

# **AGENDA ITEM 5**

## **APPENDIX 2**

**2020/0108/DET**

**HRA**

# Natura Appraisal Form

## 1a. Name of the Natura Site affected & current status

River Dee SAC

## 1b. Name of component SSSI if relevant

N/A

## 1c. European qualifying interest(s) & whether priority/non-priority

**River Dee SAC**  
Freshwater pearl mussel (*Margaritifera margaritifera*)  
Otter (*Lutra lutra*)  
Atlantic salmon (*Salmo salar*)

## 1d. Conservation objectives for qualifying interests

**River Dee SAC**

Otter (*Lutra lutra*)

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

- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species
- Population of the species as viable component of the site

Atlantic salmon (*Salmo salar*)

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

- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species

- No significant disturbance of the species
- Population of the species, including range of genetic types, as a viable component of the site

Freshwater pearl mussel (*Margaritifera margaritifera*)

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

- 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

## Proposal Details

### 2a. Proposal Title

2020/0108/DET Construction of a new single carriageway road and formation of access and erection of bridge, Gairnshiel. A939 Deeside – Tomintoul road.

<b>2b. Date consultation sent</b>	28/04/2020
<b>2c. Date consultation received</b>	28/04/2020
<b>2d. Name of consultee</b>	Hayley Wiswell (Conservation Officer)
<b>2e. Name of competent authority</b>	CNPA
<b>2f. Type of case</b>	Application for full planning permission
<b>2g. Details of proposed operation</b>	To replace the old Gairnshiel bridge with an alternative bridge in a new location downstream and new road layout

## APPRAISAL IN RELATION TO REGULATION 48

**3a. Is the operation directly connected with or necessary to conservation management of the site? YES/NO If YES give details:**

No.

*If yes and it can be demonstrated that the elements in 3b have been applied to all the interest features in a fully assessed and agreed management plan then consent can be issued but rationale must be provided, including reference to management objectives. If no, or if site has several European qualifying interests and operation is not directly connected with or necessary to the management of all of these then proceed to 3b.*

**3b. Is the operation likely to have significant effect on the qualifying interest? Consider each qualifying interest in relation to the conservation objectives.**

- i) indicate which feature of interest could be affected by the proposed operation and briefly in what way; if none provide a brief justification and then proceed to v), otherwise continue;*
- ii) refer to other plans/projects with similar effects/other relevant evidence;*
- iii) consider scale, longevity, and reversibility of effects;*
- iv) consider whether proposal contributes to cumulative or incremental impacts with other projects competed, underway or proposed;*
- v) give Yes/No conclusion for each interest.*

i) River Dee SAC: qualifying interests that could be affected are otter, freshwater pearl mussel and Atlantic salmon

ii) N/A

iii) The proposal is within a short section of the River Gairn, at Gairnshiel. Proposals are permanent, therefore any ongoing operational impacts would be permanent. Construction impacts would be temporary.

iv) N/A

v) The proposal is likely to have a significant effect on:

Otter: yes

Freshwater pearl mussel: yes

Atlantic salmon: yes

*If yes, or in cases of doubt, proceed to 3c. If potential significant effects can easily be avoided, go straight to 4 and record modifications required. If no for all features, a consent or non-objection response can be given and recorded under 6 (although if there are other features of national interest only, the effect on these should be considered separately).*

### **3c. Appraisal of the implications for the site in view of the site's conservation objectives.**

- i) Describe for each European qualifying interest the potential impacts of the proposed operation detailing which aspects of the proposal could impact upon them and their conservation objectives*
- ii) Evaluate the significance of 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. Record if any information or specialist advice has been obtained.*
- iii) In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. If SAC and/or SPA and/or Ramsar site give separate conclusions. If conditions or modifications are required, proceed to 4.*

#### **River Dee SAC : Conservation objectives**

##### Otter (*Lutra lutra*)

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:

- *Distribution of the species within site* – construction could lead to disturbance of individuals, temporarily displacing them from existing feeding areas/commuting routes
- *Distribution and extent of habitats supporting the species* - construction would lead to disturbance of habitat, resulting in temporary loss of existing feeding areas/commuting routes
- *Structure, function and supporting processes of habitats supporting the species* - construction would lead to disturbance of habitat, resulting in temporary loss of existing feeding areas/commuting routes. Pollution and siltation from construction or pollution events during construction could result in damage to supporting processes (foraging habitat) which support otter.
- *No significant disturbance of the species* - construction could lead to disturbance of individuals, temporarily displacing them from existing feeding areas/commuting routes. Without mitigation, construction could result in direct disturbance, injury or death to otter.
- *Population of the species as viable component of the site* - construction could lead to disturbance of individuals, temporarily displacing them from existing feeding areas/commuting routes which could affect relationships between individuals, potentially resulting in local impacts on breeding

An otter survey has been conducted as part of the application and no indication was found that otter are breeding within the site boundary or within 200m. Signs of otter were found on

the River Gairn within the red line boundary which indicated that otter are foraging and commuting along this section of the river.

No detailed mitigation has been proposed with regard to otter that would allow the conservation objectives of the site to be met, therefore there could be an adverse effect on site integrity.

#### Atlantic salmon (*Salmo salar*)

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:

- *Distribution of the species within site* – pollution (fuel leaks) and siltation events could lead to poisoning and/or suffocation of fish (juvenile fish are particularly vulnerable) and therefore changing the distribution of fish in the river by displacing some fish or causing local fish deaths. Siltation events could smother salmon redds and juvenile habitat, resulting in local loss of habitat. Machinery entering the river could damage key habitat, resulting in local habitat loss and associated displacement of fish from the local area.
- *Distribution and extent of habitats supporting the species* – Siltation and pollution (fuel leak) events could smother salmon redds and juvenile habitat, resulting in local loss of habitat. Machinery entering the river could damage key habitat, resulting in local habitat loss.
- *Structure, function and supporting processes of habitats supporting the species* - Siltation events and machinery entering and crossing the river could smother salmon redds and juvenile habitat, resulting in local loss of habitat that allow fish to breed in the river.
- *No significant disturbance of the species* – pollution events, siltation and machinery entering and crossing the river could all directly disturb individual fish.
- *Population of the species, including range of genetic types, as a viable component of the site* – the disturbance and habitat loss detailed above could reduce the success rate of breeding in this part of the River Gairn, affecting the genetic viability of the local population, and subsequently the River Dee population.

No detailed survey of potential fish habitat has been provided. The River Gairn is known to be important as a breeding area for salmon and is used by juvenile fish. Without survey work the impact on this species cannot be fully understood and mitigated for.

No detailed mitigation has been proposed with regard to fish that would allow the conservation objectives of the site to be met, therefore there could be an adverse effect on site integrity.

#### Freshwater pearl mussel (*Margaritifera margaritifera*)

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:

- *Distribution of the species within site* - pollution and siltation events could lead to suffocation of mussels and therefore changing the distribution of mussels in the river by causing localised deaths. Siltation events could smother mussel beds, resulting in local loss of beds. Fuel leaks entering the river could poison and kill mussels. Machinery entering the river could damage mussel beds, resulting in local habitat loss and associated loss of mussels from local area.
- *Distribution and extent of habitats supporting the species* - Siltation events could smother mussel beds, resulting in local loss of beds. Machinery entering the river could damage mussel beds and suitable habitat resulting in local habitat loss.
- *Structure, function and supporting processes of habitats supporting the species* - Siltation events could smother mussel beds, resulting in local loss of beds and suitable habitat. Machinery entering the river could damage mussel beds and suitable habitat resulting in local habitat loss.
- *No significant disturbance of the species* – disturbance could occur through smothering by siltation, poisoning from fuel leaks, direct impacts from machinery or trampling by visitors and construction personnel.
- *Distribution and viability of freshwater pearl mussel host species* – distribution of salmon could be impacted through direct disturbance or through suffocation/poisoning from pollution events. Siltation could smother salmon redds or suffocate juvenile fish. Machinery could trample redds or juvenile habitat.
- *Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species* - Siltation could smother salmon redds or suffocate juvenile fish. Machinery could trample redds or juvenile habitat.

No detailed survey for fresh water pearl mussel beds has been provided. An assessment of river habitat has been provided as part of an ecological appraisal and this considers that habitat within the red line boundary and upstream and downstream of the proposals to be suitable for supporting fresh water pearl mussel beds. The mussel's host, Atlantic salmon, is known to use this river.

A project to reintroduce fresh water pearl mussel to the River Gairn took place in 2005-2007, including locations within the proposal area. Small numbers of individuals were found to have survived as recently as 2015 but there are some distance downstream of the proposal area. Habitat in the Gairn has changed since the reintroduction attempt and is now considered less suitable, making presence of fresh water pearl mussel within the proposal area less likely. However any run-off from the site could impact fresh water pearl mussels downstream of the proposal.

No detailed mitigation has been proposed with regard to fresh water pearl mussel that would allow the conservation objectives of the site to be met, therefore there could be an adverse effect on site integrity.

#### **4. Conditions or modifications required.**

*Indicate conditions/modifications required to ensure adverse effects are avoided, & reasons for these.*

An outline Construction Method Statement has stated that no works will take place within the river and that necessary measures will be taken to prevent pollution of the watercourse.

Assuming that there will be no works within the watercourse, direct impacts on in-stream habitats will be avoided during construction. A detailed Construction Method Statement is required to detail measures undertaken to allow works to proceed without entering the river, and how impacts to in-river habitats through pollution (fuel leaks, siltation, run-off) will be prevented.

The following information is required as **suspensive planning conditions**:

- A detailed Construction Method Statement will be required as mitigation for any impacts on qualifying features.
- Details of drainage and run-off capture during operation of the new bridge and road layout that prevents pollution entering the watercourse. To follow current SEPA good practice guidelines.

The Construction Method Statement is required to address the following effects:

- Disturbance to salmon and otter
- Sediment run-off leading to suffocation of fish and mussels and smothering of river bed
- Fuel run-off leading to poisoning of fish, mussels and otter
- Accidental trapping and injury to otter

The Construction Method Statement must include presence of an Ecological Clerk of Works to oversee all works beside the river and to check necessary pollution prevention measures are in place.

Further detail on drainage during operation is required which address the following effects:

- Pollution of the watercourse during operation of bridge and road, leading to poisoning of fish, mussels and otter

**If for any reason construction of the proposal requires works in-stream, all works must stop and a full survey of in-river habitats will be required:**

- A detailed freshwater ecology survey must be provided which includes searches for freshwater pearl mussels and maps the habitats for salmon (highlighting the location of any salmon redds). The survey must include habitat upstream of the old bridge (to 100m) and downstream of the proposed bridge (to 500m). This will allow the most sensitive habitats to be mapped and avoided during construction.



## 5. Advice sought.

*Include here details of or clear reference to, advice sought from AS, colleagues etc. If no advice sought give brief reasons/justification*

Records sought of fresh water pearl mussel and salmon from SNH and Dee District Salmon Fishery Board.

Advice sought from Edwin Third, Operations Manager at Dee District Salmon Fishery Board

Advice sought from fresh water pearl mussel ecologist Peter Cosgrove.

Response on draft HRA provided by Isla Martin, Operations Officer, SNH on 24/06/2020

## 6. RESPONSE

**a) Natura comments (for additional guidance see Development Management and Natural Heritage, section 8, or the Natura Model Responses (in the Natura Casework Guidance) for all other Natura casework)**

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