

Habitat Regulations Assessment Record

Name of relevant MCC Officer:	Daniel Hulmes Biodiversity & Ecology Officer	Date:	19/06/2024
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1. INTRODUCTION

This is a record of the Habitats Regulations Assessment of the proposal outlined below, undertaken by Monmouthshire County Council as the Competent Authority. This assessment is required by Regulations 63 and 64 of Conservation of Habitats and Species Regulations 2017 (as amended) before the Council as the 'Competent Authority' under the Regulations can give consent for the proposal.

2. INFORMATION ABOUT THE PROJECT

2.1 Type of activity:	Planning Permission
2.2 National Grid reference:	SO 36936 02932
2.3 Site reference:	DM/2024/00355 – Land opposite Llancayo House
2.4 Brief description of the project	The creation of a travellers site incorporating six bespoke family related pitches with one static and touring caravan and day/utility room per pitch, three stables/dog kennels, emergency flood access, installation of private treatment plant and ecological enhancements (partially retrospective)

3. INFORMATION ABOUT THE EUROPEAN AND RAMSAR SITES

3.1 European site name(s) and status:	Site(s) to be taken forward: <ul style="list-style-type: none"> • River Usk SAC is 0.45km south of the development site. Site(s) to be ruled out: None
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3.2 Site description

(reasons for designation, key ecological characteristics, information available on general ecological trends and current issues or sensitivities)

3.2.1 River Usk SAC	Reasons for designation and trends The river is designated for a number of Annex II migratory and non-migratory fish species including Sea lamprey <i>Petromyzon marinus</i> (Status: Unfavourable: Unclassified), Brook lamprey <i>Lampetra planeri</i> (Status: Favourable), River Lamprey <i>Lampetra fluviatilis</i> (Status: Favourable), Twaite shad <i>Alosa fallax</i> (Status: Unfavourable: Unclassified.), Atlantic salmon <i>Salmo salar</i> (Status: Unfavourable: Unclassified.), Bullhead <i>Cottus gobio</i> (Status: Unfavourable: Unclassified), well as European otter <i>Lutra lutra</i> (Status: Favourable). Annex I habitat water course of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (Status: Unfavourable: Unclassified) and Allis shad <i>Alosa</i>
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alosa (Status: Unfavourable: Unclassified.) are also a qualifying features of the designation (but not primary reasons for the designation). The application site lies adjacent to Unit 2 of the SAC; Key Species for this unit are Sea Lamprey, Twaite Shad and Otter. The Key habitat is *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation.

Vulnerability (from JNCC - Natura 2000 Standard Data Form)

The River Usk is an excellent habitat for six Annex II freshwater fish. There are some concerns over long-term aquatic and riparian habitat degradation to be addressed in the Usk Catchment Management Plan, the Conservation Strategy, the River SSSI Management Plan, and by NRW encouraging owners and occupiers to carry out positive habitat management through agreements and agri-environment schemes.

Current issues for the River Usk SAC relevant to this HRA:

The development construction and the future operation of the site as a residential housing development in proximity to a tributary of the River Usk, has the potential to cause a detrimental impact on the River Usk SAC. Fish features within the River Usk SAC include twaite and allis shad. These species are particularly sensitive to noise and vibration during their migration period (April-June inclusive). An assessment should be may of potential impacts from noise and vibration.

3.3 Reference documents that provide further details on the site, and have been used to inform the assessment:	<i>Nutrient Neutrality Assessment and Mitigation Strategy (NNAMS), EnvirEn – V1.3 June 2024</i>
	<i>Proposed Site Plan - Dwg no. 07g dated 12/06/2024 drawn by Haystons Developments & Planning Ltd</i>
	<i>Planning Statement and Justification Report by by Haystons Developments & Planning Ltd dated 14th March 2024</i>
	<i>Natural Resources Wales advice to planning authorities for planning applications affecting phosphorus sensitive river Special Areas of Conservation (SACs)- Version 3 July 2022</i>
	<i>Monmouthshire County Council Review of Consents Element 1 Report by JBA Consulting dated 7th August 2013</i>
	<i>The Habitats Regulations Handbook, DTA Publications, updated 2021.</i>
	<i>Tyldesley, D. (2011) Assessing Projects under the Habitats Directive: guidance for competent authorities. Report to Countryside Council for Wales, Bangor.</i>
<i>Mason, C. (2002) Biology of Freshwater Pollution 4th Edition Pearson Education Ltd.</i>	

4. TEST OF LIKELY SIGNIFICANT EFFECT

4.1 Is the proposal directly connected with or necessary to the management of the site for nature conservation?

No

4.2 Pathways to effect (hazards):

4.2.1 River Usk SAC

The Interest Features which could be affected are:

1. Migratory and non-migratory fish (sea lamprey, brook lamprey, river lamprey, twaite shad, allis shad, Atlantic salmon, bullhead);
2. Watercourses with *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation
3. Otters;

The possible effects during the operational phase are:

- Change in water chemistry (including pollution, nutrient enrichment and pH changes)

The possible effects may occur:

- During Operation

The following potential hazards are screened out due to the scale of the proposed development and distance from the protected site:

Acidification, Change in flow or velocity regime (including abstraction/ low flows and reduced dilution capacity), Change in salinity regime, , Change in water levels or table, Changes in physical regime, Changes in thermal regime, Disturbance (access, visual, vibration, dust, litter, recreation), Entrapment/ obstruction, Habitat loss (Direct if within site or indirect to mobile feature habitat if off site), Habitat/ community simplification, Habitat fragmentation, reduced connectivity, Physical damage, Predation (pets), Siltation/ Sedimentation/ Turbidity, Air pollution. Change in surface flooding; Entrapment, Disturbance (noise, lights, increased activity);

4.3 River Usk SAC – Test of Likely Significant Effect					
Hazard	Interest Features	Possible Effect	Magnitude in the absence of mitigation	Design of the scheme which reduces impacts on Interest Features (in light of the CJEU ruling (People Over Wind and Sweetman v Coillte Teoranta (C-323/17))	Conclusion
Changes to water chemistry Operational phase	Migratory and non-migratory fish (sea lamprey, brook lamprey, river lamprey, twaite shad, allis shad, Atlantic salmon, bullhead); Otters; Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	<p>The site is approximately 0.45km north of the River Usk Special Area of Conservation (SAC).</p> <p>The site is located within the village of Llancayo, Usk. The site formerly consisted of grazed semi-improved pasture bounded by hedgerows. However, the application is partly retrospective in nature as the site has been used as a Romany Gypsy Traveller site for over eight years. It is understood that at present, foul drainage is discharged to an unpermitted septic tank situated on site.</p> <p>The plans comprise the construction of four pitches, with associated infrastructure and soft landscaping. As such the proposal would increase the volume of foul wastewater being discharged at the site. The applicant proposes to remove the existing septic tank and discharge foul drainage to a GRAF One2Clean biological package treatment plant (PTP), which will in turn discharge to a phosphate filter and finally a drainage field located at the south of the site. This is in line with Circular 008/2018.</p>	Long term	None to be considered at this stage	<p>The applicant is proposing to discharge wastewater to ground via a PTP. The proposed drainage field is located within 20m of a surface water feature (stream).</p> <p>We are unable therefore to screen out this hazard at the test of likely significant effect.</p> <p>Counteracting Measures and Additional Measures are considered via the Appropriate Assessment process.</p>

		<p>There is a watercourse to the west of the proposed development site (20m) that feeds into the River Usk SAC. As such, there is a pathway for potential adverse impacts on water quality on the SAC.</p> <p>The development has the potential to increase nutrients (in this case we are considering phosphates) entering the watercourse leading to eutrophication and resultant habitat degradation.</p> <p>Once nutrient levels reach a certain “tipping” point the ecology of the river will shift into a different ecological status and reversal of the such effects are complex and may involve long timescales. Cumulative “additive” effects of nutrients therefore also increase the vulnerability of the site as the phosphate target is approached.</p>			
<p>4.3.4. Based on the Test of Likely Significant Effect, is the project likely to have a Significant Effect on the River Usk SAC <u>alone</u>?</p>		<p>A likely significant effect on the River Usk SAC as a result of increased phosphates entering the watercourse cannot be screened out in the absence of additional mitigation measures and, therefore, a full Appropriate Assessment is required to assess for adverse impacts.</p>			

4.3.5 Conclusion of the Test of Likely Significant Effect: Will a full Appropriate Assessment be required?

The following hazards have potential to cause significant impacts on interest features of the SAC during Operation phases are carried forward to the Appropriate Assessment Stage.

- Changes in water chemistry (including pollution, nutrient enrichment and pH changes)

It is considered that mitigating measures are needed to safeguard interest features of the SAC, in light of the recent CJEU ruling (People Over Wind and Sweetman v Coillte Teoranta (C-323/17)) we will need to carry these hazards through to Appropriate Assessment.

5. APPROPRIATE ASSESSMENT

5.1 APPROPRIATE ASSESSMENT – River Usk SAC

Interest Features	Element of the Project	Mitigation Measure Required (Is mitigation required?, type & method of securing)
<p>Otter 1355 <u>Conservation Objectives - 4.3.1, 4.3.2, 4.3.3</u></p> <p>Sea lamprey 1095 Twaite shad 1103 Atlantic salmon 1106 Brook lamprey 1096 Bullhead 1163 River lamprey 1099 Bullhead 1163 Allis shad 1102 <u>Conservation Objectives -4.2.3</u></p> <p>Annex I Habitat 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation <u>Conservation objective-4.1</u></p>	<p><u>Operational Phase of the scheme:</u></p> <p>Changes in water chemistry</p>	<p>In compliance with Version 3.1 of the NRW phosphate guidance, the applicant has confirmed how foul wastewater will be managed:</p> <p>A biological PTP has been proposed, the applicant has provided that this will be a GRAF One2Clean model. The PIA test performance certification for this system, submitted in Appendix F of the <i>Nutrient Neutrality Assessment and Mitigation Strategy</i>, provides that the treatment efficiency is 80.2% and the level of P in the effluent is 1.6mg/l. Phosphorous will be further removed via the use of a filter comprising a limestone bed which, Section 3.3 of the <i>Nutrient Neutrality Assessment and Mitigation Strategy</i> states, has an 87% phosphorous removal rate.</p> <p>It is then proposed that the wastewater will discharge into a drainage field. The drainage field has been calculated to be at least 250m², based on the volume of wastewater proposed to be discharged. Percolation testing has been undertaken with the locations provided on a submitted drawing titled '<i>Existing Site Plan showing Percolation Test Hole Locations.</i>'</p> <p>Clear scale plans showing the locations of the PTP, limestone filter and drainage field have been submitted to inform the application, titled '<i>Proposed Site Plan.</i>'</p> <p>The applicant has submitted calculations using the Carmarthenshire County Council Nutrient Calculator to demonstrate that there will be no increase in phosphorus loading as a result of the proposals. The NRW consultation response, dated 08 May 2024, determined it to be a reasonable substitute for the absence of a River Usk specific calculator.</p> <p>Calculations undertaken by Monmouthshire County Council's Biodiversity Officer, based on the British Water Flows and Loads 4 document which assumes a higher occupancy rate and water usage, finds that based on the removal rates provided for both the PTP and limestone bed filter, the proposals would result in an increased phosphate loading of 373.4mg. Due to the retrospective nature of the application, for the purposes of this calculation, the existing phosphate loading is considered to be zero due to its previous use as a field of grazed pasture. However, it should be acknowledged that the site has been in use for residential purposes for a number of years and foul drainage is currently managed via an unregistered septic tank.</p>

<p>5.2 In combination test: Are there any in combination effects with other plans and projects considering Additional Mitigation Measures.</p>	<p>In consideration of other developments;</p> <p>DM/2019/00636 - Henrhiw Farm, Agricultural building,</p> <p>DM/2020/00400 - Land adjacent to Racecourse Farm</p> <p>DM/2018/00834 - Land to the west of Glebe Cottage</p> <p>DM/2018/01995 - The Willows 20 Baron Street Usk</p> <p>Conclusion of in combination test: It is possible that the proposals could have an adverse impact ‘in combination’ in consideration of other proposed development in this catchment.</p>
<p>5.3 Case Law, Planning advice & relevant studies considerations</p>	<p>The site is located on the edge of the rural settlement of Llancayo and the majority of the 1km² area is agricultural land, though we note the projects and plans referenced in 5.2 above.</p> <p>There are some uncertainties related to what significance exceedances of phosphorous from the development would have on features of the SAC (as per the Compton case).</p> <p><i>“That could not be answered, one way or the other, by simply considering whether there were exceedances of critical loads or levels, albeit rather lower than currently. What was required was an assessment of the significance of the exceedances for the SPA birds and their habitats.”</i></p> <p>The study undertaken by Natural England - Phosphorous in Package Treatment Plant effluents dated 2nd September 2016 also provides that:</p> <p><i>“A better understanding of the impact of in-stream dilution on resultant P concentrations in the environment is required. This applies, especially, to how far downstream of an effluent discharge point effects on water quality can still be observed and how the pattern of impact is affected by the mode of delivery, eg via a soakaway or through a direct discharge.”</i></p> <p>Taking into consideration the specific details of this case and the matters set out above, we are satisfied that our conclusion of no adverse effect on the integrity of the SAC is aligned with the principles of the Compton case.</p> <p><i>“The judgment is one for the decision-maker, as to whether it is satisfied that the plan would not adversely affect the integrity of the site concerned; the assessment must be appropriate to the task. Its conclusions had to be based on "complete precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effect of the proposed works on the protected site concerned"; People Over Wind. But absolute certainty that there would be no adverse effects was not required; a competent authority could be certain that there would be no adverse effects even though, objectively, absolute certainty was not proved; R (Champion) v North Norfolk District Council [2015] UKSC 52 at [41], and Smyth v Secretary of State for Communities and Local Government [2015]</i></p>

	<p><i>EWCA Civ 174 at [78]. The same approach applies, following the Dutch Nitrogen case, to taking account of the expected benefits of measures not directly related to the plan being appropriately assessed."</i></p>
<p>5.4 Conclusion of the Appropriate Assessment:</p> <p>Integrity Test - River Usk SAC</p>	<p>The capabilities of the biological PTSP and the limestone bed filter mean that Phosphorous levels are such that 373.4mg mg per day would discharge to directly to ground via a drainage field. We conclude that, subject to the imposition and incorporation of the additional mitigation measures detailed, that the project will not adversely affect the integrity of the River Usk SAC.</p>
<p>6. Consultation</p>	

NRW have been consulted on the planning application DM/2024/00355. The response is presented below:

08/04/2024

Annwyl Syr/Madam / Dear Sir/Madam,

BWRIAD/PROPOSAL: The creation of a travellers' site incorporating six bespoke family related pitches with one static and touring caravan and day/utility room per pitch, three stables/dog kennels, emergency flood access, installation of private treatment plant and ecological enhancements (partially retrospective).

LLEOLIAD/LOCATION: New Stables, Land Opposite Llancayo House, Abergavenny Road, Llancayo, Monmouthshire

Thank you for consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the above, which we received on 22 March 2024. We have concerns with the application as submitted because inadequate information has been provided in support of the proposal. To overcome these concerns, you should seek further information from the applicant regarding flood risk, and foul drainage. If this information is not provided, we would object to this planning application. Further details are provided below.

Protected Sites and Foul Drainage

We note the application site is within the catchment of the River Usk Special Area of Conservation (SAC). As you are aware, on the 21st January 2021, we published an evidence package outlining phosphorus levels for all river SACs across Wales. In line with our Planning Advice (August 2023), under the Habitats Regulations, Planning Authorities must consider the phosphorus impact of proposed developments on water quality within SAC river catchments. We therefore advise you to consider whether the proposals, as submitted, would increase the volume of foul discharge from the site in planning terms. We note from the information submitted that a new package treatment plant is proposed. As the new PTP is to discharge to a watercourse the proposal does not meet the criteria for developments which can be screened out as not likely to have a significant effect on a river SAC.

As such, we refer you to our Planning Advice and advise you to seek further information from the applicant. We note that information has already been submitted in respect of a Nutrient Neutrality Assessment and Mitigation Strategy, by Enviren dated 13 March 2024.

We have reviewed this document and offer the following comments.

Nutrient calculator: We note the consultant has used the West Wales (WW) calculator. In the absence of the new Welsh Government calculators covering the Usk catchment then use of the WW calculator is a reasonable substitute.

Consideration of existing foul drainage in the P balance calculations: the Planning Statement and Justification Report (14 March 2024) states that there is an existing foul drainage system with septic tank serving the site and that the site has been occupied for 8 years. We understand that this discharge is not permitted and it is unclear as to whether this has a discharge to ground or discharge to surface water. The proposed new foul drainage system would discharge to surface water according to the Enviren report of 13 March 2024 via a new PTP and subsequent reed/filter beds. Phosphorus calculations in the Enviren report of 13 March 2024 make no reference to discharges from the existing drainage system and therefore potentially underestimate current P discharges from the site.

Level of occupation: The phosphorus balance calculations are based on an occupancy of 2.2 people per each of the six units. It is a matter for the LPA to decide if this level of occupancy appropriately reflects how the site will be populated based on their understanding of the proposal for the site. It is not known how many bedrooms are proposed in each unit. You may wish the applicant to clarify this.

Phosphorus discharge of existing land use: a land use category of open land/built environment is appropriate with associated phosphorus loss included as reference metric.

Drainage solution: the proposal is for new PTP and associated filter beds to reduce phosphorus concentration at the point of final discharge. The Planning Statement advises that 'this strategy has been extensively discussed with Natural Resources Wales who has approved the design.' The applicant should provide any correspondence from NRW to support this statement.

Stables and kennels: the proposal includes construction of stables and dog kennels. The proposal is for horse manure to be removed from site although no clear location for its disposal is provided. Waste and washdown from the dog kennels should be disposed of in an appropriate treatment system and could be placed in the proposed foul drainage treatment system for the site. This additional material has not been considered in the nutrient balance calculation or design flows.

Permit requirements: the discharge is shown to be in a Drinking Water Protection Area and an environmental permit for the discharge will be required. The applicants are advised to submit a pre-application enquiry or permit application for the discharge with revised phosphorus balance calculation. Our permitting team would issue any permit based on the effluent quality leaving the main treatment unit and not the resultant polished effluent so consideration would need to be given as to how the neutrality aspect (if it can be shown) would be considered against our current permitting guidance for discharges in failing SACs.

We advise that the applicant/consultant should revisit their nutrient calculation based on the need to include kennel/stable waste and existing septic tank discharge.

Further information regarding the wash-down water of the stables/kennels is required - where will this be discharged, and if chemicals are to be used (please see attached guidance note).

We also advise that the foul water system must be compliant with the current British standard (not BRE as mentioned in the planning statement). We would be happy to provide further advice on receipt of the information requested above.

Flood Risk

The planning application proposes highly vulnerable development: a travellers' site. Our Flood Risk Map confirms the site to be within Zone C2 of the Development Advice Map (DAM) contained in Technical Advice Note (TAN) 15: Development and Flood Risk (2004). The Flood Map for Planning (FMfP) identifies the application site to be at risk of flooding and falls into Flood Zones 2 and 3 Rivers.

We refer you to Section 6 of TAN15 and the Chief Planning Officer letter from Welsh Government, dated 9 January 2014, which affirms that highly vulnerable development should not be permitted in Zone C2 (paragraph 6.2 of TAN15). The justification tests in paragraph 6.2 of TAN15 do not apply to highly vulnerable development in Zone C2. Notwithstanding this policy position, we have reviewed the Flood Consequences Assessment (FCA) JBA, dated March 2024, referenced LVZ-JBAU-XX-XX-RP-001 to provide you with technical advice on the acceptability of flooding consequences in accordance with Appendix 1 of TAN15.

The FCA has not demonstrated that in accordance with A1.14 of TAN15 the proposed development is predicted to be flood free in the 1% plus an allowance (25%) for climate

change (+CCA) flood event. However, we note that the proposed layout results in the proposed residential accommodation being located outside the flood event outlines as indicated by the flood map for planning.

The caravans are to be housed to the east of the site with the main access via the northwest. Along the eastern boundary is a proposed emergency access point to be accessible at all times.

A1.14 of TAN15

The FCA states that the main access road into the site is shown to be at risk of flooding in the 1% (1 in 100 year) (present day) event with depths of up to 200mm. Additionally, the two x 3-bay stable blocks proposed to be located along the western boundary are predicted to flood to a maximum depth of 250mm during this event. This is contrary to A1.14 of TAN15 which advises all new development should be flood free in the 1% +CCA event. Therefore, predicted depths are likely to be higher when the allowance for climate change is added.

The FCA recommends that the Finished Floor Level is raised by approximately 300mm to reduce the risk of flooding to the stables during the 1%+CCA flood event. We advise that should your authority be minded to grant permission, that this be secured through a suitably worded condition.

The FCA suggests that given the scale and nature of the development, it is disproportionate to include climate change with a hydraulic model to ascertain the predicted flood depths in the 1%+CCA event. Whilst we would normally advise flood risks to/from the site are assessed using the 1% +CCA fluvial flood event depths and levels, in this case as the FMfP includes climate change in the outlines and the residential elements of the proposal are located outside these outlines we offer no adverse comment in this regard. Whilst the FMfP is of a broad scale, it does give a precautionary assessment of the flood risk.

A1.15 of TAN15

The FMfP also indicates all proposed residential areas are located outside the 0.1% (1 in 1000 year) flood outline. An area in the north-west of the site is predicted to flood during the 0.1% flood event. This area is predominantly amenity space, with two proposed stable blocks within the flood extent. The FCA states that flood depths are typically less than 400mm and are not predicted to exceed 600mm. Flood depths across the proposed stable blocks are predicted to be a maximum of 308mm, which is within the indicative tolerable limits (600mm) suggested within A1.15 of TAN15. With the proposed FFL to be set 300mm higher than existing levels to ensure it is flood free during the 1%+CCA event, the predicted depth in the 0.1% event would be reduced to 8mm.

A1.12 of TAN15

Flood risk elsewhere

The FCA concludes that the proposed development shall not increase flood risk elsewhere. An area of land in the north-west of the site which is predicted to be at risk of fluvial flooding shall remain the same post development, therefore the development will not increase flood risk to third party land. (Given the scale of the proposed stables and the flood depth on site, we consider this is unlikely to increase flood risk elsewhere post development).

Access/Egress

Flooding of the main access road in the north-west is predicted up to a maximum depth of 294mm, this is within the tolerable limits (600mm) suggested within A1.15 of TAN15 for access routes on residential sites.

The emergency access to the eastern boundary of the site is predicted to be flood free during all events. Access / egress to the site is available from the eastern boundary, in a northerly direction, where flood depths are less than 300mm on the unnamed highway. TAN15 advises that access routes should be shown to be operational under all conditions.

It is for your authority to determine whether you consider these risks to be acceptable

Additional comments and advice

The owner/occupier is advised to sign up to our free Flood Warning service. Further details are at <http://naturalresourceswales.gov.uk/flooding/sign-up-to-receive-floodwarnings/?lang=en>

The applicant can access advice and information on protection from flooding from the ODPM publication 'Preparing for Floods: Interim Guidance for Improving the Flood Resistance of Domestic and Small Business Properties', can be found by following the link:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/11485/2187544.pdf

From the proposed site location plan, Drg No 07c, dated 12.03.2024, it would appear that the proposed package treatment plant is located outside the fluvial flood outlines. Should this change then we would ask to be reconsulted.

Flood Risk Summary

Although the residential elements of the proposal are located outside the flood outlines on the FMfP, the proposed development site is not shown to be designed completely flood free during the 1%+CCA event as per national planning policy.

The stable block and access are predicted to flood in the 1% flood event. Should your Authority require a 1%+CCA flood depth for completeness, hydraulic modelling would not be necessary. Instead, the applicant could, for example, compare the FMfP outlines, which include climate change, with the site topography to ascertain an approximate flood level for the 1 in 100 year plus climate change flood event.

It is for your Authority to determine whether the risks and consequences of flooding can be managed in accordance with TAN15, we recommend you consider consulting other professional advisors on matters such as emergency plans, procedures and measures to address structural damage that may result from flooding. Please note, we do not normally comment on the adequacy of flood emergency response plans and procedures accompanying development proposals, as we do not carry out these roles during a flood.

Our involvement during a flood emergency would be limited to delivering flood warnings to occupants/users.

Ecology

We recommend you seek the advice of your in-house ecologist to determine the scope of any Ecology surveys required to support this application. Please consult us again if any survey undertaken finds that bats are present at the site and you require further advice from us.

Pollution Prevention

Appropriate pollution prevention measures should be employed to protect the water quality during construction. Guidance for Pollution Prevention (GPP) documents are available on the NetRegs website: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>

We refer the applicant in particular to GPP5 Works and maintenance in or near water.

Other Matters

Our comments above only relate specifically to matters included on our checklist, Development Planning Advisory Service: Consultation Topics (September 2018), which is published on our website. We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our website for further details.

Yn gywir / Yours faithfully

Claire McCorkindale Cyngorydd - Cynllunio Datblygu / Advisor - Development Planning Cyfoeth Naturiol Cymru / Natural Resources Wales

APPENDIX 1 - European Site Conservation Objectives for River Usk SAC:

4.1 Conservation Objective for the watercourse

The ecological status of the watercourse is a major determinant of FCS for all features. The required conservation objective for the watercourse is defined below.

4.1.1 The capacity of the habitats in the SAC to support each feature at near-natural population levels, as determined by predominantly unmodified ecological and hydromorphological processes and characteristics, should be maintained as far as possible, or restored where necessary.

4.1.2 The ecological status of the water environment should be sufficient to maintain a stable or increasing population of each feature. This will include elements of water quantity and quality, physical habitat and community composition and structure. It is anticipated that these limits will concur with the relevant standards included in Appendixes 1 and 2.

4.1.3 Flow regime, water quality and physical habitat should be maintained in, or restored as far as possible to, a near-natural state, in order to support the coherence of ecosystem structure and function across the whole area of the SAC.

4.1.4 All known breeding, spawning and nursery sites of species features should be maintained as suitable habitat as far as possible, except where natural processes cause them to change.

4.1.5 Flows, water quality, substrate quality and quantity at fish spawning sites and nursery areas will not be depleted by abstraction, discharges, engineering or gravel extraction activities or other impacts to the extent that these sites are damaged or destroyed.

4.1.6 The river planform and profile should be predominantly unmodified. Physical modifications having an adverse effect on the integrity of the SAC, including, but not limited to, revetments on active alluvial river banks using stone, concrete or waste materials, unsustainable extraction of gravel, addition or release of excessive quantities of fine sediment, will be avoided.

4.1.7 River habitat SSSI features should be in favourable condition. Where the SAC habitat is not underpinned by a river habitat SSSI feature, the target is to maintain the characteristic physical features of the river channel, banks and riparian zone.

4.1.8 Artificial factors impacting on the capability of each species feature to occupy the full extent of its natural range should be modified where necessary to allow passage, eg. weirs, bridge sills, acoustic barriers.

4.1.9 Natural factors such as waterfalls, which may limit, wholly or partially, the natural range of a species feature or dispersal between naturally isolated populations, should not be modified.

4.1.10 Flows during the normal migration periods of each migratory fish species feature will not be depleted by abstraction to the extent that passage upstream to spawning sites is hindered.

4.1.11 Flow objectives for assessment points in the Usk Catchment Abstraction Management Strategy will be agreed between EA and CCW as necessary. It is anticipated that these limits will concur with the standards used by the Review of Consents process given in Appendix 2 of this document.

4.1.12 Water Quality targets follow those in the revised Common Standards Monitoring Guidance for Rivers (JNCC 2016). These are detailed in Appendix 1 with targets for organic pollution (DO, BOD and ammonia), phosphate¹, trophic diatom index and acidification.

4.1.13 Potential sources of pollution not addressed in the Review of Consents, such as contaminated land, will be considered in assessing plans and projects.

4.1.14 Levels of suspended solids will be agreed between EA and CCW for each Water Framework Directive water body in the Usk SAC. Measures including, but not limited to, the control of suspended sediment generated by agriculture, forestry and engineering works, will be taken to maintain suspended solids below these levels.

4.2 Conservation Objective for Features 1-5:

- Sea lamprey *Petromyzon marinus* (EU Species Code: 1095) ;
- Brook lamprey *Lampetra planeri* (EU Species Code : 1096) ;
- River lamprey *Lampetra fluviatilis* (EU Species Code : 1099) ;
- Twait shad *Alosa fallax* (EU Species Code : 1103) ;
- Allis shad *Alosa alosa* (EU Species Code : 1102) ;
- Atlantic salmon *Salmo salar* (EU Species Code : 1106) ;
- Bullhead *Cottus gobio* (EU Species Code : 1163)

4.2.1 The conservation objective for the water course as defined in 4.1 above must be met

4.2.2 The population of the feature in the SAC is stable or increasing over the long term.

4.2.3 The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches where predominantly suitable habitat for each life stage exists over the long term. Suitable habitat is defined in terms of near-natural hydrological and geomorphological processes and forms eg. suitable flows to allow upstream migration, depth of water and substrate type at spawning sites, and ecosystem structure and functions eg. food supply (as described in sections 2.2 and 5). Suitable habitat need not be present throughout the SAC but where present must be secured for the foreseeable future. Natural factors such as waterfalls may limit the natural range of individual species. Existing artificial influences on natural range that cause an adverse effect on site integrity, such as physical barriers to migration, will be assessed in view of 4.2.4

4.2.4 There is, and will probably continue to be, a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis.

4.3 Conservation Objective for Feature 6:

- European otter *Lutra lutra* (EU Species Code: 1355)

4.3.1 The population of otters in the SAC is stable or increasing over the long term and reflects the natural carrying capacity of the habitat within the SAC, as determined by natural levels of prey abundance and associated territorial behaviour.

4.3.2 The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches that are potentially suitable to form part of a breeding territory and/or provide routes between breeding territories. The whole area of the Usk SAC is considered to form potentially suitable breeding habitat for otters. The size of breeding territories may vary depending on prey abundance. The population size should not be limited by the availability of suitable undisturbed breeding sites. Where these are insufficient they should be created through habitat enhancement and where necessary the provision of artificial holts. No other breeding site should be subject to a level of disturbance that could have an adverse effect on breeding success. Where necessary, potentially harmful levels of disturbance must be managed.

4.3.3 The safe movement and dispersal of individuals around the SAC is facilitated by the provision, where necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc at road bridges and other artificial barriers.

4.4 Conservation Objective for Feature 7:

- Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation (EU Habitat Code: 3260)

4.4.1 The conservation objective for the water course as defined in 4.1 above must be met

4.4.2 The natural range of the plant communities represented within this feature should be stable or increasing in the SAC. The natural range is taken to mean those reaches where predominantly suitable habitat exists over the long term. Suitable habitat and associated plant communities may vary from reach to reach. Suitable habitat is defined in terms of near-natural hydrological and geomorphological processes and forms eg. depth and stability of flow, stability of bed substrate, and ecosystem structure and functions eg. nutrient levels, shade (as described in section 2.2). Suitable habitat for the feature need not be present throughout the SAC but where present must be secured for the foreseeable future, except where natural processes cause it to decline in extent.

4.4.3 The area covered by the feature within its natural range in the SAC should be stable or increasing.

4.4.4 The conservation status of the feature's typical species should be favourable. The typical species are defined with reference to the species composition of the appropriate JNCC river vegetation type for the particular river reach, unless differing from this type due to natural variability when other typical species may be defined as appropriate.