

Appendix A11.6

Habitats Regulations
Assessment

Transport Scotland

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1. Introduction

1.1. Background

1.1.1. This Appendix provides an update to Table 4.1 within the A9 Dualling Programme, Programme Level Appropriate Assessment, Transport Scotland (2015)ⁱ and uses the Scottish Natural Heritage (SNH) standard Proforma for Habitats Regulation Assessment.

1.2. DMRB Stage 2 Options

- 1.2.1. The Dalraddy to Slochd scheme is approximately 25km in length and extends at its southern end from the tie-in with the Kinncraig to Dalraddy scheme, which is currently under construction, past Aviemore and Carrbridge, and finishing to the north of Slochd summit.
- 1.2.2. AMJV was appointed by Transport Scotland in January 2015 to undertake a DMRB Stage 2 Options Assessment for the upgrade to dual carriageway of the Northern Section of the A9 Trunk road between Dalraddy and Inverness which includes this scheme.
- 1.2.3. During the initial stages of option development, different mainline alignment options, junction locations and junction layout options were identified for the Proposed Scheme. Sifting exercises were conducted to identify feasible options to be taken forward to the DMRB Stage 2 Route Options Assessment Process. The sifting processes considered engineering and environmental impacts and operational performance.
- 1.2.4. The sifting process concluded that there would be three mainline alignment options assessed as part of the DMRB Stage 2 assessment:
- Option 1 – southbound widening for the entire route;
 - Option 1A – southbound widening, as per Option 1, but with the exception of a short hybrid section to the south of Aviemore (within Sections 2, 3a and 3b, ch. 2500 to 6700); and
 - Option 2 – predominantly northbound widening but with southbound widening at Sections 2, 6a, 10 and 11.
- 1.2.5. The scheme comprises three new junctions: Aviemore South, Granish and Black Mount.
- 1.2.6. A substantial number of different junction layouts were considered for each of the junction locations during the initial options development stage. Roundabouts at the grade separated junctions were sifted out at particular locations during the sifting process, a key factor also being that the route corridor shall not be illuminated with street lighting (as per the existing situation) which is required in the case of this form of junction. The exception being a half-dumbbell layout at Granish which has been included in the Stage 2 assessment due to its reduced land take requirement in comparison with other options. Thirteen junction layouts were identified for further assessment at DMRB Stage 2.
- 1.2.7. Given that 13 junction layout options were identified (through the sifting evaluation) to be taken forward into the DMRB Stage 2 Assessment, together with three mainline options, it was not considered feasible to combine the mainline alignment options and junction



options into assimilated route options given the large number of possible permutations. As such the assessment of mainline alignment options and junction options has been carried out separately. For continuity and to assist with the ongoing design development and identification of preferred options, key features and impacts will be referenced, where possible, on the basis of the 13 section framework developed for sifting. A summary of the mainline alignment options and junctions options assessed at DMRB Stage 2 are presented in Table 1.1 (see Figures 7.1 to 7.6 in Chapter 7 of the main ES).



Table 1.1: Summary of options

Section	Mainline Alignment Options to be Assessed at DMRB Stage 2					
	Option 1 (Southbound Widening)		Option 1A (Option 1 with Hybrid at Aviemore South)		Option 2 (Predominantly Northbound Widening)	
	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound
1 Ch0 – ch2500		✓		✓	✓	
2 ch2500 – ch3500 (includes Aviemore South Junction)		✓ Junctions A02, A09, A18		Junctions A02, A09, A18 Alignment differs from Option 1 due to hybrid at Section 3a		✓ Junctions A02, A09, A18
3a ch3500 – ch5500		✓		Hybrid to avoid all properties	✓	
3b ch5500 – ch6700		✓		Alignment differs from Option 1 due to hybrid at Section 3a	✓	
4 ch6700 – ch7900		✓		✓	✓	
5 ch7900 – ch10400 (includes Granish Junction)		✓ Junctions C31, C34		✓ Junctions C31, C34	✓ Junctions C18, C21	
6a ch10400 – ch11700		✓		✓		✓
6b		✓		✓	✓	

Section	Mainline Alignment Options to be Assessed at DMRB Stage 2					
	Option 1 (Southbound Widening)		Option 1A (Option 1 with Hybrid at Aviemore South)		Option 2 (Predominantly Northbound Widening)	
	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound
ch11700 – ch13000						
7 h13000 – ch16300		✓		✓	✓	
8 ch16300 – ch17600		✓		✓	✓	
9 ch17600 – ch20900 (includes Black Mount Junction)		✓ Junctions D03, D12, D51		✓ Junctions D03, D12, D51	✓ Junctions D02, D07, D13	
10 ch20900 – ch23100		✓		✓		✓
11 ch23100 - 25030		✓		✓		✓

1.3. Natura Site Details

- 1.3.1. Habitats Regulation Assessment (HRA) is required by Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (the 1994 Habitats Regulations) for all plans and projects which may have likely significant effects on a European site and are not directly connected with or necessary to the management of the European site.
- 1.3.2. European sites include Special Areas of Conservation (SAC) and Special Protection Areas (SPA) and are also known as Natura 2000 sites. HRA is also required, as a matter of UK Government policy for potential SPAs (pSPA), candidate SACs (cSAC) and listed Wetlands of International Importance (Ramsar sites) and proposed Ramsar sites (pRamsar) for the purposes of considering plans and projects, which may affect them (see Table 1.2). In Scotland, this is applied under National Planning Policy Guidance¹. Hereafter all of the above designated nature conservation sites are referred to as 'international sites'
- 1.3.3. The list of sites and the qualifying features that have been considered in this assessment is based on the results of the Habitats Regulations Screening Report, undertaken in May 2013ⁱⁱ. Table 1.2 lists the sites considered in this HRA, together with their qualifying features, conservation objectives and sensitivities, in light of the developing design and comments from consultees. This includes the Moray Firth pSPA, which has been identified as a pSPA since the screening report was produced.

¹ <http://www.scotland.gov.uk/Publications/1999/01/nppg14>.

Table 1.2: Name of international site(s) potentially affected, qualifying interest(s) & whether priority/non-priority, conservation objectives and vulnerabilities

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
River Spey SAC	Otter, Atlantic salmon, sea lamprey and freshwater pearl mussel	<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 species 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 of the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species <p>Vulnerabilitiesⁱⁱⁱ</p> <p>The long-term wellbeing of the river and its catchment is being promoted through the development of an integrated Catchment Management Plan undertaken in partnership with others.</p> <p>Guidance on best practice for river engineering works has been prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.</p>
Insh Marshes SAC	<p>Otter</p> <p>Annex I habitats:</p> <p>Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea</p>	<p>To avoid deterioration of the qualifying habitat 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"> • Extent of the habitat on site

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
	<p>Transition mires and quaking bogs</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) (Annex I priority habitat)</p>	<ul style="list-style-type: none"> • Distribution of the habitat within the site • Structure and function of the habitat • Process supporting the site • Distribution of typical species of the habitat • Viability of typical species as components of the habitat • No significant disturbance of typical species of the habitat <p>To avoid deterioration of the habitats of the qualifying species 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 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 extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species <p>Vulnerabilities</p> <p>Much of the site is owned or leased by the Royal Society for the Protection of Birds and managed as the Insh Marshes National Nature Reserve. The current management plan for the reserve is under revision and is to be agreed with Scottish Natural Heritage.</p> <p>Part of the site is grazed by livestock throughout the year (water levels permitting) and this helps contain scrub development. Limited manual cutting of scrub vegetation is also undertaken.</p> <p>Other uses, including water sports on Loch Insh and shooting, are compatible with the European interests at current levels.</p>
<p>River Spey - Insh Marshes SPA and Ramsar site</p>	<p>SPA qualifying features</p> <p>Breeding osprey, spotted crane, wood sandpiper and wigeon</p>	<p>To avoid deterioration of the habitats of the qualifying species 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>

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
	<p>Over-wintering whooper swan and hen harrier</p> <p>Ramsar site qualifying features</p> <p>Holds outstanding examples within a UK context of a large, high-altitude slow-flowing river, a mesotrophic loch, a floodplain mire and a gravel fan</p> <p>Supports a large assemblage of nationally-rare and nationally-scarce aquatic plants and invertebrates (including species with a boreal pine distribution), and is one of the best freshwater sites in Britain for otter</p> <p>A nationally important genetic resource for floodplain mires</p> <p>Supports an assemblage of breeding birds indicative of high wetland value and diversity</p> <p>Wintering whooper swan</p>	<ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species <p>Vulnerabilities^{iv}</p> <p>The Insh Marshes are a large floodplain mire lying either side of the River Spey upstream of Loch Insh. The Special Protection Area also includes the river and its margins between Newtonmore and Kingussie together with Loch Insh and the Feshie-Spey confluence.</p> <p>A large proportion of the site is owned or leased by the Royal Society for the Protection of Birds (RSPB) Scotland and managed as a bird reserve under an agreement with Scottish Natural Heritage (SNH), ensuring compatibility with the European interests.</p> <p>Many areas are grazed by stock in the summer months and this helps contain scrub development.</p> <p>Any changes in current acceptable levels of shooting or commercial watersports would require consultation with Scottish Natural Heritage under the Wildlife & Countryside Act 1981.</p> <p>Flooding occurs annually on the site. Abnormal flooding can affect neighbouring areas and in the past there have been proposals for flood prevention/alleviation works and agricultural drainage which would be damaging to the Special Protection Area. One proposal resulted in the making of a Nature Conservation Order which is still in force.</p>
Cairngorms Massif SPA	Breeding golden eagle	<p>To avoid deterioration of the habitats of the qualifying species 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 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

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
		<p>Vulnerabilities</p> <p>Plant pests and diseases (<i>Dothistroma septosporum</i> on conifers) and pro-active on-site management.</p>
Abernethy Forest SPA	Breeding capercaillie	<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species <p>Vulnerabilities</p> <p>Increase in recreational pressure reducing to increased disturbance to lekking and nesting sites</p> <p>Increase in habitat fragmentation</p> <p>Reduction in dispersal between SPAs and functional land</p>
Anagach Wood SPA	Breeding capercaillie	<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species <p>Vulnerabilities</p> <p>Increase in recreational pressure reducing to increased disturbance to lekking and nesting sites</p>

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
		<p>Increase in habitat fragmentation</p> <p>Reduction in dispersal between SPAs and functional land</p>
<p>Craigmore Woods SPA</p>	<p>Breeding capercaillie</p>	<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species <p>Vulnerabilities</p> <p>Increase in recreational pressure reducing to increased disturbance to lekking and nesting sites</p> <p>Increase in habitat fragmentation</p> <p>Reduction in dispersal between SPAs and functional land</p>
<p>Kinveachy Forest SPA</p>	<p>Breeding capercaillie and Scottish crossbill</p>	<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species <p>Vulnerabilities</p> <p>Increase in recreational pressure reducing to increased disturbance to lekking and nesting sites</p>

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
		<p>Increase in habitat fragmentation</p> <p>Reduction in dispersal between SPAs and functional land</p>
Kinveachy Forest SAC	<p>Caledonian Forest (Annex I priority habitat)</p> <p>Bog woodland (Annex I priority habitat)</p>	<p>To avoid deterioration of the qualifying habitat 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"> • Extent of the habitat on site • Distribution of the habitat within the site • Structure and function of the habitat • Process supporting the site • Distribution of typical species of the habitat • Viability of typical species as components of the habitat • No significant disturbance of typical species of the habitat <p>Vulnerabilities</p> <p>Forest management, plantation use, forest grazing</p> <p>Air pollution</p> <p>Fire and fire control</p> <p>Invasive species</p>
Cairngorms SAC	Otter	<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
		<ul style="list-style-type: none"> No significant disturbance of the species <p>Vulnerabilities</p> <p>Grazing, hunting and trapping, air pollution, fire</p>
Cairngorms SPA	<p>Breeding capercaillie, Scottish crossbill, merlin, osprey and peregrine falcon</p> <p>NB golden eagle is also a qualifying feature of this SPA. Consultation with SNH indicates that the Cairngorms Massif SPA, which is much larger than the Cairngorms SPA, better represents use of the area by golden eagles. Therefore, golden eagles are considered under the Cairngorms Massif SPA only.</p>	<p>To avoid deterioration of the habitats of the qualifying species 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 site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species <p>Vulnerabilities</p> <p>Grazing, hunting and trapping, air pollution fire</p> <p>Increase in recreational pressure reducing to increased disturbance to lekking and nesting sites</p> <p>Increase in habitat fragmentation</p> <p>Reduction in dispersal between SPAs and functional land</p>
Loch Vaa SPA	Breeding Slavonian grebe	<p>To avoid deterioration of the habitats of the qualifying species 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 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

European Site	Qualifying Features	Conservation Objectives and Vulnerabilities
		<p>Vulnerabilities</p> <p>Invasive species</p> <p>Inundation as a result of natural processes</p>
Slochd SAC	Dry heaths (Annex I priority habitat)	<p>To avoid deterioration of the qualifying habitat (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitat that the following are maintained in the long term:</p> <ul style="list-style-type: none"> • Extent of the habitat on site • Distribution of the habitat within site • Structure and function of the habitat • Processes supporting the habitat • Distribution of typical species of the habitat • Viability of typical species as components of the habitat • No significant disturbance of typical species of the habitat <p>Vulnerabilities</p> <p>Fire, grazing, air pollution, hunting and trapping, invasive species</p>
Moray Firth pSPA	Breeding and wintering European shag; wintering assemblage including common eider, common goldeneye, common scoter, great northern diver, long-tailed duck, red-breasted merganser, red-throated diver, greater scaup, Slavonian grebe, velvet scoter.	<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species;</p> <p>Avoid significant injury, mortality and disturbance of the qualifying features so that the distribution of the species and ability to use the site are maintained in the long-term; and</p> <p>To maintain the habitats and food resources of the qualifying species in a favourable condition.</p>

1.4. In-combination Assessment

- 1.4.1. The 2013 Habitats Regulations Screening Reportⁱⁱ identified the following projects to be considered in the in-combination assessment:
- Highland Mainline Improvements Project;
 - Beaully-Denny Power Line;
 - Pitmain Lodge Kingussie hydro schemes;
 - Kingussie housing;
 - Affordable housing Aviemore;
 - An Camas Mòr – proposed development of new settlement;
 - Carrbridge housing;
 - Kincaig housing;
 - Newtonmore housing; and
 - Allt Duine Wind Farm development.
- 1.4.2. The report included an initial assessment of the risk of in-combination effects causing likely significant cumulative effects on the integrity of these international sites. It concluded that the only projects where there was potential for in-combination effects were the Highland Mainline Improvements Project, the Beaully Denny Power Line and the Allt Duine Wind Farm development. The Highland Mainline Improvements Project and the Beaully Denny Power Line have been completed and therefore now form part of the baseline conditions. The Allt Duine Wind Farm development has been refused planning permission. Therefore, in-combination effects as a result of in-combination effects with these schemes are not predicted.
- 1.4.3. However, there is still a possibility of in-combination effects with other schemes that are part of the A9 Dualling Programme. The nearest schemes are the Tomatin to Moy scheme, which is north of the Dalraddy to Slochd scheme, and the Kincaig to Dalraddy scheme, which is to the south. It is not considered that there will be any in-combination effects during construction with Kincaig to Dalraddy, as this scheme will be operational by the time Dalraddy to Slochd is under construction. It is not considered that there will be any in-combination effects during operation as effects of severance have been fully addressed in the Kincaig to Dalraddy scheme. Therefore, the only scheme for which in-combination effects are considered is the Tomatin to Moy scheme. Potential in-combination effects are considered on a site-by-site basis. There are two international sites that were considered in the Tomatin to Moy HRA; no Likely Significant Effect (LSE) were identified on either of these sites:
- Slochd SAC – qualifying feature dry heaths (an Annex I priority habitat); and
 - Loch Ashie SPA – qualifying feature Slavonian grebe, breeding and on passage.
- 1.4.4. In-combination effects also include natural ecosystem processes – any change in these processes could have an effect on the integrity of international sites, which could have a cumulative and significant effect in-combination with the effects of other schemes. For all of the international sites in this assessment, it is considered that the ecosystems present have sufficient resilience to accommodate any changes in natural processes. Therefore, no in-combination effects as a result in changes in natural processes are predicted.

1.5. Effects of Air Quality on International Sites

- 1.5.1. The air quality assessment^v includes an assessment of the effects of air quality on international sites. Two international sites were included in the air quality assessment, based on the presence of habitats that are sensitive to increased nitrogen deposition within 200m of the Proposed Scheme Options. These were the Loch Vaa SPA and the Slochd SAC. The modelling did not predict exceedances of the most stringent critical loads at either of these designated sites during operation.
- 1.5.2. Best practice dust mitigation measures will be used for all potentially dust-producing construction activities. No construction effects are predicted in terms of air quality (primarily dust deposition) on the integrity of any of the international sites.
- 1.5.3. Therefore, this issue is not considered to have a LSE on any of the international sites during construction and operation and is not considered further.

2. Summary of DMRB Stage 2 Screening

- 2.1.1. Table 2.1 provides a summary of the DMRB Stage 2 HRA screening. Details of the screening assessment are presented in full within the HRA proformas in Annexes 1 to 12.

Table 2.1: DMRB Stage 2 HRA screening results

European site	Qualifying features	DMRB Stage 2 screening conclusion
River Spey SAC	Otter	Potential for LSE during construction on Atlantic salmon, sea lamprey and freshwater pearl mussel.
	Atlantic salmon,	Potential for permanent LSE if there is permanent loss of river bed habitat that provides suitable spawning habitat for Atlantic salmon and sea lamprey and if the structures result in a barrier to movement of fish.
	Sea lamprey	
	Freshwater pearl mussel	
Insh Marshes SAC	Otter	No LSE
	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	No LSE
	Transition mires and quaking bogs	No LSE
	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) (Annex I priority habitat)	No LSE
River Spey - Insh Marshes SPA	Breeding osprey, spotted crane, wood sandpiper and wigeon Over-wintering whooper swan and hen harrier	No LSE
River Spey - Insh Marshes Ramsar site	Holds outstanding examples within a UK context of a large, high-altitude slow-flowing river, a mesotrophic loch, a floodplain mire and a gravel fan Supports a large assemblage of nationally-rare and nationally-scarce aquatic plants and invertebrates (including species with a	No LSE

European site	Qualifying features	DMRB Stage 2 screening conclusion
	boreal pine distribution), and is one of the best freshwater sites in Britain for otter A nationally important genetic resource for floodplain mires Supports an assemblage of breeding birds indicative of high wetland value and diversity Wintering whooper swan	
Cairngorms Massif SPA	Breeding golden eagle	No LSE
Abernethy Forest SPA	Breeding capercaillie	Potential for LSE on breeding capercaillie due to disturbance during construction and in the long-term due to permanent habitat loss (functional land) and disturbance during operation.
Anagach Wood SPA	Breeding capercaillie	Potential for LSE on breeding capercaillie due to disturbance during construction and in the long-term due to permanent habitat loss (functional land) and disturbance during operation.
Craigmore Woods SPA	Breeding capercaillie	Potential for LSE on breeding capercaillie due to disturbance during construction and in the long-term due to permanent habitat loss (functional land) and disturbance during operation.
Kinveachy Forest SPA	Breeding capercaillie and Scottish crossbill	Potential for LSE on breeding capercaillie due to disturbance during construction and in the long-term due to permanent habitat loss (functional land) and disturbance during operation.
Kinveachy Forest SAC	Caledonian Forest (Annex I priority habitat) Bog woodland (Annex I priority habitat)	No LSE
Cairngorms SAC	Otter	No LSE

European site	Qualifying features	DMRB Stage 2 screening conclusion
Cairngorms SPA	<p>Breeding capercaillie, Scottish crossbill, merlin, osprey and peregrine falcon</p> <p>NB golden eagle is also a qualifying feature of this SPA. Consultation with SNH indicates that the Cairngorms Massif SPA, which is much larger than the Cairngorms SPA, better represents use of the area by golden eagles. Therefore, golden eagles are considered under the Cairngorms Massif SPA only.</p>	<p>Potential for LSE on breeding capercaillie due to disturbance during construction and in the long-term due to permanent habitat loss (functional land) and disturbance during operation.</p> <p>No LSE on any of the other qualifying features.</p>
Loch Vaa SPA	Breeding Slavonian grebe	Potential for LSE as a result of disturbance to breeding Slavonian grebe during construction and operation.
Slochd SAC	Dry heaths (Annex I priority habitat)	No LSE
Moray Firth pSPA	Breeding and wintering European shag; wintering assemblage including common eider, common goldeneye, common scoter, great northern diver, long-tailed duck, red-breasted merganser, red-throated diver, greater scaup, Slavonian grebe, velvet scoter.	No LSE

3. Summary of DMRB Stage 2 Appropriate Assessment

3.1. Introduction

- 3.1.1. LSE identified in the screening assessment have been subject to AA, which is summarised in Table 3.1. Details of the AA are presented in full within the HRA proformas in Annexes 1 to 12. Qualifying features for which an LSE was not identified during the DMRB Stage 2 screening are not included here.

Table 3.1: DMRB Stage 2 Appropriate Assessment results

European site	Qualifying features for which AA undertaken	DMRB Stage 2 AA conclusion	Mitigation required	AESI summary
River Spey SAC	Atlantic salmon	Potential for LSE during construction on Atlantic salmon, sea lamprey and freshwater pearl mussel.	As per Section 4 of the River Spey HRA pro-forma (Annex 1).	No AESI
	Sea lamprey	Potential for permanent LSE if there is permanent loss of river bed habitat that provides suitable spawning habitat for Atlantic salmon and sea lamprey and if the structures result in a barrier to movement of fish.		
	Freshwater pearl mussel			
Abernethy Forest SPA	Breeding capercaillie	LSE on breeding capercaillie during construction and operation.	As per Section 4 of the capercaillie HRA pro-forma covering all five sites with breeding capercaillie as a qualifying feature (Annex 6).	No AESI
Anagach Wood SPA	Breeding capercaillie	LSE on breeding capercaillie during construction and operation.	As per Section 4 of the capercaillie HRA pro-forma covering all five sites with breeding capercaillie as a qualifying feature (Annex 6).	No AESI
Craigmore Woods SPA	Breeding capercaillie	LSE on breeding capercaillie during construction and operation.	As per Section 4 of the capercaillie HRA pro-forma covering all five sites with breeding capercaillie as a qualifying feature (Annex 6).	No AESI
Kinveachy Forest SPA	Breeding capercaillie	LSE on breeding capercaillie during construction and operation.	As per Section 4 of the capercaillie HRA pro-forma covering all five sites with breeding capercaillie as a qualifying feature (Annex 6).	No AESI
Cairngorms SPA	Breeding capercaillie NB golden eagle is also a qualifying feature of this SPA. Consultation with SNH indicates that the Cairngorms Massif SPA, which is much larger than the Cairngorms SPA, better represents use of the	LSE on breeding capercaillie during construction and operation.	As per Section 4 of the capercaillie HRA pro-forma covering all five sites with breeding capercaillie as a qualifying feature (Annex 6).	No AESI



European site	Qualifying features for which AA undertaken	DMRB Stage 2 AA conclusion	Mitigation required	AESI summary
	area by golden eagles. Therefore, golden eagles are considered under the Cairngorms Massif SPA only.			
Loch Vaa SPA	Breeding Slavonian grebe	Potential for LSE as a result of disturbance to breeding Slavonian grebe during construction and operation.	As per Section 4 of the Loch Vaa SPA HRA pro-forma (Annex 10).	No AESI

3.2. DMRB Stage 2 HRA Conclusions

- 3.2.1. The DMRB Stage 2 Options Assessment HRA Screening of the A9 Dalraddy to Slochd dualling scheme identified potential LSE on the conservation objectives of some of the qualifying features of seven of the fifteen international sites assessed:
- River Spey SAC;
 - Abernethy Forest SPA;
 - Anagach Woods SPA;
 - Craigmore Woods SPA;
 - Kinveachy Forest SPA;
 - Cairngorms SPA; and
 - Loch Vaa SPA.
- 3.2.2. The relevant qualifying features of these seven sites were subject to a DMRB Stage 2 HRA AA. The results of the AA indicate that the implementation of mitigation measures (as detailed in the HRA proformas) is required to limit any temporary and permanent LSE risks to a level that supports a conclusion of 'No AESI' for all sites, qualifying interests and conservation objectives under consideration at this stage in the DMRB process.
- 3.2.3. The following recommendations are made to inform DMRB Stage 3 design refinement for all options:
- Adapt detailed bridge design to take results of fish habitat surveys and freshwater pearl mussel surveys into account;
 - Adapt detailed bridge design to ensure continuity of habitat for fish, including during periods of low flow;
 - Avoid permanent in-channel structures and works;
 - Ensure implementation of best practice construction site environmental management measures, including appropriate construction stage SuDS controls/ interceptors, in line with Pollution Prevention Guidance (PPG);
 - Where in-channel works are required, strict adherence to the staged assessment process described in Scottish Government guidance 'River Crossings and Migratory Fish: Design Guidance'^{vi};
 - Implement suitable exclusion zones and time periods (to be agreed with SNH) for works that have to be undertaken during sensitive migration, spawning and breeding seasons. Avoid work during hours of darkness (from half an hour before sunset to half an hour after sunrise) and agree lighting arrangements with SNH where required;
 - Consider including spillage containment into the SuDS design;
 - Ensure DMRB Stage 3 design includes provision of suitable mammal passes at regular intervals to provide opportunities for wildlife to pass under, rather than over the A9;
 - Where possible, avoid SuDS outfalls in upstream proximity to freshwater pearl mussel beds (seek advice from SNH on suitable clearances in the event freshwater pearl mussel are identified during surveys);



- Consider retro-fitting baffles (or other measures) to the concrete bed of the existing structure at Baddengorm;
- Any in-channel works (including excavations for tie-ins) will incorporate design measures that enhance both in-channel and riparian habitat quality e.g. provision of resting pools/spawning habitats for salmonids;
- Identify favourable capercaillie habitats and minimise, and if possible avoid, loss in the final design;
- In consultation with the SNH Capercaillie Project Officer, identify unfavourable habitat in suitable locations which can be enhanced to provide habitat improvements to benefit capercaillie, in terms of reducing current severance between existing habitats and providing additional breeding habitat; and
- Review all layby locations between chainages 3,000+000 to 17,000+000 and relocate as necessary. SNH recommends that one layby location near Carrbridge is not progressed any further due to the potential for disturbance to capercaillie.

3.2.4. The following recommendations are made to inform the construction programme and practice for all options:

- Ensure provision of suitable otter escape pathways through construction sites, e.g. provision of ramps or mammal ladders to enable egress from construction excavations;
- Implementation of Species Protection Plans (SPP) to manage construction stage risks, including requirements for preconstruction surveys by qualified ecologists;
- The construction programme for the Spey SAC crossings will seek to avoid construction happening concurrently with each other;
- Avoid percussive construction works (e.g. piling and blasting) in proximity to the three SAC watercourses that are crossed during sensitive salmon and sea lamprey migration and spawning periods;
- Where in-channel works are required, avoid sensitive migration, spawning and breeding seasons and ensure pre-works survey to confirm absence of freshwater pearl mussel in proximity to the works;
- Where there is capercaillie and Slavonian grebe breeding habitat that could be disturbed by construction, identify suitable seasonal working windows and/or use sound barriers to reduce noise to an acceptable level;
- Identify sensitive areas and suitable buffer zones for breeding capercaillie and Slavonian grebe where construction compounds should not be located; and
- Identify suitable seasonal working windows for standard maintenance measures and a suitable design for sound barriers for maintenance works that have to be undertaken during the capercaillie and Slavonian grebe breeding season.

3.2.5. This HRA will be revised during DMRB Stage 3, which will include an Environmental Impact Assessment and HRA for the preferred option. DMRB Stage 3 will include consideration of site specific issues and risks, mitigation through design development, as well as construction stage activities, risks and required mitigation.

3.2.6. Following DMRB Stage 3, a Schedule of Mitigation will be embedded via contractual documents. Required mitigation will be informed by consultation with SNH.



Annex 1 - River Spey SAC

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED² (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

River Spey SAC

Natura qualifying interest(s) & whether priority/non-priority:

Otter
Atlantic salmon
Sea lamprey
Freshwater pearl mussel

Conservation objectives for qualifying interests:

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

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

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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

² Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The sections of the scheme that could affect the River Spey SAC are described in more detail here.

The River Spey flows south to north, to the east of the Proposed Scheme Options. The River Spey SAC is crossed by the Proposed Scheme Options in three locations, as shown on Figure 11.7a:

- Allt na Criche, south-west of Inverdrue, in Section 3a;
- River Dulnain, at Ellan near Carrbridge, in Section 8;
- Allt nan Ceatharnach, at Baddengorm, north of Ellan, in Section 8.

Other than at these three crossings, the River Spey SAC is more than 500m from all Proposed Scheme Options and/or separated from it by other infrastructure, including roads and the railway.

For all three crossings, the designs have or will seek to follow these principles in order to minimise adverse ecological effects and, where possible, improve the existing situation:

- Where watercourse crossing structures are required these will be designated to minimise effects on habitat and ecological receptors.
- Bridges and other open bottom structures that act to retain natural streambed conditions shall be the preferred option over box or piped culverts
- Elevated entrances will be avoided to facilitate fish passage and culvert inverts will be set below firm bed level to limit the impact on flows and sediment transfer.
- Existing streambed gradients will be maintained to maintain natural stream conditions as far as practically possible.
- Existing crossing structures identified as negatively affecting watercourses shall be replaced/retrofitted with structures that lessen any hydro-morphological impact and impedence to free movement of species.
- Site specific crossing design will incorporate measures to ensure the provision of adequate depth of flow (nominally no less than 200mm) and velocities to reduce impacts associated with habitat severance and associated impacts on migratory fish (e.g. through the incorporation of fish pass baffles/2-stage culvert design).
- Artificial bed substrate will be avoided to avoid perched substrate, which can affect fish passage at some flows, and worsen over time with scour eroding the natural bed downstream and increasing the head difference.

Allt na Criche

The existing crossing structure is shown below, which is a 6m wide concrete box culvert. The design is likely to be an extension of the existing structure. This will ensure that a clear span is maintained over the river, that there are no permanent works within the channel and that new earthworks on the banks are minimised. The current design options, which apply to each of the proposed locations, are to:

- 1) retain the existing structure, and construct a new parallel box structure alongside it. The current box proposal has the invert forming the river bed;
- 2) construct a portal frame allowing the retention of the existing watercourse bed; or
- 3) demolish the existing structure and replace it with a new dual carriageway structure that allows re-instatement of the natural watercourse bed.



The three options for the location of this crossing are illustrated in Figure 11.7b. This shows minor variations in the length of watercourse that is bridged and in the land-take between the north and south sides of the existing A9. The width of the Allt na Criche at this point is between 9m and 12m. The new crossing will increase the length of the River Spey SAC that is bridged, with minor variations between the locations of the Options, such that the new crossing will result in the following lengths of watercourse being bridged:

Option 1: 123m

Option 1A: 117m

Option 2: 95m

River Dulnain

The existing three span structure is shown below. It is proposed that the new bridge piers will be set back on the banks of the River Dulnain in a similar fashion to the existing Dulnain Bridge pier arrangement so that there are no bridge supports within the watercourse itself, thus avoiding alteration of local hydromorphological processes.



The three options for the location of this crossing are illustrated in Figure 11.7c. This shows variations in land-take between the north and south sides of the existing A9, with Option 1 requiring land-take on both sides of the existing A9. Options 1A and 2 involve land-take on the south side only. The new crossing will increase the length of the River Spey SAC that is bridged, with minor variations between the locations of the options, such that the new crossing will result in the following lengths of watercourse being bridged:

Option 1: 103m

Option 1A: 105m

Option 2: 27m

Allt nan Ceatharnach, at Baddengorm

The existing crossing is shown below. The existing bridge is a reinforced concrete portal frame construction. The current draft proposals show the extension to this crossing will be 6m from the existing crossing. This is to provide sufficient working space for the deep excavations (c 10m) that are required to construct the bridge. The skew will be reduced from 40° to 30° to enable the structure to meet design current standards. The clear width underneath the structure will be 8.9m, which is a direct continuation of the current cross-sectional width available beneath the existing bridge between the concrete angled revetments in the proposed extension. This will ensure that there are no permanent works within the channel and that the existing banks will not be affected. The natural watercourse bed will be retained and it is not expected that the watercourse will need to be diverted or pumped during construction.

The existing structure comprises a concrete slab that forms the bed of the watercourse; this has become perched to a degree at the downstream end and is likely to form a barrier to fish passage along the watercourse. The slab extends underneath the wingwalls, which is likely to constrain the construction of the new structure. Whilst it will not be possible to remove the entire concrete slab, consideration is being given to removal of at least some of the artificial bed substrate within the existing structure, which will improve connectivity at low flows. Other options for improving connectivity beneath the existing structure are also being considered, for example by use of a cut low flow channel or baffle placement on the artificial substrate to locally raise water levels. These issues will be considered further at DMRB Stage 3.



The three options for the location of this crossing are illustrated in Figure 11.7d. This shows variations in land-take between the north and south sides of the existing A9. The new crossing will increase the length of the River Spey SAC that is bridged, with minor variations between the locations of the options, such that the new crossing will result in the following lengths of watercourse being bridged:

Option 1: 48m

Option 1A: 48m

Option 2: 49m

Construction methods and timing:

At DMRB Stage 2, the mainline alignment and junction options have been developed to a level of detail that assumes that watercourse crossings will span the main channel without the need for permanent in-channel structures. At this stage there is insufficient detail to comment on construction methods to be used, other than to state that best practice will be followed during construction and that appropriate protection and mitigation measures and controls will be in place to ensure legislative compliance and to avoid and minimise risks to the River Spey SAC.

A detailed construction programme has not been developed at this stage. Measures, including seasonal constraints (e.g. fish spawning times) to avoid likely significant effects on qualifying features during construction will be taken account of in the construction programme.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue: ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- **If yes, or in cases of doubt, continue to stage 4.**

- **If potential significant effects can easily be avoided, record modifications required below.**

- **If no for all features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.**

The following assessment assumes standard good practice methods are employed during construction. No other mitigation measures or design detail are assumed as, at this stage of the process as there is not sufficient information to do so.

It is considered that the following issues could have likely significant effects on the River Spey SAC, given the current level of knowledge and depending on the final detailed design of the preferred option:

- effects on Atlantic salmon and sea lamprey as a result of permanent habitat loss at Allt na Criche;
- effects on Atlantic salmon and sea lamprey as a result of barriers to movement of fish (and potential effects on freshwater pearl mussel distribution and population viability through effects on salmonid (host species) movement) associated with new crossing structures at Allt na Criche and Allt nan Ceatharnach;
- direct effects on freshwater pearl mussel during construction as a result of temporary habitat loss if freshwater pearl mussel is present within the footprint of the works at Allt na Criche and Allt nan Ceatharnach, as a result of permanent habitat loss at Allt na Criche and as a result of temporary barriers to movement during construction at all three crossings;
- disturbance to qualifying species Atlantic salmon and sea lamprey during construction as a result of noise, vibration and lighting at all three crossing points.

The following issues have been considered and discounted as having no effects on the River Spey SAC (see below for justification of these decisions) at any of the three crossing points:

- disturbance to qualifying species (otter) during construction;
- on-going disturbance to qualifying species during operation;
- effects on qualifying species (otter) as a result of permanent habitat loss;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in the hydrology of the three watercourses that are directly affected, or as a result of pollution of the River Spey SAC as a result of water and sediment run-off during construction, or as a result of discharges or accidental spills during construction and operation.

Disturbance to qualifying species otter during construction

Detailed surveys for otter will be undertaken during Stage 3 Assessment. These surveys will provide information on the location of resting sites and the frequency of use of the three watercourses by otters. Any adverse effects on the otter population will be addressed through species protection plans and European Protected Species (EPS) licensing. This will ensure that there are no negative effects on the conservation status of the Spey catchment otter populations, which are known to be widespread and healthy. It will also ensure that the construction programme takes account of all international sites that have otter as a qualifying feature. Figure 11.7e shows all relevant international sites.

Taking these measures into account, there will be no on-going negative effects on the conservation status of the River Spey populations of otter during construction due to disturbance.

On-going disturbance to qualifying species during operation

Where watercourse crossing structures are required, these will be designed to minimise effects on habitat and ecological receptors and designed following current best practice guidance.

The design of bridge structures will ensure that there is sufficient bank side habitat for otters to move along when the river is in spate.

Ledges will be provided within culverts to ensure safe continuity of access for otters to habitats on both sides of the carriageway. Any maintenance works to the culvert or the banks of the watercourse will be undertaken with due regard to the species protection plan for otters, under licence if necessary.

Site specific culvert design will incorporate measures to ensure the provision of adequate depth of flow (nominally no less than 200mm) and velocities to reduce impacts associated with habitat severance and associated impacts on migratory fish (e.g. through the incorporation of fish pass baffles/ 2-stage culvert design). A smooth transition of flow to and from the culvert will be maintained which may require the need for construction of outlet pools.

There will be no on-going maintenance works within the channel so no on-going negative effects on the conservation status of the River Spey populations of otter, Atlantic salmon, sea lamprey or freshwater pearl mussel are predicted during operation.

Effects on qualifying species (otter) as a result of permanent habitat loss

Depending on the final crossing designs, there could be small amounts of bankside habitat lost. For example, at the Allt nan Ceatharnach at Baddengorm, the proposed abutment foundations span the watercourse, which means that continuation of artificial banks is likely to be unavoidable. There will be a similar issue at Allt na Criche.

As described above, detailed surveys for otter will be undertaken during Stage 3 Assessment. These surveys will provide information on the location of resting sites and the frequency of use of the three watercourses by otters. Any adverse effects on the otter population as a result of habitat loss will be addressed through species protection plans and EPS licensing. This will ensure that there are no negative effects on the conservation status of the Spey catchment otter populations, which are known to be widespread and healthy. Any adverse effects on these populations as a result of habitat loss will be addressed through a species protection plan. Therefore no likely significant effects are predicted on this species as a result of habitat loss.

Deterioration in habitat quality during construction and operation of the scheme as a result of changes in the hydrology of the three watercourses that are directly affected, or as a result of pollution of the site as a result of water and sediment run-off during construction, or as a result of discharges or accidental spills during construction and operation

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines in relation to avoidance of pollution. Pollution prevention guidelines (PPGs)^{vii} with particular reference to PPG1 (general guide to the prevention of water pollution), PPG3 (use and design of oil separators in surface water drainage systems), PPG5 (works near or liable to affect watercourses) and PPG6 (working at construction and demolition sites). Pollution prevention guidelines are a series of documents developed by Scottish Environment Protection Agency (SEPA). Each PPG is targeted at a particular type of business or activity and covers environmental good practice to minimise pollution. The PPGs also make reference to environmental legal obligations, but that information is currently out of date and requires updating.

All road run-off drainage will be attenuated and associated pollutants treated (though the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value.

Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (though the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. This will avoid indirect effects on freshwater pearl mussel and will be monitored to ensure there is no deterioration from existing quality, using SEPA's water quality monitoring data as baseline for comparison.

There will be no significant changes to the existing groundwater or surface water conveyance. Therefore, there will be no effects on water quality or on the water table within the River Spey SAC during construction or operation.

DMRB Stage 2 assessment of Likely Significant Effects (LSE) against conservation objectives for each qualifying feature

Allt na Criche – all options

Conservation objective	Atlantic salmon	Otter	Sea lamprey	Freshwater pearl mussel
<p>To avoid deterioration of the habitats of the qualifying species 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</p>	<p>Potential for LSE due to: Disturbance to spawning migrations and/or displacement from valuable resource habitat as a result of acoustic/visual disturbance from construction activities, including artificial light spill to the channel.</p> <p>Temporary loss of spawning habitat and/or temporary obstruction to fish passage should in-channel working be required e.g. use of coffer dams or other in-channel structures to construct new crossings.</p>	<p>No LSE</p>	<p>Potential for LSE due to: Disturbance to spawning migrations and/or displacement from valuable resource habitat as a result of acoustic/visual disturbance from construction activities, including artificial light spill to the channel.</p> <p>Temporary loss of spawning habitat and/or temporary obstruction to fish passage should in-channel working be required e.g. use of coffer dams or other in-channel structures to construct new crossings.</p>	<p>Potential for LSE due to: Harm to existing populations and/or temporary loss of habitat should in-channel working be required e.g. use of coffer dams or other in-channel structures to construct new crossings.</p> <p>Temporary effects on distribution through effects on upstream movement of salmonids (FWPM glochidia host species) should obstruction to fish passage occur as a result of in-channel working.</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, 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 	<p>Potential for LSE as a result of: Negative effects on recruitment due to permanent loss of spawning/valuable resource habitat, associated with the potential requirement for hard inverts at new crossings.</p> <p>Negative effects on species distribution and recruitment success due to the creation of barriers to movement associated with the potential requirement for hard inverts at new</p>	<p>No long-term LSE</p>	<p>Potential for LSE as a result of: Negative effects on recruitment due to permanent loss of spawning/valuable resource habitat, associated with the potential requirement for hard inverts at new crossings.</p> <p>Negative effects on species distribution and recruitment success due to the creation of barriers to movement associated with the potential requirement for hard inverts at new</p>	<p>Potential for LSE as a result of: Negative effects on the distribution and viability of populations due to the permanent loss of habitat associated with the potential requirement for hard inverts at new crossings.</p> <p>Negative effects on the distribution and</p>

<ul style="list-style-type: none"> • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species 	crossings that may locally change flow velocities/levels and/or head difference through structures		crossings that may locally change flow velocities/levels and/or head difference through structures	viability of populations due to the creation of barriers to movement of salmonids (FWPM glochidia host species).
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River Dulnain – all options

Conservation objective	Atlantic salmon	Otter	Sea lamprey	Freshwater pearl mussel
<p>To avoid deterioration of the habitats of the qualifying species 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</p>	<p>Potential for LSE due to:</p> <p>Disturbance to spawning migrations and/or displacement from valuable resource habitat as a result of acoustic and/or visual disturbance from construction activities, including artificial light spill to the channel.</p> <p>Temporary loss of spawning habitat is not predicted as no in-channel working is expected at this location.</p>	<p>No LSE</p>	<p>Potential for LSE due to:</p> <p>Disturbance to spawning migrations and/or displacement from valuable resource habitat as a result of acoustic and/or visual disturbance from construction activities, including artificial light spill to the channel.</p> <p>Temporary loss of spawning habitat is not predicted as no in-channel working is expected at this location.</p>	<p>Potential for LSE during construction</p> <p>Temporary effects on distribution through effects on upstream movement of salmonids (FWPM glochidia host species) should obstruction to fish passage occur as a result of in-channel working.</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, including 	<p>No long-term LSE</p>	<p>No long-term LSE</p>	<p>No long-term LSE</p>	<p>No long-term LSE</p>



<p>range of genetic types for salmon, as a viable component of the site</p> <ul style="list-style-type: none"> • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species 			
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Allt nan Ceatharnach, at Baddengorm – all options

Conservation objective	Atlantic salmon	Otter	Sea lamprey	Freshwater pearl mussel
<p>To avoid deterioration of the habitats of the qualifying species 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</p>	<p>Potential for LSE due to:</p> <p>Disturbance to spawning migrations and/or displacement from valuable resource habitat as a result of acoustic and/or visual disturbance from construction activities, including artificial light spill to the channel.</p> <p>Temporary loss of spawning habitat and/or temporary obstruction to fish passage should in-channel working be required e.g. use of coffer dams or other in-channel structures to construct new crossings.</p>	<p>No LSE</p>	<p>Potential for LSE due to:</p> <p>Disturbance to spawning migrations and/or displacement from valuable resource habitat as a result of acoustic/visual disturbance from construction activities, including artificial light spill to the channel.</p> <p>Temporary loss of spawning habitat and/or temporary obstruction to fish passage should in-channel working be required e.g. use of coffer dams or other in-channel structures to construct new crossings.</p>	<p>Potential for LSE due to:</p> <p>Harm to existing populations and/or temporary loss of habitat should in-channel working be required e.g. use of coffer dams or other in-channel structures to construct new crossings.</p> <p>Temporary effects on distribution through effects on upstream movement of salmonids (FWPM glochidia host species) should obstruction to fish passage occur as</p>





				a result of in-channel working.
<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, including range of genetic types for salmon, as a viable component of the site • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species 	<p>Potential for long-term LSE as a result of:</p> <p>Negative effects on species distribution and recruitment success due to the creation of barriers to movement associated with the new crossings that may locally change flow velocities/levels and/or head difference through structures.</p>	<p>No long-term LSE</p>	<p>Potential for long-term LSE as a result of:</p> <p>Negative effects on species distribution and recruitment success due to the creation of barriers to movement associated with the new crossings that may locally change flow velocities/levels and/or head difference through structures.</p>	<p>Potential for LSE as a result of:</p> <p>Negative effects on the distribution and viability of populations due to the creation of barriers to movement of salmonids (FWPM glochidia host species).</p>

STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.

ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This



should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.

iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.

It is concluded that there is potential for long-term LSE associated with effects on Atlantic salmon and sea lamprey as a result of permanent habitat loss and barrier effects, with associated effects on freshwater pearl mussel. There is also the potential for LSE associated with short-term, temporary effects at the construction stage. These LSE are summarised as:

- effects on Atlantic salmon and sea lamprey as a result of permanent habitat loss;
- direct effects on freshwater pearl mussel during construction as a result of temporary habitat loss if freshwater pearl mussel is present within the footprint of the works and as a result of permanent habitat loss if freshwater pearl mussel is present;
- disturbance to qualifying species Atlantic salmon and sea lamprey during construction as a result of noise, vibration and lighting;
- effects on Atlantic salmon and sea lamprey as a result of barriers to movement of fish (and potential effects on freshwater pearl mussel distribution and population viability through effects on salmonid (host species) movement) associated with new crossing structures.

The assessment of these issues in light of the current level of information about the scheme is provided below. Potential effects as a result of other construction activities have been discussed and discounted above and are not repeated here.

Atlantic salmon and sea lamprey

Permanent habitat loss at Allt na Criche

Detailed data collation, including fish habitat surveys, will be undertaken for Atlantic salmon and sea lamprey as part of the Stage 3 Assessment. This data collation will provide information on which watercourses support these species and the importance of habitat within the footprint of any proposed in-channel works.

Freshwater pearl mussel

Permanent habitat loss at Allt na Criche, temporary habitat loss at Allt na Criche and Allt nan Ceatharnach and temporary effects as a result of barriers to movement at all three crossings during construction

There is potential for permanent loss of habitat, which would have a LSE on freshwater pearl mussel if they are present in the working footprint. There is also potential for some temporary in-channel works at Allt na Criche and Allt nan Ceatharnach, which could result in adverse effects should freshwater pearl mussel be present at those locations or in close proximity.

Temporary barriers to upstream movement of Atlantic salmon and sea lamprey (freshwater pearl mussel glochidia host species) during construction as described below would have effects on the distribution of freshwater pearl mussel.

Atlantic salmon and sea lamprey

Temporary disturbance as a result of temporary habitat loss, barrier effects and disturbance due to noise, lighting and vibration during construction at all three crossings

Three new crossings are required over the River Spey SAC. There is potential for some temporary in-channel works which could result in temporary barrier effects. Habitat effects would generally be restricted to a temporary works footprint, which would limit the effect to a localised area. It is considered that the presence of other barriers upstream of the A9 means that there are no wider effects on fish passage as a result of severance.

The fish habitat surveys described above will provide information on the quality of habitats within the proposed working footprint and inform the need for seasonal and daily working restrictions to avoid the salmon run and any specific areas where temporary damage to the bed of the watercourse would need to be avoided or mitigated.

Construction works in proximity to watercourses could temporarily evoke a behavioural response that acts to disturb or displace Atlantic salmon and sea lamprey (which are assumed to be present). Significant percussive works (e.g. piling/blasting) in proximity to the watercourse could lead to physiological harm/death.

Lighting to facilitate night-time working could temporarily disturb or displace Atlantic salmon and sea lamprey if undertaken in proximity to watercourses during sensitive migration periods.

Atlantic salmon, sea lamprey and freshwater pearl mussel

Long-term effects on Atlantic salmon and sea lamprey as a result of barriers to movement of fish, and potential effects on freshwater pearl mussel distribution and population viability through effects on salmonid (host species) movement, associated with new crossing structures at Allt na Criche and Allt nan Ceatharnach.

There is potential for some in-channel works which could result in barrier effects, particularly at Allt na Criche where a box structure with a concrete invert is one of the design options. These effects would generally be restricted to the works footprint, which would limit the effect to a localised area. It is considered that the presence of other barriers upstream of the A9 means that there are no wider effects on fish passage as a result of barrier effects (as the upstream barriers are likely to still remain at the time of construction). Some of these, such as at Baddengorm, could result in a positive effect as a result of increasing the amount of natural bed habitat underneath the existing structure.

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

YES.

The structures design for Dalraddy to Slochd is currently at the stage of drafting designs for submission to Transport Scotland. The level of design at this stage does not permit the inclusion of detailed mitigation measures. However, in preparing the design principles for the structures that will cross the River Spey, the ecological and geomorphological requirements have been taken into account. The detailed design stage will incorporate the required mitigation measures, as detailed below and including measures that are commonly considered to be best construction practice. These will be sufficient to limit any LSE risks to a level that supports a conclusion of 'No AESI' (Adverse Effect on Site Integrity) for all River Spey SAC qualifying interest species and conservation objectives under consideration at this stage in the DMRB process.

This enables a conclusion of **No AESI** at DMRB Stage 2. This conclusion is dependent on the measures below being incorporated into the detailed design and construction programme. If any of these measures, or a suitable alternative, are not included, this assessment may change.

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

Mitigation	Reason
Adapt detailed bridge design to take results of fish habitat surveys and freshwater pearl mussel into account.	Avoid permanent habitat loss of salmon and lamprey spawning habitat and freshwater pearl mussel habitat

Mitigation	Reason
	and avoid the need to translocate freshwater pearl mussel.
Adapt detailed bridge design to ensure continuity of habitat for fish, including during periods of low flow.	To avoid permanent effects of habitat severance on fish.
Ensure implementation of best practice construction site environmental management measures, including appropriate construction stage SuDS controls/ interceptors, in line with PPGs.	To avoid and minimise risk of sediment release from construction works; thereby minimising risk to water quality and associated freshwater pearl mussel, juvenile salmon, sea lamprey and otter habitats.
Ensure provision of suitable otter escape pathways through construction sites, e.g. provision of ramps/ mammal ladders to enable egress from construction SuDS features, excavations etc.	To minimise risks to otters during construction.
Implementation of Species Protection Plans (SPP) to manage construction stage risks, including requirements for preconstruction surveys by qualified ecologists.	To avoid and minimise construction stage risks to all River Spey SAC qualifying species whilst maintaining a proportionate response to required construction activity.
The construction programme for the Spey SAC crossings will seek to avoid construction happening concurrently with each other.	To avoid effects on otter.
Avoid percussive construction works (e.g. piling/ blasting) in proximity to the river during sensitive salmon and sea lamprey migration and spawning periods.	Percussive works in proximity to the SAC could affect fish swim bladders, presenting risk of disturbance and injury during upstream migration (adults), downstream migration (juveniles), or potentially to relatively static salmon/ sea lamprey in juvenile habitat (if in proximity) – mitigation is to avoid and minimise such risks
Where in-channel works are required, avoid sensitive migration, spawning and breeding seasons and ensure pre-works survey to confirm absence of freshwater pearl mussel in proximity.	To avoid and minimise risks to habitat substrates, to avoid pearl mussel sedimentation, and to avoid disturbance of fish species, e.g. in proximity to bankside works should they be required.
Where in-channel works are required, strict adherence to the staged assessment process described in Scottish Government guidance 'River Crossings and Migratory Fish: Design. Guidance'.	To follow best practice guidelines to minimise risk of disturbance of fish species.
Implement suitable exclusion zones and time periods (to be agreed with SNH) for works that have to be undertaken during sensitive migration, spawning and breeding seasons. Avoid work during hours of darkness (from half an hour before sunset to half an hour after sunrise) and agree lighting arrangements with SNH where required.	To avoid and minimise construction disturbance risk via inclusion of appropriate exclusion zones and time periods.

Mitigation	Reason
Consider including spillage containment into the SuDS design.	To minimise risks to the receiving water environment and receptors in the event of a polluting spillage.
Ensure DMRB Stage 3 design includes provision of suitable mammal passes at regular intervals to provide opportunities for wildlife to pass under, rather than over, the surface of the route.	To provide opportunities for otter passage (and other species) during flood events to reduce barrier effect and minimise collision risk with vehicles.
Avoid SuDS outfalls in upstream proximity to freshwater pearl mussel beds (seek advice from SNH on suitable clearances where freshwater pearl mussel are identified).	To avoid and minimise any associated risks to freshwater pearl mussels.
Avoid permanent in-channel structures and works where possible.	To minimise substrate disturbance and avoid introduction of in-channel barriers for fish passage.
Consider retro-fitting baffles (or other measures) to the concrete bed of the existing structure at Baddengorm.	To mitigate the existing habitat severance at this location.
Any in-channel works (including excavations for tie-ins) will incorporate design measures that enhance both in-channel and riparian habitat quality e.g. provision of resting pools/spawning habitats for salmonids.	To mitigate effects of temporary habitat loss during construction.

ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)¹.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.



When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	



Annex 2 - Insh Marshes SAC

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED³ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Insh Marshes SAC

Natura qualifying interest(s) & whether priority/non-priority:

Otter

Annex I habitats:

Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea

Transition mires and quaking bogs

Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) (Annex I priority habitat)

Conservation objectives for qualifying interests:

To avoid deterioration of the qualifying habitat thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and to ensure for the qualifying habitats that the following are maintained in the long-term:

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

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and to ensure for the qualifying species that the following are maintained in the long-term:

- Population of the species as a viable component of the site
- Distribution of the species within the site
- Distribution and extent of habitats supporting the species

³ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.



- Structure, function and supporting process of habitats supporting the species
- No significant disturbance of the species

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in section 1.1 of this report. The Insh Marshes SAC is 2km to the south of section 1 of the Proposed Scheme Options.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.





- **If no for all features**, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is not considered that there are any issues could have an effect on the Insh Marshes SAC.

The following theoretical issues have been considered and discounted as having no effects on the Insh Marshes SAC (see below for justification of these decisions):

- loss of habitat as a result of construction;
- disturbance to qualifying species otter during construction;
- on-going disturbance to species during operation;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects with the Tomatin to Moy scheme – none of the qualifying features of the Insh Marshes SAC are the same as the qualifying features of either of the two international sites considered in the Tomatin to Moy HRA.

The Proposed Scheme Options alone will not result in likely significant effects on the conservation objectives of the Insh Marshes SAC from direct, indirect or secondary impacts.

Loss of habitat as a result of construction

No land take or excavation is required from within the Insh Marshes SAC, which is 2km from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the SAC.

Disturbance to qualifying species otter during construction

Detailed surveys for otter will be undertaken during Stage 3 of the assessment process. These surveys will provide information on the location of resting sites and the frequency of use of the Insh Marshes SAC by otters. Any adverse effects on the otter population within the SAC will be addressed through species protection plans and EPS licensing. This will ensure that there are no significant adverse effects on the conservation status of otter populations associated with the Spey catchment, which are known to be widespread and healthy. It will also ensure that the construction programme takes account of all international sites that have otter as a qualifying feature. Figure 11.7e shows all relevant international sites.

On-going disturbance to otter during operation

Where watercourse crossing structures are required these will be designed to minimise effects on habitat and ecological receptors and designed following current best practice guidance.

The design of bridge structures will ensure that there is sufficient bank side habitat for otters to move along when the river is in spate, or a separate tunnel will be provided.

Ledges will be provided within culverts (or a separate tunnel provided) to ensure safe continuity of access for otters to habitats on both sides of the carriageway. Any maintenance works to the culvert or the banks of the watercourse will be undertaken with due regard to the species protection plan for otters, under licence if necessary.

Site specific culvert design will incorporate measures to ensure the provision of adequate depth of flow (nominally no less than 200mm) and velocities to reduce impacts associated with habitat severance and associated impacts on migratory fish (e.g. through the incorporation of fish pass baffles or a 2-stage culvert design). A smooth transition of flow to and from the culvert will be maintained which may require the need for construction of outlet pools.

There will be no on-going maintenance works within the channel so no on-going negative effects on the conservation status of the Insh Marshes populations of otter are predicted.

Deterioration in habitat quality during construction and operation of the scheme as a result in changes in hydrology and water quality



Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (through the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. There will be no significant changes to the existing groundwater or surface water conveyance. In any case, the Insh Marshes SAC is upstream of the Proposed Scheme Options. Therefore, there will no effects on water quality or on the water table within the SAC during construction or operation.

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines^{vii} in relation to avoidance of pollution.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Oligotrophic to mesotrophic standing waters	Transition mires and quaking bogs	Alluvial forests (Annex I priority habitat)	Otter
To avoid deterioration of the habitats of the qualifying species 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	No LSE	No LSE	No LSE	No LSE
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, including range of genetic types for salmon, as a viable component of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species Distribution and viability of freshwater pearl mussel host species Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species 	No long-term LSE	No long-term LSE	No long-term LSE	No long-term LSE

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES



(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

- i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.*
- ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.*
- iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.*

It was concluded that there would be no LSE on any of the Insh Marshes SAC qualifying species with respect to long-term, permanent effects or with short-term, temporary effects at the construction stage.

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation:</i>	<i>Reason:</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.





CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	





Annex 3 - River Spey - Insh Marshes SPA

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED⁴ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

River Spey - Insh Marshes SPA

Natura qualifying interest(s) & whether priority/non-priority:

Breeding osprey, spotted crake, wood sandpiper and wigeon
Over-wintering whooper swan and hen harrier

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species 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 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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

⁴ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.





Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The River Spey - Insh Marshes SPA is 2.4km to the south of section 1 and upstream of the Proposed Scheme Options.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

*- If yes, or in cases of **doubt**, continue to stage 4.*

- If potential significant effects can easily be avoided, record modifications required below.

*- If **no** for **all** features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.*

It is not considered that there are any elements of any of the options for the Proposed Scheme that are likely to give rise to likely significant impacts on the River Spey - Insh Marshes SPA.

The following theoretical issues have been considered and discounted as having no effects on the River Spey – Insh Marshes SPA:

- loss of habitat as a result of construction;
- disturbance to qualifying species breeding osprey, spotted crake, wood sandpiper and wigeon, and over-wintering whooper swan and hen harrier during construction;
- on-going disturbance to qualifying species during operation;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects, as per the assessment in the Introduction to Stage 3 of this HRA.

Loss of habitat as a result of construction

No land take or excavation is required from within the River Spey - Insh Marshes SPA, which is 2.4km from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the





SPA. It is not considered that there is any functional land⁵ for these species within the Proposed Scheme Options, so there will be no loss of functional land as a result of any of the Proposed Scheme Options.

Disturbance to qualifying species breeding osprey, spotted crane, wood sandpiper and wigeon, and over-wintering whooper swan and hen harrier during construction

Deleterious effects on birds of chronic noise exposure have been suggested to begin at levels as low as 55 - 60dB, although data on physiological effects are lacking^{viii}. Based on literature available, the conclusions suggested that at 55dB (A), changes in bird behaviour are unlikely, whereas 70 dB (A) could result in a flight response. It is considered unlikely that birds using the SPA would experience this noise level, given the distance of the scheme from the SPA. The results of noise modelling will be used to confirm this during Stage 3 of the assessment.

A review^{ix} of disturbance distances from human activity included osprey, hen harrier and wood sandpiper. The results suggest that a buffer zone of up to 1.5km around breeding osprey sites, 1km around hen harrier sites and 600m around wood sandpiper sites would be needed to avoid disturbance. The proposed construction works are significantly further away because the SPA is 2.4km from the Proposed Scheme Options and impacts on the conservation status as a result of disturbance due to human activity on the populations of these bird species are not predicted.

On-going disturbance to qualifying species during operation

Due to the distance of the Proposed Scheme Options from the SPA, it is not considered that human activity from vehicle users or as a result of on-going maintenance would result in disturbance that would affect the conservation status of the populations of qualifying species.

Deterioration in habitat quality during construction and operation of the scheme as a result in changes in hydrology and water quality

Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (though the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. There will be no significant changes to the existing groundwater or surface water conveyance. The River Spey - Insh Marshes SPA is upstream of the Proposed Scheme Options. Therefore, there will no effects on water quality or on the water table within the SPA during construction or operation.

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines^{vii} in relation to avoidance of pollution.

In-combination effects

It is not considered that there would be any in-combination effects with the Tomatin to Moy scheme (to the north) due to the distance of the SPA from this scheme. It is not considered that there will be any in-combination effects with the Kincaig to Dalraddy scheme (to the south), as this scheme will be operational by the time the Dalraddy to Slochd scheme is under construction. It is not considered that there will be any in-combination or cumulative effects during operation as effects of severance have been fully addressed in the Kincaig to Dalraddy scheme and will be fully addressed in the Dalraddy to Slochd scheme design.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Breeding osprey, spotted crane, wood sandpiper and wigeon	Over-wintering whooper swan and hen harrier
To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying	No LSE	No LSE

⁵ 'Functional land' is land not designated as part of the internationally designated ecological site but which is considered to provide vital habitat for maintenance of a qualifying species at a favourable conservation status, i.e. for maintaining the integrity of the site.





<p>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 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 	
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Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

- i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.*
- ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.*
- iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.*

No LSE have been identified for any of the qualifying features

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.





No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

Mitigation:

Reason:

ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate



Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	

Annex 4 - River Spey- Insh Marshes Ramsar Site

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED⁶ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

River Spey- Insh Marshes Ramsar site

Natura qualifying interest(s) & whether priority/non-priority:

Holds outstanding examples within a UK context of a large, high-altitude slow-flowing river, a mesotrophic loch, a floodplain mire and a gravel fan

Supports a large assemblage of nationally-rare and nationally-scarce aquatic plants and invertebrates (including species with a boreal pine distribution), and is one of the best freshwater sites in Britain for otter

A nationally important genetic resource for floodplain mires

Supports an assemblage of breeding birds indicative of high wetland value and diversity

Wintering whooper swan

Conservation objectives for qualifying interests:

To avoid deterioration of the qualifying habitat thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and to ensure for the qualifying habitats that the following are maintained in the long-term:

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

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and to ensure for the qualifying species that the following are maintained in the long-term:

- Population of the species as a viable component of the site
- Distribution of the species within the site

⁶ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.



- Distribution and extent of habitats supporting the species
- Structure, function and supporting process of habitats supporting the species
- No significant disturbance of the species

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The River Spey-Insh Marshes Ramsar site is 2.4km to the south of section 1 of the Proposed Scheme Options.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.





- **If no** for **all** features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is not considered that there are any issues could have an effect on the River Spey-Insh Marshes Ramsar site.

The following theoretical issues have been considered and discounted as having no effects on the River Spey – Insh Marshes Ramsar site (see below for justification of these decisions):

- loss of habitat as a result of construction;
- disturbance to qualifying species otter, whooper swan or the breeding bird assemblage during construction;
- on-going disturbance to qualifying species during operation;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects with the Tomatin to Moy scheme – none of the qualifying features of the River Spey-Insh Marshes Ramsar site are the same as the qualifying features of either of the two international sites considered in the Tomatin to Moy HRA.

The Proposed Scheme Options will not result in likely significant effects on the conservation objectives of the Ramsar site from direct, indirect or secondary impacts.

Loss of habitat as a result of construction

No land take or excavation is required from within the River Spey - Insh Marshes Ramsar site, which is 2.4km from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the SAC.

Disturbance to qualifying species otter, whooper swan and the breeding bird assemblage during construction

Detailed surveys for otter will be undertaken during Stage 3 of the assessment process. These surveys will provide information on the location of resting sites and the frequency of use of the three watercourses by otters. Any adverse effects on the otter population will be addressed through species protection plans and EPS licensing. This will ensure that there are no adverse effects on the otter populations associated with the Spey catchment, which are known to be widespread and healthy.

Deleterious effects on birds of chronic noise exposure have been suggested to begin at levels as low as 55 - 60dB, although data on physiological effects are lacking^{viii}. Based on literature available, the conclusions suggested that at 55dB (A), changes in bird behaviour are unlikely, whereas 70dB (A) could result in a flight response. It is considered unlikely that birds using the River Spey - Insh Marshes Ramsar site would experience this noise level, given the distance of the scheme from the site. The results of noise modelling will be used to confirm this during the Stage 3 assessment.

The proposed construction works are at least 2.4km away and impacts on the conservation status as a result of disturbance due to human activity on the populations of these bird species are not predicted.

On-going disturbance to qualifying species during operation

Where watercourse crossing structures are required these will be designed to minimise effects on habitat and ecological receptors and designed following current best practice guidance.

The design of bridge structures will ensure that there is sufficient bank side habitat for otters to move along when the river is in spate, or a separate tunnel will be provided.

Ledges will be provided within culverts (or a separate tunnel provided) to ensure safe continuity of access for otters to habitats on both sides of the carriageway. Any maintenance works to the culvert or the banks of the watercourse will be undertaken with due regard to the species protection plan for otters, under licence if necessary.



Site specific culvert design will incorporate measures to ensure the provision of adequate depth of flow (nominally no less than 200mm) and velocities to reduce impacts associated with habitat severance and associated impacts on migratory fish (e.g. through the incorporation of fish pass baffles/ 2-stage culvert design). A smooth transition of flow to and from the culvert will be maintained which may require the need for construction of outlet pools.

Due to the distance of the scheme from the River Spey - Insh Marshes Ramsar site, it is not considered that human activity from vehicle users or as a result of on-going maintenance would result in disturbance that would affect the conservation status of the populations of qualifying species.

Deterioration in habitat quality during construction and operation of the scheme as a result in changes in hydrology and water quality

Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (through the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. There will be no significant changes to the existing groundwater or surface water conveyance. The River Spey - Insh Marshes Ramsar site is upstream of the Proposed Scheme Options. Therefore, there will no effects on water quality or on the water table within the Ramsar site during construction or operation.

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines^{vii} in relation to avoidance of pollution.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Outstanding examples of wetlands supporting an assemblage of rare and scarce aquatic plants and invertebrates	Floodplain mires	Assemblage of breeding birds indicative of high wetland value and diversity	Wintering whooper swan	Otter
To avoid deterioration of the habitats of the qualifying species 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	No LSE	No LSE	No LSE	No LSE	No LSE
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, including range of genetic types for salmon, as a viable component of the site • Distribution of the species within site 	No long-term LSE	No long-term LSE	No long-term LSE	No long-term LSE	No long-term LSE



<ul style="list-style-type: none"> • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species 					
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Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.

ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.

iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.

It was concluded that there would be no LSE on any of the River Spey-Insh Marshes Ramsar site qualifying species with respect to long-term, permanent effects or with short-term, temporary effects at the construction stage.

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?





In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation:</i>	<i>Reason:</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1
SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2
SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:





Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	



Annex 5 - Cairngorms Massif SPA

ANNEX 5

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED⁷ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Cairngorms Massif SPA

Natura qualifying interest(s) & whether priority/non-priority:

Breeding golden eagle

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species 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 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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

⁷ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.





Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Cairngorms Massif SPA is 5.5km to the south of the Proposed Scheme Options

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.

- If no for *all* features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is not considered that there are any elements of any of the options for the Proposed Scheme that are likely to give rise to likely significant impacts on the Cairngorms Massif SPA.

The following theoretical issues have been considered and discounted as having no effects on these two SPAs:

- noise or visual disturbance from either construction or operation to golden eagle due to the distance between the site and the Proposed Scheme Options. The upper limits of disturbance distances, based on expert surveys have been recorded as between 1 to 1.5km during incubation and 750m to 1km during chick rearing^{ix}.
- permanent loss of habitat during construction – there will be no land take or excavation is required from within this SPA site, which is 5.5km from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the SPA;
- disturbance due to human activity during construction and operation. A review of disturbance distances^{ix} suggests that a buffer zone of buffer of 500m is appropriate (based on observations of flight in response to activity) with an outer zone extending to 800m where some activities, such as vehicles are allowed. This is based on studies^{ix} of Spanish imperial eagle behaviour which was considered to be similar to the golden eagle;





- in-combination effects: there are no SPAs designated for golden eagle close to the Tomatin to Moy scheme (the closest SPA designated for golden eagle is the Cairngorms SPA, which is around 20km away) and there are no records of golden eagle within 250m of the Proposed Scheme Options for the Tomatin to Moy scheme. The Kincaig to Dalraddy scheme is 4km from the Cairngorms SPA and will be operational by the time the Dalraddy to Slochd scheme is under construction, so there will be no in-combination effects with this scheme during construction.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Breeding golden eagle
<p>To avoid deterioration of the habitats of the qualifying species 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 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 	No LSE

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

- Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.*
- Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.*
- Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.*

No LSE have been identified for any of the qualifying features





STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation:</i>	<i>Reason:</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1
SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)¹.

DMRB Stage 2
SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:



Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	

Annex 6 - Abernethy Forest SPA, Anagach Wood SPA, Craigmore Woods SPA, Cairngorms SPA and Kinveachy Forest SPA

ANNEX 6

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED⁸ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura sites potentially affected:

Abernethy Forest SPA, Anagach Wood SPA, Craigmore Woods SPA, Cairngorms SPA and Kinveachy Forest SPA

Natura qualifying interest(s) & whether priority/non-priority:

Breeding capercaillie

NB Scottish crossbill is also a qualifying feature of the Kinveachy Forest SPA and the Cairngorms SPA. These are considered separately in Annex 7.

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species 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 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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

⁸ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:	AMJV
Name of competent authority:	Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The distances of the SPAs from the Proposed Scheme Options are:

- Kinveachy Forest SPA is 680m to the west at Kinveachy and 1.5km to the south-west at Carrbridge;
- Cairngorms SPA is 1km to the east;
- Abernethy Forest SPA is 4km to the east;
- Craigmore Woods SPA is 10.3km to the east; and
- Anagach Wood SPA is 14.2km to the east.

Figure 11.7f shows the locations of these sites in relation to the scheme.

In addition to the designated woodlands, SNH has indicated that, due to the vulnerability of capercaillie to human disturbance^x, any suitable woodland habitat within Strathspey should be considered as functional land and be assessed in the same way as SPA woodlands^{xi}. Therefore, any suitable capercaillie woodland that would be affected by the Proposed Scheme Options will be considered as part of this assessment. The RSPB has identified suitable habitat for capercaillie habitat within the vicinity of the scheme^{xii}. This indicates that the majority of woodland immediately to the west of the A9 between section 1 and section 10 is suitable capercaillie habitat, along with areas of woodland between Kinveachy, Carrbridge and Ellan. These areas, as indicated on Figure 11.7f, can be considered as functional land.

Figure 11.7g shows the location of functional capercaillie land in relation to the Proposed Scheme Options. Each of the Proposed Scheme Options would result in the loss of some functional capercaillie woodland:

Option 1: 98,452m²;
 Option 1a: 102,614m²;
 Option 2: 191,999m².

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- **If yes, or in cases of doubt, continue to stage 4.**

- **If potential significant effects can easily be avoided, record modifications required below.**

- **If no for all features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.**

It is considered that the following issues could have an effect on these five SPAs:

- permanent loss of habitat during construction;
- noise disturbance within suitable habitats during construction and as a result of user amenities such as lay-bys during operation;
- disturbance due to human activity during construction and operation.

The following theoretical issues have been considered and discounted as having no effects on these five SPAs:

- the width of lanes, drainage ditches and laybys, as capercaillie are strong flyers;
- in-combination effects: there are no SPAs designated for capercaillie close to the Tomatin to Moy scheme (the closest SPA designated for capercaillie is Kinveachy Forest, which is 8km away) and there are no records of capercaillie or suitable habitat for capercaillie within 250m of the Proposed Scheme Options for the Tomatin to Moy scheme. The Kinraig to Dalraddy scheme is over 4km from the Cairngorms SPA and will be operational by the time the Dalraddy to Slochd scheme is under construction so there will be no cumulative effects in-combination with this scheme during construction.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Qualifying feature: breeding capercaillie					
Conservation objective	Abernethy Forest SPA	Anagach Wood SPA	Craigmore Woods SPA	Cairngorms SPA	Kinveachy Forest SPA
To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained	Potential for LSE due to disturbance during construction	Potential for LSE due to disturbance during construction	Potential for LSE due to disturbance during construction	Potential for LSE due to disturbance during construction	Potential for LSE due to disturbance during construction
To ensure for the qualifying species that the following	Potential for long-term LSE due to permanent				



<p>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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species 	<p>habitat loss (functional land) and disturbance during operation</p>	<p>habitat loss (functional land) and disturbance during operation</p>	<p>habitat loss (functional land) and disturbance during operation</p>	<p>habitat loss (functional land) and disturbance during operation</p>	<p>habitat loss (functional land) and disturbance during operation</p>
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Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<p><i>Mitigation:</i></p>	<p><i>Reason:</i></p>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

- i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.*
- ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.*
- iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.*





There is the potential for LSE associated with short-term, temporary effects at the construction stage with relation to:

- noise and human disturbance during construction.

There is the potential for long-term LSE as a result of:

- permanent loss of functional land;
- disturbance during operation.

The assessment of these issues in light of the current level of information about the scheme is provided below. Potential effects as a result of other construction activities have been discussed and discounted above and are not repeated here.

Permanent loss of habitat (functional land) during construction

There will be no loss of land from within any of the SPA woodlands. However, there will be loss of other areas of woodland. If these provide suitable capercaillie habitat, these areas can be considered as functional land⁵ and their loss could result in effects on the capercaillie population. There are numerous records of capercaillie provided by the RSPB within habitat between the SPA sites and the Proposed Scheme Options. The nearest of these is approximately 130m south of the scheme near the Slochd ski centre. Other records close to the scheme are 195m west of the scheme at Kinveachy and 380m west of the scheme near Aviemore.

Noise disturbance within suitable habitats during construction

This will depend on the distance of activities from breeding sites and the type of activity being carried out. There is little discussion about effects of noise exposure on capercaillie in the available literature, which tends to focus on disturbance caused by human activity, as discussed below. Deleterious effects on wildfowl and waders of chronic noise exposure have been suggested to begin at levels of 55 - 60dB, although changes in bird behaviour are unlikely, whereas 70 dB(A) could result in a flight response. The results of noise modelling will be used to determine likely significant effects at Stage 3 of the assessment.

Disturbance due to human activity during construction and operation (for example the use of lay-bys during operation)

A review of disturbance distances^{ix} suggests that a buffer zone of up to 1km around lek sites and around 100m around nesting sites would be needed to avoid disturbance.

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

YES.

The implementation of required mitigation measures (as detailed below) will be sufficient to limit any LSE risks to a level that supports a conclusion of no adverse effects on site integrity (No AESI) for all internationally designated capercaillie sites and conservation objectives under consideration at DMRB Stage 2.

This enables a conclusion of **No AESI** at DMRB Stage 2.

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.





Mitigation:	Reason:
Identify favourable habitats to be avoided and feed into final design.	Avoid permanent loss of functional land.
In consultation with the SNH Capercaillie Project Officer, identify unfavourable habitat in suitable locations which can be enhanced to provide habitat improvements to benefit capercaillie, in terms of reducing current severance between existing habitats and providing additional breeding habitat.	Mitigate permanent loss of favourable habitat.
Where there is breeding habitat that could be disturbed by construction, identify suitable seasonal working windows and/or use sound barriers to reduce noise to an acceptable level.	Avoid disturbance at sensitive sites during construction.
Identify areas where construction compounds should not be located.	Avoid disturbance during construction.
Review all layby locations between chainages 3,000+000 to 17,000+000 and relocate as necessary. SNH recommends that one layby location near Carrbridge is not progressed any further due to the potential for disturbance to capercaillie.	Avoid disturbance during operation.

ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

<p>DMRB Stage 1</p> <p>SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)¹.</p> <p>DMRB Stage 2</p> <p>SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.</p>

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

--

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:



Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	



Annex 7 - Kinveachy Forest SPA and Cairngorms SPA

ANNEX 7

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED⁹ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Kinveachy Forest SPA and Cairngorms SPA

Natura qualifying interest(s) & whether priority/non-priority:

Qualifying features
Breeding Scottish crossbill

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species 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 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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

⁹ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Kinveachy Forest SPA is 680m to the west of the Proposed Scheme Options at Kinveachy and 1.5km to the south-west at Carrbridge, of sections 3b to 10. The Cairngorms SPA is 1km away, from sections 1 to 4.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.

- If no for *all* features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

Scottish crossbills are confined to the Scots pine forests of the Scottish Highlands and use both the ancient Caledonian and new plantation woodlands. Surveys of woodlands within and immediately adjacent to the Proposed Scheme Options were surveyed as part of the Stage 2 environmental assessment. This included habitat in all sections between section 1 and section 10. The results of the surveys indicate that most of the woodland in these areas is young plantation, whereas Scottish crossbills are found more frequently in older, well-developed woodland.

Surveys for Stage 3 of the environmental assessment are on-going and include bird surveys. Initial survey results have recorded only common crossbills.

The habitat type and timing of observations indicates that there is little if any functional habitat for Scottish crossbill within the Proposed Scheme Options and that it is unlikely that the species is present in the immediate vicinity.

It is not considered that there are any elements of any of the options for the Proposed Scheme that are likely to give rise to likely significant impacts on the Kinveachy Forest SPA or the Cairngorms SPA.

The following theoretical issues have been considered and discounted as having no effects on these two SPAs:

- permanent loss of habitat during construction. There will be no loss of land from within the SPA woodlands. As discussed above, loss of functional land is not considered to be an issue;
- noise and visual disturbance and disturbance from human activity to Scottish crossbill using the SPAs during construction, due to the distance of the SPAs from the Proposed Scheme Options. A review of disturbance^x caused by human activity suggests that a buffer zone of between 150m and 300m would be needed to avoid effects of forestry activities on Scottish crossbill.
- disturbance within suitable breeding habitats outside of the SPA boundary, during construction, as no functional land has been identified within the Proposed Scheme Options;
- in-combination effects; there are no SPAs designated for Scottish crossbill close to the Tomatin to Moy scheme (the closest SPA designated for Scottish crossbill is Kinveachy Forest, which is 8km away).

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Breeding Scottish crossbill
<p>To avoid deterioration of the habitats of the qualifying species 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 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 	No LSE

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.

ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.



iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.

No LSE have been identified for any of the qualifying features

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation:</i>	<i>Reason:</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1
SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2
SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)





Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	





Annex 8 - Kinveachy Forest SAC

ANNEX 8

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED¹⁰ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Kinveachy Forest SAC

Natura qualifying interest(s) & whether priority/non-priority:

Caledonian Forest (Annex I priority habitat)
Bog woodland (Annex I priority habitat)

Conservation objectives for qualifying interests:

To avoid deterioration of the qualifying habitat thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

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

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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

¹⁰ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.



Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Kinveachy Forest SAC is 680m to the west of the Proposed Scheme Options at Kinveachy and 1.5km to the south-west at Carrbridge, between sections 3b and 10. It is upstream of the Proposed Scheme Options.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.

- If no for *all* features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is not considered that there are any elements of any of the Proposed Scheme Options that are likely to give rise to likely significant impacts on the Kinveachy Forest SAC.

The following theoretical issues have been considered and discounted as having no effects on the Kinveachy Forest SAC:

- loss of habitat as a result of construction – there will be no loss of land from the SAC;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills – there will be no significant changes to the existing groundwater and surface water drainage arrangements. Scheme-level best practice risk mitigation, e.g. SEPA Pollution Prevention Guidance (PPG) to be followed during all construction activities. The road



surface drainage will be separate from wider land drainage through appropriate use of SuDS and the SAC is upstream of the A9;

- in-combination effects – it is not considered that there would be any combination effects with the Tomatin to Moy scheme (to the north) due to the distance of the SAC from this scheme.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Caledonian Forest (Annex I priority habitat)	Bog woodland (Annex I priority habitat)
<p>To avoid deterioration of the qualifying habitat 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"> • Extent of the habitat on site • Distribution of the habitat within the site • Structure and function of the habitat • Process supporting the site • Distribution of typical species of the habitat • Viability of typical species as components of the habitat • No significant disturbance of typical species of the habitat 	No LSE	No LSE

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.

ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.

iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.





No LSE have been identified for any of the qualifying features

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation:</i>	<i>Reason:</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)¹.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:





Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	



Annex 9 - Cairngorms SAC

ANNEX 9

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED¹¹ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Cairngorms SAC

Natura qualifying interest(s) & whether priority/non-priority:

Otter

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and to ensure for the qualifying species that the following are maintained in the long-term:

- Population of the species as a viable component of the site
- Distribution of the species within 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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

¹¹ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.



Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Cairngorms SAC is 1km to the east of sections 1 to 4 of the Proposed Scheme Options.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.

- If no for *all* features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is not considered that there are any issues could have an effect on the Cairngorms SAC.

The following theoretical issues have been considered and discounted as having no effects on the Cairngorms SAC (see below for justification of these decisions):

- loss of habitat as a result of construction;
- disturbance to qualifying species otter during construction;
- on-going disturbance to species during operation;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects with the Tomatin to Moy scheme – none of the qualifying features of the Cairngorms SAC are the same as the qualifying features of either of the two international sites considered in the Tomatin to Moy HRA.

The Proposed Scheme Options alone will not result in likely significant effects on the conservation objectives of the Cairngorms SAC from direct, indirect or secondary impacts.

Loss of habitat as a result of construction





No land take or excavation is required from within the Cairngorms SAC, which is 1km from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the SAC.

Disturbance to qualifying species otter during construction

Detailed surveys for otter will be undertaken during Stage 3 of the assessment process. These surveys will provide information on the location of resting sites and the frequency of use of the Cairngorms SAC by otters. Any adverse effects on the otter population within the SAC will be addressed through species protection plans and EPS licensing. This will ensure that there are no significant adverse effects on the conservation status of otter populations associated with the catchment, which are known to be widespread and healthy. It will also ensure that the construction programme takes account of all international sites that have otter as a qualifying feature. Figure 11.7e shows all relevant international sites.

On-going disturbance to otter during operation

Where watercourse crossing structures are required these will be designed to minimise effects on habitat and ecological receptors and designed following current best practice guidance.

The design of bridge structures will ensure that there is sufficient bank side habitat for otters to move along when the river is in spate, or a separate tunnel will be provided.

Ledges will be provided within culverts (or a separate tunnel provided) to ensure safe continuity of access for otters to habitats on both sides of the carriageway. Any maintenance works to the culvert or the banks of the watercourse will be undertaken with due regard to the species protection plan for otters, under licence if necessary.

Site specific culvert design will incorporate measures to ensure the provision of adequate depth of flow (nominally no less than 200mm) and velocities to reduce impacts associated with habitat severance and associated impacts on migratory fish (e.g. through the incorporation of fish pass baffles or a 2-stage culvert design). A smooth transition of flow to and from the culvert will be maintained which may require the need for construction of outlet pools.

There will be no on-going maintenance works within the channel so no on-going negative effects on the conservation status of the Insh Marshes populations of otter are predicted.

Deterioration in habitat quality during construction and operation of the scheme as a result in changes in hydrology and water quality

Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (though the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. There will be no significant changes to the existing groundwater or surface water conveyance. In any case, the Cairngorms SAC is upstream of the Proposed Scheme Options. Therefore, there will no effects on water quality or on the water table within the SAC during construction or operation.

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines^{vii} in relation to avoidance of pollution.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Otter
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, including range of genetic types for salmon, as a viable component of the site • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species 	No long-term LSE



<ul style="list-style-type: none"> • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species 	
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Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

- i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.*
- ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.*
- iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.*

It was concluded that there would be no LSE on the Cairngorms SAC qualifying species with respect to long-term, permanent effects or with short-term, temporary effects at the construction stage.
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STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features
--

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation:</i>	<i>Reason:</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.





DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	



Annex 10 - Loch Vaa SPA

ANNEX 10

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED¹² (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Loch Vaa SPA

Natura qualifying interest(s) & whether priority/non-priority:

Breeding Slavonian grebe

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species 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 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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

Name of competent authority:

Transport Scotland

¹² Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.



Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Loch Vaa SPA is 75m to the east of section 6a and 6b of the Proposed Scheme Options.

The three options are shown in relation to this SPA in Figure 11.7h. This figure shows that there are no significant differences in the distance of the Proposed Scheme Options from the SPA.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue: ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.

- If no for *all* features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is considered that the following issues could have an effect on this SPA:

- disturbance to Slavonian grebe within suitable breeding habitats within the SPA boundary, during construction;
- on-going disturbance to Slavonian grebe during operation.

The following theoretical issues have been considered and discounted as having no effects on the Loch Vaa SPA:

- loss of habitat as a result of construction;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects, as per the assessment in the Introduction to Stage 3 of this HRA.

Loss of habitat as a result of construction





No land take or excavation is required from within the Loch Vaa SPA, which is 75m from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the SPA. It is not considered that there is any functional land for these species within the Proposed Scheme Options, so there will be no loss of functional land as a result of any of the Proposed Scheme Options.

Deterioration in habitat quality during construction and operation of the scheme as a result in changes in hydrology and water quality

Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (though the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. There will be no significant changes to the existing groundwater or surface water conveyance. Therefore, there will no effects on water quality or on the water table within the Loch Vaa SPA during construction or operation.

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines^{vii} in relation to avoidance of pollution.

In-combination effects

It is not considered that there would be any cumulative effects in combination with the Tomatin to Moy scheme (to the north) due to the distance of the SPA from this scheme (15km). Loch Ashie SPA was considered in the Tomatin to Moy HRA and also has breeding Slavonian grebe as its qualifying feature. No LSE were predicted on this site due its distance from the Tomatin to Moy Preferred Scheme Options (9km). Therefore, if Slavonian grebes are displaced from Loch Vaa to Loch Ashie as a result of disturbance during construction, Loch Ashie will not be subject to disturbance.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Breeding Slavonian grebe
<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species 	<p>LSE – as a result of disturbance to breeding Slavonian grebe during construction and operation.</p>

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment



and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.

ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.

iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.

It was concluded that there is potential for short-term and long-term LSE associated with effects on breeding Slavonian grebe as a result of disturbance during construction and operation.

Disturbance to Slavonian grebe within suitable breeding habitats within the SPA boundary, during construction

This will depend on the distance of activities from breeding sites and the type of activity being carried out. Deleterious effects on birds of chronic noise exposure have been suggested to begin at levels as low as 55 - 60dB, although data on physiological effects are lacking. Based on literature available, the conclusions suggested that at 55dB (A), changes in bird behaviour are unlikely, whereas 70dB (A) could result in a flight response. It is not known at this stage whether these noise levels would be experienced by Slavonian grebes using the Loch Vaa SPA. The results of noise modelling will be used to determine likely significant effects. A review of disturbance^{ix} caused by human activity suggests that a buffer zone of between 150 and 300m would be needed to avoid effects of forestry activities on Slavonian grebe.

On-going disturbance to Slavonian grebe during operation

Studies indicate that forestry works within 150-300m could result in disturbance to breeding Slavonian grebe. Therefore, until noise modelling has been undertaken, it is not possible to be certain that on-going maintenance would not result in disturbance that would affect the conservation status of the populations of qualifying species.

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

YES.

The mitigation and modifications described below will be incorporated into the detailed design of the Preferred Option. These will be sufficient to limit any LSE risks to a level that supports a conclusion of 'No AESI' (Adverse Effect on Site Integrity) for the Loch Vaa SPA qualifying species and conservation objectives under consideration at this stage in the DMRB process.

This enables a conclusion of **No AESI** at DMRB Stage 2.

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.





Mitigation	Reason
Where there is breeding habitat that could be disturbed by construction, identify suitable seasonal working windows and/or use sound barriers to reduce noise to an acceptable level, as indicated by the results of the noise modelling.	Avoid disturbance at sensitive sites during construction.
Identify areas where construction compounds should not be located.	Avoid disturbance during construction.
Identify suitable seasonal working windows for standard maintenance measures and a suitable design for sound barriers for maintenance works that have to be undertaken during the breeding season.	Avoid disturbance during operation.

ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

<p>DMRB Stage 1</p> <p>SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.</p> <p>DMRB Stage 2</p> <p>SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.</p>

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

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When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	

Annex 11 – Slochd SAC

ANNEX 11

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED¹³ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Slochd SAC

Natura qualifying interest(s) & whether priority/non-priority:

Dry heaths (Annex I priority habitat)

Conservation objectives for qualifying interests:

To avoid deterioration of the qualifying habitat (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

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

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

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

¹³ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Slochd SAC is 240m to the north-east of section 11 of the Proposed Scheme Options.

The three options are shown in relation to this SAC in Figure 11.7i. This figure shows that there are no significant differences in the distance of the Proposed Scheme Options from the SAC.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue: ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

- If yes, or in cases of *doubt*, continue to stage 4.

- If potential significant effects can easily be avoided, record modifications required below.

- If no for *all* features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.

It is not considered that there are any elements of any of the options for the Proposed Scheme that are likely to give rise to likely significant impacts on the Slochd SAC.

The following theoretical issues have been considered and discounted as having no effects on the Slochd SAC (see below for justification of these decisions):

- loss of habitat as a result of construction;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects, as per the assessment in the Introduction to Stage 3 of this HRA.

Loss of habitat as a result of construction



No land take or excavation is required from within the Slochd SAC, which is 240m from the nearest Proposed Scheme Option. Therefore, there will be no reduction of habitat area from the SAC.

Deterioration in habitat quality during construction and operation of the scheme as a result in changes in hydrology and water quality

Drainage from land adjacent to the A9 will be retained via field drains under the road in order to maintain connectivity. Surface water drainage from the road will be kept separate from land drainage through the appropriate use of SuDS. All road run-off drainage will be attenuated and associated pollutants treated (though the use of SuDS) in order to address any flood risk issues and to protect water quality. Where possible, SuDS will also be designed to maximise their ecological value. There will be no significant changes to the existing groundwater or surface water conveyance and the Slochd SAC is upstream of the A9. Therefore, there will no effects on water quality or on the water table within the Slochd SAC during construction or operation.

General measures will be followed to avoid or alleviate negative impacts upon ecological receptors including following the pollution prevention guidelines^{vii} in relation to avoidance of pollution.

In-combination effects

It is not considered that there would be any cumulative effects in combination with the Tomatin to Moy scheme (to the north). The SAC is 2.2km from the Tomatin to Moy scheme and is not connected hydrologically to any of the Tomatin to Moy Proposed Scheme Options.

DMRB Stage 2 assessment against conservation objectives for each qualifying feature

Conservation objective	Dry heaths (Annex I priority habitat)
<p>To avoid deterioration of the habitats of the qualifying species 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 site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species 	<p>No LSE</p>

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)



The following points should be considered:

- i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.
- ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.
- iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.

No LSE have been identified for any of the qualifying features

STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<i>Mitigation</i>	<i>Reason</i>
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ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.





When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	



Annex 12 - Moray Firth pSPA

ANNEX 12

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED¹⁴ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Moray Firth pSPA

Natura qualifying interest(s) & whether priority/non-priority:

Wintering great northern diver, red throated diver and Slavonian grebe
Assemblage of migratory birds: greater scaup, common eider, long-tailed duck, common scoter, velvet scoter, common goldeneye, red-breasted merganser, European shag.

Conservation objectives for qualifying interests:

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained in the long-term and that it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.

This contribution will be achieved through delivering the following objectives for each of the site's qualifying features:

- Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term;
- To maintain the habitats and food resources of the qualifying features in favourable condition.

STAGE 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A9 Dualling Programme – Dalraddy to Slochd

Name of consultee:

AMJV

¹⁴ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.



Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

An overview of the scheme is provided in Section 1.1 of this report. The Moray Firth pSPA is approximately 25km to the north of the end of the Proposed Scheme Options.

STAGE 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

No

STAGE 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue:

ii) refer to other plans/projects with similar effects/other relevant evidence;

iii) consider the nature, scale, location, longevity, and reversibility of effects;

iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;

v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest

vi) give Yes/No conclusion for each interest.

*- If yes, or in cases of **doubt**, continue to stage 4.*

- If potential significant effects can easily be avoided, record modifications required below.

*- If **no** for **all** features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to stage 4.*

It is not considered that there are any elements of any of the options for the Proposed Scheme that are likely to give rise to likely significant impacts on the Moray Firth pSPA due to the distance of the pSPA from the Proposed Scheme Options.

There will be no:

- loss of habitat as a result of construction;
- disturbance to qualifying species during construction;
- on-going disturbance to qualifying species during operation;
- deterioration in habitat quality during construction and operation of the scheme as a result of changes in hydrology, including changes to the water table, flow, as a result of water and sedimentation run-off and as a result of discharges or accidental spills;
- in-combination effects, as per the assessment in the Introduction to Stage 3 of this HRA.



DMRB Stage 2 assessment against conservation objectives for each qualifying feature		
Conservation objective	Wintering great northern diver, red throated diver and Slavonian grebe	Assemblage of migratory birds
<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained in the long-term and that it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.</p> <p>This contribution will be achieved through delivering the following objectives for each of the site's qualifying features:</p> <ul style="list-style-type: none"> • Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term; • To maintain the habitats and food resources of the qualifying features in favourable condition. 	No LSE	No LSE

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

<i>Mitigation:</i>	<i>Reason:</i>
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STAGE 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.

ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.

iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.

No LSE have been identified for any of the qualifying features
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STAGE 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

No LSE have been identified for any of the qualifying features

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

Mitigation:

Reason:

ADVICE SOUGHT

Include here details of or clear reference to, advice sought from PAD staff, Natura team, Ops staff, Area colleagues etc. If no advice sought, give brief reasons/justification.

DMRB Stage 1

SNH were consulted on the A9 Dualling Programme-Level Habitats Regulations Appraisal (HRA) Appropriate Assessment. Relevant feedback provided at that stage was documented within Appendix C to the HRA Report (HRA/AA Correspondence)ⁱ.

DMRB Stage 2

SNH were invited to review and comment on the first draft of this DMRB Stage 2 HRA/AA through the A9 Dualling Programme Environment Steering Group (ESG) consultations. Comments have been used to update the document and finalise the assessment and advise the selection of preferred options.

CONCLUSION/ADVICE IN RELATION TO PLAN OR PROJECT

When SNH is the competent authority

In view of the appraisal above outline below whether the plan or project can be consented/approved/undertaken.

When SNH is advising the competent authority

In view of the appraisal above outline below the corresponding Natura model response position that will be used when advising the competent authority. Also include the response type from the Development Management and the Natural Heritage guidance as appropriate (see Development Management and the Natural Heritage, Annex 2, Table 1 and guidance in Annex 3 of the Natura Casework Guidance)

Natura model response position:

Enter the response from the appropriate model response type

Development management response type:

Enter the response type from the Development Management and the Natural Heritage guidance as appropriate

Appraised by	
Date	
Checked by	It is recommended that the proforma is checked by an appropriate member of staff e.g. the relevant Operations Manager, particularly when cases are complex or contentious, or where the appraiser is relatively inexperienced.
Date	

4. References

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- ⁱ Transport Scotland (2015) A9 Dualling Programme, Programme Level Appropriate Assessment
- ⁱⁱ Transport Scotland (2013) A9 Dualling Programme, Habitats Regulations Screening Report. Document reference: TSSEA9/HRA/2 Version: 1.2
- ⁱⁱⁱ Natura 2000 – Standard Data Form (2015) Special Areas of Conservation under the EC Habitats Directive. UK0019811 – River Spey. From <http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0019811.pdf> (accessed November 2015).
- ^{iv} Natura 2000 – Standard Data Form (2015) Special Protection Areas under the EC Birds Directive. UK9002231 – River Spey: Insh Marshes. From <http://jncc.defra.gov.uk/pdf/SPA/UK9002231.pdf> (accessed November 2015)
- ^v A9 Dualling Dalraddy to Slochd Stage 2 Scheme Assessment Report: Appendix A15.1 - Air Quality Assessment
- ^{vi} Boyack, S. and Robertson, J. H. (2001) River Crossings and Migratory Fish: Design Guidance
- ^{vii} http://www.netregs.org.uk/library_of_topics/pollution_prevention_guides.aspx (accessed November 2015)
- ^{viii} Wright, M.D., Goodman, P. and Cameron, T.C. (2010) Exploring behavioural responses of shorebirds to impulsive noise. *Wildfowl*, 60: 150 – 167.
- ^{ix} Ruddock, M. and Whitfield, D.P. (2007) A Review of Disturbance Distances in Selected Bird Species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage.
- ^x Marshall K (2005). For CNPA, FCS and SNH, Capercaillie and Recreational Disturbance Study.
- ^{xi} CH2M Hill, December 2014, Technical Memo, Habitats Regulations Appraisal – SNH Workshop, Ref 49528.AA.02/03/04.02
- ^{xii} RSPB Scotland, January 2016. Aspirational Habitat Creation for capercaillie.
- ^{xiii} A9 Dualling Dalraddy to Slochd Stage 2 Scheme Assessment Report; Appendix A15.1 Air Quality Assessment