



The proposed Fens Reservoir, in Cambridgeshire. Image: Anglian Water

# *Green Futures*

## *What are NSIPs and why do we need them?*



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Historic England

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# Current challenges and opportunities

(New Boiler, Plumbing and Wiring)



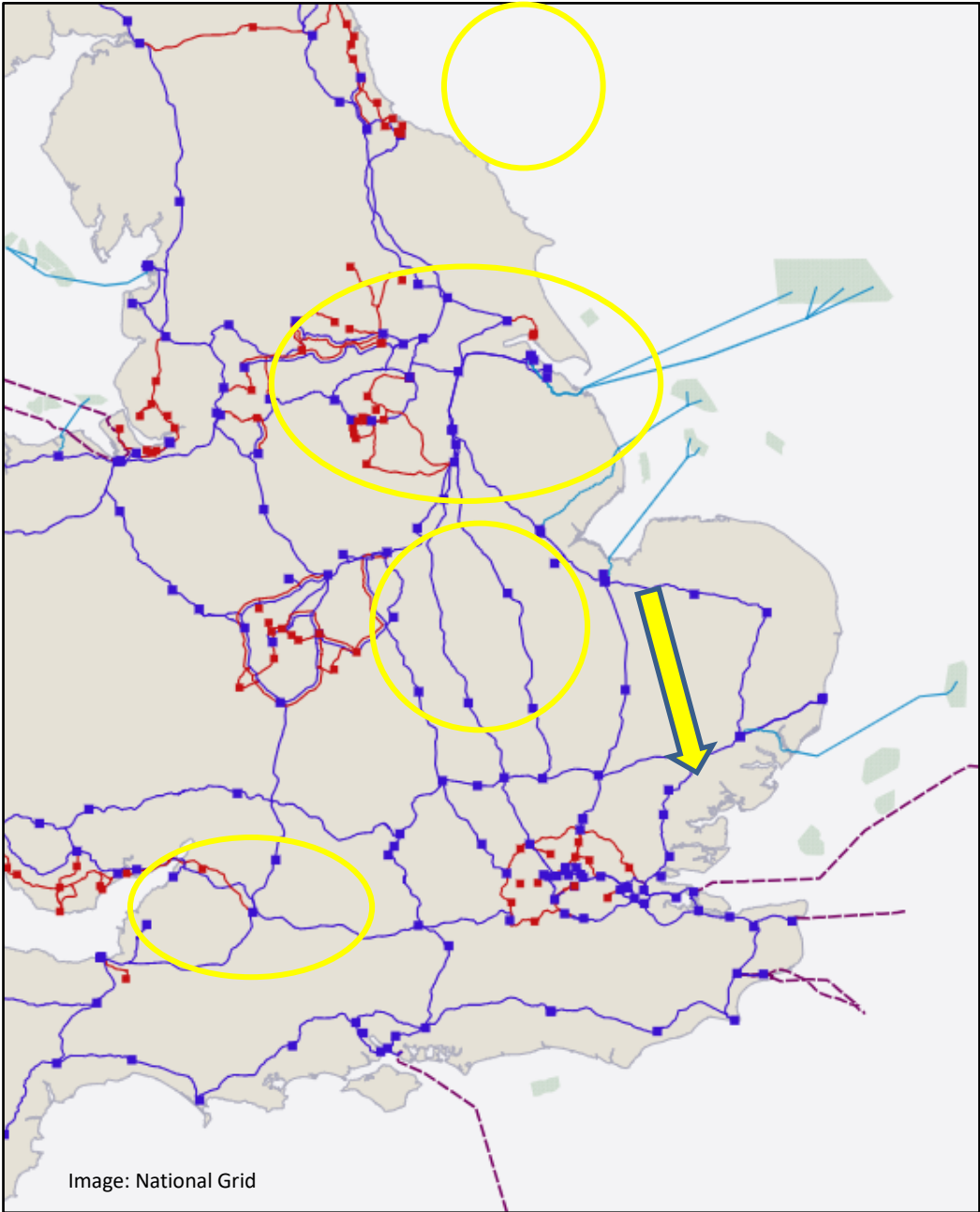
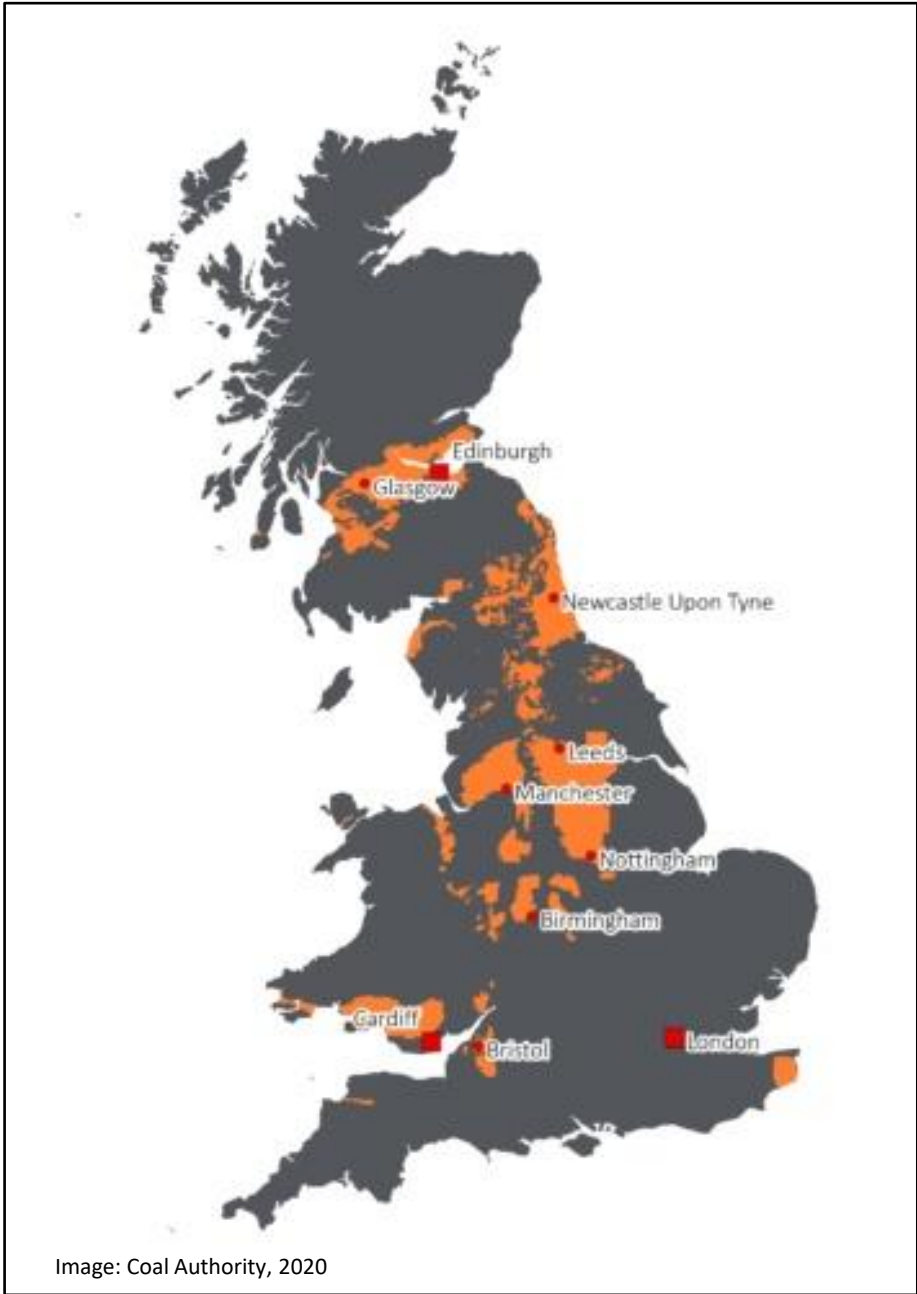
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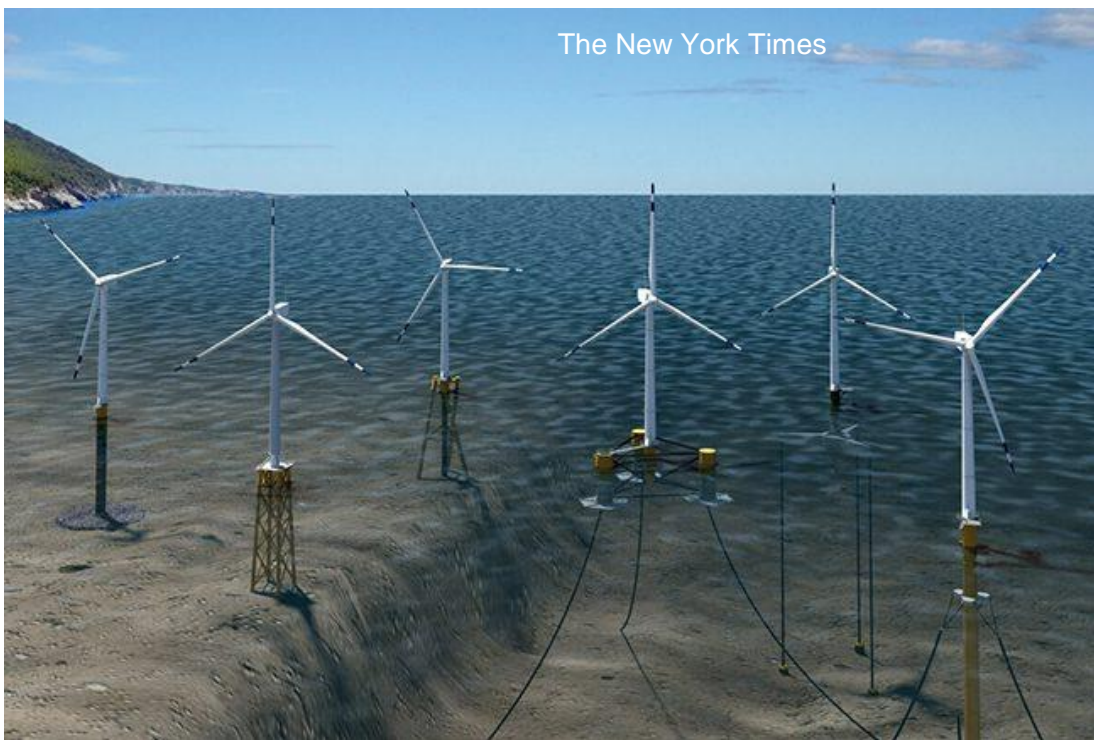
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The issue in two images





# Offshore Wind Farm developments in the English marine planning area: Part 1

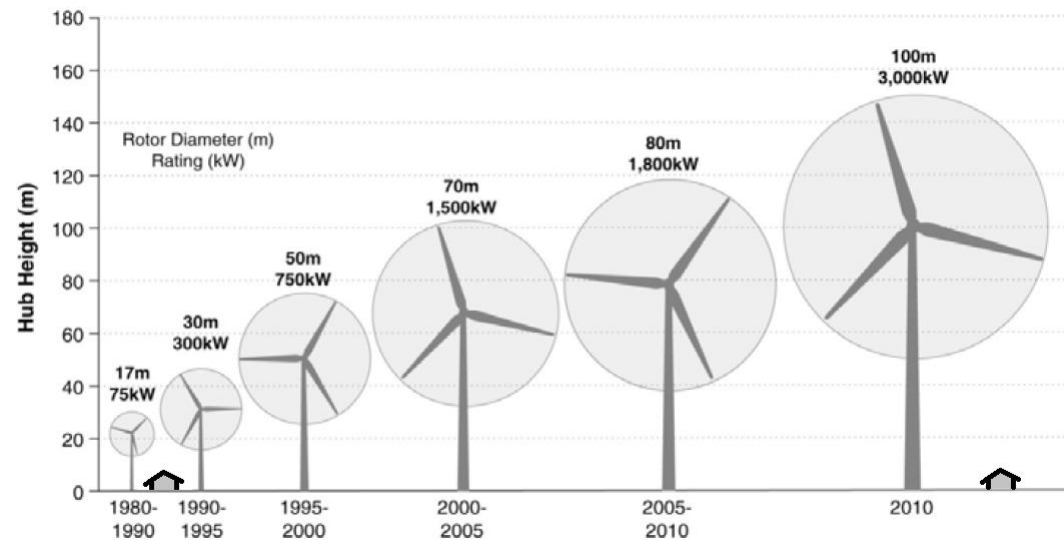
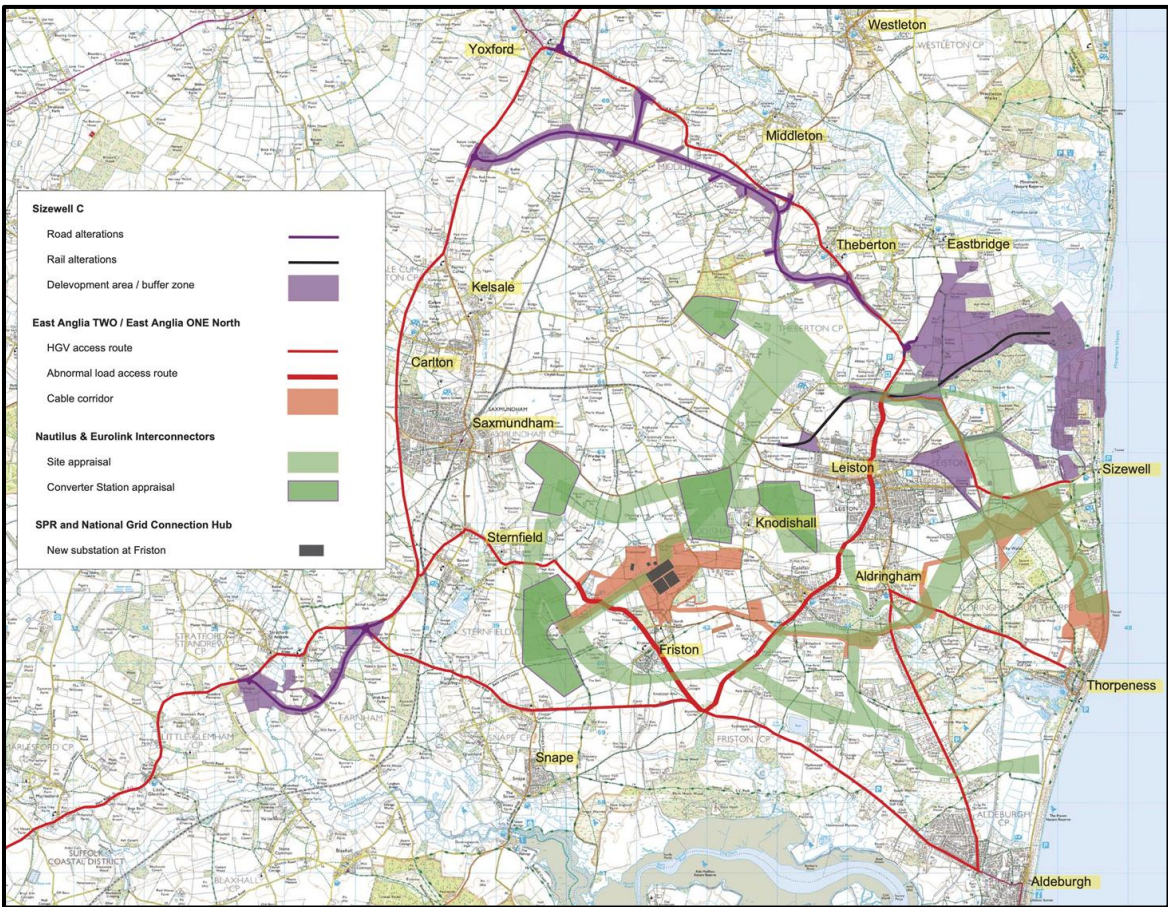
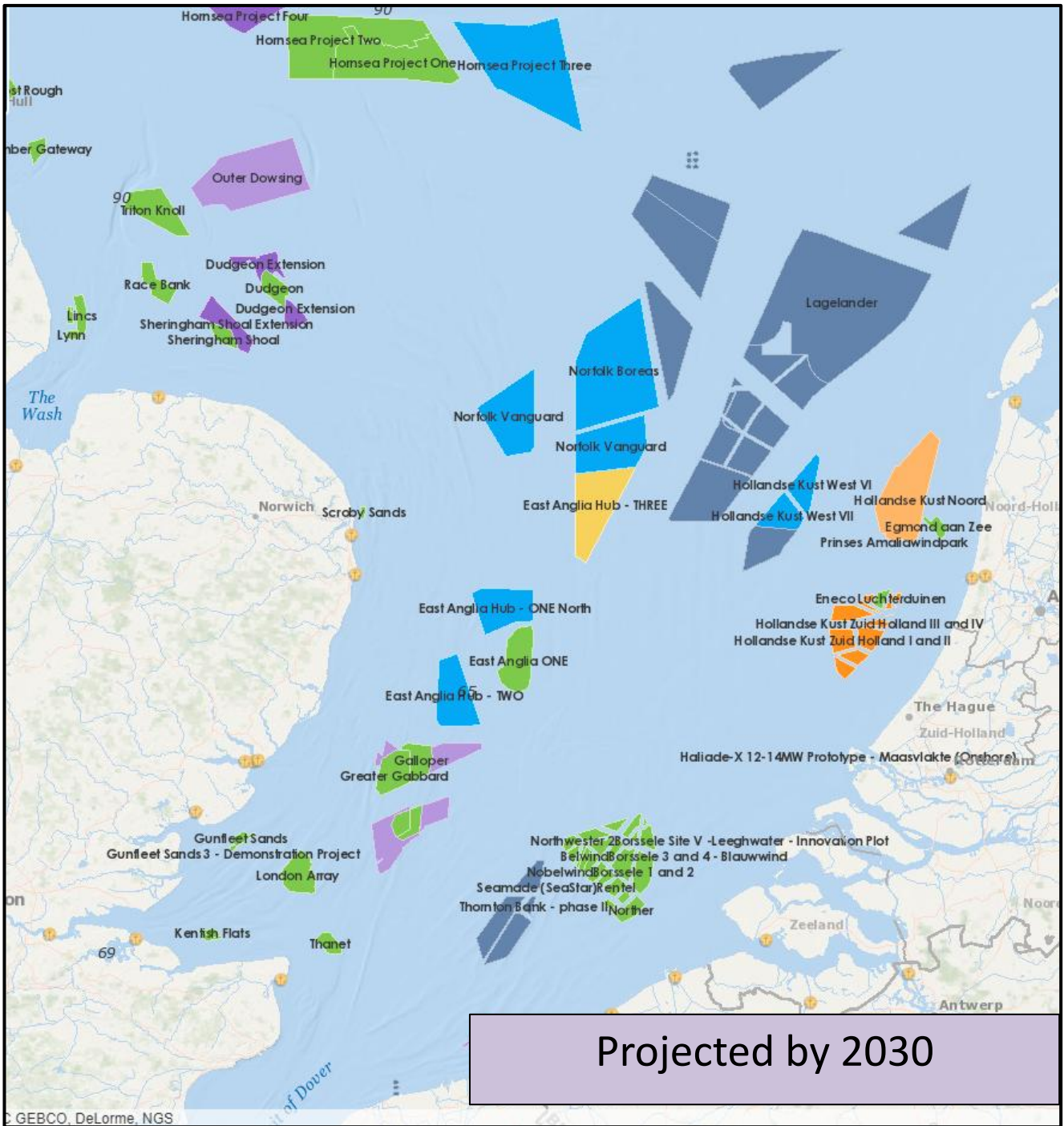


Image: commons.wikimedia.org/wiki/File:Wind\_turbine\_size\_increase\_1980-2010.png





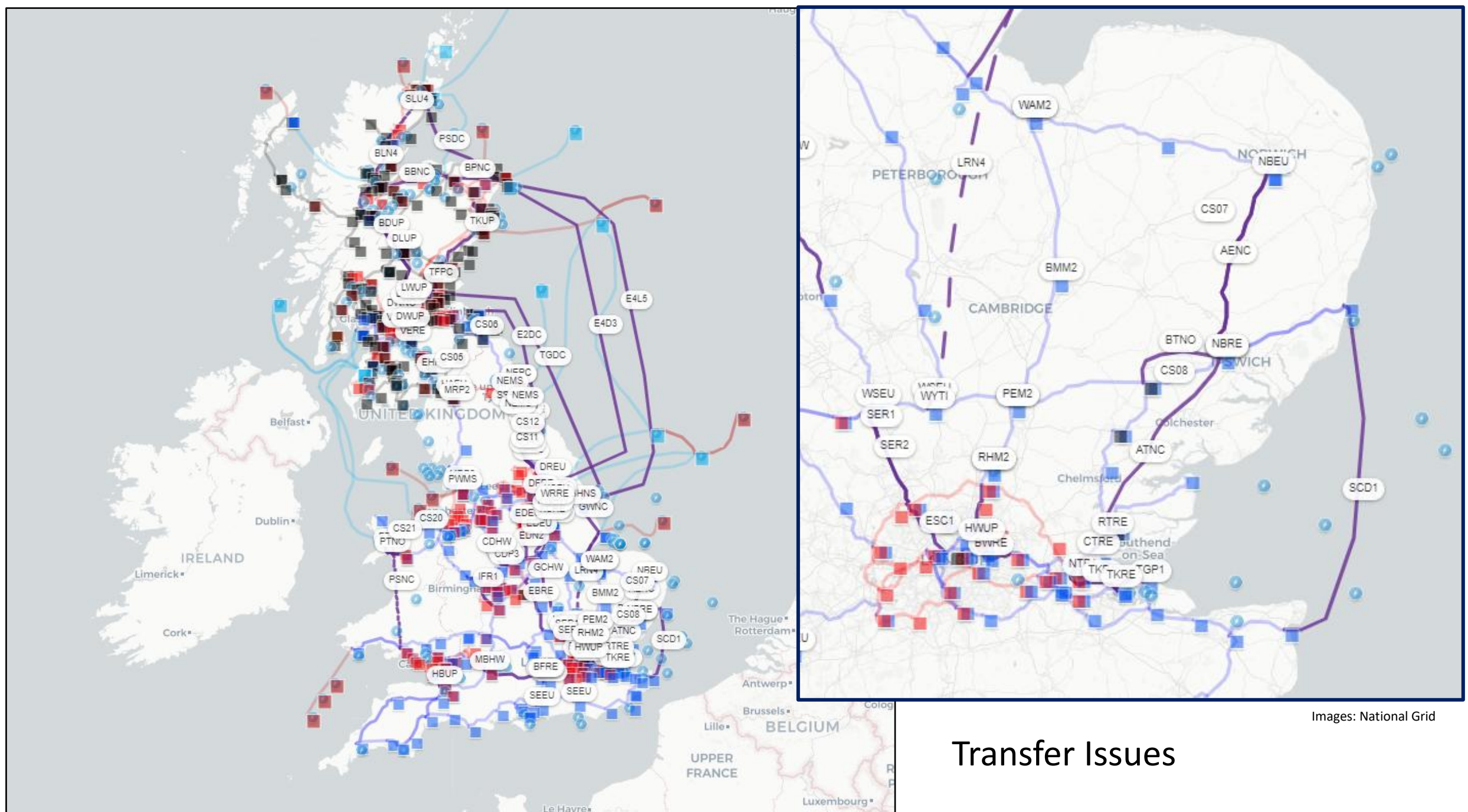


Images: Above <https://sases.org.uk/suffolk-energy-proposals/>  
 Left: <https://map.4coffshore.com/offshorewind/>

# Offshore Wind Farm developments in the English marine planning area: Part 2







Images: National Grid

# Transfer Issues



Jo Barnes  
National Trust

National Strategic Lead for Covenants



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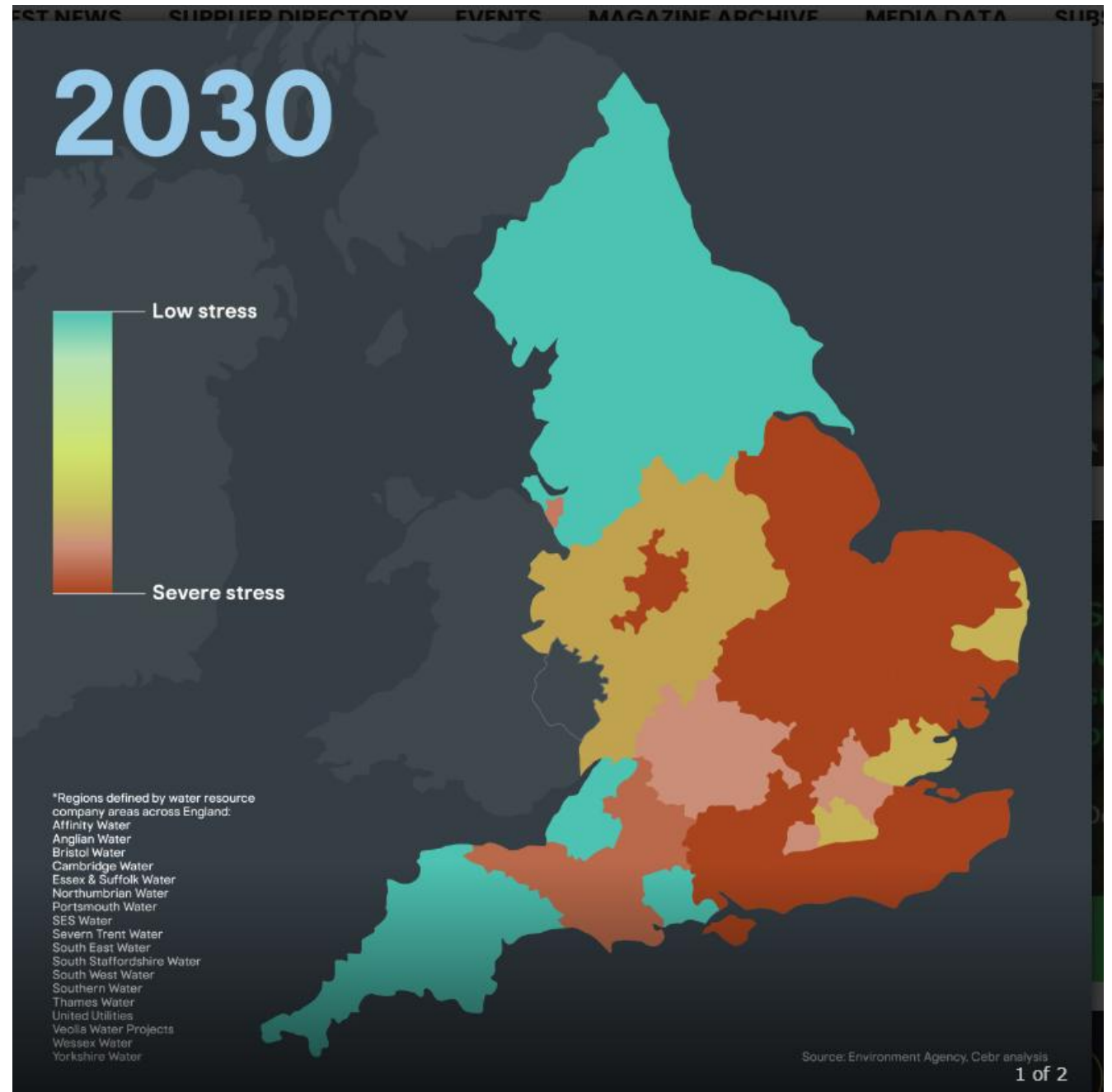


Images by the Gardens Trust:  
left, Weston Park, Shropshire;  
right, Winterbourne, Birmingham

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The East of England is predicted to be severely water stressed by 2030





Why is water important  
for Parks and Gardens –  
aesthetic, recreational,  
sensory values and  
biodiversity



Petworth Park, West Sussex



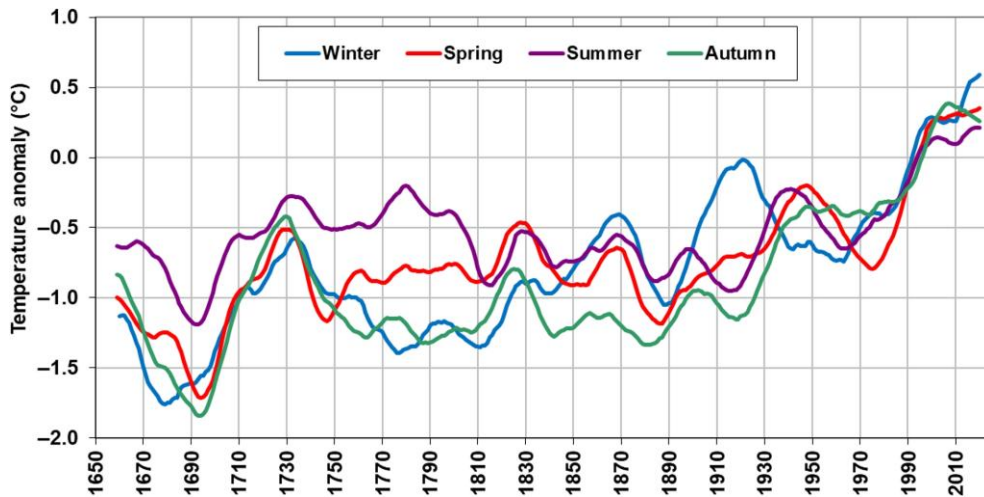
# Business and Experiential Value



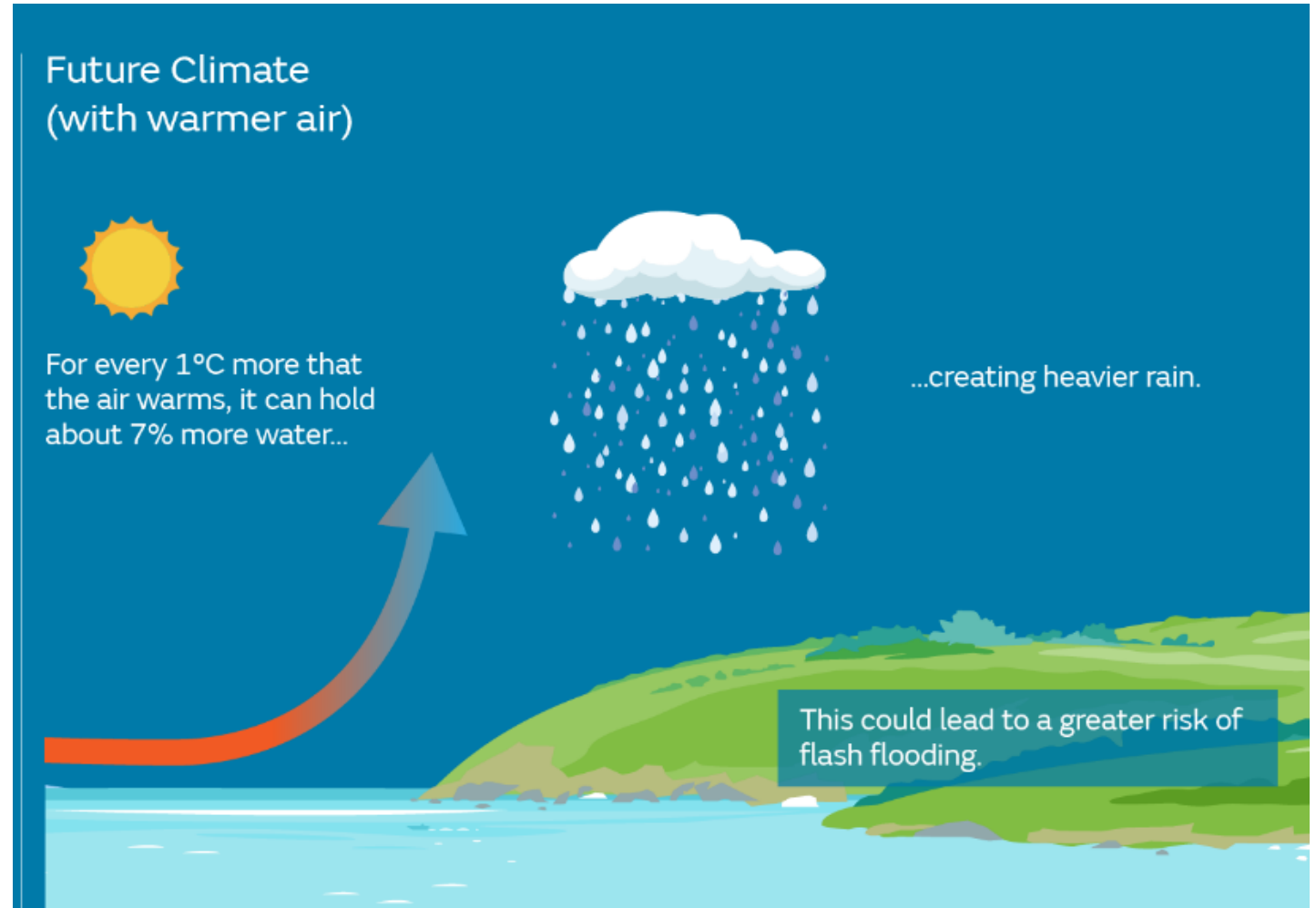
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Rising temperatures  
mean droughts in the  
summer but also  
greater humidity which  
results in more  
intense rainfall



©Metoffice



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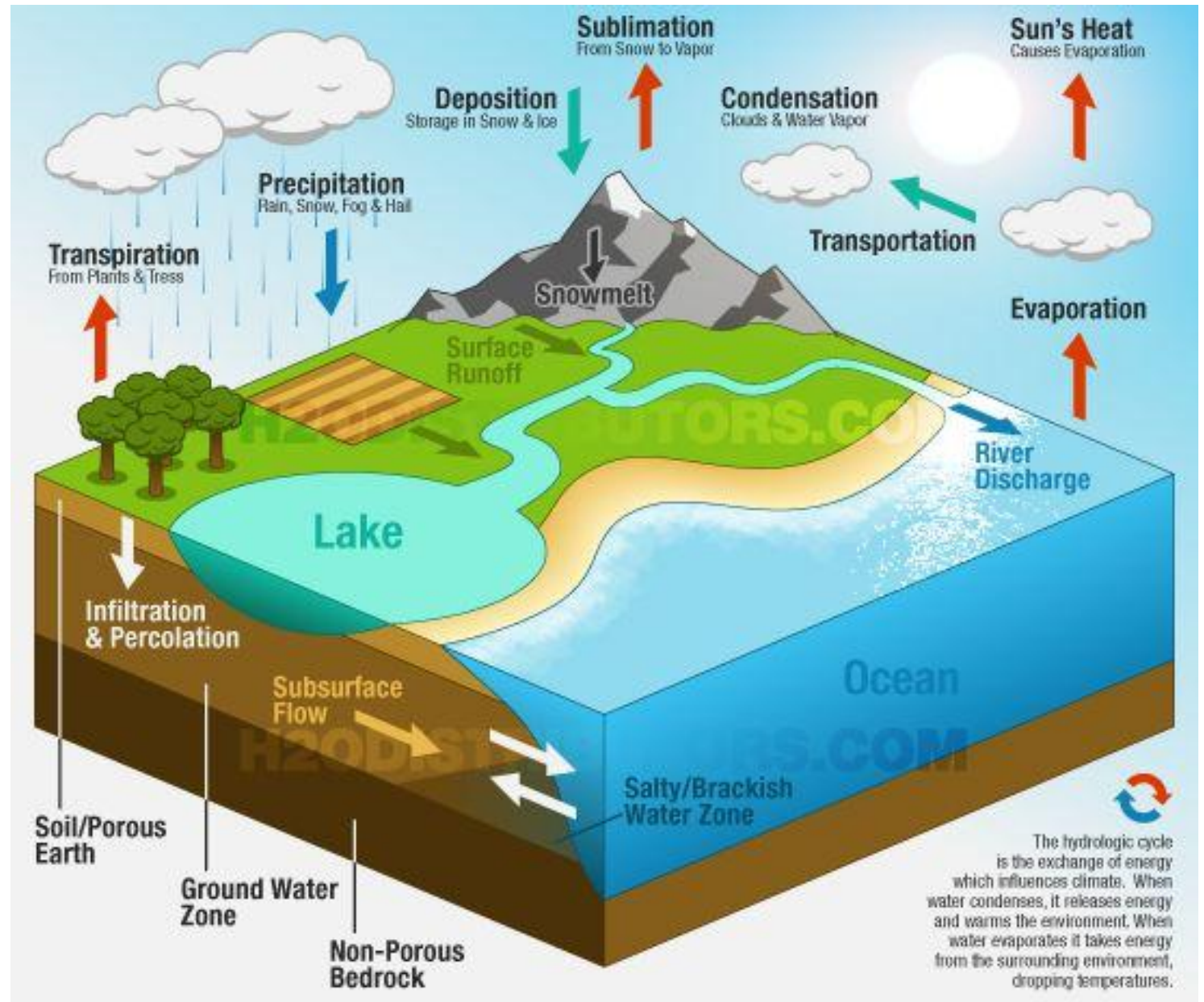
# Water Sources

**Surface water** : recharged by run off and stored in rivers and streams

**Ground water**: recharged through infiltration and percolation and stored in aquifers

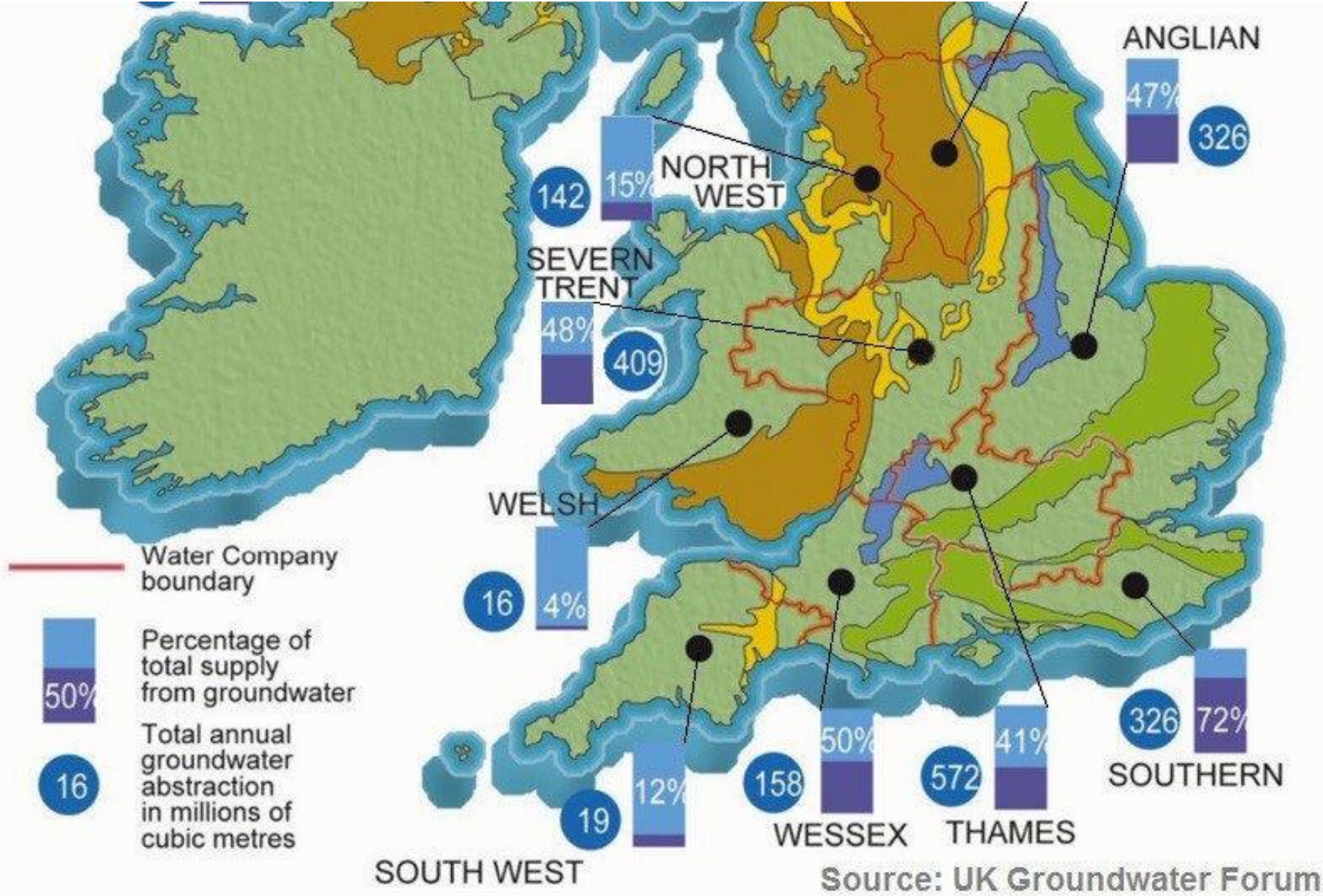
In the East of England, the early hot temperatures in Spring as well as increased development mean the ground is too hard for infiltration and percolation

**Ground water is not being restocked and is declining**





# Water sources in East of England



*The use of groundwater. Most groundwater is abstracted in central, eastern and south-eastern England*

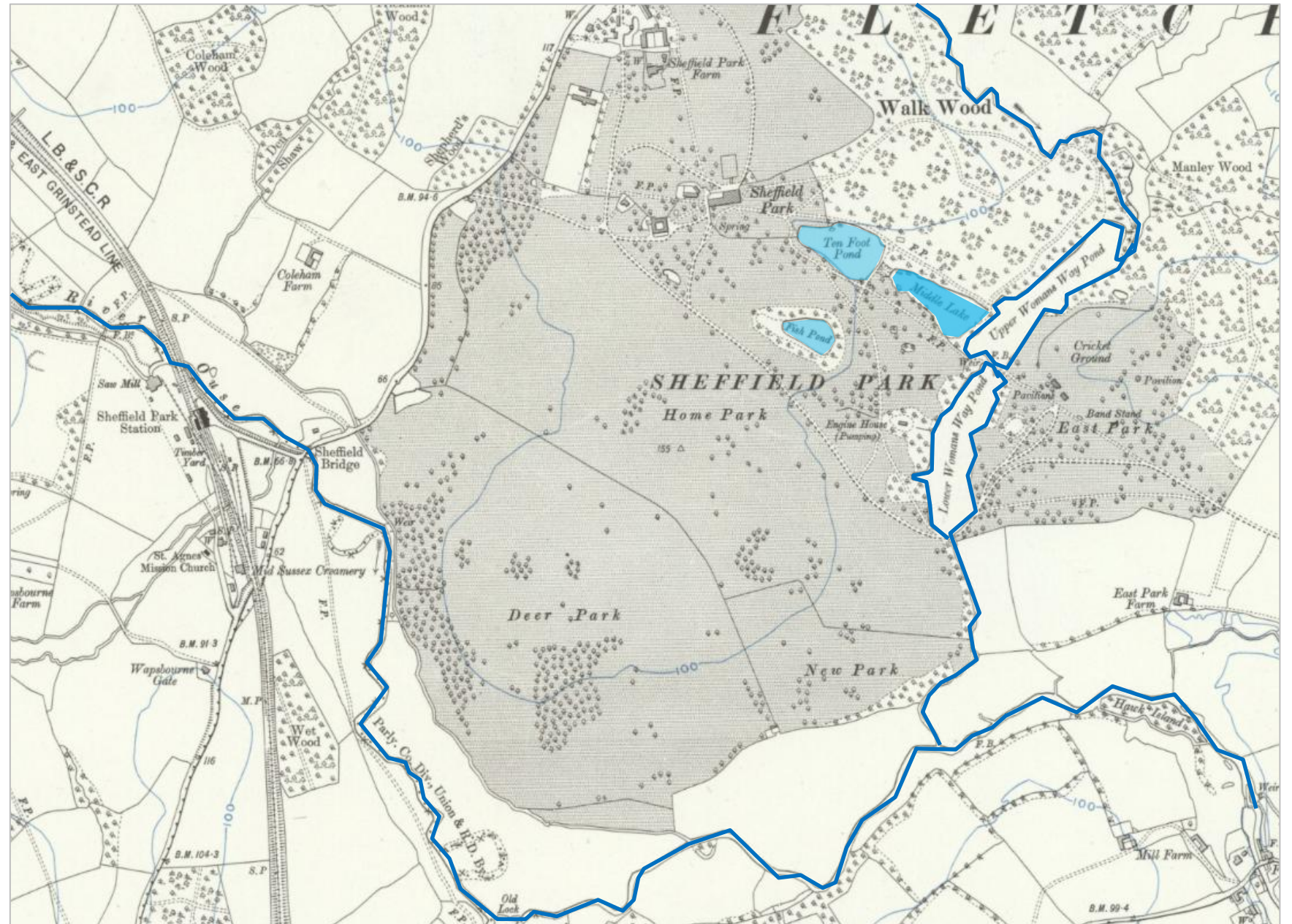
# Fens reservoir





# Ground water and abstraction risks

Sheffield Park,  
East Sussex



Issues faced:

Reduced ground  
water (spring-fed)  
and a reliance on  
abstraction





# Nineteenth Century Lakes

## Crystal Palace Park



South tower  
c1930 showing  
Baird's TV  
transmitters,  
(reproduced by  
permission of  
London Borough  
of Lambeth,  
Archives  
Department, ref  
W-CP-E.9)



Gardens reliant  
on tap water,  
abstraction or  
boreholes are  
vulnerable to  
drought





# Polesden Lacey

Water infrastructure in 1907







©nationaltrustimages

'We have a river at the bottom of the garden and it floods frequently. Sometimes the river is at the bottom of the garden and sometimes the garden is at the bottom of the river.' Kipling





## Summary

- Water features and floristic interest are key features in our parks and gardens
- But many of them are vulnerable to climate change, particularly in relation to abstraction and ground water supplies
- Without new water infrastructure, such as reservoirs, parks and gardens will lose some of their significant features
- However, adaptation of our parks and gardens, together with the reuse of historic water infrastructure should be considered to support these national endeavours
- Applications for development, including new infrastructure, are considered under the planning system.

# Nationally Significant Infrastructure Projects (NSIPs)

What are they?



# Mitigation Hierarchy



# Development Consent Process

- Process focus
- Six stages
- Duration







Image <https://uk.rwe.com/project-proposals/high-grove-solar-farm/>

*Green Futures*  
*Next: NSIP Case Studies,*  
*15<sup>th</sup> May*