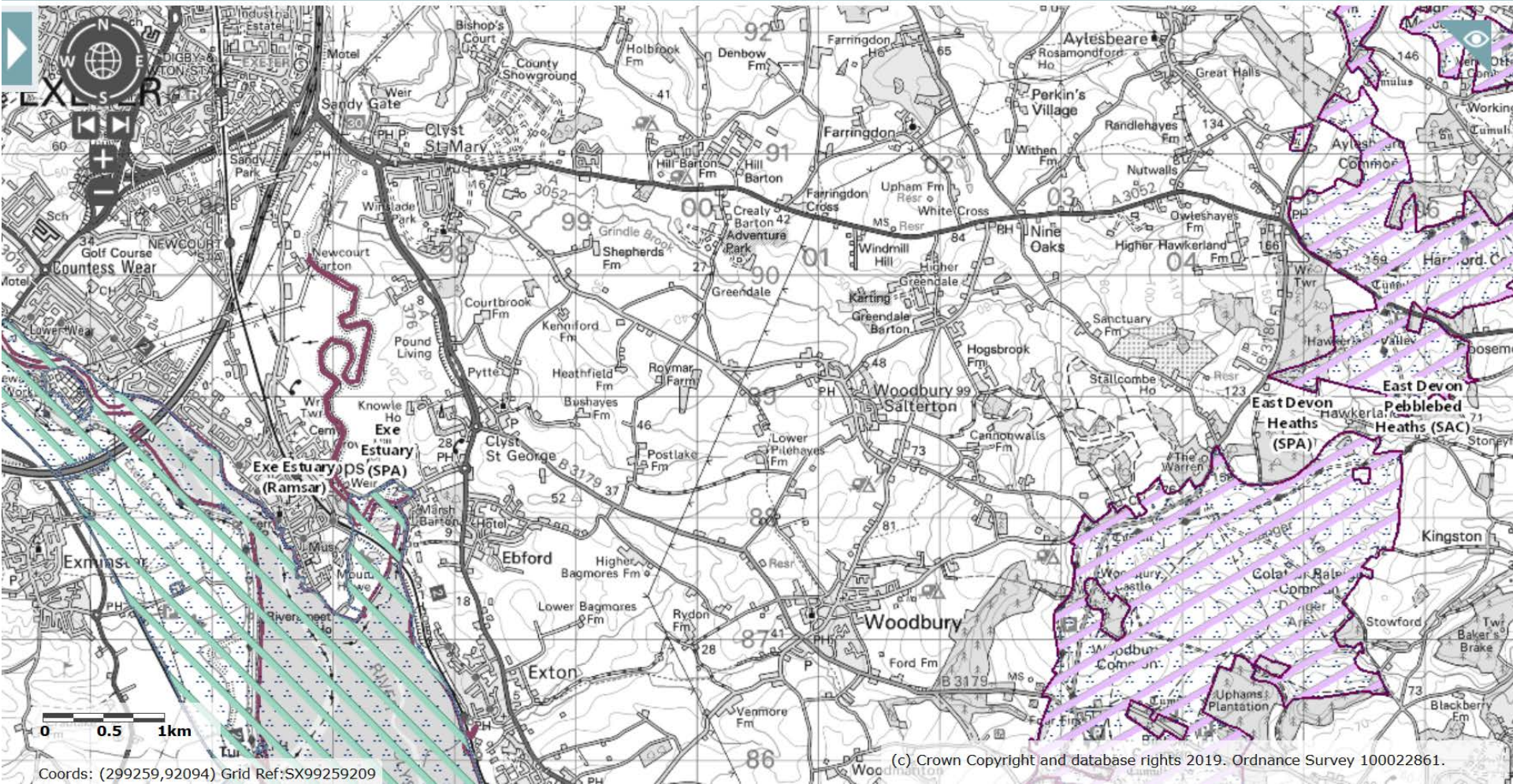


Appropriate assessment / Habitats Regulations Assessment

Riki Therivel, Levett-Therivel

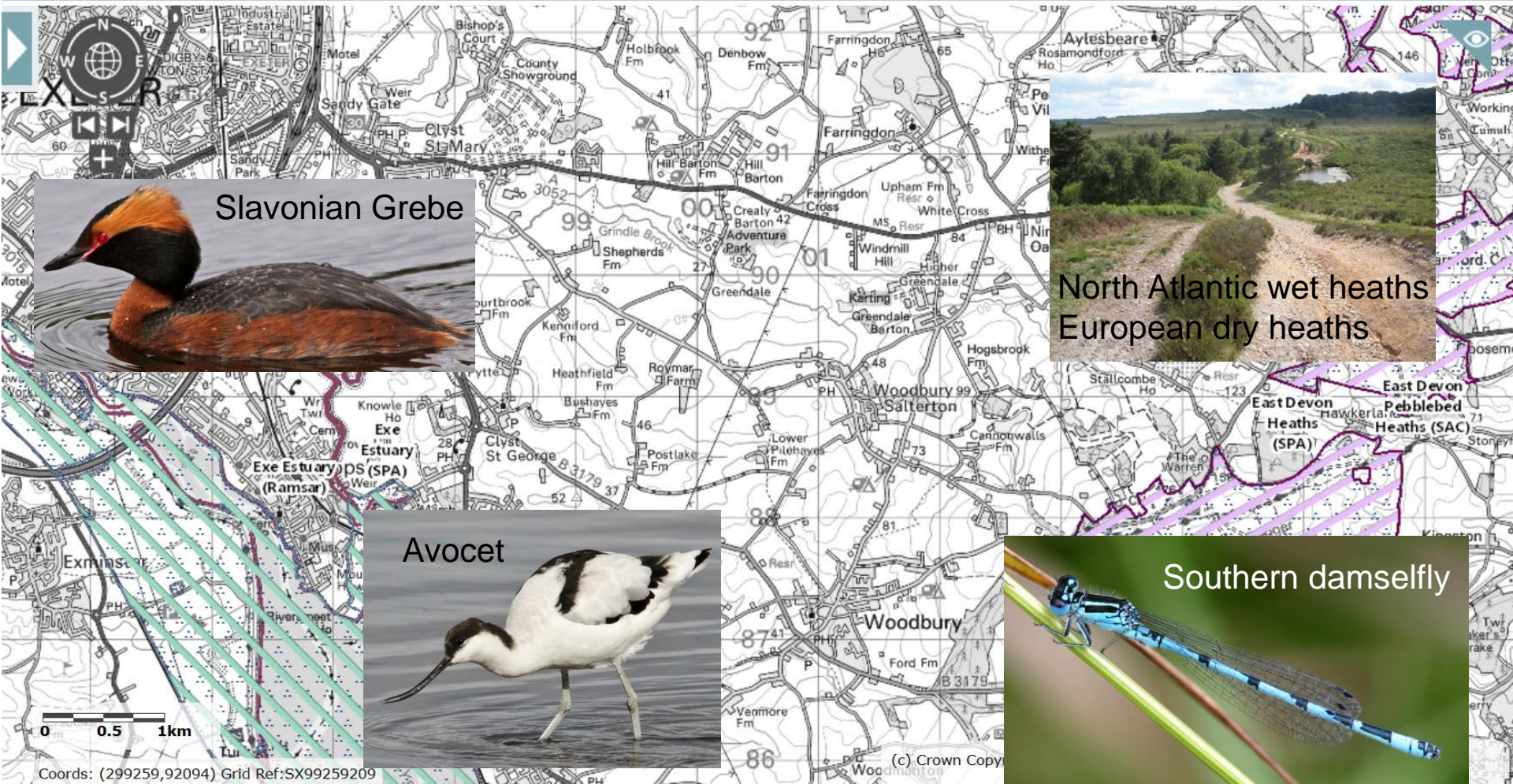
- What is AA/HRA?
- Four steps in HRA
 - Screening
 - Appropriate assessment
 - Alternatives, IROPI, compensatory measures
- UK examples
- ‘People Over Wind’

WHAT IS AA / HRA?



Coords: (299259,92094) Grid Ref: SX99259209

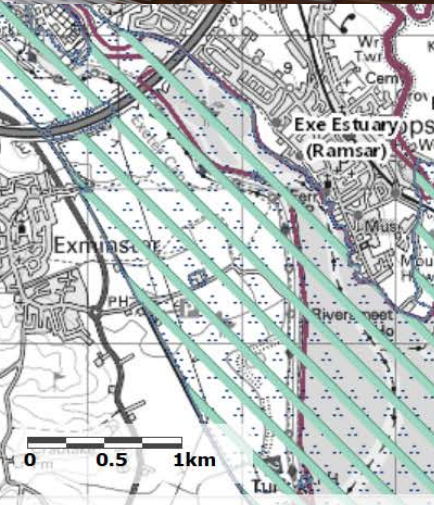
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Slavonian Grebe



North Atlantic wet heaths
European dry heaths



Avocet



Southern damselfly

- Tests impact of project or plan on SPAs/SACs
- Concludes with yes/no statement: will project or plan have significant impact on European site?
- It is very precautionary

Required by European Habitats Directive

AA of projects carried out for about 15 years

European Court of Justice ruling Oct. 2005: UK has not implemented Habitats Directive Articles 6.3 and 6.4 correctly re. plans

Conservation of Habitats and Species Regulations 2010 transposes requirements into UK law

6.3 *Any plan or project not directly connected with or necessary to the management of the **site** but likely to have a **significant** effect thereon, either individually or **in combination** with other plans or projects, shall be subject to **appropriate assessment** of its implications for the site in view of the site's conservation objectives... the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned..*

6.3 Any plan or project not directly connected with or necessary to the management of the **site** but **likely** to have a **significant** effect thereon, either individually or **in combination** with other plans or projects, shall be subject to **appropriate assessment** of implications for the site in terms of its conservation objectives.

significance is judged in terms of the features for which the site was designated and the site's conservation objectives

a European 'site' is an SPA or SAC. Ramsar sites and European Marine Sites are also typically treated as European sites in AA

Lydden and Temple Ewell Downs SAC

Semi-natural dry grasslands and scrubland facies: on calcareous substrates



- Maintenance of grazing
- Minimal recreational trampling
- Minimal air pollution
- Absence of direct fertilisation
- Well-drained soils

Thanet Coast & Sandwich Bay SPA

Turnstone, and large number of migratory birds



- Minimal recreational disturbance
- Maintenance of grazing regime
- Space to allow managed retreat of intertidal habitats
- Unpolluted water
- Absence of non-native species
- Balance of saline and non-saline conditions

6.3 Any plan or project not already necessary to the management have a **significant** effect there

a project or plan located some distance away from a European site could still have significant effects on the site

or a **combination** with other plans or projects, shall be subject to **appropriate assessment** of its

'likely' means that the possibility of the project or plan having a significant effect cannot be excluded on the basis of objective evidence

'in combination' can include existing problems and trends due to past plans or projects

site in view of the site's...
... to the...
... that it will not adversely...
the site concerned..

6.4 *If, in spite of a negative assessment of the implications for the site and in the absence of **alternative solutions**, a plan or project must nevertheless be carried out **for imperative reasons of overriding public interest...** the Member State shall take all **compensatory measures** necessary to ensure that the overall coherence of Natura 2000 is protected...*

6.4 *If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for overriding public interest... taking compensatory measures to ensure coherence*

Alternative solutions could include alternative locations, processes etc. Difficult to prove for plans

This paragraph only applies if the appropriate assessment of 6.3 identifies that the project or plan is likely to have a significant impact on a European site

*6.4 If, in spite of a ... implications for the ... **alternative solutions**, nevertheless be carried out for imperious reasons of **overriding public interest**... the Member State shall take all **compensatory measures** necessary to ensure the coherence of Natura 2000 is*

Compensatory measures aim to offset precisely the negative impacts of the project or plan. They must be in place before the plan's negative impacts occur.

the 'IROPI test' is difficult to pass: avoid getting this far if at all possible

AA guidance

- EC (2001) Assessment of plans and projects significantly affecting Natura 2000 sites
- EC (2007) Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC
- EHLG (2010) Appropriate assessment of plans and projects in Ireland
- DTA (2010?) *Habitats Assessment Handbook*

European Guidance on AA steps:

1. Screening

2. Appropriate assessment

3. Assessment of alternatives solutions

4. Assessment where not alternative solutions remain and where adverse impacts remain



Art. 6.3



Art. 6.4

1. SCREENING

- 1. 'Long list' of sites:** Be precautionary (~15km from project or district boundary – you can always weed them out later) www.magic.gov.uk
- 2. Why they were designated:** from JNCC records: habitats and species
<http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0012845>

Conservation objectives: don't always exist. Discuss with Natural England area office

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species			Population in the site							Site assessment				
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
I	1044	Coenagrion mercuriale			p				P	DD	C	B	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

JNCC form for Southern Damselfly

3. Environmental factors that support the site's conservation objectives... will vary by habitat/species, e.g.

- Beech woodland – good air quality
- Wetland birds – absence of disturbance & maintenance of water levels
- Bats – absence of disturbance, & maintenance of roosting & feeding grounds

Probably requires ecological expertise

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	G01		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	D05		I
H	B02		I

H	K02		I
H	A02		I
H	A04		I
H	H04		B

H	A02		I
H	A04		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4. Whether plan is likely to affect 3.

5. Whether other plans, projects etc...

Include underlying trends and likely future plans

Be precautionary

Site	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from plan	Is there a risk of a significant effect	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
Arun Valley ¹ SPA/Ramsar	<ul style="list-style-type: none"> •Used regularly by more than 1% of GB's population of Annex I species Bewick's swan (<i>Cygnus columbianus bewickii</i>) •Supports nationally important wintering population of 20,000+ waterfowl including tundra swan •The neutral wet grassland ditches support rich aquatic flora and invertebrate fauna. •The area is of outstanding ornithological importance notably for wintering wildfowl and breeding waders. The Ramsar site <ul style="list-style-type: none"> •holds 7 RDB threatened species, one of which is endangered; plus 4 rare and 4 nationally scarce plant species. •supports an internationally important waterfowl assemblage. 	Sympathetic management of lowland wet grassland /grazing marsh (including water level management).	None	No	None	No
		Maintenance of hydrological regime, including winter flooding	Development of 10,575 new homes in Horsham district would add to demand for water. Also urbanisation of the catchment may alter water flows and hydrology.	?	Water resources in the area are already a problem: Environment Agency has been unable to conclude no adverse effect upon integrity of SPA Housing proposed for Arun and Chichester districts (9,300 and 8,600 respectively to 2026) would result in additional demand for water Proposed investment by Southern Water and new reservoir on Chichester-Horsham boundary could reduce these impacts	Yes: see Section 3.1
		Maintenance of adequate water quality	Development of 10,575 new homes in Horsham district would increase requirements for wastewater treatment	?	Housing proposed for Arun and (9,300 to 2026) would result in additional wastewater requiring treatment.	Yes: see Section 3.2.

Screen out obvious sites, e.g.

- That impacts are very unlikely to reach
- Where conditions & underlying trends are fine and plan impacts are minimal

Consider avoidance measures for others, e.g. rules on

- siting new development
- type of development permitted within x km of site

Prepare draft screening report and discuss...

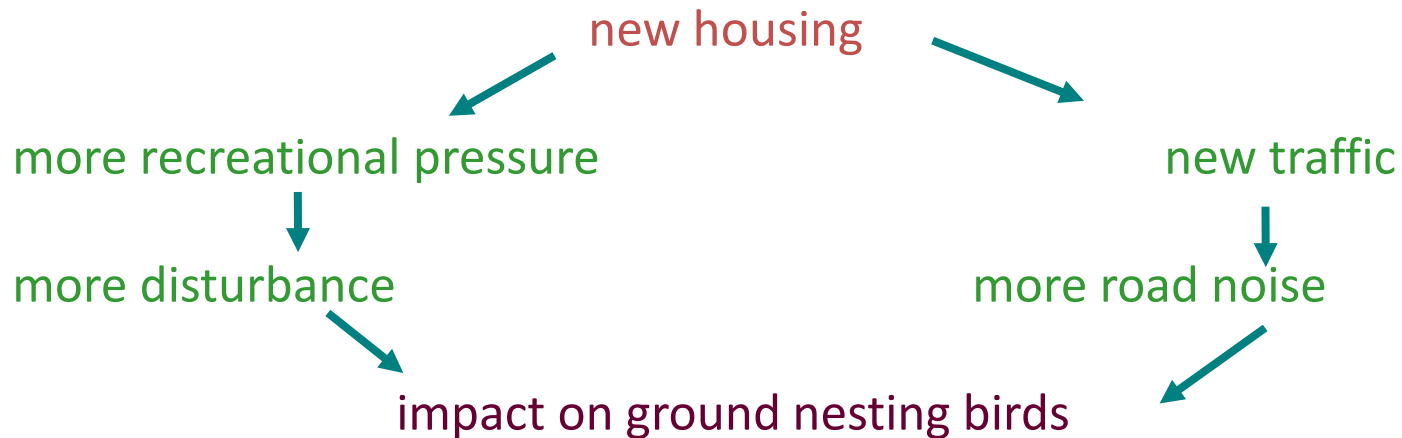
with Natural England, poss. Environment Agency, others?

Take forward remaining 'short list' of sites to...

2. APPROPRIATE ASSESSMENT

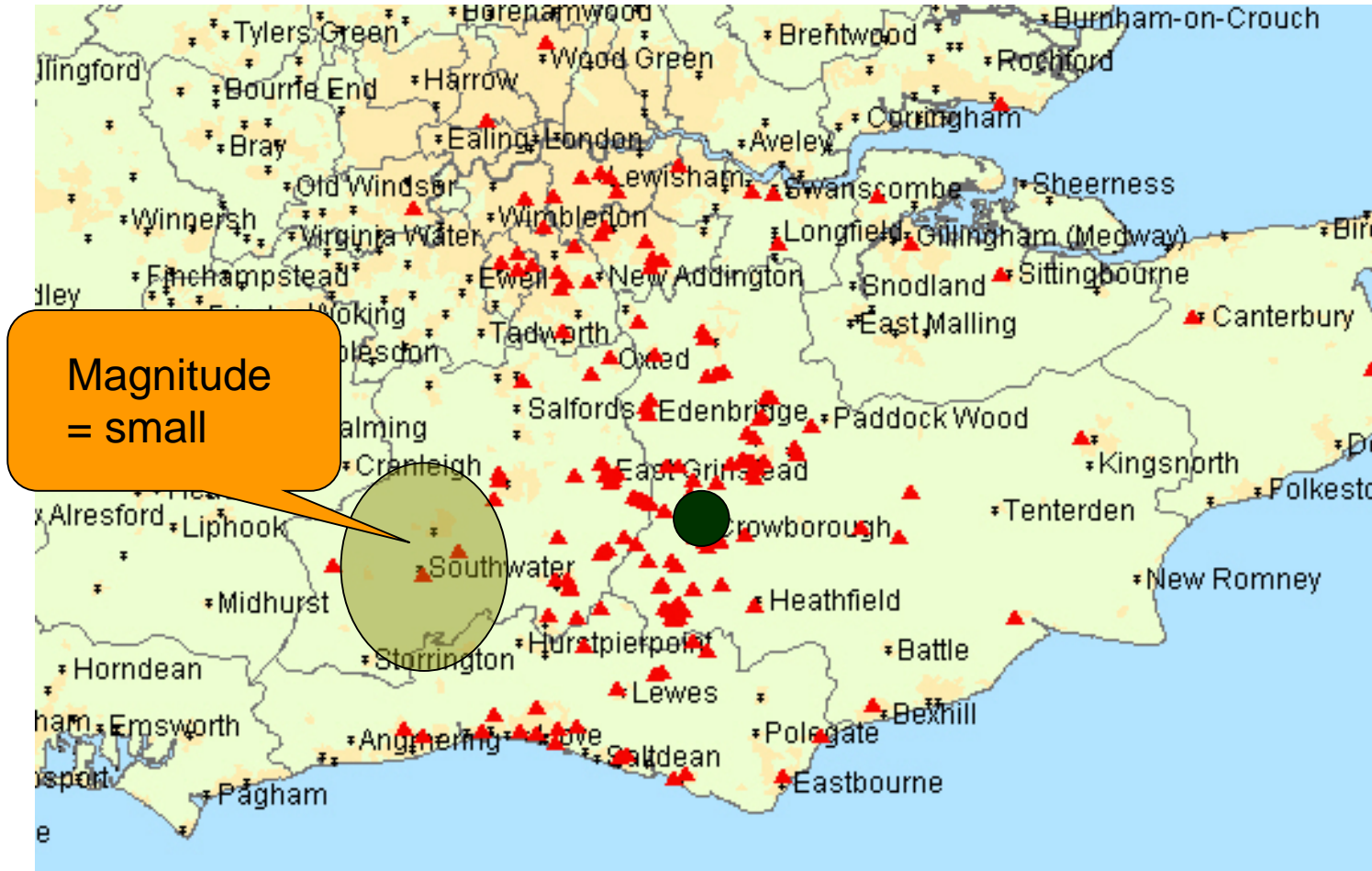
Think of this stage in terms of

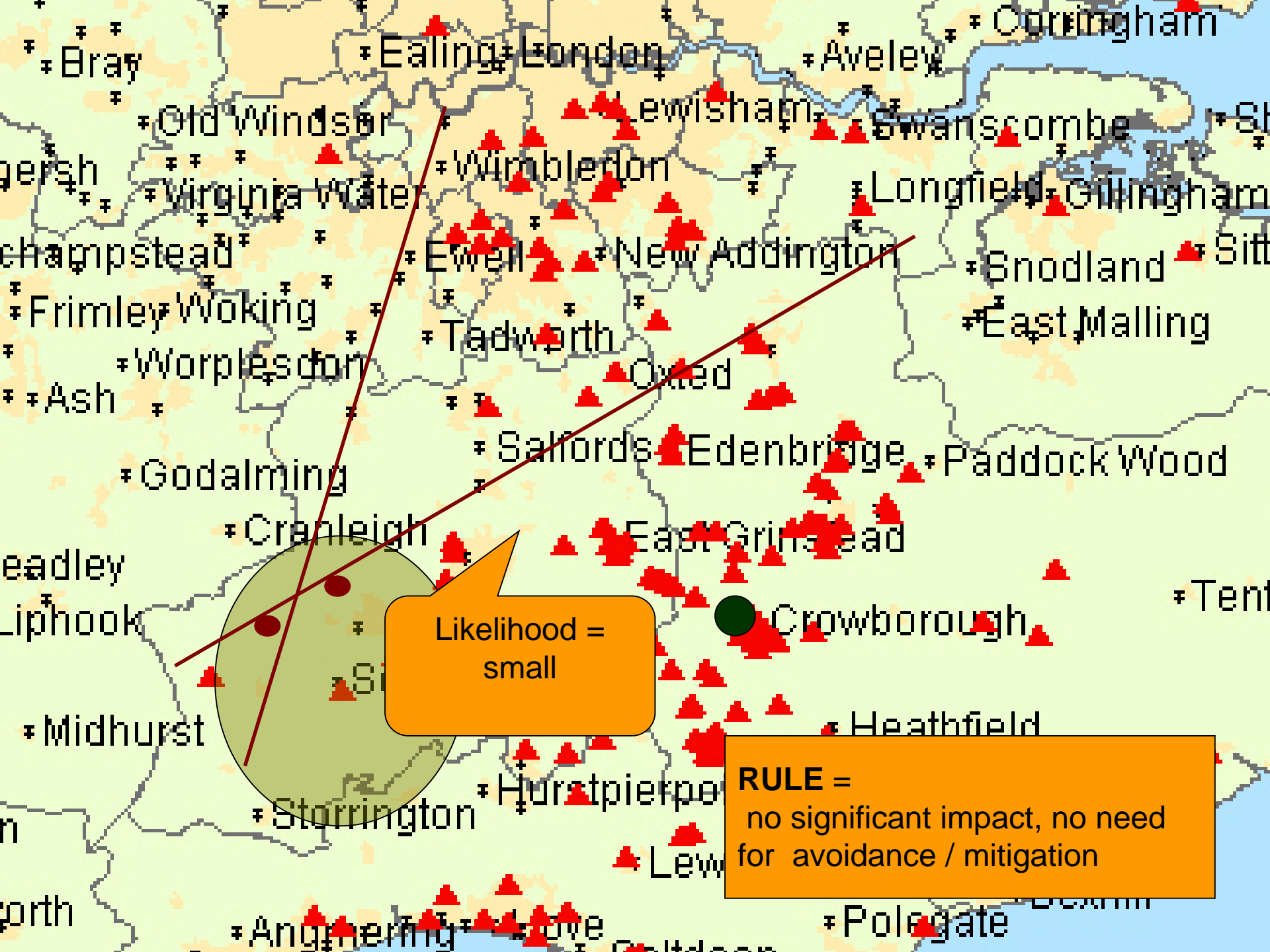
source → pathway → receiver



Recreational impact of Horsham DC Core Strategy on Ashdown Forest SAC

Sensitive feature = ground nesting birds

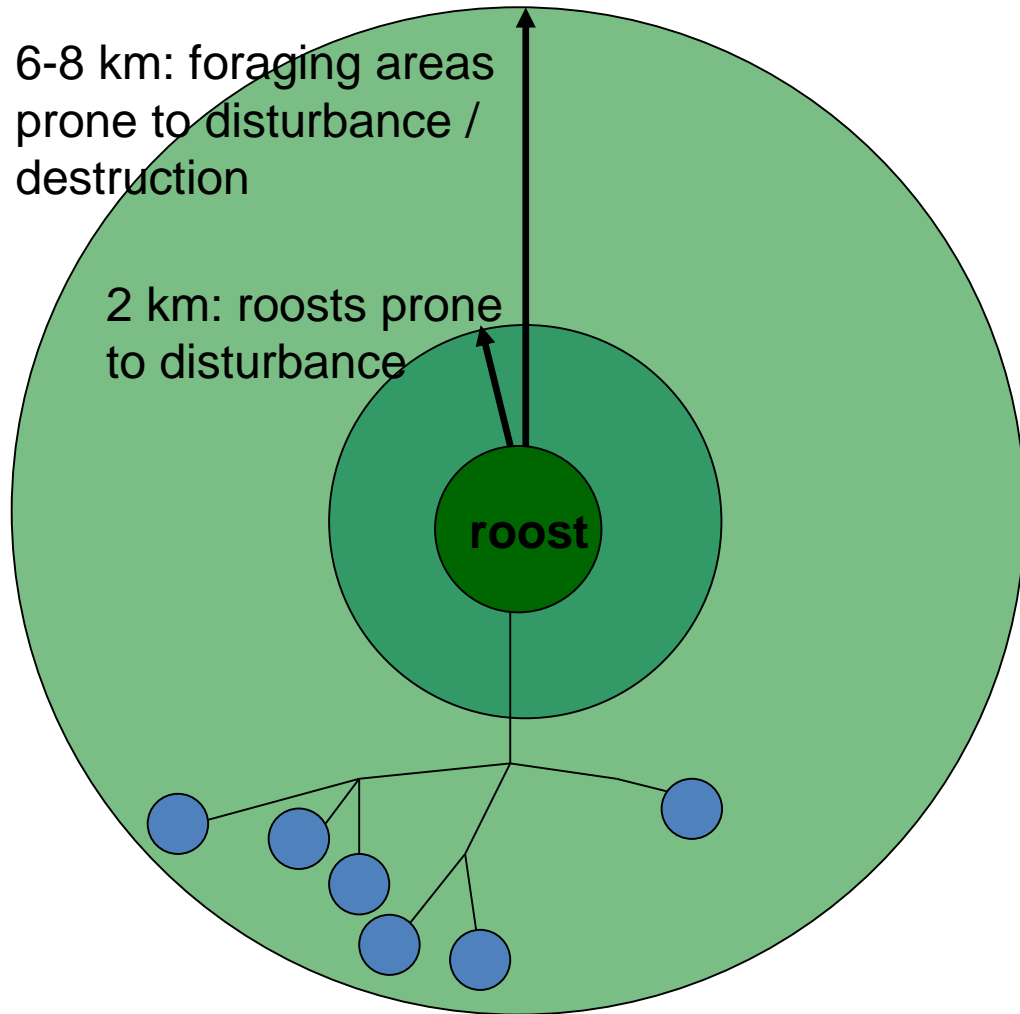


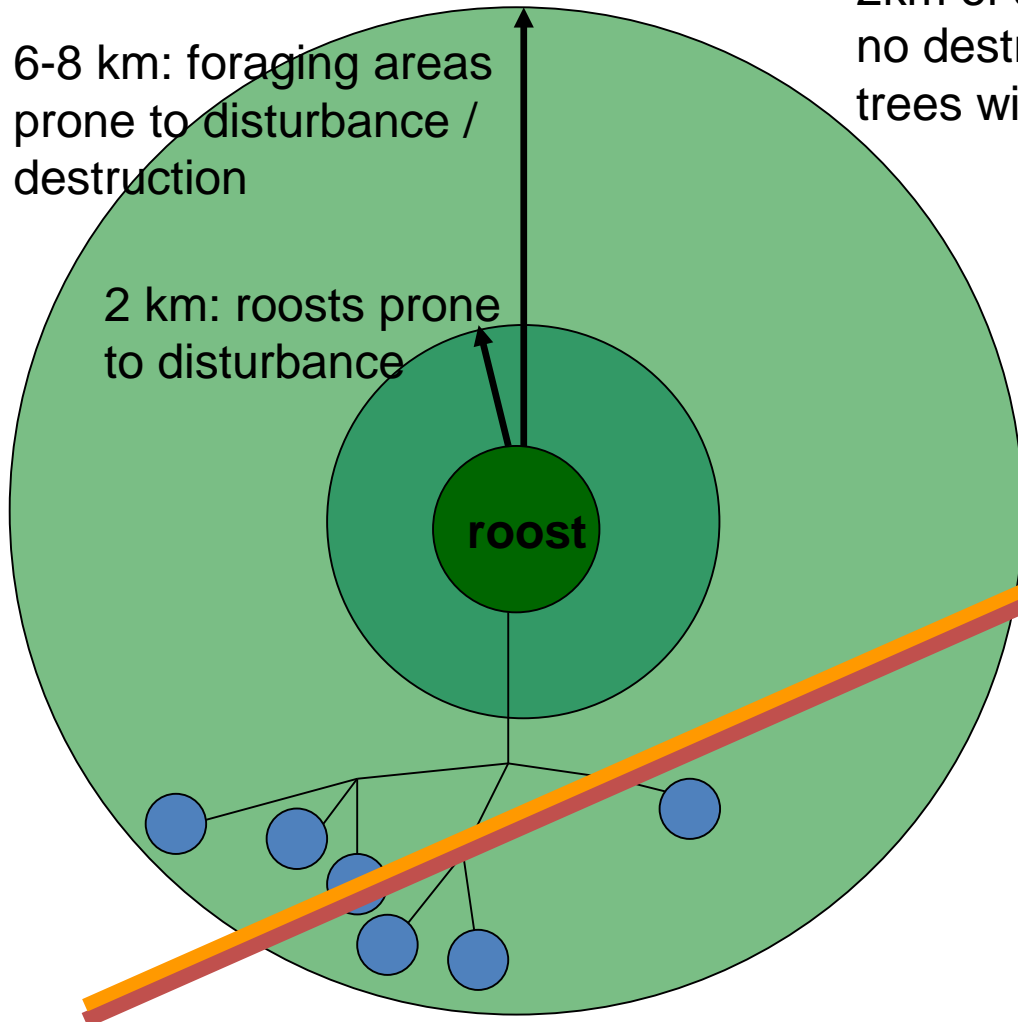


Likelihood =
small

RULE =
no significant impact, no need
for avoidance / mitigation

Impact of development on Barbastelle bats at The Womens SAC





6-8 km: foraging areas prone to disturbance / destruction

2 km: roosts prone to disturbance

roost

RULE: No new development within 2km of site boundary;
no destruction of hedges/
trees within 8km of boundary

Authority X

Authority Y

RULE: No destruction of hedges/trees within 8km of boundary
OR
No destruction of hedge A, woodland B etc.

Air quality impacts of Plan X

deposition/critical load

Name	acid dep.	ammonia	N dep.	NOx	ozone	SO2
Aston Rowant	0.47	0.1625	1.055	0.913333	1.4	0.18
Blean Complex	1.30303	0.1125	2.664	0.703333	1.5754	0.345
Castle Hill	0.4425	0.2375	1.05	0.786667	1.728667	0.14
Dover to Kingsdown Cliffs		0.0875	1.288	0.546667		0.335
Dungeness	0.3725	0.1	1.176	0.44	1.578	0.265
Ebernoe Common	1.028	0.15	2.568	0.573333	1.6336	0.12
Folkestone to Etchinghill	0.465	0.1375	0.93	0.753333	1.565	0.31
Hackpen Hill	0.495	0.175	1.125	0.723333	1.443667	0.17
Hartslock Wood	0.45	0.1875	1.03	0.93	1.389	0.165
Kingley Vale	0.37	0.1375	0.845	0.696667	1.752333	0.135
Lewes Downs	0.38	0.175	0.87	0.75	1.696	0.155
North Downs Woodlands	0.266234	0.1125	2.64			
Parkgate Down	2.946667	0.1625	1.135			
Queendown Warren	0.51	0.15	0.995			
Sandwich Bay		0.1	1.08			
Thanet Coast		0.075	1.176			
The Mens	1.051181	0.1625	2.656	0.596667	1.6402	0.125
Wye and Crundale Downs	2.653333	0.1625	1.02	0.67	1.570333	0.305

Key:

<0.25
0.25-0.74
0.75-0.99
1-1.24
1.25-1.99
2-4.99
5+

'in combination' impact
with existing situation

Air quality impacts of Plan X

deposition/critical load						
Name	acid dep.	ammonia	N dep.	NOx	ozone	SO2
Aston Rowant	0.47	0.1625	1.055	0.913333	1.4	0.18
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Ebernoe Common	1.028					
Folkestone to Etchinghill	0.465					
Hackpen Hill	0.495					
Hartslock Wood	0.45					
Kingley Vale	0.37					
Lewes Downs	0.38	0.175	0.8	1.083333	1.696	0.155
North Downs Woodlands	0.266234	0.1125	2.64	1.083333	1.6222	0.285
Park				0.68	1.537333	0.305
Que				1.043333	1.506	0.39
San				0.613333		0.385
Tha				0.586667	1.289667	0.41
The Mens	1.051181	0.1625	2.656	0.596667	1.6402	0.125
Wye and Crundale Downs	2.653333	0.1625	1.02	0.67	1.570333	0.305

Possible **RULE**:

- For local impacts: Avoid significant increases in traffic on roads within 200m of a European site
- For diffuse impacts: air pollution neutrality?

Need to show that rule will be implemented and will protect the European site...

Conclusion of AA stage:

For some European sites: project or plan is unlikely to have a significant 'in combination' impact

For others: project or plan is likely to have a significant 'in combination' impact + propose effective avoidance / mitigation rules

For still others: project or plan is likely to have significant 'in combination' impact + mitigation not possible

→ Stage 3 Alternatives

3. ALTERNATIVES

4. IROPI & COMPENSATORY MEASURES

Alternatives

Container terminal at Dibden Bay refused because other UK ports could provide enough capacity

Many flood defences unlikely to have alternatives



Imperative reasons of overriding public interest

Interest must be long-term and not just for companies or individuals

If site hosts priority habitat/ species, interest can only be human health/safety or important environmental benefits

Compensatory measures

... must maintain the coherence of the Natura 2000 network, so...

- Address habitat/species affected
- Provide comparable functions
- Relate to same biogeographical region
- Have clearly defined implementation and management objectives





Extension to Rotterdam Harbour

3125ha lost – marine habitats + natterjack toads

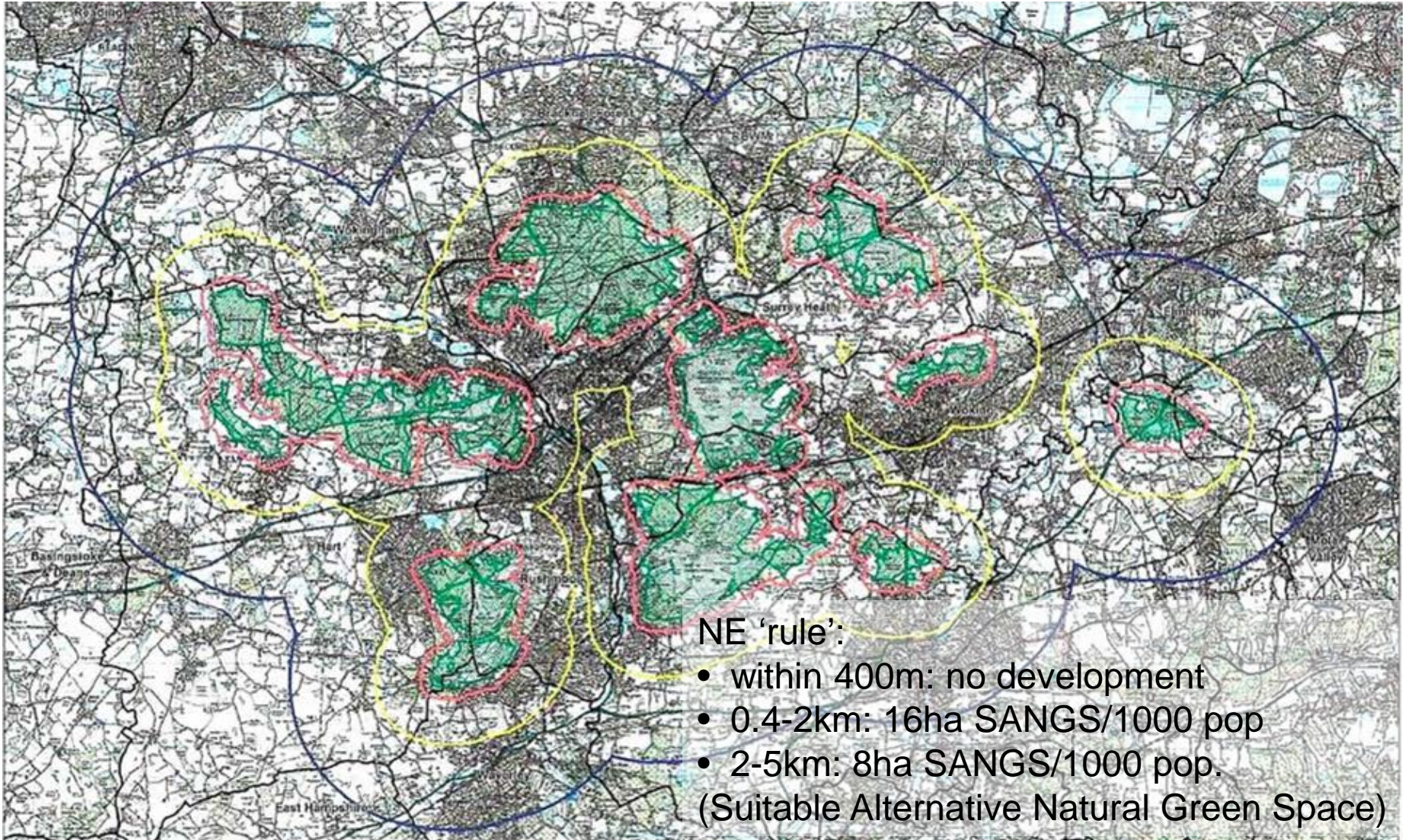
New marine reserve, 25000ha protected areas, new dunes



UK EXAMPLES

Disturbance

Thames Basin Heaths SPA: 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





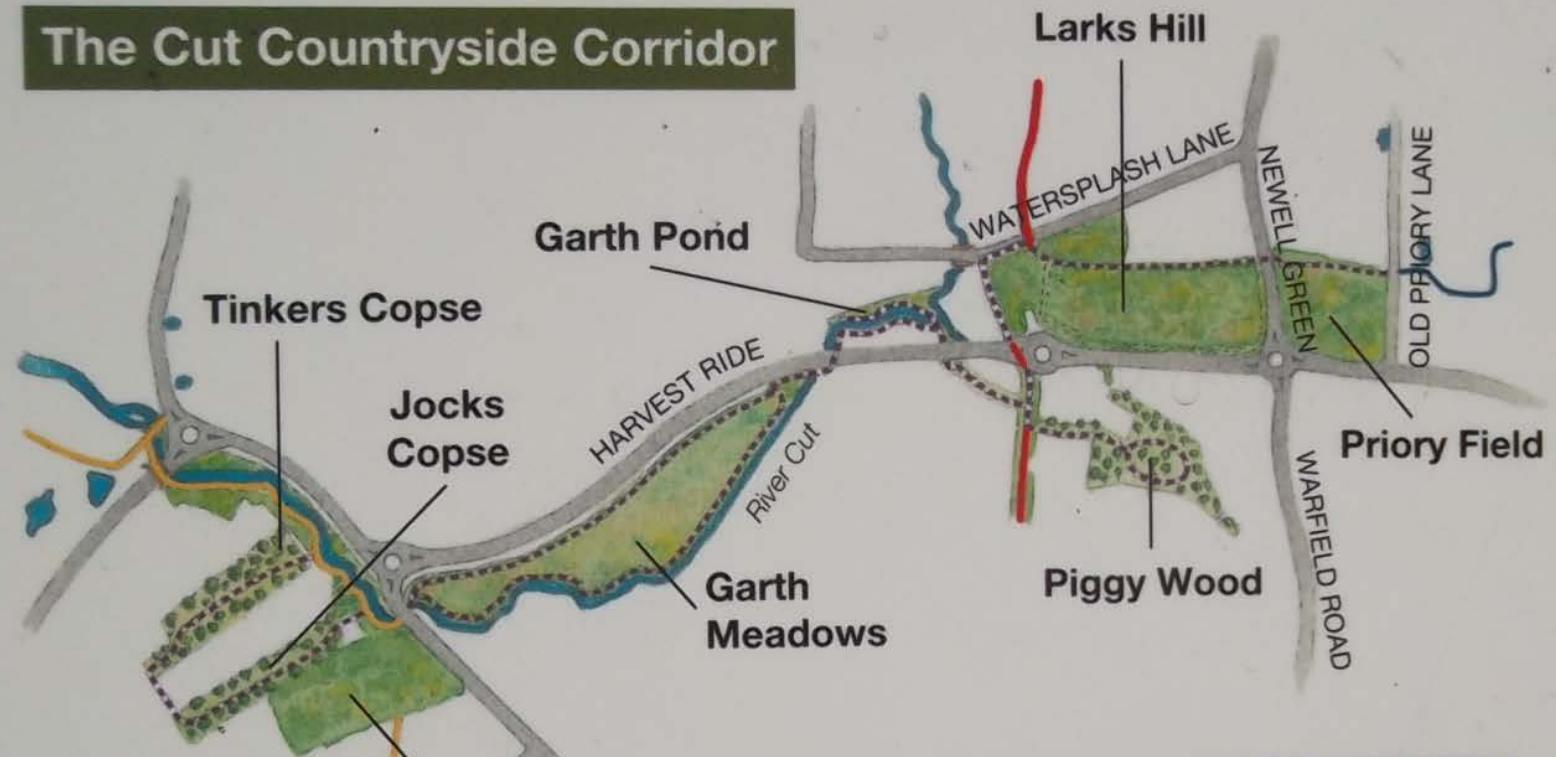
SANGS: Windsor Great Park





SANGS: Rook's Nest Wood

The Cut Countryside Corridor



Key	
.....	SANGS* Circular Route
—	Bridleway
—	Byway open to all traffic
—	Footpath



*Suitable Alternative Natural Greenspaces are managed as alternative conservation away from the ecologically sensitive

Mid Sussex District Council Enhancement of East Court & Ashplats Wood



Category of Works	Works	Estimated Cost
Landscape	Landscape improvements to East Court lake	£75,000
	Implement rolling programme of tree management initiatives, including coppicing	£8,000
	Wildlife corridors/ green infrastructure enhancements, including management of invasive species	£5,000
	Shrub planting along lower East Court wall	£4,000
	Yew hedge restoration	£6,000
	East Court parkland restoration	£10,000
Access and routes within the Estate	Path work improvements to wider site	£50,000
	Surfacing of the Holtye Track	£25,000
	Access point(s) improvements	£20,000
	Resurface and extend car park if necessary	£15,000
Site furniture	Supply and install additional site furniture as identified by inventory/ survey, e.g. benches	£3,000
	Improve access signage to the Estate plus signage within the woods to identify routes	£2,500
	Interpretation boards	£2,000
	Bridge repairs within Ashplats Wood	£10,000
	Additional dog waste bins	£2,000
Total other works costs		£237,500

Summary of SANG Tariff

The East Court & Ashplats Wood SANG strategy and tariff takes effect from the 1st January 2015.

It will be applied to relevant planning applications that were validated on or after the 1st January 2015.

This is an interim tariff until the Community Infrastructure Levy (CIL) is in place, at which point the method for collecting the SANG contribution will be reviewed.

Number of Bedrooms	SANG Tariff
1	£886
2	£1,275
3	£1,691
4+	£2,033

Recreational impacts on Exe Estuary SPA, Dawlish Warren SAC, East Devon Pebblebed Heaths SAC/SPA

Developers contribute to a pot which funds:

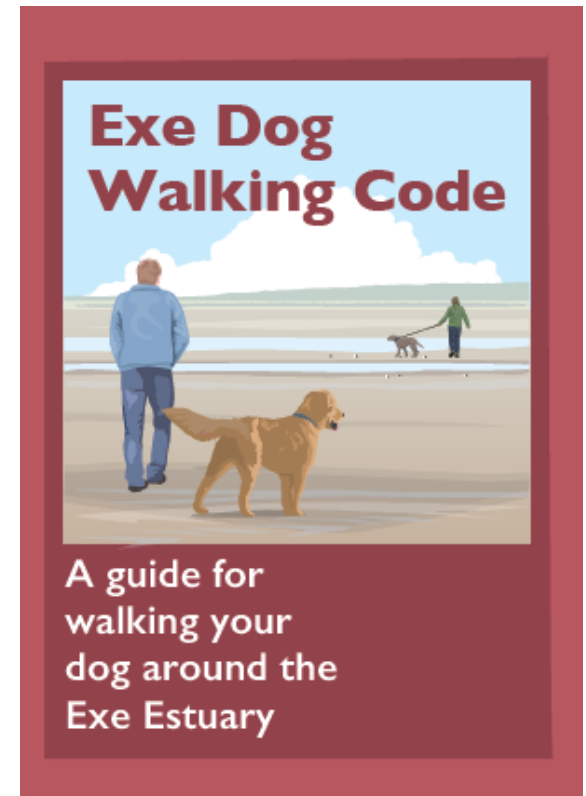
- SANGS
- Designated access points for water sports
- Restricted access to some areas
- Fenced dog exercise areas
- Zoning for different activities
- Screening / path design
- Managed car parking
- Education



e.g. East Devon

Within 10km of:

Pebblebed Heaths	£148/dwelling
Exe Estuary	£96/dwelling
Both	£201/dwelling



'PEOPLE OVER WIND'

People Over Wind & Sweetman v. Coillte Teoranta (C-323/17)

Challenge to cable connection to wind farm

Cable laying could result in river pollution, affecting River Nore pearl mussels

Screened out on basis of distance of grid connection from river, and protective measures built into the works design of project



People Over Wind & Sweetman v. Coillte Teoranta (C-323/17)

Challenge to cable c

Cable laying could r
Nore pearl mussels

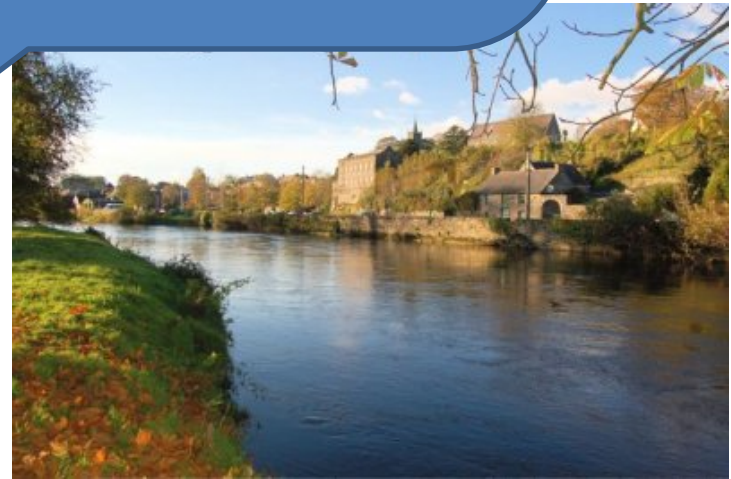
Screened out on ba
river, and protective
project

Freshwater pearl mussels can live for >100 years. They went from 20,000 in 1991 to 300 currently. They have not reproduced since 1970.

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25... the Habitats Directive divides measures into three categories, namely conservation measures, preventive measures and compensatory measures... that provision contains no reference to any concept of 'mitigating measure'

35... the fact that... measures intended to avoid or reduce the harmful effects of a plan or project on the site concerned are taken into consideration [during screening] presupposes that it is likely that the site is affected significantly and that, consequently, such an assessment should be carried out.

Article 6(3) of the Habitats Directive must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, **it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.**

PINS Note 05/2018

“11.... there is no authoritative definition of what constitutes an integrated or additional avoidance or reduction measure and this should be considered on a case by case basis. If a measure is being introduced to avoid or reduce an effect on a European site then it can be viewed as mitigation. **It may be helpful to consider whether a proposal could be considered integral to a plan or whether it is a measure to avoid harm....”**

For (say) a neighbourhood plan, where a strategic HRA mitigation package has been agreed for the local plan, is AA required?