

Issues in Strategic Environmental Assessment

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- Introduction
- Some examples
- SEA issues in the UK
- Good practice recommendations

Introduction

- Required by European SEA Directive
- SEA detail and ‘strategicness’ should be proportional to those of the plan
- Alternatives and mitigation are strategic
- Substantive objective (high level of protection of the environment) but Directive is procedural

Strategic decision-making

Describe strategic action
sustainability



Identify alternative ways to
achieve objectives



Choose between alternatives



Fine-tune chosen alternative



(Formal decision/announcement)



Implement strategic action

Environmental input/SEA

← Include environmental/
objectives, targets & indicators

← Describe environmental baseline &
identify problem areas

← Predict & evaluate impacts of
alternatives

← Mitigate impacts of chosen
alternative

← Write SEA report

← Establish environmental
guidelines for implementation

Strategic decision-making

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sustainability



Identify alternative ways to
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Choose between alternatives



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Implement strategic action

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← Include environmental/
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← Describe environmental baseline &
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← Consultation with env bodies

← Predict & evaluate impacts of
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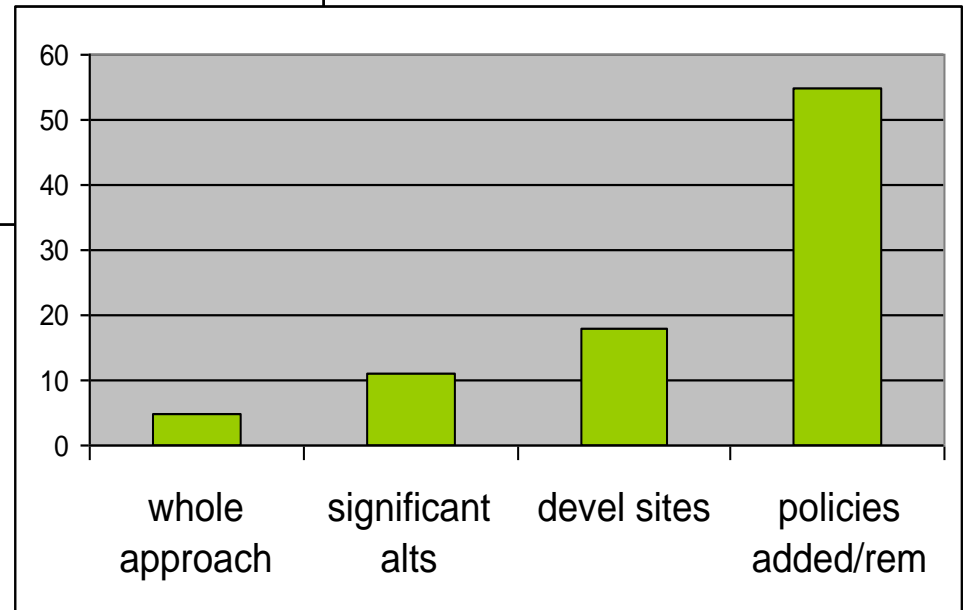
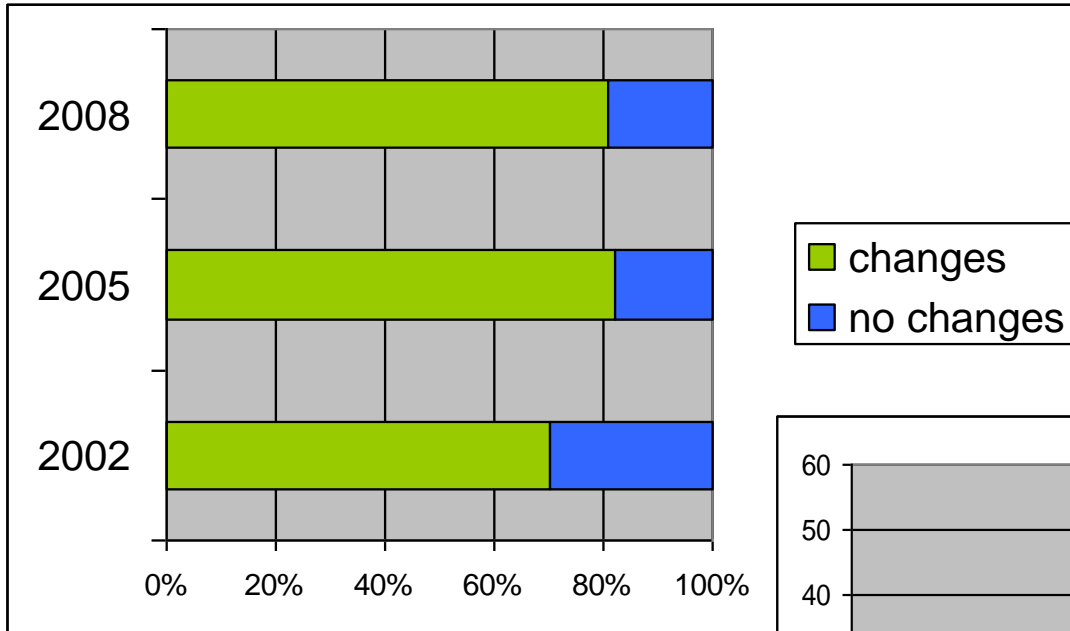
← Mitigate impacts of chosen
alternative

← Write environmental report

← Consultation with env bodies +
public

← SEA statement + monitoring

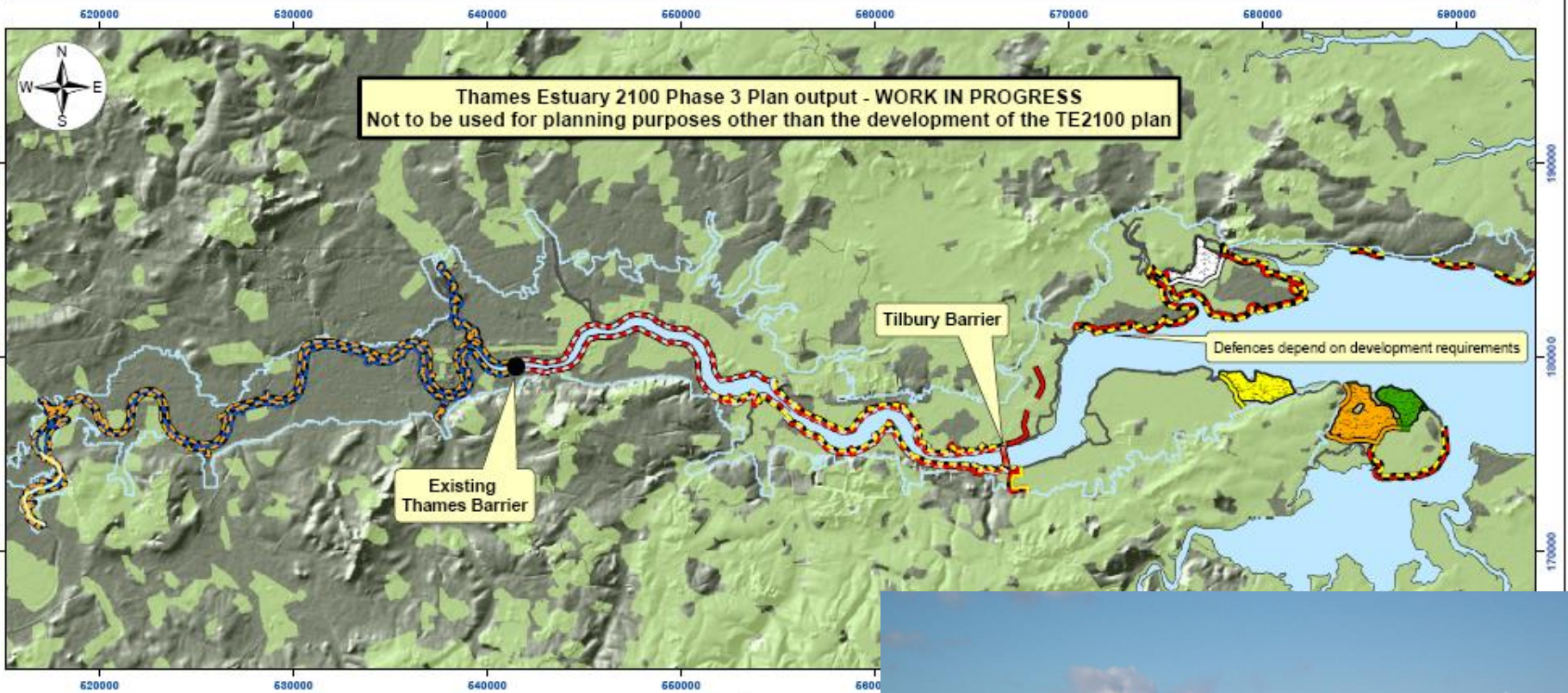
Most SEAs are leading to changes in the plans (but 20% aren't)



Examples



Option 3.1 - New Barrier at Tilbury (Climate Scenario - Defra 2006)



Flood risk management of the tidal River Thames to 2100

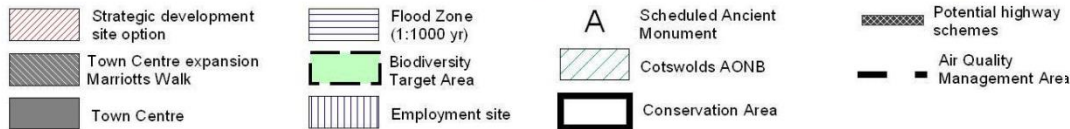
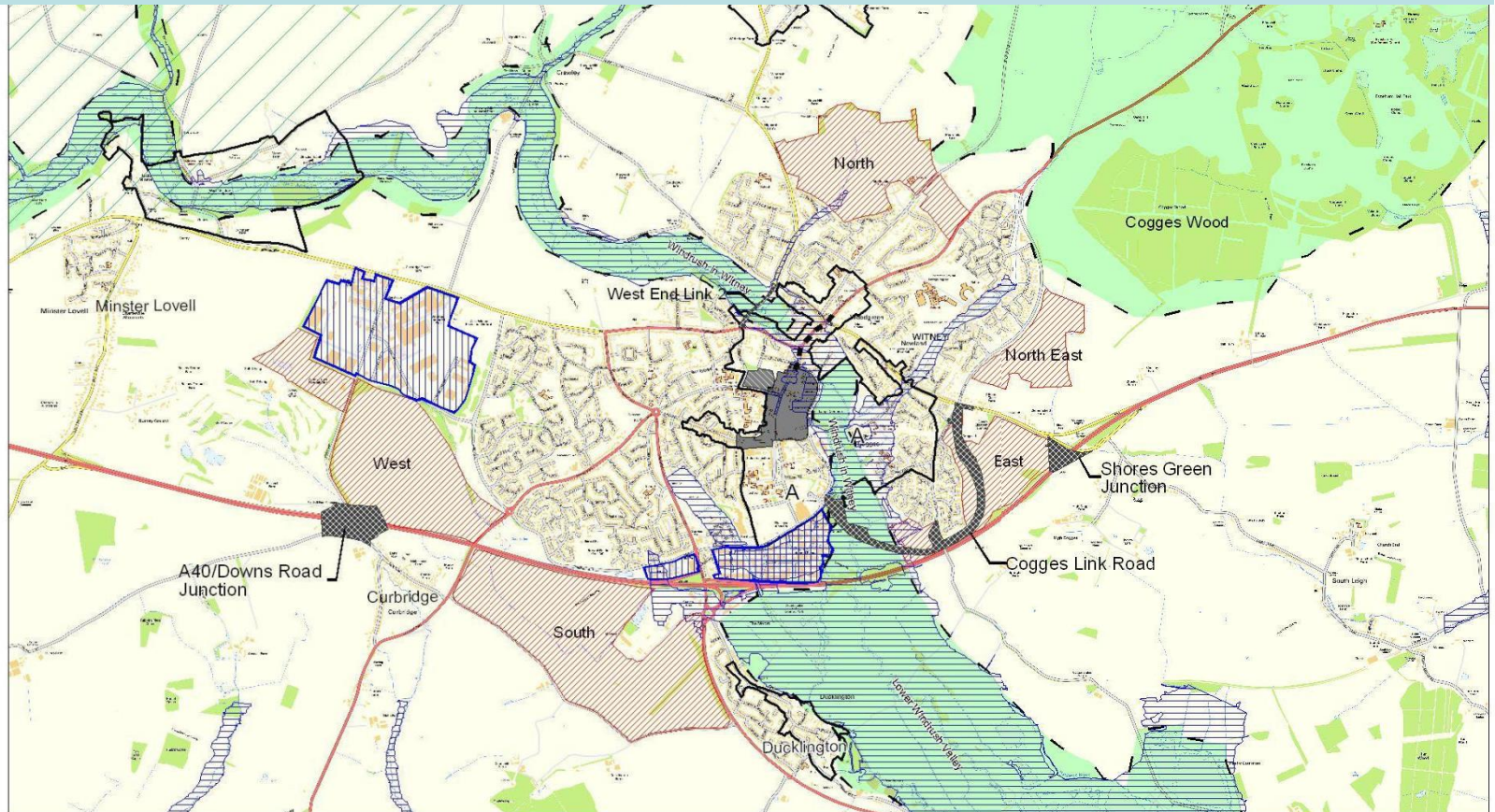




'Do minimum'
Raise defences
Flood storage
Barrier
Barrier with lock

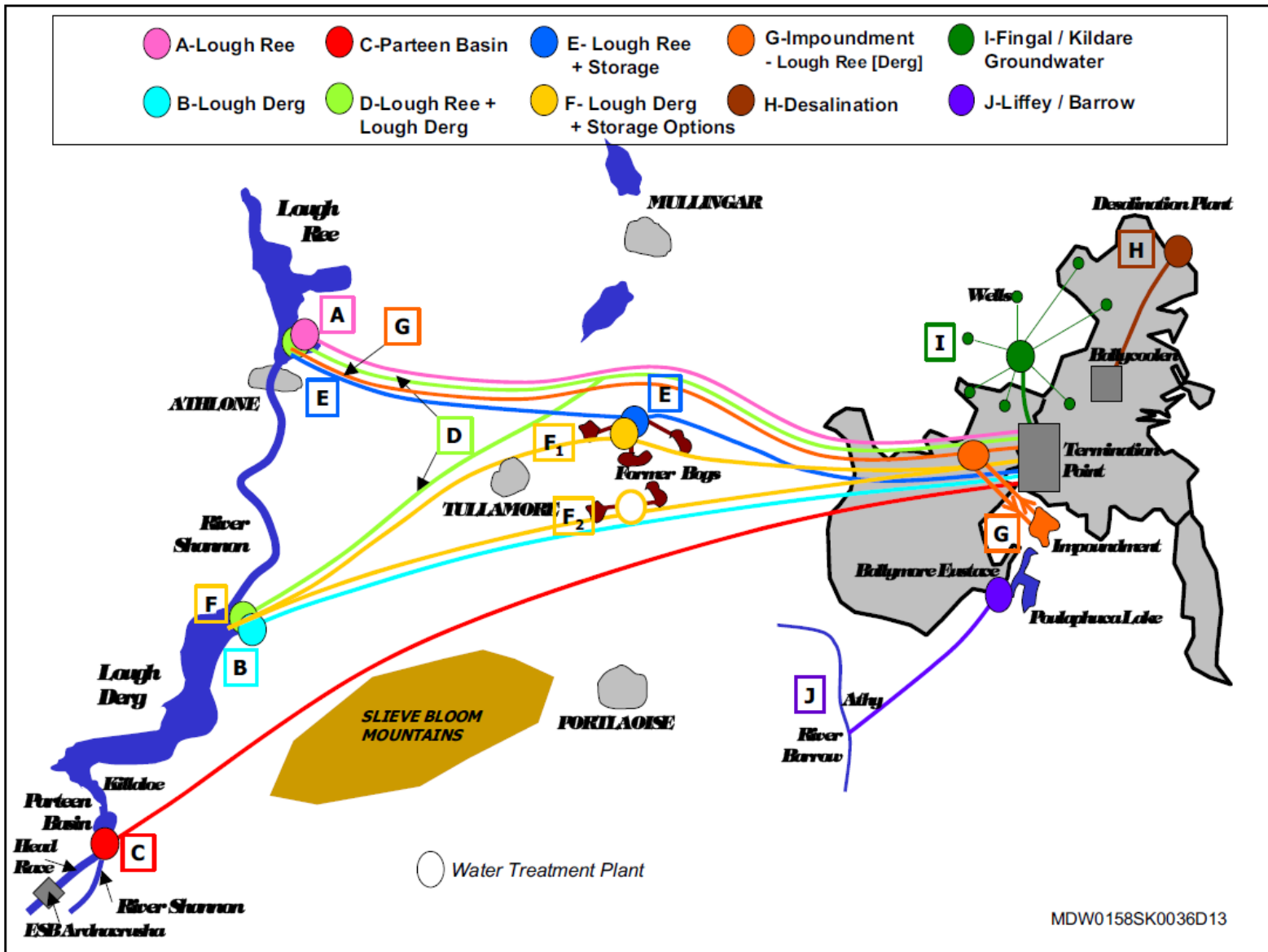


Location of future housing, West Oxfordshire District Council



SA Objective	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
1. Achieving Successful and Inclusive Communities	+	+	++	++	++	+
2. Ensure Arun delivers high quality housing and provides excellence social infrastructure	++	++	0	++	+	+
3. Ensure a diverse and thriving economic base and support Arun's growth	+	+	+	++	0/+	+
4. Improve the vibrancy of Arun's town centres	++	++	0	++	0	-
5. Ensure efficient and sustainable movement within and beyond Arun District Council	+	+	-	+	0	0
6. Enhance Arun's Environmental Integrity	-	0	--	0	-	--
7. Maximise natural resources efficiency	+	+	+	+	0	+

Options for water provision for Dublin (Ireland)



Aspect	Assessment	A	B	C	D	E	F1	F2	G	H
Water	Watercourse crossings	4	6	5	5	5	6	6	4	0
Water	Increase in retention time in Lough Derg (+ days)	+7	+7	0	+7	0	~ +3	~ +3	0	N/A
Water	Increase in low flow days in the Shannon Callows	24	N/A	N/A	17	4	N/A	N/A	5	N/A
Climate	CO ₂ emissions (tonnes CO ₂)	39,861	45,082	55,726	44,039	43,966	54,066	54,520	61,871	198,422
Material Assets (Energy)	Energy required per year in millions of kWh for 2031	51.4	58.1	71.8	56.8	56.7	69.7	70.3	79.7	255.7
Material Assets (Land use)	Area of land which will potentially be rehabilitated	0	0	0	0	2000	2000	1000	0	0
Material Assets (Land use)	Area of land impacted by water supply infrastructure (approx. ha)	1.3	1.3	1.3	2	201.3	101.3	101.3	121.3	17
Material Assets (Land use)	National roads crossed by each option	3	4	4	3	2	6	4	5	2
Material Assets (Land use)	Length of pipelines (km)	104	122	158	177	104	127	122	111	24
Population & Human Health	Households supplied per day	965517	965517	965517	965517	965517	965517	965517	965517	827586
Waste	Volume of sludge produced (m ³ /day)	340	340	340	340	340	340	340	180	180

HS2





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OPTION 1

- 1. L2 Views of Cotswolds AONB.
- 1. L5 Knock/bentley Hall & Sillind
- 1. L6 Lots of small villages nearby (824)
- 1. H1 SAM (Ditch)
- 1. H2 Grade 1 Park (Farnborough) Hall
- 1. E1 Aston Round SAC. Direct
- 1. E2 Burnham Beeches SAC (indirect (Wye))
- 1. E3 River Blythe SSSI Minor
- 1. W1 Division of R. Blythe
- W2 General (824, 850, 858, 840) > 1/2 mi
- Threat good aquifer
- 1. A1 802, 807, 837, 824. [4600
resil
Construction dust
< 100m]
- 1. N1 807. 27.5K ea unvoiced
N2 824 7K

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- 1. L1 14.5 km Chilterns AONB
- 1. L3. Townscape impact
- 1. L4 Various small towns (see framework)



Current issues in the UK

'Historic Newmarket'

SEA of 2006

Table 17 – Assessment of housing allocations

Pref.	Map ref.	Settlement	Address	Size (ha)	Dwells.	Recommended	Comment
1	1	Brandon	Land to the rear of High Street	0.39	16	Yes	
1	2	Brandon	Land to the rear of Thetford Road	0.34	10	Yes	
1	3	Brandon	Land off Webbs Row	0.32	10	Yes	
1	4	Brandon	Land to the rear of 99–107 Thetford Road	0.39	12	Yes	
1	5, 6	Brandon	Land off School Lane	1.19	48	Yes	
1	7	Brandon	Land to the rear of 54-78 Thetford Road	0.59	18	Yes	
1	8	Brandon	Land to the rear of 159–181 Thetford Road	0.33	10	Yes	
1	9	Brandon	Land to the rear of 102-102 Thetford Road	0.33	10	Yes	
3	1	Kentford	Land west of Herringswell Road	1.08	25	Yes	
3	2	Newmarket	Land east of Fordham Rd at Hatchfield Farm		400	Yes	
3	3	West Row	Land off Pott Hall Road	5.6	68	No	Publicly accessible open space/Greenfield



2008: “Greenfield land will be allocated as an urban extension to the north [east] of Newmarket for approximately 1000 dwellings as part of a mixed use development subject to highway improvements to the A14/A142 junction to be built between 2010 and 2020“

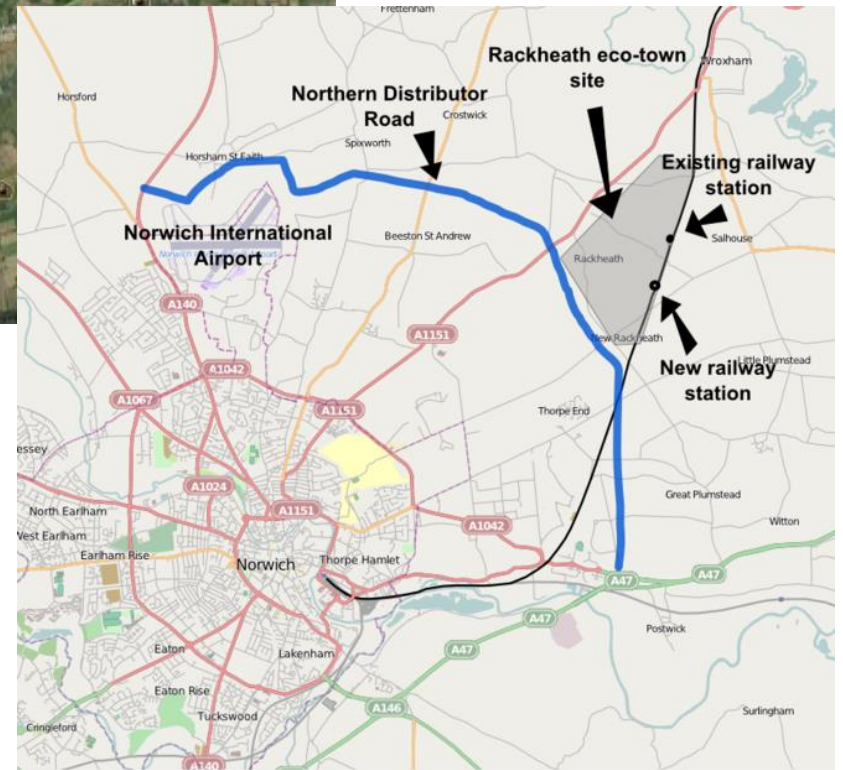
2009: ““Greenfield land will be allocated as an urban extension to the north east of Newmarket to approximately 1200 dwellings as part of a mixed use development subject to any necessary highway improvements along Fordham Road to the High Street and improvements to the A14/A142 junction to be phased between 2010 and 2031.“

No SEA carried out in 2008 or 2009

The judgement: “When the draft plan... and the accompanying environmental assessment are put out to consultation... there [can] have been [during an iterative planning process] a prior ruling out of alternatives. But this is subject to the important proviso that reasons have been given for the rejection of the alternatives, that those reasons are still valid if there has been any change in the proposals in the draft plan or any other material change of circumstances and that the consultees are able... to know from the assessment... what those reasons are...”



Greater Norwich



Case where examination temporarily stopped for additional SA work

Trafford Core Strategy:

- SEA consultants incorrectly said site was in Green Belt
- Site eliminated from further consideration
- No further SEA work despite developers' consultation response
- Examination postponed, site included in adopted plan



Rochford Core Strategy



Policy H2 – Extensions to residential envelopes and phasing

The residential envelope of existing settlements will be extended in the areas set out below and indicated on the **Key Diagram**, to contribute to a five year supply of housing land in the period to 2015, and between 2015 and 2021.

Area	Dwellings by 2015	Dwellings 2015-2021
North of London Road, Rayleigh		550
West Rochford	450	150
West Hockley	50	
South Hawkwell	175	
East Ashingdon	100	
South West Hullbridge		250
South Canewdon		60
Total	775	1010

H2 General Locations and Phasing (Submission Policy H2 Extensions to Residential Envelope and Phasing)

H3 General Locations Post 2021 (Submission Policy H3 Extensions to Residential Envelopes Post 2021)

- 5.14 This policy has been assessed in terms of the overall quantum of development proposed on urban extensions, as well as the locations proposed for development.
- 5.17 The actual locations for growth proposed in the policy are considered to be the most sustainable options available, within the context of the overall high levels of population growth being proposed in the East of England Plan. The policy recognises the di

No assessment of impacts on each settlement

Post 'Historic Newmarket'. Sent back for appraisal of options for each settlement

Lessons for SEA preparation

- No need for SEA to go beyond legal requirements
- Double-check SEA data, particularly if it has significant bearing on ultimate planning decision
- Key role of SA is to explain what alternatives have been considered, their impacts, and reasons for preferred alternatives
- SEA is understood (and sanctioned) as being partly subjective

- SEA consultation is important, and env. reports should not be a 'paper-chase'
- Planners should clearly take into account consultees' comments (and document this)
- SEA is a decision informing, not decision-making tool – the ultimate decision can be quite different from SEA preferred option as long as it is justified
- Successful legal challenges have major effect on planners' behaviour

Revocation of
plans can also
require SEA...

Strategic Environmental Assessment of the Revocation of the North West of England Regional Strategy

Environmental Report



AMEC Environment & Infrastructure UK Limited

December 2012

... as can plans that have only significant positive effects

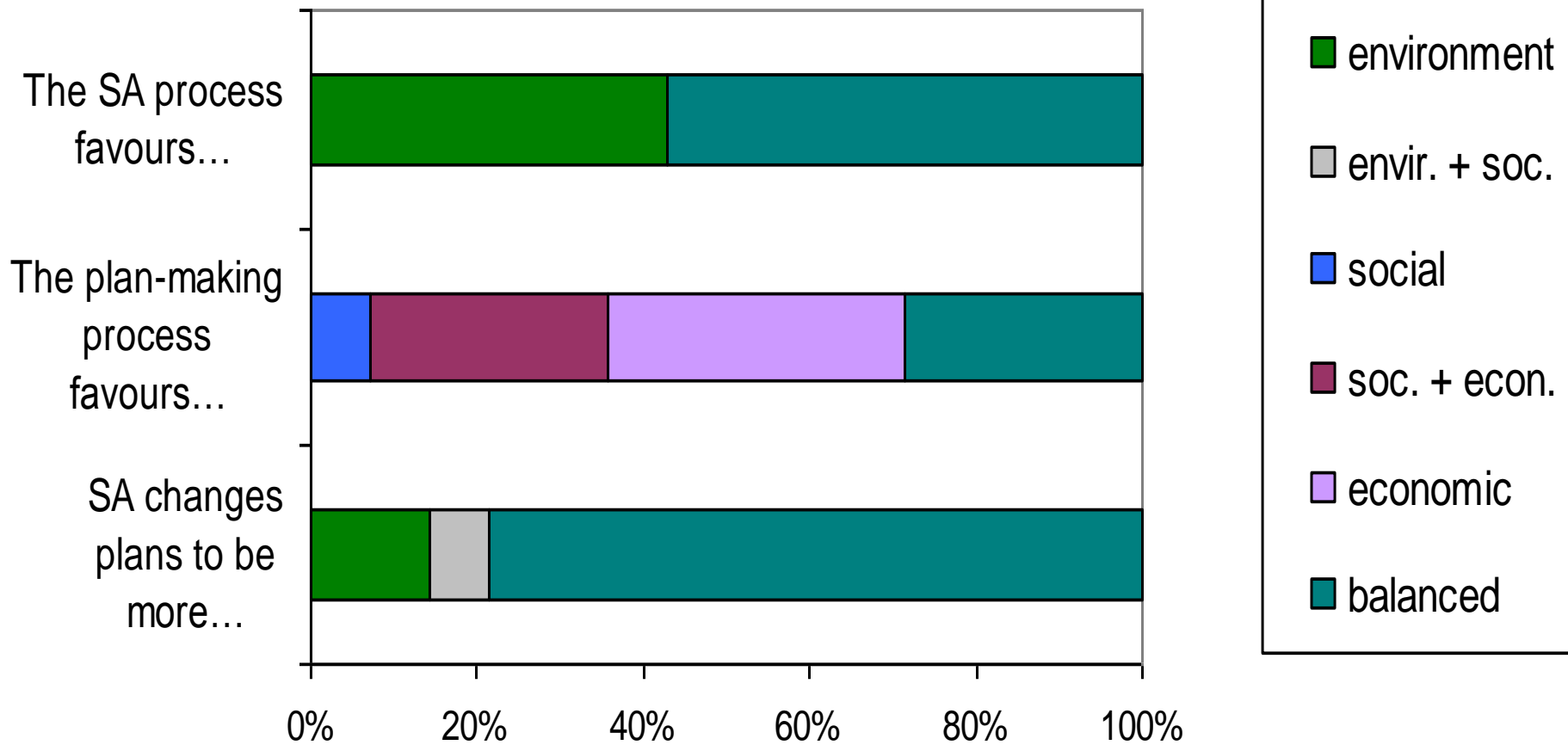
	Thame NP Objective	SA objective	7A Integrate New Housing into Thame	7B Provide a greater range of affordable housing	7C Provide a range of different housing types	8A Support Thame's Shops	8B Provide new employment	8D Make sure that development on the Cattle Market site supports Thame Town Centre	9A Connect new housing into Thame and the wider area with good pedestrian, cycle and bus connections	9B Improve existing pedestrian and cycle connections within Thame	9C Improve connections to surrounding villages / destinations	9D Plan public transport to better meet users' needs	9E Ensure car parking within the Town supports the viability of the Town Centre	10A Provide a large community facility	10B Ensure the Thame Neighbourhood Plan meets the needs of young people	10C Put a strategy in place for primary school provision	11B Provide more public open space	11C Improve existing open spaces	11D Provide riverside walks	12A The design of new housing must reinforce Thame's character
1	√	√	√	0	0	√	√	√	0	0	0	0	√	0	0	0	0	0	0	√
2	√	0	0	√	0	0	√	√	√	0	0	0	√	0	0	√	0	0	0	0
3	√	0	0	√	0	0	√	√	√	√	√	√	√	√	√	√	√	√	√	0
4	√	0	0	√	0	0	√	√	√	√	√	0	√	√	0	√	√	√	√	√
5	√	0	0	0	0	0	√	√	√	√	√	√	0	0	0	0	0	0	√	0
6	√	0	0	0	0	0	√	√	√	√	0	0	0	0	0	0	0	0	√	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	√	√	√	√	√
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	√	√	√	√
9	√	0	0	√	0	√	0	0	0	0	0	√	0	0	0	√	√	√	√	√
10	√	0	0	0	0	0	√	√	√	√	√	√	0	0	0	√	√	√	√	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	√	0	√	√	√	√	√
12	0	0	0	0	0	0	0	0	√	√	0	0	0	0	0	0	0	0	0	0
13	0	0	√	√	0	√	0	0	√	0	0	0	0	0	0	√	√	0	0	0
14	0	0	0	√	√	√	0	0	√	√	√	√	√	0	0	0	0	0	0	0
15	0	0	0	√	√	√	0	0	√	√	√	0	0	0	0	0	0	0	0	0
16	0	0	0	√	√	√	0	0	0	0	0	0	0	√	√	0	0	0	0	0

Post-SEA plans have social & economic benefits, but still neutral or slightly negative environmental effects

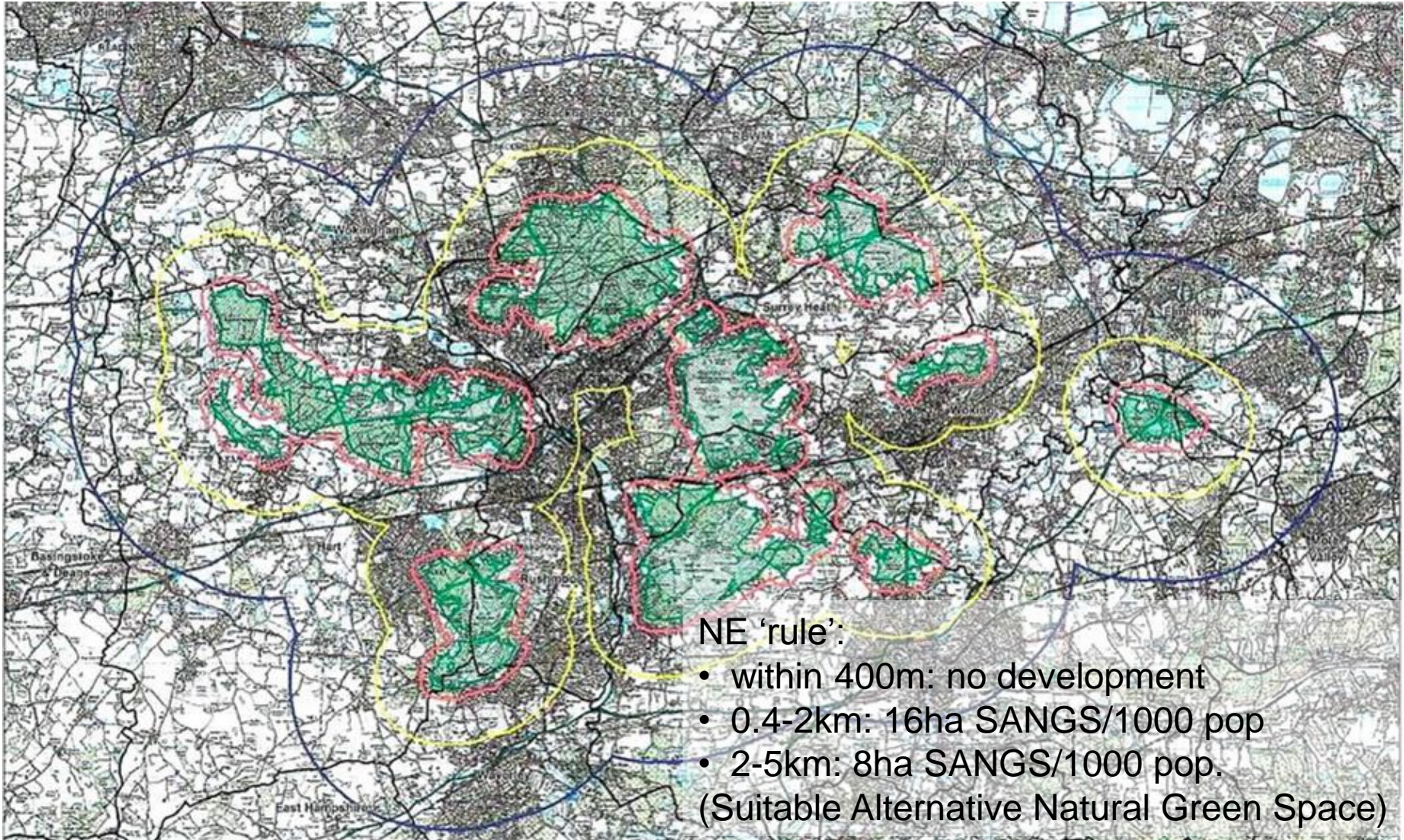
Social	Environmental	Economic
Accessibility 1.27	Air -0.21	Econ. growth 1.18
Crime 0.59	Biodiversity 0.26	Employment 1.17
Equity 1.16	Climate ch. 0.09	Skills 0.68
Health 1.04	Landsc./hist. 0.67	
Housing 1.23	Resources 0.20	Other
	Water -0.04	Flooding -0.30
	Waste -0.34	Land use 1.04

Conclusions of 45 SA/SEA reports about impacts of their plans

Respondents perceive SA/SEA as 'balancing' an economic/socially oriented plan-making process



Thames Basin Heaths SPA: strategic level mitigation using buffer zones and SANGS





Thames Basin Heaths SPA



Inspector:

- Within 400m: no development
- 0.4 - 5km: 8ha SANGs/1000 pop. for >10 dwellings
- 5 – 7 km: ‘appropriate contribution’ for >50 dwellings
- Travel distance, not as crow flies
- Hostels, nursing homes etc. = dwellings unless shown otherwise



SANGS:
Chobham Place Wood





SANGS: Windsor Great Park



Good practice recommendations

- Apply SEA to all relevant sectors
- Start early, engage stakeholders early
- Get decision-makers to better understand the value of SEA
- Better scoping
- More emphasis on spatial info / maps

- Generate clearer/better alternatives
- Appraisal scope should reflect scope of alternatives
- Level of detail of SEA proportional to level of detail of plan
- Impacts should be identified with respect to the baseline situation
- Appraisal should consider not plan ambitions but its effectiveness on the ground

- Recommend clearer mitigation measures; planners respond to them; implementation of mitigation measures
- Use SEA to help meet climate change obligations
- Clarify requirement to ‘take into account’ the env. report and consultation responses
- Document changes to plan made in response to SEA
- Clearer reports and better summaries