Acoustic Fish Deterrent
Steps to a Public Inquiry
Bristol Channel and Severn Estuary
Protected Marine Sites

Fig.1: Map of the Conservation Designations currently in place in the Severn Estuary. Source: SEP
Hinkley’s giant “plughole” threat to sea life in the Severn Estuary
HINKLEY POINT C
OUTFALL INTAKE TUNNELS

*Intake pipes:* 3.5km

*Outfall pipe:* 1.8km

*Tunnel head*

Bristol Channel

*Water intake*

*Sea bed*

*Intake tunnel:* 33m below the seabed

*Outfall tunnel:* 24m

120,000
Tunnels: 1/5 capacity

38,000
Tunnel lining segments

12 month
Tunnelling project
Will Hinkley Hoover out the Marine Life of the Severn Estuary?

**How it works**

**Fish Recovery and Return (FRR) system**

1. **Seawater** is sucked into the intake tunnels to cool the steam in the condensers.
2. Fish and sea life are also sucked in.
3. The seawater is filtered through a 5mm mesh; fish and debris are washed off along another channel.
4. The filtered, warm, seawater from the condensers is returned to the sea.

**System Diagram**

- **Unit 1**: Hinkley Point C
- **Unit 2**: Bristol Channel
- **Water outfall**: 2km
- **Two cooling water intake tunnels**: 3.3km
- **132m³ per second**

**Notes**

- The fish from the screens, whether dead or alive, are returned to the sea.
Acoustic Fish Deterrent Speakers
Sitting on Cooling Water Intakes

Figure 3.3: Potential siting of AFD structures as part of the LVSE intake head
Cooling Water Intake Head On the Sea Bed Dimensions