

# Nutrient Neutrality

June 2020



## Nutrient Neutrality: The Overview

In November 2018 the European Court of Justice (with judicial authority of the EU) ruled on the ‘Dutch Nitrogen’ case regarding the interpretation of the Habitats Directive – which relate to all development plans and projects. Following this ruling, Natural England has now advised that no planning consents should be granted within the Solent region (the areas surrounding the strait that separates the Isle of Wight from mainland England) unless new developments can demonstrate ‘nitrate neutrality’.

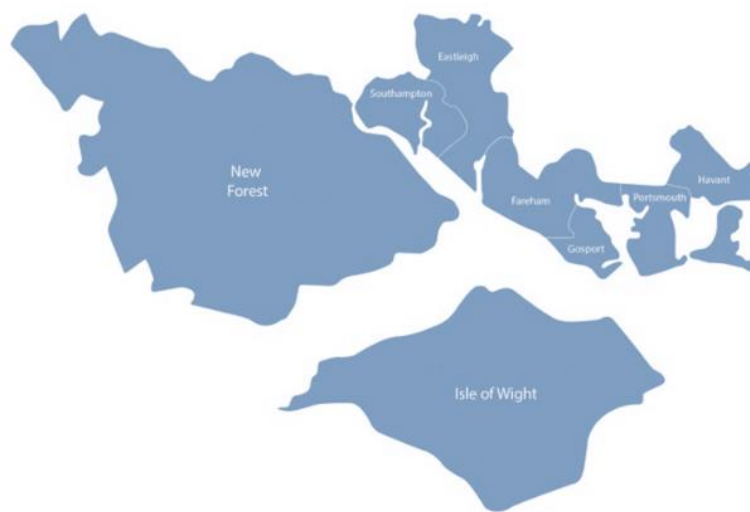


Figure 1: Cartographical representation of areas within the Solent region

This mandate stems from concerns that excessive nitrogen and phosphates nutrient entering the water system in the Solent region is causing eutrophication (excessive growth of algae induced by water system becoming excessively enriched with nutrient).



Figure 2: Eutrophication occurring in a water environment within an urban setting (Source: [Encyclopaedia Britannica](https://www.britannica.com))

The water environment within the Solent region is protected by both national and European legislation; and is of fundamental importance for much of the UK's wildlife. Consequently, the resulting dense mats of green algae produced from excessive nutrient in the water environment have serious consequences for marine life and Solent's protected habitats and bird species.

In acknowledging the above, 'Achieving Nutrient Neutrality for new developments' advice note was produced by Natural England in 2019. Updates have been made to this advice note in March 2020 to provide a definition of nutrient neutrality, clearer guidance on the calculation of the total nitrogen load from proposed development, and how to mitigate/reduce nutrient burden of a proposed development.

## Nutrient Neutrality: The Facts

Nutrient neutrality is defined as *'a means of ensuring that development does not add to existing nutrient burdens [to the surrounding water environment] and this provides certainty that the whole of the scheme is deliverable in line with the requirements of Regulation 63 of the Conservation of Habitats and Species Regulations 2017'.*

There are three stages to calculating the Nutrient Neutrality for a proposed development:

1. Calculate total nitrogen load from development wastewater.
2. Adjust nitrogen load to account for existing nitrogen from current land use.
3. Adjust nitrogen load to account for land uses with the proposed development.

The specifics of calculating wastewater total nitrogen load and assumptions regarding calculations can be found in Natural England's March 2020 [advice note](#). These calculations should be regarded for all types of development that would result in a net increase in population served by a wastewater system, including new homes, care homes, hospitals, student halls and tourist accommodation. There may also be cases where planning applications for new commercial or industrial development, or changes in agricultural practices also require this approach.

In line with this, Natural England have recommended that Local Planning Authorities (LPAs) impose a planning condition for maximum water use on all planning permissions for any development resulting in additional dwelling. As of February 2020, this has impacted planning applications proposing over 7,000 housing units that have been held up for determination by LPAs.



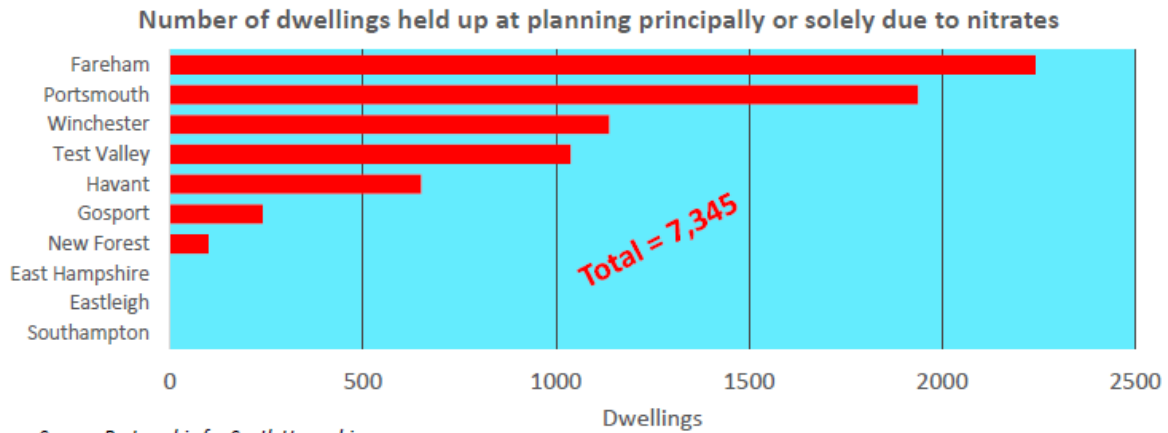


Figure 3: Graph representing the number of developments that have been stalled in terms of planning determination in various LPAs within the Solent region

## Key Considerations and Assumptions

Alongside the breakdown for calculating whether a site is nutrient neutral, Natural England’s note expounds on key assumptions that will need to be considered when determining how to adjust calculations for nitrogen load for the current and proposed land uses on the site. The note explains that the nature of previously developed land means that off-site specific or strategic mitigation solutions will be required on proposed development on brownfield land, as generally it will not prove feasible to provide mitigation as part of the proposed development.

Natural England’s advice note also instructs that in cases where greenfield development sites are proposing the retention of wildlife areas, woodlands, hedgerows, ponds and lakes, such areas can be excluded from the nitrogen load calculation as there will be no change in nitrogen input onto this land. This approach assumes that if these areas are adopted as green infrastructure or a wildlife area in the new development, appropriate management can be secured with any planning permission to restrict nitrogen loading.

Similarly, in terms of redevelopment of brownfield land, the advice note suggests that if there is no change in site area of development, such areas can be excluded from the calculation. This relies on the assumption that the nitrogen leaching rate has remained at 14.3 kg/ha in stage 2 and 14.3 kg/ha in stage 3.

## Mitigation

Upon calculating the nutrient neutrality for a proposed development, should calculations determine that there is a nitrogen surplus for the proposed works, appropriate mitigative measures will have to be carried out. Measures range from direct mitigation such as upgrading sewage work treatments and providing on-site interceptor wetlands, to indirect mitigation such as acquiring agricultural land elsewhere within the river catchment area and utilising acquired land in perpetuity for the purpose of woodlands or conservation grassland. It should be noted that it is expected that such mitigatory measures remain in place in perpetuity (effectively 80+ years).

## Nutrient Neutrality and NHSPS

At NHSPS, we have 29 holdings within the Solent region, the majority of which would be considered to constitute brownfield land. As such, should any residential development or over-night accommodation be proposed on these sites, calculations must be carried out to determine if there is a nitrogen surplus; and appropriate measures (including off-site mitigation) should be looked into ahead of submitting any planning application for development.

Number of NHSPS Holdings in Solent Region	Local Planning Authority in Solent Region
5 sites	East Hampshire District
2 sites	Eastleigh District
5 sites	Fareham District
1 site	Gosport District
7 sites	Havant District
No sites	Isle of Wight
7 sites	New Forest District
No sites	Portsmouth
No sites	Southampton
1 site	Test Valley District
1 site	Winchester District

Ahead of any proposed development within any of the above NHSPS holdings or any sites in the Solent region, discussions should be had with the town planning team via [Aahsan.Rahman@property.nhs.uk](mailto:Aahsan.Rahman@property.nhs.uk) or [Town.Planning@property.nhs.uk](mailto:Town.Planning@property.nhs.uk)

This is a general guide only and is not intended to be comprehensive or a substitute for taking detailed professional advice. No liability is accepted for the information it contains or for any errors or omissions. Further information regarding Nutrient Neutrality can be found within [Natural England's Achieving Nutrient Neutrality for new development in the Solent region \(version 3\) advice note.](#)