ADVICE TO NORTH NORFOLK DISTRICT COUNCIL

Addendum to inform the Habitats Regulations Assessment of North Norfolk District Council – Crisp Maltings Ltd.

STATUS: CONSULTATION FINAL VERSION

BY DTA ECOLOGY



Rectory Farm Finchampstead Wokingham Berkshire RG40 4JY

Tel 0118 973 4700 caroline@dt-a.co.uk → Website: www.dt-a.co.uk

Doc. Ref. 1142 DTAE NNDC HRA Addendum Date: 25 October 2022

Document title: Addendum to inform the Habitats Regulations Assessment of North Norfolk District Council – Crisp Maltings Ltd.

Document short	1142 Advice to NNDC HRA Addendum
title:	
Date:	
	25 October 2022
Status:	Final
Drafted by:	Christina Cork
Date:	25/10/2022
Authorised by:	Caroline Chapman
Date	25/10/2022

Contents

C	ontents		3
1	Intro	oduction	4
	1.1	Brief and scope of work	4
	1.2	Scope of the Assessment	4
	1.3	Documentation made available	4
	1.4	Limitations	5
2	Back	ground	6
	2.1	The Project	6
	2.2	The Site - River Wensum SAC	7
3	Lega	l and Policy Background1	2
	3.1	Context1	2
	3.2	Multi stage consents - outline planning permission	3
	3.3	Decisions of another authority	4
4	HRA	Assessment work to date	8
	4.1	Issues1	8
	4.2	Approach to addendum	8
5	Issue	es	9
		Issue 2: Pollution of surface water arising from the day to day operation of the project through accidental releases and/or from surface water drainage discharge leading to a ion in water quality	9
	5.2 into su	Issue 3: Increase in wastewater quantity requiring treatment and subsequent discharge rface water leading to a reduction in water quality2	2
	5.3 to ope	Issue 4: Increase in airborne particles or harmful chemical compounds (air pollution) due rational combustion activities leading to a reduction in air quality2	6
	5.4 change	Issue 5 Increase in demand for water leading to increased abstraction volumes resulting in es to the natural hydrological regime of the river Water quantity – hydrological impacts 30	
6	Fina	I summary of recommendations3	2

1 Introduction

1.1 Brief and scope of work

- 1.1.1 North Norfolk District Council (the Council) completed a HRA in November 2021 for two planning applications collectively referred to as Crisp Maltings (the Project) as follows:
 - Application ref: PF/20/0523 Construction of 15 no. grain silos and 1 no. 5,574 sqm (60,000sqft) warehouse with associated drainage, access and external lighting at Land North Of Fakenham Road Great Ryburgh Fakenham NR21 7AN.
 - Application ref: PO/20/0524 Hybrid application for creation of HGV access road to serve an expanded Crisp Maltings Group site (Full Planning permission) and construction of buildings and structures required to increase the maximum output tonnage of malt of the Maltings site in any one calendar year to 175,000 tonnes (currently 115,000 tonnes) (Outline application with all matters reserved except for access) at Land North Fakenham Road Great Ryburgh Fakenham NR21 7AS.
- 1.1.2 The Council were unable to conclude that there would be no adverse effect to the integrity of the River Wensum SAC. A number of issues were outlined, and the applicant asked for additional information in order for the Council to complete its appropriate assessment. The applicant has since submitted an updated Environmental Statement, and associated documentation, which are offered to address the concerns raised in the original HRA.
- 1.1.3 DTA Ecology has been commissioned to produce an addendum to the existing HRA on the basis of the new information provided, to allow the Council to update the existing HRA.

1.2 Scope of the Assessment

- 1.2.1 The method to this HRA addendum, has been approached by way of DTA Ecology referring to the original HRA¹, the conclusions of which are assumed to be correct and are not themselves subject to independent review. Our addendum logically follows to determine the extent to which the additional information submitted by the applicants has addressed the concerns which precluded the Council from being able to ascertain no adverse effect to site integrity. The applicant were not asked for any additional information on Issue 1, so this review starts from Issue 2 onwards.
- 1.2.2 In undertaking the addendum DTA Ecology have based the assessment on the framework within the Habitats Regulations Assessment Handbook published by DTA Publications².

1.3 Documentation made available

- 1.3.1 The following documents have been made available to DTA Ecology.
 - ES Addendum Vol 1 Main Report March 2022 16558948
 - ES Addendum Vol 3 Non Technical Summary March 2022 1658940
 - Appendix_1.1AA_Further_Information_request-1658938

¹ HABITATS REGULATIONS ASSESSMENT For proposed development subject of two planning applications, PF/20/0523 and PF/20/0524, at Crisp Maltings, land off Fakenham Road, Great Ryburgh, Norfolk November 2021

² www.dtapublications.co.uk

- Appendix 5.1 AA Applicant Existing Emergency Procedures 1658952
- Appendix 5.2 AA Applicant Maintenance Management System 1658952
- Appendix 10.1 AA FRA 1658956
- Appendix 10.2AA Surface water drainage Calculations 1658939
- 1.3.2 Additional information has been provided to DTA Ecology by way of;
 - A meeting with the applicants 5th September 2022 providing clarification of a number of matters, and
 - Nutrient Budget Calculator Summary for Crisp Maltings Expansion.

1.4 Limitations

- 1.4.1 DTA Ecology has specific expertise in respect of the interpretation and application of the Habitats Regulations. The advice is therefore provided on the basis of the following limitations:
 - Advice is restricted to matters of HRA compliance and the interpretation and application of the Habitats Regulations;
 - All technical information provided by the applicant is assumed to be correct DTA
 Ecology does not have the expertise to review the underpinning methodologies beyond
 drawing on any 'common sense' observations or relevant experience which may,
 incidentally, be held depending on the nature of the effects concerned. Technical
 appendices and annexes have not been subject to detailed review, but have informed
 conclusions; and
 - Advice is provided on the basis of the information subject to review. It is acknowledged
 that some comments and observations identified in this advice may be addressed by
 information which has not been subject to review and DTA Ecology reserves the right to
 amend this advice in light of further information, or further clarification, which is
 provided in response.

2 Background

- 2.1 The Project
- 2.1.1 It is important, for reasons of procedural correctness, to clearly define the 'project' for the purpose of the HRA. Recognising that this is a multi-stage project applying for outline planning permission, we describe here the project in summary with reference to the documents provided and updates from applicants.
- 2.1.2 The project consists of
 - Application 1: Construction of 15no grain silos and 1no. 5,574sqm (60,000sqft)
 warehouse with associated drainage, access and external lighting (Ref: PF/20/0523);
 - Application 2: Hybrid application for creation of HGV access road to serve an expanded Crisp Maltings Group site (full planning permission) and construction of buildings and structures required to increase the maximum output tonnage of malt of the Maltings site in any one calendar year to 175,000 tonnes (currently 115,000 tonnes) (Outline application with all matters reserved except for access) (Ref: PO/20/0524);
- 2.1.3 Following submission of the ES in March 2020, the LPA raised a number of issues in relation to the applications which resulted in a number of changes to the proposed development which included:

Application Ref: PF/20/0523

- Revised landscaping proposals to the rear of the proposed warehouse; and
- Updated highway mitigation package.

Application Ref: PO/20/0524

- Revised alignment of the new access road at the interface with Highfield Road, to avoid the requirement to divert the restricted byway;
- Widening of Fakenham Road within the vicinity of the HGV access to provide a consistent 6m wide road;
- Revisions to Networks 2 and 3 of the proposed Surface Water Drainage Strategy;
- Enhancement of passing bays between the B1146 / Fakenham Road junction and the proposed new access road; and
- Enhanced landscape screening along the route of the new access road, and to the western boundary of the proposed expansion area.
- 2.1.4 Furthermore in response to additional information request (made in February 2022) the applicants provided further detail (March 2022) relating to the proposed Surface Water Drainage Strategy incorporating revised calculations and the assessment of pollutant risk for proposed activities as part of the proposed development and the proposed water quality mitigation:
 - Justification as to why there will be no impacts to the River Wensum SAC as a result of oxides of nitrogen;
 - Further detail on the discharge of effluent and how the Proposed Development will
 continue to operate under the existing Pollution Prevention and Control Permit; and

 Measures proposed to reduce impacts on the River Wensum as a result of water abstraction and how the proposed development will continue to operate under the existing water abstraction permit.

Lastly on 5th October 2022 the applicant provided a nutrient budget calculator based on Natural England's updated advice on Nutrient Neutrality.

- 2.2 The Site River Wensum SAC
- 2.2.1 The qualifying features for which the River Wensum SAC has been designated are:
 - H3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation;
 - S1016. Vertigo moulinsiana; Desmoulin's whorl snail;
 - S1092. Austropotamobius pallipes; White-clawed (or Atlantic stream) crayfish;
 - S1096. Lampetra planeri; Brook lamprey; and
 - S1163. Cottus gobio; Bullhead.
- 2.2.2 The conservation objectives³ for the River Wensum SAC are to:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- > The structure and function (including typical species) of qualifying natural habitats
- > The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- > The populations of qualifying species, and,
- > The distribution of qualifying species within the site.
- 2.2.3 In accordance with regulation 63, any assessment under the Habitats Regulations needs to be made 'in view of the conservation objectives', which are therefore central to the assessment process.
- 2.2.4 The published conservation objectives for the River Wensum SAC are often referred to as 'high level' objectives. In practice, it is not always straightforward, in undertaking an assessment in view of these high level objectives, to fully understand how the effects associated with a given plan or project might undermine the objectives (or not). For this reason the published conservation objectives are explicit that:

'This document should be read in conjunction with the accompanying Supplementary Advice document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.'

³ http://publications.naturalengland.org.uk/publication/5908284745711616?category=6581547796791296

2.2.5 Natural England's Supplementary Advice on conserving and restoring site features <u>must be</u> read in conjunction with the conservation objectives. The introductory text explains:

'You should use the Conservation Objectives, this Supplementary Advice and any case-specific advice given by Natural England, when developing, proposing or assessing an activity, plan or project that may affect this site. Any proposals or operations which may affect the site or its qualifying features should be designed so they do not adversely affect any of the attributes listed in the objectives and supplementary advice.

This supplementary advice to the Conservation Objectives describes in more detail the range of ecological attributes on which the qualifying features will depend and which are most likely to contribute to a site's overall integrity. It sets out minimum targets for each qualifying feature to achieve in order to meet the site's objectives.'

- 2.2.6 Both the conservation objectives and the Supplementary Advice are therefore clear that, when considering the implications of any plan or project on a European site, it will be necessary to refer not only to the conservation objectives, but also to the more detailed information available in the Supplementary Advice. The Supplementary Advice is important as it provides attributes and targets, against each qualifying feature, which contribute towards the integrity of the site. In considering the implications of a plan or project for a European site these attributes and targets frequently provide site specific and quantitative information in light of which the implications of potential effects arising from any given proposal might be fully understood. The Supplementary Advice for the River Wensum SAC is available here.
- 2.2.7 It is also appropriate to recognise the condition of the site (as recorded in respect of the SSSI common standards monitoring) which can provide an important indication of any existing threats or concerns which might be of relevance to the HRA. It also provides the baseline against which projects are assessed. The SSSI unit closest to the current project location was assessed (in 2010) as being in an UNFAVOURABLE NO CHANGE condition. The comments against the unit are as follows:

Box 2.1 Extract from Common Standards Monitoring data for River Wensum SAC

Unit 48 has been assessed as UNFAVOURABLE NO CHANGE on the basis of the following

Extent: no loss of river habitat.

Hydrology, turbidity, siltation & phosphate targets are not being met for these to be regarded as favourable, but mechanisms are in place to address these issues.

Water quality is favourable: EA biolological GQA data is good (A), chemical is good (A/B). The River Wensum Restoration Strategy has concluded that the channel in Unit 48 varied from near natural channel form downstream of Fakenham Mill, and through the Pensthorpe Estate (potential to reconnect a meander loop at Great Ryburgh). However, upstream of Great Ryburgh Mill, the river is over-widened and over-deepened, and the impoundment affects upstream reaches for several kilometres. The vegetation on this sampling point had the following characteristics: Resectioned, glide dominated section through wildfowl park with rough grazing land on the left bank and gravel pits on the right. Channel substrate predominantly sand and silt deposited thickly over gravel pebble. Channel plants covering approximately 60% of channel and dominated by Potamogeton pectinatus, Myriophyllum spicatum and Sparganium emersum, with some Elodea canadensis, Callitriche stagnalis and Schoenoplectus lacustris. Some good fringing reed beds present, and water voles observed near these. Filamentous algae and diatomaceous scum extensive over substrate and plants in some areas. White-clawed crayfish was recorded under Great Ryburgh Bridge, at Pensthorpe, & immediately downstream of Fakenham Mill. Unfavourable riparian zone. No invasive species recorded. There are significant barriers to fish passage at Fakenham Mill and Great Ryburgh Mill. However, barriers are also present downstream at Bintree Mill, North Elmham Mill, Swanton Morley Mill and Elsing Mill, Lyng Mill, Lenwade Mill, Taverham Mill, Costessey Mill, Hellesdon Mill and, New Mills. These barriers may impairing characteristic migratory species from essential life-cycle movements on this reach of the river.

- 2.2.8 Beyond the site level reporting at SSSI unit level, UK Government is required to report on implementation of measures taken under the Regulations. Prior to leaving the EU this report identified any necessary management measures as well as an evaluation of the impact of such measures on the 'conservation status' of the Annex 1 habitats and Annex 2 species (the habitats and species for which Special Areas of Conservation are designated).
- 2.2.9 At a habitat level (rather than a site level) Favourable Conservation Status is defined by reference to four parameters: 'range'; 'area'; 'structure and function'; and 'future prospects'. The agreed method for the evaluation of conservation status assesses each of these parameters separately and then combines these assessments to give an overall assessment of 'conservation status'. A similar approach is adopted for species features, but the four parameters used are modified accordingly to 'range', 'population', 'habitat for the species' and 'future prospects'.
- 2.2.10 A summary of the information contained in the 4th UK Habitats Directive report (submitted in 2019) in relation to the qualifying habitats across the UK for which the River Wensum SAC is designated is set out below.

Qualifying Habitat Feature	Range	Area	Specific structures and functions	Future Prospects	Overall Assessment	Overall trend
H3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	Favourable	Unfavourable (inadequate)	Unfavourable (Bad)	Unfavourable (Inadequate)	Unfavourable (Bad)	Improving (+)

2.2.11 Measures required to tackle the unfavourable conservation status of Rivers include;

- Reduce diffuse pollution to surface or ground waters from agricultural activities (CA11);
- Reduce diffuse pollution to surface or ground waters from forestry activities (CB10);
- Reduce impact of hydropower operation and infrastructure (CC04);
- Management, control or eradication of established invasive alien species of Union concern (ClO2);
- Reduce impact of mixed source pollution (CJ01);
- Restore habitats impacted by multi-purpose hydrological changes (CJ03);
- Adopt climate change mitigation measures (CN01);
- Implement climate change adaptation measures (CN02).

Qualifying Species Feature	Range	Population	Habitat for the species	Future Prospects	Overall Assessment
S1016. Vertigo moulinsiana; Desmoulin`s whorl snail	Favourable	Favourable	Favourable	Favourable	Favourable
S1092. Austropotamobius pallipes; White-clawed (or Atlantic stream) crayfish	Unfavourable -Bad	Unfavourable -Bad	Favourable	Unfavourable -Bad	Unfavourable -Bad
S1096. Lampetra planeri; Brook lamprey	Favourable	Unknown	Unknown	Unknown	Unknown
S1163. Cottus gobio; Bullhead	Favourable	Favourable	Unknown	Favourable	Stable

2.2.12 It is important to note that the Article 17 report relates to a 'feature level assessment' in respect of the distribution of the feature across the UK. As such, whilst this information is of some relevance to the development of a *project specific* HRA, it is not an indication of the conservation status of each feature within the River Wensum SAC, at a site level. At a site level Natural England have published their Site Improvement Plan, with actions required to ensure long term sustainability of the SAC, and its ability to contribute to FCS.

3 Legal and Policy Background.

3.1 Context

- 3.1.1 For purposes of framing our Appropriate assessment addendum, it is important to set out some key elements that are relevant to the assessment of a) an outline planning application and b) a project which requires the consent, permission or other authorisation of more that one Competent Authority.
- 3.1.2 Firstly, it is helpful to reiterate some key principles which apply when undertaking an appropriate assessment. Principles C.13, C.15 and C 16 of section C.9 'An Appropriate assessment' of the HRA Handbook provide generally;

Principle 13

The appropriate assessment should be technically sound, based on up-to-date information, rigorous and robust and it must include a reasoned account of its conclusions. It must be complete, sufficiently precise and draw definitive conclusions which are capable of informing the 'integrity test'.

Principle 15

However, the assessment should be proportional to the scale and degree of risk of effects on the site and the relative complexity of the ecological judgements that need to be made.

Principle 16

... case law has established that an assessment cannot be regarded as 'appropriate' if it:

- a) is merely a summary or broad-brush assessment of the implications;
- b) is a selective examination not taking account of all material points;
- c) is incomplete;
- d) leaves important matters still to be assessed;
- e) does not contain a complete list of the interest features present in the site;
- f) contains findings that are preliminary in nature, lacking definitive conclusions;
- *q)* lacks sufficient precision;
- h) fails to provide conclusions capable of removing all reasonable scientific doubt as to the effects on the site where the competent authority is minded to proceed with the plan or project;
- i) lacks adequate information or reliable and updated data concerning the interest features.

- 3.2 Multi stage consents outline planning permission
- 3.2.1 It is important to approach the Appropriate Assessment of an outline planning permission carefully. In its Waddenzee ruling (C-127/02 paragraphs 52-54, 59) the Court of the European Union emphasized the importance of using the best scientific knowledge when carrying out the appropriate assessment in order to enable the competent authorities to conclude with certainty that there will be no adverse effects on the site's integrity. It is consistently held that an appropriate assessment should contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the site concerned. Outline planning applications, are by their very nature general, and leave specific details to be determined at a later time. The council needs to be cautious in approaching the appropriate assessment. Regulation 70 of the Regulations includes the following paragraphs which relates to outline planning applications:
 - '(2) Where the assessment provisions apply, the competent authority may, if it considers that any adverse effects of the plan or project on the integrity of a European site or a European offshore marine site would be avoided if the planning permission were subject to conditions or limitations, grant planning permission or, as the case may be, take action which results in planning permission being granted or deemed to be granted subject to those conditions or limitations;
 - '(3) Where the assessment provisions apply, <u>outline planning permission must not be</u> granted unless the competent authority is satisfied (whether by reason of the conditions and limitations to which the outline planning permission is to be made subject, or otherwise) that no development likely adversely to affect the integrity of a European site or a European offshore marine site could be carried out under the permission, whether before or after obtaining approval of any reserved matters;
 - '(4) In paragraph (3), "outline planning permission" and "reserved matters" have the same meanings as in section 92(16) of the TCPA 1990 (outline planning permission).'
- 3.2.2 Consequently, outline planning permission must not be granted unless the competent authority has met the requirements of the integrity test. The authority must be convinced that, in the face of details to be determined, the grant of outline planning permission is sufficiently constrained by conditions or a planning obligation that no matter what is (legitimately) applied for in applications for approval of reserved matters, the grant of outline planning permission cannot lead to any development that would have an adverse effect on the integrity of a European site.
- 3.2.3 It is likely that in order to meet this requirement where a proposed development, which is the subject of an outline planning application, could have a significant effect on a European site, the planning authority will need to impose very precise conditions on the permission and / or require, pursuant to Article 3 of the Town and Country Planning (General Development Procedure) Order 1995, that all or certain of the reserved matters be

- submitted for consideration as part of the outline planning application so that their effects can be subject to appropriate assessment.
- 3.2.4 It is important when dealing with outline planning applications to bear in mind the principles also relating to 'multi-stage consents', because the process of granting outline planning permission followed by the determination of applications for approval of reserved matters should be treated as a form of multi-stage consent. An application for approval of reserved matters might subsequently need to be refused in the event that the outline planning application did not properly and fully assess the effects of a proposed development.
- 3.2.5 This approach reflects the principles established in Smyth (Court of Appeal), another case of multi-stage consents was considered by the High Court, where it states in paragraph 87 of Devon Wildlife Trust (28th July 2015):
 - '87. The permission in this case is outline, and therefore is part of a multi-stage consent process. As at 23 September 2014, the Committee did have sufficient information to enable it to be satisfied that outline planning permission would not be granted under delegated powers unless and until the delegated officer was satisfied that the mitigation could be achieved in practice. As at 10 October 2014, Mr Davies (as the officer to whom the decision had been duly delegated) was so satisfied: he considered that he had sufficient information to enable him to be satisfied that the proposed mitigation could be achieved in practice (see paragraph 16 of his statement of 21 May 2015). Until all reserved matters applications were approved, the development could not begin on the ground; and there was thus no possibility of the SAC (or the objectives of the Habitats Directive) being compromised by the outline decision made. Exercising their planning judgment, both the Committee and Mr Davies were entitled to come to those conclusions and decisions. Neither of those decisions in any way jeopardised later decisions which could (and, in practice, would) ensure that the integrity of the SAC was maintained. Of course, now, a section 106 agreement has been entered into ensuring the appropriate mitigation measures are performed'
- 3.2.6 DTA Ecology would raise the implications for the Council in undertaking their Appropriate Assessment and subsequently making their decision on adverse effects on the integrity of the site, that any areas where a lack of detail might prevent a sufficient level of certainty (beyond reasonable scientific doubt), that the decision is made very carefully, with all restrictions in place that prevent adverse effects on site integrity.

3.3 Decisions of another authority

3.3.1 Crisp Maltings is operating under an existing PPC permit and water abstraction licence. The Competent authority for both, and having undertaken their own Appropriate assessment for these existing authorities, is the Environment Agency. The new PPC permit will be required to able the facility to operate on land adjacent to its existing footprint. The joint government guidance published on-line in February 2021, which the Council should be aware includes the following guidance on the adoption of another Competent Authority's assessment;

'Use the HRA of another competent authority'

'You can use an HRA previously carried out by another competent authority for the same proposal if:

- there's no new information or evidence that may lead to a different conclusion;
- the assessments already done are relevant, thorough and correct;
- the conclusions are rigorous and robust;
- there's no new case law that changes the way an HRA should be carried out or interpreted.

'If you decide to use a previous HRA's evidence and conclusions, you should still make sure your final decision will have no negative effect on the European site. The final decision is your responsibility.'

- 3.3.2 Furthermore, since the project will require an updated PPC the Environment Agency will also need to comply with their obligations under the Regulations. Regulation 67(1) sets out the requirements where a project requires the consent permission or other authorisation of more than one competent authority, such as is the case in the current circumstances;
 - 67.—(1) This regulation applies where a plan or project—
 - (a)is undertaken by more than one competent authority;
 - (b)requires the consent, permission or other authorisation of more than one competent authority; or
 - (c)is undertaken by one or more competent authorities and requires the consent, permission or other authorisation of one or more other competent authorities.
 - (2) Nothing in regulation 63(1) or 65(2) requires a competent authority to assess any implications of a plan or project which would be more appropriately assessed under that provision by another competent authority.
 - (3) The appropriate authority may issue guidance to competent authorities for the purposes of regulations 63 to 66 as to the circumstances in which a competent authority may or should adopt the reasoning or conclusions of another competent authority as to whether a plan or project—

(a)is likely to have a significant effect on a European site or a European offshore marine site; or

(b) will adversely affect the integrity of a European site or a European offshore marine site.

- (c) The competent authorities concerned must have regard to any such guidance.
- (5) In determining whether a plan or project should be agreed to under regulation 64, a competent authority other than the Secretary of State or the Welsh Ministers must seek and have regard to the views of the other competent authority or authorities involved.
- 3.3.3 The joint government guidance continues to helpfully set out some guidance over competent authority coordination. It states (our emphasis):

Make decision making quicker;

To make it quicker to decide if a proposal can go ahead, you can:

•keep duplication to a minimum, for example, you may be able to use information from the HRAs of previous similar decisions if they're still relevant and up to date.

Coordinate with other competent authorities;

When there's more than one competent authority carrying out an HRA for the same proposal, you should work together on the assessment. For example, a mineral extraction proposal may need the permission from the local authority and the Environment Agency or Natural Resources Wales.

Agree a lead competent authority where responsibilities overlap;

Where a proposal overlaps with other competent authorities' areas of responsibility, you should agree who is the lead competent authority.

For each proposal, decide which authority should lead, based on who has the:

- best technical expertise when a technical issue is the most important factor in assessing the impact of the proposal
- main interest in cross-boundary cases
- capacity to manage where there are many complex and cross-boundary issues

The lead competent authority will need to:

- act as the single point of contact for the HRA
- make sure each competent authority understands their role and responsibility
- agree a decision timetable
- make sure all SNCBs are consulted and appoint a lead body where there are split responsibilities
- share existing evidence and identify evidence gaps
- prepare the HRA on behalf of the other competent authorities
- coordinate consultations and any recommendations
- set up a memorandum of understanding between all parties for complex cases

Use the HRA of another competent authority.

You can use an HRA previously carried out by another competent authority for the same proposal if:

- there's no new information or evidence that may lead to a different conclusion
- the assessments already done are relevant, thorough and correct
- the conclusions are rigorous and robust
- there's no new case law that changes the way an HRA should be carried out or interpreted

If you decide to use a previous HRA's evidence and conclusions, you should still make sure your final decision will have no negative effect on the European site. The final decision is your responsibility.

You should not assess any part of a proposal that another competent authority has a role to assess. The relevant competent authority will do their own assessment.

When you make your decision on whether a proposal can go ahead or not, you should record that you've used all or part of an HRA carried out by another authority.

3.3.4 NNDC can therefore use the HRAs of the Environment Agency, but should confirm that there are no changes that would be contrary to the above guidance. Also, where there are new matters to be determined under an amended PPC, where the Environment Agency is a more appropriate authority, with the necessary technical expertise the Council can rely on that HRA.

4 HRA Assessment work to date

4.1 Issues

- 4.1.1 The HRA undertaken by NNDC essentially concluded that it was not possible to definitively draw conclusions on the basis of impacts on the site conservation objectives. A number of issues were raised, for which further information has been requested from the applicant.
 - Issue 2: Pollution of surface water arising from the day-to-day operation of the project either through accidental releases and/or from surface water drainage discharge leading to a reduction in water quality
 - Issue 3: Increase in wastewater quantity requiring treatment and subsequent discharge into surface water leading to a reduction in water quality
 - Issue 4: Increase in airborne particles or harmful chemical compounds (air pollution) due to operational combustion activities leading to a reduction in air quality
 - Issue 5: Increase in demand for water leading to increased abstraction volumes resulting in changes to the natural hydrological regime of the river

4.2 Approach to addendum

- 4.2.1 For each issue, DTA Ecology has reviewed the additional information required by NNDC and evaluated whether it can adequately provide the requirements to be compliant with the legislation. For each issue we draw our conclusions and make recommendations. The addendum will be clear and explicit that the findings of the original HRA are assumed to be correct and have not been subject to independent review. The addendum will follow logically from the original HRA and address the extent to which the additional information submitted has addressed the concerns which precluded the Council from being able to ascertain no adverse effect to site integrity.
- 4.2.2 Once each issue is considered we then provide an overall conclusion which will take account of the recommendations.

5 Issues

5.1 Issue 2: Pollution of surface water arising from the day to day operation of the project either through accidental releases and/or from surface water drainage discharge leading to a reduction in water quality

Summary of issue

The NNDC HRA identified concerns regarding the pollution entering the River Wensum from the project proposal, with concerns that the surface water drainage network strategy would not provide adequate mitigation to ensure long term conservation objectives of the features of the SAC.

Council requested from the applicants additional information on the nature of the high risk activities, and more details on the design and treatment measures that would be incorporated into the surface water drainage system and whether they were designed to meet the CIRIA SuDS Manual guidance.

Background

5.1.1 The current draft of the surface drainage report has been shared with DTA Ecology. The applicant has made clear that it is still a draft document. The updated ES states that

'The drainage strategy included in the FRA in Appendix 10.1AA details the assessment of pollutants which could enter the surface water drainage system and identifies Hazard rating based on proposed activities. The assessment is based on the expected development content, but this will need to be reviewed at the detailed design stage to ensure the correct treatment measures are provided for the proposed content of the outline application area.'

5.1.2 The strategy sets out a range of measures which could be added to the proposed system if deemed necessary at later stages. These features include filter drains, permeable paving and other measures including oil separators/ vortex separators on manholes.

'Performance of these products vary, but used in conjunction with the swales, oil interceptor and pond, they can provide a high level of treatment which would surpass the current design treatment levels.' ... 'The features include swales, filter drains and ponds, together with an oil interceptor. Combined in a treatment train, the features exceed the level of treatment required to mitigate water quality issues to groundwater and local watercourses.'

- 5.1.3 The assessment has identified additional features and products that can be added to the drainage design to increase the level of treatment if higher hazard rating development comes forward as part of the outline application.
- 5.1.4 The HRA Handbook states in relation to mitigation measures,
 - 5. To be taken fully into account, at the appropriate stages, all 'mitigation measures' should be <u>effective</u>, <u>reliable</u>, <u>timely</u>, <u>guaranteed</u> to be delivered and as long-term as they need to be to achieve their objectives.
 - 6. <u>Any doubts</u> about the effectiveness, reliability, timing, <u>delivery</u> or duration of mitigation measures, should be <u>addressed</u> by the competent authority <u>before</u>

<u>relying on such measures</u> during the appropriate assessment and integrity test stages.

13. A competent authority can impose 'additional mitigation measures', over and above the 'incorporated mitigation measures', if necessary, by way of the imposition of conditions or other restrictions so as to ensure that a plan or project would not adversely affect the integrity of a European site, either alone or in combination with other plans or projects.

For the purposes of assessing an outline planning application, all matters do not need to be precise, certain and final. It is acceptable for this additional level of detail to come at later stages, at such a time when the details can be properly considered. In any such case the council must be able to restrict the permission to ensure that there is no risk of an adverse effect on integrity when assessing the final source water drainage strategy.

5.1.5 It follows from the above discussion, about the terms and conditions of outline planning permissions, and the fact that an approval of reserved matters must be treated as being a part of a multi-stage consent process, that NNDC needs to be alert to any possibility of detailed proposals in reserved matters applications having an adverse effect on the features of the River Wensum SAC. If such detailed proposals would be likely adversely to affect the integrity of a European site they ought not to be in accordance with the outline planning permission and should be refused. They may be made subject to an application for full planning permission which can be determined by the planning authority after an appropriate assessment and compliance with regulations 63 and if necessary 64 and 68.

Comments from EA June 2022

5.1.6 NNDC reconsulted EA on 11th April 2022. They state that the amended

'Environmental Impact Assessment Statement and associated documents as submitted and do not consider [...] adequate to address our previous comments (dated 28/01/2022, 17/03/2021, 10/02/2021 and 28/05/2022) for the Drainage and Groundwater and Contaminated Land reasons detailed below.'

5.1.7 The Environment Agency do accept that

'the potential surface water discharge impact from the proposed malting expansion (network 3) will be assessed further as part of the permit [PPC] application process.

We have no objection to this method of drainage in principle. The pollution prevention measures should address any potential pollution risk to both groundwater and surface water.

[...]

Given the high environmental sensitivity of the site and nearby groundwater abstractions, we would like to review the more detailed drainage strategy and plans once these have been produced. '

5.1.8 DTA Ecology agree that the EA are the most appropriate authority to assess the final surface drainage design and strategy. It is not necessary for NNDC to consider further at outline planning application stage.

DTA Ecology advice and recommendations

- 5.1.9 There are concerns raised by EA that additional measures may be required in serial in the drainage networks, further concerns were raised regarding details of ground water and contaminated land. DTA Ecology would advise that, given the assessment of the drainage strategy is best undertaken once the design details are known, the strategy must be assessed once its measures are finalised.
- 5.1.10 In order to be able to conclude no adverse effects on the outline planning application, it is suggested that a suitability restrictive condition is attached that does not allow construction to commence until the surface water drainage strategy is final, and subject to appropriate assessment as part of the PPC permit.
- 5.1.11 DTA Ecology advise that a conclusion of no adverse effect on integrity cannot be reached, unless a condition is attached that prevents any construction commencing until final drainage strategy is agreed as part of the new PPC permit process.

Summary of DTA Ecology recommendation

It is appropriate for the surface drainage strategy to be more properly assessed by the Environment Agency.

It is our recommendation that a conclusion of no adverse effect on site integrity cannot be concluded for the outline planning permission, unless a condition is attached to the outline planning permission to guarantee construction cannot commence until the PPC permit is in place.

5.2 Issue 3: Increase in wastewater quantity requiring treatment and subsequent discharge into surface water leading to a reduction in water quality

Summary of Issue

The original NNDC HRA raised concerns relating to the assessment of the effects of wastewater treatment and disposal. The concerns included uncertainties over the volume of associated discharges and how they aligned with existing permit conditions.

Further information from the applicants was sought to confirm the volume of effluent that would be likely in the expanded plants, and whether any mitigations measures were proposed.

During the period in which the NNDC HRA was undertaken Natural England issued its updated advise on Nutrient Neutrality. There were thus additional uncertainties as to how this advice might relate to this project proposal; in particular if headroom within the existing PPC permit could be relied on by NNDC when undertaking its HRA.

Background

5.2.1 Annex 1 of the updated Natural England advice on Nutrient Neutrality provides where a site is currently unfavourable due to nutrients that 'Competent Authorities need to carefully consider the circumstances where plans or projects can be authorised' and continues:

'Where the plan or project will (...) contribute additional significant nutrients, alone or in-combination directly to, or upstream of, any unfavourable location ... then natural England advises that either there is a Likely Significant Effect (LSE) or LSE cannot be ruled out...'

5.2.2 The guidance is then clear and explicit that the use of permitted headroom in an existing permit which has already been subject to prior assessment under the Habitats Regulations may not be compliant. It states:

"Competent Authorities who wish to rely on the reasoning or conclusions in previous AA should consider the age of the AA, its robustness and whether evidence or circumstances have changed and therefore whether additional consideration is needed. Careful consideration will be needed where the habitats site feature is unfavourable due to elevated nutrient levels and plans or projects contribute further loading."

- 5.2.3 Natural England advice continues to explain that, should the Council wish to rely on the reasoning's or conclusions of the previous appropriate assessment, several factors should be considered by the Council including;
 - changes to habitats site nutrient or related ecological objectives;
 - new relevant information since the earlier assessment:
 - impacts of more recent case law and other legal requirements;
 - whether the measures taken into account in the appropriate assessment can still be relied on to avoid adverse effects to site integrity.

5.2.4 The applicants have used the Natural England calculator, with some tailoring to the specific project circumstances, being originally designed for residential developments.

Effluent inputs

Baseline / expansion	Mean concentration P mg/L	Mean concentration P mg/m³	Mean concentration P kg/m³	Total volume m ³	TP kg/year
PPC limits Current effluent discharge (2021)	1.0 0.52	1000 520	0.001 0.00052	511,000* 283,653	511 147.5
Expanded plant	0.31	310	0.00031	401,500	124.5

^{*}Based on 1,400m3 discharge every day.

Land use changes

Land use changes	Total P	Total N
Stage 2 – existing land use	0.85	56.56
Stage 3 – new land use	3.54	33.56
Difference	Plus 2.69 kgTP/year	Minus 23 kgTN/year

Nutrient Neutrality calculations

Nutrient	Effluent	Land use	Total
The change in total	-23 TP kg/year	+ 2.69 TP kg/year	Minus 20.31 TP
annual			kg/year
phosphorous is:			
The total annual	-	-23 TN kg/year	Minus 23 TN kg/year
nitrogen load to			
mitigate is:			

5.2.5 It is therefore proposed that the expanded plans will be able to reduce the concentration of N and P through implementation of new technologies and water efficiency measures.

DTA Ecology advice and recommendations

- 5.2.6 The implication of the Natural England advice to us is that it is necessary under the Habitats Regulations to review and evaluate the extent to which previous assessment effort undertaken by the Environment Agency can be relied upon. However, in light of the provision of regulation 67 it would seem to be wholly inappropriate for the Council to undertake such a review given the lack of necessary technical expertise within the local planning authority. In other words, any assessment of a permit subject to regulatory control by another competent authority would 'more appropriately' be assessed by the competent authority responsible for the permit.
- 5.2.7 As described above, the Defra guidance on HRA is clear that 'when there's more than one competent authority carrying out an HRA for the same proposal, competent authorities should work together on the assessment.' Defra guidance is also clear where a proposal overlaps with other competent authority's areas of responsibility, and a specific technical issue is the most important factor in the assessment, a lead competent authority should be agreed based on who has the best technical expertise.
- 5.2.8 The Council must 'have regard' to the advice from Natural England. In considering the need for Nutrient Neutrality the Council must form a view as to whether they can 'rely on the

- reasoning or conclusions in the previous AA of the existing permit'. With reference to Regulation 67(2) of the Conservation Habitats and Species Regulations 2017, it is DTA Ecology's advice that the assessment as to the robustness of the prior assessment of the existing permit (as advised by Natural England) would be 'more appropriately assessed' by the Environment Agency as the competent authority with regulatory responsibility for the permit itself.
- 5.2.9 In order to stay within the Natural England advice on Nutrient Neutrality, NNDC would need to be able to be satisfied that any expanded facility and associated PPC consent did not lead to any additional nutrient inputs. In order to avoid an increase in nutrients the proposed expansion would need to be operated in a manner which ensures that total TP kg/year are limited to 147.5-2.69 = 144.81 TP kg/year. The applicant has determined that the plant could operate to discharge 124.5 + 2.69 = 127.19 ky/ year but, as yet, there is no permit to require them to do so. The Council cannot be satisfied that adverse effects will be avoided on the basis of reassurances by the applicant. It is therefore highly relevant that the development will require an application to the Environment Agency to vary the existing permit which will be subject to assessment by Environment Agency as the relevant competent authority in due course. As a competent authority the Environment Agency will need to have regard to the Natural England guidance on Nutrient Neutrality and they are best placed to assess the implications of any increase in nutrients over and above current operating practice (i.e. whether utilising existing headroom capacity would represent a risk to the integrity of the SAC). In the absence of any response from the Environment Agency as to the extent to which the Council can rely on the earlier assessment conclusions for the current permit, the Council does not have sufficient confidence to be able to rely on the further information provided by the applicant
- 5.2.10 Recognising that an application for variation will be submitted to the Environment Agency in due course it is not necessary for the Council to seek to pre-empt the decision the Environment Agency will reach. The Environment Agency will undertake their own HRA in determining this application and, with reference to regulation 67(2), nothing in regulation 63 requires the Council to assess any implications of the project which would more appropriately be assessed under that provision by another competent authority. The Council take the view that the implications of any variation to the existing PPC permit are more appropriate assessed under Regulation 63 by the Environment Agency.
- 5.2.11 Given that NNDC need to make its decision on the outline planning permission, the options open to the Council are to wait until the Environment Agency determines the permit, or to impose a condition on the outline permission which requires a PPC permit to be in place prior to construction. In this respect the Council can assume that, should a PPC variation be granted, the Environment Agency can be relied upon to ensure that there will be no adverse effect on the integrity of the River Wensum SAC. The Environment Agency is the relevant competent authority in respect of impacts associated with the PPC permit and it would not be appropriate under regulation 67(2) to include consideration of associated water quality impacts within the HRA for the current outline planning permission.

Summary of recommendations

Recognising that an application for variation will be submitted to the Environment Agency in due course it is not necessary for the Council to seek to pre-empt the decision the Environment Agency will reach.

The Environment Agency will undertake their own HRA in determining this application.

DTAE recommend that the Council take the view that the implications of any variations to the existing PPC permit are more appropriate assessed under Regulation 63 by the Environment Agency.

DTAE advise that the Council either waits until the Environment Agency considers the permit, or imposes a condition on the outline permission which requires a PPC permit to be in place prior to construction.

5.3 Issue 4: Increase in airborne particles or harmful chemical compounds (air pollution) due to operational combustion activities leading to a reduction in air quality

Summary

The original NNDC HRA raised concerns relating to the assessment airborne deposition. The concerns included uncertainties over discharges and how they were monitored.

Further information from the applicants was sought to confirm the emissions levels and likely impact on site critical levels.

Background

5.3.1 The NNDC HRA raised that whilst the Site Improvement Plan for the River Wensum does not raise air pollution depositions and being a threat to the site, the conservation objectives supplementary advice identifies air quality as a supporting process with a target to restore the concentrations and deposition of air pollutions to at or below site relevant Critical Load or Level values given for the feature on the Air Pollution Information System (www.apis.ac.uk). It was concluded that

'emission to air arising from the day to day operation and combustion processes of the development, could undermine the ability to achieve the conservation objectives of the qualifying features of the SAC by adversely affecting the supporting processes on which the features rely.'

- 5.3.2 The precautionary principle was applied anticipating that emissions to air arising from the development, alone or in combination, could contain level of nitrogen oxides that will contribute to the nutrient loading of the river and undermine the conservation objectives of the SAC.
- 5.3.3 Further information sought from the applicants was sought on the levels of NOx predicted to be emitted, and whether any mitigation measures were proposed, together with any parameters or limits.

Response from the applicants in updated ES

See Chapter 9, Paragraphs 9.102 - 9.105

"With respect to Critical Levels of atmospheric oxides of nitrogen these are set at a default of $30~\mu g/m3$ for the annual mean within the Air Pollution System ('APIS') database. The ES determined the predicted NO2 to change by only a very small amount near to the Maltings, e.g. from $13.0~\mu g/m3$ to $13.6~\mu g/m3$. These absolute levels and changes are thought to be sufficiently low to screen out oxides of nitrogen with respect to Critical Levels without the need for a more formal assessment, on the basis that concentration of NO2 would need to more than double to reach the critical level for oxides of nitrogen. , and in practice the levels of process contributions at the River Wensum SAC would be less by virtue of distance.

[...]

"New plant has a limit for oxides of nitrogen of 100 mg/m3 and existing plant a limit of 200 mg/m3, and these values are specified within the Directive with the explicit objective of reducing health and environmental impacts. 4"

Baseline condition

5.3.4 DTA Ecology in undertaking this HRA have reviewed data for the River Wensum SAC on www.apis.ac.uk. The applicants currently identify that critical levels for all features are set at 30 µg/m3 with no comparable critical loads for the freshwater features. The absence of critical loads recognises that riverine features are inherently less sensitive to atmospheric nutrient sources given that the overwhelming nutrient contribution from the water column will render the contribution from air pollution negligible. The current baseline condition for nitrogen oxides are set out in table 1 below;

Year	NOx levels - Crisp Malting grid square	Adjacent grid squares (N, NW,W) closest to River Wensum
2019	11.2	9.7, 9.5, 9.6
2018	12.1	10.4, 10.6, 10.3
2017	12.3	11.1, 11.3,11
2016	12.2	11.5, 11.7, 11.3
2014	12.6	12.4, 12.4, 12.2

Table 1 Baseline condition for nitrogen oxides in and around the Crisp Malting facility. Source $\underline{www.apis.ac.uk}$

- 5.3.5 Taking the grids surrounding the development site recorded in APIS, it appears that levels of NOx are *circa* 2µg /m3 higher in grid squares immediately adjacent to Crisp Maltings. These elevated levels could very well be the result of other sources, but do correlate well to the additional data provided by the application to levels immediately adjacent to the facility.
- 5.3.6 Thus in the face of no evidence provided by the applicants to the contrary it would be reasonable to assume most, if not a significant proportion of the elevated level might be attributed to the existing facility. The applicants report that levels of NOx are 13 μ g /m3 immediately adjacent to the facility.
- 5.3.7 The conclusion of DTA Ecology is that the conservation objective attribute and target for NOx is not close to be exceeded. A restore target for air quality is unlikely to be linked to NOx levels.

Impacts of project on critical levels

5.3.8 The applicants predict the levels of NOx adjacent to the facility will increase to 13.6 μg /m3 as a result of the increased capacity and new combustion plant. Whilst there is no background calculation provided that sets out how the 0.6 μg /m3 increase is arrived at. The figure is not outside any common-sense parameters.

⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L2193#d1e32-15-1

5.3.9 For example if all contributions from the existing combustion plant, with an ELV of 200mg/l, are set on a precautionary basis to be the sole contribution to the additional 2 μ g seen on the Crisp Malting grid square, and the new combustion plant required to increase production from 115- 170 tonnes per annum on a plant with an ELV of 200mg/l is likely to give rise to this increase through a simple calculation.

Box 5.1 - Deposition rate calculations

The purpose of this box is to provide the simple calculations which DTA Ecology have undertaken to inform our view on the likely scale of increase in emissions. In doing so we have taken account of the current background levels, the restrictions on the Emissions Limit Value (ELV) for new combustion plants, proportionate to the increase in product output.

Existing combustion plant to fuel

115 tonnes production annually = $2 \mu g/m3$ increase critical level on background from the existing plant with ELV of 200mg/m3 ELV.

New combustion plant to fuel

An additional 65 tonnes production annually, with new combustion plant with ELV limit of $100 \text{mg/m}3 = 1.1^* / 2 = 0.55 \, \mu\text{g} / \text{m}3$

* <u>2 μg /m3</u>

115 X 65

X 65 = $1.1 \mu g$ approximate increase

- 5.3.10 Addressing the questions posed by NNDC, it would appear to DTA Ecology that sufficient information is available to undertake an assessment of whether there is any reasonable scientific doubt remaining as to no adverse effect.
- 5.3.11 With regards to the first question of the Council, the current operation of Crisp Malting facility should be considered as part of the existing baseline against which the current proposal is subject to assessment. This provides a baseline against which to estimate the impacts from the existing facility operating. An assessment can appropriately be based on a comparison of the current process contributions from Crisp Malting, extrapolated to take account of the new combustion plant, albeit with lower ELV, and a 65% increase in production. Whilst it is accepted that there will be significant variations, with no absolutes, the current baseline conditions can reasonably accommodate any such variation, and still be able to come to robust conclusions on impacts on site conservation objectives.

DTA Ecology advice and recommendations

5.3.12 It is our advice that, whilst accepting that the Conservation Objective Supplementary Advise identified air pollution as a potential risk and a possible contributary factor to high nutrient levels, there is sufficient evidence to make an assessment on site integrity, based on the current baseline condition of the site and the inherent sensitivity of the features to air pollution.

- 5.3.13 Whilst there is no doubt that the project will lead to increased NOx concentration and associated increase in total Nitrogen deposition, it can be reliably concluded that the scale of the proposed project alone will not lead to a risk of the conservation objectives not being met. The site is well below the NO_x critical level and no critical loads are assigned to freshwater features as the overwhelming waterborne nutrients will render contribution from air pollution entirely negligible. We note that the site objective is set to be a restore objective, but in this instance such critical levels (or levels) on which the long-term conservation of the site features depend are either not exceeded or established as not sensitive.
- 5.3.14 In considering if there are any plans or project that might act in combination, this would only be for any proposals where the footprint of the impacts of projects are overlapping. DTA Ecology is not aware of any such proposals, however ahead of any decision the council should confirm this is the case.
- 5.3.15 Heading 6 of the original HRA raises concerns in relation to whether the effects from different source receptor pathways might lead to a cumulative effect. It is DTA Ecology's advice that once each individual impact has been assessed and a conclusion reached of either no adverse effects on site conservation objectives, with or without mitigation measures or other conditions, there is no requirement to reconsider any possible cumulative impacts arising from multiple source / receptor pathways.

Summary – DTA Ecology recommendation

It is DTA- Ecology's advice that it can be concluded 'no adverse effect' on site integrity, on the basis of the site's current baseline condition being well below the critical level for NOx and the inherent lack of sensitivity of freshwater features to air quality in view of the overwhelming contribution from waterborne nutrients.

5.4 Issue 5 Increase in demand for water leading to increased abstraction volumes resulting in changes to the natural hydrological regime of the river Water quantity – hydrological impacts

Summary

The NNDC HRA identified concerns regarding an increase in water demand from an increase in production, leading to increased abstractions volumes. The Restoring Sustainable Abstraction Programme

Further information was requested from the applicants on water consumption, and any water efficiency measures and re-use technologies to reduce overall water consumption. Furthermore, if demand was to rise what would the impact be on flow targets.

Background

- The HRA concludes that the COSA and the Site Improvement Plan (SIP) (Natural England, 2014) identifies that abstraction is adversely impacting the flow regime of the river and as a result changes to abstraction licences to relieve pressure on the river were identified through the Review of Consents process. The actions identified in the SIP applied to abstraction by Anglian Water, with reductions secured through the Water Industry Asset Management Plan (AMP) between 2014 and 2021; with a commitment to implement measures identified in the Restoring Sustainable Abstraction Programme. A further action to investigate or identify actions to meet the conservation objectives for flow is highlighted for the third round of the RBMP from 2021. This action could affect abstraction limits for existing and/or proposed licences. On this based it was concluded that the development might undermine the ability to achieve the conservation objectives.
- 5.4.2 The applicant has confirmed that the Maltings expansion will continue to operate under the existing water abstraction permit.

"9.100 A suite of measures are proposed to increase the efficiency of water use and also greater re-use, via new plant and retrofitting to the existing operations. The technological measures proposed are existing technologies and would comprise improvements to the following items and processes: the barley washer; steeping vessel design and the use of optisteep technology, which circulates water, filters, cleans and oxygenates returns to the steeping process; and water recovery technology using a membrane bio reactor followed by reverse osmosis, such that the treated water will be of sufficient quality to be re-used in the process. The estimated reduction in the required ratio of water use to finished malt would be from the current levels of approximately 3.72m3 per metric tonne to approximately 2.6m3 per metric tonne."

5.4.3 Whilst, from the information provided the approximate water demand is a real increase of circa 6.3%. (115x3.72 = 427,800; 175,000x 2.6 = 455,00) this remains within the maximum

abstraction limits. The applicant has also confirmed that any additional water demand would be sourced from mains and they would stay with their existing water abstraction licence. Given the updated volumes of effluent inputs provided in the *Nutrient Budget Calculator Summary for Crisp Maltings Expansion* documents from the expanded plant being of the order of 401,500; applying the applicants figures of a 12.6% loss of water in process, would lead to a water demand of 452,089 l.

EA Response August 2022

Abstraction Licensing

The Environment Agency have made the following observations in respect of abstraction licensing. 'Groundwater in the Broadlands area is fully committed. We are therefore not licencing any new groundwater in this area. This is detailed in the Broadlands Abstraction Licencing Strategy. If Crisp Maltings is going to need additional groundwater for the proposal, the applicant will be required to source this from within their current licenced quantity or look to obtain it through mains supply.

The Crisp Maltings licence is a permanent licence, as such it will not go through the renewals process (as indicated in the snippet above) where licence quantities could be reduced if abstraction is considered to be unsustainable. Holders of permanent licences, will be contacted on a case by case basis should a licence change be required. We cannot guarantee that there will not be changes to permanent licences in this catchment in the future

DTA Ecology advice and recommendations

5.4.4 It is the advice of DTA Ecology that since the applicants will stay within the headroom of their existing permit, which has been subject to assessment by the Environment Agency as a competent authority, NNDC can rely on this assessment as described above. It has been confirmed by the Environment Agency that, as a permanent licence it will not be subject to the renewals process.

Summary – DTA Ecology recommendation

It is DTA- Ecology's advice that the HRA undertaken by the Environment Agency can be relied on, to enable a conclusion of 'no adverse effect' on site integrity; since the water abstraction will remain within the headroom of the applicants existing water abstraction licence.

6 Final summary of recommendations

- 6.1.1 DTA Ecology has drawn the following conclusions and makes its recommendations with regard to the issues arising from the NNDC HRA.
 - It is appropriate for the surface drainage strategy to be more properly assessed by the Environment Agency. A conclusion of no adverse effect on site integrity cannot be concluded for the outline planning permission, unless a condition is attached to the outline planning permission to guarantee construction cannot commence until the PPC permit is in place.
 - With regards to pollutants from effluent discharges, an application for variation will need to be submitted to the Environment Agency in due course. It is not necessary for the Council to seek to pre-empt the decision the Environment Agency will reach. The Environment Agency will undertake their own HRA in determining this application.
 DTA Ecology recommend that the Council take the view that the implications of any variations to the existing PPC permit are more appropriate assessed under Regulation 63 by the Environment Agency. The Council can either wait until the Environment Agency considers the permit, or impose a condition on the outline permission which requires a PPC permit to be in place prior to construction.
 - On the basis that the River Wensum SAC's current baseline condition being well below
 the critical level for NOx and the inherent lack of sensitivity of freshwater features to
 air quality (in view of the overwhelming contribution from waterborne nutrients) it is
 possible to conclude no adverse effect from airborne nutrients.
 - Lastly, since the water abstraction will remain within the headroom of the applicants
 existing water abstraction licence, the HRA undertaken by the Environment Agency
 can be relied on by the Council to enable a conclusion of 'no adverse effect' on site
 integrity from water abstraction.
- 6.1.2 In light of the above, a conclusion of no adverse effect to site integrity will only be possible if the outline planning permission is made subject to the specific restrictive conditions identified. Whilst the nature of these conditions are outlined it is for the Council to agree the specific wording of the condition and the type of restrictive condition that might be relied upon. We would suggest that the use of Grampian conditions should be given careful consideration given the need for the Council to be satisfied that outline planning permission will not give rise to a development that represents a risk to the integrity of the River Wensum SAC.