

ADVICE TO CARMARTHENSHIRE COUNTY COUNCIL

River Twyi SAC – application of nutrient neutrality in a headroom catchment

STATUS – FINAL VERSION

**BY
DTA ECOLOGY**



Rectory Farm
Finchampstead
Wokingham
Berkshire
RG40 4JY

Tel 0118 973 4700
caroline@dt-a.co.uk
📞 Website: www.dt-a.co.uk

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1 Introduction

1.1 Brief

- 1.1.1 This report is submitted by [DTA Ecology Ltd](#) to Carmarthenshire Council in response to a request for advice on the interpretation and application of the Habitats Regulations in the light of advice from Natural Resources Wales on phosphates in rivers, and the concept of nutrient neutrality.
- 1.1.2 This advice relates to all Riverine SACs whose catchments extend into Carmarthenshire namely, the Afon Teifi, Afon Tywi, River Wye and Afon Cleddau. As a Local Planning Authority (LPA), the Council is required to have regard to the advice given by NRW when making planning decisions (for both individual developments and Local Development Plans (LDP)). However, the Council feels that NRW guidance is sufficiently unclear regarding headroom catchments so as to introduce uncertainty. As an Authority, the Council have been guided since the publication of the guidelines to apply nutrient neutrality to the Tywi, and have done so, but this SAC is not currently a failing catchment. Recent Inspector findings suggest appeals against a neutrality based approach in this catchment may be received favourably.
- 1.1.3 As series of questions have been provided to DTA Ecology which are summarised in table 1 below.

Table 1: Questions posed to DTA Ecology

Application of neutrality in headroom/non-failing SAC catchments

Question 1: Does the Habitats Regulations and legal framework in Wales require that the principle of nutrient neutrality be applied to all SAC sites regardless of condition status, or that the principle of nutrient neutrality is applied *only* to SAC sites that are in unfavourable condition due to excess nutrients?

Question 2: In the event that nutrient neutrality should only be applied to failing/close to failing SACS; what decision rationale should be used for determining the point of application of nutrient neutrality to near-to failing SAC's.

Question 3: In a scenario where a previously unfavourable condition status SAC river has been returned to favourable condition, at what point (if at all) may the requirement to apply nutrient neutrality be rescinded?

Site-specific thresholds for insignificant effects

Question 4: Is it possible by taking into account the site/catchment specifics to set a 'de minimis' value which would avoid the need for further assessment either alone or in-combination with other plans and projects?

Question 5: What evidence and prior assessment may be necessary to form the basis of any such approach?

Application of nutrient neutrality to the river Tywi SAC catchment

Question 6: The compliance report for the Tywi can be found [here](#) (p40) You will note the large geographical spread of the river, and that NRW data has been taken from two points. Please outline if you consider that the evidence provided is sufficient to meet the compliance requirements of the HRA.

Question 7: Taking full consideration of your response to the questions above, is the application of nutrient neutrality principle to the Tywi SAC necessary to meet the requirements of the Habitats Regulations?

1.2 What is nutrient neutrality?

- 1.2.1 The phrase ‘nutrient neutrality’ was first widely adopted by Natural England. A summary guide produced by Natural England explains that a proposal can be considered ‘nutrient neutral’ where it can demonstrate that it will cause no overall increase in nutrient pollution affecting specified Habitats sites. Options to demonstrate nutrient neutrality are broad and can vary from individual project specific agreements with local land owners (to change agricultural land usage) to centrally co-ordinated strategic approaches to deliver larger scale constructed wetlands.
- 1.2.2 It is important to recognise that, in England, nutrient neutrality has been developed as a stop-gap to prevent a block on development pending a more strategic approach for site restoration that takes into account all the main sources of nutrient pollution (along the lines of the Diffuse Water Pollution Plans being developed by Natural England). It is also relevant to recognise that, in England, the concept came about initially because the competent authorities were reluctant to undertake a full HRA of the implications for site integrity associated with use of headroom capacity. A nutrient neutrality approach was therefore perceived as favourable on the basis that it is an avoidance measure which avoids any effect and hence also avoids the need to have to make a formal assessment under the Habitats Regulations.
- 1.2.3 There are three key points of note regarding how nutrient neutrality approaches are applied in practice. The points below are taken as inherent within a ‘nutrient neutrality’ approach and the advice provided herein needs to be read and interpreted accordingly:
- A nutrient neutrality approach is applied in a blanket manner to all development within an affected catchment.
 - A nutrient neutrality approach assumes that measures to remove nutrients will be identified and delivered by developers or local planning authorities.
 - Unless a specific local agreement is reached, nutrient neutrality approaches do not allow for a threshold based approach whereby ‘de minimis’ or very small nutrient contributions might avoid the need for further assessment.
- 1.2.4 **Whilst finalising this advice, DTA Ecology became aware of a Defra ministerial statement which was published on the 20th July. This statement applies to England only so is not relevant to Wales but it is relevant to note that it represents a potential shift away from the approach outlined above. England will introduce new statutory duties on water companies to upgrade wastewater treatment plans to the highest technically achievable limits by 2030 in nutrient neutrality affected areas. The Government in England have indicated that they want these improvements to be factored in for the purpose of Habitats Regulations Assessment. Furthermore, a ministerial direction will be issued to support Natural England in establishing a Nutrient Mitigation Scheme. This will enable developers to purchase ‘nutrient credits’ which will discharge the requirements to provide mitigation. Further details will become available in due course so it is not possible to go beyond noting the headline messages.**

2 DTA observations on NRW guidance generally

2.1 NRW guidance overview

- 2.1.1 It is necessary to recognise that the NRW advice is produced by NRW in their advisory role as the appropriate nature conservation body (rather than their role as a regulator/competent authority). The advice is provided to local planning authorities to inform their interpretation and application of the Habitats Regulations and the Council, as a competent authority, must 'have regard' to the advice which has been provided. As the competent authority the Council is free to depart from the advice of NRW but case law has established that, should they choose to do this, they must have 'cogent and compelling' reasons for doing so. As a consequence whilst the final decision rests with the Council the NRW advice carries significant weight.
- 2.1.2 Generally speaking the main emphasis of the NRW advice is to alert planning authorities to the implications of recent case law decisions which have consequences for the determination of plans and projects with the potential to affect a site which currently exceeds a given environmental standard. The case law decisions referred to, the Dutch Nitrogen Ruling¹ and Compton v Guildford Borough Council² both related to exceedance of air quality standards but the principles would equally apply to water quality standards.
- 2.1.3 It is the understanding of DTA Ecology that the Dutch Nitrogen Ruling established that, when a site exceeds a given nutrient standard, the capacity for further growth which contributes additional nutrients is 'necessarily limited'. Having said that, the Ruling went on to clarify that there is nothing within the Habitats Directive which precludes the use of thresholds to exempt certain proposals from further assessment (irrespective of whether a standard is already exceeded) so long as a prior assessment can demonstrate that the effect of those projects which might be so exempted (i.e. their combined effect) would not represent an adverse effect to site integrity.
- 2.1.4 The Compton case is relevant as it emphasised that, when addressing nutrient exceedances and the implications for the concept of site integrity *'that could not be answered, one way or another, by simply considering whether there were exceedances [of nutrient standards]. What was required was an assessment of the significance of the exceedance for the [qualifying features concerned]'*.
- 2.1.5 With reference to these Court cases NRW have provided advice for planning authorities on how to approach HRA for development which contributes additional phosphorus to riverine SACs, particularly those which currently exceed their targets. The advice covers various scenarios and, in most case applies well-established HRA principles.
- 2.1.6 The scenarios in respect of proposals connecting to public wastewater treatment works and Local Development Plans which rely on such works warrant closer scrutiny. NRW will be undertaking a review of existing permits (with a discharge of >20m3/day) against revised phosphorus targets. Where a permit has already been subject to this review, and any variations triggered by that review have been implemented, NRW advise that HRA will still be required and the scope of the assessment may need to be wider than the permit review. However they continue to emphasise that if there is capacity to accommodate additional wastewater flows it is likely that the Council will be able to conclude no adverse effect to site

¹ Joined cases C-293/17 and C-294/17 [The Dutch Nitrogen Ruling](#)

² [Compton v Guildford Borough Council](#) [2019] EWHC 3242 (Admin)

integrity by relying on the review findings. Where identified variations are yet to be delivered the Council can rely on the review findings if the improvements are considered to be 'certain'. Where a permit for a wastewater treatment works has not been reviewed against the revised phosphorus targets, NRW advise that the findings of the extant Appropriate Assessment for the permit should not be relied upon to conclude no adverse effect on site integrity. Instead, a Planning Authority should consider whether they need to carry out their own Appropriate Assessment of new connections to a public sewer taking into consideration the revised phosphorus targets for the river SAC and extant permit conditions.

- 2.1.7 Similar guidance is provided in respect of allocations within Development Plans where there is capacity for additional wastewater. **The underlying approach is therefore that where development relies upon an existing permit issued by NRW a local planning authority is advised to undertake an independent HRA in order to satisfy themselves as to the absence of an adverse effect to site integrity from the use of permitted capacity. Where a permit has been reviewed, and variations triggered by that review are implemented, or considered to be certain, it is likely that the Council will be able to conclude no adverse effect to site integrity by relying on the review findings.**

2.2 Implications of regulation 67

- 2.2.1 Where development relies upon an existing permitted treatment works, whilst it is reasonable for NRW in their role as nature conservation body to identify concerns over the use of permitted headroom capacity, their advice raise a wider question over whether the Council is the proper authority to apply the HRA tests to a permitted wastewater treatment works and available consented capacity?
- 2.2.2 In this regard DTA Ecology would advise the Council to consider the implications of Regulation 67 which applies where a plan or project 'requires' the consent of more than one competent authority. Regulation 67(2) states that *'Nothing in regulation 63(1) requires a competent authority to assess any implications of a plan or project which would more appropriately be assessed under that provision by another competent authority'*. Whilst there is some scope for interpretation as to when precisely regulation 67 applies, as a matter of law, the underlying intention of the provision is clear.
- 2.2.3 By way of context, the original assessments for the extant environmental permits were undertaken by NRW (then EA Wales), as part of the Review of Consents work under regulation 65. NRW (then Countryside Council for Wales) were statutory consultees. As such, both NRW as a regulator and NRW as a conservation advise are aware that i) the conclusions of earlier HRA work would generally not have taken account of the updated JNCC targets for the waterbodies and ii) that the earlier assessments pre-date the recent case law (the "Dutch" and the "Compton" cases), which NRW have advised need to be considered in the advice.
- 2.2.4 Given the clear position of regulation 67(2) it would seem reasonable to argue that, new development proposals within a mains sewer area 'require' connection to a permitted wastewater treatment works. As such, in completing an assessment under regulation 63, the Council cannot be expected to assess the implications of development on wastewater treatment work flows where it can be demonstrated that this would 'more appropriately' be assessed under that provision by NRW (as the competent authority responsible for the permit). It is certainly reasonable to anticipate that NRW should be able to advise the

Council in this regard rather than expect the Council to undertake their own independent assessment.

- 2.2.5 Perhaps in recognition that differences in opinion may arise between competent authorities in this regard, regulation 67(3) provides for the Welsh Government to issue guidance as to the circumstances in which a competent authority should adopt the reasoning or conclusions or another. Competent authorities are required to have regard to any such advice under regulation 67(4).
- 2.2.6 With reference to regulation 67 it is advised that the Council seek further clarification from NRW (and perhaps the Welsh Government) regarding the extent of their duties as a competent authority where a project is dependent upon (i.e. requires) a permit which is issued by another competent authority.
- 2.2.7 In this regard the Council may also wish to seek clarification from NRW over their proposed permit review programme. Is there a timetable for the consent review and, following that, for achieving the revised P targets? Is there a need for interim advice where that review has not yet been undertaken?

2.3 Implications of regulation 66

- 2.3.1 Putting the comments relating to regulation 67 to one side, another potential point for the Council to be aware of when development relies upon an existing permitted treatment works arises from regulation 66. Regulation 66 applies when an existing activity falls to be reviewed under regulation 65. There is a foundational difference between decision-making under regulation 63 (for new plans and projects) and that under regulation 65 (for existing consents). This difference recognises that an existing consent relates to an activity which is currently operational rather than aspirational. Where an existing consent is concerned, infrastructure is already in place. Many existing activities employ significant numbers of staff and decision-making under a review scenario carries very real implications for operators.
- 2.3.2 The crucial difference in decision making is provided by regulations 66(3) and (4) which are set in full below:
 - (3) The decision, or the consent, permission or other authorisation, may be affirmed if it appears to the competent authority reviewing it that other action taken or to be taken by it, or by another authority, will secure that the plan or project does not adversely affect the integrity of the site.*
 - (4) Where that object may be attained in a number of ways, the competent authority or authorities concerned must seek to secure that the action taken is the least onerous to those affected.*
- 2.3.3 It is therefore the case that when a permit was initially subject to review by NRW under regulation 65, NRW were able to affirm a potentially damaging consent on the basis of 'action taken or to be taken' by themselves or by another competent authority. The question therefore arises as to whether the Council, in being asked to 'review' any earlier decision is also able to rely on regulation 66, or whether any review you undertake should, instead, apply a 'normal' regulation 63 approach. Arguably, the fact that the activity already exists might provide a basis upon which the Council could argue that regulation 66 becomes relevant.

- 2.3.4 It is entirely reasonable that decision-making should be allowed to take a different approach to an existing consent that wouldn't be appropriate for a *new* proposal. The underlying allowance made by regulation 66 is to recognise that, whilst existing consents might be part of a problem, it is unreasonable to assume they can deliver the entire solution. In other words, action on existing consents might not be sufficient to secure site integrity; even if it might deliver that outcome it might not be the most effective way of doing so. This brings us to regulation 66(4) and the 'least onerous' duty. Where the integrity of a site might be secured through various routes, decision makers are expected to ensure that the route to be taken is the 'least onerous' to those affected. Regulation 66(5) allows for the Welsh Government to issue guidance to competent authorities as to the manner of determining which of different ways should be adopted to secure this outcome.
- 2.3.5 In completing the review of consents many wastewater treatment works were affirmed (sometimes with a variation which delivered improvements but didn't avoid adverse effects to site integrity) on the basis that other action 'to be taken' to address unregulated and diffuse sources of pollution would secure site integrity. Whilst other initiatives have been implemented in the intervening years none have delivered sufficient reductions to keep pace with the rate at which development is coming forward. The 'other action' relied upon in concluding the review has not therefore secured the integrity of the sites and a nutrient neutrality approach is now being proposed as a way forwards.
- 2.3.6 If regulation 66 might be relied upon when the Council undertake their own assessment of utilising existing capacity, the Council would be able to explore alternatives to nutrient neutrality if they could form a robust argument that 'other action taken or to be taken' by themselves or another competent authority will secure that utilising existing capacity will not adversely affect the integrity of the site concerned. In the case of phosphorus, where site integrity might be secured in a number of ways, the Council will need to demonstrate that nutrient neutrality is 'least onerous to those affected'. Nutrient neutrality is one option which might be taken avoid adverse effects to site integrity but alternative approaches might need to be explored. Of relevance, as was the case with regulation 67,
- 2.3.7 This is a complex area which is raised as it is believed to be pertinent and worthwhile for the Council to explore. DTA Ecology cannot however provide legal advice and we would strongly recommend that, should the Council wish to consider this further, they seek independent legal advice on the potential relevance of regulations 66 and 67 to the implications of the advice of Natural Resources Wales for the Council.

2.4 Other observations

- 2.4.1 It is relevant to note that the Environment Agency has not undertaken the same systematic approach to reviewing its consents in light of the revised Phosphorus targets. It is the understanding of DTA Ecology that agreements are being made between Natural England and the Environment Agency on appropriate interpretation of generic phosphorus targets for river stretches and this is feeding in to PR 24 (and potentially River Basin Management Planning 3) to inform Water Company planning and funding.

The Environment Agency also operate a 'fair share' approach and it is the understanding of DAT Ecology that both Natural England and the Environment Agency have internal interim advice. It is possible that this might be provided to the Council upon request as it was used to inform the approach adopted by the Environment Agency to the Water Company periodic review work in England and the relative role they have to play in delivering improvements.

3 Question 1: Does the Habitats Regulations and legal framework in Wales require that the principle of nutrient neutrality be applied to all SAC sites regardless of condition status, or that the principle of nutrient neutrality is applied *only* to SAC sites that are in unfavourable condition due to excess nutrients?

3.1 The question being asked

- 3.1.1 The question as phrased warrants some clarification. The legal framework put in place by the Habitats Regulations rarely 'requires' particular approaches to be applied. It is more appropriate to refer to the legal framework requiring outcomes; it is for those working within that framework to determine how such outcomes might be achieved. The outcome required by the Habitats Regulations is that, subject to certain derogation provisions and prior to permission being granted, a decision needs to be reached that a plan or project will have no adverse effect on the integrity of the site concerned.
- 3.1.2 Given the context of the advice, the question is addressed solely from the perspective of nutrients in SAC rivers and should be read and interpreted accordingly. Essentially the question is asking about the extent to which the application of a nutrient neutrality approach is *necessary* in order to comply with the legislative framework and specific legal tests which must be applied under the Habitats Regulations.
- 3.1.3 The concept of nutrient neutrality is explained in section 1.2. The 'principle' of nutrient neutrality might be referred to as the removal of existing nutrients to create capacity for growth without causing further deterioration. However, it is the opinion of DTA Ecology that those responsible for delivering neutrality based approaches exert a significant influence over the response to question 1. Hence **the principle of nutrient neutrality is 'the removal of existing nutrients by developers or local planning authorities to create capacity for growth without causing further deterioration in nutrient levels'**.

3.2 Nutrient neutrality where a SAC is in unfavourable condition due to nutrients

- 3.2.1 Where nutrients already exceed an environmental target the Dutch Nitrogen Ruling has clarified that the capacity for further nutrients to be added to the system is 'necessarily limited'. A nutrient neutrality approach is a compliant one as adverse effects to site integrity can be avoided from new development on the basis that the development will have no effect on existing nutrient levels.
- 3.2.2 Whilst a nutrient neutrality approach might be compliant with the Habitats Regulations under such a scenario, whether it is *necessary* for compliance is another matter. It is the opinion of DTA Ecology that there is no requirement to apply nutrient neutrality where a SAC is in unfavourable condition as a result of nutrients, as adverse effects might be avoided through other ways. For example statutory agencies might choose to exercise existing powers to improve sewage treatment works or to reduce nutrient inputs from wider nutrient sources in a manner which creates capacity for growth without a requirement for developer led nutrient neutrality. It could be argued that this is still a neutrality based approach, as it still relies upon the removal of existing nutrients but, in practice, it is different. A centrally co-ordinated approach which involves the exercise of statutory powers

with the aim of restoring sites to a favourable condition would exceed a neutral approach by delivering overall improvements.

- 3.2.3 Alternatively, a given plan or project might satisfy the Habitats Regulations where nutrient neutrality was not considered to be a realistic option (for whatever reason) but where permission might nevertheless be granted in spite of nutrient targets being exceeded under the derogation provisions as set out in regulations 64 and 68 of the Habitats Regulations.
- 3.2.4 A further option would be where a plan or project was below an agreed decision-making threshold such that further assessment under the Habitats Regulations might be excluded even where nutrient targets are exceeded. This is considered further in section 6 below and might be justified on the basis that the application of a threshold based approach ensures that growth is 'necessarily limited' but without a *requirement* for neutrality in all cases.

3.3 Nutrient neutrality where a SAC is not in unfavourable condition due to nutrients

- 3.3.1 Where nutrient targets are not exceeded there is no requirement under the Habitats Regulations to adopt a nutrient neutrality based approach to decision-making. This is on the basis that the Habitats Regulations only constrain development where a proposal represents a threat to the integrity of a site. Development which does not cause the failure of a given nutrient target can reasonably be argued to have no adverse effect to site integrity.
- 3.3.2 A logical consequence is that, the closer a site is to failing its target the lower the capacity for new growth to come forwards before a risk of adverse effects to site integrity arises. HRA will need to determine how close to exceedance the SAC is when the scheme is in operation, including the likely contribution to exceedance in combination with other plans and projects. When a site approaches its nutrient target a nutrient neutrality approach might reasonably be necessary. The aim being to ensure that the site remains safely below the nutrient target over the long-term. This is considered further in section 4.
- 3.3.3 The same caveats referred to above apply. Other options exist through which adverse effects to site integrity might be avoided from new development including the use of the derogation provisions if mitigation through neutrality is not considered to be a feasible option at the time a decision is taken, the use of decision-making thresholds alongside nutrient neutrality to necessarily limit new development without a requirement for nutrient neutrality in all cases, or reliance on other action taken or to be taken by other competent authorities that might be relied upon to avoid adverse effects from new development.
- 3.3.4 It is therefore **the advice of DTA Ecology that the Habitats Regulations do not require the principle of nutrient neutrality (as defined in para 3.1.3 above) to be applied to all SACs. Whilst neutrality based approaches might be a mechanism through which a decision-maker might demonstrate compliance with the Habitats Regulations there are other approaches through which compliance might also be achieved.**

4 Question 2: In the event that nutrient neutrality should only be applied to failing/close to failing SACs; what decision rationale should be used for determining the point of application of nutrient neutrality to near-to failing SAC's.

4.1 The question being asked

- 4.1.1 This question concerns the approach to be taken where a site is close to a 'tipping point'. In other words where a waterbody is currently below its nutrient target but is approaching it, such that it can reasonably be anticipated that the target will be breached on the basis of predicted growth.
- 4.1.2 In responding to this question it is necessary to carry forward the points made in the response to question 1. Hence nutrient neutrality is as defined in section 1.2 and wider nutrient based approaches involving a co-ordinated approach with other competent authorities and the exercise of statutory powers are recognised as alternative options.
- 4.1.3 The question assumes that nutrient neutrality is relevant to failing waterbodies or those that are at a 'tipping point' and close to failing. The question is specific to a 'near-to failing' SAC and is addressed accordingly.

4.2 What is a 'near-to failing' SAC?

- 4.2.1 No definition is provided by the Council as to the point at which a SAC moves from a compliant to a 'near-to fail' scenario. No attempt is made in drafting this advice to define this concept. Any such definition would be a policy decision which would need to draw upon specific freshwater ecological expertise not held within DTA Ecology alongside local knowledge of the rate and pace at which development is anticipated to come forwards. For the purpose of this advice a 'near-to fail SAC' is one which currently meets its relevant nutrient target but where the predicted growth within the catchment is such that it can reasonably be anticipated that, in the absence of any further control, the target will imminently be exceeded.

4.3 Decision rationale for application of nutrient neutrality

- 4.3.1 A neutrality concept lends itself well to a scenario where the conservation objectives require a 'hold the line' position i.e. where no further deterioration can be argued as necessary for compliance. In considering the point at which decision-making for a complaint waterbody should consider a 'switch' to a neutrality based approach the following factors could reasonably be taken into account:
 - **The rate and pace at which development is coming forwards** – in some catchments where development pressure is high a switch to a neutrality approach may be necessary with a sufficient 'buffer' in place to provide confidence that adverse effects will be avoided. A catchment with lower development pressure might adopt a less stringent approach which potentially allows greater flexibility.
 - **The potential for decision-making thresholds to be applied** - such that new development is 'necessarily limited' and proposals above a given threshold are subject to neutrality whilst those below are not.

- **The need for HRA** and the extent to which a prior HRA of the local development plan might be relied upon.
- **The flow characteristic of the river** - and the anticipated implications of low flow events on compliance with nutrient targets. This might reasonably inform decisions over how close to a given target a waterbody might reasonably be maintained.
- **An understanding of the connection between water quality targets and a site's conservation objectives.** – Case law has established that when applying the test for likely significant effects, an effect is only 'significant' in this regard when it 'undermines the conservation objectives. In considering the use of nutrient neutrality to ensure conservation objectives are not undermined it is necessary to understand how water quality monitoring data is taken into account in monitoring compliance with conservation objectives.
- **An understanding of the connection between conservation objectives and the concept of site integrity** – a proposal is compliant with the Habitats Regulations where it can be shown to have no adverse effect to site integrity. The link between integrity and water quality is informed by the conservation objectives and how they are interpreted and applied in a spatial manner across the site concerned.
- **Use of existing NRW model for the river** – to assess additional predicted nutrient loading.
- **Consider any in combination risks** - including e.g. effects of changes to flow
- **Wider mitigation options** might include nn but other options include plans for upgrading stw through AMP, PTPs, other strategic plans to tackle DWP in the catchment - is NRW reviewing the "fair share" approach to allocating responsibility to water cos vs other (agriculture) sectors? That will be relevant

5 Question 3: In a scenario where a previously unfavourable condition status SAC river has been returned to favourable condition, at what point (if at all) may the requirement to apply nutrient neutrality be rescinded?

5.1 The question being asked

- 5.1.1 The question assumes that nutrient neutrality has been relevant to a failing waterbody but that improvements have been delivered such that a waterbody now complies with the relevant nutrient target.

5.2 DTA Advice

- 5.2.1 DTA would advise that this should be treated in the same way as a 'near-to fail' scenario. A neutral based approach would still be relevant until the point at which the sites switches to a fully compliant state. In practice therefore it might be helpful to recognise three potential scenarios when considering the use of nutrient neutrality based approaches as summarised below:
 - 1. A waterbody which fails its targets – refer section 3.3 above
 - 2. A waterbody which is 'near-to failing its targets – refer response to question 2 (section 4)
 - 3. A waterbody which meets its targets – refer section 3.4 above
- 5.2.2 Any requirement for nutrient neutrality, if that is the approach adopted by a competent authority to avoid adverse effects to site integrity, would be rescinded when water quality improves sufficiently for a site 'meet its targets' (i.e. scenario 3 above).
- 5.2.3 It is clear that this advice anticipates an agreed approach as to how each scenario might be defined. This would require input from relevant freshwater ecologists in consultation with NRW conservation advisers.
- 5.2.4 Another option to rescind the need for a nutrient neutrality approach is to adopt a strategic plan, such as a Nutrient Management Plan type approach which is implemented in a manner which creates capacity for growth without reliance on nutrient neutrality. In England a suite of Diffuse Water Pollution Plans have been produced in response to a legal challenge over failures by Defra and the Environment Agency to address diffuse sources of pollution.

6 Question 4: Is it possible by taking into account the site/catchment specifics to set a 'de minimis' value which would avoid the need for further assessment either alone or in-combination with other plans and projects?

6.1 The question being asked

6.1.1 This question refers to the use of what DTA Ecology would refer to as 'decision-making thresholds' or 'screening criteria'. DTA Ecology advises against reference to 'de minimis' as this is a concept which invites legal scrutiny.

6.1.2 A decision-making threshold can be defined as follows:

'a quantifiable contribution from an individual source, below which associated effects can properly be ignored for the purpose of decision-making. The cumulative effects of proposals excluded by it will not undermine the achievement of the conservation objectives. Further assessment would not change the outcome of the decision to be taken.'

6.2 Does HRA allow for the use of decision-making thresholds (which are applied 'alone') to be relied upon to avoid the need for further assessment in-combination

6.2.1 An overview of case law which is relevant to the use of decision-making thresholds under the Habitats Regulations is provided in Appendix 1. A summary of the case law decisions reviewed in Appendix 1 and the principles established is provided in table 6.1 below.

Table 6.1: Summary of relevant court decisions and implications	
Court decision	Court extract and implications
European Commission Parliamentary Question (2005)	<p>In response to a question concerning the interpretation of EC guidance and the scope of the in-combination requirements.</p> <p><i>'[...the scope of an assessment in combination] needs to take account of particular circumstances of specific cases as well as the practical feasibility of making an assessment of combined effects... The combination provision must be applied in a manner that is proportionate to the timing, planning stage and the legality of the proposed plans and projects.'</i></p> <p>Implications: An in-combination assessment must be practically feasible and the in-combination provisions must be interpreted and applied in a proportionate manner.</p>
<u>Walton</u> [2011] CSOH 131	<p>In response to an argument that the decision was flawed as it had failed to properly assess its effects in-combination.</p> <p><i>'The [decision makers] were entitled to exercise judgement as to the projects with whose effect the proposal had to be considered in-combination... As regards the in-combination point... I agree that there must be a degree of flexibility in assessing the projects with which a particular proposal should be regarded as having an in-combination effect.'</i></p>

Table 6.1: Summary of relevant court decisions and implications	
Court decision	Court extract and implications
	<p>Implications: a decision maker is entitled to exercise judgment over which other plans and projects to take into account and there must be a degree of flexibility to an in combination assessment.</p>
<p><u>Sweetman</u> (AG Opinion) Case C-258/11 (2012)</p>	<p>A challenge concerning small scale effects and the concept of de minimis. <i>'48. The requirement that the effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.'</i></p> <p>Implications: The need to avoid legislative overkill is of central importance in considering how the Directive is to be interpreted and applied. Proposals with no appreciable effect are excluded from further assessment.</p>
<p><u>Newry</u> [2015] NIQB 65</p>	<p>In response to a challenge against grant of planning permission and a failure to undertake in combination assessment of effects on an SPA 18km downstream.</p> <p><i>'Any impacts... will be negated as a result of the tidal nature of Carlingford Lough (the associated mixing) and distance (dilution factors)... The development will not therefore contribute to any in-combination effects with other developments, including the particular developments relied upon by the Applicant... These are matters of expert judgment which cannot legitimately be condemned as unreasonable... The decision maker was entitled in the circumstances to accept and act upon the independent expert view of the statutory consultee.'</i></p> <p>Implications - It is possible to eliminate the need to undertake an in combination assessment on the basis of professional judgment, having regard to advice from the statutory nature conservation body.</p>
<p><u>Wealden DC v SoS and Lewes DC</u> (2017) EWHC 351 (Admin)</p>	<p>A challenge concerning the use of a threshold based approach to avoid the need to consider in-combination effects in the context of air quality impacts from traffic. Addressing the point at issue in a general sense (refer paragraph 95): <i>'If it is known that specific impacts are very low indeed, or are likely to be such, these can properly be ignored.'</i></p> <p>In response to the specific circumstances of the case: <i>'In my view, it was not apparent why Natural England was advising that a cumulative assessment did not require an aggregation of two figures... Natural England's advice cannot be supported on logical and empirical grounds... I believe that Natural England's advice, brief as it was, cried out for further explanation... To all intents and purposes, therefore, Natural England's advice removed the premise of the HRA – that a cumulative assessment is required – and brought about a clear breach of Article 6(3) of the Habitats Directive.'</i></p> <p>Implications - the use of thresholds is acceptable in principle as impacts which are very low indeed can properly be ignored. However proposed threshold based approaches should be supported on logical and empirical grounds.</p>

Table 6.1: Summary of relevant court decisions and implications	
Court decision	Court extract and implications
<u>Dutch Nitrogen Ruling</u> Cases C-293/17 and C-294/17 (2018)	<p>In circumstances where the conservation status is unfavourable... <i>‘the possibility of authorising activities which may subsequently affect the ecological situation of the sites concerned seems necessarily limited’.</i></p> <p>In responding to a question which asks whether the Habitats Directive precludes the use of thresholds in respect of nitrogen deposition where such thresholds have the effect of exempting proposals from further assessment.</p> <p><i>‘The Habitats Directive must be interpreted as not precluding.... exempting certain projects which do not exceed a certain threshold value or a certain limit value in terms of nitrogen deposition from the requirement for individual approval if the national court is satisfied that the ‘appropriate assessment’... carried out in advance, meets the criterion that there is no reasonable scientific doubt as to the lack of adverse effects of those plans and projects on the integrity of the sites concerned.’</i></p> <p>Implications: The permitting of additional pollution loading where a natural habitat is in unfavourable conservation status is necessarily limited. However, the Directive does not preclude the exemption of projects which do not exceed a certain threshold or limit value from further assessment. Any such threshold must be justified on the basis of an ‘appropriate assessment’ carried out in advance to demonstrate that the plans and projects which might be so exempted will have no adverse effect on the integrity of the sites concerned.</p>

- 6.2.2 It is the considered opinion of DTA Ecology that there is no case law to date which precludes the use of decision-making thresholds or ‘de minimis’ approaches. On the contrary, the Courts have recognised the risk that, if *all* plans and projects capable of having any effect whatsoever are caught by the HRA requirements, activities on or near a site risk being impossible. This is described as ‘legislative overkill’ and establishes an important principle - the Habitats Regulations are not concerned with any effect whatsoever. This principle has clear implications for how the in combination assessment aspect of the assessment is approached. In order to avoid legislative overkill some form of a threshold must be allowed to influence a) when an in-combination assessment is necessary and b) which plans and projects should be taken into account.
- 6.2.3 Some examples of existing threshold based approaches include the JNCC guidance on decision-making thresholds for air pollution³ and the Natural England thresholds for discharges to ground⁴.

³ [JNCC guidance on decision-making thresholds for air pollution](#) (2021)

⁴ Refer Annex F in document available [here](#)

7 Question 5: What evidence and prior assessment may be necessary to form the basis of any such approach?

7.1 The question being asked

- 7.1.1 Having established that there is nothing within the Habitats Regulations which precludes the use of decision-making thresholds, even where a target is exceeded, this question asks what evidence base, or prior assessment, might be necessary to form the basis of any such approach. The question is concerned primarily with compliance and the ability to defend any such approach within the legislative framework of the Habitats Regulations and the legal tests therein.

7.2 DTA Advice

- 7.2.1 When considering the evidence base upon which a threshold based approach might be derived, the *Dutch Nitrogen Ruling* (referred to in Appendix 1) provides a clear and authoritative position. Having established that the Habitats Directive does not preclude the use of thresholds the Court continues to explain that any such threshold approach should be underpinned by a 'prior assessment' which demonstrates that the plans and projects which might be excluded from further assessment will have no adverse effect on the integrity of the sites concerned. This echoes the sentiment of the UK Courts in the *Wealden* decision, that a threshold should be supported on logical and empirical grounds.
- 7.2.2 The Courts have also established that an effect is only relevant in HRA terms where it undermines the conservation objectives. When considering the extent to which additional phosphates represent a risk to the integrity of the site, the conservation objectives, and how they are applied, is a central thread which runs throughout the whole assessment process. When testing for a 'likely significant effect', the question being asked is whether it is possible that a plan or project might undermine the conservation objectives⁵. The purpose of the appropriate assessment is then to consider all aspects of a proposal that can affect the conservation objectives⁶. A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised⁷; if the conservation objectives are undermined then site integrity is necessarily adversely affected⁸.
- 7.2.3 In considering the evidence based for the setting of a threshold below which effects can properly be ignored for decision-making purposes, it is therefore appropriate to define any such threshold with reference to the conservation objectives. Conservation objectives are described in terms of an objective to 'maintain or restore' ecological targets and attributes. With reference to water quality, undermining a nutrient target conservation objective therefore involves either a) hindering the maintenance of existing ecological conditions (where a nutrient target is being met) or b) compromising the delivery of necessary improvements to ecological conditions (where a target fails).
- 7.2.4 In terms of compromising the delivery of a 'restore' objective (where a nutrient target currently fails) any additional contribution might, hypothetically speaking, be argued to

⁵ Case C-127/02 [Waddenzee Ruling](#) (refer para 47)

⁶ [Managing Natura 2000](#) EC Guidance, Nov 2018 (refer section 4.6.3)

⁷ [Managing Natura 2000](#) EC Guidance, Nov 2018 (refer section 4.6.4)

⁸ [Managing Natura 2000](#) EC Guidance, Nov 2018 (refer section 4.6.4)

compromise the delivery of necessary improvements. The logic underpinning that argument bears scrutiny however, as it is based on an assumption that all sources are equally amenable to control and that measures to deliver improvements will be applied in a proportionate manner to *all* sources. Where an effect is a consequence of multiple sources, it is reasonable to recognise that whilst all sources contribute to the ‘effect’ or problem, in practice, the measures to deliver necessary improvements will always be targeted to those sources which are a) amenable to future control and b) make the greatest contribution to nutrient loading. When it comes to decision-making, whilst a new plan and project may contribute to an existing *problem* it may (or may not) be part of a *solution*, or otherwise compromise the delivery of that solution.

- 7.2.5 A logical consequence of this is that it is unreasonable to adopt a position that all new sources must, by definition, undermine the achievement of the conservation objectives. It is certainly reasonable to argue that some ‘small’ level of change will be of no consequence to the effective delivery of measures which are necessary to achieve the conservation objectives.
- 7.2.6 It is therefore the advice of DTA Ecology that in establishing a threshold based approach evidence should be concerned with how changes in nutrient levels undermine the conservation objectives. Recent work undertaken for the Joint Nature Conservation Committee⁹ has defined decision-making thresholds for air quality based upon this logic. There are fundamental differences which apply when considering the causal effect mechanism at play when considering water quality impacts but the underpinning rationale from the JNCC approach can be helpfully applied in a water quality context.
- 7.2.7 Further detail in respect of how an approach to a decision-making threshold for water quality might be approached is provided in Appendix 2.

⁹ Guidance on Decision-Making Thresholds for Air Pollution – JNCC Report xxxx (awaiting publication)

8 **Question 6:** The compliance report for the Tywi can be found [here](#) (p40) You will note the large geographical spread of the river, and that NRW data has been taken from two points. Please outline if you consider that the evidence provided is sufficient to meet the compliance requirements of the HRA.

8.1 The question being asked?

8.1.1 The question is posed with reference to the compliance requirements of the HRA. HRA refers to a specific part of the Habitats Regulations relating to an assessment of a plan or project. There are wider duties under the regulations relating to monitoring and reporting requirements. Whilst monitoring is referred to within this advice, strict compliance considerations are beyond the scope of the question which has been asked.

8.2 Monitoring SAC rivers generally

8.2.1 The NRW compliance report sets out the findings of NRW monitoring work in light of the updated JNCC Common Standards Monitoring Guidance for rivers¹⁰. Common Standards Monitoring (CSM) is relied upon across the UK for statutory reporting and monitoring obligations. It therefore follows that if the NRW compliance report satisfies the JNCC guidelines for rivers it can be considered sufficient for compliance.

8.2.2 JNCC guidelines explain that rivers should be divided into assessment units which are sensibly focused on significant natural features. No set procedure is defined within CSM but a procedure for dividing rivers into Evaluated Corridor Sections (ECS) based on SERCON is provided by way of a suggested approach. Some key points are summarised below:

- Each ECS should have essentially uniform gross physical characteristics
- ECS channel length (not the valley length) should be between 10 km and 30 km (unless specific criteria apply).
- Boundaries should be informed by the presence of natural features.

8.2.3 The NRW report indicates that the Tywi has been divided into three waterbodies with one sampling point within each waterbody. DTA notes that whilst the upper and lower waterbodies are within the JNCC length guidelines it appears that the middle waterbody (Llandovery Bran to Cothi confluence), being approximately 45km in length, appears to exceed the maximum channel length suggested by the JNCC guidelines. The JNCC suggested approach is that *'Reaches longer than 30 km should be divided into shorter ECSs... if there is no natural break the ECS should simply be halved.'*

8.2.4 In terms of water quality targets the JNCC guidance states that 'nutrient targets should reflect natural/background concentrations and limit enrichment to levels at which adverse effects are unlikely. Tables 5&6 provide generic target values against broad river typology. Table 5 'near natural' targets should apply where existing water quality complies with the targets set or where it is feasible to reduce concentrations to comply with the target. In rivers where table 5 targets are not considered feasible the table 6 'maximum phosphorus concentration' targets should apply. An important clarification is provided which explains that *'If better local characterisation of natural/background concentrations is available, (e.g.*

¹⁰ Refer <https://data.jncc.gov.uk/data/1b15dd18-48e3-4479-a168-79789216bc3d/CSM-Rivers-2016-r.pdf>

where observed concentrations in the river are much lower than the generic target implied by the typology), changes to these generic values can be made to give a more accurate description of near-natural nutrient status.'

- 8.2.5 An area of concern relating to monitoring data is that the upper waterbody stretch (conf with Doethie to conf with Llandovery Bran) is listed as 'not assessed' due to lack of data. It is relevant to note that this waterbody only overlaps with the SAC boundary for approximately 2 km but the lack of data means that the compliance of this upper reach has not formally been assessed. It is relevant that the target for this waterbody is the strictest within the SAC at 13ug l⁻¹. The location of any discharge points in relation to the upper section of the SAC will therefore be relevant to understanding implications for HRA alongside an understanding of the geographic focus of development pressure.

8.3 HRA compliance

- 8.3.1 In terms of HRA compliance an understanding of the baseline conditions is necessary to be able to undertake an assessment of the implications of a plan or project for site integrity. The lack of monitoring data for the upper waterbody raises concerns over compliance but monitoring data from all sampling locations can be requested from NRW so, arguably, this is only a compliance issue if a plan or project proposer chooses not to make such a request or NRW are unable to provide any relevant data. Even if this were to happen, the Council could request water quality sampling data to be provided in support of an application so, again, it is difficult to frame this as a compliance issue in a strict sense.
- 8.3.2 Table 8.1 below summarises some information from the NRW compliance report and it is noteworthy that the number of waterbodies in the Tywi compared to its area is, comparatively speaking, lower than might be expected. Only the River Dee has a higher average waterbody size and as the middle stretch of the Tywi is disproportionately large compared to the upper and lower stretch it is reasonable to anticipate that this waterbody exceeds the 121ha 'average; and is exceptionally large compared to waterbodies (and distribution of monitoring locations) for other SACs.

SAC	Area (ha)	waterbodies	Average size (ha)	Pass	Fail	Not assessed
River Dee	1151	8	144	4	3	1
River Eden	284	9	31	7	0	2
River Teifi	716	18	90	8	8	2
River Twyi	363	3	121	2	0	1
River Cleddau	751	19	40	5	10	4
River Usk	1008	23	44	2	15	6
River Wye	2235	43	52	14	26	3

- 8.3.3 It is NRW's responsibility to ensure their approach is compliant with CSM guidelines. In view of the above, the Council could reasonably ask NRW to set out their reasoning for any deviation from the CSM approach with regards waterbody length. DTA would suggest that NRW might also be asked to explain how the targets have been set in the middle and lower waterbodies given the significant difference between the targets and the annual means. JNCC guidance suggests that, under such circumstances, *'changes to these generic values should be made to give a more accurate description of near-natural nutrient status'*.

9 Question 7: Taking full consideration of your response to the questions above, is the application of nutrient neutrality principles to the Tywi SAC necessary to meet the requirements of the Habitats Regulations?

9.1 Nutrient neutrality

9.1.1 By way of clarification, and to avoid any misunderstanding, for the purpose of this advice the following assumptions apply to the phrase 'nutrient neutrality' (refer section 3.2):

- A nutrient neutrality approach is applied in a blanket manner to all development within an affected catchment.
- A nutrient neutrality approach assumes that measures to remove nutrients will be identified and delivered by developers or local planning authorities.
- Unless a specific local agreement is reached, nutrient neutrality approaches do not allow for a threshold based approach whereby 'de minimis' or very small nutrient contributions might avoid the need for further assessment.

9.1.2 The appeal of nutrient neutrality is in its apparent simplicity of logic. At face value, where the effects of a given plan or project can be demonstrated to be 'neutral', it is difficult to envisage a situation where it might represent an adverse effect to the integrity of a given site. In many cases this logic bears scrutiny. A neutrality approach can be a compliant approach for stretches where targets are currently exceeded but this cannot be assumed as a point of principles. Compliance would only be robust where a neutrality based approach does not prevent or disrupt restoration work, or the potential for future restoration. This is in recognition of Welsh Government guidance which explicitly refers to such a scenario as an example of an adverse effect to site integrity¹¹. For example, where a site exceeds a nutrient target the conservation objective target will be one of 'restoration'. When measures available to remove nutrients from the catchment are plentiful nutrient neutrality approaches can be an effective and robust approach but caution is required in catchments where effective restoration measures are limited. A nutrient neutrality approach (whereby available measures are traded against new development) could rationally be argued to undermine the achievement of a site's conservation objectives in such a scenario. To look at it from another perspective, if the 'low hanging fruit' is picked to facilitate development the measures to deliver overall improvement will be harder to reach.

9.2 DTA Advice

9.2.1 In the case of the Tywi catchment, the NRW compliance report states that the river is not failing its nutrient target so concerns over preventing or disrupting restoration work are not relevant. Having said that, the Council should recognise that the upper waterbody was not assessed in the compliance report, and a tighter target of 13 ug l⁻¹ applies to this stretch so there remains a concern that this waterbody might be failing its target. There is only about 2km of the SAC located within the upper waterbody but, a failure within the stretch would be relevant to the Council's HRA work.

¹¹ <https://gov.wales/habitats-regulations-assessments-protecting-european-site.html#section-64437>

- 9.2.2 Taking the responses to questions 1-6 together, it is the advice of DTA Ecology that, **on the basis of the information within the NRW compliance report, a nutrient neutrality approach is not *necessary* to meet the requirements of the Habitats Regulations for the River Tywi.**
- 9.2.3 If we assume that the 2km stretch within the upper waterbody complies with the relevant target, the conservation objective for the Tywi will be to 'maintain' the SAC within its nutrient targets. The monitoring data in table 9 of the compliance report shows that both waterbodies comfortably comply with their existing targets. The middle waterbody has a target of 20ug l⁻¹ and both annual and growing mean is 13ug l⁻¹. The lower waterbody has a target of 21 ug l⁻¹ with annual and growing means at 10 and 9 ug l⁻¹ respectively. In light of the headroom available within these waterbodies a nutrient neutrality approach is not necessary for compliance with the Habitats Regulations. However, as referred to above, the significant difference between the targets and the annual means might conflict with JNCC guidelines so NRW should be asked to explain the targets which have been set.
- 9.2.4 It is essential to keep firmly in mind that the Habitats Regulations should only constrain proposals which represent a threat to the integrity of a site. Development proposals affecting the middle and lower waterbodies within the catchment will not represent such a risk until the waterbody approaches a nutrient target such that a risk of exceedance arises. The upper waterbody has a tighter target for phosphorus of 13 ug l⁻¹ and monitoring data in the middle waterbody shows concentrations are already at 13 ug l⁻¹. It is therefore reasonable to anticipate that levels within the upper stretch of the SAC may be a near fail or even a fail. A neutrality based approach may therefore be necessary for development affecting the upper waterbody. Developer-led nutrient neutrality is an option for compliance but other options might be relevant to consider.
- 9.2.5 It is the opinion of DTA Ecology that there is a strong case to be made for use of decision-making thresholds for the Tywi catchment. As set out in appendix 2 these might be derived on a waterbody basis which would mean that differing thresholds would apply to each waterbody and a more stringent threshold would be anticipated to apply to the upper waterbody.
- 9.2.6 Proposals whose contribution exceeds the relevant threshold can be considered on a case-by-case basis. Any approach to permitting should avoid a risk of failure in the middle and lower waterbodies and ensure that the nutrient targets continue to be met. The Council should reassure themselves that the targets set by NRW align with JNCC guidelines. It is not advisable to allow deterioration up to the target so, if we assume that the upper waterbody is near to failing its target, it might be helpful to recognise two potential scenarios when considering the approach to decision making within the Tywi catchment. A waterbody which is near-to failing its targets (upper waterbody) and waterbodies which meet their target (middle and lower reaches)
- 9.2.7 A nutrient neutrality approach might helpfully be applied to proposals which exceed the relevant threshold for a near-to-fail waterbody in order to avoid failures but this would need to be considered on a case-by-case basis. A DTA proposed alternative approach to nutrient neutrality is set out in appendix 3. This alternative approach is probably better suited to waterbodies within the Council which currently exceed their target (Teifi and Cleddau catchments) but it could also be relevant to the Tywi catchment.

Appendices

Appendix 1: Case law which is relevant to the use of decision-making thresholds under the Habitats Regulations

Introduction

In considering the advice provided within the main report, and questions 4-5 in particular, it is necessary to consider existing case law and identify any principles established by the courts which are of relevance to the questions asked in terms of the in-combination requirements under the Habitats Regulations and the development and application of decision-making thresholds.

The Wealden decision

In 2017 the High Court ruled in the case of Wealden¹² that the application of a de minimis threshold in the assessment of traffic growth associated with housing development, which had the effect of avoiding the need for further assessment in combination with other plans and projects, had brought about a clear breach of the Habitats Directive. Of particular concern to the Court, was that the use of the threshold could not be supported (under the circumstances) on logical and empirical grounds (para 101). In the words of the Court, it ‘cried out for further explanation’ (para 108).

The de minimis value in question was the use of a 1000AADT (1000 Annual Average Daily Traffic) threshold against which the air quality related impacts from traffic associated with housing development had been screened out of the need for further assessment under the Habitats Regulations, either alone or in combination. The development pressure in the area, and the sheer number of proposals coming forward, meant that the application of such a threshold precluded an in-combination assessment of plans and projects which could reasonably be anticipated to represent a risk of a cumulative impact. The logic applied by the Court is sound and it is clear from a common sense approach that the threshold applied was not appropriate given the specific circumstances of the case in question. The rate at which development proposals were anticipated to come forwards provided credible evidence of a real risk that the combined effects of proposals below 1000AADT might undermine the achievement of the conservation objectives.

This decision prompted a widespread review of the approaches taken to the screening of plans and projects under the Habitats Regulation. Some practitioners asserted that threshold based approaches could no longer be relied upon to inform decision-making under the Habitats Regulations. Before considering the Wealden decision in more detail, it is relevant to take a step back to ‘set the scene’ with reference to earlier case law decisions which have shaped and informed a correct approach to the in-combination requirements. Working in chronological order, this appendix firstly considers an EC parliamentary question from 2005 before then turning to the cases of Walton (2011), Newry (2015) and the Dutch Nitrogen ruling (2018).

EC Parliamentary Question

The EC parliamentary question concerns the nature of ‘other plans and projects’ within the context of the in-combination requirements. It reads as follows:

‘The Commission has stated in its published guidelines entitled ‘Managing Natura 2000 Sites’ that it would seem appropriate to restrict the combination provision to other plans or projects which have been actually proposed. Does the Commission have a clear position on

¹² [Wealden DC v SoS and Lewes DC](#) [2017] EWHC 351 (Admin)

whether the term ‘actually proposed’ covers only plans or projects which have the force of law?’

The direct response to the question asked is set out below:

‘The Commission does not consider that Article 6 applies only when the other plan or project has a full force of law...’

The answer provided is unsurprising, given current understanding, but of relevance to the purpose and intent of the in combination provisions (in a broader sense) in dealing with the question raised the response continues as follows:

‘...In any event, any application of what is meant by ‘actually proposed’ needs to take account of particular circumstances of specific cases as well as the practical feasibility of making an assessment of combined effects. The combination provision must be applied in a manner that is proportionate to the timing, planning stage and the legality of the proposed plans and projects.’

This further clarification provides insight into the intent and purpose of the in-combination requirements. **The EC anticipates that the scope of an in-combination assessment must be practically feasible; a member state therefore needs to adopt a proportionate approach to the interpretation of the in-combination provisions.**

The case of Walton (2011)

The case of Walton¹³ concerned an appeal against the decision made by the Scottish Ministers in connection with the Aberdeen Western Peripheral Route (AWPR). The appellants argued that the decision was flawed because the report to inform the Appropriate Assessment had failed to properly consider in-combination effects. In this case the scale of the road scheme and the proposed route was such that, theoretically, a very large number of planning applications were likely to come forwards which were in geographic and chronological proximity to the AWPR. In light of the sheer number of plans and projects concerned the consultants had established criteria which had been applied to identify those with the potential to act in-combination in a meaningful manner. In considering the argument that the approach did not satisfy the in-combination requirements, the Court made explicit reference to the EC parliamentary question referred to above and ruled as follows:

‘[decision makers] were entitled to exercise judgement as to the projects with whose effect the AWPR proposal had to be considered in-combination... As regards the in-combination point, I again accept the submission on behalf of the [decision maker]. In particular, I agree that there must be a degree of flexibility in assessing the projects with which a particular proposal should be regarded as having an in-combination effect. I can detect no unreasonableness in the approach taken by the respondents and their consultants in the present case.’

The Court clarified two important principles here; firstly, a competent authority is entitled to exercise judgement over which other plans and projects to take into account; secondly, there must be a degree of flexibility in an in-combination assessment.

¹³ Walton v Scottish Ministers [2011]CSOH 131

The case of Sweetman (2012)

The Advocate General's opinion in the Sweetman¹⁴ decision is relevant to the manner in which the in-combination provision is interpreted and applied and the extent to which a threshold based approach might inform decision-making under Article 6(3). Paragraph 48 states that:

'The requirement that the effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.'

This is a clear warning against what the Advocate General perceives as legislative overkill or, to put it another way, an excessive interpretation of legislative requirements. The Sweetman case concerned small-scale impacts and the potential for small impacts to act in-combination was therefore central to the underlying reasoning of the Court.

In spite of the legislative requirement to consider the effects of an individual proposal 'either alone or in combination with other plans or projects', the Advocate General explicitly recognised the inherent dangers if that provision was extended to all plans and projects capable of having any effect whatsoever - such that an in-combination assessment become a legal requirement irrespective of the magnitude of the effect concerned or any engagement with the inherent potential for it to act in-combination with other plans and projects in a meaningful manner.

The case of Newry (2015)

The decision of Newry¹⁵ in the Northern Ireland courts concerned a challenge against the grant of planning permission and the alleged potential for associated release of sediment during construction into a watercourse. The challenge was that the Northern Ireland Environment Agency (NIEA) had failed to undertake an in-combination assessment of potential effects on the Carlingford Lough SPA some 18km downstream of the development site. Of relevance to the approach taken to the in-combination assessment it was argued that the effects from the subject proposal were inconsequential...

'Ms Reeve further explains NIEA's position by reference to the proposal's distance from the SPA, the lack of direct disturbance to the qualifying features, and the fact that "any impacts from mobilised sediment from construction works on the supporting habitat of the qualifying features will be negated as a result of the tidal nature of Carlingford Lough (the associated mixing) and distance (dilution factors)"...

...As a result of the matters referred to by the NIEA including the 18 km distance involved it is considered that there will be no adverse effects on the SPA. The development will not therefore contribute to any in-combination effects with other developments, including the particular developments relied upon by the Applicant.'

NIEA had consulted the statutory nature conservation body and, recognising that they had agreed with the arguments as to the inherent potential for in-combination effects (and the lack of any credible evidence that the risk was real), the court concluded in paragraph 64:

¹⁴ [Case C-258/11 Sweetman v An Board Pleanala](#)

¹⁵ [Newry \[2015\] NIQB 65](#)

'I am in agreement with the [NIEA] that these are matters of expert judgment which cannot legitimately be condemned as unreasonable. Furthermore...the decision maker was entitled in the circumstances to accept and act upon the independent expert view of the statutory consultee.'

In considering the claim that the assessment had failed to identify whether, or if so to what extent, other projects were taken into account as part of the necessary in-combination assessment, the Court expressed a view (para 65) that it was pertinent to recall the reasoning in the case of *Boggis* (which had established a, now widely accepted, principle that any third party alleging that there was a risk which should have been taken into account must produce 'credible evidence that there was a real, rather than a hypothetical, risk'). The Court applied this reasoning to the asserted requirement to undertake an in-combination assessment when a decision-maker is of the opinion that the effects 'alone' will not contribute to any in-combination effects with other development in a meaningful manner. Para 66 concluded as follows:

'at no stage... did the applicant put forward credible evidence that there was a real, rather than a hypothetical risk which should have been taken into account.'

This is a perfectly sensible and pragmatic decision. Hypothetically, the assessment of every plan or project, with even the slightest effect, should also include an assessment in-combination with other plans and projects. To do so however would create an overly burdensome and excessive approach which was cautioned against by Advocate General Sharpston in the case of *Sweetman* referred to above.

The *Newry* decision is relevant as it establishes the important principle that a decision-maker is entitled to eliminate the need to undertake an in-combination assessment on the basis of professional judgement, having regard to advice from the statutory nature conservation body. Such an approach to the application of the in-combination provisions certainly cannot be condemned as inherently unreasonable on legal grounds. In this case no 'threshold' had been agreed but common sense, which could be explained on logical and empirical grounds, was sufficient to satisfy the Court that the approach was compliant with the Habitats Regulations.

Back to Wealden

The *Wealden* judgment is significant, but it needs to be read and interpreted in light of other, well established principles. Looking back over the earlier decisions which have shaped our understanding of in-combination effects. In ruling against the use of the 1000AADT threshold, nothing in the *Wealden* decision suggested that the use of a threshold based approach was unacceptable in principle. Indeed para 95 explicitly recognised that *'if it is known that specific impacts are very low indeed, or are likely to be such, these can properly be ignored'* (emphasis added).

The Dutch Nitrogen Ruling (2018)¹⁶

Subsequent to the *Wealden* decision, the CJEU handed down their judgment in 2018 in respect of a case which is commonly referred to as the Dutch Nitrogen Ruling. This case was a reference for a preliminary ruling from the domestic courts in the Netherlands with reference to a wide-ranging list of questions. A full analysis of the decision is not appropriate but one question is of particular relevance to the legality of the use of thresholds to inform decision-making under the Habitats Directive.

¹⁶ Joined cases C-293/17 and C-294/17 The [Dutch Nitrogen Ruling](#)

A key point acknowledged by the Court was that, where the conservation status of a designated habitat is unfavourable, the possibility of authorising further activities which will add further pollutant loaded is ‘necessarily limited’. In this matter it is essential to recognise that in ruling that the capacity for further growth is ‘necessarily limited’ the Court explicitly disagreed with the Advocate General who has argued in her Opinion that where a site exceeded a relevant threshold no further growth *at all* should be allowed. The Court went on to address a question of interest to the use of thresholds which was summarised by the Court as follows (para 105):

‘whether Article 6(3) of the Habitats Directive must be interpreted as precluding national programmatic legislation, such as that at issue in the main proceedings, exempting certain projects which do not exceed a certain threshold or limit value in terms of nitrogen deposition from the requirement for individual approval, since the cumulative effects of all plans and projects likely to create such deposition were subject in advance to an ‘appropriate assessment’ within the meaning of Article 6(3)’.

In responding to the question, paragraph 112 clearly establishes that, in principle, the application of thresholds or limit values is acceptable under the Directive. It states:

‘Article 6(3) of the Habitats Directive must be interpreted as not precluding national programmatic legislation, such as that at issue in the main proceedings, exempting certain projects which do not exceed a certain threshold value or a certain limit value in terms of nitrogen deposition from the requirement for individual approval...’.

However, paragraph 112 does not stop there. It continues to explicitly set out the criteria which must be met to enable such a threshold approach to be relied upon. It continues...

‘...if the national court is satisfied that the ‘appropriate assessment’ within the meaning of that provision, carried out in advance, meets the criterion that there is no reasonable scientific doubt as to the lack of adverse effects of those plans or projects on the integrity of the sites concerned.’

The acceptability of thresholds in principle reflects the Advocate General’s Opinion in Sweetman (already referred to) that *‘the requirement that the effect in question be ‘significant’ exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded.’* Furthermore, it validates the approach taken by the High Court in the Wealden decision that the use of the threshold needs to be supported ‘on logical and empirical grounds’ through some form of prior assessment.

Summary and conclusions

It is therefore the case that an in-combination assessment must be practically feasible and the in-combination provisions must be interpreted and applied in a proportionate manner. A decision-maker is *obliged* to exercise their judgement as to which other plans and projects to take into account; there must be a degree of flexibility to an in-combination assessment.

The case law decisions support an assertion that thresholds form an acceptable basis upon which to exempt proposals from the need for individual assessment. Whilst thresholds are acceptable in principle, the ability to authorise additional pollutant loading is ‘necessarily limited’ where the conservation status is unfavourable due to a relevant target already being exceeded. In order to be able to rely on the use of a threshold based approach it is necessary to undertake some form of prior assessment. The assessment carried out in advance must meet certain criteria; it must demonstrate

that there is no reasonable scientific doubt as to the lack of adverse effects of those plans or projects on the integrity of the sites concerned.

In applying this criterion it is necessary to correctly understand which ‘plans and projects’ the Court has in mind in the Dutch nitrogen ruling. The ruling refers to ‘those plans and projects’ which is clearly restrictive in its scope. It is not appropriate to seek to test a proposed threshold by means of a prior appropriate assessment which takes account of all plans and projects – that would be internally inconsistent with the very aim and purpose of a threshold based approach.

It is reasonable to argue that the plans and projects referred to are restricted to *those* plans and projects which would be excluded from further assessment by the application of a proposed threshold. This interpretation is logically coherent and is supported with reference back to how the Court summarised the question which they were providing an answer by referring to the assessment in advance of ‘*the cumulative effects of all plans and projects likely to create such deposition*’ (paragraph 105). Likewise, paragraph 108 refers to a prior assessment where the effects ‘*of plans and projects of that scale were examined*’. The referring Court was clear that their assessment in advance was concerned with the cumulative effects of proposals which contribute deposition below a threshold value. If the CJEU had other plans and projects in mind it would be a significant oversight not to clarify that within the judgment itself.

The assessment carried out in advance must therefore demonstrate that there is no reasonable scientific doubt as to the lack of adverse effects from the plans or projects excluded from further assessment by the application of a threshold for the integrity of the sites concerned.

This interpretation also aligns with other case law as the assessment carried out in advance would then provide an evidence base upon which it can be demonstrated, on logical and empirical grounds (refer Wealden), that the cumulative effects of proposals excluded from further assessment by a proposed threshold will not have an adverse effects to the integrity of the site concerned. Such proposals can properly be ignored (Wealden).

A note on the Wyatt¹⁷ case

The more recent Wyatt case related to the use of nutrient neutrality. It is the opinion of DTA Ecology that there is nothing in the Wyatt case which changes the principles set out above. The Wyatt case did not concern the use of thresholds or the application of the in-combination provisions as the grounds of challenge related to a nutrient neutrality approach, and whether such an approach was in breach of duties under the Habitats Regulations. In spite of having explicitly endorsed a nutrient neutrality approach there is nothing in the ruling to preclude the use of thresholds or *de minimis* based approaches where they can be explained on logical and empirical grounds.

¹⁷ [Wyatt v Fareham Borough Council](#) [2021] EWHC 1434 (Admin)

Appendix 2 – Advice on how a decision-making threshold for water quality might be derived

With reference to the JNCC approach to decision-making thresholds for air quality¹⁸, a critical first step in defining a decision-making threshold is to quantify a level of acceptable ecological change which would not undermine the achievement of a 'restore' conservation objective. This value is referred to in the JNCC report as 'Objective Compliant Change' (OCC) and is defined as '*a quantified magnitude of change, across a defined period of time, which will not undermine the achievement of the conservation objectives for a designated site*'. It is important to recognise that OCC refers to an overall level of environmental change, over a given timeframe. This is in contrast to a minimum effect threshold which can be blindly applied without taking account of the cumulative 'creeping' effect, over time, of doing so. Where the cumulative effects of small proposals over a defined timeframe will not exceed the OCC value, it can thus be argued that those proposals would not undermine the conservation objectives for a site – and will not be 'significant' in HRA terms.

When considering what this means where phosphorus targets are concerned, compliance with conservation objective nutrient targets is assessed against monitoring locations through a given SAC, which is divided into units or waterbodies. Monitoring locations are assumed to be representative of the waterbody. JNCC guidance explains that '*targets apply throughout the assessment unit, not just at sparsely distributed monitoring sites*' but then provides the following by way of clarification (emphasis added):

'Assessment of water quality targets is mandatory. Data for each water quality indicator from the past 3 years should be requested from the appropriate environment agency, for all routine water quality survey points within each assessment unit. Compliance with each numerical target should be judged on face value (i.e. is the observed value numerically greater than the target value?). The assessment unit is judged unfavourable for a water quality indicator if any of the routine sampling points within the unit fails to comply with the target.

Sampling sites may be sparsely distributed across the river network and water quality can be very variable within an assessment unit, depending on the location of sources of pollution and dilution. Where modelled data are available, each assessment unit should comply with the relevant target throughout its length. This allows for limited non-compliance with the mixing zones of individual effluents, since water quality models assume full mixing at the point of discharge. Where no modelled data are available, a 'best-endendeavours judgement' will need to be made about the ability of sparse routine monitoring points to detect spatially significant impacts on organic pollution status within the site and within each assessment unit. This could involve extrapolations of pollutant concentrations from routine monitoring sites to downstream river stretches using crude estimates of dilution from tributaries.

It would therefore be inappropriate to suggest that targets *only* need to be met at sampling locations but, equally, it would be excessive to argue that the conservation objectives imply that phosphate targets should be achieved throughout the SAC in every location (the JNCC guidance explicitly allows for limited non-compliance within mixing zones). As such, when applying the integrity test, the phosphate target needs to be considered in terms of the inherent potential within a SAC to achieve the targets rather than a pass/fail test being applied in every conceivable location.

¹⁸ [JNCC guidance on decision-making thresholds for air pollution](#)

How might an OCC value for water quality be approached?

It is the opinion of DTA Ecology that the OCC value for water quality should be defined in view of the conservation objectives. It would seem reasonable to seek to define OCC as a predicted water quality change for a defined linear stretch of a river over a defined timescale '*which will not undermine the achievement of the conservation objectives*' for the site concerned. This reflects the JNCC approach for air quality where the OCC value was defined in terms of a change in air quality over a defined timeframe and the concept was agreed through an ecological workshop with contributions from various external parties including scientific researchers.

Like air pollutants, the ecological response to phosphorus concentrations is not a linear relationship. There is a notable response to phosphorus at lower concentrations but, once concentrations exceed the point at which damage has already occurred the ecological response to additional phosphate loading becomes less apparent. It could therefore be argued that a given change in water quality will have more significant ecological effects in a waterbody with lower phosphate concentrations compared to one with higher concentrations and that the OCC can be higher for stretches with more significant exceedance. This is appealing at face value but such reasoning fails to recognise how conservation objectives are applied and interpreted. Where an approach is built upon the conservation objectives, and the aim of achieving them, ecological effects are only one part of the issue. It is also necessary to take account of what is required to achieve a conservation objective where a site currently exceeds a target. Where a restore objective applies the ecological effects of additional loading need to be balanced against the statutory duty to deliver improvements to achieve the phosphorus targets. An approach which allows further decline based on ecological response will undermine the achievement of a restore objective by making the longer term objective harder to achieve.

An OCC for water quality therefore needs to balance two elements. Firstly, the ecological implications of change. Secondly the implications of change for the achievement of the conservation objectives and the practical delivery of any improvement measures which might be required to get there.

It is the opinion of DTA Ecology that the setting of OCC values will need to be based on best available scientific understanding and professional judgement. An OCC value should be subject to regular review and can be revised in line with scientific evidence.

How might decision-making thresholds be derived from an agreed Objective Compliant Change value?

DTA Ecology are not water quality modellers and do not have in house water quality technical expertise. The following advice is therefore provided in good faith but needs to be read and interpreted accordingly.

The water environment is complex and the relative contribution an individual discharge will have to water quality in a receiving watercourse is dependent on the circumstances which apply, in particular the volume and flow (i.e. the dilution capacity) of the receiving watercourse. By way of example a discharge of 10m³ into the headwaters of a river can have a significant impact on water quality whereas the same discharge into a downstream reach of the same river may be largely negligible in terms of water quality change.

It is therefore not advisable to seek to define a generic decision-making threshold (DMT) in terms of the water quality at a given point of discharge. Likewise attempts to define a DMT in terms of

volume of a discharge would not be appropriate. Once an OCC value for a river stretch has been agreed a decision-making threshold could potentially be derived on the basis of modelled outputs. The modelling will need to recognise that individual sources do not co-locate and the proliferation risk could be taken into account through a hypothetical modelling scenario of the rate at which new applications might come forward based on real world data from historic permit applications. The model will need to assume a worst case scenario for the number of proposals that may arise within a given stretch over the time period for which the OCC applies.

If the OCC were to be defined as a maximum predicted change in water quality for a given waterbody, a DMT for that waterbody, which would be applied to an individual proposal, will be dependent on the flow in the receiving watercourse (i.e. the dilution capacity). In other words to achieve the same water quality change from an assumed number of small proposals will require a lower threshold where flow in the receiving watercourse is lower compared to a threshold for the same number of assumed sources into a stretch with higher flow and dilution.

The concept of a generic threshold, which can be applied throughout a waterbody is unrealistic for water quality. A decision-making threshold approach to water quality might therefore need to be derived through a formula based approach which takes the OCC as a standard and applies the Q90 (or Q95) flow as a variable. Thus a consistent approach to the derivation of a threshold (based on a standard OCC) will generate more stringent thresholds in headwaters when flow and dilution capacity is limited when compared to lower reaches of a river when flow and dilution capacity will be greater. This does not need to be a problem as the difference can be explained on logical and empirical grounds with reference to the same generic OCC value.

Appendix 3 – A possible alternative to nutrient neutrality

For the purpose of this advice nutrient neutrality is defined in accordance with the following assumptions:

- A nutrient neutrality approach is applied in a blanket manner to all development within an affected catchment.
- A nutrient neutrality approach assumes that measures to remove nutrients will be identified and delivered by developers or local planning authorities.
- Unless a specific local agreement is reached, nutrient neutrality approaches do not allow for a threshold based approach whereby 'de minimis' or very small nutrient contributions might avoid the need for further assessment.

It is the advice of DTA Ecology that, whilst nutrient neutrality is an effective short term approach to remove barriers to development it is eminently short-sighted. It is therefore advised that a strategic and co-ordinated approach to site management, mitigation and improvement could provide a mechanism to better control off-site and unlicensed activities through the alignment of management and improvement duties under Article 6(1) and (2) with the delivery of mitigation measures under Article 6(3). This alternative approach would embed nature recovery and site improvement into the process ensuring that it moves away from merely preventing deterioration.

Environmental capacity being traded (in a neutrality-based approach) against growth serves to avoid further deterioration. An improving future trend would enable decisions regarding site integrity to be made in light of the potential for development to delay progress in achieving conservation objectives, which is fundamentally different. A strategic approach could also provide centrally co-ordinated opportunities for developers to meet their mitigation obligations whilst also providing optional mechanisms to implement nature recovery measures. A strategic management, mitigation and improvement framework would streamline the delivery of a number of parallel related duties.

The approach which is envisaged could be **co-funded by statutory bodies and plan and project proposers and will involve the exercise of statutory powers**. The resources which might be invested in case-by-case mitigation approaches or strategic approaches delivered by local planning authorities could be redirected to a strategic site management, mitigation and improvement framework which would minimise delays to plans and projects, reduce staff time in undertaking HRA work and maximise ecological outcomes from the financial contributions which are secured. A strategic framework also has significant advantages in terms of monitoring and enforcement implications where measures are relied upon to mitigate the effects of new plans and projects. DTA Ecology would recommend that such an approach might helpfully include the following elements;

- Actions to achieve conservation objectives for a site are clearly set out with associated measures which are potentially available and tools for delivery (refer Appendix 4). For example, a conservation objective to restore a site and achieve relevant water quality targets might involve the exercise of various statutory powers as 'conservation measures' (refer Box 1 below).
- The pressures and threat that are anticipated to arise from new plans and projects are recognised and potential strategic mitigation options that could be taken to avoid adverse effects to site integrity are evaluated and identified. Opportunities for strategic approaches are highlighted and requirements to secure funding to address staff capacity or other resource issues in respective agencies involved in delivery are acknowledged.

- Opportunities for potential enhancement to sites features, beyond normal conservation practice and mitigation obligations, are also clearly and separately identified.
- An evaluation of the relative value priority to each of the measures, with narrative on the least onerous and most cost effective for public/ private finance together with any central policy steers.
- Options for financial requirements and options to secure financing. For example developer contributions and the considerable opportunities that may flow from the delivery of biodiversity net gain finance.
- Clear monitoring and reporting protocols of delivery that would assist to support access to more innovative funding, such as financial markets.

The exercise of statutory powers is a significant step and DTA Ecology does not underestimate the implications of the bodies involved taking them in practice. However these implications must be weighed against the statutory duties relating to environmental improvements, the realities of long-term ongoing constraints on development in and around sites with legacy pollution issues, the excessive cost burdens and delays on project proposers in delivering schemes such as nutrient neutrality, and the administrative and enforcement burdens placed on public bodies in implementation of such schemes.

Voluntary strategic approaches have been extensively explored and trialled across Wales but they have consistently failed to deliver meaningful improvements which keep up with the pace at which development proposals and growth comes forward. The 'other action' relied upon in the original review of consents programme has not delivered the anticipated improvements. The benefits from the more coordinated and strategic exercise of statutory powers are multiple:

- Measures can be targeted to areas which will deliver the best ecological outcomes rather than areas where land owner agreement is forthcoming;
- Costs can be standardised as they will be independent of market forces and the influence of supply and demand.
- Substantial cost-benefit gains would accrue when compared to current approaches such as nutrient neutrality.
- The approach would be fair and equitable as the use of statutory powers can be applied in a uniform manner to landowners in affected areas.
- Depending on the statutory powers exercised the measures implemented may not always require financial or compensation payments to land owners (polluter pays principle) but many provide a mechanism to provide these should that be desirable.
- There will be significant up-front resource implications for staff time associated with the exercise of statutory powers and the development and implementation of a site management, mitigation and improvement strategy, but these must be weighed against the staff time in ongoing implementation of any nutrient neutrality based approach which would require case-by-case decisions to be taken and the identification of bespoke mitigation options. Resource implications will however be central – see points below.

- Financial contributions to cover staff resource and implementation costs can be secured through developer contributions as part of a strategic option for delivery of mitigation for plans and projects.
- Use of statutory powers enables strategic approaches to the delivery of mitigation options to be administered in a fair and cost effective manner whilst securing optimum ecological outcomes. Strategic approaches can be anticipated to significantly reduce delays in decision-making.

The objective of any strategic management mitigation and improvement framework would be to deliver overall improvements and meet conservation objectives whilst also facilitating the delivery of a sustainable level of development.

Using diffuse water pollution as an example a hypothetical scenario is provided in Box 1 through which Natural Resources Wales (as both regulator and nature conservation body) local planning authorities, project proposers and Welsh Ministers might be involved in delivery of a co-ordinated range of measures.

Box 1 – A strategic management, monitoring and implementation framework for a site currently subject to a nutrient neutrality approach which exceeds its targets.

The current problem

It is recognised that achieving nutrient targets will require targeted measures to reduce nutrient inputs across the catchment. A nutrient neutrality approach will prevent further deterioration but in the absence of statutory powers this will be dependent upon individual agreements with land owners and measures being delivered where opportunities arise rather than being focussed on where best ecological outcomes might be achieved. Nutrient neutrality does not drive any actual improvements so, arguably, measures which are currently available to deliver benefits would merely be traded against new development and may represent a threat to site integrity if they prevent or disrupt restoration work, or the potential for future restoration. There is no long-term view to facilitate a move back to a 'business as usual' approach (whereby developers need to satisfy themselves that there is capacity at a receiving WWTW to accept the flows from new development). Voluntary approaches to incentivise better agricultural practices and nature recovery are not delivering improvements at a sufficient pace to keep up with the rate at which development is coming forwards.

The proposed approach

A joint strategic approach is agreed involving Natural Resources Wales, Local Planning Authorities and Welsh Ministers. All parties exercise their powers in a co-ordinated manner to ensure best ecological outcomes relative to costs and **with the long term objective to deliver actual reductions whilst reducing the current constraints on developments**. An approach might involve some, or all, of the following steps.

- Under Regulation 12 of Environment Act, the Welsh Ministers direct Natural Resources Wales to take such steps as appear to them to be reasonably practicable to address the matters specified in an area statement relating to themes in the South West Area Statement including '[reversing the decline of and enhancing biodiversity](#)' and '[ensuring sustainable land management](#)'. This would provide a policy basis for co-ordination amongst public bodies (regulation 14/15 of Environment Act) and for NRW to impose catchment specific constraints on the carrying out of certain polluting activities and the taking of steps where such activities are carried out. This could include controls on the application of fertilisers, land management practices (i.e. ploughing times) and the storage / spreading of slurry, either at the catchment level or in targeted areas. **This**

would be a measure to deliver overall improvements but powers could be exercised over larger spatial areas, or otherwise extended in scope to deliver additional ‘mitigation’ benefits.

- Natural Resources Wales (regulator) use powers under regulation 34 of Environmental Permitting Regulations to check whether permit conditions continue to reflect appropriate standards and requirements for a SAC river. **This would be a measure to deliver overall improvements.**
- Natural Resources Wales (regulator) exercise their enforcement powers to address unauthorised discharges and failures to comply with legislative requirements. Recent work by the Environment Agency on the River Axe (refer Box 2 below) identified that 98% of dairy farmers within the catchment operated in breach of existing legislative requirements. **This would be a measure to deliver overall improvements.**
- Natural Resources Wales (conservation body) exercise their powers – whether under Section 7 of NERC Act; Regulation 20 of the Habitats Regulations; Regulation 32 of Habitats Regulations (bylaw powers); Regulation 16 of the Environment Act to impose management agreements or other obligations on land adjacent to designated stretches of the river (**this would be a measure to deliver overall improvements**). In addition they could use powers to identify targeted areas for the planting of a riparian buffer zone adjacent to the river (**by way of additional ‘mitigation’ benefits**).

The above steps will require financial and staff resources so it is essential that the strategy also involves some of the following elements:

- Local Planning Authorities operate a strategic mitigation framework for delivery of measures where financial contributions from project proposers are allocated to provide additional staff resource and funding to support statutory bodies to further the exercise of their statutory powers. For example, funding the delivery of riparian planting on land subject to exercise of NRW powers or financial compensation for changes to current agricultural practices (Regulation 20 management agreements provide for financial payments to land owners). **This would deliver additional ‘mitigation’ benefits.**
- Local Planning Authorities identify opportunities for Local Nature Recovery Strategies on land adjacent to the river such that Biodiversity Net Gain funds could also be paid to land owners to plant and maintain the riparian buffers over 30 years. **This would deliver additional ‘mitigation’ benefits.**
- Local Planning Authorities introduce planning policies in their statutory development plans to incentivise land use change where certain criteria are met. This would potentially allow land owners of ‘problem’ sources to obtain planning permission for development on their land, and not necessarily on the land that is causing the ‘problem’, in accordance with planning policies designed to provide an incentive to change the management of land so as to remove source problems which might not otherwise occur. **This would deliver overall improvements and could significantly influence pollution loadings from historic problem sites and the rate of progress towards achieving the conservation objectives.**
- A framework might be set up to facilitate voluntary contributions from private sector parties to enhance and improve the environment. Within any such framework individual land managers can sell accredited ‘stocks’ for nature based solutions.

The approach and measures referred to above are provided by way of example, there are other statutory powers that might be exercised along with other options for securing funds from plan and project proposers or other funding sources.

The suggested approach aligns with the following duties and planning policies in Wales:

- South West Wales Area Statement and themes of '[reversing the decline of and enhancing biodiversity](#)' and '[ensuring sustainable land management](#)'
- Section 6 of the Environment Act duty to maintain and enhance biodiversity.
- Regulation 14/15 of Environment Act and coordination between public bodies for the purposes of preparing and implementing Area Plans.
- Duty under Regulation 16A of Habitats Regulations to manage the site network with a view to achieving the management objectives.
- A proactive approach to facilitating the delivery of biodiversity and resilience outcomes being taken by all (para 6.4.8 Planning Policy Wales).
- Planning authorities being able to demonstrate that they have taken all reasonable steps to maintain and enhance biodiversity (para 6.4.8 Planning Policy Wales).
- Policy 9 of Future Wales 2040 and identifying opportunities to maximise potential areas to improve the resilience of ecological networks and ecosystems.

Box 2: River Axe Catchment regulatory project case study¹⁹

Background

The River Axe Special Area of Conservation is in unfavourable condition and is declining, owing to nutrient enrichment and sediment pollution. The Environment Agency are of the opinion that this has resulted from intensification of dairy farming and associated maize growing for fodder as well as for energy production. The soils in the catchment are vulnerable to compaction and erosion and are unsuited to growing maize or winter manure spreading but these activities are widespread.

Despite over a decade of advisory visits in the period up to 2016, the catchment continued to decline and there were no significant improvement in farming practices. 95% of farms did not comply with legislative storage regulations and 49% of farms were actively polluting the river Axe. All the farms visited are Red Tractor Assured. The findings of this campaign demonstrate that Red Tractor is not effective at assuring farms are meeting environmental regulations.

The project

The Environment Agency secured £120,000 in local funding for a three year regulatory farm visit campaign during the winter periods 2016 to 2019, during which time they carried out 86 farm audits. The farm visits involved inspecting infrastructure, checking for pollution and risk of pollution and raising awareness of legislative requirements. The work followed standard Environment Agency compliance assessment procedures and follow-up enforcement with each situation dealt with on a case-by-case basis.

¹⁹ River Axe N2K Catchment Regulatory Project Report, Environment Agency, November 2019.

Environment Officers gave advice and guidance was also given on land management and the Farming Rules for Water. Where appropriate, referrals were made to Natural England for further support and grant aid through the Catchment Sensitive Farming Scheme.

Outcomes

As a result of these advice-led but regulatory driven visits farmers in the catchment have either constructed or are in the process of constructing 33 slurry stores, 3 silage clamps, 10 fuel stores and have carried out 21 infrastructure repairs. Farmers made use of Catchment Sensitive Farming grants and stewardship funds to support delivery.

The findings of the project clearly demonstrated the importance of the exercise of regulatory powers. In this instance the approach involved the provision of advice, backed up by regulation and supported by financial incentives. to create positive benefits for water quality. Neither advice, incentives nor regulation delivered in isolation of the others will generate the desired environmental improvements in water quality. A cost benefit analysis identified that every £1 spent on regulatory officer time secured an investment delivering nature recovery of £32.89.

Some key points from the EA regulatory reports are summarised below

- Most farmers were aware of the requirement for four months slurry storage but often admitted to taking a business risk by not investing in infrastructure because there was little regulatory presence of the Environment Agency in the catchment and the lack of direct pay back. Instead they have been investing in housing and robotic milking systems which will increase herd size and put more pressure on existing infrastructure.
- All of the 33 farms visited that were SSAFO non-compliant for slurry storage have voluntarily agreed to meet compliance and install the minimum of four months slurry storage. This agreement was reached after the regulations were clearly explained to the farmers alongside the enforcement repercussions if they remained non-compliant. Messages given on site were backed up in writing with agreed timescales confirmed.
- Following all regulatory visits a letter itemising all identified non-compliance was sent to farmers requiring improvement works to an agreed timescale. Failure to comply without good reason will leave the Environment Agency no alternative but to serve the appropriate enforcement notice to get the desired outcome. Failure to comply with a notice usually results in prosecution. However, as this had been made clear by the visiting officers, the vast majority of farmers chose to comply without the need for formal enforcement. Formal enforcement was necessary on only one farm where a large dairy unit was served with two enforcement notices for infrastructure improvements and soil run-off related problems.

Appendix 4: Statutory powers and other tools potentially available which might be relevant to facilitating the delivery of a strategic solution for dealing with phosphates.

Table 1: Statutory powers and other steps potentially available to Welsh Ministers to facilitate the delivery of a strategic solution	
Powers in the Environment Act (Wales)	
Power / policy tool	Comments/observations
Regulation 12 gives Welsh Ministers power to direct NRW to take such steps as appear to them to be reasonably practicable to address the matters specified in an area statement.	There are measures/steps which <i>could</i> be taken by NRW to deliver phosphate reductions (refer table 2). It is reasonable to anticipate legitimate concerns about taking steps in one catchment which are not applied consistently elsewhere. A direction issued under regulation 12 in respect of the South West Area Statement would address these concerns and provide a policy basis upon which NRW can rely in order to focus the delivery of measures in a targeted manner. A direction under regulation 12 might also provide a policy driver, or an ‘umbrella’ under which other parties can make use of respective powers under Regulations 14, 15 and 16 of the Environment Act and/or regulations 20 and 32 of the Habitats Regulations (refer Annex 2).
Regulation 13 imposes a duty on public bodies to have regard to any guidance issued by the Welsh Government concerning ‘ <i>steps that should be taken to address matters specified in an area statement under section 11(3).</i> ’	Guidance from the Welsh Ministers could be helpful to provide a policy direction concerning differing political priorities in the development and delivery of a strategic approach. This would minimise delays and discussion amongst relevant parties with differing remits and priorities. Guidance under regulation 13 might also provide a policy driver, or an ‘umbrella’ under which other parties can make use of respective powers under Regulations 14, 15 and 16 of the Environment Act and/or regulations 20 and 32 of the Habitats Regulations (refer Annex 2).
Regulation 10 allows Welsh Ministers to add, remove or amend the list of public bodies to which regulations 12 and 13 would apply.	It is noteworthy that water companies are not a public body according to Regulation 10 and it is reasonable to anticipate that, depending on the measures which might be identified to reduce phosphate levels in SAC rivers, it may be relevant to consider adding Welsh Water to the list of public bodies.

Table 1: Statutory powers and other steps potentially available to Welsh Ministers to facilitate the delivery of a strategic solution	
Powers under Conservation of Habitats and Species Regulations	
Power / policy tool	Comments/observations
Regulation 16A(1) is a new duty, introduced in the EU Exit version of the Regulations upon Welsh Ministers to manage the national site network, with a view to contributing to the achievement of the management objectives.	Further details are provided under paragraphs (2) to (6) of regulation 16A. The 'management objectives' are to maintain or restore habitats and species to a favourable conservation status and considerations which Welsh Ministers must 'have regard' to in complying with regulation 16(A)(1) include the threats of degradation or destruction to which sites are exposed. Regulation 16(A) therefore provides a driver for the Welsh Ministers to exercise powers under other legislation to support the delivery of strategic solutions to achieve the conservation objectives of SAC rivers.
Regulation 27 gives Welsh Ministers the power to make a special nature conservation order in respect of operations which appear to Welsh Ministers to be of a kind which, if carried out in certain circumstances or in a particular manner, would be likely to destroy or damage protected features.	This power is one which is anticipated to be targeted and specific. Depending on the nature and location of potential measures identified which might be relied upon to secure phosphate reductions, it is possible that this power might be appropriate at a future time.
Other steps that might be taken	
Step	Comments/observations
Support NRW proposals for Sustainable Farming Scheme	The forthcoming Sustainable Farming Scheme (including both payments and new National Minimum Standards) has the potential to deliver at scale on phosphate issues, due to its focus on soil and nutrient management. Given WG's recent regulatory focus on nitrate in the recently introduced agricultural pollution regulations, the SFS offers an opportunity to tackle nutrient pollution from farms in the round, including both phosphates and nitrates. NRW is advising WG to this effect. Given the potential for the scheme to have wide ranging impacts on improvements, the opportunity here is for WG to support NRW recommendations.
Expand LPA powers in respect of land management agreements and the ability to deliver higher standards of water efficiency	Enable LPAs to enter into 'section 16' agreements of their own with developers where the agreements can be used as a tool to set out land management measures to reduce nutrient inputs into a waterbody in a way that allows development (new nutrient inputs) to take place.

Table 2: Statutory powers and other steps potentially available to other parties to facilitate the delivery of a strategic solution

Table 2: Statutory powers potentially available to other parties to facilitate the delivery of a strategic solution	
Power / policy / tool	Comments/observations
Regulation 14/15 of Environment Act refers to coordination between public bodies for the purposes of preparing and implementing Area Plans.	Regulation 14 places a requirement on public bodies to provide NRW with information or other assistance, in the exercise of its functions, for the purpose of preparing and publishing a state of natural resources report and an area statement. Regulation 15 requires NRW, on request from a public body, to provide that body with information or other assistance, in the exercise of its functions, for the purposes of implementing an area statement. The use of regulations 14 and 15 could be influenced by the exercise of Welsh Ministers powers under Regulation 12 of the Environment Act.
Regulation 16 of Environment Act enables NRW to enter into agreements with any person who has an interest in land about how they manage their land and confers a broader power to enter into land management agreements for any purpose within the remit of NRW.	<p>Regulation 16 does not impose a requirement on a person to enter into an agreement with NRW and they are voluntary arrangements. Section 16(2) provides a non-exhaustive list of the type of terms and conditions that may be included in an agreement. Some examples of how the land may be used and restrictions on activities that may be undertaken are below:</p> <ul style="list-style-type: none"> • On farmland, under the terms of an agreement, the landowner/occupier may be required not to cultivate a certain area of the land, or they may be asked not to cut down certain trees. • It may be a term of an agreement that a landowner/occupier must manage the flow of water through his or her land for the purposes of managing flood risk. For example, the landowner/occupier may be required under the agreement to retain certain peat bogs or forestry coverage, therefore, restricting the use of the land but for the purpose of flood retention. This is an example of alternative measures that may be taken to manage flood risk by managing land in a way that retains water and attenuates flow to prevent flooding downstream. • NRW may undertake management activities (i.e. harvesting woodland) on the land, or appoint someone else. • NRW may also use management agreements for managing land that falls within a SSSI. The terms of an agreement may reflect the interests of any management scheme relating to a SSSI that may be made under section 28J of the 1981 Act. A management scheme sets out measures to be taken for conserving and restoring a SSSI.

Table 2: Statutory powers potentially available to other parties to facilitate the delivery of a strategic solution	
Power / policy / tool	Comments/observations
Regulation 20 of the Habitats Regulations enables NRW to make a management agreement with a person who has an interest in land within or adjacent to a European site. Management agreements may be made for the purpose of the management, conservation, restoration or protection of the site, or any part of it.	<p>Contrary to regulation 16 of the Environment Act, a management agreement under Regulation 20 can be binding on persons with an interest in such land and can impose obligations upon that person in respect of the use of the land and exercise of rights over the land. A management agreement under regulation 20 is enforceable by NRW under regulation 20(4)(b). A management agreement can provide for the making of payments to either party (refer regulation 22).</p> <p>This power is not widely used but, given an appropriate steer from Welsh Ministers (perhaps through exercise of powers in Table 1), it is a tool which could be relied upon to deliver reductions in phosphates entering the river through restrictions / controls on certain activities on land within a defined distance of the river. Likewise a management agreement might provide payments for the planting and maintenance of woodland on such land or other land use changes.</p>
Regulation 32 of the Habitats Regulations enables NRW to make bylaws for the protection of a European site.	<p>Regulation 32(3) specifies that such bylaws may prohibit or restrict <i>'the taking of, or interference with, vegetation of any description in the site, or the doing of anything in the site which will interfere with the soil'</i>. Regulation 32(4) extends the prohibition or restrictions of activities referred to in 32(3) within such area surrounding or adjoining a site as appears to NRW necessary for protecting the site. Regulation 32(6) specifies that byelaws can be made so as to relate to either the whole site or to any part of the site, of any surrounding or adjoining area of land. As with regulation 21 management agreements this power is not widely used but given an appropriate steer from the Welsh Ministers it is a tool which could be relied upon to secure reductions in phosphates entering the river as a result of adjacent land uses.</p>
Regulation 12 of the Environmental Permitting Regulations and the need for an environmental permit, and offences under regulation 38.	<p>NRW has an enforcement role to take action where a person causes or knowingly permits a water discharge activity except under, and to the extent authorised by, an environmental permit. Part 4 of the Regulations includes various enforcement and offences powers. It is understood that there are known incidences of unconsented discharges which will be causing deterioration to water quality and NRW can exercise necessary powers in this regard.</p>

Table 2: Statutory powers potentially available to other parties to facilitate the delivery of a strategic solution	
Power / policy / tool	Comments/observations
Regulation 34 of the Environmental Permitting Regulations. Statutory periodic review of environmental permits.	<p>NRW Regulatory Guidance Series, No EPR 12²⁰ sets out how NRW will meet their statutory duty to periodically review environmental permits. Para 1.2 refers to Welsh Assembly Core Guidance which says that “<i>permit reviews are required to check whether permit conditions continue to reflect appropriate standards and remain adequate in light of experience and new knowledge. Reviews should guard against permits becoming obsolete as techniques develop.</i>” Section 2 of this guidance provides the ‘key principles of permit reviews’ and recognises the need for permits to ‘fulfil statutory obligations’. A permit review process includes two stages. NRW guidance refers to the steps as follows:</p> <ol style="list-style-type: none"> 1. checking a permit or group of permits to see whether they ‘remain adequate’ in ensuring the operator achieves the relevant environmental and regulatory objectives. It is not always necessary - and may not be cost-efficient - to check each individual permit to assess whether it ‘remains adequate’. Where appropriate, we will do high level performance checks on groups of similar permits and target effort on those that need attention. 2. revising individual permits if necessary. Some permits will not require any changes if they already deliver expected levels of performance. <p>It is reasonable to anticipate that a strategic approach may involve amendments or tightening of conditions on existing permits.</p>
Wider planning powers available to LPAs	<p>LPA powers will be important in securing financial contributions from developers which might be relevant to the delivery of measures within a strategic approach. The exercise of powers by NRW or Welsh Water will have resource implications and funds from developers might legitimately be assigned to facilitate delivery of measures by other bodies. There are also powers available to local planning authorities relating to land use. Furthermore wider planning duties under biodiversity net benefit might reasonably be targeted to specifically focus the delivery of habitat creation schemes to land adjacent to the river such that the benefits extend to include a reduction in phosphates entering the river.</p>

²⁰ [Environmental Permitting Regulations \(England and Wales\) 2010 Regulatory Guidance Series, No EPR 12 Statutory Periodic Permit Reviews.](#)