

River South Esk Special Area of Conservation (SAC)

Advice to planning applicants



Advice to planning applicants when considering new proposals which could affect the River South Esk Special Area of Conservation

This guidance aims to assist you when you are considering submitting a planning application for a development which may affect the River South Esk Special Area of Conservation (SAC).

It provides advice on the types of appropriate information and safeguards to provide in support of your planning application so that it can be properly and timeously assessed, and includes:

- An explanation of planning authorities' obligations when evaluating planning applications including permitted development
- Information on the qualifying interests of the designation which may be affected;
- Advice on the nature of developments that may affect the River South Esk SAC; and
- Examples of information which you need to submit with your planning application.

Other considerations

This guidance is specifically for the River South Esk SAC and the 'qualifying' interests associated with this designation. However, there may be other natural heritage interests such as protected species affected by development proposals which you will also need to consider. Further information is available in the Scottish Planning Policy: <http://www.scotland.gov.uk/Publications/2010/02/03132605/0>

Additional authorisation from SEPA will be required for many development activities adjacent to, and in the vicinity of watercourses under The Water Environment (Controlled Activities) (Scotland) Regulations 2005. A higher level of licence protection may be required for activities that may impact on the River South Esk SAC, such as engineering works in inland waters, water abstraction, impoundment and diversion, or discharge to land and water. Any such authorisation will also need to first consider the effects on the SAC. Contact with SEPA's local regulatory team in the Arbroath office is advised before an application is submitted. Details on all these activities are available via the following links: http://www.sepa.org.uk/water/water_publications.aspx

Information on CAR licence requirements: http://www.sepa.org.uk/customer_information/water.aspx

Activities should also ensure compliance with SEPA's Pollution Prevention Guidelines, available at: http://www.sepa.org.uk/water/groundwater/policy_legislation_guidance/planning.aspx

Examples of polluting activities are point source pollution (e.g. from private sewerage outlets), diffuse source pollution (e.g. water bound roads and tracks) and surface water drainage.



Why is the River South Esk so important?

The River South Esk has the highest wildlife accolade as it is designated as a SAC and is part of the Natura 2000 network – a series of internationally important wildlife sites throughout the European Union. The qualifying interests for which the site is designated are **Atlantic salmon** and **freshwater pearl mussel**.

Planning authorities' obligations

The European legislation under which sites are selected as SACs is the Habitats Directive. This sets out obligations on Member States to take appropriate steps to avoid "the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant. These obligations relate to 'Competent Authorities' such as Planning Authorities.

Because of this, Angus Council as a Planning Authority can only agree to development proposals which are unconnected with the nature conservation management of the site after having ascertained that they will not adversely affect the integrity of the site.

If this is not the case and there are no alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest.

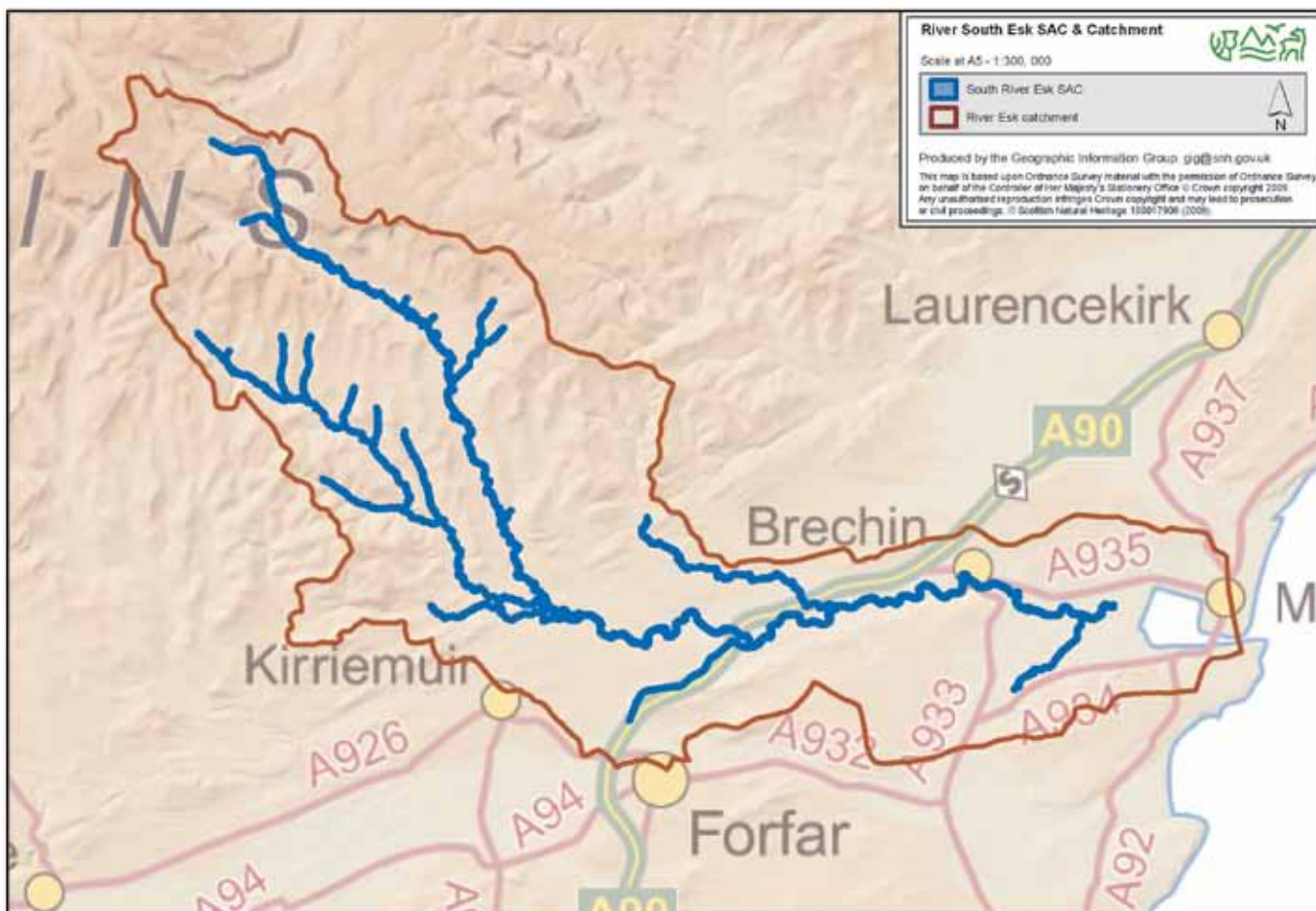
Any 'permitted development' likely to have an adverse effect on the River South Esk SAC will also need planning permission.

To assist you in the planning process it is useful to consider the following:

Does your proposed development lie within the river catchment?

* Please note that the boundary of the SAC is not just the River South Esk, but includes its tributaries.

If your proposed development lies in the catchment of the River South Esk SAC as shown in the map, you need to consider whether it has the potential to affect the River South Esk SAC's qualifying interests i.e. Atlantic salmon and freshwater pearl mussels. Developments outwith the actual SAC site but within the river catchment (such as those upstream of the SAC) need to be considered because by their nature, freshwater sites have the potential to be affected by management activities occurring outwith their boundary.



The 'qualifying interests' of the River South Esk SAC

Atlantic salmon

Salmon are found throughout the River South Esk SAC site. Salmon require high quality water, and any reduction in water quality as a result of a development could be significant. In the short-term, sediment released into the watercourse from construction work can be detrimental to salmon, resulting in the gills being smothered, or their passage upstream impeded. Sediment can also smother the gravels used by spawning salmon or areas used by juvenile fish, making them unsuitable. In addition, any discharge points could raise pollution levels in the river.

There is also a possible risk of contamination of the watercourses from the fuel and chemicals used on site, or in the longer term, pollution from the drainage system.

Freshwater pearl mussels

The freshwater pearl mussel is one of Scotland's most endangered species. Recent estimates are that Scotland holds some of the world's most significant known remaining breeding populations, and the South Esk has one of the largest populations of freshwater pearl mussels in the world.





Based on current knowledge, freshwater pearl mussels are present throughout the main stem of the South Esk, from Glen Doll to as far downstream as the limit of saline influence at Bridge of Dun. Their distribution mirrors those parts of the river where salmon have had historical access to – the young larva released by female pearl mussels depend on being inhaled by young salmon or trout to attach themselves to their gills for survival. The larvae will remain attached to the fish for almost a year before dropping off in spring or summer to bury themselves in the river bed. The most suitable habitat for pearl mussels is fine gravel or coarse sand where they can live for up to 100 years, reaching sexual maturity after 12-15 years.

As pearl mussels are filter feeders and pass considerable amounts of water through their digestive system, they are very vulnerable to water pollution, for example even slight increases in nutrients including phosphorus. They require fast flowing, well oxygenated water. Juvenile pearl mussels are particularly vulnerable to any reduction in water quality as they tend to live entirely buried within the river substrate, therefore they could be affected by sediment loads and untreated washings entering the river.

Why is there a need on the South Esk to take extra measures to protect the freshwater pearl mussels in particular?

Research by Scottish Natural Heritage in 2005 showed that the condition of pearl mussels in the South Esk is classed as 'unfavourable' due to the low densities, lack of juveniles and poor water quality.

The report identified the different sources of phosphorus entering the river. It showed that the major contributor is agriculture, but waste water treatment plant and septic

tanks discharges make a significant contribution to phosphorus loadings downstream from Brechin.

Freshwater pearl mussels have a tolerance threshold of 0.03mg/l for soluble reactive phosphorus (SRP). Any increase in phosphorus levels can cause large dips in oxygen, which puts the mussels under stress. Recent results indicate that phosphorus levels in parts of the lower reaches of the river (i.e. downstream of Brechin) are very close to the 0.03 mg/l tolerance threshold, therefore development in the catchment can have an adverse effect downstream which may lead to the threshold being exceeded.

Incidents of high levels of suspended solids have also been recorded. If large amounts of soil are washed into the river from development site, they can settle over a pearl mussel colony. This could smother the pearl mussel beds, causing them to suffocate.

Is your development likely to affect these interests?

Angus Council as a Planning Authority will need to establish if your proposal is likely to have a significant effect on the qualifying interests of the SAC.

The following section will help establish this and then if so, what supporting information needs to be submitted with your planning application so that it can be properly assessed.

You should consider the nature of the development proposed and the potential direct and indirect impacts on the qualifying interests of the River South Esk SAC in order to determine the information that will be needed.

The threshold for impacts from development can be very low and you should take a precautionary approach if you are unsure.

Examples of proposals likely to have a significant effect are:

- A residential or commercial development that will not link to the mains sewerage system and therefore will increase direct or diffuse sewerage discharges. This may result in an increase in nutrients above acceptable thresholds, particularly (but not necessarily exclusively) where it discharges to water.
- Any proposal that will involve diverting the river or its tributaries, or bank regrading work is likely to result in an increase in sediments downstream of the development and may affect the flow rate of the river.
- Dredging, gravel extraction or the installation of temporary or permanent structures within the river channel will affect the substrate of the river bed and may damage or destroy pearl mussels and their habitat, or salmon spawning beds.



The checklist below should help you establish whether your proposal is likely to have a significant effect and whether further information needs to be submitted with the planning application:

Potential impacts from development on the River South Esk SAC		Tick if likely
Direct impacts		
Will salmon or freshwater pearl mussels be damaged, destroyed, or disturbed?		
Will any of their habitat be altered or lost to any extent as a result of the proposal? (e.g. by construction, vehicular access, excavation of habitat, pollution or trampling)		
Indirect impacts		
These could affect any aspect of the ecological requirements of individual freshwater species and habitats to any extent and include:		
River flow	Are there any proposed alterations to the banks or river bed? (including set-back flood embankments, diversions)	
	Will the quantity of water be affected? (e.g. by abstraction, discharge, or impoundment)	
	Are drainage patterns to be altered?	
Channel substrate	Will sediments in and around the river be moved, exposed, or consolidated?	
	Would proposed changes in land management alter the amount of fine sediment reaching the channel?	
Water quality in running and standing water	Will there be any discharge directly/indirectly to the river? (e.g. sewage or effluent discharge, fertiliser or pesticide treatment)	
	Is there additional risk of accidental pollution? (e.g. oil tanks, slurry tanks)	

Further information required

If you have ticked any of the above questions, you may be required to submit further information with your planning application.

Information required will depend on the type, scale and location of the development. Guidance prior to submitting an application can be obtained from Angus Council, SEPA or SNH.

If this information is provided with the planning application when it is submitted then the decision making process can be quicker. Often SNH, as statutory consultee, has to put in a holding objection to an application due to lack of supporting information or safeguards/undertakings which if supplied, could provide reassurance that a detrimental impact on the wildlife interest can be avoided.



Key information normally required

1. **A Construction Method Statement (CMS)** which should include:

- pollution prevention safeguards, including drainage arrangements and the possible use and capacity of siltation traps, settlement tanks, and bunds;
- storage and disposal of materials, including the siting of stock piles, use of buffer strips and disposal methods;
- construction site facilities, including extent and location of construction site huts, vehicle equipment, and materials compound;
- timing, duration and phasing of construction, particularly in relation to salmon migration/spawning and avoidance of periods of seasonally highest rainfall to sensitive elements of construction.

Please see Annex A for detailed information on the CMS.

2. **Details of surface water discharges**, for example Sustainable Urban Drainage Systems.

3. **Sewage treatment arrangements**

- Water quality needs to be maintained below 0.03mg/l SRP anywhere in the river. The threshold for this is already close to being breached downstream of Brechin, therefore any development upstream in the catchment can have an adverse effect downstream which may lead to the SRP threshold being exceeded.
- If it is not proposed to link the development to the mains sewage system, it needs to be demonstrated that the discharge will not result in the 0.03mg/l SRP threshold being breached.
- It should be demonstrated that sediment entering the river that could affect freshwater pearl mussel populations can be avoided.

4. **Locations of any outfalls, details of timing and the method of installation** should be provided with the application including the relevant Construction Method Statement (see 1 above).

5. **For any work within the river channel, it may be necessary to undertake a freshwater pearl mussel survey.** SNH can provide advice on whether a freshwater pearl mussel survey is required and has prepared guidance on survey requirements for freshwater pearl mussels:

<http://www.snh.gov.uk/docs/A372955.pdf>

6. **Further information** may need to be provided on other habitats and species in the immediate vicinity in support of your application (e.g. water voles, bats and otters). The planning authority or SNH can advise on further surveys required.

There may also be a requirement for additional information depending on the nature of the development.

Further details

More information on the River South Esk SAC including its conservation objectives can be found on the SNH website via SiteLink: http://gateway.snh.gov.uk/portal/page?_pageid=53,910305,53_910314&_dad=portal&_schema=PORTAL&PA_CODE=8364&NEW_WINDOW=false

SNH, SEPA and Angus Council are working closely to protect the interests of the River South Esk SAC, and are happy to assist you where required in submitting your application, including pre-application discussion.

Contacts

Angus Council

www.angus.gov.uk

Development management, County Buildings, Market Street, Forfar, Angus DD8 3LG

planning@angus.gov.uk

Scottish Environment Protection Agency

www.sepa.org.uk

SEPA planning service (planning application input)

planning.perth@sepa.org.uk

SEPA local regulatory team (regarding authorisations)

DL-dundeeandangus@sepa.org.uk

Scottish Natural Heritage

www.snh.gov.uk

West Lodge, Airlie, by Kirriemuir, Angus DD8 5NP

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Tayside_Grampian@snh.gov.uk



Annex A

Construction Method Statement Guidance

River South Esk Special Area of Conservation (SAC)

A detailed Construction Method Statement (CMS) should be agreed between you as the applicant and the planning authority (Angus Council) giving details of measures to prevent harmful materials entering the River South Esk Special Area of Conservation (SAC). It is important to note that works outwith the boundary of the SAC may have an impact on the SAC, particularly those affecting tributaries.

The CMS should comprise a text statement with information about the construction works and details of the sediment control measures to be taken on site, accompanied by a map identifying the specific locations of measures to be taken. The aim of the CMS is to produce a simple short document and map that contractors can use on site.

Tables 1 and 2 provide a list of requirements for all locations, and suggested additional sediment control methods, which in combination may form the basis of a

Construction Method Statement. This list is not exhaustive and further measures may be required depending on the location, nature and scale of works proposed. For some locations, only a few of the additional measures may be applicable.

Angus Council as the 'competent authority' will assess which measures are required for each individual planning application. References that you may find useful in making this assessment are listed below.

Useful References

Although targeted at forestry operations, you may wish to refer to the "Forests and Water Guidelines" (2003) published by the Forestry Commission for good working practice around watercourses, available to download free of charge from [http://www.forestryresearch.gov.uk/PDF/fcgl002.pdf/\\$FILE/fcgl002.pdf](http://www.forestryresearch.gov.uk/PDF/fcgl002.pdf/$FILE/fcgl002.pdf)

Another useful source of information is the netregs website, in particular the construction pollution prevention guidelines which can be found on the netregs website via http://www.netregs.gov.uk/netregs/resources/278006/278095/?version=1&lang=_e

Advice from SEPA may also be necessary.

Table 1 – General Information Required and Principles to be Applied to ALL Locations

Requirement	Reason
Timing of Works – information should be given about the timing, duration and phasing of construction, particularly in relation to salmon migration/spawning times (migration and spawning is usually October – February, hatching and emergence February – May, inclusive).	For optimum sediment control, and to avoid disturbance to SAC species
Boundary – the boundary of the site should be clearly marked and no works or storage permitted outwith the boundary.	To contain the area of works so as to reduce risk of accidental impact on SAC
Site Facilities – information should be given about the extent and location of construction site huts, vehicle equipment, etc, and materials compound including details of any chemicals and/or fuels to be used/stored on site.	To contain the area of works so as to reduce risk of accidental impact on SAC, and to avoid chemical/fuel spills reaching SAC
Wet Weather – no construction or ground disturbance works should take place during or immediately following wet weather. This includes vehicle movements likely to churn up the ground and expose soil.	To prevent excess ground disturbance and sediment release that usually occurs in wet conditions
Sediment Trapping – bunds, straw bales or another suitable sediment trapping barriers (e.g. oil spill booms) should be placed along the boundary of the site nearest the watercourse.	For sediment control by preventing sediment reaching the watercourse.
Site Drainage – any drainage created on site must not directly enter the watercourse. Settlement ponds/silt traps should be used prior to drainage reaching the watercourse (see also 'Sediment Trapping' above and 'Removal of Water From Excavations' in Table 2).	For sediment control by preventing sediment reaching the watercourse

Table 2 – Other Measures to be Included Depending on Size/Location of Works

Sediment Control Measure	Reason
<p>Working Alongside Watercourses – where works entail working alongside watercourses, works should be done in parallel to the watercourse, with a buffer strip of no works running along the waters edge (see “Watercourse Buffer Strips” below)</p>	<p>For sediment control (to prevent direct run-off into the watercourse), and to avoid disturbance to watercourse and SAC species</p>
<p>Watercourse Buffer Strips – water courses should have buffer strips retained where no works and no vehicle movements take place. For small watercourses, a buffer strip of 5 metres on each side is advised. For larger burns/watercourses, a buffer strip of 10 metres is advised.</p>	<p>For sediment control as the buffers will act as a silt trap reducing the amount reaching the SAC, and to avoid disturbance to watercourse and SAC species</p>
<p>Watercourse Crossings – no crossings to take place within 200 metres of a freshwater pearl mussel bed or salmon spawning grounds. In other locations, watercourses which do not have bridges across them should not be driven through by vehicles. Where crossings are unavoidable and where practical, temporary bridges should be created (with no parts in the watercourse) to keep vehicles out of the watercourse. Where this is impossible, the crossing point(s) should be as few as is practical, should be clearly marked and vehicle movements kept to a minimum. Sediment traps (see ‘Sediment Trapping’ in Table 1) should be used across small watercourses downstream of crossing points where it is unavoidable that these will be crossed by vehicles. <i>The use of culverts when constructing any river crossings is generally discouraged and there is a presumption against culverting for land gain.</i></p>	<p>To reduce disturbance to the ground and watercourse, and prevent sediment release into the watercourse</p>
<p>Vehicle Movements Across Wet Areas – where vehicle movements are required across wet areas, the ground should be protected by using matting or other suitable measures (e.g. brash mats, wooden boards, etc) to prevent the ground from being churned up. <i>Vehicle movement should be kept to a minimum and limited to one or two areas.</i></p>	<p>To prevent excess ground disturbance and sediment release that usually occurs in wet conditions</p>
<p>Roads/Access roads – roads should be brushed regularly (and particularly after wheel-washing) and kept free from dust and mud.</p>	<p>To prevent sediment release into the watercourse</p>
<p>Wheel Washing – wheel washing of vehicles should take place at the furthest point from the watercourse as is practical. Care must be taken that run-off from wheel washing does not enter the watercourse.</p>	<p>To prevent sediment release into the watercourse</p>
<p>Exposed Embankments/Earth – where possible, stripped turfs should be carefully stored to ensure the vegetation survives, and used to surface any exposed embankments/earth once works are complete.</p>	<p>To reduce volume of sediment exposed (and therefore reducing risk of sediment reaching watercourse)</p>
<p>Topsoil Stripping – in order to minimise the area of exposed ground at any one time, a general topsoil stripping of the whole area should be avoided. Instead, localised strips should be taken as required.</p>	<p>To reduce volume of sediment exposed (and therefore reducing risk of sediment reaching watercourse)</p>
<p>Soil Stockpile – the works should be programmed such that the volume of soil stockpiled at any given time is kept to a minimum. All stockpiles should be located as far away from the watercourse as practical, and should be kept covered. <i>Non-native invasive species are present in the South Esk catchment, and measures should be put in place to avoid the spread of these through plant remains or seed.</i></p>	<p>To reduce volume of sediment exposed (and therefore reducing risk of sediment reaching watercourse)</p>
<p>Removal of Water From Excavations – if required, a sump should be formed in the corner of the excavation and water pumped out at a low rate to a temporary settlement basin. Once settlement has occurred, clean water from the settlement basin should be allowed to slowly flow over vegetated land into the watercourse.</p>	<p>To prevent sediment from excavations reaching the watercourse</p>

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