



# AN CAMAS MÒR

Volume 5, Information to Inform Appropriate Assessment



## Information to Inform Appropriate Assessment

### 1.1 Introduction

- 1.1.1** The purpose of the information provided in this report is to help inform the assessment of the potential effect of the proposed An Camas Mòr development on the integrity of the River Spey Special Area of Conservation (SAC; EU SAC code UK0019811).
- 1.1.1** Under Article 6.3 of the EU Habitats Directive (92/43/EEC) any plan or project that is likely to have a significant effect on a European Site (e.g. an SAC or SPA [Special Protection Area], also collectively termed 'Natura sites') requires an assessment as to its effect on the ecological integrity of that site. Specifically, Article 6.3 of the Habitats Directive requires that "any plan or project not directly connected with or necessary to the management of the site, but likely to have a significant effect thereon, shall be subject to an "Appropriate Assessment of its implications for the site in view of the site's conservation objectives". Based on this assessment, "competent national authorities shall agree to a plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned", unless there are imperative reasons of overriding public interest. In Scotland, this process is implemented in domestic legislation through Regulation 48 of the Conservation (Natural Habitats &c.) Regulations 1994.
- 1.1.2** The An Camas Mòr development is not a plan or project which is directly connected with or necessary to the management of the River Spey SAC for nature conservation purposes. Scottish Natural Heritage (SNH), as the statutory nature conservation organisation constituted to provide advice to competent authorities in relation to Appropriate Assessment, have verbally indicated that there could be a likely significant effect on the River Spey SAC (Keith Duncan, SNH Aviemore Office, pers. comm.). Therefore this report has been provided should the competent authority decide that an appropriate assessment, under Regulation 48, should be undertaken.
- 1.1.3** The European Commission's guidance (EC, 2002) on Appropriate Assessment sets out four stages in the assessment process, as follows:
- 1.1.4** Stage One: Screening — the process which identifies the likely impacts upon a Natura 2000 site from a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;
- 1.1.5** Stage Two: Appropriate assessment — the consideration of the impact on the integrity of the Natura site from the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;
- 1.1.6** Stage Three: Assessment of alternative solutions — the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura site; and

- 1.1.7** Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain — an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.
- 1.1.8** In this case, Stage One of the process (screening) was undertaken through the iterative Environmental Impact Assessment process, which culminated in the production of the Environmental Statement. Although this is a separate regulatory process the information on impacts, design and mitigation for the project were all developed through that process. This report collates and analyses the information gained from the EIA process to provide an assessment in the context of the specific requirements and ‘tests’ of the Habitats Directive and Regulations.
- 1.1.9** This report has been written by a qualified and experienced ecologist (Dr Andy Mackenzie, Partner at MBEC) drawing on the wealth of information regarding the ecology of the An Camas Mòr site and its surroundings and the nature of the proposed development and associated nature conservation strategy.

## **1.2 Objectives of This Report**

- 1.2.1** The objectives of this report are based on Methodological Guidance from the EU (EU 2002). The key elements of the assessment (Table 4 within the Guidance) form the specific objectives of the report, which are as follows:
- To briefly describe the ecological interests of the River Spey SAC;
  - To identify the likely nature and scale of the impacts on the River Spey SAC from the proposed scheme, along with other relevant projects in the same area;
  - To describe the mitigation proposed to avoid or minimise these impacts;
  - To determine, taking into consideration the site Conservation Objectives, the residual impacts on the SAC;
  - To determine whether the proposal will or will not adversely affect the integrity of the SAC.

### **River Spey Special Area of Conservation**

- 1.2.2** The following section of the report outlines the conservation interest and reasons for the designation of the River Spey SAC. This section also contains information on the qualifying interests which are of relevance to the An Camas Mòr proposals and which have the potential to be adversely impacted by the proposals.
- 1.2.3** The River Spey SAC includes many of the larger tributaries within the designation. Of relevance to the An Camas Mòr site, the River Druie is

included within the designation. The qualifying habitats and species and the conservation objectives for the site are listed in Table 1 below.

**Table 1: The Conservation Objectives for the River Spey Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) 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;
- Distribution and viability of freshwater pearl mussel host species; and
- Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species.

Qualifying Species:

- Atlantic salmon
- Freshwater pearl mussel
- Otter
- Sea lamprey

**1.2.4** All of the qualifying species listed in Table 1 are reliant on high water quality and therefore all, directly and indirectly, could be adversely affected by pollution. The freshwater pearl mussel is probably the most sensitive of all the qualifying species to declines in water quality. Theoretically, all the qualifying species listed in Table 1 could be present within the River Spey and/or the River Druie in the immediate vicinity of the An Camas Mòr site. Survey and local knowledge has confirmed the following:

**1.2.5** Atlantic salmon are present in both rivers, migrating and breeding in the vicinity of An Camas Mòr;

**1.2.6** Freshwater pearl mussel are not present in the section of the River Druie from the proposed bridge area to its downstream confluence with the River Spey. Freshwater pearl mussel are not present immediately downstream from the confluence with the River Spey but are likely to be present within the main river downstream from the confluence of the River Druie. Pearl mussel have been surveyed downstream of the Druie confluence in the past.

- 1.2.7** Otter use both the River Spey and the River Druie as movement corridors and both rivers in the vicinity of An Camas Mòr are within otter territories and frequently have otters present. There were no holts or couches (i.e. 'resting sites') identified within the area of the proposed River Druie bridge at the time of the latest survey (2008) but they are known to be present in the wider surrounding area; and
- 1.2.8** Sea lamprey may be present within the surrounding area as adults and juveniles. While surveying for freshwater pearl mussels no suitable ammocoete habitat or ammocoetes were seen in the River Druie but they could be present further downstream in the main River Spey.
- 1.2.9** It is also important to have regard to the supporting habitats for these qualifying species which are present within the An Camas Mòr area and immediately downstream from this because any damage or destruction of these could also have an adverse effect on the qualifying species. This is specifically mentioned in the conservation objectives, listed here in Table 1, for the River Spey SAC.

### **1.3 Relevant Elements of the Proposed Development**

- 1.3.1** This section of the report lists and explains the relevant elements of the proposed An Camas Mòr development which have the potential to interact with the qualifying features and supporting habitats of the River Spey SAC.
- 1.3.2** The design elements of the proposed development that are of potential relevance to the SAC interests are as follows:
- 1.3.3** Construction and operation of the road access bridge and adjacent services and footpath/cyclepath bridge across the River Druie in the vicinity of the existing electricity substation;
- 1.4 Construction and operation of all drainage proposals for the site;**
- 1.4.1** The increased presence of people around the area particularly once the site is operational; and
- 1.4.2** The offsetting mitigation proposed for An Camas Mòr.
- 1.4.3** There is the need to construct two new bridges (adjacent to each other on one set of foundations) for people, utilities and vehicles to access the An Camas Mòr site across the River Druie from the B970 at Inverdruie. It has been agreed within the development team that the best environmental option for connecting utilities / services from the B970 into the development would be by bridge rather than by boring or trenching across the River Druie. As well as crossing the River Druie itself these bridges would also require to cross the existing water inlet channel for the Rothiemurchus Fishery which runs parallel to the main river immediately adjacent to it.
- 1.4.4** Careful consideration of all the drainage proposals for the An Camas Mòr site and infrastructure connections has been undertaken particularly in relation to

the River Spey SAC nearby. It is proposed that all surface runoff will be dealt with by infiltration into the permeable geology below the site. This will be through a series of Sustainable Urban Drainage Systems (SUDS) approaches principally by the use of soakaways and porous surfaces. Specifically for car park areas and roadways requiring a more formal drainage system a piped system will be used to ensure collected water is treated via a hydrocarbon separator prior to infiltration into the underlying geology. Although a SUDS will be installed for all rainwater (and householders will be encouraged to use roof runoff for gardens etc.) all grey water and sewerage will be piped into the existing Scottish Water system and removed from the site for standard treatment. There will be no piped release of water into either the River Drueie or the River Spey from any elements of the proposals.

- 1.4.5** Once the An Camas Mòr development is completed there will be a large increase in the number of people present in and around the area. This is likely to result in increased numbers of people wishing to access the surrounding area on foot and by bicycle. A carefully designed set of footpaths and cycleways will be designed to discourage people from the immediate riverbanks of both the Rivers Drueie and Spey. An outline of these paths is included in the Environmental Statement. In addition, there will be the provision of “green recreational space” within the development (up to 30%) which will discourage an element of walking in the surrounding area, particularly dog walking.
- 1.4.6** Due to the loss of a small area of mixed woodland near the River Drueie it is proposed to create an area of wet alder-dominated woodland just upstream of the A970 road bridge on the edge of Aviemore, on the Inverdrueie side of the river (NGR NH 896 114). This proposed mitigation is to offset the loss of these trees and along with other proposals elsewhere is intended to provide a degree of enhancement. It is not intended to be “compensation” in the strict sense defined under the Habitats Directive - i.e. it is not required due to an effect on the SAC’s integrity in the longer-term. The proposed area is outside of the River Spey SAC, although close to its boundary. It is currently semi-improved and marshy grassland and lies just to the north of an overhead high voltage powerline. There is a total of up to 3.48ha of land available, however, due to vegetation height restrictions within the wayleave for the powerline it will be less than this in practice. A reasonable area of land being managed for wet woodland will allow for an element of habitat creation greater than the small area of trees which will be lost close to the River Drueie.

## **1.5 Assessment Including Proposed Mitigation**

- 1.5.1** This section of the report addresses the likely nature and scale of any impacts there may be from the described elements of the development which could interact with the River Spey SAC. Any relevant elements of design and mitigation to address any concerns or possible impacts on the qualifying species and supporting habitats are also described. Any potential for “in-combination” effects (i.e. potential cumulative effects) associated with other plans or projects affecting the SAC and the same qualifying interests and supporting habitats are also explored at the end of this section. This section of the report has been written with reference to the conservation objectives of the SAC and any effects there may be on those for the qualifying species and their supporting habitats and processes.

- 1.5.2** The design elements of the proposed development of potential relevance to the SAC are taken in turn and related to the qualifying species and supporting habitats.

## **1.6 Bridges**

**1.6.1** The construction of the two bridges, particularly their foundations, probably carries the largest risk of adverse impact. It is widely recognised that release of silt into a river during construction works carries a significant pollution risk, particularly in a catchment such as the Spey which on average carries a low fine sediment load. Freshwater pearl mussels and salmon are particularly sensitive but otter can also be indirectly affected through changes in the abundance of their food supply. However, this risk is widely known and mitigation to minimise all such risks can and will be put in place, largely through careful construction procedures, timing and on-site ecological supervision. For a detailed discussion of the mitigation which will be used to minimise all such construction risks see the Environmental Statement Chapters on Hydrology and Ecology. In addition, all the foundations of the bridges will be constructed and placed away from the river channel of the Druie. There will be a set-back from the banks, of at least 2m from bank top with adequate clearance for medium sized mammals at the very top of the bank and all mammals slightly down from the bank top. No piers (temporary or permanent) will be placed within the river channel. This will not only avoid the need to work within the river channel during the ground works but will also allow continued passage for wildlife along the bank tops. As well as avoiding potential pollution issues within the SAC this will allow otter to continue to use the river banks for movement along the Druie, particularly in high water. As well as silt pollution there is also a recognised risk from other materials used during bridge construction such as hydrocarbons and concrete, both of which can be very damaging to aquatic life. Again, best practice construction procedures and pollution and drainage control measures will be in place, under good supervision, in order to minimise all risks of such an occurrence. These procedures and measures are outlined in the Environmental Statement. It is intended that all method statements for all elements of bridge construction will be discussed and agreed with SNH and Scottish Environment Protection Agency (SEPA) in advance of any construction occurring. In addition, no works will be able to proceed without first obtaining a CAR licence from SEPA and they will have to undertake an assessment of the implications of the proposed works in relation to the wider environment and specifically in relation to the SAC. An independent Ecological Clerk of Works will also be present to supervise, advise, monitor and oversee all works, including the construction of the bridges.

**1.6.2** Another element of the bridge construction which relates to the conservation objectives of the SAC is the need to clear riverine edge habitat on the south bank of the River Druie. With the exception of the need to fell some trees on the south bank there will be no loss of bank-side habitat on the River Druie because the bridge piers will be set back from the banks. The riparian habitat here is mixed woodland with a few native tree species and a tall stand of planted non-native conifers. The route for the access road aims to minimise the number of native tree species which will need to be felled. Because of this the overall amount of felling is very small and although not precisely measured at this stage (i.e. outline planning application), is not more than 0.3ha. The felling of these trees will not have any effect on the conservation

objectives of the SAC and will be minimised to that strictly necessary for the construction of the road. In between these trees there are several small backwater channels which do flood during spates but which, with the exception of a few isolated small pools, do not carry any water for the majority of the year. It is intended to use culverts for these and the fisheries intake channel to allow continued passage of water. These culverts will be oversized and inverted to preserve a natural bed; if possible they will be arched structures to avoid the need to excavate any bed material. Construction of these will again be done in the dry with the fisheries intake channel being built before diverting the water from the existing intake into the new one. This will minimise all risks of aquatic pollution occurring. The use of oversized structures will also allow the continued passage of otters and since they will be short due to the relatively narrow width of the road there is unlikely to be any barrier effect to otter.

- 1.6.3** During operation of the bridges there are several potential risks to the SAC from polluted drainage off the bridges or their immediate vicinity into the River Druie. Polluted drainage could occur from three sources: a leak from a sewage pipe serving the development site, the chronic direct release of contaminated drainage water from the road bridge and/or a vehicular accident causing a sudden release of polluting chemicals into the watercourse. Mitigation to ensure prevention of any leakage from a sewage pipe at or close to the River Druie is standard practice in sensitive environments by way of a double skinned pipe which can be engineered to ensure that any risk is minimised. This will be undertaken at and for a minimum of 40m either side of the main River Druie crossing. The road will only carry relatively small amounts of traffic and is not likely to pose any significant chronic pollution risk. However, on a precautionary basis, all drainage at the bridge and for 40m either side of it will be piped and will be hydrocarbon treated and infiltrated into the ground away from the River Druie and there will be no risk of chronic pollution from this potential source. Given that the speed limit on the whole of that road will be 20mph it is unlikely that a serious accident could occur, however, the formal road drainage would also help to divert any such carriageway pollution away from the River Druie.
- 1.6.4** During the operation of the bridges there will be a slight shading effect on a narrow section of the River Druie along with a level of vibration from vehicles using the bridge. These impacts have a slight potential to cause a habitat change in the river channel and to have an adverse effect on fish. Given that the bridges are both fairly narrow, the channel will be crossed in a south west to north east direction and that the existing river channel is extensively shaded on the southern bank at present, shading is not viewed as likely to cause any effect on migrating or resident fish. Vibration has recently been publicised as an issue for migrating salmon and resident salmonids, however, the evidence is limited and vibration levels that could be an issue are related to large scale sound and vibration propagation such as that released from hammer piling or similar during construction, not due to vehicular operation on a bridge. If any prolonged piling operations are needed for bridge construction (very unlikely) timing avoidance and soft start mitigation to allow fish migration would be agreed with SNH in advance to avoid any effects on migratory or resident juvenile salmon.
- 1.6.5** Given that there are currently no bridges across the River Druie in the proposed location (there is one downstream at the Fishery and one further upstream at the Dell Farm entrance) there is the potential for temporary

disturbance to otter during construction and long-term disturbance to otter during operation. In 2008 there were not otter holts or couches found in the vicinity of the proposed bridges so there is no likely disturbance to any otter resting up or breeding areas. The main potential for disturbance comes from the physical presence of the bridges and any noise and movement by people and vehicles on them. The otter surveys have shown that there is a healthy otter population in the area and evidence from other similar bridges does not suggest that any barrier effect will be likely. Otters are more active at night time and this is a time when no construction is likely to be occurring and a time when vehicular traffic would be less. If it was felt necessary by SNH, both the road and footpath/cycleway bridges could have solid barriers added to the design to a height above vehicular light height to ensure light does not stray beyond the bridges and movement disturbance is lessened. However, this is probably not necessary in this location with the likely vehicle frequency expected.

## **1.7 Drainage**

**1.7.1** As explained above, all drainage from the An Camas Mòr development will be by ground infiltration into the geological profile below the site, with prior hydrocarbon separation in areas where road vehicle pollution could be more concentrated. There will be no piped outfall into either the River Druie or the River Spey. The surficial geology is thought to be largely glacial below the site being freely draining into sands and gravels (Geology chapter of the Environmental Statement). This links to a large band of glacial outwash material and riverine sediments which fill the whole of the Spey valley in the area. These deposits store a large volume of ground water in the Spey valley and this is likely to be closely linked to the surface drainage seen in the River Spey and its lower tributaries on the surface. The so called hyporheos or hyporheal zone in the Spey valley is thought to be large with quite frequent interchange between both “bodies” of water. Given this likely exchange of ground and surface water in the An Camas Mòr area and the likelihood of rapid infiltration of water from the ground surface (An Camas Mòr is situated on a plateau above a raised river terrace and therefore it is likely that ground water is not at the surface in most places at any time during the year), any water born pollution will be likely to seep into the ground water and hence may interact with the River Spey SAC at a subsequent time. However, given that the majority of the water will be roof and hard standing drainage water this is not likely to be a pollution source. Also, it has been agreed that hard standing areas for cars such as car parks will have hydrocarbon separators fitted prior to ground discharge and these will reduce any hydrocarbon pollution possible. This added with the potential for a level of treatment in the surface layers and the massive dilution potential mean that this potential issue is not likely to have any effect on the water quality of the River Spey SAC.

## **1.8 Disturbance by People**

**1.8.1** It is unlikely that any increased presence of people could have any effect on the qualifying migratory fish or freshwater pearl mussel present in the area. Theoretically, there could be an increase in illegal salmon fishing, however, Rothiemurchus Estate patrol the fishings and this would be unlikely (more likely on a fishing rod basis, rather than organised larger scale poaching) to have any measurable effect on the Atlantic salmon population of the River

Spey catchment. The greater potential is for an increased level of human disturbance to have an adverse effect on otters using the River Spey and River Druie. However, given the existing presence of disturbance from Aviemore, the existing healthy otter population in the area and the relative ease with which otters can move and cover a large area within their territories this is not likely to cause any change in the population status in the area. In addition, and as mentioned above, paths and cycleways will be designed to give people views of the Rivers Spey and Druie but discourage them from disturbing the immediate river banks. Education will also be an important part of this management, particularly in relation to disturbance from dogs and Rothiemurchus Estate has already made a managerial commitment to undertake such provision of information and education of residents. While it is likely that there will be an overall increase in disturbance close to the River Spey and River Druie it is not thought to be likely to be of a sufficient magnitude to be deemed as significant disturbance or to be likely to affect the distribution and status of the otter population (see Table 1 to relate this sentence to the conservation objectives for the SAC).

## **1.9 Offsetting Mitigation/Enhancement**

**1.9.1** While the creation of an area of wet woodland is viewed as a benefit overall it is recognised that there is a need to protect the River Spey SAC and ensure no effect on integrity. While the precise details of this mitigation have still to be agreed with SNH and the National Park, it is envisaged that it would be preferable to create some localised ground alterations to hold water/keep the area damp to encourage a wet woodland formation. It is envisaged that this could be created using a series of shallow scrapes to encourage retention of moisture in the summer time. This need not be large-scale earthworks because the area is within the floodplain and some of it is currently marshy grassland which does contain some water in the winter.

**1.9.2** However, with any such earthworks there is a risk of silt pollution into the SAC while the earthworks are being undertaken and afterwards until stabilisation occurs. To minimise the risk of any such occurrence the following mitigation is proposed: there will be ecological supervision during all the works; best construction practice will be followed at all times; there will be no earthworks within 15m of the river bank; the earthworks will be carried out in mid summer; and there will only be localised movement of soil and no deep excavations which could have any effect on groundwater/the hyporheos. With this mitigation in place all risks of silt release are minimised and there will not be an effect on site integrity.

## **1.10 In-combination Effects**

**1.10.1** There are various planning applications lodged related particularly to small housing projects and one larger project in the Aviemore area. However, there are no developments, which we are currently aware of which have similar timescales or are immediately adjacent to the River Spey SAC which would be likely to have any longer-term negative effects on water quality. Possible in-combination or cumulative effects along with the An Camas Mòr proposals could, as far as we are aware at present, only occur with a proposal by Scottish Water to change Aviemore's water supply to a borehole supply originating from the River Spey valley aquifer just south of Aviemore. While

Scottish Water have currently submitted two planning applications to Highland Council (both of which have been called-in by the Cairngorms National Park Authority), these related to the new water treatment works building at Kinakyle and a new large treated drinking water storage tank to the north west of Aviemore. These two applications would be very unlikely to have any in-combination effect with An Camas Mòr, due to their small-scale and locations. Scottish Water have not yet submitted their planning application for the new boreholes at Kinakyle (according to the Scottish Water website, 24.3.09). This boreholes application is the one element of the project which has some potential to affect the River Spey SAC in-terms of quantity of water in the River, rather than any direct qualitative change. It is assumed this element of the Scottish Water proposals will require the lodging of more detailed environmental information relating to the River Spey SAC with the possible need to provide "information to inform an appropriate assessment". In terms of an in-combination assessment with the An Camas Mòr proposals there is not currently adequate environmental information with which to judge whether there could be any in-combination effect. This will need to be assessed by the Scottish Water boreholes application in due course. However, given the vastly differing scale and duration of any effect possible on the water environment it seems unlikely that the An Camas Mòr proposals would be any more than a deminimus effect (i.e. negligible) and it is for Scottish Water to put forward their detailed proposals to the competent authority for them to undertake the appropriate assessment in light of both sets of proposals. Therefore, it is suggested that the competent authority review such information along with this in due course to determine if such an effect could exist in-combination with these proposals.

## **1.11 Conclusion for the River Spey SAC**

- 1.11.2** This report is provided to allow the competent authority to decide whether there is any likelihood of "a likely significant effect" on the River Spey SAC, taking account of the details of the project and the mitigation provided. Further, information to inform any such necessary appropriate assessment is provided, should this be deemed necessary.
- 1.11.3** The assessment provided has explored the elements of the proposed An Camas Mòr development that could potentially have an adverse effect on the River Spey SAC. Descriptions of these development elements along with any likely impacts and effects on qualifying species and/or supporting habitats are detailed. It is concluded that the An Camas Mòr development will not on its own have any effect on the integrity of the River Spey SAC. Due to a lack of information regarding the Scottish Water boreholes proposals at present, it is not currently possible to determine whether there is a possibility of an in-combination effect on the integrity of the River Spey SAC. However, given the vastly differing scale and duration of the elements of both projects and any effect on integrity the Scottish Water borehole proposals could potentially have it is unlikely that the An Camas Mòr development proposals could contribute significantly to any such possible effect in-combination.

## 1.12 Other Natura Sites

### River Spey – Insh Marshes Special Protection Area

- 1.12.1** During the earlier development of the An Camas Mòr proposals, when it was envisaged that the main access road to the site would cross the Rothiemurchus Fishery, it was thought that there could be a likely significant effect on osprey feeding at the fishery (in discussion with SNH) which would be related to the River Spey – Insh Marshes Special Protection Area. This was due to a need to move and disturb the pond(s) where the ospreys take trout with resultant possible construction and operational disturbance. Even at that time it was advised by MBEC that any effect on the ospreys could be totally avoided by careful access road and bridge construction timing out of the breeding season. The main access road location has now been moved and is now going to cross the River Druie slightly further upstream and will not result in any construction to or near the feeding ponds. Given the high visitor numbers to the Fishery over the summer time (which osprey are used to and accept), not just for fishing but also specifically to see the ospreys, any construction disturbance upstream of the fishery is very unlikely to have any effect on feeding ospreys.
- 1.12.2** While ospreys sometimes use the main River Spey as a navigation aid and for foraging and may fly close to water level, they do not regularly use the much smaller River Druie close to water level or indeed routinely at higher altitude, preferring the main Spey valley. The River Druie has overhanging trees over much of its lower length, is a smaller river and does not appear to form a flyway in the way the River Spey does to the vast majority of nest sites in the surrounding area. There will therefore be no effect on osprey from the construction upstream in the River Druie.
- 1.12.3** While it is clear that during the operational phase of An Camas Mòr there will be increased numbers of people in the vicinity of the development, including the use of carefully sited footpaths and cycleways. It is not thought likely that this will have any effect on either osprey flying to and from the Fishery or on their feeding at the Fishery. As mentioned above, the ospreys are habituated to the presence of people in the area and this is unlikely to deter them from their main purpose in visiting the Fishery which is to hunt fish. There has been past discussion regarding a footbridge across the main River Spey downstream of the Rothiemurchus Fishery. This footbridge is not part of the current development proposals for An Camas Mòr and therefore is not an issue considered here.
- 1.12.4** Due to the reasons given above, the River Spey – Insh Marshes SPA (SPA EU code: UK9002231) has been “screened out” of further assessment. It is clear that the updated design will not have any effect on feeding osprey, some of whom breed in the River Spey – Insh Marshes SPA and for which it is one of the qualifying species in the designation. There will be no likely significant effect on osprey and the River Spey – Insh Marshes SPA. Taking into account the specific conservation objectives for this European designation (listed in Table 2 below), there will be no effect on the integrity of the River Spey – Insh Marshes SPA due to this proposed development.

**Table 2: The Conservation Objectives for the River Spey – Insh Marshes Special Protection Area**

<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <p>Population of the species 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</p>
<p>Qualifying Species:</p> <ul style="list-style-type: none"> <li>• Hen harrier (<i>Circus cyaneus</i>)</li> <li>• Osprey (<i>Pandion haliaetus</i>)</li> <li>• Spotted crake (<i>Porzana porzana</i>)</li> <li>• Whooper swan (<i>Cygnus cygnus cygnus</i>)</li> <li>• Wigeon (<i>Anas penelope</i>)</li> <li>• Wood sandpiper (<i>Tringa glareola</i>)</li> </ul>

### 1.13 Cairngorms Special Area of Conservation

**1.13.1** The boundary of the Cairngorms SAC is mainly distant from the proposals but does interact with the An Camas Mòr proposals in two places, these are at the proposed new road behind Coylumbridge and at a proposed area of offsetting mitigation and enhancement near Creag a' Chalamain. These are dealt with in turn within this section.

**1.13.2** The proposed road location at Coylumbridge is adjacent to the SAC boundary. Here the boundary of the SAC is behind the ends of the new house gardens (approximately 10 to 15m behind; SNH Sitelink mapping, 2009) and the road proposal will be close to the boundary of the SAC but not within it. The development of the 21 houses at Coylumbridge and the width of land required for the proposed new road were considered in relation to the SAC boundary during the previous planning stages for the houses to ensure both were kept outside of the SAC boundary. The land on which the new road is proposed which is closely adjacent to the SAC currently contains plantation forestry and mature plantation trees outwith but adjacent to the SAC some of which will require to be felled for the road construction.

**1.13.3** The qualifying habitats and species are listed below in Table 3. Related to the new road at Coylumbridge none of these will be affected and none of the conservation objectives will be affected (Table 3). To ensure no effects the

following mitigation will be implemented: the number of trees to be felled will be minimised to that strictly necessary for the building of the road; and the boundary of the SAC will be clearly marked by robust fencing before development commences, in agreement with SNH, to ensure no construction works or workers enter or disturb it.

- 1.13.4** The proposed area of offsetting mitigation and enhancement near Creag a' Chalamain is a maximum area of up to 76.4ha to the 620m contour. This area has been included within the An Camas Mòr proposals as mitigation and an opportunity for additional enhancement for the loss of habitats which will inevitably occur due to the development proposed. This area is not "compensation habitat" in the Habitats Directive use of these words; it is offsetting mitigation for the proposed An Camas Mòr development. In particular, this area is intended as mitigation for the loss of the plantation woodland within the site which has recently been classified by SNH as ancient woodland of plantation origin (but ploughed and of relatively low ecological value) and for other areas of tree loss including that which will occur due to the new Coylumbridge road. This area is currently mainly moorland with occasional trees which is near to the natural upper limit of tree growth. In the past this area would have contained much more montane scrub/woodland consisting mainly of Scot's pine but also juniper and willow species. Given the international importance of montane scrub/woodland at and just below the natural altitudinal tree limit it has been decided that this is a good opportunity to help offset loss of woodland and trees associated with the An Camas Mòr development. While not being necessary for the conservation management of the SAC, with the relevant management regime put in place it will be a valuable longer-term enhancement to this location and the wider SAC. This area is currently not part of a Woodland Grant Scheme or other funded conservation management. Given the relatively large area involved in combination with other offsetting and enhancement proposals the medium to longer-term creation of montane scrub/woodland along with the wider Rothiemurchus montane conservation efforts creates a sizeable enhancement opportunity.
- 1.13.5** Relating this offsetting mitigation and enhancement to the qualifying habitats/species and the conservation objectives for the Cairngorms SAC (see Table 3) there will be an interaction with several of the qualifying habitats but not with any qualifying species. The key habitats present within the Creag a' Chalamain proposed area that occupy a substantial area are wet and dry heathland with some smaller areas of wetter blanket bog. Although these habitats would be altered by natural tree regeneration wet and dry heath would essentially remain under the loose network of montane scrub and small trees and the wettest areas would be likely to remain open.
- 1.13.6** Otter is a qualifying species of this SAC, however, otter using the River Drue further upstream, which could be the same individuals as those present closer to the development, due to the likely fairly large territory sizes, are addressed under the assessment presented for the River Spey SAC. Therefore it is considered that there will be no likely significant effect. On this basis this Natura site has been "screened out" and is not considered further in this document.

**Table 3: The Conservation Objectives for the Cairngorms Special Area of Conservation****Habitats**

To avoid deterioration of the qualifying habitats (listed below) 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 habitats that the following are maintained in the long term:

- Extent of the habitat on site;
- Distribution of the habitat within site;
- Structure and function of the habitat;
- Processes supporting the habitat;
- Distribution of typical species of the habitat;
- Viability of typical species as components of the habitat; and
- No significant disturbance of typical species of the habitats.

**Qualifying Habitats: Acid peat-stained lakes and ponds**

- Acidic scree
- Alpine and subalpine heaths
- Blanket bog\*
- Bog woodland\*
- Caledonian forest\*
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Dry grasslands and scrublands on chalk or limestone
- Dry heaths
- Hard-water springs depositing lime\*
- High-altitude plant communities associated with areas of water seepage\*
- Juniper on heaths or calcareous grasslands
- Montane acid grasslands
- Mountain willow scrub
- Plants in crevices on acid rocks
- Plants in crevices on base-rich rocks
- Species-rich grassland with mat-grass in upland areas\*
- Tall herb communities
- Very wet mires often identified by an unstable `quaking` surface
- Wet heathland with cross-leaved heath

\* Indicates priority habitat

### Species

To avoid deterioration of the habitats of the qualifying species (listed below) 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 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; and
- No significant disturbance of the species.

### Qualifying Species:

- Green shield-moss
- Otter

## 1.14 Cairngorms Special Protection Area

**1.14.1** The Cairngorms Special Protection Area is also in the surrounding area. The boundary of this site is mainly away from the proposals but does interact with the An Camas Mòr proposals in two places: it is close to the proposed new road behind Coylumbridge and the proposed offsetting mitigation area at Creag a' Chalamain. At Coylumbridge the boundary of the SPA is behind the ends of the new house gardens (approximately 10 to 15m behind; SNH Sitelink mapping, 2009) and the road proposal will be close to the boundary of the SPA but not within it. The development of the 21 houses at Coylumbridge and the width of land required for the proposed new road were considered in relation to the SPA boundary during the previous planning stages for the houses to ensure both were kept outside of the SPA boundary. The land on which the new road is proposed which is closely adjacent to the SPA currently contains plantation forestry and mature plantation trees outwith but adjacent to the SPA will require to be felled for the road construction.

**1.14.2** The proposed offsetting mitigation area at Creag a' Chalamain is the same area described in the section above for the Cairngorms SAC and would involve the encouraged natural regeneration of montane woodland and scrub close to the natural tree line.

**1.14.3** The qualifying species and supporting habitats for the Cairngorms SPA are noted in the conservation objectives listed below in Table 4. Bird records from the RSPB (to 2008) do not indicate any of the qualifying species as being present in the surrounding area of Coylumbridge. From the ornithological surveying carried out for An Camas Mòr one species, which is a qualifying species for the SPA, which could be present in this area is Scottish

Crossbill (it was not possible to differentiate all crossbill species recorded during surveying and no evidence of breeding crossbill within or immediately surrounding the An Camas Mòr site has been recorded or observed). However, standard mitigation proposed for construction in this area will ensure that there is no likely significant effect on Scottish Crossbill. This will include minimising the number of trees to be felled to that strictly necessary for the building of the road, all vegetation clearance will be completed outwith the bird breeding season and the boundary of the SPA will be clearly marked by robust fencing before development commences, in agreement with SNH, to ensure no construction works or workers enter or disturb it. This mitigation has led to this site being screened out of any further assessment. In other words, there will be no likely significance effect and no effect on integrity to the Cairngorms SPA due to the proposed Colylumbridge road.

- 1.14.4** The woodland mitigation proposals on the edge of the Cairngorms will change the habitat in places, although it is likely that the ground vegetation will remain essentially as the habitats are at present, however, the three dimensional structure of the vegetation will change. This is likely to be potentially beneficial for capercaillie and Scottish crossbill, should they choose to use this scrub and woodland. However, these proposals are likely to have no effect on the other qualifying species of the SPA, due to the small scale of the proposals relative to the surrounding SPA and the area they are proposed in. The offsetting mitigation proposals have therefore been screened out of any further assessment because there will be no likely significance effect and no effect on integrity to the Cairngorms SPA.

**Table 4: The Conservation Objectives for the Cairngorms Special Protection Area**

<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>▪ Population of the species as a viable component of the site ;</li> <li>▪ Distribution of the species within site;</li> <li>▪ Distribution and extent of habitats supporting the species;</li> <li>▪ Structure, function and supporting processes of habitats supporting the species; and</li> <li>▪ No significant disturbance of the species.</li> </ul>
<p>Qualifying Species:</p> <ul style="list-style-type: none"> <li>▪ Capercaillie (<i>Tetrao urogallus</i>)</li> <li>▪ Dotterel (<i>Charadrius morinellus</i>)</li> <li>▪ Golden eagle (<i>Aquila chrysaetos</i>)</li> <li>▪ Merlin (<i>Falco columbarius</i>)</li> <li>▪ Osprey (<i>Pandion haliaetus</i>)</li> </ul>

- Peregrine (*Falco peregrinus*)
- Scottish crossbill (*Loxia scotica*)

## 1.15 Kinveachy Forest Special Protection Area

**1.15.1** This site is remote from An Camas Mòr and there will be no construction or operational effects on it. However, due to the slight potential for a flyway between this SPA and the Cairngorms SPA it has been included here. One of the qualifying species of both SPAs is capercaillie (see Table 5 below for the conservation objectives) and there is a slight potential for birds to fly directly between the two SPAs which could mean that they could cross the An Camas Mòr site at altitude or use it as a stopping off point between the two sites. At present any birds choosing to do this would pass over the A9 trunk road and Aviemore or very close to Aviemore.

**1.15.2** The bird surveys undertaken over the past few years have not indicated any presence of capercaillie (including evidence such as droppings and moulted feathers) within or adjacent to the An Camas Mòr site. In addition, there are no known regular flight lines above An Camas Mòr and no flights have been seen during all the ecological surveying undertaken. Given that birds have to cross the A9 trunk road and are likely to at least cross the edge of Aviemore and given other known flight lines for capercaillie which cross trunk roads and areas of open farmland there is not likely to be any adverse effect. On this basis there is no likely significant effect or effect on integrity predicted and therefore this Natura site has been screened out of any further assessment.

**Table 5: The Conservation Objectives for the Kinveachy Forest Special Protection Area**

<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>▪ Population of the species as a viable component of the site;</li> <li>▪ Distribution of the species within site;</li> <li>▪ Distribution and extent of habitats supporting the species;</li> <li>▪ Structure, function and supporting processes of habitats supporting the species; and</li> <li>▪ No significant disturbance of the species.</li> </ul>
<p>Qualifying Species:</p> <ul style="list-style-type: none"> <li>▪ Capercaillie (<i>Tetrao urogallus</i>)</li> <li>▪ Scottish crossbill (<i>Loxia scotica</i>)</li> </ul>

## **1.16 Conclusion for all Natura Sites Considered in This Report**

**1.16.1** On the basis of the information presented here there will be no likely significant effect and no effect on integrity for any of the Natura sites considered in this report, taking into account each of their qualifying habitats and species, conservation objectives and committed mitigation. It is recognised that the competent authority may wish to complete appropriate assessment(s) for the proposed An Camas Mòr development. It is the author's view, that such assessment(s) are unnecessary if the committed mitigation is taken into account in the determination of any likely significant effect, however, all the relevant information is presented in this report should assessment be viewed necessary.

## **References**

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- The Conservation (Natural Habitats, &c.) Regulations 1994 and subsequent amendments.



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Rothiemurchus Estate Office | Aviemore | Inverness-shire | PH22 1QH

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