

THE POLITICS OF ADAPTATION

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Background

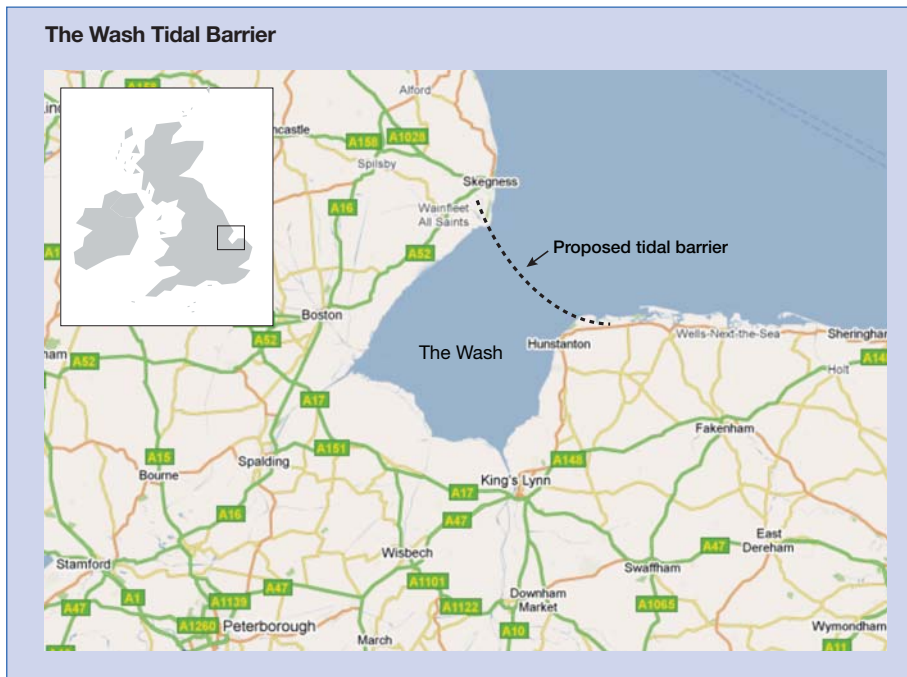
In the United Kingdom the concept of NIMBYism ('not in my back yard') is well established: when asked, an individual or organization is not against a project on principle, but does not want it implemented near them.

The protection of land from sea-level rise would seem so important that it would not suffer from such a problem. However, in the case of the Lincolnshire, Cambridgeshire and Norfolk Fens this seems to be the case.

The fenlands are an area of low-lying, fertile farmland in East Anglia. These Fens account for over 25 per cent, by value, of the UK's agricultural output, cover over 300,000 hectares and are home to over 500,000 people. The Fens are also near or below current mean sea level. Their drainage is a testament to Victorian engineering. Straightened rivers and massive pumping has ensured that the land has enjoyed a flood risk of 1 in 200 years. However, sea-level rise causes two problems: higher high tides and higher low tides. Higher high tides mean that the chances of a repeat of the 1954 inundation of the Fens by the sea become increasingly likely. Two solutions to this are either to raise the sea-defences, or to allow the sea to inundate the land. For the Fens, the latter is not possible, as the level of the Fens decreases away from the shore. Giving up to the sea could mean that the sea would reach all the way to Peterborough, St Ives, Cambridge and Newmarket. The alternative is to raise the current defences. This would require raising over 200 kilometres of sea defence and river bank. Further, the sea defences would also have to be strengthened as sea erosion will increase dramatically as the inter-tidal areas are squeezed ever narrower and ever steeper.

Higher low tides mean the Fens become ever more difficult to drain, and become more reliant on pumping. It has to be assumed that the lowest fenlands will be abandoned first, returning back to freshwater meres and then gradually to freshwater marshes of sphagnum and reed. The returning of fen to freshwater meres and marsh is being carried out today, not in the lowest-lying areas but in extending Wicken Fen (the Wicken Vision), and creating a new reserve near Peterborough called the Great Fen.

The Wash Tidal Barrier Corporation plc has proposed a radical solution: to build an 18 kilometre dam across the whole of the Wash estuary from Hunstanton to Skegness. This would protect the Wash and the whole of the fenland area, and provide the capability to generate over 2 gigawatts of tidal electricity.



The NIMBY problem

The political response to date has been principally one of disinterest. The key to this disinterest is the statutory protections for various habitats in the Wash and Fen areas. The Wash is seen as one of the most important estuarine habitats in Europe. It is also protected by the Ramsar Convention (see box overleaf), the highest level of international protection. In addition, there are numerous other protected sites in the affected area, mainly for birds.

Sea-level rise will destroy all of these habitats, while building a barrier could protect many of them and provide opportunities to create new habitats to replace those lost elsewhere. However, the Royal Society for the Protection of Birds (RSPB) and other biodiversity protection organizations condemned the building of a barrier as soon as the project was launched. In published responses to the proposal, the RSPB appears not to have considered the value of the project, or indeed about how otherwise to protect the habitats threatened by sea-level rise. The RSPB is the largest membership organization in the UK. Politicians, it appears, are reluctant to challenge the RSPB for this reason.

Why do organizations behave in a way that runs contrary to long-term interests?

One possibility is that they too are victims of NIMBYism. Local activists identify closely with local initiatives. In the case of the Wash, for example, media coverage of the opposition to the project used footage of the Gibraltar Point conservation area, with activists talking about how a barrier would destroy this important habitat. There was no mechanism for the project proposer to point out that the barrier was to be built to save the habitat.

Another motivation might be that anything that is good for a particular habitat must be the initiative of its protector. This is the ‘not invented here syndrome’ (NIHS), well known in business, where only those ideas internally generated are valued within a company.

A third possible motivation is to protect a previous position. The RSPB is against a proposal to build a barrier across the Severn estuary. Here the sole justification for the barrier is for the generation of electricity, and it will have a major negative impact on local habitats. For the RSPB not to oppose what to the uninformed looks like a similar scheme in the Wash could be seen as double standards.

The feasibility study problem

Misunderstandings about a barrier scheme could be rationally explored through a feasibility process. This process would allow all parties to contribute, discuss and evaluate the complex issues such a large scheme generates. Typically, feasibility studies for this type of scheme are government funded. If the project cannot generate enough political goodwill to elicit government funding for a feasibility study, then the project fails.

In the case of the Wash Barrier, the estimated cost of construction and the value of the electricity it would generate suggest that it is possible for the project to be fully funded by private money. Indeed, the estimated rate of return on investment indicates that it would be worthwhile to fund the feasibility study privately. However, in the case of the Wash, no private investor could ensure a monopoly on the construction and operation of the barrier. If such a private feasibility study were to take place, the government or another private investor could win the monopoly and enjoy a ‘free ride’ from the private investors who funded the feasibility study. The Victorians solved this by private member’s bills in Parliament. These bills created the statutory vehicles for the building of major infrastructure projects, such as the railway system, using private money. This mechanism has fallen out of favour, and is rarely successful today.

The commons problem

Another possible way to fund the feasibility study would be to seek funding from those who would benefit from the flood protection provided by the barrier, namely

Ramsar

The Convention on Wetlands of International Importance, called the Ramsar Convention, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. Negotiated through the 1960s by countries and non-governmental organizations that were concerned at the increasing loss and degradation of wetland habitat for migratory waterbirds, the treaty was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975. It is the only global environmental treaty that deals with a particular ecosystem, and the Convention’s member countries cover all geographic regions of the planet.

the landowners. A £3 million feasibility study would require a contribution of only £10 per hectare from the landowners protected. This land has a current market value of over £10,000 per hectare. Small beer, one might think.

However, while a few landowners have been willing to provide some funding, it has not been to the level needed, nor have the great majority of the landowners offered to contribute. Here the problem is that those not paying would gain equal benefit to those paying (the barrier protects the whole of the fens, not just the fields of those funding the study!).

The tragic reality

In this author's opinion the Wash Barrier will be built, but only after the sea has inundated the fenland at least once.

In the case of the Fens and the Wash Barrier, we see a real-life exemplar of the difficulties faced by investors in a more developed nation such as the UK, seeking to introduce long-term planning to address the global challenge of climate change. It is a salient example of the difficulties associated with planning for future generations and events that seem so remote as to command no immediate attention. The implication is that multiple organizations (including government, local government, scientists, engineers, planners, non-governmental organizations and local communities) will need to communicate and cooperate for the collective good if courageous decisions are to be reached through the process of deliberative democracy.