Building a Better Future Plan - Representation Form

Part A - Personal Details

Please indicate whether you are completing this form yourself or if you are an agent completing this on behalf of a client

I am completing this form myself

Part A - Personal Details (Completing form on own behalf)

Please provide the following personal details.
Please note that these details are required for all representations and your information will be shared with the Planning Inspectorate.
The personal data you provide will be used to ensure that representations comply with government guidance and that they can be used as part of the Local Plan examination process. More information on how we use your personal information can be found as part of the 'Planning Policy' privacy notice is available here.

Title	Dr.
First Name	David
Last Name	Mason



Please provide the following details where applicable and/or relevant

No Response

Part A - Personal Details (Agent on client's behalf)

If an agent is appointed, please provide the following information:
Please note that these details are required for all representations and your information will be shared with the Planning Inspectorate.
The personal data you provide will be used to ensure that representations comply with government guidance and that they can be used as part of the Local Plan examination process. More information on how we use your personal information can be found as part of the 'Planning Policy' privacy notice is available here.

No Response

Please provide the following information about the client for whom you are completing this form on their behalf

No Response

Part B - Your representation(s)

Which part of the Building a Better Future Plan does your representation relate to?
Please provide as much detail as possible.
If you wish to make a change to the Policies Map, please comment on the corresponding p olicy, and explain what change you would wish to make. If you would be helpful if you could show this in visual form
A full list of policies and allocations can be found in the contents page(s) of the Publication Plan - you can access this document here.

Policy Number	-
Allocation Number	2
Paragraph Number	-
Page Number	95–97

Do you consider the Local Plan is ...
(Please select as appropriate)

	Yes	No
Legally compliant		X
Sound		X

Please give details of why you consider the Building a Better Plan is not legally compliant o r is unsound. Please be as precise as possible.
If you wish to support the legal compliance or soundness of the Local Plan, please also use this box to set out your comments.

This box is a summary only. My full representation is the document uploaded with this form; it forms part of this representation and should be provided to the Inspector. This representation concerns nutrient neutrality, and specifically the time taken for a reduction in nitrate loading at an off-site mitigation site to reach groundwater and so to take effect. Natural England's guidance requires mitigation to be in place in advance of occupation, and its Solent region advice of March 2020 indicates at sections 5.45 and 5.46 that offset sites where groundwater lies more than 5 m below ground level, with no surface watercourse in proximity, are unlikely to be appropriate for short-term development, and are appropriate for development phased over more than five years only if the mitigation land is delivered straight away. Published work measures travel times through the unsaturated zone in years, with depth to groundwater as the controlling parameter. This is not hypothetical for this allocation. The only nutrient mitigation scheme ever brought forward for this land, at Stansted Park, was reviewed for the Council by Ricardo Energy & Environment in 2023 and was not accepted: the review recorded a significant lack of site-specific baseline data, an unsaturated zone that could exceed twenty metres, too many uncertainties to provide sufficient confidence in the scheme, and potential non-compliance with Natural England's Solent guidance on the 5 m threshold. No mitigation land has been delivered, and the Habitats Regulations Assessment records at paragraph 7.51 that mitigation for the years beyond five — the period in which the whole of this allocation falls — has not yet been identified. The mitigation now required is substantially greater: Appendix 3 to the Habitats Regulations Assessment enters this allocation at 310 dwellings and 376.92 Kg/TN/Yr, against 263.23 Kg/TN/Yr for the 2021 application for 210 dwellings. The Plan identifies no mechanism by which the necessary hydrogeological modelling would be required or carried out. The Council's own Habitats Regulations Assessment records at paragraph 2.18 that a general protective policy is not sufficient. The appropriate assessment therefore does not establish, beyond reasonable scientific doubt, that the mitigation on which this allocation depends will be effective before occupation.

Please set out the modification(s) you consider necessary to make the Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified above.
You will need to say why each modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

That Allocation 2 be deleted from the Plan, with the consequential amendments to Policy 6, the housing trajectory and the Policies Map that follow from it. The Plan relies for this allocation on off-site nutrient mitigation which has not been identified, in a catchment for which the Council claims no sufficiency of mitigation beyond the short term, for a site none of which is programmed before 2032/33; and the only scheme ever brought forward for this land failed the Council's own consultant's review on precisely the ground this representation concerns. If the Inspector is nonetheless minded to retain the allocation, I ask in the alternative, and on this issue alone, that a criterion be added requiring site-specific hydrogeological modelling of nitrate travel time where the effectiveness of proposed mitigation in advance of occupation is not otherwise demonstrated.

If you wish to upload any documents to support your representation, please do so below. Please note that there is a maximum file size of 50MB and you can upload a maximum of 10 files to include with your form.

- File: Plan_26_vadose_dcm_v2.pdf - Download

Examination Hearing Session Invitation

If your representation / representations are seeking a modification to the plan, do you consider it necessary to participate in examination hearing session(s)?
Please note that while this will provide an initial indication of your wish to participate in examination hearing session(s), you may be asked at a later point to confirm your request to participate.
No details on the examination hearing session(s) have yet been determined and will be made available upon the submission of the Building a Better Future Plan to the Planning Inspectorate.

Yes, I wish to participate in examination hearing session(s)

Examination Hearing Session Invitation (2)

You indicated that you wish to participate in the examination hearing session(s). Please outline why you consider this to be necessary.
Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in examination hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.

The issue is technical and turns on site-specific hydrogeology. The Council and the promoter will be represented at the hearing sessions, and the mitigation scheme previously proposed for this land was the subject of expert dispute between the promoter's consultants and the Council's own reviewer. I am able to explain what modelling of nitrate travel time would involve, the site parameters it depends on, and the limits of the published evidence, and to answer the Inspector's questions on those matters directly. Written representations cannot be tested in the same way.

Future Notification

Do you wish to be notified of any of the following milestones in the Building a Better Future Plan process?
These milestones include:

The Local Plan has been submitted for examination
The publication on the Inspector's Report
The adoption of the Local Plan

If you indicate that you wish to be notified, the email address you provided in Part A of the f orm will be used by the Council to notify you of these milestones.

Yes, I wish to be notified

Comment: ***Nutrient neutrality – nitrate travel time to groundwater***

A mitigation scheme is designed to provide off-site mitigation for developments that would negatively impact Chichester Harbour through increased nutrient levels. It involves taking arable land out of agricultural use to reduce nutrient runoff.

Natural England (NE) released updated guidance for nutrient neutrality in 2022 [1]. The guidance states that a planning application's HRA should detail the proposed timing of its building works to ensure that appropriate mitigation will be in place in advance of any potential effects from the development i.e. in advance of dwelling occupation. This is to ensure that planners take nitrate travel time to groundwater into account.

Ref. [2], based partly on a study on the South Downs, says that "One known problem with catchment level solutions for nitrate is the lead time for seeing nitrate reductions in raw water due to the time of travel through groundwater" … "Recovery times for groundwater can be long, potentially up to 40 years, so over the lifetime of a Local Plan some reductions in nitrates would be expected but they would be relatively small (circa 10%)".

Ref. [3] measured nitrate concentration dynamics in the unsaturated zone beneath a fertilized crop field as a function of time and depth. The study had an 18.5 m depth to groundwater. The authors found that it took 6 years for a pulse of nitrate to be tracked from the surface, through the whole of the unsaturated zone, to the water table. Good agreement was found between observed nitrate concentrations and those simulated using a nitrate transport model. The authors describe lag times of years to decades between what happens in the root zone and its eventual effect on groundwater quality. Ref. [4] says depth to groundwater is the most significant parameter affecting nitrate concentration in groundwater, with soil type being a secondary parameter. The study of ref. [3] was on sandy soil. On loam the lag time would be longer than 6 years, and on chalk even longer.

Reflecting the findings of refs. [2] and [3], sections 5.45 and 5.46 of Natural England's Advice on Achieving Nutrient Neutrality for New Development in the Solent Region [5] indicate that depth to groundwater should be considered when designing a mitigation scheme, and that offset sites where the groundwater level is more than 5m below the ground level and where there is no surface water course in proximity may be inappropriate for short-term developments.

When an actual mitigation site is chosen in a planning application for Allocation 2, and that site does not meet the NE guidance, the hydrogeological systems at the site should be modelled to provide accurate estimates of nitrate travel times. The type of modelling required is described in ref. [3], and depends on site-specific parameters such as depth to groundwater, nitrate concentration, pore-water velocity and nitrate retardation. Where possible the modelling should be validated by monitoring.

The importance of carrying out this modelling lies in the fact that the only nutrient mitigation scheme ever brought forward for Allocation 2 was reviewed by the Council's own consultant and was not accepted. In December 2022 Havant Borough Council commissioned Ricardo Energy & Environment to review the material supporting application APP/21/00893, a proposal for 210 dwellings on this land [6]. On the mitigation scheme, at Stansted Park, Ricardo did not fully agree with the hydrogeological conceptual model and recorded a significant lack of site-specific baseline data on stratigraphy, groundwater regime and water

levels. It found that the unsaturated zone could exceed twenty metres, that leaching of residual nitrate could take years, and that the scheme was therefore unlikely to demonstrate a net change in nutrient contribution within the one year the appraisal assumed. Its conclusion was that there were "too many uncertainties to provide sufficient confidence in the mitigation scheme". Because the expected depth to groundwater exceeded five metres, it identified a potential non-compliance with Natural England's Solent guidance.

In the present Plan proposal, the scale of the mitigation required has increased. The 2021 application was for 210 dwellings and required 263.23 Kg/TN/Yr of mitigation. The allocation now provides for around 325 dwellings. Appendix 3 to the Council's Habitats Regulations Assessment enters this allocation at 310 dwellings and 376.92 Kg/TN/Yr; scaled to 325 dwellings the equivalent figure would be about 395 Kg/TN/Yr. On either basis the mitigation required is substantially greater than in 2021. Given the increased size of the mitigation site required, it may be difficult to find a site that complies everywhere with the NE guidance. I do not say that a suitable mitigation site could never be found. I say that this land has been allocated without any means of establishing whether one can be, and that the only scheme ever brought forward for it was rejected on precisely that ground.

HBC's proposed Plan fails to identify the need for a mechanism whereby such modelling could be performed if deemed necessary. Possibly it could be performed as part of NE's Environmental Delivery Plan, or perhaps HBC could employ an external consultant as before. HBC was the Competent Authority and NE the Statutory Adviser for the previous application, and this division of responsibility will continue when EDPs are used. We submit that failure to identify the need for such a mechanism is a shortfall in the Plan.

Two qualifications in section 5.46 of Natural England's advice in [5] (which is considered further in [7]) should be discussed. The advice is addressed to sites in the upper fluvial catchment on chalk bedrock with no watercourse in close proximity; and it adds that such land may nonetheless be appropriate for development phased over more than five years, provided the mitigation land is delivered straight away. Allocation 2 is phased over seven years, so the second qualification is engaged. It does not answer the point. The proviso depends on the mitigation land being delivered straight away, whereas the Plan's own Habitats Regulations Assessment records at paragraph 7.51 that mitigation for the years beyond five — the period in which the whole of this allocation falls — has not yet been identified. And the only scheme ever proposed for this land was assessed by the Council's own consultant as having an unsaturated zone that could exceed twenty metres, with leaching of residual nitrate taking years. Whether a travel time of that order can be accommodated within a seven-year phasing is precisely the question that modelling would answer, and precisely the question the Plan provides no means of asking.

It should be said that the 2020 Solent advice is not among the documents to which the Council's own Position Statement and Mitigation Plan for Nutrient Neutral Development, August 2025 [8], directs applicants; that document sends them to Natural England's generic methodology and calculator. Natural England themselves, however, still described the Solent Nutrient Neutrality Methodology of June 2020 as their existing spatial principles for nutrient mitigation in Chichester Harbour when advising Chichester District Council on a mitigation scheme in February 2025, so the advice cannot be treated as spent. If the Council's position is that sections 5.45 and 5.46 no longer form part of its framework, the point is not weakened, because the Position Statement imposes a requirement of its own. Paragraph 3.9 requires that in all cases a clear scientific link be established between the proposed development and the

mitigation scheme, and that any third-party scheme provide supporting evidence that the mitigation principles in Natural England's guidance have been met. Paragraph 3.10 expects the mitigation provider to demonstrate the scientific link between the mitigation site and the catchment in which the development is located. Where the time taken for a reduction at the mitigation site to take effect at the habitats site is unknown, that link cannot be established on the evidence, and it is the Council's own document that sets the test. Nor is what I ask for novel. The Council has twice commissioned exactly this kind of review. Paragraph 3.27 of the Position Statement records that Ricardo's review of the Warblington Farm scheme confirmed the scientific link between the effect of development and the mitigation, as required by the Habitats Regulations. Ricardo's review of the Stansted Park scheme, discussed above, reached the opposite conclusion. The mechanism therefore exists in practice at application stage. What is missing is anything in the Plan that requires it for this allocation, or that identifies who would carry it out.

One further passage bears on timing. At paragraph 3.13 the Position Statement records that for development draining to the Chichester catchment — the catchment into which Emsworth drains via Thornham, and which the Habitats Regulations Assessment calls Western Streams — there are currently enough nitrogen credits in the mitigation market to meet immediate need, and that there are likely to be enough to meet short-term need. For the East Hampshire catchment the same paragraph claims sufficiency in the short and medium term, and considers long-term sufficiency likely. No equivalent claim is made for the Chichester catchment, and the whole of this allocation is programmed for delivery after 2032/33.

Two further points bear on the failure to identify the need for a modelling mechanism. First, the Council's own Habitats Regulations Assessment records at paragraph 2.18 that it is not sufficient for an HRA to conclude no significant effects merely because the plan contains a policy protecting European sites, and that any policy introduced to remove uncertainty must be targeted specifically at the issue causing the uncertainty. That is the answer to any suggestion that a general commitment to nutrient neutrality is enough in itself. Second, the timing is particular to this allocation. The Plan's trajectory places none of these dwellings before 2032/33; the Habitats Regulations Assessment records at paragraph 7.49 that credit supply in the Western Streams catchment is not expected to run out until 2032/33, and at paragraph 7.51 that nutrient mitigation has not yet been identified for the years beyond five, with the timing and suitability of Natural England's Environmental Delivery Plans currently unknown. The mitigation on which this allocation depends therefore falls in the period for which none has been identified, and its effectiveness will turn on travel times that no one has yet estimated.

A final point is addressed to plan-making rather than to applications. In the advice by which Natural England put this regime in place [9], competent authorities are recommended to consider carefully whether it is possible to allocate development in catchments, or parts of catchments, where applying nutrient neutrality is likely to face significant constraints. That is advice about where to allocate, and it is the question now before the Inspector.

References

1. Nutrient Neutrality Generic Methodology. Natural England. February 2022.
2. Chichester District Council Water Quality Assessment. Amec Foster Wheeler. 2018.

3. Turkeltaub et al. 2016. Real-time monitoring of nitrate transport in the deep vadose zone under a crop field - implications for groundwater protection. Hydrol. Earth Syst. Sci., 20, 3099-3108.
4. Lockhart et al 2013. Identifying sources of groundwater nitrate contamination. J. Contaminant Hydrology, 151, 140-154.
5. Advice on Achieving Nutrient Neutrality for New Development in the Solent Region. Natural England, Version 4, March 2020 (sections 5.45–5.46).
http://publications.naturalengland.org.uk/publication/4792131352002560
6. Ricardo Energy and Environment. Independent review of nutrient mitigation proposed at Stansted Park. February 2023.
7. Nutrient Neutrality Principles. Natural England Technical Information Note TIN186, first published August 2022 (Edition 2, July 2023).
8. Position Statement and Mitigation Plan for Nutrient Neutral Development. Havant Borough Council, August 2025.
9. Natural England Water Quality and Nutrient Neutrality Advice (16 March 2022) (NE785). http://publications.naturalengland.org.uk/publication/4792131352002560