



**PISCES**  
CONSERVATION LTD



**The Eels(England and Wales)  
Regulations 2009: what they mean to  
you and how we can help**

### The regulations

- Aim to protect declining eel stocks and return them to sustainable levels
- Came into force on 15<sup>th</sup> January 2010 and are to be enacted by 1<sup>st</sup> January 2015
- Apply to England and Wales
- Failure to comply is an offence

### Are you affected?

- Do you operate a diversion structure capable of abstracting at least 20 cubic metres of water through any one point in any 24 hr period?
- Do you have a diversion structure returning water to a channel, bed or sea?
- If the answer to either of these questions is yes then you will be expected to comply.



### The implications

- On or after 1<sup>st</sup> January 2015 you may be required to fit a screen to your intake structure in order to protect eels.
- Screen mesh sizes to be fitted: Estuary to tidal limit = 1mm; tidal limit to 30km upstream = 2-3mm; 30km upstream of tidal limit = 9-20mm.
- You may also need to maintain low screen approach velocities, depending on the life stages of eels present.
- The EA may also serve you with a notice requiring that an eel screen be fitted before 1<sup>st</sup> January 2015.



### Exemptions

- Your site may be exempt where:
  - it can be statistically proven that eels are absent from the water course or;
  - your current screening provides adequate protection or;
  - your flow or intake configuration is such that “not many eels will be impinged or entrained”

### What we can do to help

- Assess the applicability of the regulations to your site
- Carry out long- and short-term entrainment/impingement investigations
- Conduct surveys to determine presence/absence and life stages of eels
- Assess your current screening
- Negotiate a course of action with the Environment Agency on your behalf



### Why choose Pisces Conservation?

We have over 30 years' experience in tackling the problems of fish impingement and entrainment in water intakes, and the full range of other environmental problems associated with large-scale water use. We also have extensive databases that cover many marine and freshwater habitats, and offer a unique ecological team, combining international experience, biological knowledge, and statistical expertise. This makes us the UK's leading authority, and a world-class consultancy.

### Contact us today

Contact us at [pisces@pisces-conservation.com](mailto:pisces@pisces-conservation.com) to discuss how we can help you, or call our office on **01590 674000**.



## European eel facts

### Current state of eel stocks in the UK

- Since the early 1980s, recruitment of juvenile eels to European waters has shown a marked decline of up to 90%.
- Numbers of adult eels in many estuaries and rivers have declined dramatically over the last three decades, and stocks are now considered to be in danger of collapse.
- No single cause for this decline has been identified but it is likely that a combination of factors is responsible.
- Factors responsible may include: habitat loss and degradation; parasitism; overfishing; pollution; climatic changes in oceanic conditions; and man-made barriers resulting in impaired passage between marine and freshwater habitats.

### Lifecycle of the European eel

- The lifecycle of the European eel has seven principal stages.
- After hatching from eggs in the Sargasso Sea, the larvae, known as leptocephali, are carried eastwards by the Gulf Stream towards European coasts.
- Having arrived on the continental shelf, the leptocephali metamorphose into glass eels which colonise coastal and inland waters. At this stage, their skin becomes pigmented and they metamorphose into elvers.
- While some elvers remain in the estuary, or are recruited to coastal regions, others migrate upstream into freshwater during their first year, or later as juvenile yellow eels in subsequent years.
- At the end of this phase in the life cycle, yellow eels metamorphose into silver eels and migrate back to the Sargasso Sea to spawn.

### Pisces Conservation Ltd staff publications

For information on the decline of the European eel please refer to: Henderson, P.A., Plenty, S.J., Newton, L.C. and Bird, D.J. (2012) Evidence for a population collapse of European eel (*Anguilla anguilla*) in the Bristol Channel. Journal of the Marine Biological Association 94, 843-851.