

Phosphate Credit and Nutrient Neutrality FAQs

APRIL 2025

Version	Date	Approved by	Amendments
V 1.0	15/06/2022	Elizabeth Duberley - Service Manager Built and Natural Environment	n/a
V 2.0	17/03/2023	Fran Lancaster - Principal Natural Environment Officer	Removed questions on strategic wetland stages which have now been completed. Removed reference to VAT in credit price. Added questions 12, 13, 14, 15 and clarified the answer to question 22.
V 3.0	09/02/2024	Fran Lancaster - Principal Natural Environment Officer	Additional FAQs added to 'other' relating to the River Teme and Wye

V4.0	15/2/2024	Fran Lancaster - Principal Natural Environment Officer	To update the answer to question 13 re: holiday let occupancy figures following discussions with Natural England.
V5.0	26/07/2024	Fran Lancaster - Principal Natural Environment Officer and Liz Duberley, Phosphate Mitigation Lead	Questions re-numbered. Updated questions on payments and allocations and added questions relating to mitigation and impact points.
V6.0	20/11/2024	Nickie Frost – Graduate Ecologist, and Liz Duberley – Phosphate Mitigation Lead	Additional FAQs added to 'other' relating to B&B Occupancy Rates
V7.0	04/04/2025	Nickie Frost – Graduate Ecologist, and Liz Duberley – Phosphate Mitigation Lead	Additional FAQs added to 'other' relating to Phosphate credits within Bartestree, Lugwardine and Withington, and low phosphate package treatment plants.

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Phosphate credit and Nutrient Neutrality FAQs

FAQs will be updated as queries are received. If you are unable to find the information you require on our website, supportive packs, guidance, or FAQs then you may email your query to phosphates@herefordshire.gov.uk.

Please be aware we are unable to answer queries individually.

Planning

1 Who should I expect to call about progressing credits?

Planning officers will contact applicants as and when credits become available to mitigate the nutrient budget of their development proposal and will explain the next stage of the process.

2 Will the S106 for the wetlands scheme contain commencement deadlines different to those of the normal statutory timetables?

No – the normal statutory timescales will apply.

3 What credit scheme will apply to Permitted Development and agricultural change of use applications known as Class Qs? Is there to be a General Development Orders (Regulation 77 within the Habitats Regulations) credit allocation system?

Yes. Applications will need to be made and the allocation of credits will be made on the basis of the credit allocation policy in place at the time.

4 Can payments be conditioned until closer to the time of scheme implementation? If an applicant turns down the first offer of credits will that mean they can't get credits later?

As of 1st August 2024 the council is offering credits on the basis of a 10% non-refundable deposit at the point of signing the S106 agreement and permission being granted with the remaining balance being due prior to the commencement of development. Further information on this change can be found in the Record of Officer Decision dated July 2024 published on the website.

Ecology

5 Why has the average occupancy and water usage on the Natural England calculator in Stage one increased in comparison to the Herefordshire Council calculator?

As set out in Natural England's Ricardo guidance, the default setting for residential dwellings is the national occupancy rate of 2.4 people per dwelling and the average daily water use per person is determined in accordance with water efficiency standards. However, as the Local Planning Authority Herefordshire Council is able to set the appropriate occupancy rate and water use for our authority area, which is 2.3 people per dwelling, and water usage as 110 litres/person/day.

6 Who will check my calculation? What happens if there are areas of disagreement/interpretation?

An officer within the planning service will assess the calculations provided accuracy and to ensure against fraud. Clarification will be sought from applicants in the event that queries arise from that assessment. It is expected that applicants will follow the guidance associated with the calculation tool and provide robust, evidence based justification where the methodology deviates from the standards.

7 Why has the council chosen to go with the Natural England calculator?

Natural England has provided Herefordshire Council with the current version of the phosphate calculator this includes recently updated Farmscoper modelling and a tab for addressing surface water drainage proposals, which may result in minor changes to outcomes.

8 Why does the calculator not recognise the small amount of Phosphate coming from housing compared to other sectors and the existing housing stock?

The Habitats Directive requires this approach to nutrients where they have the potential to cause harm to the ecology of higher level designated sites. The calculator is developed to assess the nutrient budget of new housing, as a consequence of the Dutch judgement, all development must demonstrate nutrient neutrality.

9 Will the first three wetlands reduce enough Phosphate to meet the NMB target?

Natural England have set targets for restoring river quality. The Integrated Wetlands are funded to support economic growth and create development headroom. Restoration of the river is the responsibility of the present causers of poor water quality, however the council has committed to giving over a small percentage of phosphate reduction to river betterment

10 Why aren't other types of development required to show neutrality?

All development within the Lugg catchment is required to demonstrate nutrient neutrality, the council are currently working with consultants to develop a methodology for agricultural development to assess its nutrient budget.

11 If you are purchasing a large number of credits, is there scope to include some sort of metric for the biodiversity net gain?

Credits cannot count towards Biodiversity Net Gain (BNG) as they cannot be double counted. BNG in the first instance should be delivered on site wherever possible.

12 Can package treatment plants which use chemical dosing be used in the Lugg Catchment?

Yes, you can choose 'package treatment plant user defined' in the Stage 1 Tab in the calculator and enter the phosphate level in the output from the PTP in the next cell.

The chemicals used in phosphate stripping in package treatment plants have the potential to impact upon the aquatic environment particularly where those plants are not managed correctly or are inappropriate sited. The council is working with Natural England to establish the advice relating to chemical dosing in the Lugg catchment but it is already clear that the most toxic chemicals, including aluminium salts, should generally be avoided. Additionally management and maintenance will need to be carried out by an experienced, professional company and this professional management secured for the lifetime of the development. This is in order to ensure that potentially toxic dosing chemicals are carefully controlled, used by experienced personnel and that under or over dosing does not occur.

There are additional costs associated with dosing units and with the requirement for them to be professionally managed and maintained and developers should ensure that the development can bear those costs before proceeding.

The Council will expect developers to provide: technical specifications for any dosing units proposed as part of budget calculations, the certificate associated with the proposed package treatment plant which shows the total phosphate in the treated effluent, details of the mix of chemicals proposed for use in dosing on the site and agreement that the package treatment plant will be managed and maintained by a British Water Accredited Service Technician, or other suitably qualified professional. Management and maintenance will need to be secured in perpetuity by an appropriate mechanism linked to the planning application. This information is required as part of the Habitats Regulations Assessment process and in order to ensure certainty around the impacts of the scheme.

13 How is occupancy rate for self-catering holiday let accommodation set in Herefordshire for use in budget calculations?

The council will expect holiday let accommodation to assume 2.3 person occupancy (to match local evidence on dwelling occupancy) and to assume that the let will be occupied 80% of the time in most circumstances. The calculation should use 120l of water use per person per day.

Where a single very large holiday let is proposed (4 plus double bedrooms for large groups) the council will require a bespoke occupancy level to be determined.

For shepherds huts (or similar) it may be appropriate to reduce the occupancy down to 2 people per unit.

Generally 80% occupancy should be assumed. Only where use can genuinely be said to be seasonal, e.g. shepherds huts or glamping which are not suitable for winter use, may a reduced occupancy period be used to reflect the 'closed' season (60% occupancy would then be assumed). This will be secured by planning condition.

14 In the Council's Package Treatment Plants and Small Scale Impacts in the Lugg and Clun Catchment Herefordshire Council - Interim Guidance (January 2023) Herefordshire Council provided local clarification around Natural England's criteria for small scale impacts which have now been withdrawn. Why?

The council continues to work with Natural England on developing its guidance and approach. In this instance the council undertook to address some additional elements of impact in respect of the high soil phosphate legacy which occurs specifically in Herefordshire, Natural England have since shared further evidence associated with the small scale impact criteria and have assured the Council that the criteria are already sufficiently precautionary for interactions between phosphates from drainage features and phosphates in the agricultural fields in which those features might be located to have been taken into account.

15 The NE budget calculator uses an urban runoff coefficient which assumes that 80% of the site will be hard standing. Can this figure be amended if it does not accurately represent the site?

Yes. The Natural England Nutrient Neutrality Generic Methodology (February 2022) covers the urban runoff coefficient in Appendix 2 and provides a methodology for amending those coefficients. Applicants may wish to seek advice from an experienced professional if seeking to amend the urban runoff coefficient since the remainder of the calculation then has to be done outside the standard budget calculation spreadsheet. It should be noted that the calculation can only be amended where there is some detail of layout included in the application and that the minimum percentage of hard standing which the model can accept is 30%, so sites resulting in less than 30% hard standing must use that 30% figure.

16 Why can't all developments rely on any council wetland?

In line with the Natural England methodology a development must not impact a SAC river upstream of the point where mitigation impacts occur. This is to ensure that the SAC river does not further decline in quality as a result of development.

Credits from the Luston Wetland, which is high up in the catchment, can be applied to development anywhere within the Lugg catchment and can effectively mitigate development impacting upon the whole of the nutrient neutral section of the River Wye SAC. A map showing the Luston Wetland Mitigation Area Map can be found on the council's website.

This is because the Luston Wetland is upstream of the start of the River Wye SAC designation. The mitigation achieved at Luston therefore enters the River Wye SAC at the point of designation and so can mitigate development impacts downstream.

Credits from the Tarrington Wetland can only be applied to the Frome sub-catchment. Mitigation delivered by the Tarrington Wetland enters the River Wye SAC at the confluence between the River Wye and the River Frome and it cannot be applied to development upstream of this point. A map showing the Tarrington Wetland Mitigation Area Map can be found on the council's website.

This is because there is a section of the River Wye SAC in which no phosphate reduction occurs as a result of the wetland at Tarrington. This applies to the section of the River Wye SAC upstream of the confluence with the River Frome. Development which occurs upstream of the confluence would, therefore, cause an impact upon the SAC which is not mitigated.

Credits from the Tarrington wetland can only be applied to developments in certain subcatchments of the nutrient neutral area:

- The Upper Frome
- The New Barns Brook
- The Middle Frome
- The Lower Frome
- The Loden
- A small part of the Lower Lugg sub-catchment

A map of the nutrient neutral catchment showing the sub-catchments can be found on the Council's website.

17 Does this restriction around development impact points and mitigation impact points apply to other forms for phosphate mitigation?

Yes. All mitigation must apply at the point at which the development impacts upon the nutrient neutral section of the River Wye SAC or upstream of the development impact point. This ensures that development does not negatively impact sections, however small, of the river before mitigation is applied.

This approach applies to the council's wetland credits, credits from private phosphate banks, betterments achieved by upgrading legal septic tanks and older packaged treatment plants and bespoke land use change proposals.

This has always formed part of Natural England's methodology for calculating nutrient budgets but has become more relevant as a wider variety of mitigation options are being developed in Herefordshire.

Other

18 When will more credits become available?

Credits are now available. Planning officers will contact applicants in tranches when they are eligible to apply. In the meantime applicants can check the website for guidance and updates.

19 Who is the supplier of credits? Are there multiple suppliers?

Under this scheme Herefordshire Council will be the sole provider of credits. However, planning applicants can develop their own mitigation to offset the phosphate load of their development proposal. Further information can be found on the Council's website at Nutrient management - guidance for developers - Herefordshire Council

20 Which type of developments can apply for credits in Herefordshire Council's wetland scheme?

Under this scheme only housing developments have access to credits. However other types of development proposals are still able to provide their own mitigation to demonstrate nutrient neutrality.

21 How have the wetlands been funded? How will the grants from the New Homes Bonus and LEP be used?

The grants have been invested to develop the wetlands schemes and funds recouped through credits will be reinvested into the development of further wetlands schemes across the county.

22 What are the costs of credits? Will there be changes to costs in the future?

The price of a credit includes the whole life cost of design, build and maintenance for at least 80 years. Prices for new credits will be reviewed every year to ensure the whole life cost is recovered and the council does not make a profit. Currently credits are priced at £14,000 per kilogram.

23 How are credits allocated?

As of 1st August 2024 credits are allocated in validation date order in two streams: (1) applications requiring credits from the Luston wetland and (2) applications utilising credits

from the Tarrington wetland. This to ensure that best use is made of the Tarrington credits and that they are applied to qualifying developments.

See question 16 above.

24 On sites that already have PTPs how will credits be allocated? Can a new PTP unit be installed?

Where a PTP is in existence already, there is the opportunity to replace this with a more environmentally sound model which will reduce the phosphate load that will be required to be mitigated.

It should be noted that the assumed baseline will always be a legally compliant system. For sites using septic tanks the legal baseline includes a septic tank discharging to ground (and not a septic tank discharging directly to watercourse as per the General Binding Rules which set a deadline of 1 January 2020 for upgrade works to be completed). Older waste water treatment systems which require upgrading in order to meet current regulations (i.e. which are not currently legally compliant) cannot be used to achieve betterment.

25 Why were wetlands chosen as a form of mitigation by Hereford Council? Were any other schemes considered?

All options were considered by our consultants as part of stage 2 of our Interim Phosphate Delivery Plan which is published on our website. They confirmed that integrated wetlands were the most efficient way of taking phosphate out of the river. This has been independently verified by a number of experts. However this does not preclude developers from considering other options for mitigation for the phosphate budget of their development.

26 Do we have enough credits to meet the requirement of Core Strategy or emerging local plan?

The estimated mid-yield of our first 3 wetlands sites including Luston is 348 kg, with the expectation that more will be released in time.

27 How long until credits can be used to release approvals? Can approvals be granted ASAP on the basis that occupation will be 12-24 months away?

Credits are now available from the wetlands at Luston and Tarrington. The Luston Wetland is operational and no occupation restriction is required for developments relying upon these credits. The Tarrington Wetland is secure and can be relied upon for Habitats Regulations Assessment, a condition will be attached to permissions relying on Tarrington Credits stating that dwellings may not be occupied until 1st June 2026 to align with the date Tarrington wetland is operational.

28 What is the scale of each of the schemes identified as coming forward? How many credits will be available?

Wetlands are scaled according to the size of the waste water treatment works (WWTW) and the level of phosphate the effluent contains, that come from the works and can be taken up by the wetlands, therefore the number of credits available will vary from site to site.

29 Why is mitigation needed?

To deliver nutrient neutral development, see Natural England's letter dated July 2019.

30 Is mitigation a way to solve the nutrient issues in Herefordshire? How are they related to the Nutrient Management Plan?

Mitigation is a means of facilitating economic growth, The council has committed to giving 20% phosphate uptake from the strategic mitigation towards river betterment, The long term solution is a strategic one developed through the nutrient management plan which tackles all sources of nutrients.

31 Why are private mitigation projects not being sought and supported?

Herefordshire council welcomes applicants seeking to engage in the pre-application process to discuss how developers can mitigate their Phosphate load. Guidance on progressing private schemes is available on our website (Nutrient management - guidance for developers - Herefordshire Council) and the council is developing a multiagency advisory service to support with the development of individual projects.

32 Are credits a form of fine for the housing industry?

Credits are a form of mitigation to facilitate economic growth in the county, the credits enable developers to mitigate their phosphate load and receive a positive Habitat Regulations Assessment.

33 Why is the Council asking for information relating to drainage (foul and surface flows) in the River Teme catchment?

The Council has been advised by Natural England that the River Teme SSSI is in failing condition. The SSSI has 6 units Natural England's latest condition assessment shows one unit as Unfavourable – Declining and the other five units as Unfavourable – No Change¹. Natural England have listed 'siltation', 'freshwater pollution' and 'discharge' as adverse condition reasons across the SSSI units. Natural England's Impact Risk Zones for the River Teme SSSI (via Magic Maps) include discharges to ground and to surface water up to 3km from the SSSI. Natural England, in their responses to a number of recent developments in the River Teme SSSI have been clear that discharges of foul and

¹ Natural England SSSI Unit Condition Assessment for the River Teme SSSI at <u>Site feature condition</u> (naturalengland.org.uk)

surface water associated with new development must not contribute to further declines in condition within the SSSI or make the restoration of the SSSI more difficult or less achievable.

On this basis the Council is seeking to understand the impact of development within the River Teme catchment upon the SSSI. This relates to both impacts of surface water flows which can carry silt, sediment, fuels and oils into the SSSI and to foul flows which contribute nutrients to the SSSI. To understand these impacts the Council must ask for information which might previously have conditioned (such as details of surface water systems and information about packaged treatment plants and drainage fields/direct discharges to local watercourses).

The Council will seek to ensure that best available technology and best environmental options are applied to applications which have the potential to impact upon the River Teme SSSI. This might include asking developers to consider installing packaged treatment plants of a biological nature which achieve lower levels of phosphate in the effluent, asking whether secondary treatment of effluent could be achieved on site where a direct discharge is proposed (i.e. can a reedbed, absorptive media or other technology be utilised) and seeking silt traps and other technology to treat surface water being discharged to watercourses.

If these measures are not feasible or viable developers will be asked to explain why they have been ruled out.

In taking this approach the Council is not requiring development to achieve nutrient neutrality but is seeking high quality developments which minimise impacts upon designated sites as far as reasonably practical. The Council considers that, through this process, Natural England are more likely to be supportive of individual schemes when they are formally consulted.

34 Is Nutrient Neutrality being applied by the Council in the River Teme catchment?

No. Nutrient Neutrality does not apply in the River Teme SSSI catchment. The Council is seeking high quality applications where best available technology and best environmental solutions have been applied in order to ensure that impacts upon the SSSI are kept to a minimum. This approach responds to the SSSI condition assessment, the Impact Risk Zones for the SSSI and advice which Natural England have provided to the Council relating to specific developments in the catchment.

35 Why is the Council seeking information from applications to support Habitats Regulations Assessments for the River Clun SAC when development in Herefordshire is downstream of this SAC?

Natural England has advised the Council that some elements of development in the River Teme SSSI catchment which is downstream of, but hydrologically connected to, the River Clun SAC have the potential to impact upon the integrity of the SAC. These impacts relate to elements of development (both construction and operational) which have the potential to impact upon fish species which are integral to the life cycle of the freshwater pearl mussel for which the SAC is designated.

The Council will seek appropriate levels of information relating to silt, sediment, pollution and nutrient impacts to support the Habitats Regulations Assessment process even where development is downstream of (but hydrologically connected to) the River Clun SAC.

36 Why has the Council started seeking drainage information (relating to foul and surface flows) in the Middle and Lower Wye catchments?

In 2023 Natural England reassessed the status of the River Wye SSSI² to Unfavourable Declining³ and amended the Impact Risk Zones for the River Wye SSSI on Magic Maps to include any discharges of water or liquid waste including to mains sewer. The result of this change is that areas of the Middle and Lower Wye catchments where the Council previously was not carrying out Habitats Regulations Assessment now require this assessment and a formal consultation with Natural England.

On this basis the Council is seeking to understand the impacts of developments within the Middle and Lower Wye catchments. This relates to both impacts of surface water flows which can carry silt, sediment, fuels and oils into the river and to foul flows which contribute nutrients. To understand these impacts the Council must ask for information which might previously have been conditioned (such as details of surface water systems and information about packaged treatment plants and drainage fields/direct discharges to local watercourses).

The Council will seek, in the Middle and Lower Wye, to ensure that best available technology and best environmental practice is applied to applications to minimise impact upon the River Wye SSSI and SAC. This might include asking developers to consider installing packaged treatment plants which achieve low levels of phosphate in the effluent (with the preference being for biological systems especially for smaller developments), asking in certain locations whether secondary treatment of effluent could be achieved on site where a direct discharge is proposed (i.e. can a reedbed, absorptive media or other technology be utilised) and seeking silt traps and other technology to treat surface water being discharged to watercourses.

If these measures are not feasible or viable developers will be asked to explain why they have been ruled out.

The requirements depend upon the scale of the development, whether waste water can infiltrate to ground or must be discharged to local watercourses, and where the development sits within the catchment.

The following information will be sought (and the Council welcomes this information being included within applications at the outset):

A detailed foul and surface water management strategy

² Natural England Blog at <u>Assessing the health of the River Wye and its catchment - Natural England (blog.gov.uk)</u>

³ Natural England SSSI Condition Assessment for River Wye SSSI at <u>Site feature condition</u> (naturalengland.org.uk)

- Soil testing to support proposed use of soakways and drainage fields or to demonstrate why these options are not feasible
- Details of any on site waste water treatment including make and model of the proposed PTP. The phosphate certificate from the manufacturer should also be provided along with details of any chemical dosing proposed
- Sizing and location of drainage fields and soakaways
- Location and design of any direct discharges to watercourses

Additional information may be sought especially where direct discharges into, or in close proximity to the SSSI/SAC are proposed.

In taking this approach the Council is not requiring development to achieve nutrient neutrality but is seeking high quality developments utilising environmental best practice to minimise impacts upon designated sites as far as reasonably practical. The River Wye is in unfavourable declining condition and avoiding a further decline into failing status is a priority.

Seeking this information allows the Council to complete the Habitats Regulations Assessment of these developments which Natural England have advised is necessary.

37 Is the Council applying Nutrient Neutrality in the middle and lower Wye catchments?

No. Nutrient Neutrality does not apply in the Lower and Middle Wye catchments. The Council is seeking high quality applications where best available technology and best environmental practice has been applied in order to ensure that impacts upon the River Wye SSSI are kept to a minimum and in the hope that a decline to failing status can be avoided. This approach follows advice provided to the Council by Natural England.

38 How is the occupancy rate for B&B accommodation set in Herefordshire for use in budget calculations?

The council will expect B&B accommodation to assume 2 person per room occupancy (a reduction in the dwelling occupancy of 2.3 person per unit) and to assume the let will be occupied 80% of the time in most circumstances. The calculation should use 110l of water per person per day.

If evidence is provided by the applicant relating to either single or family rooms, the council will require a bespoke occupancy level to be determined.

Generally, 80% occupancy should be assumed. Only where use can be said to be seasonal, e.g. shepherds' huts or glamping which are not suitable for winter use, may a reduced occupancy period be used to reflect 'closed' season (60% occupancy would then be assumed). This will be secured by planning condition.

39 Why can we not use Phosphate credits to mitigate housing development within Bartestree, Lugwardine and Withington?

A new housing development on a green field site has the potential to increase both surface water and wastewater. While surface water can be managed with sustainable drainage systems, the additional volume of wastewater could lead to more overflows from the combined sewer system (CSO's), this would result in untreated effluent entering the River Lugg SSSI, SAC. Because the volume, concentration, and duration of any overflow incidents are not recorded, we cannot accurately determine the amount of phosphate that needs to be reduced to protect the river and meet Habitat Regulations.

40 Can you advise on Low Phosphate Package Treatment Plants (PTP) that apply best environmental technology?

The choice of system will depend upon the nature and volume of the flows being managed by the PTP.

There are a number of new systems now available on the market including:

- Marsh Ensign + Phoslite tertiary treatment (0.2mg/litre)
- WTE Sabre (0.4mg/litre)
- Haba Bio Easy Flow (0.8mg/litre)

There may also be other systems available that can achieve a test certificated low phosphate level at outfall (under 1mg/litre) through use of non chemical methodology.

The Phoslite system is installed as a separate unit between the standard Marsh PTP discharge and final outfall to drainage field (the preferred option) or watercourse.

The inert pellets used in the Phoslite unit to absorb phosphates do have a finite life and will need to be replaced as part of the routine management of the PTP system. The pellets will need to be disposed of by a licensed waste contractor and it is recommended that this disposal is undertaken using the same contractor that manages the desludging of the PTP.

This additional ongoing management requirement will be secured for the lifetime of the development the system supports through any planning permission granted via condition.