test to focus on a limited number (say a dozen) of key policy documents<sup>9</sup>. They should consider what those documents say that the plan must/should do and must/should not do, e.g. it must provide for objectively assessed housing need, and it should not locate development in Flood Zone 3.

## Environmental/sustainability context

This section needs enough information to provide a baseline against which the plan's effects can be assessed and monitored, and to identify existing problems. It should focus on what the plan can deliver, e.g. for a Local Plan the section on education might focus only on where any new secondary schools are needed. Planners should otherwise scope things out, with an explanation of why.

The Authority Monitoring Reports, Action Programmes or other forms of assessment – flood risk, habitats, equalities etc. – and the SEA/SAs of higher level plans where they exist (e.g. for the Welsh national development framework) can provide much of this information.

GIS is very useful at this stage, since it can easily show the spatial dimension of environmental/sustainability issues at any scale<sup>10</sup>. However, familiarisation with the area through site visits is always useful.

The section on the likely future without the plan is important, especially for the later consideration of cumulative effects. It should discuss any changes expected in the absence of the new plan. These should not be general statements (e.g. "without the new plan, traffic would get worse"), but rather should document:

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<sup>9</sup> For instance in England this should include the NPPF and Defra's 25 year environment plan when this is published; in Wales this should include the Wales National Development Framework, Natural Resources Policy and Area Statements when published.

<sup>10</sup> However Historic England require more than a GIS based approach to assessing effects on historic environment, since this does not deal well with setting – see Appendix A.



- **Projects that are likely to occur anyway** (e.g. new bypass, new retail centre in the adjacent local authority);
- **Underlying trends** (e.g. generally improving air quality, declining biodiversity); and
- **Expected changes** in population and housing/employment demand.

This will probably require consultation with adjacent authorities and other agencies.

**Fareham: Likely future without the plan (extract)<sup>11</sup>**

“If the Local Plan Review is not adopted, it is assumed that relevant policies in the current Local Plan and National Planning Policy would apply. Traffic flow and congestion in and around the borough may increase as the economic climate improves and South Hampshire’s population increases. This could lead to worsening air quality due to pollutants associated with transport, particularly within the Fareham Spatial Planning Area and areas adjacent to the M27 and A27, although these could be offset to an extent by planned transportation infrastructure improvements.

Fareham Borough Council previously identified the following local developments which may have an effect on air quality in the local authority area in the future, and which will be taken into consideration in future Local Air Quality management reports:

- Industrial and commercial development at the Solent Enterprise Zone at Daedalus airfield; and
- The planned residential, commercial and industrial development north of Fareham at Welborne.”

Where a future plan or project is uncertain, and future conditions could vary significantly depending on whether it is implemented or not, ‘with plan/project’ versus ‘without plan/project’ scenarios could be run. This could be the case, for instance, for a new distributor road, which would facilitate future development<sup>12</sup>.

## Existing problems

The legal requirement is to describe “existing environmental problems... in particular, those relating to European designations of Special Areas of Conservation for Habitats and Species (SACs) and Special Protection Areas for Birds (SPAs) and other areas of environmental importance”<sup>13</sup>, so the scoping report should identify these as a minimum. Planners should avoid generic lists of ‘sustainability issues’ such as “encouraging more sustainable methods of travel” or “supporting

<sup>11</sup> [www.fareham.gov.uk/PDF/planning/local\\_plan/DSP3-SA.pdf](http://www.fareham.gov.uk/PDF/planning/local_plan/DSP3-SA.pdf)

<sup>12</sup> See *Heard v. Broadland* in Appendix B

<sup>13</sup> Annex I(d) of the SEA Directive

economic growth”. They should consider this section as a way of identifying problems so that the new plan can avoid exacerbating these, and ideally to start thinking of alternative ways of solving the problems. The potential for cumulative effects (e.g. climate change, effect on ecosystem services) should also be identified here.

## SEA/SA framework

The careful selection of the SEA/SA objectives that comprise the SEA/SA framework, both in terms of overall number (generally 10-15 objectives) and how they are applied, can reduce the amount of unproductive assessment and reporting. SEA/SA objectives should also aim to elicit meaningful information, which will help to choose between alternatives and inform the plan preparation.

The local authority’s existing SEA/SA framework generally acts as a starting point for this stage, otherwise existing frameworks can be adapted. The topics from the SEA Directive<sup>14</sup> must either be covered by the framework or scoped out with an explanation. The SEA Directive also requires a discussion of ‘interrelationship between the above factors’: this can cover a wide range of topics such as transport, noise, resilience and ecosystem services<sup>15</sup>. Sub-objectives and decision aiding questions can provide more clarity and detail for the assessment stage.

For a given topic (e.g. economy), the SEA/SA framework should be narrowed down to only those issues that are within the plan’s remit (e.g. employment areas). SEA/SA objectives should generally focus on outcomes (e.g. improved air quality) rather than outputs (e.g. new guided busway): the latter might be a plan objective, whilst the former is a sustainability objective.

The SEA/SA framework should consider a topic in a holistic way rather than only focusing only on designations (e.g. Sites of Special Scientific Interest or Areas of Outstanding Natural Beauty), or what is easiest to measure. It should aim for enhancement where the current situation is problematic. Where cross-border effects are likely to be significant, the SEA/SA framework should be designed to identify and evaluate these.

SEA/SA topics can be scoped out for sites, individual policies, or clusters of policies (Figure 4). For instance, all housing sites could be assumed to have the same approach to design or waste management, so these topics could be scoped out for the site assessment although not for the plan as a whole.

<sup>14</sup> Biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, including architectural and archaeological heritage, landscape, the interrelationship between the above factors.

<sup>15</sup> In Wales, ecosystem resilience should be tested as a way of showing conformity with the Environment (Wales) Act 2016 (Article 6 in [www.legislation.gov.uk/anaw/2016/3/pdfs/anaw\\_20160003\\_en.pdf](http://www.legislation.gov.uk/anaw/2016/3/pdfs/anaw_20160003_en.pdf)). The Scottish Borders Land Use Strategy SEA - [www.scotborders.gov.uk/download/downloads/id/2217/lus\\_strategic\\_environmental\\_assessment.pdf](http://www.scotborders.gov.uk/download/downloads/id/2217/lus_strategic_environmental_assessment.pdf) focuses on assessment of the ecosystem services.

Objective/sub-objective	Reason for exclusion
Objective 1 To secure provision of sufficient good quality housing to meet objectively assessed needs	The allocation of housing sites by definition secures the provision of sufficient good quality housing, therefore, all sites would score significantly positive in response to this objective.
Sub-Objective 2.3 To reduce levels and fear of crime and anti-social behavior	The Core Strategy requires all sites to have regard to 'Secured by design' principles, therefore, the sub objective has no effect.
Objective 9 To reduce consumption of natural resources and manage their use efficiently	It will not be possible to tell if the objectives have been achieved through the Housing Site Allocations DPD alone. Assessment will be made through the determination of a planning application which will need to have reference to Core Strategy policy CS15 that it has specific regard to sustainable construction and energy efficiency.

Figure 4. West Berkshire: SEA/SA objectives scoped out for Housing and Gypsies, Travellers and Travelling Showpeople Sites (extract)<sup>16</sup>

Where a plan requires only an SEA under the European SEA Directive as opposed to both an SEA under the SEA Directive and sustainability appraisal under relevant UK legislation there is no need to have an equal number of social, economic and environmental topics: the framework should simply cover the full suite of sustainability issues relevant to the plan<sup>17</sup>. Where existing environmental conditions are poor, or where the effect of future development may be significant, the SEA/SA framework can be made more robust by referring to limits or standards including:

- **Air quality** – National air quality objectives<sup>18</sup>, remembering that ecological standards may be more demanding than human health standards;
- **Water quality** – Water Framework Directive, via river basin management plans<sup>19</sup>;
- **Water resources** – Water resource zones in deficit in Water Resource Management Plans;
- **Condition of Sites of Special Scientific Interest** – Biodiversity 2020 target of 50% of sites in favourable and 45% in unfavourable recovering condition;
- **Integrity of Special Protection Areas and Special Areas of Conservation** – from Habitat Regulation Assessments;
- **Carbon emissions** – 31% reduction below 1990 levels by 2017 and 37% below by 2020<sup>20</sup>;
- **Flood zone** – from flood risk assessments.

Assessing against these may require modelling and/or reference to other forms of assessment.

<sup>16</sup> [info.westberks.gov.uk/CHttpHandler.ashx?id=43957&p=0](http://info.westberks.gov.uk/CHttpHandler.ashx?id=43957&p=0)

<sup>17</sup> See footnote 1 for more information.

<sup>18</sup> [uk-air.defra.gov.uk/assets/documents/Air\\_Quality\\_Objectives\\_Update.pdf](http://uk-air.defra.gov.uk/assets/documents/Air_Quality_Objectives_Update.pdf)

<sup>19</sup> [www.gov.uk/government/collections/river-basin-management-plans-2015](http://www.gov.uk/government/collections/river-basin-management-plans-2015)

<sup>20</sup> [www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/](http://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/)

## 3. Alternatives

Alternatives is the SEA/SA stage that has been most consistently challenged at examination/inquiry and in the courts (see Appendix B). Three sets of information are needed for each set of alternatives:

- What reasonable alternatives have been identified and on what basis?
- How they have been assessed and compared (including how sustainability issues have been considered)?
- What are the preferred alternatives and **why they are preferred over other alternatives?**

### Identifying reasonable alternatives

The SEA/SA alternatives stage should inform the key planning decisions: numbers and location of housing and employment, proportion of affordable housing, any proposed development in the Green Belt etc. Alternatives should also be considered for how to deal with existing problems identified at the scoping stage, e.g. poor air quality, congestion hot spots, areas of deprivation.

Alternatives are not needed for every plan issue. A 'policy versus no policy' comparison of alternatives is necessary only where 'no policy' is under active consideration by the planning team. Where only one alternative is reasonable, then looking at other alternatives is not 'reasonable'. Not meeting objectively assessed housing need and going against Government policy are also generally not 'reasonable'.

The SEA/SA should clearly document where significant alternatives are rejected early on as being unreasonable, e.g. where the proposed focus of development is quite quickly narrowed to one area<sup>21</sup> or where a large viable site is rejected because it is not near any existing settlements.

Where there are a large number of alternatives, typically for development sites, they may need to be narrowed down to a manageable number. For instance, sites might be screened out from appraisal if they are small or the Strategic Housing Land Availability Assessment (SHLAA) has identified them as unsuitable, unachievable or undeliverable<sup>22</sup>. The remaining sites might subsequently be narrowed down further through the use of:

- **Exclusionary/'showstopper' criteria** – e.g. flood risk areas, Civil Aviation Authority exclusion zones, areas outside the pattern of development set out in the strategy;

<sup>21</sup> As in *Heard v. Broadland* in Appendix B

<sup>22</sup> [www.uttlesford.gov.uk/CHttpHandler.ashx?id=5334&p=0](http://www.uttlesford.gov.uk/CHttpHandler.ashx?id=5334&p=0)

- **Discretionary/sustainability criteria** – e.g. nature conservation or landscape designations, distance from public transport;
- **Deliverability criteria** – e.g. land ownership, access, planning history, viability etc<sup>23</sup>.

Some alternatives may be considered sequentially, with the preferred alternatives from earlier stages limiting the range of alternatives considered at later stages (Figure 5).

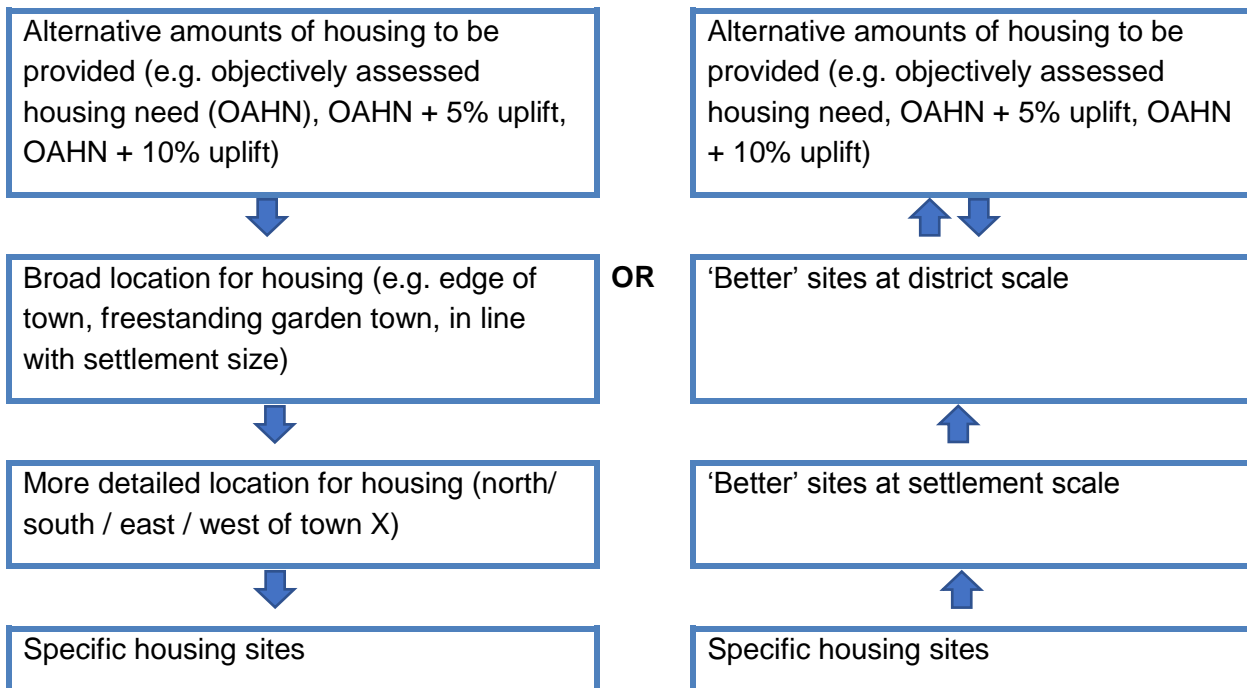


Figure 5. Example of sequential assessment and elimination of alternatives

Sites proposed by a developer at the last minute are not necessarily unreasonable: it is often better to assess them than to argue at examination/inquiry that they should not be considered. Large sites that do not accord with the plan's spatial strategy may be reasonable alternatives if they could act as a Garden Town or similar. Particularly if existing urban areas cannot reasonably be extended, but this should be done when overall spatial strategy options are being appraised, not introduced at the last minute. Where main modifications to a plan are significant (e.g. the addition of many new homes) or where there have been 'material changes in circumstance' during the plan-making process<sup>24</sup>, alternatives may have to be reconsidered.

Where alternatives have been considered in other reports – for instance housing numbers in the SHMA or HDNA (in Scotland), exceptions tests in flood risk management reports, different approaches to water resource provision in the Habitats Regulations Assessment – these should be summarised in the SEA/SA, with links to the full reports.

<sup>23</sup> [www.local.gov.uk/sites/default/files/documents/principle-8-067.pdf](http://www.local.gov.uk/sites/default/files/documents/principle-8-067.pdf)

<sup>24</sup> See the 'Save Historic Newmarket' legal challenge in Appendix B

## Assessing and comparing alternatives

Assessment of general plan policies is straightforward: they are simply assessed using the SEA/SA framework developed earlier, with commentary provided. Assessment of development sites, instead, may come under particular scrutiny, so a robust process should be followed which ensures that each site is appraised in a consistent way. Using GIS (e.g. Figure 6) to determine the site's distance from features such as environmental designations and community infrastructure can be particularly helpful. The site appraisal criteria can be linked to the SEA/SA objectives to demonstrate consistent application of the SEA/SA framework.

Criteria (Location in relation to...)	Performance categories
European site (SPA and SAC)	<b>Red</b> = <0.4 km straight-line <b>Amber</b> = <5 km straight-line <b>Green</b> = >5 km straight-line
SSSI	<b>R</b> = <0.4 km straight-line <b>A</b> = <0.8 km straight-line <b>G</b> = >0.8 km straight-line
Key employment site	<b>R</b> = > 2 km walking <b>A</b> = <2 km walking <b>G</b> = <1 km walking <b>G</b> = <0.5 km walking
Area of flood risk	<b>R</b> = Zone 3 <b>A</b> = Zone 2 <b>G</b> = Zone 1

Figure 6. Guildford: GIS site assessment criteria (extract)<sup>25</sup>

However, care must be taken when using this approach:

- If the site outlines are not accurately mapped, the GIS results will be inaccurate;
- Where GIS data is limited, it may give only a partial understanding of an issue;
- Using 'as the crow flies' distances may not give accurate information. For instance, if a children's play area is 40m away from a new housing development this may look 'good' in GIS terms, but if it is cut off by a canal or motorway it is in practice 'bad'. Specialist software can measure actual walking distances (given road layouts etc.) from the site, but it adds to the assessment cost;
- GIS cannot capture 'character' related issues such as suitability with respect to landscape and townscape. For this reason, it should be supplemented by site visits by specialist

<sup>25</sup> [www.guildford.gov.uk/newlocalplan/CHttpHandler.ashx?id=24623&p=0](http://www.guildford.gov.uk/newlocalplan/CHttpHandler.ashx?id=24623&p=0)

officers (e.g. heritage, landscape).

For these reasons, it may be best to 'be minded to' eliminate sites on the basis of GIS mapping, but be open to responses by developers which would give a more precise understanding of the site.

Generally site assessment deals with the merits of the existing site (e.g. Figure 7), rather than with specific proposals for the site or with different uses of the site. However shortcomings of a site, e.g. a substantial distance from a health centre, may be able to be mitigated through, say, the provision of a new health facility. 'Mitigation off' v. 'mitigation on' assessment could deal with the problem of larger sites looking more problematic than smaller sites because many services will be further away from them. The 'mitigation off' assessment would consider a development's potential effects based on location alone, and the 'mitigation on' assessment would also consider the mitigation offered by other plan policies or site planning conditions<sup>26</sup>. Where planners reference developer proposals in coming to conclusions on the sustainability of a certain site, they should be very clear where such information has been used and any uncertainties associated with it.



Figure 7. Basildon: Biodiversity scores for development sites<sup>27</sup>

<sup>26</sup> That said, this then introduces a discrepancy in the treatment of site alternatives i.e. if a discarded site had been assessed with the 'policy on', perhaps it would also have scored well.

<sup>27</sup> [www.basildon.gov.uk/CHttpHandler.ashx?id=6601&p=0](http://www.basildon.gov.uk/CHttpHandler.ashx?id=6601&p=0)

Once the site assessments have been completed (Figure 8), sites scores could be added up to gain an initial view of more versus less sustainable sites. However, this should be complemented with planners' expert knowledge, since the different SA/SA criteria generally have different levels of importance and may not cover the full range of sustainability issues. The SEA/SA report should record differences between sites in such a way that decisions about them are understood and can be justified.

Site Allocations LDD Proposed Submission Sustainability Appraisal Appendix 2b											
Baseline scores of housing sites in Site Allocations LDD (November 2012)											
											ENVI
SITE	GB Impact	GB Objectives	PDL	TPO	AONB	Floodzone	Groundwater Protection	SSSI	LNR	Wildlife Site	RIGG
Adjacent 65 Toms Lane, Kings Langley	7	10	5	10	10	9	9	10	10	5	10
Three Acres, Toms Lane, Kings Langley	4	8	5	10	10	9	4	10	10	2	10
Kings Langley Employment Area	7	10	9	8	10	2	4	10	10	1	10
Mansion House Farm Equestrian Centre, Abbots Langley (frontage only)	7	8	8	10	10	10	9	10	10	3	10
Pin Wei, 35 High Street, Abbots Langley	10	10	10	10	10	10	9	10	10	1	10
Leavesden Pumping Station, East Lane, Abbots Langley	7	10	8	7	10	10	9	10	10	8	10
Furtherfield Depot, Furtherfield, Abbots Langley	7	10	10	10	10	10	5	10	10	1	10
Leavesden Aerodrome, Abbots Langley	6	7	8	6	10	10	7	10	10	3	10
Hill Farm Industrial Estate, Hill Farm											

Figure 8. Three Rivers: GIS-based site assessment (extract)<sup>28</sup>

## Identifying and justifying the choice of preferred alternatives

In practice this stage is often a series of iterations. It documents what decisions have been made, and why they have been made the way they have. As such, it must be written by the planning team, or at least in close communication with them. This is where most of the 'storytelling' for the plan takes place.

Plan options and alternatives may be considered over several years, and through several changes of staff. Planners should keep a written record of how alternatives have been identified, assessed and chosen (Figure 9) as this will be key information for the examination/inquiry, and it is very hard to reconstitute if any 'institutional memory' is lost.

<sup>28</sup> [www.threerivers.gov.uk/download?id=29525](http://www.threerivers.gov.uk/download?id=29525)



SWJCS Preferred Options 2008	SA/SEA of Strategic Sites (preferred Options) (May 2009/ December 2009)	SWDP Public Consultation Document (September 2011)	SA Report (Integrated Appraisal) (September 2011)	SWDP proposed Significant Changes to the 2011 Preferred Options (August 2012)	SWDP Pre-Submission Consultation: SA Report (Integrated Appraisal) (November 2012)	SWDP Proposed Submission Document (January 2013)	SA Addendum (May 2013)	SWDP Examination (2014)	SA Addendum Report (July 2014)
Supporting text of Policy CS4: North-east of Malvern, in the vicinity of Newland, east of railway to accommodate some 1,100 dwellings and 10ha of employment land	Subject to detailed individual SA matrix - Land at Newland - Site B 50ha (1,100 dwellings, 10 ha employment, open space, community uses).	Policy SWDP17 - Development at Newland 51ha (700 dwellings, 10 ha employment, community infrastructure)	Subject to individual SA - Development at Newland (700 dwellings, 10 ha employment)	No change.	No change.	SWDP 56: Development at north east Malvern (700 dwellings, 10 ha employment).	No change, SA of site presented in SA Reports published in September 2011 and November 2012.	Increase in the provision of housing by 100 dwellings (new total of 800).	Considered in Appendix A of the SA Addendum 2014.
Supporting text Policy CS4: South of Townsend Way, east of Mayfield Road, for 500 dwellings and 7ha of employment land.	Subject to detailed individual SA matrix - Land at Mayfield Road - Site C 35ha (500 dwellings, 7 ha employment, open space, community needs).	Alternative to Newlands: Option rejected, reasons provided in para 8.35 (pg 117).	Reasons for rejection provided in SA Report Table 5.4 (pg 43).	N/A - Option rejected.	N/A - Option rejected.	N/A - Option rejected.	N/A - Option rejected.	N/A - Option rejected.	N/A - Option rejected.

Figure 9. SW Development Plan: Chronology table of options in/out (extract)<sup>29</sup>

Typically the preferred development sites will not be problem free 'ideal' sites. In some cases, all the alternatives will be problematic, for instance they may all be in the Green Belt. They will be shades of grey reflecting site location, trade-offs between larger sites offering more potential for community benefits versus smaller sites with fewer effects etc. These trade-offs and the reasons for choosing the preferred alternatives/sites should be explained in the SEA/SA report.

The most 'sustainable' alternative may not necessarily be the preferred one. For instance a less sustainable alternative may facilitate, or be facilitated by future infrastructure projects, or may be much more deliverable than more sustainable alternatives. Again, the SEA/SA report should document why decisions have been made, and how environmental/sustainability considerations informed this. It should clearly document why sites have been rejected, as in Figure 10.

Ref	Rejected sites	Reasons for rejection
22	Catisfield Lane, Paddocks	It is located outside of the urban area and its allocation in the plan would therefore be contrary to Core Strategy Policy CS6: The Development Strategy
40	Gosport Road Bus Depot	Effect on Ecological Designations. Unviable. Part within flood zone – fails sequential test. Its reallocation from employment to residential in the DSP plan is contrary to emerging DSP policy ED1

Figure 10. Fareham: Reasons for rejecting sites (extract)<sup>30</sup>

<sup>29</sup> [www.swdevelopmentplan.org/wp-content/uploads/2013/02/SA\\_AppxBSept2014.pdf](http://www.swdevelopmentplan.org/wp-content/uploads/2013/02/SA_AppxBSept2014.pdf)

<sup>30</sup> [www.fareham.gov.uk/PDF/planning/local\\_plan/DSP3-SA.pdf](http://www.fareham.gov.uk/PDF/planning/local_plan/DSP3-SA.pdf)

## 4. Effect assessment and mitigation

Once a draft plan has been prepared its effects need to be assessed; significant negative effects mitigated; and positive effects ideally enhanced.

### Assessment against what?

To date, most SEA/SAs have assessed as positive anything that includes some reference to the topic, e.g. “We will build 5000 homes at location X whilst protecting the biodiversity of the nearby stream” would be marked as positive for biodiversity. This has caused local residents to challenge SEA/SAs as not representing reality. Instead, assessment should be of the actual effect: against the ‘likely future without the plan’ which is probably no development at X. In the above example, the assessment score may well be negative.

### Effect significance

Annex II of the SEA Directive sets criteria for determining the likely significance of effects. They are a combination of:

The **magnitude** of the plan’s effects, including the degree to which the plan sets a framework for projects, the degree to which it influences other plans, and environmental problems relevant to the plan.

The **sensitivity** of the receiving environment, including the value and vulnerability of the area, exceeded environmental quality standards, and effects on designated areas or landscapes.

**Effect characteristics**, including probability, duration, frequency, reversibility, cumulative effects, transboundary effects, risks to human health or the environment, and the magnitude and spatial extent of the effects.

Clearly the person carrying out the assessment must be familiar with the information from the scoping report and other reports (e.g. flooding, HRA) to be able to determine environmental sensitivity; as well as with what the plan will ‘look’ like when implemented (rather than just what the plan says, since some plan policies will be used more frequently than others, will carry more weight than others etc.)

To date, few SEA/SA reports have explicitly stated how they determine effect significance. Figure 11 clearly explains its assumptions about effect significance, which include sensitivity of the

receiving environment. Figure 12 is unclear about how significance is determined, but is exemplary in linking effect significance to the need for subsequent mitigation.

Will the policy...	Assumptions for SA of housing sites
... protect and enhance biodiversity and geodiversity, taking into account the effects of climate change? (4.6)	<p>There is not a fixed distance at which biodiversity sites may be affected by new development, as the habitats and species for which biodiversity sites are designated are different, and different types of effects can be transmitted across different distances [but] As an indication of potential effects on biodiversity assets from housing site options, the follow assumptions are made:</p> <ul style="list-style-type: none"> <li>• Where allocated sites overlap with an internationally (SAC, SPA, Ramsar), nationally (SSSI, NNR) or locally (Local Wildlife Site, Local Nature Reserve) designated wildlife site or area of Ancient Woodland, significant adverse (--) effects are assumed</li> <li>• Where allocated sites are within 500m of the boundary of an internationally, nationally or 250m of a locally designated wildlife site or area of Ancient Woodland, uncertain significant adverse (--?) effects are assumed</li> <li>• Where allocated sites are between 500m and 1,000m from the boundary of an internationally, nationally or between 250m and 500m from a locally designated wildlife site or area of Ancient Woodland, uncertain minor adverse effects (-?) are assumed...</li> </ul>

Figure 11. Criteria for determining effect significance (extract)<sup>31</sup>

Symbol	Predicted effect	Suggested action/response
++	Very positive effects – site allocation/use would significantly help in achieving the objective	Consider whether very positive effect can be further enhanced
+	Positive effect – site allocation/use would help in achieving the objective	Consider whether positive effect can be further enhanced
0	Neutral effect – site allocation/use would neither help nor hinder the achievement of the objective	Policy or allocation likely to be acceptable; consider whether intervention could result in positive effects
-	Negative effect – site allocation/use would be in conflict with the objective	Consider mitigation, such as delete/reconsider/amend the policy or site

<sup>31</sup> [consult.welhat.gov.uk/file/4121015](https://consult.welhat.gov.uk/file/4121015)

		allocation' reconsider proposed use
--	Very negative effect – site allocation/use would be in significant conflict with the objective	Significant mitigation measures to reduce severity of effect; reconsider the policy or proposed use
I	Effect depends on how the policy and allocation are implemented	Suggestions for implementation
?	Uncertain – need more information	Consider where this will come from – who has it? What will be done about collecting it? When will it be collected?

Figure 12. Woking: Linking effect significance with mitigation<sup>32</sup>

## Cross border effects

Where a plan will have significant effects outside of the plan area, these should be documented (Figure 13). Cross-border effects could include the under provision of homes within the broader housing market area if the local authority is expected to help provide homes for the wider area; downstream flooding; access to jobs, services and facilities in neighbouring authorities (especially where the other authority has a large settlement nearby); or changes in commuting patterns.

<sup>32</sup> [www.woking2027.info/allocations/allocationsreport.pdf](http://www.woking2027.info/allocations/allocationsreport.pdf)

Preferred Policy Option: <b>B</b>																		
Preferred Option: Predicted Impact	Social					Environmental							Economic					
	1 – Decent and Affordable Home	2 – Access to Health	3 – Opportunities for Education	4 – Access to Retail and Community Facilities	5 – Crime Resistant Communities	6 – Flood Risk	7 – Efficient Land Use	8 – Conserve and Enhance Biodiversity	9 – Protect and Enhance Countryside	10 – Protect and Enhance Historic Environment	11 – Reduce Road Congestion	12 – Reduce Waste Generation	13 – Maintain and Improve Water Quality	14 – Increase Energy Efficiency	15 – Encourage regeneration of Town and Village Centres	16 – Ensure High and Stable Employment Levels	17 – Sustain Economic Growth	18 – Encourage Tourism
Short	+	0	0	0	0	+	0	0	0	0	0	+	0	0	0	0	0	0
Medium	+	+	0	0	0	+	0	+	0	0	0	+	0	0	0	0	0	0
Long	+	+	0	0	0	++	0	+	0	0	0	+	0	0	0	0	0	0
<b>Recommendations and Mitigation Measures:</b>																		
Sequential flood risk tests (and, if necessary, the exception test) will be applied for the District Plan, Neighbourhood Plans and other documents that allocate sites for development to ensure that new development is directed towards areas with the lowest probability of flooding.																		
<b>Cross-Border Impacts:</b>																		
Flood risk issues have the potential to impact on areas outside the district. In particular fluvial flood risk issues could impact across boundaries as the four main river catchments that affect Mid Sussex (the River Ouse, the River Adur, the River Medway and the River Mole) also affect areas outside of the district. The Strategic Flood Risk Assessment has regard to Catchment Flood Management Plans and the Environment Agency provided data for the whole of the Agency's Southern Region to inform the SFRA.																		
<b>Overall Conclusion:</b>																		
This policy would mainly have positive impacts on the flood risk (objective 6), housing (objective 1) and water (objective 13) objectives but could achieve other sustainability benefits through the																		

Figure 13. Mid Sussex: Analysis of cross-border effects<sup>33</sup>

## The mitigation hierarchy

Mitigation of significant negative effects of the plan and enhancement of positive effects are a key purpose of SEA/SA. Mitigation includes deleting or adding policies, and changing policy wording. The identification and choice of sustainable alternatives is also arguably a large-scale, early form of mitigation.

### Mitigation measures proposed by consultants<sup>34</sup>

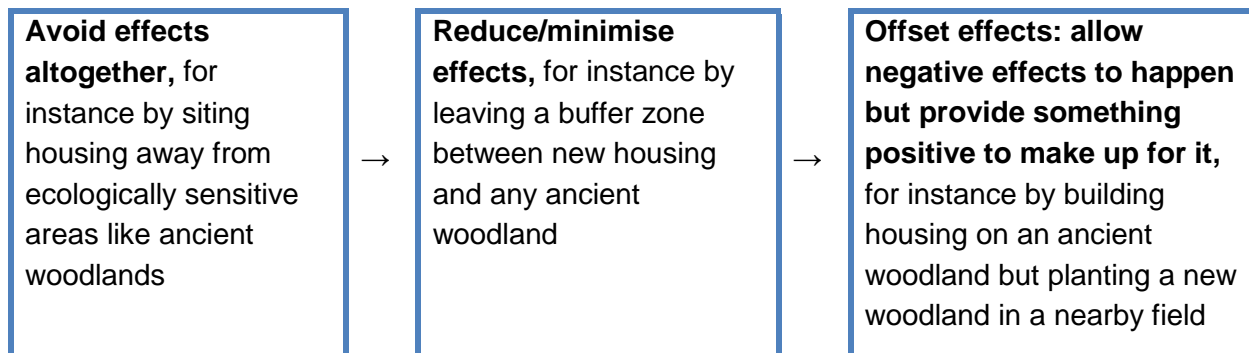
“Suggested changes cover - Biodiversity (including around the matter of setting requirements for ‘biodiversity gain’); Climate change mitigation (in particular, policy might set more stringent requirements for low carbon infrastructure, albeit viability is constraining factor); Climate change adaptation (in particular, detail might be added to policy requirements for ‘Land north of A41’); Communities (at two large sites further consideration might be given to targeted community infrastructure delivery); Pollution (policy dealing with water, noise and air pollution

<sup>33</sup> [www.midsussex.gov.uk/media/77678/bp5\\_sa\\_submission-aug16.pdf](http://www.midsussex.gov.uk/media/77678/bp5_sa_submission-aug16.pdf)

<sup>34</sup> [www.aylesburyvaldc.gov.uk/sites/default/files/page\\_downloads/VALP%20-%20SA%20Report%20170918.pdf](http://www.aylesburyvaldc.gov.uk/sites/default/files/page_downloads/VALP%20-%20SA%20Report%20170918.pdf)

could all feasibly be supplemented with added detail); Transport (AGT policies might discuss links to the town centre more explicitly); and Waste (a thematic policy could be added).”

Mitigation should be considered in a hierarchy, with avoidance better than reduction, which in turn is better than offsetting:



This stage can also promote enhancement measures, for instance improved green infrastructure.

Mitigation measures must be deliverable and effective although, as plans are strategic documents, the effectiveness of mitigation may not be immediately known. Policy ‘fixes’ should be supported by evidence of their effectiveness. For instance, a local plan’s encouragement of public transport (not within its remit, unclear whether car drivers will switch to public transport) will not, of its own, solve air pollution problems. Mitigation measures will typically not turn negative effects into positive ones, but rather will reduce the negative effects.

## Documenting mitigation

The entire plan-making process is one of decisions, change and fine tuning in response to many factors including SEA/SA information. Documenting these changes is a key role of the SEA/SA report. Planners should keep track of how the plan has changed and what mitigation measures have been incorporated into the plan, since this will show at examination/inquiry that the SEA/SA process has been taken seriously. This information will also be needed for the post-adoption SEA statement. Where the SEA/SA is carried out by consultants, the mitigation measures will normally initially be ‘recommended’. The SEA/SA report should document whether these proposed measures have been incorporated into the plan and, if not, why not (Figure 14).

Policy/ SA topic	SA recommendation	How did the SA influence plan-making?
CP12 Climate change	It is recommended that consideration is given to decentralized electricity supply, in addition to heating	Policy CP12 has been amended to reflect this recommendation
DM39 Climate change	This policy could be updated to reference stakeholder engagement, including considering cross-boundary flood risk and management, which would be in line with SFRA recommendations	This is not appropriate for inclusion in a development management policy. The council is part of a countywide Technical Flood Management group which amongst other things covers local flood issues and strategic planning proposals, policies and plans

Figure 14. Wycombe: Documenting the influence of the SEA/SA<sup>35</sup>

## Presenting the assessment findings

The SEA/SA report will be read by a wide ranging audience, including professional planners, planning inspectors, lawyers and the courts. It will need to be sufficiently well articulated to satisfy scrutiny at examination/inquiry. However, given the wider public involvement and interest in the outcomes, it also needs to be presented in such a way that it can be readily understood. Non-technical summaries are particularly important in this regard<sup>36</sup>. Lengthy tables should be avoided or placed in appendices.

Graphic presentations such as maps and the ‘traffic light’ approach can be easily understood by both experts and non-experts. The use of traffic light colours (red, amber, green) as well as symbols (-, 0, +) is strongly recommended in SEA/SA. The former helps to quickly identify key effects. The latter ensures that colour blind people can also understand the assessment.

One of the challenges of the assessment process is recording the merits of a policy or site against the SEA/SA objectives of the plan in an efficient way. Long, unwieldy assessment tables are of questionable use in decision-making. While they can provide a useful tool and audit trail, there is no requirement to produce pages of matrices, and some perfectly acceptable SEA/SA reports have not used matrices at all<sup>37</sup>.

<sup>35</sup> [www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/New-local-plan-sustainability-appraisal-full-technical-report.pdf](http://www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/New-local-plan-sustainability-appraisal-full-technical-report.pdf)

<sup>36</sup> A good example of a non-technical summary is at [consult.chelmsford.gov.uk/file/4472711](http://consult.chelmsford.gov.uk/file/4472711)

<sup>37</sup> E.g. [www.swale.gov.uk/sustainability-appraisal/](http://www.swale.gov.uk/sustainability-appraisal/)

## 5. Total, cumulative and synergistic effects

Total effects are all of the plan’s effects. They are typically documented by compiling one table of all the sites’ and/or plan policies’ effects, as in Figure 15, and by describing these effects in text form. Some policies’ effects may be much greater than those of other policies: this should be kept in mind when total effects are identified, rather than just adding up all the positive and negative scores. Total effects are often erroneously called ‘cumulative effects’ in SEA/SA reports.

Policy	Sustainability Objectives (SO)							
	1	2	3	4	5	6	7	8
The Vision	++	++	++	++	++	++	+	+
The Objectives	++	++	++	++	++	++	++	++
Policy SPL1	++	++	++	++	++	?	?	N/A
Policy SPL2	+	++	+	++	++	+	N/A	N/A
Policy SPL3	++	++	+	++	N/A	++	++	N/A
<del>Total</del> Cumulative Impact	++	++	++	++	++	++	+	+

Figure 15. Tending: Total effects of plan (excerpt)<sup>38</sup>

### Wycombe: Description of total plan effects (extract)<sup>39</sup>

“None of the proposed allocations alone are likely to result in a significant residual negative effect on biodiversity... [but given] the findings of the appraisal under the transport and traffic and natural resources topics, there is the potential for the draft plan to have effects on biodiversity as a result of increased traffic and associated atmospheric emissions... Overall, a residual minor negative effect on biodiversity is predicted at this stage as a result of increased atmospheric emissions from traffic.”

<sup>38</sup> [www.tendingdc.gov.uk/sites/default/files/documents/planning/Planning\\_Policy/SDTDC\\_019%20Section%20Two%20SA%20and%20SEA%20Environmental%20Report.pdf](http://www.tendingdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/SDTDC_019%20Section%20Two%20SA%20and%20SEA%20Environmental%20Report.pdf)

<sup>39</sup> [www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/New-local-plan-sustainability-appraisal-full-technical-report.pdf](http://www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/New-local-plan-sustainability-appraisal-full-technical-report.pdf)



Cumulative effects, instead, are all of the effects on components of sustainability: from the plan plus all other actions including people's behaviour and other underlying trends. The 'nibbling' effects of a wide range of actions that cause climate change and habitat fragmentation are examples. Assessment of cumulative effects therefore requires a change of focus, from the plan to the sustainability components. The effects of other expected plans, projects and underlying trends should already be described in the scoping report as the 'likely future without the plan', so;

**cumulative effects = total plan effects + 'likely future without the plan'**

Cumulative effects are important because the plan itself may not have a significant effect, but when added to other actions its effects may be significant and require additional mitigation<sup>40</sup>. For instance, the plan may not have a significant effect on water abstraction or deprivation, but together with other trends may have a significant effect that should be mitigated if possible.

### Steps in cumulative effect assessment are:

1. Identify the total effects of the plan on each sustainability component, as shown above;
2. Identify key cumulative effects: those where the likely future without the plan is likely to be problematic; or where the plan is likely to have a significant negative impact, particularly if considered with other plans, projects and underlying trends. Potential cumulative effects may already have been identified at the scoping stage. Cumulative effects do not need to be assessed for every sustainability issue: issues over which the plan has little control or where the likely future situation both with and without the plan is good, can be scoped out with an explanation;
3. Add information about the 'likely future without the plan' from the scoping report to the total effects, as in Figure 16<sup>41</sup>. It may be necessary at this stage to revisit the 'likely future without the plan' section in the scoping report to ensure that it discusses;
  - **General/underlying trends** (e.g. changes in air quality over time, climate change);
  - **Projections** where these are available (e.g. population);
  - **Known and expected projects** (e.g. Highways Agency proposals, HS2);
  - **Other expected changes**, e.g. Brexit.

<sup>40</sup> For instance a continuous 'nibbling' of new houses on the edge of the Chilterns AONB as a result of individual planning decisions is affecting the AONB's visual amenity, biodiversity and water quality: see [www.chilternsaonb.org/news/274/19/Local-Plans-and-housing.html](http://www.chilternsaonb.org/news/274/19/Local-Plans-and-housing.html).

<sup>41</sup> This assumes that the plan assessment did not already 'invisibly' consider cumulative effects by assessing the plan effects plus the likely future without the plan.

SA objective	Effect of proposed submission policies [total effects]	Cumulative effect [previous column + likely future without the plan]
Flooding	X? A small part of the Barton AAP site is within the floodplain however no development will take place in this area. The development of 800 – 1200 new homes plus associated facilities could increase the risk of flooding through water run-off. The effect is not expected to be significant.	XX About 5000 properties in Oxford are already at risk of flooding. The Oxford Core Strategy proposes about 8000 homes plus further employment, university and other development. Although most of the sites in the Site Allocation DPD avoid areas of flood risk, the overall scale of housing could have significant negative flooding effects.
Housing need	✓✓ The Proposed Submission Document requires at least 40% of housing on the site to be affordable. This will make a significant contribution towards affordable housing provision in Oxford.	XX? The Oxford Core Strategy is for 8000 new homes including at Barton, many of which will be affordable. However on current assessments this will not be sufficient to meet need. Whether this cumulatively contributes to a worsening of the affordable housing crisis will depend on trends in housing need over the period covered by the plan.

Figure 16: Oxford: Cumulative effects = total effects of plan + likely future without the plan (extract)<sup>42</sup>

- Finally, consider mitigation for any significant cumulative effects. In the example above, the new homes may need special measures to ensure that they do not worsen flooding downstream, and more homes may need to be provided in the plan area. Cumulative effects may also require joint mitigation with other authorities, as has been the case in the provision of SANGS (suitable alternative natural green space) near the Thames Basin Heaths Special Protection Area<sup>43</sup>.

The SEA Directive also requires an assessment of synergistic effects. These are a subset of cumulative effects, where effects interact to produce a total effect greater than the sum of the individual effects. For instance, smog results from the interaction of sunlight, nitrogen oxides and volatile organic carbons, but the health effects of smog are much worse than the sum of the effects of the three components. Synergistic effects often happen as habitats, resources or communities get close to capacity. Synergistic effects are assessed as part of cumulative effects assessment.

<sup>42</sup> [www.oxford.gov.uk/downloads/download/424/barton\\_area\\_action\\_plan](http://www.oxford.gov.uk/downloads/download/424/barton_area_action_plan)

<sup>43</sup> SANGS must be provided by the local authorities near the Thames Basin Heaths SPA, to draw people and their dogs away from the SPA which hosts sensitive ground-nesting birds. The Thames Basin Heaths Joint Strategic Partnership was formed to ensure the delivery of SANGS as well as of new homes near the SPA. See e.g. [www.surreyheath.gov.uk/residents/planning/planning-policy/joint-strategic-partnership](http://www.surreyheath.gov.uk/residents/planning/planning-policy/joint-strategic-partnership).

## 6. Monitoring and the post-adoption statement

### Monitoring

After plan adoption, a monitoring regime needs to be finalised and a post-adoption statement published<sup>44</sup>. The aim of SEA/SA monitoring is to check whether the plan is having the significant effects that were predicted in the SEA/SA, and to deal with any unforeseen problems. Clearly, many environmental/sustainability changes will be caused by factors outside of the plan's control (e.g. people's behaviour, technical changes), but it is useful to know about the changes, and to consider whether the plan needs to be adapted to manage them. Monitoring data also provides a basis for the SEA/SA scoping report of the next round of the plan.

Authority monitoring reports (AMR) already regularly report on plan implementation e.g. housing delivery, Green Belt land taken. However the SEA Directive requires monitoring of "the significant environmental effects of the implementation of [the plan]", for instance air and water quality near strategic development sites (Figure 17). The AMR could also monitor the implementation of SEA/SA mitigation measures; for instance new landscaping or a new nature reserve, and so identify positive as well as negative effects.

SEA/SA objective	Indicator(s)	Source	Current level	Trend	Target
To improve the District's air quality	Number of Air Quality Management Areas	Lewes District Council	1, Lewes Town (Fisher Street, West Street, Station Road)	Not available	Reduce or maintain number of AQMAs
	Annual mean nitrogen dioxide levels in AQMAs	Sussex Air	2012: Lewes AQMA: 21µg/m <sup>3</sup>	No trend available: recording began in mid-2011	Improve annual mean nitrogen dioxide levels in AQMAs
	Carbon dioxide emissions by sector	Dept. of Energy and Climate Change	2009: Total 531 kt	2005: 620 kt 2006: 612 kt 2007: 586 kt 2008: 580 kt	Reduce figure to help meet UK target to reduce greenhouse gas emissions by 80% by 2050

Figure 17. SEA/SA monitoring indicators and targets<sup>45</sup>

<sup>44</sup> Article 9.1b of the SEA Directive

<sup>45</sup> [www.lewes-eastbourne.gov.uk/resources/assets/inline/full/0/258254.pdf](http://www.lewes-eastbourne.gov.uk/resources/assets/inline/full/0/258254.pdf)

Rules of thumb for monitoring are:

- Most authorities will already have a monitoring system in place. This will be a useful starting point for identifying effects that were deemed significant enough to previously monitor;
- Focus on significant effects: there is no need to monitor all effects, or even one issue per sustainability topic area;
- Monitor against legal standards, targets, thresholds or, if these do not exist, trends over time.

It may be possible to use expert judgement for monitoring, e.g. the county ecologist's perception of whether biodiversity at a development site has improved or worsened

## Post-adoption statement

A post-adoption (or SEA) statement must be published as soon as reasonably possible after the plan has been adopted. It must provide information on:

1. How environmental/sustainability considerations have been integrated into the plan;
2. How the SA/SEA report and consultation responses to the report have been taken into account;
3. Reasons for choosing the plan as adopted in the light of the other reasonable alternatives.

Ideally that information should already be provided within the SEA/SA report, to show the public and examiners/inspectors that the SEA/SA has been taken seriously and has made a difference.

Point 1 is covered by the previous documentation about how mitigation measures were incorporated into the plan. Point 2 is typically presented in a table like Figure 18. Point 3 comes out of the alternatives section of the SEA/SA report.

Name of organisation	Comments made on the SEA/SA	Where to be addressed
Natural England	Air: a reference to considering the effect of air quality and designated sites should be added to the Air section of the SA/SEA and reflect the need to protect habitats from water related effects and seek enhancement, especially N2K and SSSIs, but also local sites	Further details on the effect of air quality on designated sites have been added to the Air Chapter (Chapter 15). Further assessment to be included in the Biodiversity Chapter (Chapter 19).
Cllr Alex Crawford	The ward information needs to be updated to reflect current wards	Ward information has been updated throughout the report

Figure 18. Rushmoor: Documenting responses to comments made on the SEA/SA <sup>46</sup>

<sup>46</sup> [www.rushmoor.gov.uk/CHttpHandler.ashx?id=14950&p=0](http://www.rushmoor.gov.uk/CHttpHandler.ashx?id=14950&p=0)

## 7. Neighbourhood (development) plans

### Screening

Neighbourhood plans in England require SEA if their effects are likely to be significant, or if the plan requires appropriate assessment (rather than just screening) under Habitats Regulations Assessment. The criteria for whether a plan's effects are likely to be significant are at Annex II of the SEA Directive. If the neighbourhood plan does not meet most of these criteria, and the HRA stops at the screening stage, then this should be documented in a screening report (e.g. Figure 19) which is sent to the statutory consultees for comment. If the statutory consultees agree that the plan does not require SEA, then it can be screened out. No screening report is required if SEA will be carried out.

Criterion	Y/N	Reason
1. Is the plan subject to preparation and/or adoption by a national, regional or local authority OR prepared by an authority for adoption through a legislative procedure by Parliament or Government (Art. 2(a))	Y	The Neighbourhood Development Plan will be 'made' by a Local Planning Authority, Aylesbury Vale District Council. The Plan is prepared by the relevant Qualifying Body, although modifications to the plan can be carried out by the Local Planning Authority once the Plan has been submitted, if necessary to meet the basic conditions.
2. Is the plan required by legislative, regulatory or administrative provisions? (Art. 2(a))	N	The Neighbourhood Development Plan is an optional plan produced by Buckland Parish Council
3. Is the plan prepared for agriculture, forestry,... AND does it set a framework for future development consent of projects in Annexes I and II to the EIA Directive? (Art 3.2(a))	N	The Neighbourhood Development Plan is prepared for town and country planning purposes, but it does not set a framework for future development consent of projects in Annexes I and II to the EIA Directive (Art 3.2(a))

Figure 19. Screening a neighbourhood plan (excerpt)<sup>47</sup>

SEA screening of neighbourhood plans varies by authority. However generally, if the neighbourhood plan allocates specific large development sites, promotes a large amount of development, is near or in a national or international designated area, or contravenes significant elements of the local plan, then generally it requires SEA<sup>48</sup>. In practice, screening of neighbourhood plans varies between local authorities.

Even if an SEA is not legally required, preparation of an SA (not SEA) report could be useful

<sup>47</sup> [www.aylesburyvaledc.gov.uk/sites/default/files/page\\_downloads/Basic%20Conditions%20Statement.pdf](http://www.aylesburyvaledc.gov.uk/sites/default/files/page_downloads/Basic%20Conditions%20Statement.pdf)

<sup>48</sup> See [http://lepusconsulting.com/pdfs/Screening\\_wheel\\_guidance\\_13\\_141217WE.compressed.pdf](http://lepusconsulting.com/pdfs/Screening_wheel_guidance_13_141217WE.compressed.pdf).

because it documents how the neighbourhood plan contributes to sustainable development, which is one of the ‘basic conditions’ that the plan must fulfil. A warning, if an SEA is not required, do not call any appraisal of the neighbourhood plan an ‘SEA’, or else that appraisal will be expected to fulfil the full requirements of the SEA Directive.

### If SEA is required...

The preparation of neighbourhood plans and their SEA has become increasingly professional, in part as a response to legal challenges<sup>49</sup> The fact that neighbourhood plans must be ‘in general conformity’ with the Local Plan limits the alternatives that they can consider; for instance they cannot consider housing numbers lower than those allocated to them in Local Plans, and cannot consider development in the Green Belt if this is not supported by the Local Plan.

The examiner will test whether the neighbourhood plan meets the ‘basic conditions’ set out in the Localism Act 2011. These include whether the plan ‘contributes to the achievement of sustainable development’. The SEA report (or, if no SEA is needed, an SA report) will help to demonstrate this.

A range of guidance on the development and SEA/SA of neighbourhood plans is available<sup>50</sup>. The previous advice for Local Plans also holds true for neighbourhood plans, keeping in mind that the assessment will be more detailed; typically more like site specific assessment than policy assessment, because neighbourhood plans are usually quite detailed.

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<sup>49</sup> See Appendix B.

<sup>50</sup> E.g. <https://levetttherivel.files.wordpress.com/2015/09/diysa.pdf>; [locality.org.uk/projects/building-community/](http://locality.org.uk/projects/building-community/); [www.wiltshire.gov.uk/planning-neighbourhood/](http://www.wiltshire.gov.uk/planning-neighbourhood/);

## Appendix A. SEA/SA guidance

European Commission	SEA Directive (2004) <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0042">eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0042</a> EC (2009) Guidance on the implementation of Directive 2001/42/EC, <a href="http://ec.europa.eu/environment/archives/eia/pdf/030923_sea_guidance.pdf">ec.europa.eu/environment/archives/eia/pdf/030923_sea_guidance.pdf</a>
England	DCLG (2015) Strategic environmental assessment and sustainability appraisal, <a href="http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/">planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/</a> Local Government Association: search for 'sustainability appraisal' on <a href="http://www.local.gov.uk">www.local.gov.uk</a>
Northern Ireland	Department of the Environment (2015) Development Plan Practice Note: Sustainability Appraisal incorporating Strategic Environmental Assessment, <a href="http://www.planningni.gov.uk/index/advice/practice-notes/dp_practice_note_4_sa.pdf">www.planningni.gov.uk/index/advice/practice-notes/dp_practice_note_4_sa.pdf</a>
Scotland	Scottish Government (2013) Strategic Environmental Assessment Guidance, <a href="http://www.scotland.gov.uk/Resource/0043/00432344.pdf">www.scotland.gov.uk/Resource/0043/00432344.pdf</a>
Wales	Welsh Government (2015) Strategic Environmental Assessment, <a href="http://gov.wales/topics/environmentcountryside/consmanagement/strategic-environmental-assessment/?lang=en">gov.wales/topics/environmentcountryside/consmanagement/strategic-environmental-assessment/?lang=en</a>

### Topic specific guidance

Air	Scottish Environmental Protection Agency (SEPA) (2017) Guidance on consideration of air in strategic environmental assessment, <a href="http://www.sepa.org.uk/media/162985/lups-sea-gu1-consideration-of-air-in-sea.pdf">www.sepa.org.uk/media/162985/lups-sea-gu1-consideration-of-air-in-sea.pdf</a>
Biodiversity	European Commission (2013) Guidance on integrating climate change and biodiversity into strategic environmental assessment, <a href="http://ec.europa.eu/environment/eia/pdf/SEA%20Guidance.pdf">ec.europa.eu/environment/eia/pdf/SEA%20Guidance.pdf</a> English Nature and others (2004) Strategic environmental assessment and biodiversity: Guide for Practitioners, <a href="http://www.rspb.org.uk/Images/SEA_and_biodiversity_tcm9-133070.pdf">www.rspb.org.uk/Images/SEA_and_biodiversity_tcm9-133070.pdf</a> .
Climate change	See European Commission (2013) under 'biodiversity' Environment Agency and others (2010) Strategic environmental assessment and climate change: Guide for Practitioners, 3 <sup>rd</sup> ed., <a href="http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297039/geho0811buca-e-e.pdf">www.gov.uk/government/uploads/system/uploads/attachment_data/file/297039/geho0811buca-e-e.pdf</a> Scottish Government (2010) Consideration of climatic factors within strategic environmental assessment (SEA), <a href="http://www.gov.scot/Resource/Doc/306477/0096207.pdf">www.gov.scot/Resource/Doc/306477/0096207.pdf</a>
Health	Department of Health (2007) Draft Guidance on Health in Strategic Environmental Assessment, <a href="http://webarchive.nationalarchives.gov.uk/20080817164223/http://www.dh.gov.uk/en/Co">http://webarchive.nationalarchives.gov.uk/20080817164223/http://www.dh.gov.uk/en/Co</a>



	<p><a href="#">nsultations/Closedconsultations/DH_073261</a></p> <p>SEPA (2015) Guidance on consideration of human health in strategic environmental assessment, <a href="http://www.sepa.org.uk/media/219433/lups-sea-gu5-consideration-of-human-health-in-sea.pdf">www.sepa.org.uk/media/219433/lups-sea-gu5-consideration-of-human-health-in-sea.pdf</a>.</p>
Heritage	<p>Historic England (2016) Advice Note 8: Sustainability appraisal and strategic environmental assessment, <a href="http://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/">historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/</a></p>
Material assets	<p>SEPA (2016) Guidance on consideration of material assets in strategic environmental assessment, <a href="http://www.sepa.org.uk/media/219432/lups-sea-gu4-consideration-of-material-assets-in-sea.pdf">www.sepa.org.uk/media/219432/lups-sea-gu4-consideration-of-material-assets-in-sea.pdf</a></p>
Soil	<p>SEPA (2017) Guidance on consideration of soil in strategic environmental assessment, <a href="http://www.sepa.org.uk/media/162986/lups-sea-gu2-consideration-of-soil-in-sea.pdf">www.sepa.org.uk/media/162986/lups-sea-gu2-consideration-of-soil-in-sea.pdf</a></p>
Water	<p>SEPA (2017) Guidance on consideration of water in strategic environmental assessment, <a href="http://www.sepa.org.uk/media/162987/lups-sea-gu3-consideration-of-water-in-sea.pdf">www.sepa.org.uk/media/162987/lups-sea-gu3-consideration-of-water-in-sea.pdf</a></p>

## Appendix B. Legal judgements

The table below summarises the main UK legal judgements relating to SEA/SA. Information current at January 2018.

Legal case	Context	Main messages
<p>Seaport Investments Ltd. No. 2007 NIQB 62</p> <p><a href="http://www.bailii.org/nie/cases/NIHC/QB/2007/62.html">www.bailii.org/nie/cases/NIHC/QB/2007/62.html</a></p>	<p>Two Area Plan SEAs prepared by the Northern Ireland Department of the Environment were challenged by developers and district councils as not fulfilling the SEA Directive's requirements. Plaintiffs also challenged the Northern Ireland government's transposition of the SEA Directive</p>	<p>The SEA/SA report must cover all requirements of Annex I of the SEA Directive</p> <p>Northern Ireland's transposition of the SEA Directive was adequate (the court ruling found that it was not, but a later European Court of Justice ruling found that it was)</p>
<p>St. Albans [2009] EWHC 1280 (Admin)</p> <p><a href="http://www.bailii.org/ew/cases/EWHC/Admin/2009/1280.html">www.bailii.org/ew/cases/EWHC/Admin/2009/1280.html</a></p>	<p>An inspector recommended new development in the Green Belt, and these changes were incorporated into the East of England Regional Spatial Strategy without an assessment of</p>	<p>Alternatives that have already been assessed do not need to be re-assessed with each plan iteration</p> <p>Assessment of a topic in the SEA for a lower level plan is no substitute for assessment at a</p>

Legal case		Context	Main messages
		alternatives	higher level, and so is not an excuse or mitigation for not assessing at a higher level
Save Historic Newmarket Ltd v Forest Heath DC [2011] EWHC 606 (Admin)	<a href="http://www.bailii.org/ew/cases/EWHC/Admin/2011/606.html">www.bailii.org/ew/cases/EWHC/Admin/2011/606.html</a>	Forest Heath District Council increased the number of homes proposed at a site which affected the town's horse racing industry from 400 to 1200 without re-assessing the site's effects	Alternatives that have been rejected earlier in plan-making need to be reconsidered if the reasons for rejecting them are affected by any change in the draft plan 'or any other material change in circumstances'  The SEA/SA report must explain why alternatives are rejected, to allow consultees to comment on this
Heard v. Broadland DC [2012] EWHC 344 (Admin)	<a href="http://www.bailii.org/ew/cases/EWHC/Admin/2012/344.html">www.bailii.org/ew/cases/EWHC/Admin/2012/344.html</a>	A Joint Core Strategy put forward an area for major growth without documenting in the SA/SEA report why it had rejected other areas. The plaintiff also suggested that the SA/SEA report should have considered the effects of a distributor road needed to develop this 'North Eastern Growth Triangle'	The SEA/SA report must document the choice of preferred alternatives, and explain why other reasonable alternatives are rejected  Developments that are not within the remit of the plan (even if they are essential to implementing the plan) should be described as part of the baseline against which the effects of the plan are assessed
Satnam Millennium Ltd. V. Warrington BC [2015] EWHC 370 (Admin)	<a href="http://www.bailii.org/ew/cases/EWHC/Admin/2015/370.html">www.bailii.org/ew/cases/EWHC/Admin/2015/370.html</a>	An inspector recommended deletion of the plaintiff's site from the Local Plan in favour of a different site, but when the plan was modified to reflect this, alternatives were not assessed. A subsequent 'remedial' SEA/SA was argued to be a 'bolt-on' which merely confirmed a predetermined position	SEA/SA must clearly not simply confirm a predetermined position  SEA/SA reports must fulfill all the requirements of Annex I of the SEA Directive
Henfield Neighbourhood Plan [2016] EWHC 2512 (Admin)	<a href="http://www.bailii.org/ew/cases/EWHC/Admin/2016/2512.html">www.bailii.org/ew/cases/EWHC/Admin/2016/2512.html</a>	A neighbourhood plan SEA/SA rejected development on the west side of the village because it was felt to place unsustainable pressure on the local road system. A previous planning application	The SEA/SA evidence base must be balanced, up to date (i.e. change if circumstances change), and include key relevant information  Consideration of alternatives must

Legal case		Context	Main messages
		appeal for a site to the west of the village had found that the site was sustainable	be supported by an accurate evidence base

Other SEA-related legal challenges which were found in favour of the defendant (i.e. they were not upheld), may still provide useful information about what legal arguments may or may not be effective. They include:

### Local plan

- Cogent Land LLP v Rochford DC [2012] EWHC 2542 (Admin);
- Chalfont St Peter Parish Council v Chiltern District Council [2013] EWHC 1877 (Admin);
- Ashdown Forest Economic Development LLP v Secretary of State for Communities and Local Government [2014] EWHC 406 (Admin) (21 February 2014);
- DB Schenker Rail (UK) Ltd. v Leeds City Council [2013] EWHC 2865 (Admin);
- Performance Retail Partnership v Eastbourne BC [2014] EWHC 102 (Admin);
- Zurich Assurance v Winchester CC [2014] EWHC 758 (Admin);
- No Adastral New Town v. Suffolk Coastal DC [2015] EWCA Civ 88;
- Friends of the Earth v Welsh Ministers [2015] EWHC 776 (Admin).

### Neighbourhood plan

- Gladman Developments v. Aylesbury Vale DC [2014] EWHC 4323 (Admin);
- Abbotskerswell Parish Council v Teighbridge DC [2014] EWHC 4166 (Admin);
- Crowhall Estates Ltd v. Chichester DC [2016] EWHC 73 (Admin).

They can all be found at [www.bailii.org](http://www.bailii.org).

### Further information

- Planning Advisory Service (2014) Plan-making case law update. Main issue 3: sustainability appraisal, [www.local.gov.uk/sites/default/files/documents/main-issue-3-sea-sa-pas-g-46d.pdf](http://www.local.gov.uk/sites/default/files/documents/main-issue-3-sea-sa-pas-g-46d.pdf).
- 39 Essex Chambers (2015) Planning case law update, see part J of [www.39essex.com/content/wp-content/uploads/2015/11/PEP-Planning-Seminar-Paper-Leeds-2015-Final.pdf](http://www.39essex.com/content/wp-content/uploads/2015/11/PEP-Planning-Seminar-Paper-Leeds-2015-Final.pdf).



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