

Nitrogen Budget Calculator - guidance notes

There is a four stage process to calculate the nitrogen budget for a development proposal. Each stage is briefly described here. A more detailed explanation and worked example is provided in the Natural England (NE) advice, available on our website.

If the nitrogen budget calculation shows there is a nitrogen surplus (a positive figure) then mitigation is required. This is to achieve nitrogen neutrality. No mitigation is required if the calculation identifies a deficit (a negative figure).

Will the proposed development connect to the mains drainage / sewerage systems?

The calculator doesn't apply to proposed development which will use non-mains drainage (such as package treatment plants). In these cases, liaise with the Local Planning Authority (LPA) and NE for further advice on a bespoke approach.

Will the proposed development generate wastewater from overnight use?

This method is for all types of development that would result in a net increase in population served by a wastewater system. This includes new homes, student accommodation and tourist accommodation. This development will have inevitable wastewater implications. For tourist attractions, refer to the full guidance and consider a bespoke approach with advice from Natural England.

Is wastewater before or after treatment to be discharged into the Solent catchment?

The nitrogen neutrality approach only applies to developments where the treated effluent discharges into any Solent European site or any water body (surface or groundwater) that discharges into such a site.

Solent European sites include Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA, Chichester and Langstone Harbours SPA. This is only a selection of the designated sites - a full list is provided in the NE advice.

Is there a change to land use?

If the development is converting an existing urban use that does not generate overnight stays to other urban use, then this is not considered a change of land use for offsetting purposes. Examples of overnight stays include office accommodation or employment land.

If urban land is being converted to a park or greenspace this should be included in the land use calculation.

Does any part of the existing land use drain to the Solent catchment?

If the development site is within the Solent catchment, there is a pathway (via surface or groundwater) for nutrients added to this land. This is to contribute to designated sites' water quality standards. In these cases, the existing uses can offset the nutrients from wastewater. If the site is not within the Solent catchment, the existing use can't be taken into account in Stage 2 or 3.

Does the development result in a net increase of nitrogen to the Solent catchment?

Achieving nutrient neutrality may be problematic for smaller developments, developments on brownfield land, or developments that are well-progressed in the planning system. NE is working with LPAs to progress Borough/District/City wide and more strategic options. It is recommended that discussions are held with the relevant LPA about these options. Further information will be available on the PfSH website and NE can provide further advice on the methodology and mitigation options through our chargeable services (Discretionary Advice Service (DAS)).

Nitrogen budget calculator flow chart

Q 1: Will the proposed development connect to the mains drainage / sewerage system?

YES

Q 2: Will the proposed development generate wastewater from overnight use?

NO

YES

Q 3: Is wastewater before or after treatment to be discharged into the Solent catchment?

NO

Nitrogen budget calculator not applicable

YES

Stage 1

Calculate the developments' total nitrogen that would be discharged (via treatment works) into Solent catchment

Q 4: Is there a change to the land use?

NO

YES

Q 5: Does any part of the existing land use drain to the Solent catchment?

YES

NO

Stage 2

Calculate existing (pre-development) nitrogen from the current land use of the development site

Stage 3

Calculate nitrogen for the future land uses proposed for the development site

Stage 4

Calculate change in total nitrogen as a result of the proposed development

Q 6: Does the development result in a net increase of nitrogen to the Solent catchment?

NO

YES

Development will not generate additional Nitrogen - mitigation is not required

Development will generate additional Nitrogen - mitigation is required

Farm Types - Stages 2 and 3

The UK system is based on weighting the contributions of each enterprise in terms of their associated outputs. The weights used (known as 'Standard Outputs' or SOs) are calculated per hectare of crops and per head of livestock and used to calculate the total standard output associated with each part of the Farm Business.

Cereals

Holdings on which cereals, combinable crops and set-aside account for more than two thirds of the total SO and (pre-2007) where set-aside alone did not account for more than two thirds of the total SO.

Dairy

Holdings on which dairy cows account for more than two thirds of their total SO.

General cropping

Holdings on which arable crops (including field scale vegetables) account for more than two thirds of the total SO, excluding holdings classified as cereals; holdings on which a mixture of arable and horticultural crops account for more than two thirds of their total SO excluding holdings classified as horticulture and holdings on which arable crops account for more than one third of their total SO and no other grouping accounts for more than one third.

Horticulture

Holdings on which fruit (including vineyards), hardy nursery stock, glasshouse flowers and vegetables, market garden scale vegetables, outdoor bulbs and flowers, and mushrooms account for more than two thirds of their total SO.

Specialist Pigs

Holdings on which pigs account for more than two thirds of their total SO.

Lowland Grazing Livestock

Holdings on which cattle, sheep and other grazing livestock account for more than two thirds of their total SO except holdings classified as dairy.

Mixed

Holdings for which none of the above categories accounts for more than 2/3 of total SO. This category includes mixed pigs and poultry farms as well as farms with a mixture of crops and livestock (where neither accounts for more than 2/3 of SOs).

Specialist Poultry

Holdings on which Poultry account for more than two thirds of their total SO.

For more information, visit:

http://farmbusinesssurvey.co.uk/DataBuilder/UK_Farm_Classification_2014_Final.pdf

Contacts for Further Information	
<i>Local Planning Authorities</i>	
Partnership for South Hampshire	www.push.gov.uk/
Chichester District Council	www.chichester.gov.uk
East Hampshire District Council	https://www.easthants.gov.uk
Havant Borough Council	www.havant.gov.uk/nitrogen
South Downs National Park	www.southdowns.gov.uk
Portsmouth City Council	www.portsmouth.gov.uk/ext/development-and-planning/planning-policy/nitrate-mitigation-strategy
Gosport Borough Council	www.gosport.gov.uk
Fareham Borough Council	www.fareham.gov.uk/planning/nitratepositionstatement.aspx
Winchester City Council	www.winchester.gov.uk/planning/wcc-position-statement-on-nitrate-neutral-development
Southampton City Council	www.southampton.gov.uk
Test Valley Borough Council	https://www.testvalley.gov.uk/planning-and-building/guidance/solent-southampton-water-special-protection-area
Basingstoke and Deane District Council	www.basingstoke.gov.uk
New Forest District Council	http://newforest.gov.uk/nutrientneutrality_nitrates
New Forest National Park	www.newforestnpa.gov.uk
Wiltshire County Council	www.wiltshire.gov.uk
West Berkshire	www.westberks.gov.uk
Isle of Wight Council	www.iow.gov.uk
<i>Other Contacts</i>	
Hampshire & Isle of Wight Wildlife Trust	www.hiwwt.org.uk/news/route-nitrate-neutrality-solent
Natural England	https://www.gov.uk/government/organisations/natural-england
Environment Agency	https://www.gov.uk/government/organisations/environment-agency
Southern Water	https://www.southernwater.co.uk/