



Broads Angling Services Group

BASG response to consultation EPRRB3557SW and papers from Natural England Feb 2021

In Summary

From the outset the HGB Project was formed as a partnership across the Broads community. Anglers provided a key component to over 5 years of monitoring and assessment. However, as soon as it became clear the impact of isolating the Broad would be significant the project team took a much more insular approach and effectively stopped any partnership approach.

Attempts to publicly access the fishery science viewpoints that were opposed to the project were clearly constrained and judged as illegal in the previous permit application. But it goes much further, poor treatment of fisheries staff has led to resignations over the matter. The PhD jointly funded by the HGB project and Rod Licence money has scientifically proved that HGB/HB form a significant component in the life cycle of bream in the Northern Broads and that the EA fisheries paper, previously hidden from the public and disclaimed by the project team as not peer reviewed has been found 100% accurate. These views and corresponding document are still not disclosed within the present or previous consultation.

Natural England wish to change the definition of the agreed and accepted Environment Statement vol 1 in that any fisheries objection should be accepted. As this document is indeed linked to the agreed planning conditions, this cannot be just changed at the applicants will, but must follow due planning process and consultation.

Natural England in Sept 2020 decided to install two additional barriers without notice. Furthermore, after lengthy correspondence they denied these being fish barriers for weeks until challenged when they subsequently admitted all along they were indeed barriers to stop fish passage. Yet again, this demonstrates the complete disrespect for lawful permitting and policy. We attempted to re-open dialogue in Nov-2020, but this was turned down by the NE project officer.

There are some very clear recommendations from the IFM, who clearly Natural England now feel are the experts, with NE seeking a review of their papers prior to this consultation. The resultant IFM recommendations could potentially bring about the formal classification of the Broads in terms of a UK TAG fishery classification, currently unassigned for the Broads water bodies. This would once and for all define its fishery classification and give its natural fish some level of protection from man's interference. But once again expert fisheries science advice both ignored and not made public.

BASG has challenged the lack of forward planning on waste water treatment in supporting the growth planned around Norwich as defined within the GNDP, today the overall River Bure Phosphate load remains no different than 30 years ago, despite Juridical Review asking for action. So eutrophication pressures will continue, without this being addressed.

Finally, the project now seems to be driven completely by its funding objectives, as evidenced within the papers. The objections raised, and clearly defined within its environment statement, should have been part of any formal project risk assessment and lodged with its funders. That is standard grant management practice.

Comments on the Current FRAP application and papers

BASG Specific comments on Red

[Application Submission letter 26/01/2021](#)

3) Please note that the application form Part B10, at section 6, requests 'If you have details on previous public consultation on environmental issues, include this as a separate document in the application'. I trust it is sufficient to state that in response to this that the Environment Agency carried out a full public consultation between Monday, 20th January to 17th February 2020 on the EA's citizen space webpage <https://consult.environment-agency.gov.uk/east-anglia-c-e/hoveton-great-broad-temporary-fish-barriers/>

Is this sufficient given the previous permit was quashed legally in that this previous consultation failed to include any of the Environment Agency's own positioning documents on the impact of the barriers? Again, these documents were only made available to BASG/AT after Fish Legal request for an FOI. Clearly these should form part of the public consultation within the Environment Permit process.

We note that the 14 objectional responses from the Environment Agency Fisheries, Biodiversity and Geomorphology team are now included in the previous permit application listing, but not specifically mentioned in this new application. It is therefore very easy for the public to be misled and not see the corresponding views and science without searching through the data.

However, the key fisheries document linked to the previous quashed claim, is still missing from both the previous register and this current register of documents. Clearly it is not in the public interest to exclude such evidence, as upheld by the court. The document in question is:

Northern Broads Bream Spawning Assessment 2019 Interim Summary V1.4

We should also point out in the strongest terms the attitude from Natural England against EA staff who undertook their statutory fishery duties in challenging the evidence with clear fishery science. This attitude, together with the actions and conduct of the Environment Agency Management led to the resignation of senior fisheries staff. This puts the whole ambition and leadership of the project into question, the lengths they will go to protect their position and project outcomes.

Gravel Dyke & Hoveton Marshes Documents

These, on request from the Environment Agency, cannot be considered as part of this application. What is being done with this activity, clearly illegally installed and formally under enforcement investigation? Again, it shows the contempt of the applicant against following due process.

7) Very recently, the PhD research carried out by a student from Bournemouth University has become available, following the grant of the PhD. Natural England has incorporated results and conclusions of this work in the documents accompanying this application (with all updated documents identified below) and if you propose to include this work in your forthcoming consultation exercise we can have no objection, but would suggest that you contact the University beforehand.

As above none of the PhD or associated response from EA fisheries based on this PhD data have been made public and are not included in the consultation.

Content 15)

Environmental Statement Vol 1[1] 1 Landscape Partnership on behalf of NE updated

1 Natural England wishes to clarify paragraph 8.5.24 of the Environmental Statement of July 2014. The third sentence of this paragraph ought to read as follows: "If these impacts are assessed by the Environment Agency as being significant, biomanipulation will not proceed."

In the current submitted papers under item 15 [1] Natural England wishes to clarify paragraph 8.5.24 of the Environmental Statement of July 2014. The third sentence of this paragraph ought to read as follows: "If these impacts are assessed by the Environment Agency as being significant, biomanipulation will not proceed."

How can this be a point of clarity, it is clearly an attempt to work around the objection of some of the leading fishery scientists' findings and objections to the proposal.

On the 7th Jan 2021, BA Head of Planning confirmed that the planning conditions against BA/2014/0248 remained against the submitted Environment Statement Vol 1. Para 8.5.24 "If these impacts are assessed by Environment Agency fisheries specialists as being significant, biomanipulation will not proceed" You cannot have the application changing formal submitted planning documents, without following due process. This is a key issue we believed gave us some form of legal protection from the start.

13) Natural England confirms that an extension to the PhD research will be funded for a further three years, at a cost in excess of £170,000.00. The data it provides will help inform future biomanipulation projects and EA's fishery management. We are committed to this and will commission the work once the barriers are in place and fish removal has commenced. This guarantees funded research to 2024

The whole concept of any form of advisory group with seemingly a confirmed fund of over £170k, seems like box ticking when viewed against the TOR of such advisory group and its findings. NE have made it very clear that even with evidence of significant impact to cyprinid fish and ecological damage this would cause the objectives of the project still stand and the barriers would be legally defended.

11) Your letter of 15th January suggests that we ask the Hoveton Fisheries Monitoring Group (HMG) to commission spring spawning observational work, perhaps making use of the volunteer angling community in this work. We agree that this would be a good use of the HMG, in their role to advise the Steering Group on best practice, for them to debate this and, if felt appropriate, use their allocated ring-fenced budget to facilitate such work. We will also commit to keeping a look out for future funding opportunities to help support the HMG to commission further works as necessary.

20) You have referred to a group called the 'Hoveton Monitoring Advisory Group' (HMAG, or HMG), which is the same group that we have called the 'Fisheries Advisory Group'. For consistency and in order to stress that the terms of reference for this group are directed towards fisheries interests, we suggest that it would be helpful henceforth to call this group the 'Hoveton Fisheries Advisory Group' (HFAG). In order to give it status under the LIFE agreement and to bring this group within the scope of funding from the agreement, Natural England will, during the course of the project, treat the HFAG as an advisory sub-committee of the Project Steering Group, which is itself a requirement of the LIFE agreement. After the project ends the group can then become an advisory sub-committee of the After LIFE Steering Group, itself a further requirement of the LIFE agreement.

In terms of BASG association with the Advisory Group, we wrote to Natural England on 6th Oct 20 after the legal case concluded and the response was that the group was on hold with the EA, and that given we had taken legal action against NE on this matter, they couldn't comment, but would respond in terms of its TOR. They failed to respond and we never heard anymore.

We now find that the group has indeed met in January and made more recommendations, without any reference to Broads fisheries representatives. This again shows contempt for fish and fisheries interests.

23) Conclusion

Please could you note that there are areas in which we consider that the information that we have

supplied and the commitments that we are making are in excess of what is reasonably necessary, having regard to the nature of the installations for which permission is requested, the purposes of the overall project, the science and the law. However, Natural England is able to take this position because of the very considerable environmental improvements that the Hoveton Great Broad Restoration Project will bring if it comes to completion. Natural England has no doubt that without this project, which cannot proceed without the permission that we hereby apply for, the currently unfavourable status of Hoveton Great Broad and Hudson's Bay, for WFD, Habitats Directive and WCA 1981 purposes cannot be reversed.

Natural England has directly approached the Institute Fishery Management (IFM) for their views on the current proposals and the IFM response is very clear. That isolation and removal of fish alone will NOT restore HGB to favourable conditions for macrophytes. Again, this information is NOT in the public domain.

The application again doesn't include any informed assessment from the EA on the impact of the barriers, one of the key legal points raised against the previous application.

[Application Submission letter 04/02/2021](#)

This version removes the column showing the update status of the associated status of the 27 associated documents from the previous application, so it makes it almost impossible to see the changes.

[Application letter 27/01/2021](#)

Two structures at Gravel Dyke and Hudson's Marsh excluded from permit.

[Part B10 - application form 27/01/2021](#)

3d Please tell us when you plan to start and complete your activities

Start Date 02/08/21

End Date 28/02/22

Plans are to implement the barriers from Aug-21

[Alternatives to Full Lake Biomanipulation 04.02.2021](#)

Project objectives

To frame our response, we wish to restate the project's objectives, as agreed by Natural England and the Environment Agency, an associated beneficiary, on 10th October 2014 which were: 1. Improve the ecological condition of the Naturally Eutrophic lakes with Magnopotamion or Hydrocharition feature (H3150) within Hoveton Great Broad and Hudson's Bay, moving them into 'Unfavourable Recovering' condition by 2020 (thus contributing to Biodiversity 2020 targets). This will involve: • Sediment removal from both water-bodies • Biomanipulation of both lakes to achieve clear-water conditions, leading to an aquatic macrophyte dominated state.

Again Natural England take a very sided science approach. Seemingly, neither NE or the Environment Agency want to publish other recognised scientific recommendations associated with the project. The Environment Agency has a duty to share all data appropriate to the application. This formed the basis of the successful legal challenge to the previous approved permit and subsequent quashing by order of the court.

Hoveton Project creating a sustainable future for the Bure system updated Feb 2021

This is an updated document from the previous version which was only made available after the FRAP closed and by FOI.

Again, it takes a very single viewed approach of the science and that of bio-manipulation. The document was sent to the IFM for review in Feb-21 and the resultant reply is copied below. Yet again, it hasn't been shared with any Broads Fisheries representatives until the consultation 10th March 2021. We are pleased that the IFM shared their response as below.

“The additional reports supplied by Natural England do not provide any new or significant evidence to support the case that biomanipulation of roach and bream stocks by introduction of a barrier to fish migration will result in clear water conditions and consequent regrowth of macrophytes.

As was concluded by Axford and Knights (2019), it is not clear that exclusion of spawning bream from entering HGB will be sufficient to reduce phytoplankton densities, increase water clarity and ensure macrophyte recovery.”

It was recommended in this report that:

- “1. The age and size structures and diets of relevant fish species in the communities of HGB and the River Bure should be monitored and related to the need, if any, to remove fish of particular species and sizes in order to achieve project objectives.
2. The roles of fish and other organisms in phosphate recycling and control of zooplankton that in turn control phytoplankton, water clarity and macrophyte recovery should be regularly monitored and modelled against project objectives.
3. End points for fish removal and fish exclusion operations should be pre-determined for various scenarios.
4. A preliminary study should be carried out (possibly in Hudson's Bay alone) to assess the efficacy of excluding bream spawners, effects on recruitment, potential impacts on catchment stocks and to inform future approaches.

No evidence has been presented regarding any of these points, yet plans for the barrier have gone ahead regardless.

Any reductions in bream and roach populations in both HGB and the River Bure as a result of the block to fish movements must represent a deterioration in both the fishery and ecological statuses in the short term. The likelihood and timescale of any subsequent improvements in ecological status for fish in both HGB and the River Bure as a result of this measure remain almost entirely unknown.”

This alone should ensure a precautionary approach is taken and enforced by the Environment Agency.

Annex 1 - Fish assemblages in the broads

River flow for good ecological potential' UKTAG Dec 2013 defines an area like the Northern Broads as: FCS2 an appropriate classification model to use to assess fish populations and the impact of potential changes in fish populations against the expected community Eurytopic group 'a' (roach, pike, perch, bream)

Lowland floodplain eurytopic species are intrinsically associated with wetland areas and floodplain habitats and may require connectivity between the river channel and floodplain environment for breeding and feeding purposes. For example, pike spawn in February or March in well-vegetated flooded backwaters and

HGB cannot therefore be considered as a closed lake habitat, with or without a barrier.

[Hoveton Fisheries Advisory Group - HFAG January 2021](#)

As the project is 100% funded by EU LIFE and National Heritage Lottery Funds, with Natural England as the legally named beneficiary of their funding, NE is legally bound under the terms of the funding agreements to maintain overall control of the project and maintains the responsibility for meeting its primary objectives.

The terms of reference to any monitoring and advisory group currently are not acceptable.

It is very clear that the facts are that the EA have not completed any successful catchment wide fish survey since 2016 in the Northern Broads. It's management do not recognise it's of any importance, which just aids Natural England in their endeavours to reduced Bream numbers overall, without any form of management or assessment and contrasting starkly against their statutory fishery management duties.

NE state in section 5 & 6 that once deployed the barriers will not be removed and will become subject to the constraints empowered by the Habitat's Directive.

So you have to ask what is the point of any extensive monitoring and advisory group, if the findings are completely overruled by the overriding outcomes and commitments of the project, however, damaging to the wider Broads ecosystem?

[WFD Compliance Assessment January 2021](#)

Fish – not assessed

No tool is currently available to assess the WFD status of the fish communities in lakes, therefore the Environment Agency have not assessed the fish element for HGB. Given concerns about the impact of the proposed works on the fish community an assessment of the likely impact of the project on the WFD status of the fish has been completed by Natural England using the best available evidence and is included in appendix 1 of this assessment. Below provides a brief summary and those looking for further information should consult the appendix With regards to HGB the assessment concludes that the current fish status is poor. Monitoring data shows a fish community within HGB is dominated by roach in number and bream by biomass

Appendix 1

UK TAG states Eurytopic group 'a' (roach, pike, perch, bream) Lowland floodplain eurytopic species are intrinsically associated with wetland areas and floodplain habitats and may require connectivity between the river channel and floodplain environment for breeding and feeding purposes.

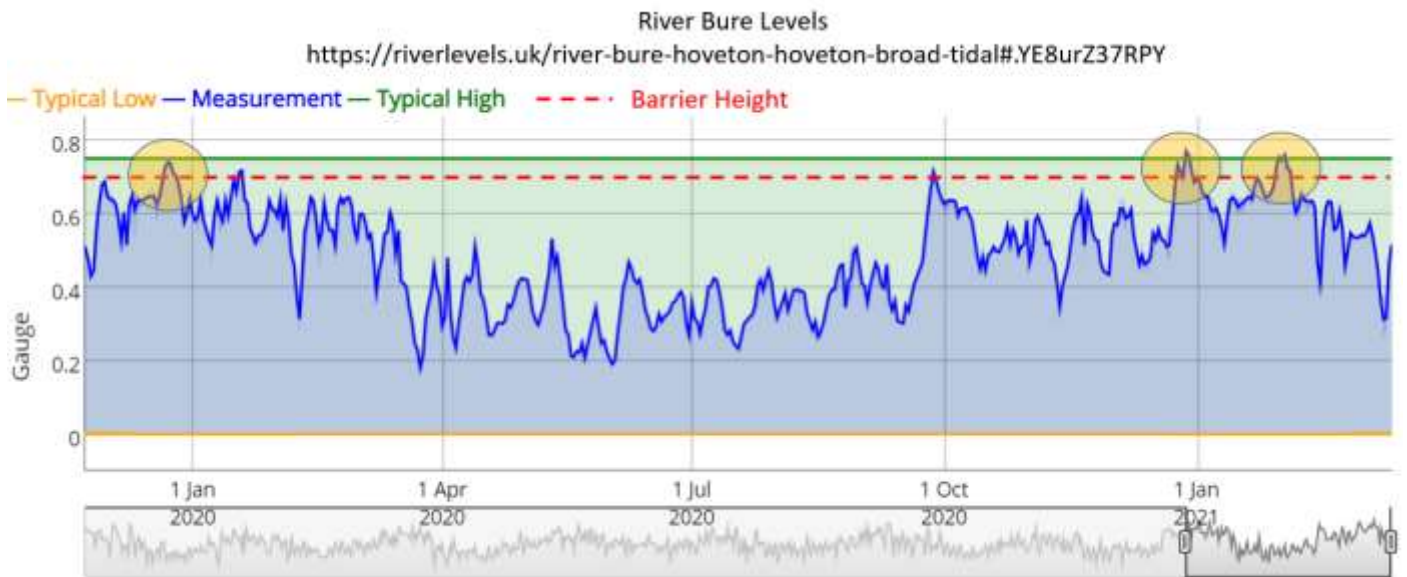
If this is not the Northern Broads, then what is it? It certainly is not a Stillwater with the mixed species that NE seem to want to create. Species such as Rudd, Tench have never been associated in significant numbers within the Northern Broads.

How can you assess something with a long history associated with eurytopic habitat and by installing a barrier, classify it as something it has never been?

We have explored the historic context of the Bure Catchment and found that in the 19th century tonnes of bream were removed commercially for food. This was at a time when recent core samples have shown the broad full of weeds. The 1877 Norfolk and Suffolk Fisheries Act gave protection to these fish from man's interference and is something we wish to see in the 21st century also.

Barrier Design and Hydrogeology Impact

The plans to install semi permanent barriers to fish to a height of 0.76 AOD by your own flood risk assessment shows that the river levels will breach this level at an ever increasing rate with the forecast changes to river levels. Indeed the last breaches were in the past two winters. This makes the barriers ineffective without a huge commitment to manually remove fish ingress after each flood event.



Phosphate Load and Management

It is very clear that the IFM state that removal of fish alone will not support the restoration of HGB, as the fish do not themselves cause eutrophication. Historically, the cause of phosphate levels for instance has been agriculture and sewage. The project has undertaken the removal of sediment through dredging, yet the project seeks to deal with the symptoms of the phosphate levels without examining or even making plans to deal with the future influx of phosphates and other nutrients into HGB and the Bure. Clearly there is still work to do here let alone the significant housing growth planned in the Bure catchment. Which again BASG has challenged on its impact.

Figures from the Broads Research Progress Report 1991 show an average Phosphate load of 8.64 kg/day between 1987-1991, whilst today's own figures from the EA state 9.79 kg/day across all sewage treatment works upstream of HGB. With plants like Belaugh and Rackheath at their capacity limits.

Geese and gulls continue to roost on HGB in vast numbers, which as previously evidenced on Hickling Broads was a cause of eutrophication and loss of stoneworts species in the mid-eighties.

This just demonstrates again that fish aren't the single issue.

Fish Stock Modelling and Assessment:

We have modelled the impact and shared this with the project team, which has been accepted.

This uses the following parameters and constraints to build a model on future fish stocks.

Profiled against evidence from Synopsis of biological data from the bream *Abramis brama* (Linnaeus, 1758)

Average Life cycle 14 years

Average 100% Spawning success from years 4 -13

Spawning Productivity Average number of eggs per kg a ratio of circa 1 : 90,000

Average number succeed to year 1 = a ratio of 1:2.5

Average Annual Mortality Rates as show below (But can be between 13% to 26% annually)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Annual Life Cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mortality Rate	80%	44%	16%	16%	16%	16%	16%	16%	16%	16%	16%	25%	50%	100%
Weights Kg	0.06	0.17	0.45	0.90	1.34	1.79	2.24	2.52	2.66	2.80	2.80	2.80	3.08	3.08
Spawning Success	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%

As example here In their 4th year

20 Fish 100% Spawning Success

Circa 90,000 eggs each, results in 50 Juveniles

Which 80% are lost in the 1st year = 10

Which 44% are lost in the 2nd year = 6

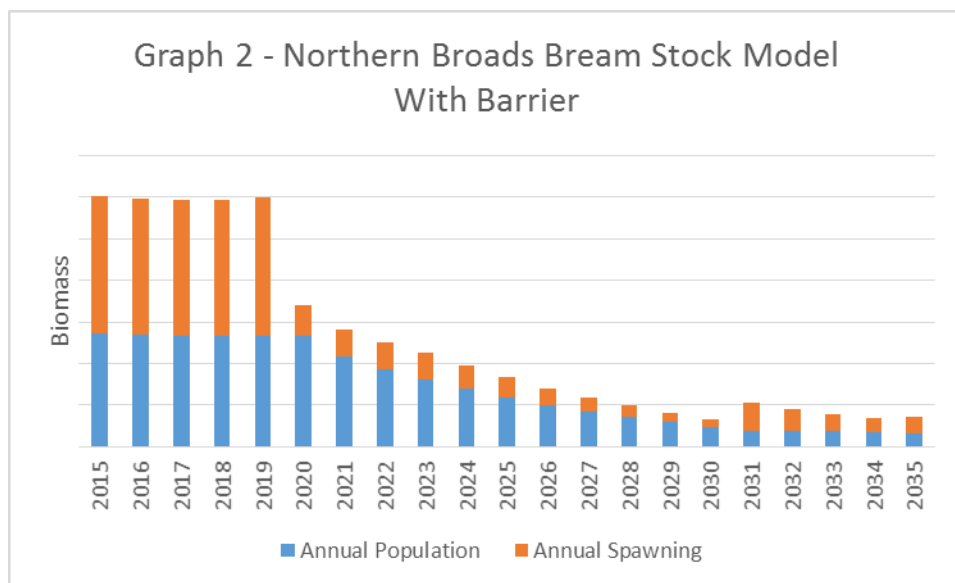
Which 16% are lost in the 3rd year = 5

In the 4th year the resultant 4 fish restarts the cycle

In the 5th year the resultant 3 fish restarts the cycle Etc etc

By the 13th year mortality has taken all 20 fish

The graph below takes the proposals from Natural England to isolate HGB for 10 years 2021-2031 and sets a spawning success achievement of 20% from outside HGB . Something the last 3 years has been recorded at around 1%.



We believe that only a 20% reduction in total Bream stock over the 10-15 years should be the maximum impact to the wider Northern Broads Catchment, as the forecast for increased salinity as shown in your own flood assessment is quite significant. Let alone the potential increased risk from prymnesium this brings with more brackish water.

How this can be achieved is what we want to discuss through mitigation or through partial manipulation measures, as implemented elsewhere across the broads.

We are not against the restoration, indeed it very welcome. It's just how it's implemented led through science and evidence.

Kelvin Allen Chairman BASG CIC 25th March 2021