

Scottish Natural Heritage

River Tay Special Area of Conservation (SAC)

Advice to developers when considering new projects which could affect the River Tay Special Area of Conservation.



Advice to developers when considering new projects which could affect the River Tay Special Area of Conservation.

Our aim is to advise you on the types of appropriate information and safeguards to provide in support of your planning application so as to assist the planning process.

Why is the River Tay SAC so important?

The River Tay Special Area of Conservation (SAC) has the highest wildlife accolade as part of the Natura 2000 network – a series of internationally important wildlife sites throughout Europe.

This guidance aims to assist developers when submitting planning applications which may affect the River Tay Special Area of Conservation (SAC).

It provides:

- an explanation of Perth and Kinross Council's obligations as a Planning Authority
- information on the special interests of the designation which may be affected
- advice on the nature of developments which may affect the River Tay SAC
- examples of information which need to be included with the planning application.

Although this guidance is for the River Tay SAC and the specific ('qualifying') interests associated with this designation, there may be other natural heritage interests affected by development proposals which also need to be considered. Further information is available in NPPG 14 "Natural Heritage"

www.scotland.gov.uk/Publications/1999/01/nppg14

Planning authorities' obligations

The European legislation under which sites are selected as SACs is the Habitats Directive, which 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 Perth and Kinross Council as a Planning Authority.

Because of this, the 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 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 over-riding public interest.



What are the special interests of the River Tay SAC?

The River Tay SAC is designated as a Natura 2000 site for Atlantic salmon, sea lamprey, river lamprey, brook lamprey, clear-water lochs and otters. It is also important for freshwater pearl mussel which is a protected species.

Salmon and lamprey

Salmon are found throughout the Tay SAC site and sea, river and brook lamprey are also widespread, although sea and river lamprey, which are migratory, can not get into the Tummel system above Faskally dam or probably above medium sized waterfalls on the Lochay, Ericht and Dochart. The Tay is likely to support one of the most important sea lamprey populations in Scotland. Salmon and lamprey both require high quality water, therefore any reduction in water quality as a result of a proposal could be significant. In the short-term, if sediment is released into the watercourses during construction, this could result in the gills of salmon or lamprey being smothered, or their upstream passage impeded. It can also smother the gravels used for spawning salmon and lamprey or the areas used by juvenile fish, making them unsuitable.

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.

Otters

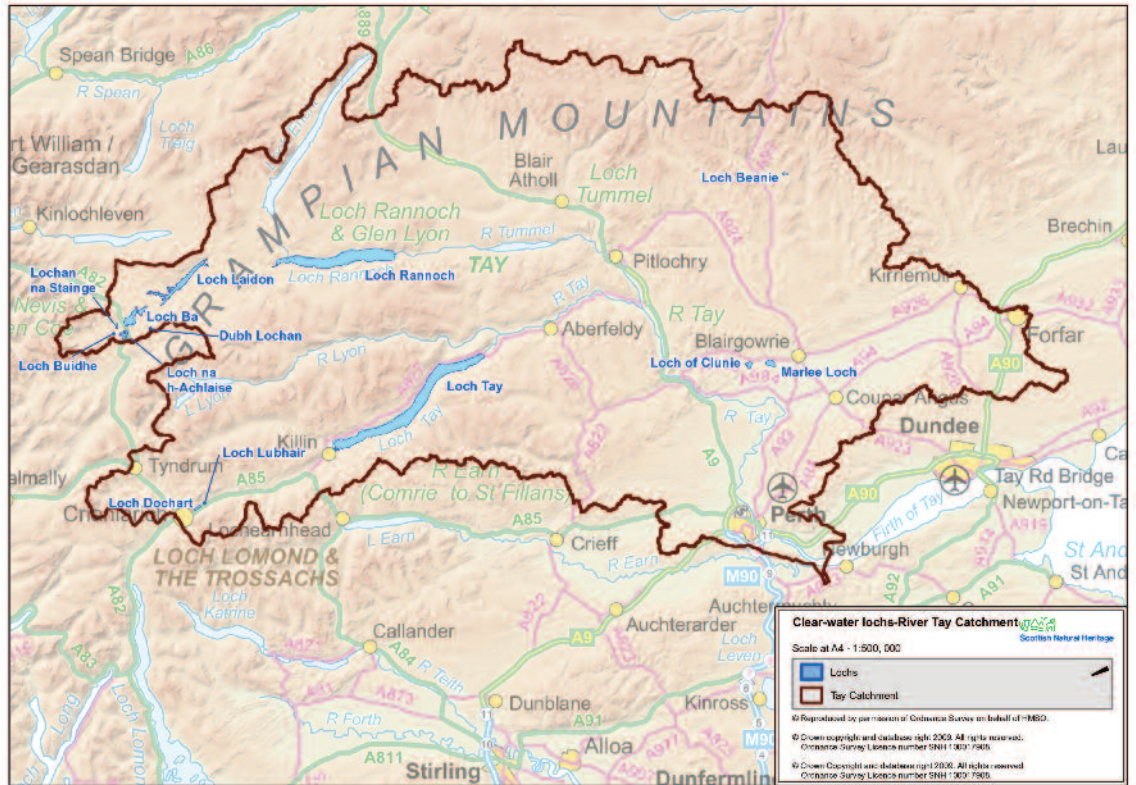
A healthy population of otters is present throughout the River Tay and its tributaries. Otters depend on an abundance of food supply such as eels, lamprey, salmon, trout and frogs, normally associated with a high water quality. If the otter's food supply is depleted due to pollution or degradation of their habitat, then the number of otters along stretches of river will reduce. In addition otters need suitable habitat such as vegetated riverbank, reed bed, woodland and islands for foraging, breeding and resting places. They need quiet conditions and can be prone to disturbance, resulting in them deserting an area.



Clear-water lochs

These nutrient-poor to moderately nutrient-rich lochs have clear water free from a significant sediment load. The quantity of sediment entering the loch should be minimised as increased sediment can lead to enrichment, smothering of the bed of the loch and excessive growth of algae.

The location of clear water lochs within the catchment of the River Tay is shown on the map below:



Clear-water lochs within the River Tay catchment	Associated river:
Loch Tay	River Tay
Loch Lubhair	River Dochart
Loch Dochart	
Loch Rannoch	
Loch Laidon	River Tummel
Dubh Lochan	
Loch Buidhe	River Ba
Loch n h Achlaise	
Lochan na Stainge	
Loch Ba	Shee Water (north of Black Water)
Loch Beanie	
Maree Loch	Lunan Burn
Loch of Clunie	

Freshwater pearl mussels

Freshwater pearl mussels are one of Scotland's most endangered species and are present throughout the River Tay SAC. Recent estimates are that Scotland holds approximately two thirds of the world's known remaining functional populations. They can be found throughout those parts of the site where salmon have had historical access – the young larva released by female pearl mussels depend on being inhaled by young salmon or trout and attach themselves to their gills for survival. As pearl mussels are filter feeders and pass considerable amounts of water through their digestive system, they are very vulnerable to water pollution. Juvenile pearl mussels, in particular, are 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.

Freshwater pearl mussels have a tolerance threshold of 0.03mg/l for soluble reactive phosphorus, therefore any increase in phosphorus levels could cause large dips in oxygen, which puts the mussels under stress. If large amounts of soil or other material are washed into the river from a development site, or an outfall is located close to freshwater pearl mussel beds, this could smother the freshwater pearl mussels, causing them to suffocate.



Is your development likely to affect these interests?

Perth and Kinross Council as a Planning Authority will need to establish if your proposal is likely to have a significant effect on the special interests of the SAC.

The following section will help you and the Planning Authority establish this and then if so, what further information needs to be submitted with the planning application so that the Authority, and SNH as their statutory consultee, can properly assess it.

You should consider the nature of the development proposed and the potential direct and indirect impacts on the special wildlife interests of the River Tay SAC.

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.
- 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. SNH has produced specific guidance for gravel extraction on the River Tay.



The following checklist 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 Tay SAC	YES/NO
Direct impacts:	
Will salmon, lamprey, otters, freshwater pearl mussels and clear water lochs be damaged, destroyed or disturbed?	
Will any of the habitat of lamprey, otters, freshwater pearl mussels and clear water lochs 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:	
Will the development affect the flow?	
Will the velocity be changed or the flow diverted?	
Will the quantity of water be affected? e.g. by abstraction, increase or impoundment.	
Will the flow regime change so that the river level rises or falls more quickly? (e.g. through the effects of drainage on adjacent land).	
Will summer flows be changed (altering water temperatures and oxygen levels) or will winter floods be altered? (e.g. through construction of embankments).	
Channel substrate:	
Will the plan or project affect the substrate?	
Will there be physical damage/disturbance to the habitat structure?	
Will the diversity of channel morphology be reduced? (e.g. bank or bed destabilisation).	
Will the plan or project affect the river sediments such as sand, gravel, cobbles and boulders? (e.g. through more sediment being added or removed).	
Will the plan or project lead to changes in the nature of river bed sediments? (e.g. changes in land management altering the amount of fine sediment reaching the channel).	
Water quality in running and standing water:	
Will the development affect water quality?	
Will the development result in increased sewerage input?	
Will oxygen levels be altered? (e.g. through nutrient input).	
Will the water chemistry be changed? (e.g. through runoff from land-based activities, disposal to land, effluent discharge, pesticide treatments).	
Is there additional risk of accidental pollution?	
Will the development increase the water turbidity?	
Will water temperature be changed?	
Loch hydrology:	
Will the development change the hydrology of the loch?	
Will general loch levels change? (e.g. through abstraction).	
Will there be frequent change in the loch levels through drawdown and recharge?	
Will the inflow or outflow of the loch be changed altering the flushing rate of the loch?	
Will there be a change in the seasonal variability in loch levels?	

If you have answered 'Yes' to any of the above questions, you may be required to submit further information.

Please note that additional authorisation for development activities adjacent to, and in the vicinity of watercourses may be required 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 Tay SAC, such as engineering works in inland waters, or water abstraction, impoundment or discharge to land and water.

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.



Further information you may be required to supply with your planning application

Information required will depend on the nature, scale, location etc of the development. Guidance prior to submitting your application can be obtained from the Planning Authority 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 provided, could reassure us that a detrimental impact on the wildlife interest can be avoided.

Some examples of additional information required include:

1. **A Construction Method Statement** which should include:
 - **pollution prevention safeguards**, including drainage arrangements and the possible use 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 and lamprey migration/spawning;
2. **Sewerage treatment arrangements.** If the development proposal will not link to the mains sewerage system, demonstration that the potential impact on water quality and the associated salmon and lamprey will not adversely affect the integrity of the SAC. Evidence should be submitted that the proposal is appropriately designed so there will be no deterioration in water quality.
3. **Locations of outfalls** to be provided with the application and details of timing and method of installation.
4. Any available **information on important habitats and species** in the immediate vicinity.
5. **Further wildlife surveys** in support of your application may be necessary. SNH can advise on this. Freshwater pearl mussel records are confidential due to the ongoing threat from pearl fishermen, therefore SNH can provide advice to the developer on whether a freshwater pearl mussel survey is required.
6. An undertaking to provide a **riverine buffer strip** of approximately 10m from the river bank to the edge of the development ground to reduce disturbance to otters foraging along a riverbank.
7. **Proximity of otter holts and resting places** – Otters are “European Protected Species” which means that special protection is given to them and makes it an offence to damage or destroy a breeding site or resting place unless in specified circumstance, a licence has been issued by the Scottish Government. Link:
<http://www.scotland.gov.uk/Publications/2001/10/10122/File-1>

Further details

More information on the River Tay 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=8366&NEW_WINDOW=false

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

Contacts:

- Scottish Natural Heritage
www.snh.org.uk
For proposals in Perth and Kinross:
Contact Tayside and Clackmannanshire team, Battleby, Redgorton, Perthshire PH1 3EW. Tel 01738 444177
- Scottish Environment Protection Agency
www.sepa.org.uk
Contact SEPA's local office: Planning Service, SEPA, Strathearn House, Broxden Business Park, Perth PR1 1RX. Tel 01738 627989
- Perth and Kinross Council
www.pkc.gov.uk
Pullar House, 35 Kinnoull Street, Perth PH1 5GD.
Contact Planning and Environment, Tel 01738 475300



www.snh.org.uk

© Scottish Natural Heritage

Photography: Lorne Gill/SNH front cover, 2, 4, 9, 11; George Logan 7;
P&A Macdonald/SNH 6 bottom; Sue Scott/SNH 6 top.



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad