The Big Screen Experience: The regulator's view of protecting European eels

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- European eel and legal protection
- The Eels (England & Wales) Regulations, 2009
- Issues and challenges in regulating
- Resolving the issues and delivering benefits for eel

Why do we need to protect European eels?



Young eels: Ros Wright





The Domesday Book



Ely in Cambridgeshire



Heron: Scottish Wildlife Trust

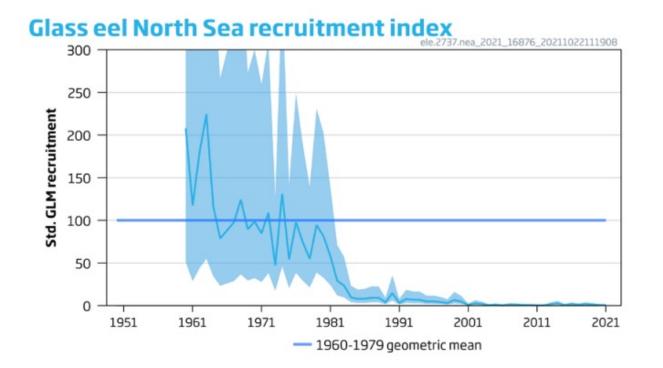


Otter: BBC Wildlife

Bittern: Natural History Museum



Why do we need to protect European eels?





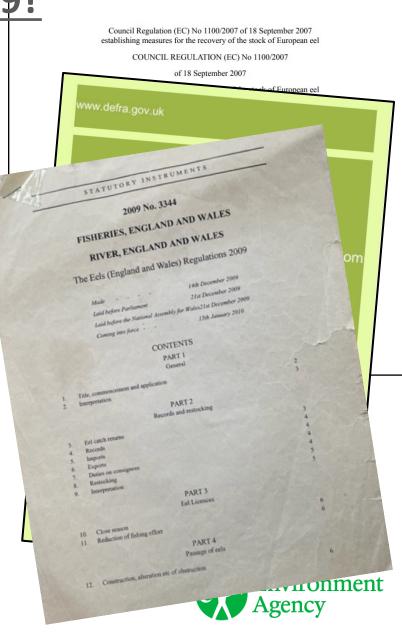
- 2007 European Eel Regulation (EC 1100/2007) Eel Management Plans (EMPs).
- 2008 IUCN red list categorises European eel as critically endangered.
- 2009 CITES trade restrictions no movement of European eel outside the EU.



Status: Point in time view as at 31/12/2020. Changes to legislation: There are outstanding changes not yet made to Council Regulation (EC) No 1100/2007. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details)

The Eels (England and Wales) Regulations 2009?

- **9 EMPs** in England restore access to habitat & ensure safe passage for eel
- UK legislation <u>The Eels Regulations</u> give Environment Agency powers to implement Eel Management Plans.
- The Eels Regulations (Part 4) powers in relation to securing safe passage for eels at obstructions and at <u>diversion structures</u> (intakes and outfalls).



The Eels Regulations, Part 4, in relation to eel screens

Eel Screens

Regulation 17

(1)This regulation applies to-

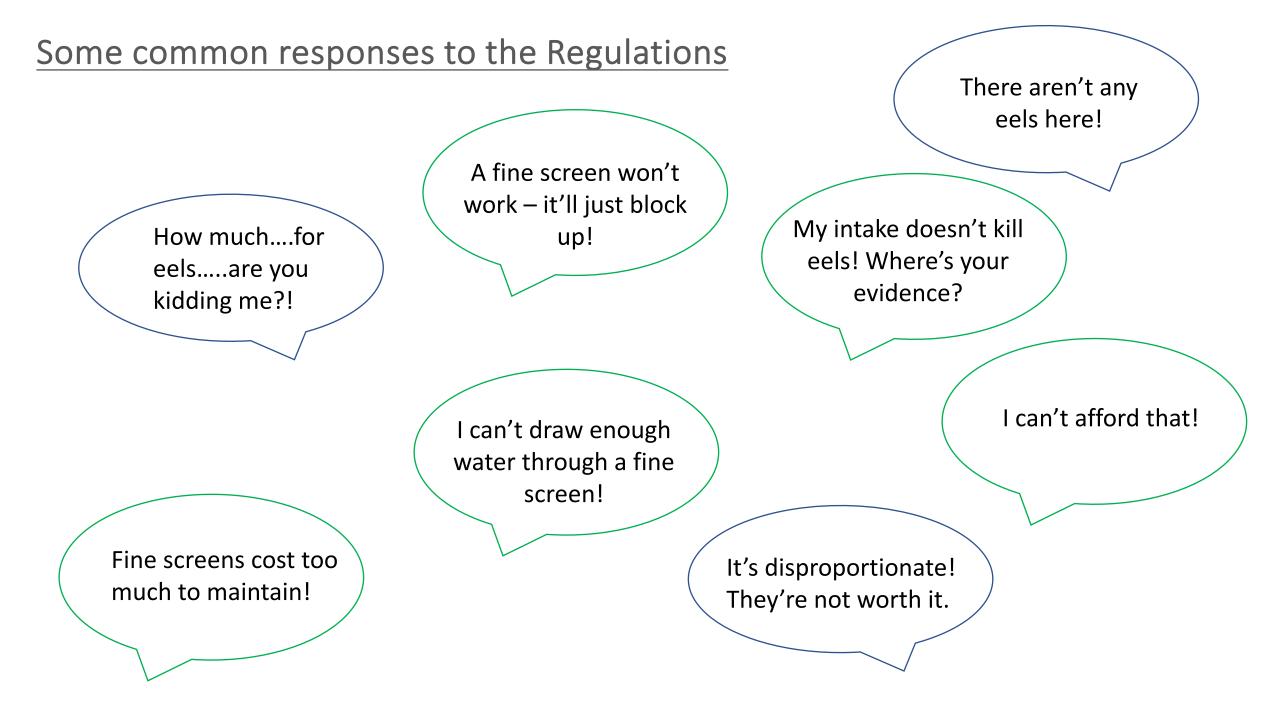


- (a) Any diversion structure capable of abstracting at least 20 cubic metres of water through any one point in any 24 hour period; and
- (b) Any diversion structure returning water to a channel, bed or sea.

(4) On or after 1st January 2015, a responsible person **must ensure an eel screen is placed in a diversion structure**.

- (5) The Agency may, by service of a notice-
- (a) **Exempt** the responsible person from the requirement in paragraph (4); or
- (b) Require the responsible person, at their own cost, to alter the dimensions (including mesh size) and the placement of any screen placed under paragraph (4) to those specified in the notice.





Robust and powerful legislation??

• As of 1st January 2015, owners or operators of structures capable of abstracting at least 20m³ per day **must install an eel screen**, at their own cost, **unless exempted by notice** by the Environment Agency.





Issues & challenges

- Scale of implementation
- Ability to pay
- Regulatory constraints
- Data and evidence
- The legislation
- Technical solutions





<u>Scale of</u> <u>implementation</u>

- Multiple industrial sectors.
- Thousands of structures in England.
- Hundreds of structures for some operators.
- Sector-specific guidance?





Ability to pay



















Regulatory constraints

- Government ensures there are checks on how we regulate:
 - **Regulator's Code**, 2014, "any [regulatory] action taken is proportionate"
 - **Growth Duty** S.108 of Deregulation Act, 2015 supporting compliance and growth
 - S.39 Environment Act, 1995 "have regard to costs and benefits"







Data and evidence

- Gaps in the data
- Evidence is not site-specific
- Evidence on small eels
- Won't a fine screen block up?
- Level of impact







Wording of the legislation

Regulation 14 (1) – "This regulation applies where the Agency determines that the **passage of eels is impeded** or likely to be impeded...." Regulation 14 (2) – "The Agency **may, by service of a notice, require**...."

Regulation 17(4) – ".....a responsible person must ensure **an eel screen** is placed in a diversion structure."

Regulation 17(5) – "The Agency **may, by service of a notice – exempt** the responsible person...."





Technical solutions

- Availability of eel screens for different settings
- "Unproven" technology lack of trust/lack of experience



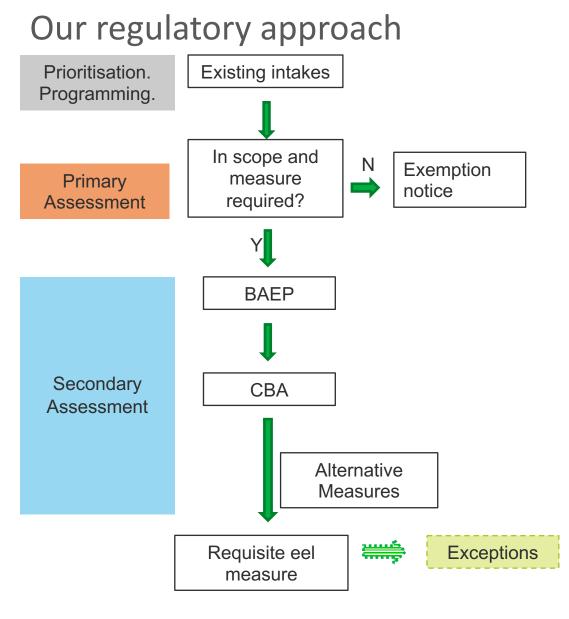
• Misconceptions about design and functionality







How we addressed the issues & challenges



- Scale of implementation
 - Prioritisation of existing structures
- Ability to pay
 - Programming approach
 - BAEP/Alternative measures
 - Exceptional cost as proxy for affordability
- Regulatory constraints
 - Primary assessment (structure in scope/ eel measures needed?)
 - Cost Benefit Analysis
- Data and Evidence
 - Primary assessment site specific data



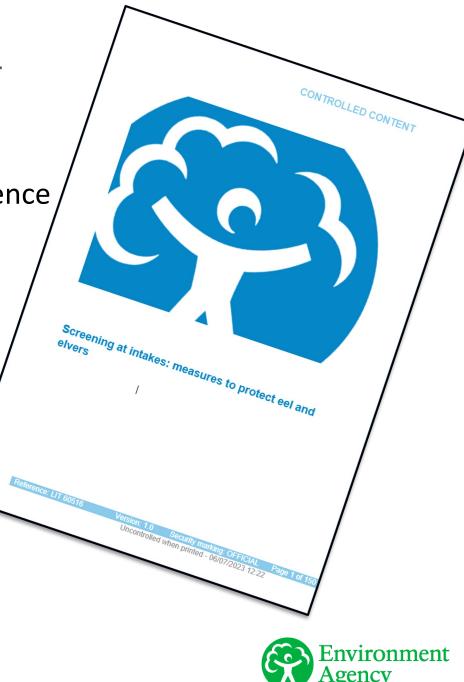
How we addressed the issues & challenges

- Data and Evidence
 - Leading and supporting research
 - Primary assessment take account of site specific evidence
 - Technical guidance
- The legislation
 - Exemptions "opt out" vs "opt in"......
 - Scale of implementation



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How we addressed the issues & challenges

Technical solutions

- New products to market
- Testing of new products
- Environment Agency technical guidancee latest update 2022
- Best Achievable Eel Protection (BAEP) in regulatory process and technical guidance.







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What has been achieved so far? "What have the Eels Regs ever done for us"

- Increasing awareness
- Collaboration
- New regulatory process, inc BAEP
- Research
- Updated technical guidance
- New products to market choices for operators
- Approx 350 eel screens installed (with many more planned)
- 40+ less damaging (BAEP) pumps (with many more planned)
- Less damaging turbines.
- Operators reporting operational cost savings as a result of their eel screens!
- Wider benefits for other fish species





What have we learned?

- Get the legislation right.
- Engage with operators
- Set out a clear regulatory approach
- Prioritise bite-sized chunks
- Pace of delivery planning

Legislation/regulation can drive innovation

Thank you for listening