

SEVEN REASONS TO SAY NO TO A SEVERN BARRAGE

THE SEVERN BARRAGE – AND WHY WE OPPOSE IT

There are a number of options for using the Severn Estuary to generate renewable energy. One of the most frequently promoted is a 10-mile long concrete barrage between Cardiff and Weston.

Although the idea has been around for several years, it has recently gained prominence as the Government has set up a Severn Tidal Power Feasibility Study to examine the best way of harnessing the natural power of the Severn to generate renewable energy. The Government is due to publish and consult on a shortlist of options early in 2009.

Stop the Barrage NOW wants to ensure a Barrage isn't on the Government's shortlist.

The Stop the Barrage NOW campaign isn't against renewable energy generation in the Estuary – far from it – but we believe that a Barrage will do more harm than good. Our supporters are drawn from a range of interests, from the maritime community to anglers to conservationists, demonstrating the wide variety of reasons why a Barrage would be very bad news for the Severn and those who live near it.

Any one of these reasons should make the Government think again. Together they make a compelling case for dropping a Barrage.

1. IT WON'T DELIVER THE RENEWABLE ENERGY PROMISED

Promoters claim a Cardiff-Weston Barrage would have a power output of 5GW - 8GW, but there are severe problems in harnessing power constantly. Output drops significantly outside the tidal ebb or flow peak; current plans indicate it would actually generate power for only 5.7 hours every 24 hours.

Recent technical analysis by independent experts IPA Energy & Water Consulting shows that the wide variation in generating capacity – from 40GW per day at spring tides to 15GW per day at low neap tides – makes for higher costs. Worse still, a Barrage would produce virtually no contribution to winter peak electricity demand. And as if this were not enough, the spin-off costs to the entire electricity generating system would be substantial.

The net effect is to make power from the Barrage up to twice as expensive as wind power and up to ten times more costly per Kilowatt-hour as a conventional coal fired power station.

2. IT WILL DAMAGE THE LOCAL ENVIRONMENT AND BIODIVERSITY

Many well-respected NGOs, including RSPB, The National Trust, WWF and Friends of the Earth are extremely concerned about the massive damage to wildlife in and near the Estuary – including many protected species – which a Barrage would cause. Like us, they believe that other, less damaging renewable solutions are necessary and possible.

Under the EU's Habitat's Directive, a compensatory habitat would have to be found were a Barrage to be built of around 2,000km² – one of the largest compensatory habitats ever required and nigh on impossible in practice to identify.

“WWF is concerned that a Severn Barrage may impose unacceptable environmental impacts on the Severn Estuary and entail a serious breach of the Habitats Directive.”

WWF-UK Policy Position on the Severn Barrage

3. IT WILL INCREASE THE RISK OF FLOODING

Contrary to popular belief, a Barrage could increase the risk of flooding – in a region already badly affected by floods over the last 18 months.

Contact max@stopthebarrage.com or visit www.stopthebarrage.com for more details

Detailed scientific studies have found that estuarial barriers create considerably greater risks of flooding and siltation than were thought likely when the Severn barrage was first evaluated in the 1980s. With some three million people living around the Severn estuary, and sea levels predicted to rise due to global warming, flood risk is already a major concern across the region.

“If erosion patterns in any way mirror those experienced on the Eastern Schelde [a storm surge barrier in Holland], the long term impacts on flood defences...will place an increasing burden on flood risk budgets.”

Roger Morris, Senior Specialist (Ports & Estuaries), Natural England

4. IT IS UNPROVEN TECHNOLOGY

Tidal range technology has been theoretically possible for many decades but, apart from a very much smaller barrage built in France 40 years ago (La Rance), very few other barrages have been built – certainly nothing like the size proposed for the Severn Estuary.

In fact, major problems of silting and habitat damage have permanently stopped the development of tidal barriers in the Bay of Fundy in Canada, which has the world's largest tidal range.

5. IT WILL DIMINISH FISH STOCKS

Well-respected angling groups like the Salmon & Trout Association and the Wye & Usk Foundation have joined the Stop the Barrage NOW campaign because they are hugely concerned about the impact of a Barrage on the stocks of migratory fish in the Estuary.

Some 28 species of fish are known to inhabit, via seasonal migration, waters above the recommended site. In addition, it is home to four further species listed as endangered - salmon, twaite shad, common eel and lamprey. All these stocks would be under risk, were a Barrage to be built.

“There is absolutely no net benefit in any such scheme, which would destroy unique natural features and threaten already endangered species.”

Salmon & Trout Association

6. IT WILL LEAD TO UNEMPLOYMENT AND DESTROY LOCAL PORTS

Although the construction of Barrage may create some employment in the short-term, it would destroy the Severn's maritime industry. A number of ports, including Bristol, Sharpness, Gloucester and Cardiff, will be adversely affected by a Barrage, putting tens of thousands of jobs and other businesses reliant on the ports at risk.

Although locks could allow ships to pass through the Barrage, this would still leave ports like Bristol at a considerable disadvantage. This is ironic - Bristol, because of its proximity and good rail access to the cargo distribution centres of England is one of our greenest ports.

7. IT WILL RUIN OUR ARCHEOLOGICAL HERITAGE

The mudflats and wetlands surrounding the Seven Estuary are home to extremely significant prehistoric archaeology. As the Severn Estuary Levels Research Committee says, these Holocene environments are exceptionally important because of the waterlogged conditions that preserve wooden structures and biological evidence.

Building a Barrage will reduce the size of the tidal range, permanently submerging the lowest Palaeolithic and Mesolithic sites – these irreplaceable locations, and the lessons they can teach us about our past will be lost forever if a Barrage is built.

“Barrage construction will increase erosion in some areas and sediment deposition in others, burying some sites and exposing others to destruction.”

Professor Martin Bell, Reading University