South East England Partnership Board

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ENVIRONMENTAL LIMITS FOR THE SOUTH EAST EXECUTIVE SUMMARY

Report to the South East England Partnership Board
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1. Introduction.

Regional Strategies are expected to promote sustainable economic growth, namely economic growth 'within environmental limits'. Most UK regions are currently (spring 2010) exploring whether environmental limits can be identified for their region, to inform the preparation of Regional Strategies (RS) and their sustainability appraisals. The South East England Partnership Board commissioned Levett-Therivel and Scott Wilson to explore if and how environmental limits for the South East could be established to assist with the preparation of the Regional Strategy and the Sustainability Appraisal. Our initial ambitious proposal was to get as close to agreement as possible on environmental limits for air quality, greenhouse gas emissions, water quality and water resources. This proved to be so successful that the work was expanded to also include biodiversity, heritage and landscape.

2. Methodology.

Many definitions of environmental limits exist, but a common theme of the definitions is that environmental limits include an element of judgement or valuation as well as a scientific basis. Our work sought to explicitly tackle both elements through two cycles of first evidence gathering and then judgement. The evidence was gathered by the consultant team based on a wide range of data about the region, and presented as topic papers. These informed two one-day stakeholder workshops, each involving about 40 environmental and planning experts. The workshops aimed to make judgements and propose environmental limits.

The topic papers explored four approaches to identifying environmental limits, each of which emphasises a particular dimension of limits:

- The precautionary principle, which seeks to ensure an explicit focus on uncertainty and risk.
- Quality of Life Capital / ecosystem services, which seeks to systematically and explicitly consider the full range of benefits and services provided by the environment.

- Regional self-sufficiency which seeks to ensure natural resource self-sufficiency, but also considers scale of analysis and how limits can be expanded or shrunk through import and export.

- Comparative disadvantage, which seeks to ensure that existing socio-environmental imbalances are not worsened and where possible actively redressed.

Not all of these approaches were relevant for each environmental topic (e.g. self-sufficiency of air quality), and some approaches were particularly relevant for some topics (e.g. ecosystem services for biodiversity).

3. Key findings.

Table 0.1 shows the environmental limits proposed through the workshops. Instead of proposing limits per se, several groups proposed rules of thumb to which all local plans and individual development projects should adhere to ensure that development is 'within environmental limits'. Other groups proposed 'ultimate limits': the ideal target that the region should be working towards in the longer run. Biodiversity, heritage and landscape are more complex topics involving more dimensions and a greater component of judgement. They were considered in only one workshop, whereas the other topics were considered at two workshops. As such, the environmental limits proposed for these topics are more tentative and vague.

Table 0.1 - Proposed Environmental Limits:

Topic	Critical environmental limit / rule of thumb minimum requirements	Ultimate environmental limit / ideal target	Comments
Air Quality	National air quality standards could be a useful basis for environmental limits, but no precise limits were proposed. There may also be justification for targeted action to protect ecosystems. A rule of thumb is that loss of life expectancy as a result of air quality should decrease year on year.		
Greenhouse Gas Emissions	Minimum requirement: no development / project / decision should add to net greenhouse gas emissions	Cut per capita emissions by 80% by 2050	We have up to now failed to reduce greenhouse gas emissions. There is an urgent need for the rhetoric on climate change to be matched by decisive and vigorous enough interventions.

Topic	Critical environmental limit / rule of thumb minimum requirements	Ultimate environmental limit / ideal target	Comments
Water Quality	No deterioration in achievement of Water Framework Directive (WFD) objectives year on year. If there is an improvement in one year, this acts as the new baseline. It is a principle of the WFD that there will be no deterioration between classes, and that protected areas will not deteriorate from their current classification. In the South East, there should also be no literal deterioration within the 'bad' class.	Achievement of WFD 'good ecological status' for all water bodies in the region	Decisions should seek to improve water quality as well as ensure 'no deterioration'. Environmental limits for resources (e.g. air, water) should be set at the strongest level necessary to ensure the achievement of all other environmental limits (e.g. biodiversity). Management for water quality should be as simple (non-complex) as possible: for instance water pollution should be avoided if possible rather than sophisticated technical measures be used to treat polluted water.
Water Resources	Although participants were not able to come up with one proposed environmental limit for water resources, elements of an environmental limit would relate to the Water Framework Directive, public supply headroom, and cultural values.		The Regional Strategy should: • Support, influence and co-ordinate with water company forecasting of water demand and plans for supply. • Promote a sequential approach of first water company cooperation, then demand management, and new supply side assets. In practice, all three are likely to be needed. • Identify and respond to potential irreversible damage from low flows. • Put forward as options (only) those housing and employment land distributions that avoid areas of water over-abstraction if this cannot be managed. • Link its policies on water resources to achievement of Water Framework Directive objectives.

Topic	Critical environmental limit / rule of thumb minimum requirements	Ultimate environmental limit / ideal target	Comments
Biodiversity	Two discussion groups came up with slightly different environmental limits for biodiversity. 1. A 'no-net-loss' (NNL) approach should be taken when making decisions relating to biodiversity conservation. BAP targets provide an estimate of environmental limits for biodiversity. NNL must be achieved in relation to *viability* of species populations. This would necessitate some remediation and enhancement work. 2. The environmental limit is the long-term ecological viability of priority biodiversity assets where: • Priority biodiversity assets = the Biodiversity Action Plan list (species and habitats) and designated sites; and • Long-term ecological viability = species / habitats are still there in 50-100 years. Inherent in this definition is that the species / habitats must have the opportunity to resolve pressures such as climate change. A rule of thumb for implementing this should be net biodiversity gain for all development		
Heritage	The aim should be 'maintaining capacity' rather than 'applying limits'. Bottom-up assessment and justification for the historic environment is needed to inform this.		Today's construction will be tomorrow's heritage, so we need to build well now.
Landscape	Maintenance of designated landscape should not be the (only) environmental limit for landscape. Landscape dimensions that should be considered when proposing environmental limits include functionality, character / attractiveness, tranquillity, darkness at night, and historical links		Work on landscape environmental limits should focus on areas outside designations, as these are more vulnerable.
These are not the only environmental limits relevant to the South East. Others include the region's ecological footprint; its contribution to agricultural land area, soil fertility, and its effect on environmental limits outside the South East (for instance from water use elsewhere to grow food consumed in the region).			

The idea of 'environmental limits' applies in different ways, and is of different levels of usefulness, to the seven topics. It applies most obviously and directly to water quality, water resources, air quality and biodiversity; less directly to greenhouse gas emissions; and 'environmental capital' is probably a more appropriate approach for heritage and landscape. Capacity was interpreted as meaning the ability to accept pressure or change without losing what matters. It includes the concept of expanding the ability to accept change, and of environmental improvement.

Several of the environmental limits are genuinely new, notably the water quality limit of "no literal deterioration within the 'bad' class". In other cases, new ways of operationalising limits were identified, for instance the water resources hierarchy of water company cooperation – demand

management – supply-side assets. The greenhouse gas emissions group felt that both the limits and the methods for implementing are well-known, but that action to achieve the limits has been notably absent to date.

Interestingly, designations do not feature in the environmental limits, despite being a focus of current planning: designations were perceived as 'reservoirs' of good condition and good management, but environmental limits were seen as going far beyond this. For biodiversity, at least, the improving condition of designated areas was felt to go counter, and possibly mask, a trend of severe overall deterioration. There is clear evidence that environmental limits are being exceeded for some topics even if there is still uncertainty or controversy about how far.

4. Implementing Environmental Limits.

Workshop participants consistently stated that the RS should be bold and ambitious, and not be bound by national level standards or past concepts of what is good for 'UK plc'. Many participants felt frustrated by national government's (more or less explicit) insistence that regional policy should not go beyond national standards, and felt that this had limited the ability of planners in the South East to ensure that development is within environmental limits.

Participants felt that environmental limits should be at the heart of the RS development process; that all RS options should be framed within environmental limits / capacity; and that the RS process could usefully start by looking at where environmental limits are being exceeded rather than where growth is desired.

Participants recommended that preventing development from adding any pressure to environmental resources recognised as potentially under stress is a necessary and useful (if far from sufficient) step towards keeping development within environmental limits. This ‘no deterioration’ or 'do no harm' approach could be a useful starting point for implementing sustainable development more widely (ideally the aim should be to enhance the overall environmental capital of the region), and has the advantage of being applicable at all scales, from the personal to the global.

Cross-compliance was felt to be a powerful means of ensuring through the RS that development is within environmental limits. Participants felt that public funding should only be made available for developments that supported RS policies, and particularly that no public funding should be made available for projects that add to net pressure on environmental limits. Participants also suggested that monitoring systems should include effective responses ('with teeth') if limits are exceeded.

5. Validity of these conclusions.

This process of evidence – judgement – evidence - judgement proved to be highly effective in gaining agreement on proposed environmental limits, in part because much environmental data already existed for the South East, many highly experienced and qualified people were willing to contribute positively to the process (for which we are most grateful), participants already had a long history of collaboration, and the region was felt to already be near or beyond several environmental limits. The two workshops provided both an evidence base and broad agreement on proposed environmental limits for the South East.

Although it will always be possible to criticise any environmental limit on the basis that it has been taken without 'full' evidence and / or by people whose judgement is biased or poor, participants felt that this group and this process was suitable for developing environmental limits, and that the proposed limits are 'fit for purpose' and should be used by regional planners or other decision-makers until and unless any future process was able to improve on them: future economic development should be within these limits, and the limits should not be modified to allow for preferred levels of economic development.

6. Next steps.

A strong message from participants was that **further agreement on precise environmental limits is less important than implementation of the principle of 'within environmental limits' through the RS**. This accounts for the prevalence of 'rules of thumb' and 'no deterioration' approaches rather than precise numerical limits.

For greenhouse gas emissions and water resources, further discussion about precise environmental limits is not necessary, and could in fact act as a distraction and excuse for inaction. Instead, after consultation on whether the proposed environmental limits and rules of thumb are broadly fit for purpose, emphasis should be placed on implementing them through the RS. For biodiversity, another stakeholder workshop is likely to be needed to reconcile the slightly different limits proposed by the two discussion groups at our workshop. For heritage and the landscape, more discussion with expert bodies is likely to be needed to flesh out the different dimensions of environmental limits identified at our workshop. Table 0.2 lists suggested next steps.

Table 0.2 - Suggested next steps:

Topic	Suggested next steps
Overall	Consult on whether the environmental limits and rules of thumb proposed in this report are fit for purpose; keeping in mind that implementation of the principle of 'within environmental limits' is more important than agreement on precise limits.
Air & Water Quality	Discuss with the Environment Agency where environmental limits are (and will not) be met, and what the implications of this are for the RS.
Greenhouse Gas Emissions	Make the principle of 'no net increase' operational through the RS. Include new carbon related targets and indicators in the RS to reflect the urgency of the issue: these should include aviation, and the carbon effects of imports. Cover the management of farming, forestry, parks, and open space in the RS. Treat transport not as a consequence of decisions make on other sectors.
Water Resources	Promote a clear hierarchy of water company cooperation → demand management → new resources. Identify areas of potential irreversible damage from low flows. Consider only housing allocations that avoid areas of water over-abstraction, and particularly areas of potential irreversible damage from low flows. Link RS policies on water resources to achievement of Water Framework Directive objectives.
Biodiversity	Hold another stakeholder meeting to further discuss environmental limits for biodiversity.

Topic	Suggested next steps
Heritage	Request English Heritage (possibly jointly with other stakeholders) to clarify what characteristics of heritage are important at the regional level and why. The RS should then ensure that these are protected and enhanced (if this is required beyond national policy).
Landscape	Organise another workshop to propose how functionality, character / attractiveness and historical links can be translated into RS policies.
Other topics	Consider whether and how other environmental limits for the region need to be set, e.g. for global impacts, agricultural productivity, waste. Identify prioritisation rules for circumstances where two environmental limits conflict.

The workshops discussed the role of SA/SEA in helping to ensure that economic growth is within environmental limits. Our initial recommendations for how this could be done are:

- The SA should be used to ensure the RS is within environmental limits and the RS should not receive an overall positive sustainability appraisal score unless, as a whole, it is consistent with all the objectives/rules.

- In the Regional Sustainability Framework (SA framework), include as SA objectives the achievement of agreed quantified environmental limits. For environmental topics for which specified limits have not been agreed, until such limits have been agreed, SA objectives should be an appropriate 'no net detriment' / neutrality test.

- Include in the scoping report evidence about environmental limits: the policy context, current situation and expected situation without the RS.

- Appraise through the SA process the implications on environmental limits of RS options and policies, and the RS as a whole. Where the RS would lead to environmental limits being exceeded, avoidance and mitigation measures should be taken until it no longer does so.

- SA/SEA monitoring and reporting requirements should include performance against these objectives for (a) the plan (including implementation, daughter documents and lower tier plans) and (b) the region as a whole.