

# **AGENDA ITEM 8**

## **APPENDIX 2**

**2019/0215/DET**

# **HABITATS REGULATIONS ASSESSMENT**

# Habitats Regulations Assessment consultation Draft:

27/01/2020

**Demolition of house, erection of 9 houses, formation of access track and path 2019/0215/DET and Erection of three houses (Phase 3) 2019/0245/DET at Boat of Garten**

## Introduction

This is a record of the assessment under regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) for the planning applications **2019/0215/DET** and **2019/0245/DET** made by Peter Smith, Roderick James Architects. The development is of 12 houses, covered by 2 planning applications “Demolition of house, erection of 9 houses, formation of access track and path” and “Erection of three houses (Phase 3)”

The proposal was consulted on in 2019, a re-consultation is now taking place.

An application for a path link has not yet been submitted, but indicative plans have been provided.

## Background to the assessment

The principal documents which have been taken into account for this assessment are:

- Documents - Proposed Masterplan BSW\_3\_002, 11/11/19 and Masterplan Phase 3 BSW\_3\_005, 11/11/19
- Document - Extended Phase I Survey Report, February 2019, John Gallacher, Tilhill Forestry Ltd.
- Document - SNH Consultation Response to the initial consultation dated 7<sup>th</sup> August 2019 (CNS/DC/Hi/B&S).
- General Method Statement, For the construction of the proposed Boat of Garten Housing Development, Asher Associates, 01.11.19
- Drainage Layout, AA6178/EW/03, 23/1/19
- Environmental Protection Measures, AA6178/EW/04, 1/11/19
- Drainage Impact Assessment, AA6178/8.4/DIA, 30/10/19
- Typical Roadworks Details, AA6178/EW/07, 4/10/19
- SEPA Response Letter, PCS/169185, 24/12/19

**Table I. Stages of Assessment**

<b>Stages of Assessment</b>	
<b>Stage 1</b>	Decide whether proposal is subject to HRA
<b>Stage 2</b>	Identify Natura Sites that should be considered and gather information about the Natura Sites
<b>Stage 3</b>	Consultation on the method and scope of the appraisal with SNH and others. Request additional information from applicant if required.
<b>Stage 4</b>	Screening the proposal for likely significant effects on Natura sites including mitigation measures included within the proposal
<b>Stage 5</b>	Screen for “in combination effects” with other plans or projects
<b>Stage 6</b>	Appropriate Assessment to determine effect upon conservation objectives. Preliminary conclusion about adverse effect upon the integrity of any site.
<b>Stage 7</b>	Consultation with SNH (and others if considered appropriate)
<b>Stage 8</b>	Apply additional mitigation measures, if required, via conditions or agreements to ensure that there is no adverse effect on site integrity
<b>Stage 9</b>	Conclusion on Integrity test
<b>Stage 10</b>	Regulation 49 derogation procedures. This only applies if adverse effects remain and Competent Authority still wishes to approve the application

## **Stages 1-5 describing the Natura sites and Screening**

### **Stage 1: Deciding whether the proposal is subject to a HRA**

The proposed development is not wholly concerned with the necessary management of a European site for nature conservation and requires planning permission and so the plans must be subject to assessment under the terms of Directive 92/43/EEC.

### **Stages 2: Identification of Natura Sites and gathering their details**

The list below is those sites that have been taken forward to screening for likely significant effects. See Appendix I for details on each site and its qualifying features.

#### Special Areas of Conservation (SAC):

- River Spey SAC (420m SE of the site)

### Special Protection Areas (SPA):

Boat of Garten woods has a known population of Capercaillie (approximately 2.0 km south of the site),

Five Special Protection Areas (SPAs), are designated to safeguard the Strathspey meta-population of Capercaillie:

- Abernethy Forest SPA (1.6km SE of the site)
- Kinveachy Forest SPA (4.3km West)
- Craigmore Wood SPA (7km NE)
- Cairngorms SPA (10km South of the site)
- Anagach Woods SPA (12km NE of the site)

### **Stage 3: Discussions on the method and scope of the appraisal and requests for additional information**

A burn borders the site on the west and south, this burn flows into the Milton Loch and from there into the River Spey SAC. Qualifying features of the Spey SAC include: Otter, FWPM, Sea Lamprey, Atlantic Salmon.

Milton Loch is renowned locally for its populations of invertebrates and birds. Any nutrients released from the site would likely become trapped within Milton Loch which is sensitive to any increases in nutrients.

Proposals for the foul water drainage and surface water drainage have been submitted along with a draft Construction Method Statement. An Extended Phase I Habitat Survey was carried out in February 2019. SEPA and SNH have been consulted. Advice as been sought from the Spey Fisheries Board.

An application for a path link has not yet been submitted, but indicative plans have been included within the masterplan docs.

### Extended Phase I Habitat Survey (EPIHS):

The EPIHS found no signs of otter but it is considered possible that these species may intermittently utilise the site for feeding and/or as a corridor.

### Construction Method Statement (CMS):

The measures to protect the burn satisfy the requirements of the CAR (Controlled Activities Regulations). (The measures include: silt fence, tree protection fencing which will also keep the works away from the burn, storage/laydown areas kept at least 20m away from the burn, extent of soil stripping minimised, sump trenches). Measures to safeguard otter are included in the CMS (daylight working and measures to reduce risk of entrapment.)

The CMS can be improved by adding in a mention of checks and additional exclusion fencing to the west of the site.

Surface Water drainage design: The design satisfies the requirements of the CAR.

- Roof water will be conveyed into rain gardens with a proposed storage volume of 9.0m<sup>3</sup> (per property), in which infiltration will be encouraged. To allow for large storm events overflows will be installed to collect the rain gardens to the filter drain network. The modelling showed that even with a 200 yr storm event plus climate change factored in the discharge to the overflow system should will be 0.

- Road water from the adopted section of road will be collected in road gullies and transferred into an adjacent filter drain in which the water will begin to be filtered and soakaway into the ground. During heavy rain fall the water will flow through the filter drain to the bottom of the site and be discharged into the local burn at a reduced discharge rate of 5.0 l/s.

The design proposals for the surface water drainage system can be improved by expanding the details on maintenance.

Foul Water drainage design: To be authorised by SEPA through a simple licence. This has not been issued yet. Septic tank and soakaway proposed, minimal maintenance details provided. For the purposes of this assessment we will take a worst case scenario approach, the design has not been confirmed to safeguard the water quality of the watercourse.

Masterplan docs/location plans: These indicate that the housing development would add 12 new homes to Boat with associated access track and path. The path would be a core path link to Boat of Garten. Trees adjacent to the road would be maintained as a buffer zone. Boat of Garten woods has a known population of Capercaillie (1.5km South of the site).

SEPA response: SEPA advise that ground water investigation monitoring is still required to help determine an acceptable solution to the foul water drainage.

SNH response: SNH have determined that the design of the waste water treatment needs to ensure that neither the water course, nor the River Spey SAC, would be negatively impacted by nutrients or other pollution arising from the septic tank or soakaway. Ideally it would be connected to the public waste water.

SNH have assessed the connectivity between this development site and Boat of Garten woods and concluded that recreational disturbance to capercaillie Boat of Garten Wood will not increase as a result of this proposal.

- The distance between the site and the woodland at Boat of Garten (Deshar Wood) is approximately 1.5km, and longer to get significantly into the wood where the capercaillie are.
- There are closer places to walk, for example the core path between Milton Farm and Drumullie, Milton Loch, and the riverside path.
- The development of 12 houses is small in terms of the overall population of Boat of Garten.

#### **Stage 4: Screening the proposal for likely significant effects**

The effects identified are discussed in Table 3.

**Table 3. Screening for Housing development at Boat of Garten.**

<b>River Spey SAC</b>					
<b>Qualifying Feature Affected</b>	<b>Possible effect of development</b>	<b>Likely significant effect</b>	<b>Duration</b>	<b>Screening assessment</b>	<b>Screening outcome</b>
Otter	There is the potential for increased nutrients to the watercourse in the longer term from the septic tank and soakaway. This design has not yet received a simple licence from SEPA.	Reduced water quality (increased nutrients such as phosphorous) in the long term can impact the distribution and variety of prey. Potential loss of foraging habitat.	Potentially permanent but intermittent	<p>The impact of any enrichment would decrease further downstream as the dilution factor increased. Any impacts would be mostly felt in the burn itself and Milton loch.</p> <p>Otter use many food sources and would be likely to adapt if there were changes over time to the nature of the burn. The development could however change the foraging behaviour of otter which may affect their distribution.</p>	Likely significant effect
Atlantic Salmon		Reduced water quality and oxygen levels can negatively impact egg survival rates, embryo health and hatching. The nature of the watercourse can be changed with the addition of nutrients in the long term, reducing habitat quality and suitability for salmon.	Potentially permanent but intermittent	<p>Salmon were not found during 2017 SFB survey work between the burn d/s of the site and the Spey. Habitat in the burn is not suitable to support salmon (given width).</p> <p>The impact of any enrichment would not be likely to directly affect salmon in the Spey where the dilution factor is large and salmon are mobile.</p>	No likely significant effect

Sea Lamprey		<p>Reduced water quality and oxygen levels can negatively impact egg survival rates/larvae.</p> <p>The nature of the watercourse can be changed with the addition of nutrients in the long term, reducing habitat quality and suitability for lamprey.</p>	Potentially permanent but intermittent	<p>Sea lamprey are not known to use the burn. (Juvenile brook lamprey were found in 2017 between the burn d/s of the site and the Spey.</p> <p>The impact of any enrichment would not be likely to directly affect Sea lamprey in the Spey where the dilution factor is large and lamprey are mobile.</p>	No likely significant effect
Freshwater Pearl Mussel		<p>FWPM require coarse sand and fine gravel in clean, oligotrophic, fast-flowing and unpolluted rivers and streams.</p> <p>The nature of the watercourse can be changed with the addition of nutrients in the long term, reducing habitat quality and suitability for freshwater pearl mussel.</p>	Potentially permanent but intermittent	The WQ in the Spey is not likely to decrease significantly as a direct result of the development, however there is a local population of FWPM in the vicinity and vulnerable to any incremental increase in nutrients. FWPM are not very mobile/cannot adapt quickly to changes in WQ. In a low flow scenario pollution entering the Spey may impact these.	Likely significant effect.
Otter	Silt entering the burn during construction.	<p>Suspended silt can impact the visibility of water, negatively impacting the ease with which otter can forage.</p> <p>Silt deposition on gravels may reduce the quality of</p>	<p>Temporary reduction in visibility during construction.</p> <p>Smothered gravels can have a longer</p>	<p>The burn is small, any sediment reaching this receptor is likely to have an impact on water visibility. However the effects from construction would be short term and otter are mobile and able to find better foraging if necessary.</p> <p>Sediment entering the burn is likely to settle out in Milton Loch. No additional sediment is</p>	No likely significant effect.



		habitat for some prey.	term effect on prey.	likely to enter the Spey SAC.	
Atlantic Salmon		Silted substrate is not suitable for salmon spawning, it cannot support eggs or newly hatched alevins which are dependant on clean, well oxygenated gravels.	Long term impact.	Salmon were not found during 2017 SFB survey work between the burn d/s of the site and the Spey. Habitat in the burn is not suitable to support salmon (given width).  Sediment entering the burn is likely to settle out in Milton Loch. No additional sediment is likely to enter the Spey SAC.	No likely significant effect
Sea Lamprey		Silted substrate is not suitable for lamprey spawning, it cannot support eggs or larvae which are dependent on well oxygenated gravels.		Sea lamprey are not known to use the burn. (Juvenile brook lamprey were found in 2017 between the burn d/s of the site and the Spey).  Sediment entering the burn is likely to settle out in Milton Loch. No additional sediment is likely to enter the Spey SAC.	No likely significant effect
Freshwater Pearl Mussel		Silted substrate is not suitable for FWPM, it cannot support adults or juveniles which are dependant on well oxygenated gravels.		FWPM are not known to use the burn. There is a local population of FWPM d/s of Milton Loch on the Spey.  Sediment entering the burn is likely to settle out in Milton Loch. No additional sediment is likely to enter the Spey SAC.	No likely significant effect
Otter	Disturbance and/or physical harm during construction	Disturbance to foraging due to construction activity taking place and/or lighting used at night time.  Trapping or injury. Should pits, tunnels or piping be left open overnight; otters that wander onto the site could	Temporary, during construction only	It is likely that otter use the burn for foraging/commuting. They may use the area adjacent to the burn for resting or foraging. The active construction site would pose a risk to otter that may venture onto the site.	Likely significant effect

		become trapped or injured.			
	Increased recreational disturbance	Disturbance leading to displacement	Permanent	There could be increased recreational disturbance from, residents on the path and new foot bridge. This will be mainly during the day when otter are less active and will be low numbers. Path does not run adjacent to the river and so disturbance area is limited to bridging point.	No likely significant effect
<b>Abernethy Forest SPA</b>					
<b>Qualifying Feature Affected</b>	<b>Possible effect of development</b>	<b>Likely significant effect</b>	<b>Duration</b>	<b>Screening assessment</b>	<b>Screening outcome</b>
Osprey (Pandion haliaetus)	Nutrients from the development being deposited in Milton Loch.  Osprey use the general area and may use Milton loch for feeding.  No impacts to the habitats at Abernethy	Reduced variety/abundance of food (fish) available in Milton Loch for osprey.	Permanent	It is likely that Osprey find the neighbouring Spey River more appealing for hunting. Unlikely that there is a dependency on Milton Loch.	No Likely significant effect

	that support Osprey.				
Scottish crossbill ( <i>Loxia scotica</i> )	The site does not provide suitable habitat for Scottish crossbill and no impact to the habitats at Abernethy that support Scottish crossbill.	The proposal would have no effect, either direct or indirect.			No likely significant effect
Capercaillie ( <i>Tetrao urogallus</i> )	The application is for 12 houses and includes a proposal to create a path between the development and the village, bringing more people within closer range of an existing population in Boat Woods. Capercaillie (red conservation status) are highly vulnerable.	Strathspey metapopulation would be adversely affected if the population in Boat Woods experiences an increase in disturbance from recreation due to population increase at Boat of Garten village.	Permanent.	The distance between the site and the woodland at Boat of Garten (Deshar Wood) is approximately (depending on the route taken) 1.5km, and longer to get significantly into the wood. There are closer places to walk, for example the core path between Milton Farm and Drumullie, Milton Loch, and the riverside path. The development of 12 houses is small in terms of the overall population of Boat of Garten. For these reasons it is concluded that this development at this location is not likely to lead to any meaningful additional disturbance of capercaillie over and above the existing use of the wood. There is no anticipated effect on capercaillie in the wood, so there would be no significant effect on the SPAs notified for capercaillie.	No likely significant effect
<b>Kinveachy Forest SPA</b>					
<b>Qualifying Feature Affected</b>	<b>Possible effect of development</b>	<b>Likely significant effect</b>	<b>Duration</b>	<b>Screening assessment</b>	<b>Screening outcome</b>

Capercaillie (Tetrao urogallus)	The application is for 12 houses and includes a proposal to create a path between the development and the village, bringing more people within closer range of an existing population in Boat Woods. Capercaillie (red conservation status) are highly vulnerable.	Strathspey metapopulation would be adversely affected if the population in Boat Woods experiences an increase in disturbance from recreation due to population increase at Boat of Garten village.	Permanent.	The distance between the site and the woodland at Boat of Garten (Deshar Wood) is approximately (depending on the route taken) 1.5km, and longer to get significantly into the wood. There are closer places to walk, for example the core path between Milton Farm and Drumullie, Milton Loch, and the riverside path. The development of 12 houses is small in terms of the overall population of Boat of Garten. For these reasons it is concluded that this development at this location is not likely to lead to any meaningful additional disturbance of capercaillie over and above the existing use of the wood. There is no anticipated effect on capercaillie in the wood, so there would be no significant effect on the SPAs notified for capercaillie.	No likely significant effect.
Scottish crossbill (Loxia scotica)	The site does not provide suitable habitat for Scottish crossbill and no impact to the habitats at Kinveachy that support Scottish crossbill.	The proposal would have no effect, either direct or indirect.			No likely significant effect.
<b>Craigmore Wood SPA</b>					
<b>Qualifying Feature Affected</b>	<b>Possible effect of development</b>	<b>Likely significant effect</b>	<b>Duration</b>	<b>Screening assessment</b>	<b>Screening outcome</b>

Capercaillie (Tetrao urogallus)	The application is for 12 houses and includes a proposal to create a path between the development and the village, bringing more people within closer range of an existing population in Boat Woods. Capercaillie (red conservation status) are highly vulnerable.	Strathspey metapopulation adversely affected if the population in Boat Woods experiences an increase in disturbance from recreation due to population increase at Boat of Garten village.	Permanent.	The distance between the site and the woodland at Boat of Garten (Deshar Wood) is approximately (depending on the route taken) 1.5km, and longer to get significantly into the wood. There are closer places to walk, for example the core path between Milton Farm and Drumullie, Milton Loch, and the riverside path. The development of 12 houses is small in terms of the overall population of Boat of Garten. For these reasons it is concluded that this development at this location is not likely to lead to any meaningful additional disturbance of capercaillie over and above the existing use of the wood. There is no anticipated effect on capercaillie in the wood, so there would be no significant effect on the SPAs notified for capercaillie.	No likely significant effect.
<b>Cairngorms SPA</b>					
<b>Qualifying Feature Affected</b>	<b>Possible effect of development</b>	<b>Likely significant effect</b>	<b>Duration</b>	<b>Screening assessment</b>	<b>Screening outcome</b>
Scottish crossbill (Loxia scotica)	The site does not provide suitable habitat for Scottish crossbill and no impact to the habitats in Cairngorms SPA.	The proposal would have no effect, either direct or indirect.			No likely significant effect.
Dotterel (Charadrius morinellus)	The site does not provide suitable habitat for Dotterel and the development will not impact habitats in Cairngorms	The proposal would have no effect, either direct or indirect.			No likely significant effect.

	SPA.				
Golden eagle (Aquila chrysaetos)	The site does not provide suitable habitat for Golden Eagle and the development will not impact habitats in Cairngorms SPA.	The proposal would have no effect, either direct or indirect.			No likely significant effect.
Peregrine (Falco peregrinus)	The site does not provide suitable habitat for peregrine.  The development will not impact habitats in Cairngorms SPA.	The proposal would have no effect, either direct or indirect.			No likely significant effect.
Osprey (Pandion haliaetus)	Nutrients from the development being deposited in Milton Loch.  Osprey use the general area and may use Milton loch for feeding.  No impacts to the habitats at Cairngorms SPA that support Osprey.	Reduced variety/abundance of food (fish) available in Milton Loch for osprey.	Permanent	It is likely that Osprey find the neighbouring Spey River more appealing for hunting. Unlikely that there is a dependency on Milton Loch.	No Likely significant effect
Merlin (Falco columbarius)	Red conservation status. Merlin may use the Boat area in	The proposal would have no effect, either direct or			No likely significant effect.

	<p>summer.</p> <p>The development will not impact breeding birds (potential prey).</p> <p>The development will not impact habitats in Cairngorms SPA.</p>	indirect.			
Capercaillie (Tetrao urogallus)	The application is for 12 houses and includes a proposal to create a path between the development and the village, bringing more people within closer range of an existing population in Boat Woods. Capercaillie (red conservation status) are highly vulnerable.	Strathspey metapopulation adversely affected if the population in Boat Woods experiences an increase in disturbance from recreation due to population increase at Boat of Garten village.	Permanent	The distance between the site and the woodland at Boat of Garten (Deshar Wood) is approximately (depending on the route taken) 1.5km, and longer to get significantly into the wood. There are closer places to walk, for example the core path between Milton Farm and Drumullie, Milton Loch, and the riverside path. The development of 12 houses is small in terms of the overall population of Boat of Garten. For these reasons it is concluded that this development at this location is not likely to lead to any meaningful additional disturbance of capercaillie over and above the existing use of the wood. There is no anticipated effect on capercaillie in the wood, so there would be no significant effect on the SPAs notified for capercaillie.	No likely significant effect.
<b>Anagach Woods SPA</b>					
<b>Qualifying Feature Affected</b>	<b>Possible effect of development</b>	<b>Likely significant effect</b>	<b>Duration</b>	<b>Screening assessment</b>	<b>Screening outcome</b>

<p>Capercaillie (Tetrao urogallus)</p>	<p>The application is for 12 houses and includes a proposal to create a path between the development and the village, bringing more people within closer range of an existing population in Boat Woods.</p>	<p>Strathspey metapopulation adversely affected if the population in Boat Woods experiences an increase in disturbance from recreation due to population increase at Boat of Garten village.</p>	<p>Permanent.</p>	<p>The distance between the site and the woodland at Boat of Garten (Deshar Wood) is approximately (depending on the route taken) 1.5km, and longer to get significantly into the wood. There are closer places to walk, for example the core path between Milton Farm and Drumullie, Milton Loch, and the riverside path. The development of 12 houses is small in terms of the overall population of Boat of Garten. For these reasons it is concluded that this development at this location is not likely to lead to any meaningful additional disturbance of capercaillie over and above the existing use of the wood. There is no anticipated effect on capercaillie in the wood, so there would be no significant effect on the SPAs notified for capercaillie.</p>	<p>No likely significant effect.</p>
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## Stage 5: In-combination effects

There is a risk of an incremental reduction of WQ in the Spey over time due to diffuse pollution if developments with insufficient foul water drainage arrangements are built in the Spey Catchment but we are not aware at this time of any other developments in the area with the potential to increase the nutrient load of the Spey.

(The waste water treatment works at Boat of Garten have upgraded capacity in the last few years, the water quality of the Spey is thought to have improved in this time.)

There are no Minor Residual Effects (Likely Insignificant Effects) identified during screening or through the Appropriate Assessment therefore there will be no in combination effects.

## Stages 6–10 Assessment and Conclusions

### Stage 6: Appropriate Assessment

The proposals have been screened in Stages 4 and 5. It was found that for one Natura site there were likely significant effects upon the qualifying interests. Consequently the following appropriate assessment is required to ascertain the implications for the conservation objectives. The affected site identified is:

- River Spey SAC

#### River Spey SAC

##### Qualifying species and conservation status

Sea lamprey (*Petromyzon marinus*) Favourable Maintained (Sept 2011)

Otter (*Lutra lutra*) Favourable Maintained (Sept 2011)

Atlantic salmon (*Salmo salar*) Unfavourable Recovering (Sept 2011)

Freshwater pearl mussel (*Margaritifera margaritifera*) Unfavourable Declining (Sept 2014)

##### 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;

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 the site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species and their hosts where relevant

- No significant disturbance of the species

**Is the operation likely to have a significant effect on the qualifying interest? Consider each qualifying interest in relation to the conservation objectives**

Sea lamprey: Screened out at stage 4  
 Otter: Likely Significant Effect  
 Atlantic salmon: Screened out at stage 4  
 Freshwater pearl mussel: Likely Significant effect

**Will the development adversely affect the site’s conservation objectives?**

In this assessment, the implications of the planning application for the site’s conservation objectives are assessed in order to answer the question: “Can it be ascertained that the proposal will not adversely affect the integrity of the site?”

The over-arching conservation objective of SACs is to avoid deterioration of the habitats of the qualifying species, or significant disturbance to the qualifying species, thus ensuring that the integrity of the sites is maintained. This over-arching conservation objective can be broken down into the following detailed elements:

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

1. a) Population of the species as a viable component of the sites  
     b) Distribution of the species within sites
2. a) Distribution and extent of habitats supporting the species  
     b) Structure, function and supporting processes of habitats supporting the species
3. No significant disturbance of the species

**In-combination effects**

As described at Stage 5 (screening); no in-combination effects have been identified.

**Assessment against the Conservation Objectives**

**I a) Population of the species as a viable component of the sites**

**Freshwater Pearl Mussel:** - if pollution exceeds a threshold due to a low flow event scenario there may be a toxic effect on individual FWPMs. The development has the potential to contribute to this.

**It is concluded that there could be an effect upon this conservation objective and therefore additional mitigation is required.**

**I b) Distribution of the species within sites**

**Freshwater Pearl Mussel:** if pollution exceeds a threshold due to a low flow event scenario there may be a toxic effect on the FWPM bed. The extent of the population in the Spey SAC would

be changed permanently.

**It is concluded that there could be an effect upon this conservation objective and therefore additional mitigation is required.**

**2a) Distribution and extent of habitats supporting the species**

**Freshwater Pearl Mussel:** if pollution exceeds a threshold due to a low flow event scenario there may be a toxic effect on the FWPM bed through eutrophication which encourages increase growth of algae and plant which clogs the mussel bed substrate. The extent of the population and extent of appropriate habitat for FWPM would be changed permanently.

**It is concluded that there could be an effect upon this conservation objective and therefore additional mitigation is required.**

**Otter:** if the nature of the burn and loch are changed due increased sediment load from the construction works the area may provide less diverse food sources and foraging behaviour/areas may be impacted. In addition areas receiving artificial light spill during construction works would discourage otter and may result in avoidance of the area. The information provided contains a construction method statement that anticipates these factors and included measure to prevent sedimentation of the burn. In addition there will be no lighting used on site. This will prevent the adverse effects upon otter.

**It is concluded that there will be no effect upon this conservation objective.**

**2b) Structure, function and supporting processes of habitats supporting the species**

**Freshwater Pearl Mussel:** if pollution exceeds a threshold due to a low flow event scenario the extent of appropriate habitat for FWPM would be reduced temporarily. In the longer term, colonies can become smothered by algal growth. Increased ranunculus growth can increase silt deposition, increasing the rate of smothering. Pollution can affect the physiology of FWPM, non-lethal effects can include decreased reproduction. Reduced oxygen levels in water and gravels can render the habitat unable to support FWPM at all life stages which require well oxygenated water. E.g. unsuccessful recruitment of juveniles will result in the life cycle failing.

**It is concluded that there could be an effect upon this conservation objective and therefore additional mitigation is required.**

**3) No significant disturbance of the species**

**Freshwater Pearl Mussel:** disturbance effects were screened at stage 4

**Otter** Otters may avoid any artificially lit areas, abandoning options for foraging and access to holts/lie up areas. Any otter that became trapped/injured would exhibit a significant change in behaviour and experience stress and/or harm. The information provided contains a construction method statement that anticipates these factors and includes measure to prevent sedimentation of the burn. In addition there will be no lighting used on site. This will prevent the disturbance effects upon otter.

**It is concluded that there will be no effect upon this conservation objective.**

### **Additional mitigation**

Mitigation is required for the above effects. The key issues are the quality of water in the River Spey being affected by waste water discharge. Therefore there must be a treatment system that will ensure that this cannot happen. This must be agreed prior to construction starting on site and in place before any housing unit is occupied. To achieve this the following condition must be applied to the planning consent:

*Suspensive Condition: No development shall commence until the full details of foul water treatment and discharge that demonstrates no significant effect on the River Spey SAC have been submitted to and approved in writing by the CNPA acting as planning authority in consultation with SEPA. The details must include a full groundwater investigation undertaken in accordance with SEPA guidance (WAT-RM-04 Indirect Sewage Discharges to Groundwater section 1.1) and the outcome of the investigations must satisfy requirements under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) for any discharges to land or the water environment from private foul drainage systems.*

This will ensure that foul water drainage proposals are satisfactorily designed, implemented and managed in order to minimise any risk of pollution which may affect natural heritage interests including the River Spey Special Area of Conservation. This will also ensure there is no risk to the water quality of the burn, and Milton Loch.

This would resolve the following likely significant effects:

- Water quality reduction of the Spey leading to negative impacts to FWPM

### **Likely insignificant effects**

No residual effects.

### **Conclusion on site integrity**

**With the mitigation above is followed, there will not be an adverse effect upon the integrity of the River Spey SAC.**

## **Stage 7: Consultation**

Wider consultation of the draft report is at the discretion of the competent authority. In this case, it has been decided that no further consultation, other than with SNH, is required.

**N.B.** This is the consultation draft and will be followed up with a final response prior to determination.

## **Stage 8: Additional mitigation**

The Appropriate Assessment details a number of mitigation measures that are considered necessary. These are summarised below:

- A suspensive condition to address concerns about the sewage treatment design and potential impacts to the WQ of the burn, and Spey SAC.

This assessment based upon the best available scientific evidence and advice offered from SNH and others has shown that, with the additional mitigation measures, there is not a likely significant effect from the proposed development upon the qualifying features or the conservation objectives for the following Natura sites:

### ***River Spey SAC***

**We therefore conclude that the proposed development, subject to the mitigation measures identified in this appropriate assessment and applied to any consent, will not adversely affect the integrity of the River Spey SAC.**

### **Stage 10: Section 49 (derogation)**

The conclusion that there is no adverse effect upon the integrity of any of the Natura sites covered in this report means that regulation 49 is not relevant.

### **Summary of residual effects**

There are no Minor Residual Effects.

## **References**

### **Habitat Regulations process**

Council Directive 92/43/EEC “the Habitats Directive” EEC adopted 1992

Managing Natura 2000 sites – EU communities 2000

Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC - EC 2007

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)

Welsh Assembly Government TAN 5: Nature Conservation and Planning - 2009

Habitat Regulations Appraisal of Plans – Guidance for Plan Making Bodies in Scotland SNH/DTA August 2012 (Version 2.0)

### **Other sources**

Cairngorms National Park Core Paths Plan 2010 – CNAP – 2010

CRAGG Visitor, visitor infrastructure and tourism Audit. Robinson 2013

Cairngorms Outdoor Access Strategy 2007-2012 – CNPA 2007

Scottish Recreation Survey, Annual Summary report 2011. CR No. 535 SNH 2012

Report of Site Condition Monitoring survey of freshwater pearl mussels in the River Spey during 2013 and 2014. SNH, Iain Sime 2014.

Laughton, R., and Burns, S. (2003). Assessment of sea lamprey distribution and abundance in the River Spey: Phase III. Scottish Natural Heritage Commissioned Report No. 043 (ROAME No. F02AC604).

Fredricks, K. T., Swink W. S., and Montouri, L. (1996) Feasibility of using strobe lights to direct sea lamprey movement. Great Lakes Fishery Commission.

**Appendix I**  
**Details of Natura 2000 sites within, or adjacent to, the proposed development site**

Name of European Site	River Spey SAC
Conservation Objectives	<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 the site            Distribution and extent of habitats supporting the species            Structure, function and supporting process of habitats supporting the species            No significant disturbance of the species</p>
Qualifying Species	<p>Sea lamprey (<i>Petromyzon marinus</i>)            Otter (<i>Lutra lutra</i>)            Atlantic salmon (<i>Salmo salar</i>)            Freshwater pearl mussel (<i>Margaritifera margaritifera</i>)</p>
Site Condition	<p>Sea lamprey (<i>Petromyzon marinus</i>) Favourable Maintained (2011)            Otter (<i>Lutra lutra</i>) Favourable Maintained (2011)            Atlantic salmon (<i>Salmo salar</i>) Unfavourable Recovering (2004)            Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) Unfavourable Declining (2014)</p>
Factors currently influencing site	<p>In terms of development, none at present</p>
Vulnerabilities to change/potential effects	<p>Effects on water quality including sewerage treatment, release of minerals, contamination or other pollution and waste.            Functioning of flood plains and the river system.            Abstraction of water.            Relevant settlements: Dalwhinnie, Newtonmore, Kingussie, An Camus Mòr, Aviemore, Inverdrue, Kincaig, Insh, Boat of Garten, Carr-Bridge, Dulnain Bridge, Nethy Bridge, Grantown-on-Spey, Cromdale.</p>

<b>Name of European Site</b>	<b>Abernethy Forest SPA</b>
Conservation Objectives	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 to ensure for the qualifying species that the following are maintained in the long term: 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 Population of the species as viable component of the site
Qualifying Species	Osprey ( <i>Pandion haliaetus</i> ) Scottish crossbill ( <i>Loxia scotica</i> ) Capercaillie ( <i>Tetrao urogallus</i> )
Site Condition	Osprey ( <i>Pandion haliaetus</i> ) Favourable Maintained (2007) Scottish crossbill ( <i>Loxia scotica</i> ) Favourable Maintained (2012) Capercaillie ( <i>Tetrao urogallus</i> ) Favourable Maintained (2009)
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects	Recreational disturbance to species from neighbouring development Relevant settlements: An Camus Mòr, Boat of Garten – also developing of, or extension of existing, recreational facilities.



Name of European Site	Cairngorms SPA
Conservation Objectives	<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 to ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <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 habitat supporting the species</li> <li>No significant disturbance of the species</li> <li>Population of the species as viable component of the site</li> </ul>
Qualifying Species	<p>Scottish crossbill (<i>Loxia scotica</i>)  Dotterel (<i>Charadrius morinellus</i>)  Golden eagle (<i>Aquila chrysaetos</i>)  Peregrine (<i>Falco peregrinus</i>)  Osprey (<i>Pandion haliaetus</i>)  Merlin (<i>Falco columbarius</i>)  Capercaillie (<i>Tetrao urogallus</i>)</p>
Site Condition	<p>Scottish crossbill (<i>Loxia scotica</i>) Favourable Maintained (2012)  Dotterel (<i>Charadrius morinellus</i>) Unfavourable Declining (2011)  Golden eagle (<i>Aquila chrysaetos</i>) Favourable Maintained (2009)  Peregrine (<i>Falco peregrinus</i>) Favourable Maintained (2002)  Osprey (<i>Pandion haliaetus</i>) Favourable Maintained (2006)  Merlin (<i>Falco columbarius</i>) Not Assessed  Capercaillie (<i>Tetrao urogallus</i>) Favourable Maintained (2011)</p>
Factors currently influencing site	<p>In terms of development, none at present</p>
Vulnerabilities to change/potential effects	<p>Recreational disturbance to species from neighbouring development  Relevant settlements: An Camus Mòr, Boat of Garten – also developing of, or extension of existing, recreational facilities.  Wind farms could impact on young golden eagles, given their mobility</p>

<b>Name of European Site</b>	<b>Anagach Woods SPA</b>
Conservation Objectives	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 to ensure for the qualifying species that the following are maintained in the long term: 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 Population of the species as viable component of the site
Qualifying Species	Capercaillie (Tetrao urogallus)
Site Condition	Capercaillie (Tetrao urogallus) Unfavourable Declining (2015)
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects	Recreational disturbance to species from neighbouring development Relevant settlements: An Camus Mòr, Boat of Garten – also developing of, or extension of existing, recreational facilities.

<b>Name of</b>	<b>Craigmore Wood SPA</b>
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<b>European Site</b>	
Conservation Objectives	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 to ensure for the qualifying species that the following are maintained in the long term: 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 Population of the species as viable component of the site
Qualifying Species	Capercaillie (Tetrao urogallus)
Site Condition	Capercaillie (Tetrao urogallus) Unfavourable Declining (2015)
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects	Recreational disturbance to species from neighbouring development Relevant settlements: An Camus Mòr, Boat of Garten – also developing of, or extension of existing, recreational facilities.

<b>Name of European Site</b>	<b>Kinveachy Forest SPA</b>
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Conservation Objectives	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 to ensure for the qualifying species that the following are maintained in the long term: <ul style="list-style-type: none"> <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</li> <li>No significant disturbance of the species</li> <li>Population of the species as viable component of the site</li> </ul>
Qualifying Species	Capercaillie ( <i>Tetrao urogallus</i> ) Scottish crossbill ( <i>Loxia scotica</i> )
Site Condition	Capercaillie ( <i>Tetrao urogallus</i> ) Favourable Maintained (2008) Scottish crossbill ( <i>Loxia scotica</i> ) Favourable Maintained (2012)
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects	Recreational disturbance to species from neighbouring development Relevant settlements: An Camus Mòr, Boat of Garten – also developing of, or extension of existing, recreational facilities.

## Appendix 2

## Glossary of terms and abbreviations

<b>Appropriate Assessment (AA)</b>	The part of the Habitats Regulations Assessment process that considers the effects of an aspect of a plan upon the conservation objectives for a Natura site.
<b>CNPA</b>	Cairngorms National Park Authority
<b>CNAP</b>	Cairngorms Nature Action Plan
<b>Competent Authority</b>	The decision making body required under the Habitats Directive to undertake HRA. This includes Scottish Government, National Park Authorities, SNH , SEPA or Local Authorities.
<b>CPP</b>	Core Paths Plan
<b>Habitats Regulation Assessment (HRA)</b>	The whole appraisal process for determining effects upon Natura Sites. It includes Appropriate Assessments. It is a requirement by the Habitats Directive that competent authorities carry out HRAs where a plan or project affects a Natura site.
<b>CLDP</b>	Draft Cairngorms National Park Local Development Plan
<b>Likely Significant Effect</b>	An adverse effect of the development upon a qualifying interest or conservation objective that is considered to be potentially severe enough as to threaten the integrity of the Natura site itself.
<b>Natura Sites</b>	Collective term for Special Protection Areas and Special Areas of Conservation
<b>Ramsar sites</b>	Ramsar sites are wetlands of international importance designated under the Ramsar Convention 1971. Not technically Natura sites they are however usually also SPAs. They are included within the HRA process by policy.
<b>Special Area of Conservation (SAC)</b>	An area designated for the protection of habitats and species. Authorised under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (commonly called the “Habitats Directive”). One of three designation to be considered in a HRA
<b>Special Protection Area (SPA)</b>	An area designation for the protection of birds. Authorised by the Directive 2009/147/EC of the European Parliament and of the Council (commonly called the “Birds Directive”). One of three designation to be considered in a HRA