

"What is a fish worth? Challenges from a policy and environmental conservation perspective"



#### The value of fish

#### NE gives fish conservation advice on:

- Protected sites.
- Protected species.
- As prey for protected birds, mammals, etc.
- Integral to the wider
   environment (ecosystem services & "wildlife").
- Resource for people (as food & recreation).





#### **Protected locations:**

#### **Spot the difference:**

Hinkley Point C located on highly designated Severn Estuary, also on migratory corridor for several SAC designated for migratory fish.

Sizewell C located on open coastline, outside of protected sites and obvious migratory corridors.
Adjacent to SPA for terms so some consideration of fish as prey.







### **Protected locations:**

- Fish impacts assessed on case by case basis.
- Cumulative impacts becoming significant.

• UK requires more space, or strategic placement.





# **Protected species**









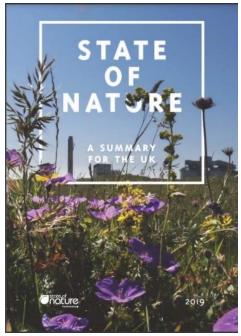
### **Wider Environment**

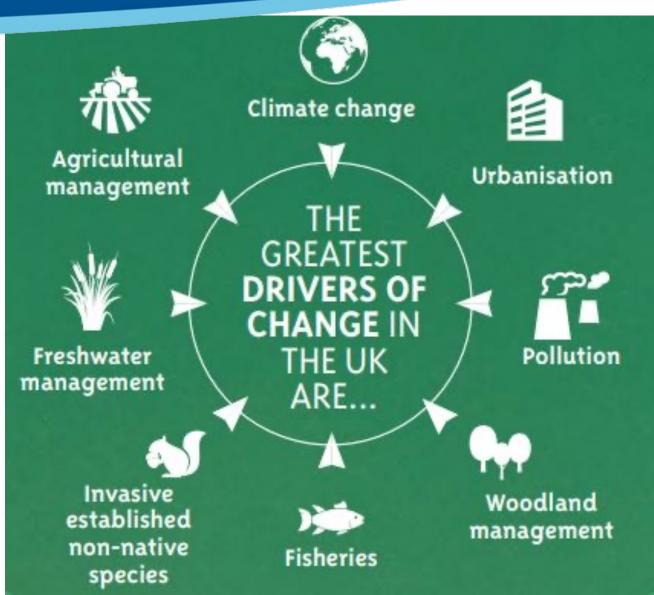
"UK is a nature-depleted country" So, is a fish is worth more than before?

Do these approaches deliver nature recovery?

Is there room for improvement?









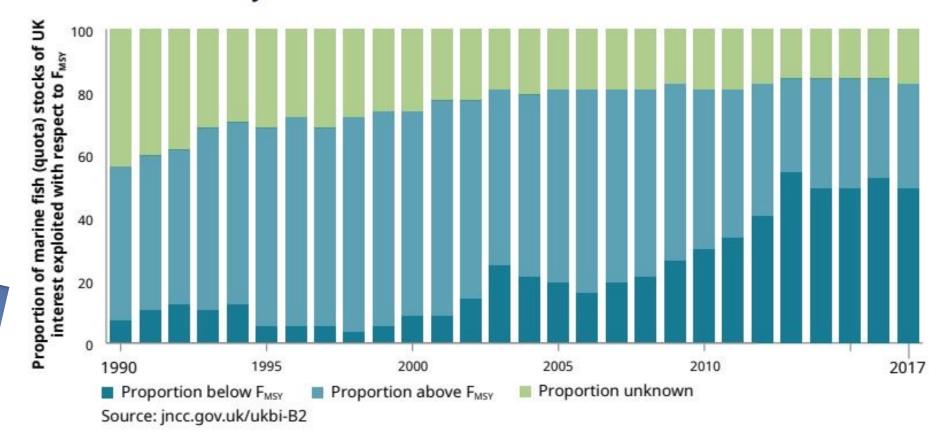
## Aquatic environments under pressure

#### **Freshwater:**

- In South East and Eastern England 22% of freshwater is abstracted.
- Over 1/3 of rivers, lakes and estuaries affected by physical changes to (flood defences, weirs, etc).

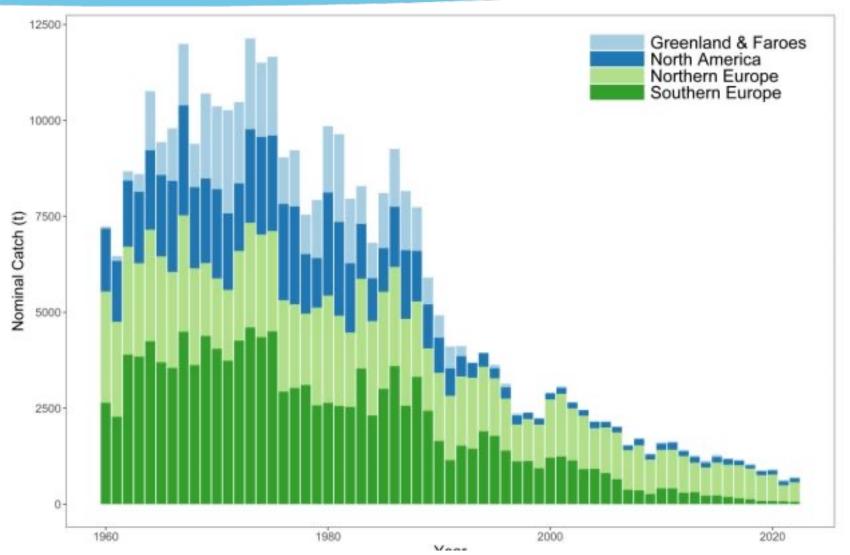
#### Marine:

UK Biodiversity Indicator: Proportion of marine fish (quota) stocks of UK interest harvested sustainably





#### **Crisis for Atlantic Salmon**



#### **Climate change worsens:**

- Temperature stress.
- Adverse flows.
- Changed/lost habitat.
- INNS.

# Increased urbanisation worsens:

- Abstraction = entrapment.
- Physical habitat loss
- Pollution

We are possibly at the point where every fish counts...



# **Degraded habitats**

# 2021 River Basin Management Plan (EA) October 2019:

- In the UK we've lost 90 per cent of our wetland habitats in the last 100 years and over 10 per cent of our freshwater and wetland species are threatened with extinction. Two thirds of existing species are in decline.
- Wetlands make up only 3 per cent of the UK but are home to around 10 per cent of all our species, so they are vital for the species that remain













# Change for wider environment:

The new Environment Act contains a new biodiversity net gain condition for planning permissions.

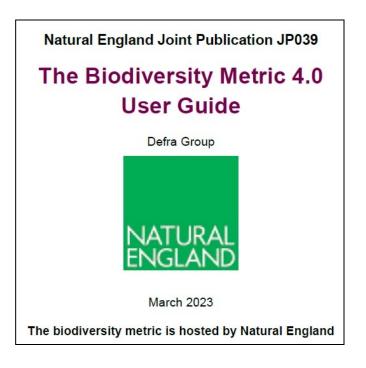


Table 2. Losses and gains of area habitat biodiversity units and watercourse biodiversity units.

Biodiversity unit type	Description	Biodiversity unit outputs
Area habitat	Baseline – 2.71 ha 'modified grassland'	5.42
Area habitat	Net on-site retention and enhancement of habitats:  • 2.12 ha 'modified grassland' retained  • 0.22 ha 'modified grassland' enhanced to 'other neutral grassland' in good condition	+5.97
	Total net gain	+0.55
Watercourse	Baseline – 'other rivers and streams' habitat:  O.5 km fairly poor, condition  O.1 km poor condition	5.52
Watercourse	Net on-site retention – 0.4 km 'other rivers and streams'	+4.14
Watercourse	Habitat enhancement:	+2.50
Total net gain		+3.01
Overall percentage net gain in area habitat biodiversity units		+10.13%
Overall percentage net gain in watercourse biodiversity units		+54.59%



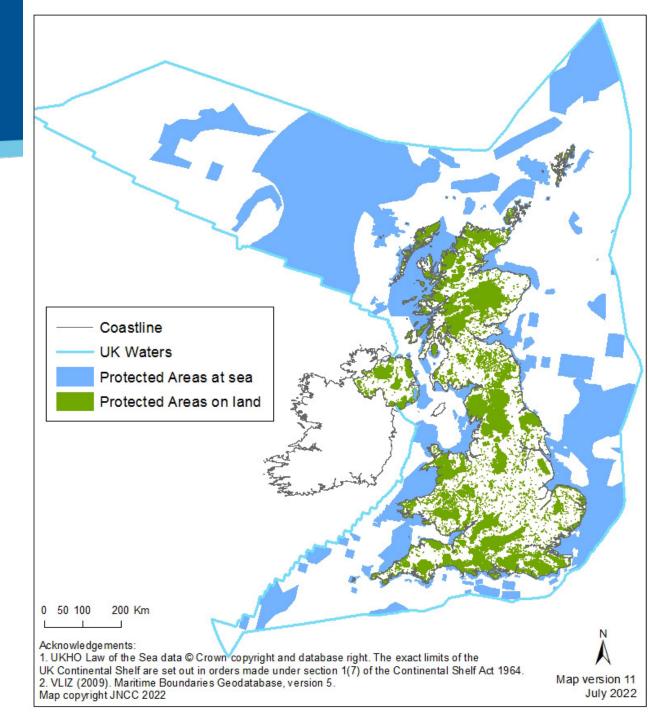
# Change for protected sites:



Stronger <u>avoidance</u> of sensitive locations for large abstractions.

NE working on the policy level, but stakeholders can lend support.

Saves everyone time and money! As well as improved environmental outcomes.





# Change for protected species:

Maximise benefit!





## In summary:

Impacts occurring the context of an already degraded environment.

UK adopting "Nature recovery" policy direction to reverse biodiversity decline.

Look forward to natural capital assessments, and be aware of cumulative impacts.

#### 3 key considerations:

- Account for a degraded wider environment: Biodiversity Net Gain.
- 2. Early planning to avoid protected sites saves effort down the line.
- 3. Maximise benefit in every opportunity Multi-species, **ecosystem-based** solutions.







Any questions?