Nutrients from wastewater

This sheet contains two tables. The tables are seperated by a heading in the 'Headings 2' style, which describes the following table. The first table 'Table_3_Water_Infrastructure' may contain blank cells in rows 11 to 12 and column C. User inputs are required for cells B5 to B10. In addition, user inputs are required in C11 depending on the information entered by the user. The second table 'Table_4_Wastewater_Load' may contain blank cells in rows 20 to 23. No user inputs are required in this table.

You can enter the average occupancy rate of the development in cell B6. The default rate is 2.4, this should not be edited without sufficient evidence.

You can enter the water usage in cell B7. This value should be kept at 120 unless other efficiency measures are used.

You can enter the total number of dwellings/units that will be within the development site as of the project completion date in cell B8.

You can choose whether the catchment of the proposed development can apply deductible acceptable loading from the drop-down list in cell B9.

You can choose the receiving WwTW from the drop-down list in cell B10. The drop-down lists can be accessed by clicking the arrow or pressing the 'Alt' + 'Down' keys when the cell is selected. If the user selects 'Package Treatment Plant user defined' or 'Septic Tank user defined', the user must enter their certified value of TN in cell C11. Otherwise the default values will be used in the calculation of the nutrient load associated with wastewater.

Nutrient permits may be changing for the WwTW selected by the user as of 01/01/2025, or 01/04/2030. If the date of first occupancy is in-between changing permit dates, multiple permit limits may be automatically

Water infrastructure information

Description of required information	Data entry column	Additional data entry column
Date of first occupancy (dd/mm/yyyy):	04/08/2025	
Average occupancy rate (people/dwelling or people/unit):	2.40	
Water usage (litres/person/day):	120	
Development Proposal (dwellings/units):	2	
Include deductible acceptable loading?	Yes	
Wastewater treatment works:	Package Treatment Plant user defined	
Current wastewater treatment works N permit (mg TN/litre):	**Please enter value in cell to the right:**	5.5

Final calculation of nutrient load from wastewater

Description of values generated	Values generated
Stage 1 Nutrient Loading	
Additional population (people):	**4.8**
Wastewater by development (litres/day):	**576**
Annual wastewater TN load (kg TN/yr):	**0.74**

Nutrients from current land use

This sheet contains two tables. The tables are seperated by a heading in the 'Headings 2' style, which describe the following table. The first table 'Table_5_Site_Information' requires user inputs in cells B5 to B8. The second table 'Table_6_Current_Land_Uses' requires user inputs in cells A11 to A27 and B11 to B27. The remaining columns are automatically calculated. The final Column (Column D) titled 'Notes on data' will remain empty unless the data automatically generated data has been extrapolated.

You can choose the Operational Catchment the site is located within from the drop-down list in cell B5. The drop-down lists can be accessed by clicking the arrow or pressing the 'Alt' + 'Down' keys when the cell is selected.

You can choose the soil drainage type associated with the predominant soil type within the development site from the drop-down list in cell B6.

You can choose the annual average rainfall the development will receive from the drop-down list in cell B7. If the rainfall volume is not on the list, please select the nearest value.

You can choose whether the development is in a Nitrate Vulnerable Zone (NVZ) from the drop-down list in cell B8.

You can choose the existing (pre-development) land use type(s) from the drop-down list in cells A11-A27. You can enter the area(s) (in hectares) of each land use type in cells B11-B27.

The nutrient load from current land uses is shown in cell C11-C27.

Current land use information

Description of required information	Data entry Column
Operational Catchment:	Isle of Wight Rivers
Soil drainage type:	Slightly impeded drainage
Annual average rainfall (mm):	900.1 - 950
Within Nitrate Vulnerable Zone (NVZ):	Yes

Current land uses

Existing land use type(s)	Area (ha)	Annual nitrogen nutrient export (kg TN/yr)	Notes on data
Commercial/industrial urban land	0.02	0.17	
Totals:	**0.0185**	**0.17**	

Nutrients from future land use

This sheet contains one table. The table 'Table_7_Future_Land_Uses' requires user inputs in cells A5 to A21 and B5 to B21. The remaining columns are automatically calculated.

You can choose the future (post-development) land use type(s) of landcover present on the new site from the drop-down list in cells A5-A21. The drop-down lists can be accessed by clicking the arrow or pressing the 'Alt' + 'Down' keys when the cell is selected.

You can enter the area(s) (in hectares) of each land use type in cells B5-B21.

The nutrient load from future land uses is shown in cell C5-C21.

The total nutrient load from future land uses is shown in cell C22.

Future land uses

New land use type(s)	Area (ha)	Annual nitrogen nutrient export (kg TN/yr)
Residential urban land	0.02	**0.32**
Totals:	**0.0185**	**0.32**

Final nutrient budgets

This worksheet contains one table 'Table_9_Final_Nutrient_Budgets'. This table is automatically populated using the outputs from the previous worksheets. It presents calculations that underpin the final annual nutrient budget for the development site. If applicable, up to three values for the nutrient budget may be presented in cells B10, B12, or B14. Some cells may be empty if there are no changing permits.

Total nutrient budget calculations

Description of values generated	Values generated
Wastewater TN load (kg TN/year):	**0.74**
Net land use TN change (kg TN/year):	**0.15**
TN budget:	**0.89**
TN budget + 20% buffer:	**1.07**
The total annual nitrogen load to mitigate is (kg TN/yr):	**1.07**