

7 Oct 2022

Our ref: Norfolk Nutrient calculator response



FAO: Heads Planning, Development Management and Planning Policy

By email only

Dragonfly House  
2 Gilders Way  
Norwich NR3 1UB

Dear Sir/Madam

**Consultation: Norfolk Nutrient Budget Calculator (Developed by Norfolk LPAs and Royal Haskoning)**

Thank you for your email of 23 September from Trevor Wiggett, consulting Natural England on the nutrient budget calculator that the Norfolk Authorities have developed with support from Royal Haskoning, hereafter referred to as the 'Norfolk calculator'.

Natural England notes that the approach adopted in the Norfolk calculator is broadly consistent with that which underpins the Natural England nutrient budget calculator. This response therefore focusses on the elements of the Norfolk calculator for which a different approach, or different figures have been used.

Following a review of the information shared with Natural England, there are three elements of the Norfolk calculator where the approach differs from that in the Natural England calculator:

1. Occupancy rates
2. Water usage
3. WwTW discharge concentrations

Detailed comments and advice regarding the three aforementioned elements are set out below.

**Occupancy rates:**

As set out in the Natural England Nutrient Neutral Generic Methodology and the Natural England Calculator Guidance document; "Competent authorities must satisfy themselves that the residents per dwelling/unit value used in this step of the calculation reflects local conditions in their area. The residents per dwelling value can be derived from national data providing it reflects local conditions. However, if national data does not yield a residents per dwelling/unit value that reflects local occupancy levels then locally relevant data should be used instead. Whichever figure is used, it is important to ensure it is sufficiently robust and appropriate for the project being assessed."

The Norfolk calculator also includes a separate occupancy rate for houses with multiple occupancy (HMO) and for hotels/guest houses to be used when there is development with an additional number of rooms above six residents. For hotels/guesthouse developments, the calculator additionally allows for a bespoke

figure of number of weeks occupied per year and an average occupancy rate (0-100%). There is no information in the ORS report to explain how these figures have been derived, or to support using a different occupancy rate for HMOs/tourist accommodation. The Royal Haskoning report indicates that the average occupancy rate for hotels and HMOs comes from the Dorset Heaths SPD. This SPD specifies a 1.65 occupancy rate for 'flats' but with no detailed information as to how this has been derived.

Natural England would advise that suitable provisions should be put in place to ensure that should hotels/guesthouses revert to residential accommodation in the future, there is a mechanism to assess the potential for any resulting change in nutrient load. We would further advise that the number of weeks per year use, and average occupancy of hotels and tourism accommodation should be adequately evidenced to provide the necessary certainty required for Appropriate Assessment.

Natural England therefore support the use of locally relevant data to derive an appropriate occupancy figure for Norfolk. The Norfolk Authorities, as competent authority must be satisfied that the evidence underpinning the occupancy rate in the Norfolk calculator is sufficiently robust and appropriate. We would recommend that project level Appropriate Assessments which are informed by the Norfolk calculator specifically include justification for why the competent authority has decided upon the occupancy rate that has been used.

We would also recommend the Norfolk Authorities review the comments made by Justice Jay at the High Court in the *Wyatt v Fareham* Judicial Review, regarding the use of occupancy rates which are appropriate to the type of development being permitted.

#### **Water Usage:**

The Natural England methodology and calculator recommends the addition of 10 litres per person, per day to the Building Regulations standard being applied to the planning permission (e.g. 110 litres per person, per day). The Norfolk calculator has removed this additional 10 litres per person, per day and relies on the Building Regulations standard which is secured as part of the planning permission.

The Norfolk Authorities have referenced a study to support the removal of the additional 10 litres per person, per day. It is noted that this study is of homes built to the 125 litres per person, per day standard, rather than 110 litres. We would highlight that Natural England's methodology was informed by the analysis by Waterwise of homes in London built to a stricter 105 l/person/day under the Code for Sustainable Homes which showed that actual water usage ranged between 110 to 140.75 litres per person, per day, depending on the occupancy rates (<https://www.waterwise.org.uk/knowledge-base/advice-on-water-efficient-new-homes-for-england-september-2018/> ).

Natural England advise that the removal of the additional 10 litres per person, per day makes the Norfolk calculator less precautionary than the approach set out in the Natural England methodology, and the Natural England calculator.

#### **WwTW discharge concentrations:**

The Norfolk calculator uses a hybrid approach of retaining the Natural England methodology for Waste-water Treatment Works (WwTW) with high levels of anticipated new connections, and current discharge concentrations with an additional precautionary uplift for WwTW with lower levels of anticipated new connections.

Water companies can increase the concentration of nutrients in the waste-water discharged from WwTW up to the level set in their Environment Agency permit without the requirement for any new consent or consultation. Therefore, the Norfolk Authorities must be satisfied that the figures used in the Norfolk calculator do not risk underestimating the nutrient load of new development connecting to WwTW with lower levels of anticipated growth. It is important to recognise that when undertaking an Appropriate Assessment, potential impacts need to be considered over the lifetime of the development proposal.

For WwTW which do not benefit from a discharge permit with a defined maximum nutrient concentration, the Norfolk calculator uses 6mg/litre for Total Phosphorus, and 25mg/litre for Total Nitrogen. We note that these are the national average values used by the Environment Agency for their planning purposes.

However, as these values represent the national average, there will be a variation in WwTW performance with some performing better, and others worse than this figure.

Natural England advise that the reduction (by 2mg/litre) in the values used in the Norfolk calculator for WwTW without a defined maximum nutrient concentration makes the Norfolk calculator less precautionary than the approach set out in the Natural England methodology, and the Natural England calculator.

The Norfolk calculator includes future discharge concentration values for WwTW which have upgrades planned as part of the Periodic Review (PR) process. This is consistent with the approach set out in the Natural England methodology, and the approach taken for the Natural England calculator. The Norfolk calculator also incorporates the Technically Achievable Limit (TAL) figure from 2030 (0.25mg/litre for Phosphorus and 10mg/litre for Nitrogen) which was announced as a requirement for water companies in nutrient neutrality areas by Defra Secretary of State in July 2022.

The announced requirement for water companies to achieve TAL will be legislated through the Levelling-up and Regeneration Bill. Natural England advise that until the Bill receives Royal Assent the requirement for TAL cannot be considered certain. We recommend that the pre-2030 figure is used to determine the mitigation requirement for new development until the legislation securing the requirement for water companies to achieve TAL is in place.

### **Summary of Natural England's Advice**

As set out above, Natural England considers the Norfolk calculator to have reduced the level of precaution in the nutrient budget calculation in comparison to the methodology and calculator we have produced. A reduction in the level of precaution in the nutrient budget calculation will have a corresponding increase in the potential for the mitigation delivered to be insufficient to fully address the potential for adverse effect to the Broads SAC, and River Wensum SAC.

Natural England accepts that it is the decision of the Norfolk Authorities, as Competent Authority to determine the approach (and associated calculations) taken to Appropriate Assessment of new development proposals. We therefore recommend that the Authorities take legal advice to ensure the approach taken to inform Appropriate Assessment of new development proposals is robust and not open to legal challenge.

Natural England do not intend to raise objection to the Norfolk Authorities using the Norfolk calculator to inform their Appropriate Assessments, other than the specific inclusion of the TAL figure for WwTW from 2030 onwards. As highlighted, the 2030 upgrades are not yet in legislation and therefore cannot be considered sufficiently certain to form the basis of a nutrient budget for new development proposals. Therefore, any Appropriate Assessment which relies on these figures, in advance of the relevant legislation being in place, would lead to an objection by Natural England.

Consultation responses to Appropriate Assessments relating to nutrient neutrality, which do not rely on the TAL figure from 2030 will include the following advice from Natural England:

*Natural England notes that the Authority's own calculator has been used to calculate the nutrient budget for this application. This calculator deviates from the Natural England nutrient neutral methodology. As set out in our letter dated 7 Oct 2022 your Authority must be satisfied that the calculator is based on robust evidence and takes a suitably precautionary approach.*

I hope this information is helpful, please contact my colleague Helen Dixon in the first instance if you wish to discuss further [helen.dixon@naturalengland.org.uk](mailto:helen.dixon@naturalengland.org.uk)

Yours faithfully

Simon Thompson  
Principle Adviser – Strategic Solutions  
Strategy and Government Advice