APPROPRIATE ASSESSMENT OF A PROPOSAL LIKELY TO HAVE A SIGNIFICANT EFFECT ON A EUROPEAN SITE

CONSERVATION (NATURAL HABITATS & C.) REGULATIONS, 2010

PART A: The Proposal

1. Type of permission:	**2. Consents and ROMP references:**	**3. National Grid reference:** 53.049163, -2.991572
Map of Application site with Permission reference(s) Map Attached Yes/No	**4. Brief description of consents and options** EBENESER (CAPEL YR ANNIBYNWYR), 2 CHESTER ROAD, WREXHAM, LL12 7AD P/2025/0629 ERECTION OF NO 27 AFFORDABLE APARTMENTS	
6. European site name(s):	RIVER DEE AND BALA LAKE	

7. List of interest features:

H3260. Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot
S1095. *Petromyzon marinus*; Sea lamprey
S1096. *Lampetra planeri*; Brook lamprey
S1099. *Lampetra fluviatilis*; River lamprey
S1106. *Salmo salar*; Atlantic salmon
S1163. *Cottus gobio*; Bullhead
S1355. *Lutra lutra*; Otter
S1831. *Luronium natans*; Floating water-plantain

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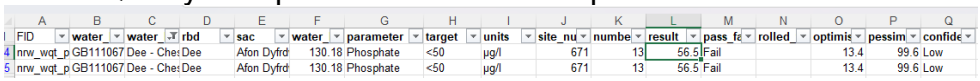
CONSERVATION (NATURAL HABITATS & C.) (Continued)

PART B: Identification of effects being considered and relevant features affected

Significant effect being considered (attribute affected)	Affected qualifying feature(s)	Favourable condition target(s) for relevant feature(s) based on conservation objectives set for SPA/ Ramsar	Contribution of attribute(s) to site integrity (ecological structure and functioning of site)
1. Water quality - increase in Phosphorus	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation Sea lamprey Brook lamprey River lamprey Atlantic salmon Bullhead Otter	Waterbodies and Water Quality Summary **Waterbody ID (SAC unit ID)** / **Waterbody name** / **Phys-Chem Failures[1]** / **Year** / **Confidence** / **Ecological Failures** / **Year** / **Confidence** GB111067052060 (SAC unit 7851) / Dee - Ceiriog to Alwen / Phosphorus / 2021 2024 / Low High / Trophic Diatom Index / 2021 (no data in 2024) / Very certain GB111067051910 (1786) / Ceiriog - confluence Dee to Teirw / Phosphorus / 2021 2024 / Low Low /	Water quality is essential to maintain populations of all the SAC features of interest.

	Waterbody ID (SAC unit ID)	Waterbody name	Phys-Chem Failures[1]	Year	Confidence	Ecological Failures	Year	Confidence
	GB111067057080 (7852)	Dee - Chester Weir to Ceiriog	Phosphorus, dissolved oxygen	2024	Low	Trophic Diatom Index	2021 (no data in 2024)	Very certain

Water Quality Compliance – NRW - Phosphorus 2020-23



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	FID	water_	water_	rbd	sac	water_	parameter	target	units	site_nu	numbe	result	pass_fa	rolled_	optimis	pessim	confide
4	nrw_wqt_p	GB111067	Dee - Che	Dee	Afon Dyfrd	130.18	Phosphate	<50	µg/l	671	13	56.5	Fail		13.4	99.6	Low
5	nrw_wqt_p	GB111067	Dee - Che	Dee	Afon Dyfrd	130.18	Phosphate	<50	µg/l	671	13	56.5	Fail		13.4	99.6	Low

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CONSERVATION (NATURAL HABITATS & C.) (Continued)

PART C: Assessment				
Significant effect being considered (attribute affected)	**Adverse Effect of proposal alone on attribute and/or feature and in relation to conservation objective for the feature.**	**Adverse Effect of proposal in combination with other plans or projects, on attribute and /or feature**	**Adverse effect on the integrity of the site? :** **Long term/ short term** **Yes/ Uncertain** **No**	**What mitigation could prevent an adverse effect on the integrity of the site?**

1.	Increase in phosphate levels in the River Dee SAC	Elevated nutrient concentrations increase the risk of adverse ecological impacts such as algal blooms, loss of nutrient-sensitive species and deoxygenation of river substrates. Impacts all areas of riverine ecology and features of interest over the long-term.	The proposal generates foul water discharges which are treated at Five Fords Waste Water Treatment Works resulting in additional phosphorus entering the River Dee – Chester Weir to Ceiriog water body (Water Body ID: GB11106 7057080) within the catchment of the Afon Dyfrdwy a Llyn Tegid / River Dee and Bala Lake Special Area of Conservation (the 'SAC'). Phosphorus budget for the proposal + 20% buffer = 3.15 kg TP/year Consequently, it is not possible to rule out the development having a Likely Significant Effect on the SAC. A more detailed Appropriate Assessment (AA) is therefore required to inform the decision-making process.	Short term – possible Long term - Certain	

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PART D: Wrexham County Borough Council's Conclusion

CAN IT BE ASCERTAINED THAT THE PLAN OR PROJECT WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE EUROPEAN SITE(S)?

Phosphate Pollution

The lower Dee waterbody is the lowest within the Dee SAC catchment, the scope of this assessment does not therefore need to consider any other waterbody. There is no evidence of adverse changes in other sources of phosphorus loading in the waterbody, for example agricultural land management and Combined Sewer Overflows that would generate additional phosphorus loadings, therefore these can be screeded out of consideration.

The 2024 compliance assessment for the River Dee – Chester Weir to Ceiriog water body concluded that the water body exceeded the limit of 50µg/l. NRW issued a report investigating failings in the River Dee SAC - River SAC Water Quality (Phys-chem) Investigations Report: Lower Dee, September 2025. NRW conclude that on the balance of the available evidence, diffuse rural sources are the most likely cause of the spikes in phosphate at sampling station 671, although continuous and intermittent sewage discharges will have also contributed to the average phosphate contributions and therefore the failure in 2024.

Various data analysis (Brookbanks, River Dee Lower Reach Assessment, May 2026, WCBC: and shadow Habitats Regulations Assessment WSP 18 August 2026 for Lower Berse Farm) concludes the mean river phosphorus concentration at the sample point in the Chester Weir to Ceiriog water body is less than the target of 50µg/l. A range of values is presented, dependent on data sets used.

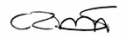
The WSP study and NRW Water Quality Modelling, Dee Catchment, September 2026 studies, sets out the predicted additional load from planned growth at other WwTWs in the catchment. The broad findings of both reports align, that the river has some phosphorus headroom. Consequently, the WwTWs can likely accommodate some development within current permit limits, without exceeding targets. The amount of headroom varies between both studies.

Whilst further work is required to establish a level of headroom that would not risk exceeding the phosphorus limit of 50µg/l, decisions can be made before this limit is established. The WSP report concluded that the phosphorus output from the Lower Berse Farm development of 1450 houses was so small as to be beyond the limit of detection, a position acknowledged by NRW. This development alone, constitutes 27/1450th of the load that could not be detected i.e. 1.86% of a level that cannot be detected.

WCBC will maintain records of consented development to ensure the combined phosphorus load does not exceed the threshold for detection at Five Fords WWTW and will not permit development that exceeds this limit (1450 dwellings) until a headroom figure for the lower Dee has been established.

<u>In Combination Effects</u>

No adverse in combination effects identified, see above.

Conclusion			
Name of Assessing Officer: Chris Smith		2. Name of Supervising Officer:	
Job Title: **Interim Head of Service Planning Policy**		**Job Title: Head of Service Planning Policy**	
Signed: 	**Date:** 15/10/26	**Signed:**	**Date:**

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PART E: Consultation with NRW on Part D
3. Natural Resource Wales comment on conclusion: