



From Jamie Cook - CEO Angling Trust
To: Jenni Balmer - Environment Agency Head of Fisheries

7.11.25

Dear Jenni

Re- Saline Incursions in the Norfolk Broads.

I'm sure you are aware of the recent fish kills caused by high saltwater ingress into the Broads system. I know EA Fisheries staff attempted some fish rescues but it is clear from the pictures we've seen that many thousands of fish will have perished. The Agency simply doesn't have the resources to save more than a fraction of threatened fish without additional help.

Likewise the occasionally mooted Great Yarmouth Barrier is unlikely to ever qualify for government funding as the attached extract from the report by Duncan Holmes of the Broads Angling Services Group (BASG) makes clear. However, there are other options that shouldn't be so easily dismissed.

What could be done?

Having trawled through reports and correspondence it is clear that no serious attempts have been made to tackle or mitigate the damage done to fish stocks by these events. Indeed some human interventions have made matters worse such as the creation of freshwater wetlands in the lower Bure catchment thereby depriving the system of much needed storage during flood events.

I've seen reports of the workshops looking at experiences from Holland and possibility of establishing a Broads Guardian scheme involving volunteers in supporting EA staff at fish rescues.

Following the September -2022 saline event, where the EA didn't react and left things to nature, I'm told that the BASG met with EA area director Simon Hawkins and agreed an action plan to scope an additional volunteer response team to aid the rescue of fish on such events, modelled on the process used by a Dutch volunteer group. Sadly, this didn't generate the support needed to create a business plan to move forward and like so many good ideas this one appears to have run into the sand. However, I hear that the Broads Guardian initiative has recently been resurrected by the Broads Society so perhaps all is not lost.

I understand that your former colleague Steve Lane looked at additional options from Dutch experts back in 2015 who suggested in the modelling of air curtains and the use of flood plains and salt marshes as buffers. Again this wasn't followed up within the EA

After the 2022 incursion BASG revisited this and presented the case on the use of flood plain. It seems to us that this remains the single most sensible options especially given its effectiveness in the southern Broads system where waterbodies like Breydon Water are able to store and hold back much of the saline incursion from travelling up river and causing fatalities.

As I understand it this concept couldn't gain any traction as the RSPB and other environmental groups want things left along and cited the habitat regulations on newly created SPA sites to maintain the status quo. I find this quite extraordinary as the same NGOs are usually keen to

promote the use of natural processes to hold back water, except it seems when it comes to the River Bure system. I'm sure of the saline incursions were killing birds at the same rate as they are killing fish then the RSPB might take a radically different position.

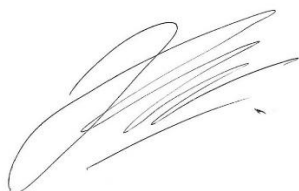
Next Steps?

I do not feel that the Angling Trust can sit back and ignore the damage that is being done to fish stocks and the angling economy of the Broads estimated to be worth £100m pa and supporting 1500 full time jobs. It would be helpful for me to gain a better understanding of what, if anything the Agency is planning to do to address or mitigate this situation. I'm aware just how problematic it is but that no reason to give up.

I'd be grateful for an opportunity for myself and my staff to meet with you and your staff to discuss this matter in more detail.

I look forward to hearing from you

All the best



Jamie Cook
CEO

Notes:

Extract from 'Here Comes the Sea' - a paper from Duncan Holmes of the BASG

Preparing for a Future with Rising Waters

With North Sea levels rising and a warming climate leading to more intense rainfall, it's clear that flooding in the Broads will become more frequent.

"What About a Barrier at Great Yarmouth?"

You might be wondering if a barrier at Great Yarmouth could be the answer. This idea is far from new—it's been debated for over a century. George Christopher Davies raised the possibility in his time, and Tom Cable echoed it in his 1991 book *Broadland Tom*, where he urged, "As a matter of urgency, a tide barrier at the entrance to Yarmouth should be installed," as a key measure to protect the Broads. The success of barriers on other east-facing rivers, such as the Ouse, Colne, Thames, and Orwell, has only strengthened recent calls for a similar solution at Great Yarmouth. But could such a barrier effectively safeguard the Broads?

The feasibility of a barrier depends on two critical factors: cost and whether it meets stringent cost-benefit criteria. While exact costs for a Great Yarmouth barrier are somewhat outdated, recent infrastructure projects offer insights:

Great Yarmouth's Recent Upgrades: £17 million per mile to protect 2,000 homes or 5,000 people, with an effective lifespan of just 30 years.

Ipswich Barrier: £70 million to protect 1,600 homes or 4,000 people.

A Proposed Yarmouth Barrier: At the new Herring Bridge location, this barrier would need to span 55m—40% larger than Lowestoft's. The estimated cost exceeds £200 million to protect 2800 homes or 6,300 people.

On a cost-per-home basis, a barrier at Yarmouth would exceed £70,000 per home, more than double the cost of other East Coast solutions. Additionally, barriers like those at Lowestoft and Ipswich benefit from topographies that allow effectiveness for over a century. In contrast, the Broads face unique challenges.

Within 30-40 years, even conservative estimates of sea level rise suggest that significant new sea walls—approximately 20 miles—would be required to protect the Broads. These sea walls, costing between £100 million and £200 million per mile, would push total expenditures to £2-4 billion. And the challenges wouldn't end there.

With a barrier in place, managing seaward water flow becomes critical. The 2023 floods already revealed insufficient river storage capacity, meaning new washlands would need to be created, or costly pumping systems would be required to move water over the barrier and into the sea. Both options involve significant construction and operational costs.

Given the current economic evaluations, the Broads do not qualify for this level of investment. This stark reality highlights the urgent need for alternative strategies to protect this unique and vulnerable landscape amid rising sea levels and environmental challenges.

In the short term, we must focus on ways to limit the impact on vulnerable areas along river channels and low-lying land. Medium-term solutions must include creating systems to store excess water when the sea prevents natural drainage, potentially reserving this water for use during the drier summer months. In the long term, we face a crucial decision: allow the North Sea to reclaim its estuary or protect the Broads with walls, barriers, and pumps to preserve this unique landscape. One thing is certain—we can't afford to do nothing.

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