***Appendix 5: Appropriate Assessment***

# Appropriate Assessment

## Endrick Water Special Area of Conservation (SAC)

**2020/0055/DET**

Erection of training centre (use Class 8) composing leadership centre and 4 no. visitor accommodation buildings with associated parking and landscaping
Land Adjacent To Ross Priory, Gartocharn

# Requirements of the Habitats Regulations

European Sites are **Special Areas of Conservation (SACs)** designated under the EC Habitats Directive to protect particular habitats and non-bird species and **Special Protection Areas (SPAs)** designated under the EC Birds Directive to protect wild birds.

The EC Directive is applied in Scotland through the *Conservation (Natural Habitats &c) Regulations 1994*, which is known as the "Habitats Regulations".

The requirements of the Habitats Regulations are summarised in Planning Circular 6/1995 as amended June 2000.

The Habitats Regulations require that:

**Where an authority concludes that a development proposal is likely to have a significant effect on a European site (SPA or SAC), it must undertake an appropriate assessment of its implications for the European site in view of the site's conservation objectives.**

The need for appropriate assessment extends to projects outwith the boundary of the SAC or SPA, in order to determine their implications for the interest protected within the site.

**Significance Test**

Regulation 48(1) of the Habitats Regulations requires the competent authority to first carry out a 'significance test'. The test for significant effects acts simply as a filter to exclude any projects which have no possible connection to the interests of the SAC or SPA.

Under Regulation 48 of the Habitats Regulations, the LLTNPA, as a competent authority, has a duty to:

- determine whether or not the proposal is directly connected with or necessary to SAC/SPA management for conservation; and, if not,
- determine whether the proposal is likely to have a **significant effect** on the SAC/SPA either individually or in combination with any other plans or projects; and, if so, then
- make an **appropriate assessment** of the implications (of the proposal) for the SAC/SPA in view of that site's conservation objectives.

The first bullet should only be accepted where it is part of a fully assessed, and agreed, management programme.

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Habitats Regulation 48 (5) requires that *"in the light of the conclusions of the assessment, the authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site"*, in relation to its conservation objectives.

## Agency Role

In undertaking the Appropriate Assessment, the Habitats Regulations require LLTNPA to have regard to the advice we receive from statutory consultees including SNH, SEPA and HSE (Health and Safety Executive). However, the responsibility for undertaking the Appropriate Assessment rests with LLTNPA.

## Background Information on the Endrick Water SAC

Name of European site: Endrick Water

Site Type: Special Area of Conservation (SAC)

Qualifying Interests:

| SCIENTIFIC NAME | COMMON NAME |
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| *Salmo salar* | Atlantic salmon |
| *Lampetra planeri* | Brook lamprey |
| *Lampetra fluviatilis* | River lamprey |

Conservation Objectives:

To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species, including range of genetic types for salmon, as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

## Project Information

A planning application (2020/0055/DET) has been submitted to Loch Lomond & The Trossachs National Park Authority for the erection of a leadership training centre and four visitor accommodation buildings with associated parking and landscaping. The application site is situated on land adjacent to Ross Priory.

**Qualifying Features of the SAC**

As listed above, the Qualifying Interests for the Endrick Water SAC are:

- Atlantic salmon *(Salmo salar)*;
- Brook lamprey *(Lampetra planeri)* and;
- River lamprey *(Lampetra fluviatilis)*.

The Conservation Objectives for the Endrick Water SAC are detailed in the background information above.

**Significance Test**

The proposal is situated on the southern shore of Loch Lomond around 2km southwest of where the Endrick Water SAC enters the loch. Although the loch is outwith the boundary of the SAC, adult salmon pass through the loch to access the Endrick Water to spawn and smoults travel through the loch in the opposite direction to reach the sea via the River Leven. River lamprey also access the Clyde via Loch Lomond although research has shown that many river lamprey do not migrate to the sea and remain in Loch Lomond as adults. Brook lamprey do not migrate to the sea.

Given that the proposal is situated on the shoreline of Loch Lomond, there is potential for pollution from the construction of the development site (e.g. silt or fuel oil) to enter Loch Lomond and affect the qualifying interests of the Endrick Water SAC. Salmon and lamprey both require high water quality therefore any reduction in water quality as a result of the proposal could be significant. In the short-term, if sediment is released into the loch during construction, this could result in the gills of salmon or lamprey being smothered, or their upstream passage impeded. It can also smother the gravels used for spawning salmon and lamprey or the areas used by juvenile fish, making them unsuitable. There is also a possible risk of contamination from the fuel and chemicals used on site, or in the longer term, pollution from the surface water drainage system.

The Design Statement and Arboricultural Method Statement indicate that helical piles are to be used to construct the proposed buildings. Piling can cause underwater transmission of noise/vibration which may create barriers to fish passage and cause tissue and other physical damage to fish.

As a consequence, the proposal is likely to have a significant effect on the qualifying interests of the SAC and an appropriate assessment is required. The potential for the construction and operation of the development to affect the qualifying interests of the SAC is considered further in the appropriate assessment below.

Initially it was proposed that foul drainage from the development would be treated at a new private treatment plant on the site and discharged into Loch Lomond. However, following further discussions with the NPA, SEPA and SNH regarding the sensitivity of Loch Lomond, the applicant has now been decided to connect the development to the public sewer network. As Scottish Water have confirmed that there is sufficient capacity to accommodate the additional load from the development and the existing Ross Priory buildings (which are also to be connected to the public sewer network as part of the development), there will be no deterioration in the water quality of Loch Lomond as a result of foul drainage from the development. Indeed, the removal of the existing discharge of treated foul drainage into the loch from Ross Priory will result in an overall enhancement of water quality.

Although the supporting statement highlights the potential for the development to enable Ross Priory to expand water related leisure activities and events, no specific proposals are detailed in this application (only the potential for future proposals to involve the adjacent stable block and bothy is mentioned). As expanding water activities and events does not form part of this proposal and there are no details of what this would involve, it is not possible to undertake an assessment of these activities in terms of the SAC. This will need to be considered in the future if detailed proposals are brought forward.

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| Elements of project likely to give rise to significant effects on the site. | As highlighted above, the proposal is situated on the southern shore of Loch Lomond around 2km southwest of where the Endrick Water SAC enters the loch.<br><br><u>Construction</u><br>Given that the proposal is situated on the shoreline of Loch Lomond, there is potential for pollution from the construction of the development site (e.g. silt or fuel oil) to enter Loch Lomond and affect the qualifying interests of the Endrick Water SAC.<br><br>Piling can cause underwater transmission of noise/vibration which may create barriers to fish passage and cause tissue and other physical damage to fish.<br><br><u>Operation</u><br>In the longer term there is a possible risk of pollution from the surface water drainage system entering Loch Lomond and affecting the qualifying interests of the Endrick Water SAC. |
| Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes and geological changes etc.). | Salmon and lamprey both require high water quality therefore any reduction in water quality as a result of the proposal could be significant. In the short-term, if sediment is released into the loch during construction, this could result in the gills of salmon or lamprey being smothered, or their upstream passage impeded. It can also smother the gravels used for spawning salmon and lamprey or the areas used by juvenile fish, making them unsuitable. There is also a possible risk of contamination from the fuel and chemicals used on site, or in the longer term, pollution from the surface water drainage system.<br><br>Piling can cause vibration underwater which disturbs the swim bladders of fish. This can result in physical damage to salmon as well as causing a temporary avoidance of areas and may prevent fish passage. Lamprey do not have swim bladders and scientific evidence has found that lamprey are unaffected by vibration due to the lack of a swim bladder.<br><br>As a consequence, the proposal could affect the following conservation objectives:<br><br>• Population of the species;<br>• Distribution of the species within site;<br>• No significant disturbance of the species; |
| Describe what mitigation measures are to be introduced | The following mitigation and best practice measures are to be secured to ensure that there are no adverse effects on the integrity of the SAC: |

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| to avoid any adverse effects on the integrity of the site. | • **Construction Method Statement (CMS):** Prior to commencement of construction of the development, a detailed Construction Method Statement (CMS), which sets out how the construction of the development will be managed, shall be submitted to, and approved in writing by, the Planning Authority in consultation with SEPA. In particular, the CMS shall include the following:<br><br>o Full details of the pollution prevention safeguards that will be implemented to protect the water quality of Loch Lomond during construction works in line with Scottish Environment Protection Agency, Guidance for Pollution Prevention 5: *Works and maintenance in or near water* (February 2018) and other relevant Guidance for Pollution Prevention (GPP)/Pollution Prevention Guidance (PPG).<br><br>o Detailed construction methods for any new outfall structures into Loch Lomond.<br><br>• **Surface water drainage**: Prior to the commencement of the development hereby permitted, details of a scheme for the treatment of surface water for the entirety of the application site (including details of the timing of works) shall be submitted to, and approved in writing by, the Planning Authority. Such a scheme shall ensure compliance with The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) General Binding Rules and incorporate the principles of The SuDS Manual (https://www.ciria.org/), SEPA's Regulatory Method for SuDS (WAT-RM-08), Water Assessment and Drainage Assessment Guide (Sustainable Urban Drainage Scottish Working Party) and Guidance and Sewers for Scotland (v4.0), or any subsequent revisions/equivalent publications.<br><br>This will ensure that adequate pollution control measures are implemented during the construction and operation of the development to protect the water quality of Loch Lomond and the qualifying interests of the Endrick Water SAC.<br><br>• **Piling**: Unless otherwise agreed in writing by the Planning Authority in consultation with SNH, all piling activity shall be undertaken using helical piling techniques. Alternative piling techniques |

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| | will only be considered if the applicant can demonstrate beyond reasonable scientific doubt that the alternative piling technique will not have an adverse effect on the integrity of the Endrick Water SAC.<br><br>Helical piling produces less noise and vibration than standard impact piling and restricting all piling activity to helical piling will ensure that the construction works do not create barriers to salmon passage and prevent any physical damage to salmon. Alternative piling techniques will only be considered if the applicant can demonstrate beyond reasonable scientific doubt that the alternative piling technique will not have an adverse effect on the integrity of the Endrick Water SAC.<br><br>The implementation of these measures is to be secured via planning conditions and this will ensure that the conservation objectives of the SAC are not compromised by the proposal. |
| Conclusion | Provided the above mitigation measures are secured via appropriately worded planning conditions, the proposal will not have an adverse effect on the integrity of the Endrick Water SAC. This conclusion has been supported by SNH. |