Northumberland National Park
Eastburn South Park
Hexham
Northumberland
NE46 1BS

Our ref: NA/2015/112349/01-L01
Your ref: 15NP0036

Date: 08 July 2015

Dear Sir/Madam

PROVISION OF PERMANENT SCOUR PROTECTION TO HIGHWAY BRIDGE. ASSOCIATED SOFT ENGINEERING WORKS TO MINIMISE SCOUR AND GRAVEL DEPOSITION. REMOVAL OF OLD RAILWAY ABUTMENT, RAISING CREST OF FLOOD EMBANKMENT TO IMPROVE RISK TO FLOODING TO ADJOINING LAND WESTNEWTON BRIDGE, KIRKNEWTON, WOOLER, NORTHUMBERLAND, NE71 6XF

Thank you for referring the above application that was received on 26 May 2015.

Environment Agency position - biodiversity
As the proposal is not necessary for the management of the European protected site, the competent authority should determine whether the proposal is likely to have a significant effect on the European site. This being the case, we **object** to the proposal as submitted as insufficient information has been submitted with the application to determine likely significant effects. An appropriate assessment out must be carried out if any significant effects can't be ruled out

We have the following advice and information to offer to help the production of the assessment.

A monitoring programme is required which should determine levels and triggers for the maintenance of the structure, surrounding channel and will include the entire reach. The programme should identify and quantify vertical and lateral channel adjustment, specifically areas of erosion, scour and accretion and will also identify any long term implications, including an alteration to the sediment transport regime. The programme should be provided in accordance with the River Restorations Centre's PRAGMO guidelines and following recommendations made in the submitted CBEC report u12-1003. It should determine parameters at which movement, scour, accretion and other factors would begin to pose a risk to the WFD element statuses and the protected features and integrity. Furthermore it should link the geomorphology at the site and the reach to the impacts on biology specifically relating to the features of the protected site and WFD biology elements. The programme will determine the frequency and timings of when monitoring takes place, including monitoring following high flows

A maintenance programme will also be required detailing levels and triggers when

maintenance should be undertaken informed by an agreed monitoring programme.

The programme should ensure risks posed by the structure are mitigated and that the maintenance will be carried out indefinitely, or an agreed deemed to be reasonable duration, for the existence of the structure and its impacts.

The plan will need to include:

- named body responsible for delivery
- details of adequate financial provision over the longer term
- details ensuring fish passage, and WFD elements are maintained and not prevented from reaching good status.
- details ensuring features of the protected site are not impacted and site integrity is maintained.

These programmes are required to ensure the protection of the designated site, its features and supporting habitat and secure opportunities for the enhancement of the nature conservation of the site. They are also necessary to ensure there is no deterioration in the status of WFD elements and WFD status of the waterbody and to ensure that the ability of the waterbody to achieve good status is not impacted by the development.

The National Planning Policy Framework (NPPF) paragraph 109 recognises that the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible. Paragraph 118 of the NPPF states that if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused and that opportunities to incorporate biodiversity in and around developments should be encouraged.

Article 10 of the Habitats Directive stresses the importance of natural networks of linked habitat corridors to allow the movement of species between suitable habitats, and promote the expansion of biodiversity. River corridors are particularly effective in this way. Such networks and corridors may also help wildlife adapt to climate change.

A comprehensive pollution monitoring and control plan should be produced. The plan will ensure the risks posed by the work are suitably controlled and reduced and should include:

- named body responsible for delivery
- confirmation of a responsible person to carry out monitoring and assess the effectiveness of the plan during the work such as an ECoW.
- details of monitoring of oxygen levels both upstream and downstream during work and at other high risk times such as pouring and setting of cement or vehicle tracking
- details of monitoring of turbidity and silt levels
- details of monitoring of pH levels
- details of monitoring for leachate from cement or other construction related residues
- details of monitoring of silt and pollution control equipment and structures to ensure their effectiveness
- a detailed plan of comprehensive silt control measures including the ability to filter all water across the channel, frequency and trigger points to replenish and

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measures, how silt is controlled when measures are replaced or removed.
- a detailed plan of measures to stop leachate from cement residues from entering the watercourse during transport, pouring, levelling, setting and through the ground or over the top of the structure. This will also include measures to prevent cement from being washed out during flows which would overtop the structures.

This is necessary to ensure the protection of the designated site, its features and supporting habitat, and secures opportunities for the enhancement of the nature conservation of the site. It is also necessary to ensure there is no deterioration in the status of WFD elements and WFD status of the waterbody and to ensure the ability of the waterbody to achieve good status is not impacted by the development.

Furthermore, any works that result in increased amounts of suspended sediment is likely to result in a decrease in dissolved oxygen. In summer and autumn dissolved oxygen levels are low and a further decrease is likely to have a negative impact on migrating fish. The National Planning Policy Framework paragraph 109 recognises that the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity.

In addition, the Northumbria river basin management plan requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Oxygen and other pollution levels need to be monitored and adequately controlled as the impacts of pollution and low oxygen levels may lead to deterioration of a quality element to a lower status class and/or cause deterioration of a protected area.

The following advice/information should also be taken into consideration:

There are 2 WFD compliance reports. It would have been beneficial for one of these to be supporting information used in an overall WFD assessment linking the hydromophology and ecology.

The hydromorphology and ecology are intrinsically linked and therefore we would normally expect one compliance assessment. This would ensure consistency in the approach, using the same baseline information, criteria and conclusion. For instance, it is unclear which baseline condition the CBEC Compliance Assessment is referring to and therefore in Table 4.1, Assessment of Impacts, what the proposed design is being compared against. It can be argued that the logs arrays will bring an improvement compared to the current situation, post 2012 emergency works. Although compared to the 2009 condition, where by the College Burn displayed an excellent example of a wandering gravel bedded river with pools and riffles, it is not agreed that that proposed design provides betterment.

With regard to the CBEC report, table 4.1 of impacts in the College Burn from Lamden Burn to Glen (GB102021072940), we have the following comments:

River continuity
The risk to river continuity from scour should be highlighted and explained.

Fish
We do not agree the scheme will promote an improvement to fish habitat. The channel provided good spawning/nursery habitat before the emergency gravel works were carried out. There is no evidence that it will provide an improvement over the existing situation where the channel will, in time, re-naturalise providing good nursery habitat. It cannot be reliably predicted what habitat the presence of the training structures will assist in creating. Given the short length of channel this may be neutral.

Regarding 'Enhancement of fish passage through creation of diverse flow depth and velocity through concrete apron structure design'. Compared to the current status and status before 2012 emergency works we are not aware there is a fish passage issue at the bridge. If the design is implemented as suggested and maintained to allow fish passage and reduce scour then this would be neutral.

Although the proposals have incorporated measures to reduce the risk of scour, it cannot be certain it would not happen. The risk of downstream scour leading to deterioration in fish passage and WFD status needs to be highlighted as a real risk in the proposals. Our view for the other biological elements is similar to that for fish where the report has suggested a possible improvement.

Confirmation is required that the structure and surrounding channel is constructed and maintained according to the submitted drawings. If any ongoing issues that pose a risk to the protected site, WFD elements or status cannot be resolved, then the structure may need significant alteration or removal. This will include appropriate reinstatement of the natural channel.

It is agreed that at the waterbody scale, the design proposal in its current condition, will not pose a deterioration in WFD status and is therefore WFD compliant. However, both compliance assessments severely underestimate the long term sustainability of the project and possibility for future deterioration of WFD status based upon a deterioration of the watercourse at the reach scale. There may be a risk that maintenance requirements could be considerable and indefinite for the duration of the structure and its impact.

Protected species
Otters are likely to use this stretch of river, therefore it is vital that all site operatives are aware of this and that any working method takes account of this protected species, for example, by making sure that any excavations are not left uncovered after work has finished for the day, or if for some reason this is not possible, access out of excavations/trenches for otters must be facilitated. Additionally, if an otter is encountered during the work, all operatives must know how to react appropriately and if required, who to contact. The advice of a suitably qualified ecologist should be followed.

Water Vole
Our records show that there could be water vole in the area. These are protected under the Wildlife & Countryside act 1981. Further guidance can be found at http://www.naturalengland.org.uk/ourwork/regulation/wildlife/species/watervoles.aspx

Biosecurity
Biosecurity measures need to be in place for the duration of the works and strictly adhered to by all site operatives. This is especially important in this case as Signal Crayfish and other invasive species are present the Till catchment. As a minimum the Check Clean and Dry campaign should be followed. Further information on biosecurity can be found at the following link
https://secure.fera.defra.gov.uk/nonnativespecies/checkcleandry/index.cfm

- **Check** your equipment and clothing for live organisms - particularly in areas that are damp or hard to inspect.
- **Clean** and wash all equipment, footwear and clothing thoroughly. If you do come across any organisms, leave them at the water body where you found them.
- **Dry** all equipment and clothing - some species can live for many days in moist conditions. Make sure you don't transfer water elsewhere

If the aforementioned objection can be overcome and you are minded to grant consent, then the following should also be taken into consideration:

Flood Risk
The proposal has been shown, through hydraulic modelling, that it will not increase flood risk and will in fact, reduce flooding. It shows the proposal will result in the 1 in 200 year flood remaining within the embankments upstream of the bridge and the extent out of bank downstream of the bridge, will be reduced. This is of course dependent on the structures (particularly the log pairs) remaining in situ.

The modelling report refers to ongoing monitoring of the area to ascertain what additional or regular maintenance needs to be undertaken to ensure the structures stay in place. If they were to move and become dislodged, they could cause an increase in flood risk by forcing water out of bank upstream of the bridge or by blocking the bridge arches. Therefore this monitoring and maintenance is crucial. This would normally fall under the responsibility of the landowner but we understand the local authority would take responsibility for this ongoing maintenance.

Environment Agency Position – Flood Risk
The proposed development will only meet the requirements of the National Planning Policy Framework if the following measure(s) as detailed in the Flood Risk Assessment (FRA) submitted with this application are implemented and secured by way of a planning condition on any planning permission.

Condition
The development permitted by this planning permission shall only be carried out in accordance with the approved Flood Risk Assessment (FRA) ref 108201/15 produced by Northpoint Consulting and the cbec modelling and design report ref U13-1003 and the following mitigation measures detailed within the FRA:

- A monitoring programme is produced to monitor the works and to determine required ongoing maintenance.
- Modifications to embankment and abutment and installation of log pairs are in accordance with design drawings in appendix D.
- New concrete apron invert is constructed as per drawing no. HB127276/B/B6351/06/35
- Gravel levels upstream and downstream of concrete apron are reinstated to original levels.

The mitigation measures shall be fully implemented prior to occupation and

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subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reason

- To ensure the structure remains as proposed through appropriate maintenance.
- To ensure they do not alter the predicted flood risk.
- To ensure no obstruction to flow is created
- To ensure no obstruction to flow is created.

Condition
The development hereby permitted shall not be commenced until such time as a scheme for the monitoring and maintenance of the new structures has been submitted to, and approved in writing by, the local planning authority.

The scheme shall be fully implemented and subsequently maintained, in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reason
To ensure the structural integrity of the structures thereby reducing the risk of flooding.

Charging for Planning Advice
The Environment Agency began charging for the planning advice we provide to developers and their consultants on 3 March 2014.

We will continue to provide a free service to developers and their consultants in the form of a preliminary opinion. The above information constitutes our preliminary opinion which outlines our position and highlights any environmental issues we are concerned about as a statutory consultee. Should you require any further bespoke advice, we can provide this at a chargeable rate. Our charge will be £84 per hour and we do not charge VAT. Further information can be found on our website at http://www.environment-agency.gov.uk/research/planning/33580.asp

In accordance with the Planning Practice Guidance (Reference ID: 7-043-20140306), please notify us by email within 2 weeks of a decision being made or application withdrawn. Please provide us with a URL of the decision notice, or an electronic copy of the decision notice or outcome.

I have sent a copy of this letter to the agent/applicant.

Yours faithfully

Susan Davison
Planning Officer - Sustainable Places Team

Direct dial 0191 203 4263
Direct e-mail susan.davison@environment-agency.gov.uk
cc Northumberland County Council

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