

Habitats Regulations Assessment – Cairngorms Local Development Plan 2 - Main Issues Report

I. Introduction

Local Development Plans must be subject to assessment in terms of The Conservation (Natural Habitats &c) Regulations 1994 (as amended) to determine likely effects on European designated sites (Natura sites).

This report sets out the screening process and preliminary assessment undertaken on three key issues to inform the preparation of the Main Issues Report. It is not a record of a full Habitats Regulations Assessment, which will be carried out when preparing the Proposed Local Development Plan.

However, it is important that the Main Issues Report considers likely effects on Natura sites when setting out options. The MIR should include options that are likely to result in an adverse impact on the integrity of Natura sites that cannot be mitigated. The screening and assessment of allocation options have been carried out by the Cairngorms National Park Authority having consulted Scottish Natural Heritage.

Pre-main issues engagement report advice from consultees

Consultation has been undertaken with SNH on a pre-main issues engagement report. The response (8/06/17) on likely impacts on European Designated Sites and Species identified three key issues, these have been summarised below. It should be noted that the previous LDP HRA identified a range of other LSEs that were subsequently either ruled out through assessment or mitigated through changes to the final plan. These will be re considered in full during the preparation of the draft LDP but are not noted at this earlier stage.

Table I – Key Natural issues as identified by SNH

Natura Interest	Comment
Capercaillie	While the Capercaillie Framework will assist considerably with reducing recreational disturbance, it is important to note that it may not resolve all issues arising from the LDP eg the framework may not cover all settlements where new housing is proposed and sustainable community recreation plans may not have been fully developed and implemented prior to applications from housing developments coming forward
Freshwater Pearl Mussel	<p>Impact from wastewater discharges – there is some debate about the point at which levels of pollution cause an adverse impact- the debate has not been concluded and further work is required to resolve this</p> <p>The freshwater pearl mussel (<i>Margaritifera margaritifera</i>) lives buried or partly buried in coarse and fine gravel in clean, oligotrophic, fast-flowing rivers and streams. It is a sensitive species with a complicated life cycle and exacting physical and chemical habitat requirements. Indeed, it is so sensitive that its presence is indicative that habitat conditions will be suitable for other sensitive freshwater species, e.g. salmonids which are the host of the glochidial phase of the freshwater pearl mussel.</p> <p>The key threats to freshwater pearl mussel have been summarised by SNH (Angus Tree email dated 19/4/17) are:</p> <p>1) The smothering of its habitat with fine material. This material may be mineral or organic or both. Run-off with a high suspended sediment</p>

	<p>load is a major concern but discharges containing suspended sediment may eventually have the same effect. Fine material that's deposited on freshwater pearl mussel habitat may fill interstices and reduce the availability of adequately oxygenated water or may simply smother and so suffocate freshwater pearl mussels.</p> <p>2) Increases nutrient levels which may result in the proliferation of, for example, algae that may itself smother freshwater pearl mussel but may also increase the potential for fine sediment to be trapped and so compound the issue.</p> <p>3) Increased biochemical oxygen demand (BOD). This will occur when polluting substances enter a watercourse—if their breakdown relies upon the presence of O₂ then decreased amounts of it will be available for freshwater organisms to respire. Fish kills are perhaps the best known example of O₂ depletion.</p> <p>4) Pollution, i.e. the accidental spillage of harmful substances in a watercourse or in an area that is hydraulically connected with a watercourse. The toxic effects may be direct or indirect.</p> <p>5) Habitat modification. This may be either direct, e.g. digging-up freshwater pearl mussel habitat, or indirect, e.g. changes to habitat resulting from work undertaken in another part of a watercourse.</p>
River Dee SAC	Concern over increased abstraction on River Dee SAC for development in Aberdeenshire. Assessment of cumulative impacts would be required and identification of alternative water supplies may be required to avoid adverse integrity of the SAC.

2. Summary of Natura 2000 sites within the Cairngorms National Park and potential vulnerabilities relevant to the main issues report

Table 2

Natura Site	Site at risk from:		
	Capercaillie Disturbance	FWPM – Pollution from wastewater or surface water	FWPM – Abstraction resulting in low flows
Ballochbuie SPA	x		
Anagach Woods SPA	x		
Abernethy SPA	x		
Cairngorms SPA	x		
Craigmore Woods SPA	x		
Glen Tanar SPA	x		
Kinveachy SPA	x		

River Spey SAC		x	x
River Dee SAC		x	x

3. Details of Natura 2000 sites within the Cairngorms National Park and potential vulnerabilities relevant to the Main Issues Report

Table 3

Name of European Site	Abernethy Forest
Site Type	Special Protection Area
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"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Osprey (<i>Pandion haliaetus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
Site Condition	<ul style="list-style-type: none"> • Capercaillie, breeding, 2009, Favourable maintained. • Osprey, breeding, 2007, Favourable maintained. • Scottish crossbill, 2012, Favourable.
Factors currently influencing site	In terms of development, no factors currently influencing site.
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • Disturbance from construction and recreation arising from neighbouring development • Relevant settlements: Boat of Garten, Nethy Bridge

Name of European Site	Anagach Woods
Site Type	Special Protection Area
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"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>)

Site Condition	<ul style="list-style-type: none"> • Capercaillie, 2015, Unfavourable, declining.
Factors currently influencing site	Impact from disturbance from adjacent village and footpaths within the wood.
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • Disturbance from construction and recreation arising from neighbouring development • Relevant settlements: Grantown-on-Spey

Name of European Site	Cairngorms
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie • Dotterel • Golden Eagle • Osprey • Peregrine • Scottish crossbill
Site Condition	<ul style="list-style-type: none"> • Capercaillie, 2011, Favourable maintained • Dotterel, 2011, Unfavourable, declining • Golden Eagle, 2009, Favourable Maintained • Osprey, 2006, Favourable Maintained • Peregrine, 2002, Favourable Maintained • Scottish crossbill, 2012, Favourable Maintained
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • Recreational disturbance from development in neighbouring areas • Relevant settlements: Aviemore

Name of European Site	Craigmore Wood
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site

	<ul style="list-style-type: none"> • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus)
Site Condition	<ul style="list-style-type: none"> • Capercaillie, 2015. Unfavourable, declining.
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • Recreational disturbance from development in neighbouring areas • Relevant settlements: Boat of Garten, Nethy Bridge

Name of European Site	Glen Tanar
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus) • Hen Harrier (Circus cyaneus) • Osprey (Pandion halietus) • Scottish crossbill (Loxia scotica)
Site Condition	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus) 2011, Unfavourable declining • Hen Harrier (Circus cyaneus) 2010, Favourable maintained • Osprey (Pandion halietus), 2010, Favourable maintained • Scottish crossbill (Loxia scotica), 2012, Favourable Maintained
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the plan	No specific vulnerabilities identified

Name of European Site	Kinveachy Forest
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site

	<ul style="list-style-type: none"> • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus) • Scottish crossbill (Loxia scotica)
Site Condition	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus), 2008, Favourable maintained • Scottish crossbill (Loxia scotica), 2012, Favourable Maintained
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • Recreational disturbance from development in neighbouring areas • Relevant settlements: Aviemore, Carrbridge

Name of European Site	River Dee
Site Type	Special Area of Conservation
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 the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitats that the following are maintained in the long term:</p> <ul style="list-style-type: none"> • 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 to the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species
Qualifying Interest(s)	<ul style="list-style-type: none"> • Atlantic salmon • Freshwater pearl mussel • Otter
Site Condition	<ul style="list-style-type: none"> • Atlantic salmon, 2011, Favourable maintained • Freshwater pearl mussel, 2003, Unfavourable no change • Otter, 2012, Favourable declining
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • Effects on water quality including sewerage treatment, release of minerals, contamination or other waste • Functioning of flood plains and the river system • Water abstraction • Micro-hydro schemes • River engineering • Rainbow trout fisheries • Relevant settlements: Braemar, Ballater, Dinnet

Name of European Site	River Spey
Site Type	Special Area of Conservation
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 the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitats that the following are maintained in the long term:</p> <ul style="list-style-type: none"> • 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 to the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species
Qualifying Interest(s)	<ul style="list-style-type: none"> • Atlantic salmon • Freshwater pearl mussel • Otter • Sea lamprey
Site Condition	<ul style="list-style-type: none"> • Atlantic salmon, 2011, Unfavourable recovering • Freshwater pearl mussel, 2014, Unfavourable declining • Otter, 2011, Favourable maintained • Sea lamprey, 2011, Favourable maintained
Factors currently influencing site	In terms of development, extraction and water quality
Vulnerabilities to change/potential effects of the plan	<ul style="list-style-type: none"> • 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 Mor, Aviemore, Inverdrue, Kinraig , Boat of Garten, Carrbridge, Dulnain Bridge, Nethy Bridge, Grantown-on-Spey, Cromdale,

4. Screening of the Main Issues

The following aspects of the Main Issues Report would not be likely to have a significant effect alone on a European site for the reasons given:

Table 4

General policy statements	<ul style="list-style-type: none"> • Vision
Proposals excluded from this appraisal because they are not proposals generated by this plan. They are already consented development sites and not allocations in themselves.	<ul style="list-style-type: none"> • THC023 ED2 Aviemore • THC079 CI Aviemore • AB010 H2 Dinnet • AB012 H1 Dinnet • MC001 H1 Tomintoul • MC002 H2 Tomintoul
Aspects which are too general so that it is not known where, when or how the aspect of the plan may be implemented, or where potential effects may occur, or which European sites, if any, may be affected	<ul style="list-style-type: none"> • Main Issue 1 –Over-arching development statement • Main Issue 2 – Designing Great Places • Main Issue 4B –Housing Alternative Option I • Main Issue 6 – Economic Development – Alternative Option • Main Issue 7 – Impact on Natura Designation • Main Issue 8 – Planning Obligations • Main Issue 9 – Digital Connectivity • Main issue 10 – Flood Risk & Climate Change Resilience • Main Issue 11 – Land management in the Uplands

Given that it is not possible to assess the issues and options proposed because they are too general, it is also not possible to assess the likely cumulative effects of potential policy approaches at this stage. Assessment of proposed policies will be carried out when developing the Proposed Development Plan.

The exceptions are Main Issues 3 – Impacts and opportunities from the A9 and Highland Main Line Upgrade and Main Issue 4- Housing for which the specific options for allocations in the Main Issues Report can be assessed.

Considering the potential vulnerabilities of the Natura sites and relevant settlements identified in section 3, likely effects on Natura sites arising from development cannot be excluded.

All proposed sites within the Main Issues Report were screened for identification of any Likely Significant Effect on Natura sites designated for FWPM or Capercaillie.

Capercaillie

The Main Issues Report proposes Preferred Options for allocations going forward and an Alternative, for each settlement, these were a combination of sites already allocated within the LDP 2015, but not consented, and new proposals. Each allocation was screened for having a Likely Significant Effect on Capercaillie. We identified that the impact would be primarily increased recreational disturbance resulting from:

- New housing close to SPAs designated for capercaillie these are Anagach Woods SPA, Abernethy SPA, Cairngorms SPA, Craigmore Woods SPA and Kinveachy SPA.
- New housing close to non-designated woods which we know are important areas for Capercaillie, these are the Inshriach and Uaith Lochans area.
- Sites proposed for economic development – this is a general description for the type of development, but has the potential to include activities which have a potential disturbance effect eg. new mountain bike centres

The screening outcomes are summarised in Table 5. We have screened **IN** proposed sites in: Aviemore, Boat of Garten, Cromdale, Carrbridge, Grantown, Nethybridge & Kincaig

Freshwater Pearl Mussel

Freshwater pearl mussel is identified as a species for targeted action within the Cairngorms Nature Action Plan and is one of the qualifying features for a number of the National Park's Special Areas of Conservation, including the rivers Spey and Dee. A recent survey of freshwater pearl mussel sites in the River Spey highlighted a 50% decline in the population. The reasons for this are still being investigated, but water quality is considered to play a significant role. In order to ensure the long-term survival of the species, it is therefore important that new development does not lead to any reduction in water quality

The Main Issues Report proposed a Preferred Option for allocations going forward and an Alternative, for each settlement, these were a combination of sites already allocated within the LDP 2015 and new proposals. All of the options were screened for the likelihood of having a Likely Significant Effect on Freshwater Pearl Mussel. With advice from SNH we identified that the likely impacts would be from:

- An increase in nutrients to the River Dee SAC and River Spey SAC resulting from increases in domestic and industrial wastewater production
- An increase in nutrients to the River Dee SAC and River Spey SAC resulting from surface water run-off
- An increase in nutrients, silt and sediments resulting from construction sites
- The River Dee has an additional water abstraction pressure which was also mentioned in the Aberdeenshire LDP (2016)

We have screened **IN** proposed sites in Ballater, Braemar, Aviemore, Grantown, Nethybridge, Kincaig, Newtonmore and Carrbridge.

Table 5

Aviemore	Screened OUT	Screened IN	
		FWPM	Capercaillie
Preferred			
THC031 ACM	x		
THC025	x		
THC026		x	x
ED1		x	
ED2		x	
ED3		x	
CI	x		
C2	x		

EP2	x		
EP3	x		
Alternative			
THC007-014 AHR		x	x
THC045		x	x
THC059		x	x
THC061		x	x
Ballater			
Preferred			
EDI		x	
CI		x	
TI		x	
Alternative			
AB017		x	
Grantown on Spey			
Preferred			
H1	x		
H2		x	x
EDI	x		
TI		x	x
CI	x		
C2		x	x
THC039		x	x
Alternative			
THC028		x	
THC038			x
THC039		x	x
THC040		x	x
THC48	x		
THC049	x		
THC055			x
THC064	x		
Kingussie			
Preferred			
EPI	x		

TI		x	
ED1	x		
ED2	x		
ED3	x		
CI	x		
C2	x		
Alternative			
THC053	x		
Newtonmore			
Preferred			
ED1		x	
ED2		x	
TI		x	
HI		x	
Alternative			
THC004		x	
THC022		x	
THC051		x	
Blair Atholl			
Preferred			
ED1	x		
EP2	x		
TI	x		
C2	x		
PK005	x		
PK003	x		
Alternative			
PK002	x		
PK003	x		
PK004	x		
PK005	x		
PK006	x		
PK007	x		
Boat of Garten			
Preferred			
ED1		x	
TI			x

Alternative			
THC043			x
THC044			x
THC058	x		
THC074			x
THC075			x
Carrbridge			
Preferred			
EDI	x		
ED2		x	
TI			x
HI			x
H2		x	x
THC030	x		
THC039	x		
Alternative			
THC057	x		
THC066			x
THC067			x
THC068			x
Braemar			
Preferred			
HI		x	
EPI	x		
EP2	x		
EP3	x		
EDI		x	
ED2		x	
TI		x	
AB009		x	
AB019		x	
AB023		x	
Alternative			
AB002		x	
AB003		x	
AB004		x	
AB005		x	
AB006		x	

AB007		x	
AB008		x	
AB009		x	
AB019		x	
AB021		x	
AB022		x	
AB024		x	
Cromdale			
Preferred			
EPI	x		
EDI		x	x
HI		x	x
Alternative			
THC018		x	x
THC019		x	x
THC020		x	x
THC021		x	x
Dulnain			
Preferred			
HI		x	
EPI	x		
EDI		x	
Alternative			
THC032		x	
THC041		x	
THC042		x	
THC070		x	
Kincraig			
Preferred			
HI			x
ED2	x		
THC46/54			x
THC062	x		
Alternative			
THC046	x		
THC054			x

Nethybridge			
Preferred			
THC002		x	x
THC003		x	x
Alternative			
THC002 (additional 30 homes)		x	x
THC005		x	x
THC017		x	x
THC036			x
THC037		x	x
THC052		x	x
THC060		x	x
THC063		x	x
Tomintoul			
Preferred			
H1	x		
H2	x		
ED1	x		
ED2	x		
ED3	x		
Dalwhinnie			
Preferred			
H2		x	
ED1		x	
THC016		x	
Alternative			
THC015		x	
THC056		x	
Dinnet			
Preferred			
H2		x	
AB015		x	
Alternative			
AB011		x	
AB013		x	
AB014		x	

AB016		x	
Glenmore			
T1		x	x
T2		x	x
Glenshee			
Preferred			
Alternative			
PCK008	x		
PCK009	x		
PCK010	x		
Insh			
Preferred			
Alternative			
THC001	x		

5. Preliminary Assessment

This is a preliminary assessment, carried out to inform the identification of options in the Main Issues Report. A full Habitats Regulations Assessment will be carried out and recorded when developing the Proposed Local Development Plan, in which proposed sites (as well as policies) will be clearly identified. Given the relevance of multiple settlements to each Natura site, the assessment is set out by Natura site. The assessment for capercaillie highlights direct effects. There are in addition possible indirect effects upon other SPAs arising from the direct effects listed here. These will be assessed in detail in the HRA for the LDP.

Table 6

Name of European Site	Abernethy Forest
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Osprey (<i>Pandion haliaetus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
Settlement assessment	Effect on conservation objectives
Boat of Garten	There are no new housing options proposed under the Preferred option for Boat of Garten but there are four new housing allocations under the Alternative Option THC043, THC044, THC074 and THC075 which could potentially cause disturbance to capercaillie. If the Alternative Option is taken forward then they will be taken forward for full assessment at the next stage of the proposed LDP.
Nethy Bridge	The Main Issues Report proposes two Preferred allocations in Nethy Bridge: THC002 & THC003 both of which are for housing (24 homes) which are likely to cause disturbance to capercaillie. The Alternative option is to allocate more housing sites which is likely to result in greater disturbance. The final option will be taken forward for full assessment at the next stage of the proposed LDP.
Aviemore	The Main Issues Report proposes new housing allocations in Aviemore, which are likely to cause disturbance to capercaillie, they will be taken forward for full assessment at the next stage of the proposed LDP.

An Camas Mor	An Camas Mor has outline planning permission and had an HRA undertaken (ACM HRA, CNPA 2017) which concluded there would be no Likely Significant Effect upon capercaillie provided mitigation was undertaken as recommended by the Recreational Management Plan (SNH, & CNPA, 2016). Though no minor residual effect was found through this assessment, ACM will be considered for in combination effects with Allocations in Aviemore.
Conclusion	Implementing housing proposals has the potential to have a direct Likely Significant Effect on site integrity, in addition capercaillie within Badenoch & Strathspey are known to function as a metapopulation within the five designated SPA's considered here, so any direct effect on one could therefore have an in-direct effect on the others. Similarly, effects on the capercaillie population within Badenoch & Strathspey but outside the boundaries of the SPAs, such as the undesignated woodlands home to capercaillie and near An Camas Mor, could affect the populations in the five SPAs. Two Minor Residual Effects on capercaillie related to housing proposals have already been identified and therefore cumulative impacts require consideration. A full assessment will be undertaken at the next stage of the proposed LDP, the assessment methodology and proposed mitigation is outlined in Section 6 .

Name of European Site	Anagach Woods
Site Type	Special Protection Area
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"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>)
Settlement assessment	Effect on conservation objectives
Cromdale	The MIR proposes retention of a housing allocation from LDP 2015 which is within the settlement boundary, this may cause some additional recreational disturbance to capercaillie to the more sensitive areas of Anagach but of greater concern would be housing or tourism allocations proposed in the Alternative allocations which are located closer to Anagach Woods. The final option will be taken forward for full assessment at the next stage of the proposed LDP.
Grantown-on-Spey	The MIR Preferred Option proposes retention and extension of housing allocations from LDP 2015 which are likely to increase the impact of recreational disturbance on capercaillie. The Alternative Option is new site

	allocations for housing on the northern side of Grantown closest to the most sensitive part of Anagach (THC039, THC040 & THC055). Both the Preferred and Alternative options are likely to have a LSE on capercaillie. The final option will be taken forward for full assessment at the next stage of the proposed LDP.
Conclusion	There may be a direct effect on site integrity from the MIR Preferred and Alternative allocations, capercaillie within Badenoch & Strathspey are known to function as a metapopulation within the five designated SPA's considered here, so any direct effect on one could therefore have an indirect effect on the others. Similarly, effects on the capercaillie population within Badenoch & Strathspey but outside the boundaries of the SPAs, such as the undesignated woodlands home to capercaillie and near An Camas Mor, could affect the populations in the five SPAs. Two Minor Residual Effects on capercaillie related to housing proposals have already been identified and therefore cumulative impacts require consideration. A full assessment will be undertaken at the next stage of the proposed LDP, the assessment methodology and proposed mitigation is outlined in Section 6 .

Name of European Site	Cairngorms
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Dotterel (<i>Charadrius moninellus</i>) • Golden eagle (<i>Aquila chrysaetos</i>) • Merlin (<i>Falco columbarius</i>) • Osprey (<i>Panion haliaetus</i>) • Peregrine (<i>Falco peregrinus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
	<p>The Cairngorms SPA qualified under Article 4.1 by supporting an internally important population of Scottish crossbill <i>Loxia scotica</i> (an estimated 60 individuals, representing in the order of 10% of the total world population of this species); and nationally important populations of:</p> <p>golden eagle <i>Aquila chrysaetos</i> (12 pairs, 3% of GB), peregrine <i>Falco peregrinus</i> (12 pairs, 1% of GB), merlin <i>Falco columbarius</i> (14 pairs, 1% of GB), osprey <i>Panion haliaetus</i> (2 pairs, 2% of GB), capercaillie <i>Tetrao urogallus</i> (at least 130 individuals, 12% of GB), and dotterel <i>Charadrius moninellus</i> (240 pairs, 28% GB). The SPA is also important for dotterel as a gathering ground during the spring and autumn passage periods for individuals that breed elsewhere in Scotland and Europe.</p>

Settlement assessment	Effect on Capercaillie conservation objectives
Aviemore	The Main Issues Report proposes new housing allocations in Aviemore, which are likely to cause disturbance to capercaillie, they will be taken forward for full assessment at the next stage of the proposed LDP.
An Camas Mor	An Camas Mor has outline planning permission and had an HRA undertaken (ACM HRA, CNPA 2017) which concluded there would be no Likely Significant Effect upon capercaillie provided mitigation was undertaken as recommended by the Recreational Management Plan (SNH, & CNPA, 2016).
Conclusion	<p>Implementing housing proposals has the potential to have a direct Likely Significant Effect on site integrity, in addition capercaillie within Badenoch & Strathspey are known to function as a metapopulation within the five designated SPA's considered here, so any direct effect on one could therefore have an in-direct effect on the others. Similarly, effects on the capercaillie population within Badenoch & Strathspey but outside the boundaries of the SPAs, such as the undesignated woodlands home to capercaillie and near An Camas Mor, could affect the populations in the five SPAs. Two Minor Residual Effects on capercaillie related to housing proposals have already been identified and therefore cumulative impacts require consideration.</p> <p>A full assessment will be undertaken at the next stage of the proposed LDP, the assessment methodology and proposed mitigation is outlined in Section 6.</p>

Name of European Site	Craigmore Wood
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus)
Settlement assessment	Effect on capercaillie conservation objectives
Nethy Bridge	The Main Issues Report proposes two Preferred allocations in Nethy Bridge: THC002 & THC003 both of which are for housing (24 homes) which are likely to cause disturbance to capercaillie. The Alternative option is to allocate more housing sites which is likely to result in greater

	disturbance. The final option will be taken forward for full assessment at the next stage of the proposed LDP.
Conclusion	<p>Implementing housing proposals has the potential to have a direct Likely Significant Effect on site integrity, in addition capercaillie within Badenoch & Strathspey are known to function as a metapopulation within the five designated SPA's considered here, so any direct effect on one could therefore have an in-direct effect on the others. Similarly, effects on the capercaillie population within Badenoch & Strathspey but outside the boundaries of the SPAs, such as the undesignated woodlands home to capercaillie and near An Camas Mor, could affect the populations in the five SPAs. Two Minor Residual Effects on capercaillie related to housing proposals have already been identified and therefore cumulative impacts require consideration.</p> <p>A full assessment will be undertaken at the next stage of the proposed LDP, the assessment methodology and proposed mitigation is outlined in Section 6.</p>

Name of European Site	Kinveachy Forest
Site Type	Special Protection Area
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> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extend of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
Settlement Assessment	Effect on capercaillie conservation objectives
Aviemore	The Main Issues Report proposes new housing allocations in Aviemore, including Aviemore Highland Resort THC7-14, which are likely to cause increased recreational disturbance to capercaillie in Kinveachy, they will be taken forward for full assessment at the next stage of the proposed LDP.
An Camas Mor	An Camas Mor has outline planning permission and had an HRA undertaken (ACM HRA, CNPA 2017) which concluded there would be no Likely Significant Effect upon capercaillie provided mitigation was undertaken as recommended by the Recreational Management Plan (SNH, & CNPA, 2016).
Conclusion	Implementing housing proposals has the potential to have a direct Likely

	<p>Significant Effect on site integrity, in addition capercaillie within Badenoch & Strathspey are known to function as a metapopulation within the five designated SPA's considered here, so any direct effect on one could therefore have an in-direct effect on the others. Similarly, effects on the capercaillie population within Badenoch & Strathspey but outside the boundaries of the SPAs, such as the undesignated woodlands home to capercaillie and near An Camas Mor, could affect the populations in the five SPAs. Two Minor Residual Effects on capercaillie related to housing proposals have already been identified and therefore cumulative impacts require consideration.</p> <p>A full assessment will be undertaken at the next stage of the proposed LDP, the assessment methodology and proposed mitigation is outlined in Section 6.</p>
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Name of European Site	River Dee
Site Type	Special Area of Conservation
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 the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitats that the following are maintained in the long term:</p> <ul style="list-style-type: none"> • 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 to the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species
Qualifying Interest(s)	<ul style="list-style-type: none"> • Atlantic salmon • Freshwater pearl mussel • Otter
Settlement assessment	Effect on FWPM conservation objectives
Braemar	The Main Issues Report identifies options for housing allocations in Braemar which could lead to a Likely Significant Effect on Freshwater Pearl Mussel the qualifying species or their supporting habitats within this site if, during construction or operation, physical or chemical contaminants were released into watercourses that flow into the River Dee. In addition, there is concern over the increasing rates of abstraction on the River Dee and the impacts of low flow conditions on Freshwater Pearl Mussel populations.
Ballater	The Main Issues Report Preferred Option is to retain LDP 2015 site H1 for 250 homes which will require abstraction from the River Dee to meet

	water demands. The alternative option is to expand this development which would provide 270 homes requiring greater resources.
Dinnet	The Main Issues Report Preferred Option is to retain the HI allocation for 15 homes, the Alternative is for further housing development at AB011 and AB013 to provide 61 homes which would require significantly greater water resources and result in larger scale development with associated construction and operational pollutant risks..
Conclusion	Provided that policies to protect Natura sites are included in the Local Development Plan (Section 6 – Mitigation) and adhered to, and the wastewater nutrient discharges and abstraction rates are within SEPA CAR licence consent levels, the proposals are unlikely to have a Significant Effect, however the cumulative impacts of multiple abstractions and discharges from other plans and projects must be considered therefore a full assessment will be undertaken at the next stage of the proposed LDP, the proposed mitigation is outlined in Section 6 .

Name of European Site	River Spey
Site Type	Special Area of Conservation
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 the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitats that the following are maintained in the long term:</p> <ul style="list-style-type: none"> • 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 to the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species
Qualifying Interest(s)	<ul style="list-style-type: none"> • Atlantic salmon • Freshwater pearl mussel • Otter • Sea lamprey
Settlement assessment	Effect on FWPM conservation objectives
An Camus Mor	The Main Issues Report identifies options for housing allocations in An Camus Mor which could lead to a Likely Significant Effect on Freshwater Pearl Mussel or their supporting habitats if, during construction or operation, physical or chemical contaminants were released into watercourses that flow into the River Spey. The construction of up to 1500 homes will generate significant amounts of wastewater, treatment to an acceptable level so as not to cause harm to FWPM or its supporting habitat is under jurisdiction of SEPA & Scottish Water. <i>An Camus Mor has been subject to an HRA (ACM HRA, CNPA 2017) which identified No Likely</i>

	<i>Significant Effect on FWPM following mitigation.</i>
Aviemore	The Main Issues Report identifies options for medium sized housing allocations in Aviemore North, Aviemore Highland Resort (AHR) and Land to the South of Achantoul (THC045) which could lead to a Likely Significant Effect on Freshwater Pearl Mussel or their supporting habitats if, during construction or operation, physical or chemical contaminants were released into watercourses that flow into the River Spey. The construction of the new homes will generate significant amounts of wastewater, treatment to an acceptable level so as not to cause harm to FWPM or its supporting habitat is under jurisdiction of SEPA & Scottish Water.
Cromdale	The MIR proposes retention of a housing allocation from LDP 2015 which is within the settlement boundary, of greater concern would be the housing or tourism allocations proposed in the Alternative options which are close to the banks of the River Spey and FWPM locations which could be directly harmed from increased recreational activity.
Dalwhinnie	The Main Issues Report proposes Preferred and Alternative locations for housing and economic development, all of these are located close and have direct connectivity to the River Truim where recently a new population of mussels was detected. There can potentially be a Likely Significant Effect on Freshwater Pearl Mussel or their supporting habitats if, during construction or operation, physical or chemical contaminants were released into watercourses that flow into the River Spey. The allocation includes economic/ industrial use which has the potential to generate wastewater deleterious to FWPM populations, treatment to an acceptable level so as not to cause harm to FWPM or its supporting habitat is under jurisdiction of SEPA & Scottish Water.
Dalnain Bridge	None of the proposed sites for Dalnain Bridge are to be taken forward for allocation at this stage therefore there will be no effect on site integrity.
Kincraig	The Main Issues Report proposes retaining the existing A9 site compound, at present future use is uncertain but likely to be economic use which could lead to a Likely Significant Effect on Freshwater Pearl Mussel or their supporting habitats if, during construction or operation, physical or chemical contaminants were released into watercourses that flow into the River Spey. It has the potential to generate wastewater deleterious to FWPM populations, treatment to an acceptable level so as not to cause harm to FWPM or its supporting habitat is under jurisdiction of SEPA & Scottish Water.
Nethy Bridge	The Main Issues Report identifies two options for housing in nethybridge (THC002 & THC003) which could lead to a Likely Significant Effect on Freshwater Pearl Mussel or their supporting habitats if, during construction or operation, physical or chemical contaminants were released into watercourses that flow into the River Spey. The Alternative scenario is for more homes which could have a greater impact. The construction of the new homes will generate significant amounts of wastewater, treatment to an acceptable level so as not to cause harm to FWPM or its supporting habitat is under jurisdiction of SEPA & Scottish Water.
Conclusion	Provided that policies to protect Natura sites are included in the Local Development Plan (Section 6 – Mitigation) and adhered to, and the wastewater nutrient discharges and abstraction rates are within SEPA CAR licence consent levels, the proposals are unlikely to have a Significant Effect Alone, however the cumulative impacts of multiple abstractions and

	discharges from other plans and projects must be considered therefore a full assessment will be undertaken at the next stage of the proposed LDP, the proposed mitigation is outlined in Section 6 .
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6. Mitigation Strategy

The MIR proposes the following mitigation strategies to avoid Likely Significant Effects on Capercaillie, Freshwater Pearl Mussel and the River Dee which will be used as the basis for further assessment at the proposed LDP stage. Each allocation will still require further HRA assessment at full planning application stage to ensure that any change in status or improved knowledge on species distribution and cumulative recreational impacts for example are fully considered.

Capercaillie

It is proposed following consultation for the Preferred and Alternative allocations to undertake a full assessment based on the method used for the An Camas Mor HRA Assessment, where the CNPA together with expert opinion from SNH will assess each settlement and look at likely increases in recreational activity in sensitive areas.

It is also proposed to include cohesive mitigation strategy to cover all of the interlinked SPA and non-designated woodlands which are important for Capercaillie, the delivery mechanism for this would be the Capercaillie Framework which would identify appropriate measures for each settlement.

The Cairngorms Capercaillie Framework has been developed to provide a strategy for the conservation of capercaillie within the Park. A Phase I Report was published in January 2015, and this made a series of recommendations. In respect of development planning, the report recommended the following actions:

- Continue a presumption against development in forest habitat that is or could be used by capercaillie;
- All new development adjacent to sensitive capercaillie sites should include tailored packages of mitigation including recreation management planning; and
- Develop a co-ordinated and proportionate approach at a landscape scale to identifying, implementing and monitoring mitigation associated with new development.

Freshwater Pearl Mussel

It is proposed for the sites going forward to the LDP do a full Appropriate Assessment to assess impacts on FWPM which will require input from Scottish Water on STW capacity and advice from SNH and SEPA on likely abstraction capacity of the River Dee. The mitigation for the LDP will be to ensure that a suite of measures are required at the planning stage for each site, these measures are:

- Requirement for connection to existing Sewage Treatment Works to treat all wastewater to a sufficient standard as required by SEPA (under jurisdiction of SEPA & Scottish Water)

- If no sewerage connection available enhanced treatment of wastewater through a sewage treatment package plant which also removes ammonia and phosphate would be required.
- Enhanced treatment of any industrial wastewaters to ensure that consent levels are not breached for nutrients, metals or chemicals harmful to the environment (under jurisdiction of SEPA & Scottish Water where connected to mains sewerage)
- Treatment of surface water through enhanced Suds system which also includes measures to improve water quality.
- A requirement for Pollution Prevention Plan based on SEPA GPP 5 (2017) to safeguard the water environment to be provided with the Construction Method Statement for the development
- Continue to support and input into discussion with SNH and SEPA on research and mitigation for Freshwater Pearl Mussel.

Water Abstraction from the River Dee SAC

An assessment will be undertaken on the requirement of additional abstraction for the final options in relation to the licenced capacity for existing water supplies. Assessment of cumulative impacts, including downstream abstractions, will be required and identification of alternative water supplies may be required to avoid adverse integrity of the SAC. This will be conducted as part of the final HRA for the LDP.

7. Conclusion

This is a preliminary assessment to inform the selection of options in the MIR and highlight the main issues. The policy issues addressed in the report are too general at this stage of the plan development process to assess, and these will be assessed at the stage of the Proposed Development Plan.

The site allocation Preferred and Alternative Options described in the Main Issues Report have had a preliminary appraisal:

- Those allocations assessed as having a Likely Significant Effect on Capercaillie will require further assessment at the proposed LDP stage using the methodology described in Section 6 which will also consider in-combination effects.
- Those allocations assessed as having a Likely Significant Effect on Freshwater Pearl Mussel will require further assessment at the proposed LDP stage incorporating the mitigation proposals as outlined in Section 6.

This assessment has concluded that there is reasonable certainty that mitigation of the key issues is possible for the preferred option or alternatives within the MIR. The final proposed allocation and policies will be tested at the required detail during the preparation of the LDP.

Preliminary Assessment completed: 17th November 2017