

# River Tweed Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI)

Advice for developers and competent authorities when considering projects which could affect the River Tweed SAC and SSSI



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# Introduction

Our aim is to advise developers and planners on the types of information and safeguards that they should provide in support of project applications, to assist with the consenting process. Please note that development (and any related activities) carried out within the SSSI, which does not require planning permission, may need consent from SNH before operations can proceed. Please seek advice from SNH in such cases.



# Why is the River Tweed so important?

The River Tweed is designated as a Special Area of Conservation (SAC), which means it has the highest wildlife accolade as part of the Natura network, a series of internationally important wildlife sites throughout Europe. It is also designated as a Site of Special Scientific Interest (SSSI) - this underpins the Natura designation in British law and also recognises the site's national importance. When considering applications which may affect the River Tweed SAC and SSSI, this guidance will help developers and planners to understand:

- Scottish Border Council's obligations as a Planning Authority;
- the qualifying interests of the SAC and SSSI which may be affected;
- the nature of developments which may affect the River Tweed SAC and SSSI;
- the information which needs to be included with a planning application.

Although this guidance is only for the River Tweed SAC and SSSI, and their 'qualifying' interests, there may be other natural heritage interests affected by development proposals which also need to be considered, e.g. other nearby designated sites, protected species, or landscape interests. Further information is available in Scottish Planning Policy:

[www.scotland.gov.uk/Publications/2010/02/03132605/0](http://www.scotland.gov.uk/Publications/2010/02/03132605/0)

This guidance will also be useful when considering applications under other consenting regimes, e.g. CAR licencing and PPC licencing where SEPA are the Competent Authority.



# Planning authorities' obligations

## Special Area of Conservations (SAC)

The European legislation under which sites are selected as SACs is the Habitats Directive. This protection means that the Planning Authority, i.e. the “Competent Authority”, must first identify if a plan or proposal may have a “likely significant effect” on the SAC, i.e. is there connectivity or a possible pathway by which the proposal could affect the SAC. They can only agree to the plan or proposal if they can conclude that the proposal will not adversely affect the integrity of the site. This conclusion is reached through a procedure called the Habitats Regulations Appraisal (HRA), which can include an appropriate assessment (AA). See SNH’s website for further advice on SACs and HRA: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/special-areas-conservation-sacs>

## Sites of Special Scientific Interest (SSSI)

SSSIs are designated and protected under the Nature Conservation (Scotland) Act 2004. It is an offence for any person to intentionally or recklessly damage the protected natural features of an SSSI. Planning Authorities must therefore consult SNH and ensure that the activities they are permitting will not damage SSSIs. See SNH’s website for further advice on SSSIs: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/national-designations/sites-special-scientific-interest>



# Maps of the River Tweed SAC and SSSI

The maps (see page 5 below) and other documents for the River Tweed SAC and SSSI can be found on SNH's website SiteLink feature at:

<http://gateway.snh.gov.uk/sitelink/index.jsp>

Please note that the SAC and SSSI include not just the main channel of the River Tweed but also include many of its tributaries. The SSSI consists of the River Tweed and its larger tributaries (listed below), whilst the SAC covers a much wider area and incorporates many of the smaller watercourses within the Tweed catchment, included to ensure that there is comprehensive protection of salmon spawning areas.

## **River Tweed SSSI tributaries:**

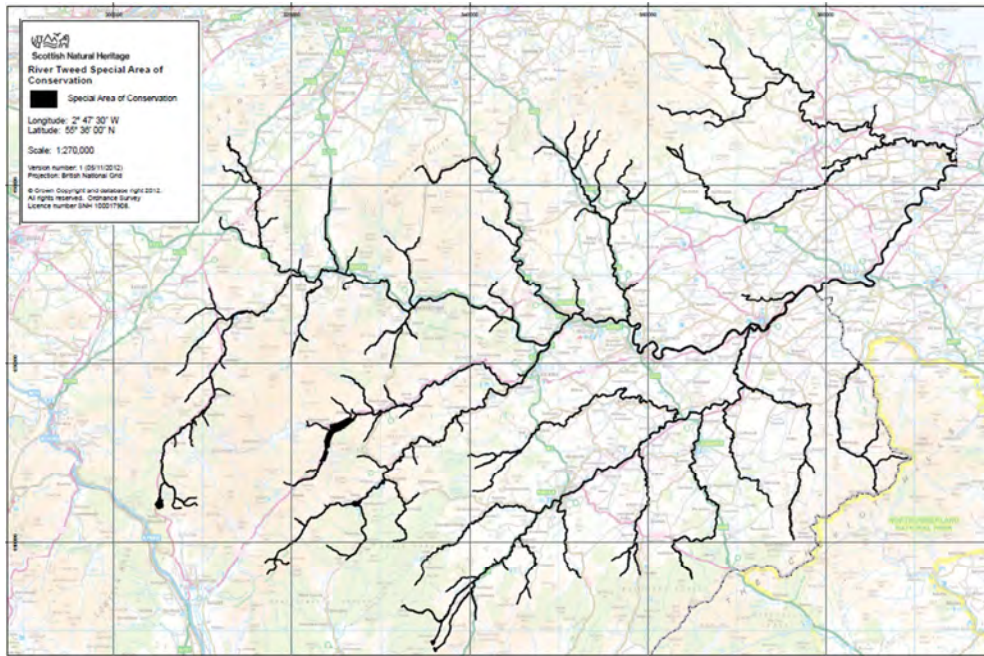
- Whiteadder Water (reservoir outfall) to English border;
- Blackadder Water (source) to confluence with Whiteadder Water;
- Yarrow Water/Little Yarrow (source) to confluence with Ettrick Water;
- Ettrick Water (source) to confluence with River Tweed;
- River Teviot (source) to confluence with River Tweed;
- Bowmont Water (source) to English border.

The River Tweed does of course flow into England as it approaches the sea. The English sections of the Tweed and the Bowmont Water, as well as the Till catchment, are also designated as a separate SSSI and SAC by Natural England. Where the Tweed forms the border between Scotland and England, in the Coldstream area, SNH, SEPA, Scottish Borders Council, Natural England, the Environment Agency, and Northumberland Council all have shared responsibilities for regulation.

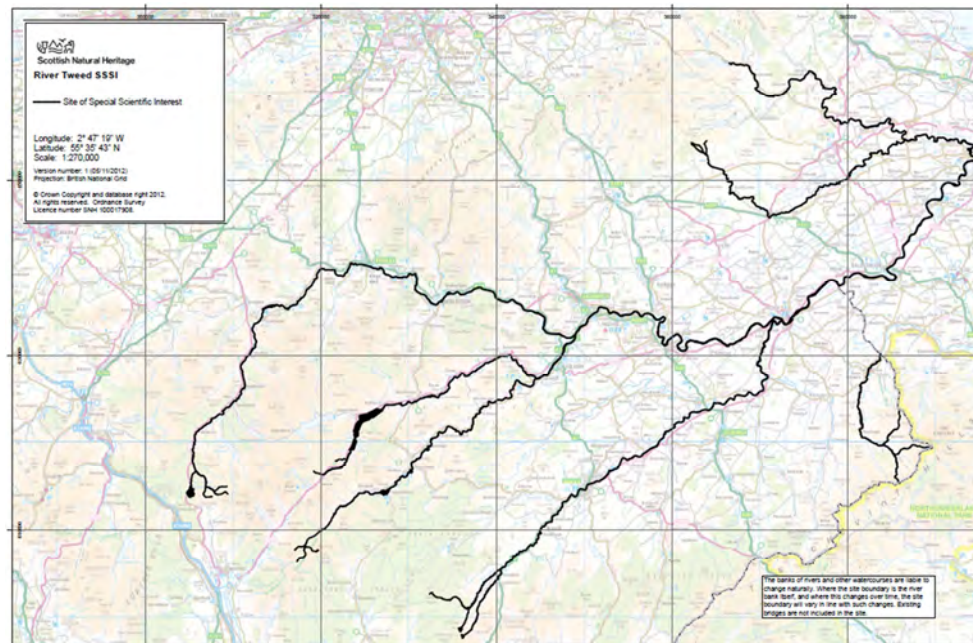
## **Does the proposed development lie within the river catchment?**

If your proposed development lies within the catchment of the River Tweed and its tributaries you will need to consider whether it has the potential to impact upon the River Tweed SAC and SSSI's qualifying interests. Even developments outwith the actual SAC or SSSI but within the river catchment, particularly those upstream, need to be considered because they may have the potential to affect river habitats and species.

# River Tweed SAC



# River Tweed SSSI





# What are the special ‘qualifying’ interests of the River Tweed SAC and SSSI?

## River Tweed SAC

The River Tweed SAC is designated for Atlantic salmon, sea lamprey, river lamprey, brook lamprey, otters and freshwater habitats.

## Salmon and lamprey

Salmon are found throughout the River Tweed SAC, and sea, river and brook lamprey are also widespread. Salmon and lamprey both require high quality water; therefore any reduction in water quality as a result of a proposal could be significant. If sediment is released into a watercourse during construction or dredging activities, 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 may also be a possible risk of contamination of the watercourses from fuel or chemicals used on project sites, or pollution from drainage systems which could kill or injure fish.





## Otters

A healthy population of otters is present throughout the River Tweed 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 deterioration of their habitat, then the number of otters along stretches of river will reduce. In addition, otters need sufficient suitable habitat such as vegetated river banks, reed beds, woodland and islands for foraging, breeding and resting places. They need quiet conditions and can be sensitive to disturbance, which might cause them to desert an area.



## Freshwater habitats: Rivers with floating vegetation often dominated by water-crowfoot

The River Tweed SAC contains a variety of aquatic vegetation including several species of water crowfoot (*Ranunculus spp.*) and 10 species of pondweeds (*Potamogeton spp.*), plus several rare hybrids of each. In turn, these species form the habitat for a rich variety of other aquatic plants and animals. Like salmon, lamprey and otters they depend on high water quality free from physical disturbance, siltation and pollution.



## **River Tweed SSSI**

### **Salmon, lamprey and otters**

Salmon, sea, river and brook lamprey and otters, as per River Tweed SAC.

### **Freshwater habitats: Trophic range river/stream**

The Tweed and its tributaries are clean river systems of high conservation and ecological value. Along the length of the river, the changes in plant and animal species reflect the changing gradient of the river from torrent to slow flowing, and the change in the geology and nutrient status from nutrient-poor to nutrient-rich. These features depend on high water quality free from physical disturbance, siltation and pollution.

### **Vascular plant assemblage**

In addition to the water crowfoots and pondweeds for which the SAC is classified, the Tweed river system is also home to a wide variety of other noteworthy plant species. On stony stream margins of the upper rivers, the nationally scarce hairy stonecrop and pale forget-me-not occur, with maiden pink on the more basic soils of the middle river, and the nationally scarce water figwort being found on lower margins. In addition to these, there are over 40 species of locally rare flowering plants occurring within the SSSI. Again, high water quality and an absence of habitat disturbance, siltation and pollution are key to their survival.

### **Invertebrates: Beetle and fly assemblages**

The invertebrate fauna of the Tweed is diverse and contains many species of limited distribution. The most important group are the beetles, especially those which live in the marginal shoals of silt, gravel and shingle, with a number of nationally important sites on the Yarrow Water and tributaries. Over half of all British mayfly species and a quarter of British caddisfly species are found along the Tweed. Other groups with species of restricted distribution include stoneflies, soldier flies, long-legged flies, craneflies, and dance flies. In total, 13 invertebrate species listed on the Red Data List and 45 invertebrate species classed as notable are recorded from the Tweed. These species depend on a variety of river and river bank habitats. These species also depend upon high water quality with an absence of habitat disturbance, siltation and pollution.

# Is your development ‘likely’ to affect the SAC and SSSI interests?

All proposals which may affect a Natura site must be subject to a Habitats Regulations Appraisal (HRA): <https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra>

As the first step in their HRA the Planning Authority must establish if a development proposal is “likely to have a significant effect” on the qualifying interests of the SAC. “Likely significant effect” has a very specific meaning in Natura terms and is more precautionary than it sounds. It refers to a direct or indirect ecological connection between the proposal and the Natura site which may lead to an impact on the qualifying interests (either alone or in combination with other projects). If there is a likely significant effect, then the planning Authority must undertake an “appropriate assessment” to determine if there will be “no adverse effect on the integrity of the site”. They must also consult SNH at this stage and can only give consent if they conclude that the proposal will have no adverse effect on the integrity of the site.

The following section will help you decide what information the Planning Authority needs so that it can assess the planning application, with advice from SNH as their statutory consultee. You should consider the nature of the development proposed and the potential direct and indirect impacts on the qualifying interests of the River Tweed SAC.

Examples of proposals which could have a ‘likely significant effect’ are:

- A residential or commercial development that will not link to the mains sewerage system and will therefore 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 re-grading work, that is likely to result in an increase in sediments downstream of the development or which 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 salmon spawning beds or other river habitats.

Scottish Borders Council, as Planning Authority, must also determine if there will be damage to the SSSI using similar criteria to those above.

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

# Potential impacts from development to the River Tweed SAC and SSSI

If you answer 'Yes' to any of these questions, you may be required to submit further information.

## Direct impacts:

- Will salmon, lamprey, otters, river or riverbank habitats and associated species be damaged, destroyed or disturbed as a result of the proposal, e.g. by construction, vehicular access, excavation, pollution, sedimentation, trampling or excessive visitor numbers?
- Will these impacts be temporary or permanent? Both must be considered, but the longevity of any impacts will be relevant.

## Indirect impacts:

These could affect any aspect of the ecological requirements of individual freshwater species and habitats and may be temporary or permanent, including:

## River flow:

- Will the development affect the flow, e.g. will the velocity be changed or the flow diverted?
- Will the quantity of water be affected, e.g. by abstraction, input 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 change (altering water temperatures and oxygen levels) or will winter floods be altered, e.g. through construction of embankments?

## Channel substrate:

- Will there be physical damage or disturbance to the river bed?
- Will the diversity of channel morphology be reduced, e.g. bank or bed destabilisation?
- Will the river bed, e.g. sand, gravel, cobbles and boulders, be affected by the addition or removal of sediment resulting from in-stream or adjacent works?

## Water quality:

- Will the development affect water quality?
- Will there be increased sewerage or other nutrient 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 change?
- Will changes in river flow, e.g. lower summer flows, affect water quality?

**Examples of polluting activities:**

- Point source pollution, e.g. from private sewerage outlets;
- Diffuse source pollution, e.g. runoff from fields, forestry or roads.



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 2011. A higher level of licence protection may be required for activities 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](http://www.sepa.org.uk/water/water_publications.aspx)

Information on CAR licence requirements:

[http://www.sepa.org.uk/customer\\_information/water.aspx](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,legislationguidance/planning.aspx>

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

The information required will depend on the nature, scale, location and duration of the development; but it is the responsibility of the applicant to provide the Planning Authority with the information it needs to undertake a HRA. Prior to submitting your application, you can obtain further guidance from Scottish Borders Council or SNH.

If you provide the necessary information with the planning application when it is submitted then you may get a quicker decision. If you don't then SNH, as statutory consultee, may submit a holding objection to an application due to a lack of supporting information or detailed mitigation, which if provided, could reassure us that a detrimental impact on the wildlife interest could be avoided.

Some examples of additional information which may be required include:

1. **A Construction Method Statement** (proportionate to the scale and risks of the project) 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 and associated sewerage, vehicle equipment, and materials compound;
  - timing, duration and phasing of construction, particularly in relation to salmon and lamprey migration and spawning. Any engineering or construction activities which could affect a designated watercourse or its banks should be carried out between the start of June and the end of September, to avoid the sensitive time period for migratory fish.
2. **Sewerage treatment arrangements.** If the development proposal will not link to the mains sewerage system you must demonstrate that it is designed such that it will not create an impact on water quality that would adversely affect river habitats and species.
3. **Locations of outfalls** and details of timing and method of installation.

4. Any available information on important habitats and species in the immediate vicinity. Further wildlife surveys in support of your application may be necessary. SNH can advise on this.
  
5. Proximity of otter holts and resting places – as well as being qualifying interests of the SAC and SSSI otters are also European protected species (EPS) which means that special protection is given to them wherever they occur and makes it an offence to damage or destroy a breeding site or resting place unless a licence has been issued by the Scottish Government. Further advice on otters and their protection can be found on SNH's website:  
<https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/licensing/species-licensing-z-guide/otters-and-licensing/otters-licences-development>
  
6. **Proposed mitigation** e.g. an undertaking to maintain an undeveloped buffer strip of at least 10m from the river bank to the edge of the development footprint. This will help to provide a more natural riparian corridor and also minimise impacts on water quality during construction activities.

## Contact details

SNH, Scottish Borders Council and SEPA work closely to protect the interests of the River Tweed SAC and SSSI, and are happy to assist you in submitting your application, including pre-application discussions.

- Scottish Natural Heritage  
[www.nature.scot](http://www.nature.scot)

Contact the SNH Scottish Borders team on 01896 661710 or  
[SOUTHERN\\_SCOTLAND@snh.gov.uk](mailto:SOUTHERN_SCOTLAND@snh.gov.uk)

- Scottish Borders Council Planning and Environment:  
[https://www.scotborders.gov.uk/info/20012/planning\\_and\\_building](https://www.scotborders.gov.uk/info/20012/planning_and_building)
- Scottish Environment Protection Agency  
[www.sepa.org.uk](http://www.sepa.org.uk)

Contact SEPA's Galashiels team on 01896 754797

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