

My Reference ID numbers 20024947 and 20024988

### **Cumulative projects' impact on water catchment detrimental to biodiversity**

Further to my earlier representations to the Planning Inspectorate on the above projects, I am concerned to discover the following in ScottishPower Renewables' Environmental Statement on Water Resources and Flood Risk, paras 159 and 163 (pages 73 & 74 of the attached document):

159. **Potential cumulative impacts between the proposed East Anglia ONE North project, proposed East Anglia TWO project, the Sizewell C New Nuclear Power station project and the Sizewell B Power Station Complex project could potentially arise in surface drainage catchments and groundwater bodies where activities from the projects occur.** Cumulative impacts have therefore been considered in relation to groundwater and the following surface water receptors:

- **Leiston Beck: This catchment would contain a small proportion of the onshore development area**, the Sizewell B Power Station Complex development, and the majority of the Sizewell C New Nuclear Power Station development (including the Main Development Site, rail extensions and rail terminal); and
- **Hundred River:** This catchment would contain part of the onshore development area and National Grid infrastructure. The catchment would also contain part of the Sizewell C Green Rail Extension Route.

AND

163. Construction activities associated with the proposed East Anglia TWO project, the proposed East Anglia ONE North project, the Sizewell B Power Station Complex project and the Sizewell C New Nuclear Power Station Main Development Site, Rail Extensions and Rail Terminal **overlap in the Leiston Beck catchment**. Furthermore, a small proportion of the construction activities for part of the Green Rail Extension Route will also take place within the Hundred River catchment. Therefore, **there is the potential for a cumulative impact to occur in these catchments as a result of increased sediment supply during the construction phases of these projects.**

I am writing in particular about the catchment area I know best, which is that of the Leiston Beck. I live in The Studio on Leiston Common, which is where the illustrations for the King Penguin books of British Reptiles and Amphibia and British Butterflies were made by my father-in-law, Paxton Chadwick. All the creatures he painted came from this exact same location and habitat around Leiston Common. The Leiston Beck runs along the bottom of Leiston Common and feeds the Sizewell Marshes SSSI, the Eastbridge marshes and Minsmere levels, and within this 2km radius an astonishing 3,700 species are listed on the National Biodiversity Database<sup>1</sup>. At a time when the Government's own Review on The Economics of Diversity (Dasgupta Review of February 2021<sup>2</sup>) said: "Our economies, livelihoods and well-being all depend on our most precious asset: Nature" and "Our unsustainable engagement with Nature is endangering the prosperity of current and future generations. Biodiversity is declining faster than at any time in human history" it is hard to

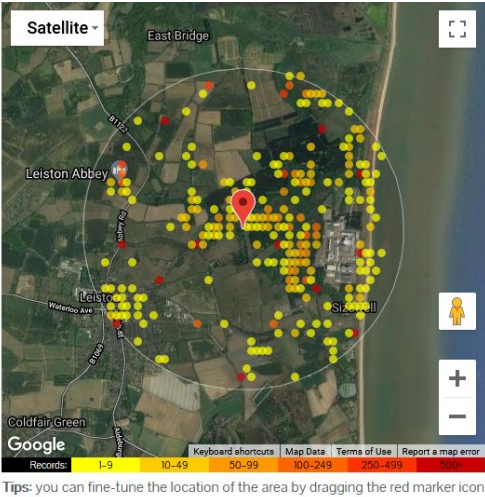
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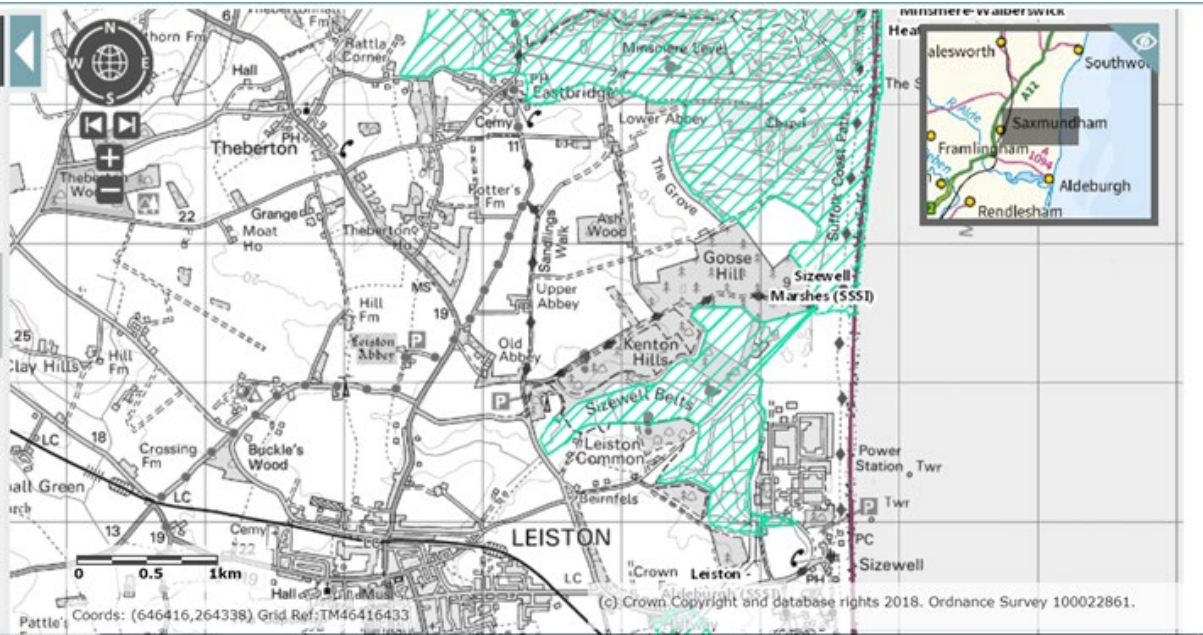
comprehend that a Department of Government can even consider endangering the biodiversity that we still have here. The Dasgupta Review was commissioned to address the need to rebalance economic analyses to take into account nature’s goods and services and the depreciation of those assets, because market prices are not reflecting the real cost to the common good. And that is exactly what is happening in this situation where a private company, National Grid, is being given responsibility for providing a connection to the grid for windfarms WITHOUT this cost to the environment and ‘the common good’ being taken into account.

Group	Species	Species : Common Name	Records
All species	3702		40
Animals	2038	1. <i>Abraxas grossulariata</i> : Magpie Moth	4
Amphibians	6	2. <i>Abraxas sylvata</i> : Clouded Magpie	5
Arthropods	1468	3. <i>Abrostola tripartita</i> : Spectacle	9
Crustaceans	19	4. <i>Abrostola triplasia</i> : Dark Spectacle	1
Insects	1381	5. <i>Acanthinula aculeata</i> : Prickly Snail	81
Myriapods	15	6. <i>Acanthis cabaret</i> : Lesser Redpoll	3
Spiders and Allies	51	7. <i>Acanthis flammea flammea</i> : Mealy Redpoll	7
Birds	373	8. <i>Acanthis flammea/cabaret</i> : Redpoll (Common/Lesser)	11
Fishes	14	9. <i>Acanthis flammea</i> : Common Redpoll	2
Mammals	43	10. <i>Acanthosoma haemorrhoidale</i> : Hawthorn Shieldbug	3
Molluscs	108	11. <i>Acarospora duriectii</i>	3
Reptiles	6	12. <i>Acarospora fuscata</i>	27
Worms	9	13. <i>Acasis viretata</i> : Yellow-barred Brindle	83
Bacteria	0	14. <i>Accipiter gentilis</i> : Goshawk	686
Chromista	2	15. <i>Accipiter nisus</i> : Sparrowhawk	4
Fungi	471	16. <i>Acentria ephemerella</i> : Water Veneer	11
Plants	1191	17. <i>Acer campestre</i> : Field Maple	2
Algae	0	18. <i>Acer platanoides</i> : Norway Maple	21
Bryophytes	135	19. <i>Acer pseudoplatanus</i> : Sycamore	35
Clubmosses and Firmosses	0	20. <i>Achillea millefolium</i> : Yarrow	8
Ferns and Allies	23	21. <i>Achillea ptarmica</i> : Sneezewort	2
Flowering Plants	1024	22. <i>Acleris comariana</i> : Strawberry Tortrix	2
Gymnosperms and Ginkgo	9	23. <i>Acleris emargana</i> : Notch Wing Tortrix	3
Horsetails	0	24. <i>Acleris forsskaeana</i> : Maple Button	1
Protozoa	0	25. <i>Acleris hastiana</i> : Sallow Button	1
		26. <i>Acleris holmiana</i> : White-triangle Button	1
		27. <i>Acleris hyemana</i> : Heath Button	2
		28. <i>Acleris laterana</i> : Dark-triangle Button	



[see Footnote 1]

These species will be directly affected by water flow and quality and so are threatened by any impact on their habitat by the repeated disturbance of numerous projects which threaten “increased sediment supply” to the water catchment. These proposed projects are the first of at least six energy projects, and the next proposed Nautilus project has already shown a possible trench route goes over Leiston Common, so the cumulative impact will continue being repeated over a decade or more and this biodiversity will inevitably suffer losses as a result.






The list of priority species observed in this area include 7 species of bats, otters, water vole, red deer, yellow-necked mouse, reptiles, amphibia and numerous rare birds like the yellowhammer, nightingale, cuckoo and even white-tailed eagles. There are also nationally rare invertebrates and aquatic flora as well as insects which of course are essential food for all the above, as well as for pollination.

As described by an information board placed on Leiston Common by British Energy, **"This is our rainforest"**!

British Energy





Leiston Common is a typical Suffolk Sandlings heath, a habitat that has declined by over 80% in the last century. Agriculture, housing development and encroachment by bracken and trees are the principle causes behind the decline. These areas are now very rare. The Sandlings consists of 1% of the total low-land heath left in the world. **This is our rain forest.**

Without continual management heaths quickly turn into bracken and scrub and the special wildlife associated with them disappears.


Grazing with sheep is the traditional method of management. Sheep control rank vegetation and scrub and help to create a varied sward of heather and acid grassland. The Common is grazed by sheep from the Suffolk Wildlife Trust's 'flying flock'.

**Linnet**  
Nesting in gorse the males can easily be seen singing from the tops of the bushes.



**Green Hairstreak Butterfly**  
Flying in early spring this insect favours gorse and broom.

**Adder**  
These colourful reptiles are often encountered as they bask in the sun on the open paths.



**Leiston Common**

The National Biodiversity Database list shows:

All species	3702
Animals	2038
Amphibians	6
Arthropods	1468
Crustaceans	19
Insects	1381
Myriapods	15
Spiders and Allies	51
Birds	373
Fishes	14
Mammals	43
Molluscs	108
Reptiles	6
Worms	9
Bacteria	0
Chromista	2
Fungi	471
Plants	1191
Algae	0
Bryophytes	135
Clubmosses and Firmosses	0
Ferns and Allies	23
Flowering Plants	1024
Gymnosperms and Ginkgo	9
Hornworts	0
Protozoa	0

Selected lists of species with known endangered and/or declining species in bold – as listed on the UK BAP List of UK Priority Species<sup>3</sup>:

#### **Amphibians – 6**

1.	<b>Bufo bufo : Common Toad</b>	17
2.	<b>Epidalea calamita : Natterjack Toad</b>	1
3.	Lissotriton helveticus : Palmate Newt	2
4.	Lissotriton vulgaris : Smooth Newt	8
5.	Rana temporaria : Common Frog	54
6.	<b>Triturus cristatus : Great Crested Newt</b>	12

## Reptiles – 6

1.	<a href="#"><i>Anguis fragilis</i></a> : Slow-worm	30
2.	<a href="#"><i>Dermochelys coriacea</i></a> : Leathery Turtle	2
3.	<a href="#"><i>Lacerta agilis</i></a> : Sand Lizard	1
4.	<a href="#"><i>Natrix helvetica</i></a> : Grass Snake	35
5.	<a href="#"><i>Vipera berus</i></a> : Adder	53
6.	<a href="#"><i>Zootoca vivipara</i></a> : Common Lizard	64

## Birds – 373 but list is only those on the UK BAP List of UK Priority Species (Footnote 3)

#9.	<i>Acrocephalus palustris</i> : Marsh Warbler	34
20.	<i>Alauda arvensis</i> : Sky Lark	597
49.	<i>Anthus trivialis</i> : Tree Pipit	27
63.	<i>Aythya marila</i> :Scaup	26
66.	<i>Botaurus stellaris</i> : Bittern	3034
67.	<i>Branta bernicla bernicla</i> : Dark-bellied Brent Goose	147
77.	<i>Burhinus oediconemus</i> : Stone-curlew	138
117.	<i>Coccothraustes coccothraustes</i> : Hawfinch	39
131.	<i>Cuculus canorus</i> : Cuckoo	299
140.	<i>Cygnus columbianus</i> : Tundra Swan	238
145.	<i>Dendrocopos minor</i> : Lesser Spotted Woodpecker	36
148.	<i>Emberiza calandra</i> : Corn Bunting	3
149	<i>Emberiza citronella</i> : Yellowhammer	194
150.	<i>Emberiza schoeniclus</i> : Reed Bunting	972
169.	<i>Gavia arctica</i> : Black-throated Diver	6
185.	<i>Jynx Torquilla</i> : Wryneck	24
208.	<i>Locustella luscinioides</i> : Savi's Warbler	36
209.	<i>Locustella naevia</i> : Grasshopper Warbler	48
211.	<i>Lullula arborea</i> : Woodlark	632
225.	<i>Melanitta nigra</i> : Common Scoter	374
240.	<i>Motacilla flava flavissima</i> : Yellow Wagtail	13
243.	<i>Muscicapa striata</i> : Spotted Flycatcher	73
246.	<i>Numenius arquata</i> : Curlew	621
259.	<i>Passer domesticus</i> : House Sparrow	728
261.	<i>Passer montanus</i> : Tree Sparrow	34
264.	<i>Perdix perdix</i> : Grey Partridge	47
271.	<i>Phalaropus lobatus</i> : Red-necked Phalarope	18
285.	<i>Phylloscopus sibilatrix</i> : Wood Warbler	11
299.	<i>Poecile montanus</i> : Willow Tit	37
300.	<i>Poecile palustris</i> : Marsh Tit	616
304.	<i>Prunella modularis</i> : Dunnock	2037
305.	<i>Puffinus mauretanicus</i> : Balearic Shearwater	2
307.	<i>Pyrrhula pyrrhula</i> : Bullfinch	309

327. <i>Stercorarius parasiticus</i> : Arctic Skua	150
330. <i>Sterna dougallii</i> : Roseate Tern	229
335. <i>Streptopelia turtur</i> : Turtle Dove	593
337. <i>Sturnus vulgaris</i> : Common Starling	1629
361. <i>Turdus philomelos</i> : Song Thrush	545
363. <i>Turdus torquatus</i> : Ring Ouzel	64
371. <i>Vanellus vanellus</i> : Lapwing	1659

## Mammals – 43

1. <a href="#"><i>Apodemus flavicollis</i></a> : Yellow-necked Mouse	2
2. <a href="#"><i>Apodemus sylvaticus</i></a> : Wood Mouse	13
3. <a href="#"><i>Arvicola amphibius</i></a> : European Water Vole	24
4. <a href="#"><i>Barbastella barbastellus</i></a> : Western Barbastelle	4
5. <a href="#"><i>Capreolus capreolus</i></a> : Roe Deer	3
6. <a href="#"><i>Cervus elaphus</i></a> : Red Deer	13
7. <a href="#"><i>Dama dama</i></a> : Fallow Deer	4
8. <a href="#"><i>Eptesicus serotinus</i></a> : Serotine	4
9. <a href="#"><i>Erinaceus europaeus</i></a> : West European Hedgehog	58
11. <a href="#"><i>Hydropotes inermis</i></a> : Chinese Water Deer	4
12. <a href="#"><i>Lepus europaeus</i></a> : Brown Hare	9
13. <a href="#"><i>Lutra lutra</i></a> : Eurasian Otter	21
16. <a href="#"><i>Micromys minutus</i></a> : Harvest Mouse	8
17. <a href="#"><i>Microtus agrestis</i></a> : Field Vole	4
23. <a href="#"><i>Myotis daubentonii</i></a> : Daubenton's Bat	1
24. <a href="#"><i>Myotis nattereri</i></a> : Natterer's Bat	26
25. <a href="#"><i>Neomys fodiens</i></a> : Eurasian Water Shrew	5
26. <a href="#"><i>Neovison vison</i></a> : American Mink	2
27. <a href="#"><i>Nyctalus leisleri</i></a> : Lesser Noctule	3
28. <a href="#"><i>Nyctalus noctula</i></a> : Noctule Bat	13
32. <a href="#"><i>Pipistrellus nathusii</i></a> : Nathusius's Pipistrelle	3
33. <a href="#"><i>Pipistrellus pipistrellus</i></a> : Common Pipistrelle	3
34. <a href="#"><i>Pipistrellus pipistrellus</i></a> : Pipistrelle	19
35. <a href="#"><i>Pipistrellus pygmaeus</i></a> : Soprano Pipistrelle	10
36. <a href="#"><i>Plecotus auritus</i></a> : Brown Long-eared Bat	21
40. <a href="#"><i>Sorex araneus</i></a> : Eurasian Common Shrew	8
41. <a href="#"><i>Sorex minutus</i></a> : Eurasian Pygmy Shrew	2

**Plants – 1191:** Suffolk County Council’s Description of Sizewell Marshes SSSI<sup>4</sup> lists nationally scarce plants and aquatic flora. “Sizewell Marshes are of exceptional interest for their invertebrate fauna, supporting a wide range of taxa and many nationally rare or scarce species. [List is included.] The

<sup>4</sup> Suffolk County Council’s Description and Reasons for Notification of Sizewell Marshes’ SSSI status.

breeding bird assemblage is also of national significance with many species that are typical of wet grassland and associated habitats....”

**Insects – 1381**, too numerous to detail!

## Conclusion

These are the many reasons for grave concern as a 2019 Intergovernmental Global Assessment of Biodiversity and Ecosystems concluded that “we are eroding the very foundations of our economies, livelihoods, food security, health and quality of life.” I believe that SPR’s projects and those that are likely to follow will be a continuation of this tragedy, flying in the face of the many policies, targets and reports set out by the government. A report on the 20 targets for 2020 that we signed up to at the 2010 Aichi Convention on Biological Diversity showed progress was too slow, **with protecting and restoring ecosystems a particular challenge**. Surely it would be better (as well as easier and cheaper) to protect the biodiversity that we already have than to try to recreate it? But the 2021 Dasgupta Review of the Economics of Biodiversity again stated that “Biodiversity is declining faster than at any time in human history”. Please remember **“This is our rain forest”**. How can a so-called eco-project countenance green field sites instead of brown and the destruction of rare habitats? Why is National Grid dictating that SPR join Sizewell’s power lines instead of installing new ones to existing industrial sites, especially in light of all the future intended projects in East Anglia?

Finally, how can we expect foreign-owned private companies to take care of our wildlife and biodiversity if our own government fails to ensure that their own targets are upheld. With National Grid, another private company, seeming to have carte blanche to dictate where these projects go and the bottom line of foreign-owned companies being about profit, what hope is there for OUR nature and biodiversity?