

# SEVERN BARRAGE DIGEST

“An Environmental Gamble Too Far”

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## FOREWORD BY MARTIN SALTER AND CHARLES WALKER

As both anglers and politicians we have regularly warned government ministers about the environmental and economic threat posed by the construction of the Severn tidal barrage. We note that Government has nominated the Severn estuary for EU protection because of its importance to fish stocks and wildlife; yet at the same time are considering putting a barrage across it that could have devastating consequences for the whole fishery, with a knock-on impact on the regional economy.

The government is shortly to publish the results of a two year feasibility study into the proposed construction of 10-mile barrage across the River Severn which could possibly generate 5% of the UK's electricity. Yet, the Government's own 2003 Energy White Paper dismissed these plans at the time because of fears about the cost and environmental damage and, as this report demonstrates, they were right to do so. In fact costs have escalated from an initial £8 billion to the current, eye-watering, £20+ billion figure. Last year the government agreed to refine down ten possible schemes for Severn tidal power to a short list of five which, whilst still including barrage options, did open the door to emerging and innovative tidal reef designs which would allow for the passage of both fish and boats.

The barrage has been rightly opposed by a wide collation of environmental and conservation groups, including the National Trust, the Royal Society for the Protection of Birds, the Salmon and Trout Association, the Atlantic Salmon Trust, the Wildlife Trusts, the Angling Trust, the United Usk Fisherman's Association, the Wildfowl and Wetlands Trust, WWF UK, Wye Salmon Fishery Owners Association and the Wye and Usk Foundation. We and other MPs have raised the same concerns in Parliament and are publishing this report as a further contribution to the current debate.

Environment Agency surveys have shown that the public themselves put an Existence Value on salmon of some £350 million a year. Bearing in mind that 25% of the spawning habitat for salmon in England and Wales—is upstream of the proposed Severn barrage, and given that its construction would effectively destroy migratory fish runs, the simple conclusion is that the construction of the Severn barrage would be cataclysmic for migratory fish in the Severn, Wye and Usk catchment and would also destroy wild bird habitats formed naturally by the Severn's huge tidal range and protected by European law. The Habitats Directive means that the Government would have to recreate these sites elsewhere and ensure that they were of similar value to wildlife. It is simply not possible to recreate spawning habitats on this scale and our report concludes that for legal reasons alone the Government must drop the Barrage plans and seek other ways of harnessing the phenomenal tidal power of the River Severn.

We well understand the need for new sources of renewable energy to meet EU targets and to bridge the UK energy gap. However, the Severn Tidal Barrage will be devastating for the fish stocks and marine life in the Severn, Wye and Usk catchment. Not only would this be an environmental disaster, but would wipe out the millions of pounds recreational fishing contributes to the economy. The creation of the Severn Tidal Barrage runs contrary to all the environmental protection that Parliament introduced in the Marine Bill, and is simply not the right solution to our energy problems. As this report demonstrates there are less environmentally damaging alternatives such as tidal lagoons or tideway turbines which can create green energy without destroying the unique habitat of the Severn estuary.

**Martin Salter MP**  
**Charles Walker MP**

## **Joint statement by the Salmon and Trout Association and the Atlantic Salmon Trust**

The Government is undertaking a two-year feasibility study into options for generating tidal power in the Severn Estuary. It published a consultation document on the first phase of this in December, seeking views on a proposed short list of schemes and on the issues it was proposing to investigate further. The S&TA and the Atlantic Salmon Trust (AST) submitted a joint response (visit the web site to view under 'Hydropower'). The Government has now confirmed the original shortlist, and is undertaking an assessment of the likely environmental impact of each scheme; the preliminary results of this confirm that even a small barrage scheme would seriously affect migratory fish. It has promised to hold a further public consultation before a final decision is taken.

There are five shortlisted schemes; three are for barrages and two for tidal lagoons, which work in the same way as barrages, but impound only part of the estuary. The Cardiff-Weston barrage, usually referred to simply as the Severn barrage, would be by far the largest of the schemes. It would generate some 4.5% of the UK's current electricity supply, and is estimated by the Government to cost £21 billion to construct. It would have a major impact on the habitat of the Severn estuary and the wildlife that depends on it.

We are particularly concerned at the potential impact on salmon and other migratory fish. A barrage would obviously create a barrier to returning adult salmon and turbines could kill large numbers of emigrating smolts. But the damaging effects of a barrage could go well beyond this. It would alter the whole nature of the estuary, with unpredictable effects on flow patterns, temperatures and channels. Build up of sediment could cause major problems. We know very little about the movements of salmon and other fish in the estuary, and cannot predict how a barrage might affect the migration cues that trigger their movement upstream, and their ability to find their native rivers. Two of the barrage options would affect the Wye and the Usk, which are protected under the EU Habitats Directive because of the importance of their salmon stocks.

We believe that the Severn barrage is not a feasible option, given the cost (£21 billion is likely to be a considerable underestimate) and the impact on the environment, and that this is also likely to be true of the smaller barrage schemes. We believe that efforts should be focused on more cost-effective, sustainable and innovative ways of harnessing the Severn's tidal power, and this is the present thrust of our lobbying work.

S&TA and AST are members of a working group of wildlife and environmental NGOs which share our concerns about the threat to the Severn estuary. Other members include the RSPB, Wildlife Trusts, the Wildfowl and Wetlands Trust, the National Trust and WWF. Needless to say, our work in ongoing!

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