

Technical Note

Project:	Garages , Aston Close, Pewsey, SN9 5EQ	Date:	26 th November 2025
Subject:	Nutrient statement	Author:	Nicola French

1.0 Background

- 1.1. This Technical Note has been prepared to provide information to Wiltshire Council (WC) in support of an outline Planning Application for the demolition of a series of existing single storey garages to create a new 2 storey, 3-bedroom dwelling. The information is provided under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).
- 1.2. In January 2024, Defra issued a policy paper¹ notifying the designation of sensitive river catchments sensitive to nutrient pollution. This includes the River Avon Special Area of Conservation (SAC), identified as being in unfavourable condition on account of phosphorous pollution². The implication of this is that any local planning authority within the catchment of the Hampshire Avon cannot grant consent for new residential development unless it can be shown to be net phosphorous neutral. A phosphorous calculation is therefore required to ensure that WC has sufficient information to carry out an appropriate assessment to consider impacts of the application on the River Avon SAC, required to approve the outline planning application.
- 1.3. This note takes full account of all information provided by WC on the Council's dedicated nutrient neutrality website³ and draws on the calculator and guidance resources on the Government website *Tools and resources for calculating nutrient neutrality*⁴, most recently updated on 27th May 2025.

2.0 Nutrient neutrality calculations

- 2.1. **Box 1** on the following page sets out the parameters and assumptions used to assess the additional phosphorous loading that the new dwelling will generate.

¹ January 2024, DEFRA. The Designation of Sensitive Catchment Areas Notice 2024

² <https://www.gov.uk/government/publications/notice-of-designation-of-sensitive-catchment-areas-2024/notice-of-designation-of-sensitive-catchment-areas-2024>

³ <https://www.wiltshire.gov.uk/planning-bio-phosphorous-nitrogen-mitigation>

⁴ <https://www.gov.uk/government/collections/tools-and-resources-for-calculating-nutrient-neutrality>

Box 1: Assumptions relevant to the assessment of additional nutrient loading for x1 new residential unit on land occupied by garages at Aston Close, Pewsey

- **Residential occupancy for the new dwellings:** 2.4 occupants
- **Total wastewater produced by single person:** 120 litres per day. The applicant does not wish to progress using the smaller 85 litres per day water consumption rate offered as an option by Wiltshire Council.
- **Method of waste processing:** foul waste will be processed at Pewsey Waste Water Treatment Works (WWTW)
- **Total plot area:** The total area of the plot is 194m² (0.0194ha).
- **Land use:** the area of the red line comprises a series of existing garages within a residential area. It is best described **residential urban land**.
- **Proposed development:** The residential scheme, once developed, is classed as **residential urban land** (0.0194ha) and will not result in a change of land use.

2.2. The most recent Natural England Phosphorous Calculator for the River Avon has been used to calculate the nutrient load generated by the treated foul from the new residential unit.

Water infrastructure information	
Description of required information	Data entry column - user inputs required
Date of first occupancy (dd/mm/yyyy):	01/06/2027
Average occupancy rate (people/dwelling or people/unit):	2.40
Water usage (litres/person/day):	120
Development proposal (dwellings/units):	1
Wastewater treatment works:	Pewsey WwTW
Current wastewater treatment works P permit (mg TP/litre):	1.00
Not applicable	Not applicable
Post 2030 WwTW P permit (mg TP/litre):	0.25
Final calculation of nutrient load from wastewater	
Description of values generated	Values generated
Post-2030 wastewater nutrient Loading	
Additional population (people):	2.40
Wastewater by development (litres/day):	288.00
Annual wastewater TP load (kg TP/yr):	0.02
Pre-2030 wastewater nutrient loading	
Annual wastewater TP load (kg TP/yr):	0.09

2.3. The calculations show that the treatment of foul from the new residential unit will generate **0.09kg** of Total Phosphorous per year in the period up to 2030 prior to the upgrade of the Pewsey WWTW, and **0.02kg** TP per year thereafter. Note that the 20% buffer has not been applied at this stage. Rather it is

applied to the final calculation once the overall budget for the site is established.

- 2.4. The pre and post loadings derive from the requirements of the Levelling up and Regeneration Act 2023, which imposes a new duty on Wessex Water to ensure wastewater treatment works serving populations of 2,000 or more meet specified nutrient removal standards. Local planning authorities considering planning proposals for development are required to consider that the nutrient pollution standard will be met by the upgrade date for the purposes of their Habitats Regulations Assessments⁵. It is therefore reasonable to assume that the loading will reduce on upgrade of Pewsey WWTW in 2030.
- 2.5. To address the overall net nutrient budget for the scheme, it is important to also consider how rates of phosphorous leaching from the ground will change in response to a changed land use. Stages 2 & 3 of the calculation assess the Total phosphorous loading to the water environment that is currently taking place and compares this to the loading that will occur once the site has been developed. For this scheme, stages 2 & 3 cancel out because there is no change in land use. The total nutrient loading therefore derives from just the loading that will arise from treatment of foul from the new residential dwelling. For completeness, both stages are set out below, using the categorisations and land area set out in Box 1.

⁵ <https://www.gov.uk/guidance/nutrient-neutrality-update>

Current land use information		Data entry column - user inputs required	
Description of required information			
Operational catchment:			
Soil drainage type:			
Annual average rainfall (mm):			
Within nitrate vulnerable zone (NVZ):			
Current land uses			
Existing land use type(s) - user inputs required		Area (ha) - user inputs required	Annual phosphorus export (kg TP/yr)
Residential urban land		0.02	0.03
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Future land uses		
New land use type(s) - user inputs required	Area (ha) - user inputs required	Annual phosphorus export (kg TP/yr)
Residential urban land	0.02	0.03
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Totals:	0.02	0.03

- 2.6. Finally, the calculator generates a net phosphorous loading for the scheme to take account of both loading from treated foul and the change of use of the land for development. This is set out in Stage 4, below.

Total nutrient budget calculations	
Description of values generated	Values generated
Wastewater TP load (kg TP/year):	0.02
Net land use TP change (kg TP/year):	0.00
TP budget:	0.02
TP budget + 20% buffer:	0.02
Annual nutrient budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	0.02
Pre-2030 nutrient budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	0.11

- 2.7. The calculations show that construction of a new residential unit in place of the garaging at Aston Close will generate **0.11kg** of total phosphorous per year once built out and occupied pre 2030, dropping to **0.02kg** total phosphorous post 2030.
- 2.8. To ensure net nutrient neutrality, **mitigation is required** to address the additional phosphorous load that the new dwelling will generate.

3.0 Mitigation

- 3.1. A Council-led scheme to provide phosphorus credits is available for planned development. The credits can be purchased to offset the additional loading identified and demonstrate nutrient neutrality. Wiltshire Council must consider that development schemes are planned development to qualify for the scheme.
- 3.2. This scheme is planned development because it falls under Core Policy 2 as a proposal within a settlement boundary.
- 3.3. Guidance on the Wiltshire Council website states that consent can be granted through use of a Grampian condition on the Reserved Matters Approval. This will allow the application to be determined, with a payment due on commencement of the development. The charge covers the cost of delivery of the mitigation projects and is re-invested back into delivering further mitigation projects.

4.0 Conclusion & analysis

- 4.1. A nutrient budget calculated in line with the current Natural England guidance and calculator for a new residential dwelling on land currently occupied by garaging at Aston Close, Pewsey shows that the proposed scheme will generate increased loading of 0.11kg TP per year prior to 2030 dropping to 0.02kg TP per year post 2030.
- 4.2. To offset this additional loading, and in line with advice available from WC's website, consent can be granted with a Grampian condition precluding the start of development until mitigation has been secured from WC's own mitigation scheme, or other, alternative ratified scheme if it becomes available. With this condition in place, WC can conclude that the proposed residential property will not adversely affect the integrity of the River Avon SAC, either alone or in combination with other plans and projects.

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