

Supporting Guidance (WAT-SG-90)
SEPA Conservation Procedure for CAR
activities in Freshwater
Special Areas of Conservation (SACs),
Special Protection Areas (SPAs)
and
Sites of Special Scientific Interest (SSSIs)

Version: V2.1 (May 2023)

Update Summary

Version	Description
V1	First issue for Water Use reference using approved content from the following documents: <i>WLPRSG(16)17a Application of environmental standards in assessing risks to river and loch Natura 2000 interests</i>
V2 Dec 22	Document content updated Guidance added on assessing likely damage to SSSIs Screening distances added in Annex 6.
V2.1 May 23	Table 4b removed and text updated in Annexes 4 and 5 to refer to Lamprey Sites & buffer areas which are available on SEPA's GIS system.

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1. Key Information

1.1 Nature Conservation Sites

This document together with WAT FORM 32, sets out how SEPA, in line with its statutory duties, will assess and record whether or not a proposed controlled activity and the method of undertaking the activity (on its own or in combination with other activities) is:

1. likely to have a significant effect on the qualifying interests of any river or fresh water loch Special Area of Conservation (SAC) or Special Protection Area (SPA) - **See section 2**
2. likely to damage any water dependent, notified feature of any river or fresh water loch Site of Special Scientific Interest (SSSI) -**See section 3**

These nature conservation sites are designated for a variety of different qualifying interests and features. SEPA's assessment will focus on those that are water dependent such as fish and freshwater habitats and for geological features potentially impacted by the activity or associated construction works. *For example a geological SSSI for rock formation would not be impacted by an abstraction however bridge abutments could have potential to impact on the feature depending on the location. Even if the bridge abutments in themselves would not directly impact on the feature, their construction works phase may do so.*

This guidance does not cover Marine Protected Areas, in the absence of guidance, please seek specialist advice.

1.2 Ramsar Sites

Ramsar Sites are wetlands of international importance designated under the Ramsar Convention. Nearly all Ramsar Sites have a corresponding SAC/SPA interest over that area. Where this is not the case then that Ramsar interest is protected by SSSI legislation and should be assessed as such.

1.3 National Nature Reserves (NNRs)

Most NNRs are SSSIs and many are Natura sites – SACs and/or SPAs. In many reserves, the land will have more than one designation on it. SEPA does not carry out any additional screening for NNRs.

1.4 Screening Distances

Any registration or licence application must follow this conservation procedure when the proposed activity lies within the protected area, or within the screening distances set out in **Annex 6**.

SEPA will assess the effects of proposed activities located anywhere within the vicinity of a protected area, including locations beyond the site boundaries. For example, in the case of a discharge upstream of a river SAC, it is appropriate to assess the impact from the discharge on the concentrations within the downstream SAC.

1.5 Additional permissions required from NatureScot

The assessments in 1 and 2 above, refer to habitats and species but **only** where these are listed as qualifying interests (SAC, SPA) or notified features (SSSI) of designated sites. These assessments also fulfil the CAR Reg 12 consultation requirement, but only for this specific interest/feature. You may also require to consult under CAR regulation 12 for other reasons. It is important that any consultation under CAR regulation 12 clearly documents the basis for consultation.

It is also possible to have **protected species present in a location that is not within a designated site** and it is possible to have **protected species present in a designated site that are not listed as a qualifying interest or feature** of the designated site including, for example, freshwater pearl mussels, water voles and otters. In these circumstances, the assessments listed as 1 and 2 above, are not carried out by SEPA. You may however require to consult NatureScot as a consultee under reg 12 of CAR.

In addition, owners and occupiers of land within a SSSI must apply to NatureScot for consent to carry out certain operations. Further information is available on the [SSSI Consent page](#). In such cases, it is the **responsibility of the applicant to obtain any necessary permissions** or consents from NatureScot as the regulatory authority for such matters.

Further information can be found at <https://www.nature.scot>

1.6 Associated documents

WAT-FORM 32-SEPA Conservation Procedure for Controlled Activities Recording Template, will lead you through the process and this guidance has additional information.

Record your decision in WAT-FORM-32 and the CAR Decision Document.

Note: For construction run-off licences, where no flocculant chemicals are used, WAT FORM 32 is not required and a record is instead made in the- CAR Decision Document.

Where the procedure leads you to formally consulting NatureScot, use WAT-LETT-86.

This guidance (WAT SG 90) should be followed for any activities impacting protected sites (SACs, SPAs and SSSIs). Out with protected sites, there may be reason to consult NatureScot in which case Regulatory Method (WAT-RM-20) Advertising and Consultation should be followed as NatureScot is a consultee under Reg12 of CAR.

2. Assessment required for Special Area of Conservation (SAC) and Special Protection Area (SPA) Sites

Where there is a SAC or SPA within the screening distances set out in Annex 6, it is necessary to carry out a ‘**Likely Significant Effect**’ (LSE) assessment. SEPA must carry out this assessment to determine whether the proposed controlled activity (new or varied) and any associated temporary works or method of working is likely to have a significant adverse effect on:

1. any river or freshwater loch (SAC) or
2. any loch (SPA)

either alone or in combination with other plans or projects **See section A1.**

The purpose of the assessment is to separate activities into:

- (a) those that have either no, a negligible or very short-term minor effects on the SAC or SPA qualifying interests and can be authorised,

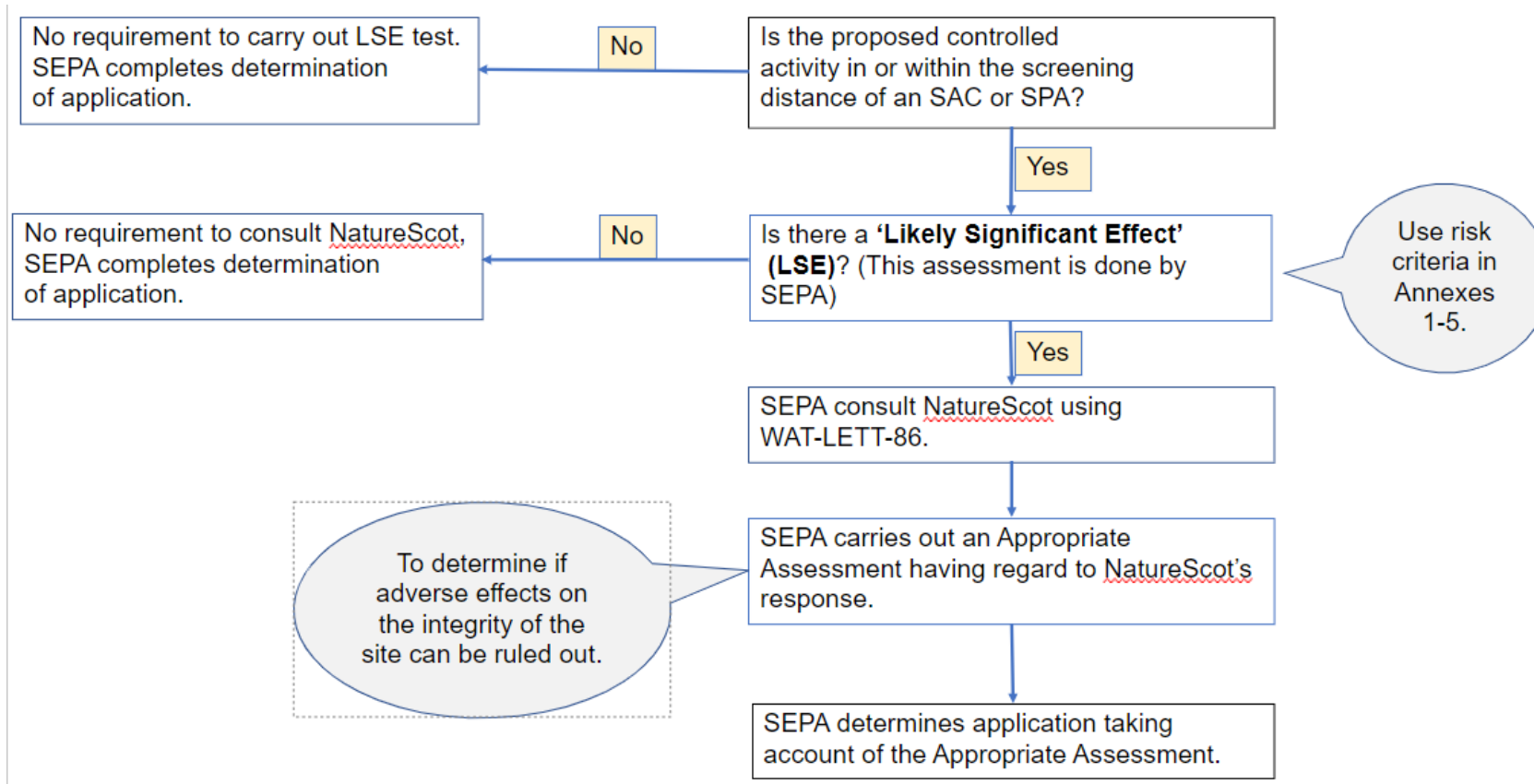
and

- (b) those that are potentially damaging even with standard template conditions in place. Those should proceed to the next step and be subjected to an Appropriate Assessment (AA).

While it is SEPA’s statutory duty to undertake this assessment, **the onus is on the applicant to provide sufficient information** for example surveys or on ways of working, in order that SEPA can carry out the assessment. If you have insufficient information to make the LSE assessment, you may first ask the applicant for any surveys carried out or for any correspondence they have from NatureScot. An information notice under CAR can be used to obtain any further information from the applicant if necessary.

NatureScot can be contacted informally at this stage, but SEPA is not required to formally consult NatureScot unless the AA stage is reached.

Figure 1



2.1 How to Carry out a Likely Significant Effect Test

See rows 5-8 of WAT FORM 32

Table 1 below sets out the SAC and SPA qualifying interests you should consider when assessing the LSE for any particular activity and the relevant annex where you will find the guidance.

Table 1

Proposed Activity	Annex	SAC and SPA Qualifying Interests
Discharges to rivers	Annex 1	<ul style="list-style-type: none"> freshwater pearl mussel lamprey habitat Atlantic salmon Ranunculus river habitat
Discharges to lochs	Annex 2	<ul style="list-style-type: none"> SAC Loch habitats Slender Naiad SPA Lochs
Water abstraction or flow increase (rivers and lochs)	Annex 3	<ul style="list-style-type: none"> freshwater pearl mussel lamprey habitat Atlantic salmon, ranunculus river habitat loch habitat & slender naiad
Registration-level engineering works (rivers and lochs)	Annex 4	<ul style="list-style-type: none"> freshwater pearl mussel Atlantic salmon lamprey habitat otter alluvial woodland loch habitat & slender naiad SPA lochs with nesting/roosting birds

Licence-level engineering works in rivers and lochs (including impoundments)	Annex 5	<ul style="list-style-type: none"> • freshwater pearl mussel • Atlantic salmon • lamprey habitat • otter • Ranunculus river habitat • alluvial woodland • loch habitat & slender naiad • SPA lochs with nesting/roosting birds
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Possible outcomes of LSE Test-See row 9 of WAT FORM 32

- 1) Where there remain likely significant effects not addressed, SEPA concludes that the controlled activity will have a likely significant effect on the SAC or SPA and an AA must now be undertaken See section A2 of this document.

Otherwise:

- 2) a) Where no relevant environmental standards will be breached as a result of the controlled activity,
or
b) Where a relevant environmental standard, will be breached as a result of the controlled activity, but the location/ area of effect for the controlled activity is known not to host the qualifying interest for which the relevant standard will be breached,

SEPA concludes that that the controlled activity will not have a likely significant effect on the SAC or SPA provided that appropriate conditions are attached to the CAR authorisation. No further assessment is required.

Further Information:

See Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994

A link to the details for each SPA and SAC can be found at <https://sitelink.nature.scot>

2.2 How to Carry out an Appropriate Assessment

See rows 11-13 of WAT FORM 32

Where SEPA has identified that a proposed controlled activity (new or varied) could have a LSE on an SAC or SPA, the Conservation (Natural Habitats, &c.) Regulations 1994 (“ the Conservation Regulations”) require that SEPA must undertake an Appropriate Assessment (AA) before deciding to grant authorisation. This assessment is required to:

- (a) determine the impacts of the proposal upon the SAC or SPA qualifying interests (species or habitats) and,
- (b) provide the information necessary to ascertain whether or not it will adversely affect the integrity of the site.

As part of that AA SEPA must consult NatureScot formally using WAT LETT 86. This letter requests that they complete rows 14 to16 of WAT FORM 32. There is no statutory time period for a response other than the time period must be reasonable. The letter requests a response within 28 days but it may be, due to the circumstances of the case, that a longer period should be afforded for a response.

On receipt of NatureScot’s response, continue to row 17 (SEPA’s appropriate assessment), taking account of NatureScot’s advice and information. Next, go to row 19 and identify any suitable template and bespoke conditions, which will remove the risk of an adverse effect.

Finally, in row 20, identify all likely significant effects not able to be addressed by any template conditions or bespoke conditions.

Possible outcomes:

- 1) SEPA determines that the integrity of the site will be adversely affected- WAT FORM 32 Row 21, option 21b.
- 2)
 - a) SEPA determines that the integrity of the site will not be adversely affected. WAT FORM 32 Row 21, option 21a.
 - b) SEPA determines that the integrity of the site will not be adversely affected but in exceptional circumstances, NatureScot may decide that if SEPA concludes there is no impact on integrity, there is a risk of failure to secure compliance with the requirements of the Directives (Habitats and Birds). Row 22 *In these exceptional circumstances, where differing positions exists, the matter should be escalated through the appropriate management channels of each Agency.*

Where SEPA determines that the integrity of the site will be adversely affected, this should also be recorded in the CAR Decision Document.

3. Assessment required for Site of Special Scientific Interest (SSSI)

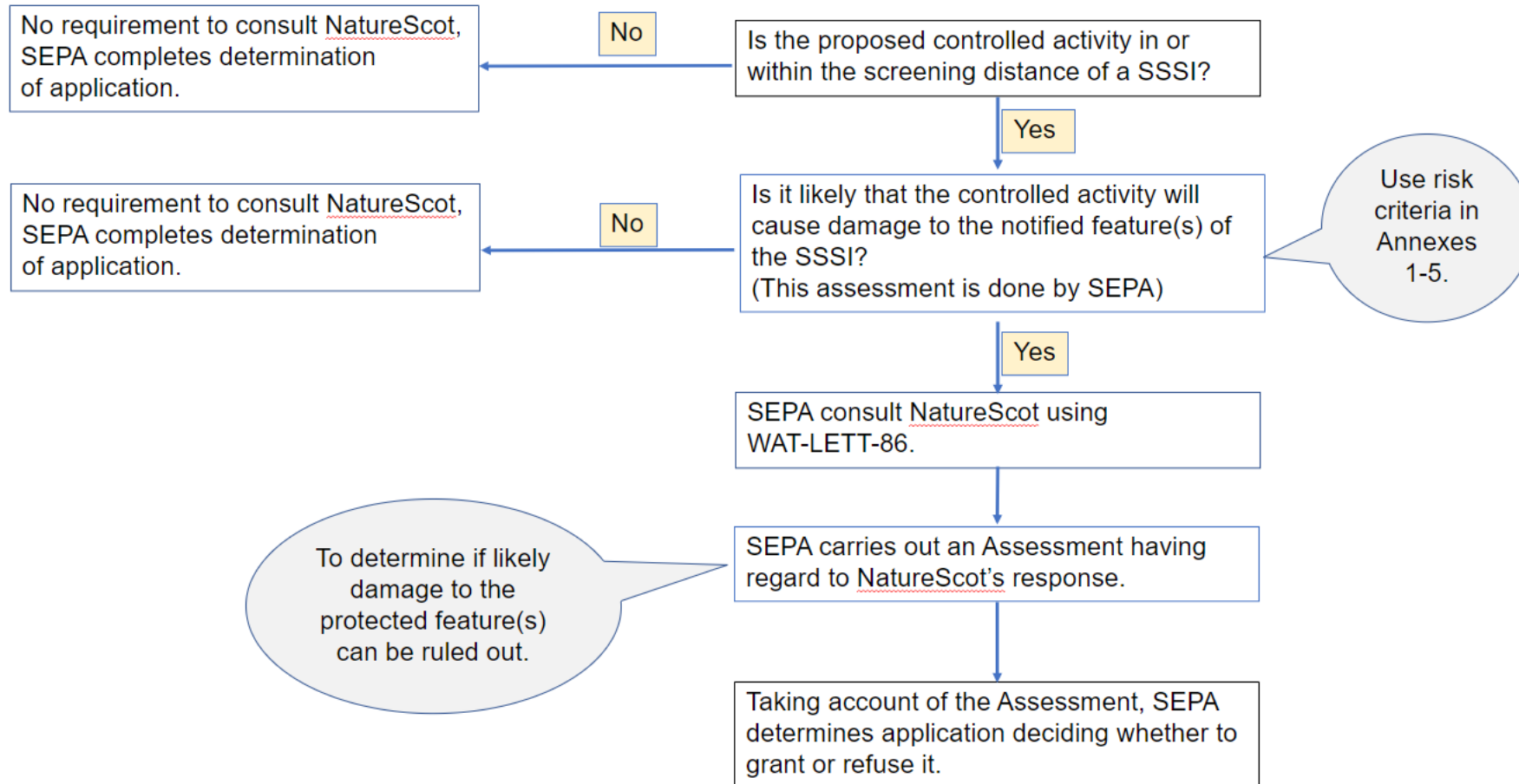
When determining applications under CAR, SEPA must assess if the proposed activity (new or varied) is **likely to damage** any notified **feature** specified in a SSSI notification. In this guidance, for simplicity, 'notified feature' replaces the term natural feature used in the *Nature Conservation (Scotland) Act 2004*, Where SEPA believes that the proposed controlled activity and any associated temporary works or method of working **is** likely to cause damage to those features we must notify NatureScot and allow 28 days for a response. We must not grant the application within this 28 day period unless NatureScot has notified SEPA that it need not wait until then. If we receive advice from NatureScot we must have regard to it in deciding whether to grant the application and, if we do decide to grant it, in deciding what conditions should be attached to the authorisation.

Further info:

See Section 15 of the Nature Conservation (Scotland) Act 2004

A link to the details for each SSSI can be found at <https://sitelink.nature.scot>

Figure 2



3.1 How to Assess Likely Damage to Notified Features of SSSI

See rows 5-8 of WAT FORM 32

Where there is a SSSI within the screening distances set out in Annex 6, it is necessary to carry out this assessment. It is helpful to consider some simple questions as part of this assessment process.

1. Will the controlled activity including any associated temporary works result in the breach of any environmental standards contained in [2014 Directions](#) from the Scottish Ministers? Where no environmental standard is breached and there is no likelihood of any damage to the notified features of a SSSI, SEPA will conclude that there is no likelihood of damage to the notified feature of the SSSI. You should follow similar principles to the guidance above for SAC/SPA sites when making this judgement.
2. Is there connectivity between the proposed controlled activity and/or any associated temporary works and the SSSI? For example, where the proposed controlled activity is downstream of a SSSI it is unlikely that there will be any pathway for likely damage to occur.
3. Is the notified feature of the SSSI susceptible to the damage caused by the controlled activity and the method of working associated with the controlled activity? For example, a designation for ground nesting birds is not likely to be damaged by an abstraction from a watercourse. When considering this, it is often helpful to look at the Operations Requiring Consent document on NatureScot's website as this sets out those activities which are of concern on the site.
4. Is the notified feature present within the vicinity of the proposed controlled activity and/or any associated temporary works? For example, some SSSIs are very large, and the notified feature may not be present in all of the site. This is similar to the process for SAC and SPA sites above.

When making these assessments it may be helpful to speak to the relevant Officer in NatureScot to seek their assistance in relation to the distribution of the notified feature within the SSSI. **Formal consultation however must only take place where SEPA concludes that the activity is likely to damage any notified feature specified in the SSSI.**

Possible outcomes:

1. In considering all the information, SEPA determines that the controlled activity is likely to cause damage to the notified features of the site_ WAT FORM 32 Row 23b
2. The application is granted because, in considering all the information, SEPA determines that the controlled activity is not likely to cause damage to the notified features of the site -WAT FORM 32 Row 23a

SSSI which are Coincident with SPA and SAC sites

There are a number of SSSIs where the site is also designated as an SAC for the same feature(s). In such cases it is possible to rely on the assessment undertaken for the SAC designation to satisfy the test that SEPA is required to carry out for SSSI, i.e. that the controlled activity and any associated works or the method of working is not likely to damage the notified features of the site. Where any SSSI is coincident with any SAC or SPA and there are SSSI features that are not also SAC or SPA features, those additional SSSI features should be assessed for likely damage as part of a separate assessment.

Where the decision is not to follow NatureScot advice:

Where NatureScot advises against authorising or advises we attach conditions, but we do not follow this, SEPA must give notice of this to NatureScot and the applicant in accordance with section 15(8) to 15(10) of the Nature Conservation (Scotland) Act 2004.

The notice must set out the permission given and its terms (i.e. the permit and its conditions). The notice must also include a statement specifying:

1. What SEPA has done, or proposes to do, in consequence of NatureScot's advice;
2. That in giving permission or, as the case may be, attaching conditions to the permission, SEPA has not followed the advice received from NatureScot; and
3. The conditions set out in section 15(10)*.

*The conditions detailed at section 15(10) are as follows and **must** be included in the permit in these circumstances:

1. The permitted operation (i.e. the authorised activity) may not be commenced before the expiry of the 28 day period beginning with the date the notice is given; and
2. The permitted operation must be carried out in such a way as to give rise to as little damage or disturbance as is reasonably practicable in all the circumstances to the relevant natural feature.

Decision of No Likely Damage

In cases where you have concluded that there is no likelihood that the controlled activity will damage the notified features of the SSSI, you should record this in your decision document WAT FORM 32. State the reason(s) why SEPA believes that the controlled activities will not be likely to damage the notified features of the SSSI.

Annex 1: Risk assessment criteria for proposed discharges to rivers

Annex 1-Relevant river SAC species and habitat qualifying interests			
Freshwater pearl mussel	Lamprey habitat	Atlantic salmon	Ranunculus river habitat (River Tweed SAC only)

Table 1A Criteria for assessing whether proposed discharges are likely to have a significant effect on river SAC qualifying interests

Water quality determinand	Proposed discharge type	Applicable environmental standards – reference is to Tables in 2014 Standards Directions [Reference in square brackets is to SEPA internal guidance]	Criteria for identifying whether a significant effect is likely	
			Breach of applicable standard	Mixing zone over pearl mussel bed ¹
Oxygen conditions	Continuous	Dissolved oxygen: Table C1.1 (salmonid river type); or, if assessment against dissolved oxygen standards is not possible, biochemical oxygen demand: Table C1.3 SEPA GIS Portal	✓	✓
	Short-duration, intermittent	Table C1.2 (salmonid river type); or, if assessment against dissolved oxygen standards is not possible, biochemical oxygen demand: Table C1.4 [WAT-SG-53-T2 – Table 2a]	✓	✓
Phosphorus ²	Any	Table C1.5	✓	✓

		[Science Advice Helpdesk]		
River temperature	Any	Table C1.6 (salmonid river type) SEPA GIS Portal	✓	-
Ammonia	Continuous	Table C4.1 (total ammonia) SEPA GIS Portal	✓	✓
	Short-duration, intermittent	Table C4.3 (unionised ammonia) [WAT-SG-53-T2 – Table 2d]	✓	✓
specific pollutants (other than ammonia)	Continuous	Table C4.6 to C4.32 (annual mean standard) [WAT-SG-53 -T5]	✓	✓
	Short-duration, intermittent	Table C4.6 to C4.32 (95-percentile standard if specified, otherwise annual mean standard) [WAT-SG-53-T5]	✓	✓
Priority substances	Any	Table C5.1 (as amended by 2015 Amendment Directions) [WAT-SG-53-T4]	✓	✓
Suspended solids	Continuous discharges other than from urban waste water treatment works	Annual mean standard of 25 mg/l suspended solids	✓	-
	Continuous discharges from urban waste water treatment works	Table C4.1 (total ammonia) & Table C1.3 (biochemical oxygen demand) SEPA GIS Portal	✓	-

Suspended Solids Construction Run-off Licences	Intermittent discharge	WAT-SG-75 Sector Specific Guidance: Water Run-Off from Construction Sites	✓	-
Acidity	Any	Table C1.7 (pH) [WAT-SG-53-T7]	✓	-

Notes:

- Discharges to freshwater pearl mussel SACs will be considered likely to have a significant effect unless, based on the tests set out in Table 2B below, SEPA concludes that pollutant concentrations in the effluent plume, prior to that plumes full mixing, are unlikely to have a significant adverse effect on freshwater pearl mussels.
- For the purpose of applying the risk assessment criteria for phosphorus, monitoring results below the limit of detection will be assigned a concentration equivalent to that limit of detection unless SEPA has other data showing that the concentration of phosphorus is lower than that limit.

Annex 2: Risk assessment criteria for proposed discharges to lochs

Annex 2 -Relevant loch SAC/SPA species and habitat qualifying interests		
SAC Loch Habitats	Slender naiad SACs	SPA lochs

Table 2A Criteria for assessing whether proposed discharges are likely to have a significant effect on freshwater loch SACs and SPAs

Water quality determinand	Proposed discharge type	Applicable environmental standards – reference is to Tables in Tables in 2014 Standards Directions [Reference in square brackets is to SEPA internal guidance]	Criteria for identifying whether a significant effect is likely	
			Breach of any standard	Mixing zone over pearl mussel bed
Phosphorus ¹	Any	Table C2.4 or C2.5 as applicable SEPA GIS Portal	✓ ₂	-
specific pollutants (other than ammonia)	Continuous	Table C4.6 to C4.32 (annual mean standard) [WAT-SG-53-T5]	✓	✓
Priority substances	Any	Table C5.1 (as amended by 2015 Amendment Directions) [WAT-SG-53-T4]	✓	✓
Suspended Solids Construction Run-off Licences	Intermittent discharge	WAT-SG-75 Sector Specific Guidance: Water Run-Off from Construction Sites	✓	-
Acidity	Any	Table C2.2 (acid neutralising capacity)	✓	-

Notes:

1. For the purpose of applying the risk assessment criteria for phosphorus, monitoring results below the limit of detection will be assigned a concentration equivalent to that limit of detection unless SEPA has other data showing that the concentration of phosphorus is lower than that limit.
2. The phosphorus standards will only be applied to SPA lochs if the protected bird species are dependent on feeding in those lochs. The standard for high will not be applied.

Table 2B Assessing whether a significant effect on freshwater pearl mussels is likely from concentrations of pollutants in a mixing zone

Step-wise tests	No	Yes
1. Would the concentration in the proposed emission be \leq the relevant environmental standard?	Go to test 2	Significant effect not likely
2. If the discharge is to be made via a new outfall, is the outfall located in, or immediately upstream of, potential fresh water pearl mussel habitat (i.e. areas of riffle-type flow over beds comprised of mixtures of rocks, cobbles and fine gravel/coarse sand)?	Go to test 4 if (i) not via a new outfall; or (ii) via a new outfall but not be located in or immediately upstream of pearl mussel habitat	Go to test 3
3. Is there evidence that pearl mussels are absent from the potential pearl mussel habitat that is present immediately downstream of the proposed outfall?	Significant effect considered likely	Go to test 4
4. Is the mixing zone ¹ length 200m (approximately)? <i>The mixing zone length is the distance downstream of the outfall before the discharge is mixed across the full width of the channel.</i>	Go to test 5	Significant effect not likely
5. Would the concentration in the plume be \leq the relevant environmental standard within < 200 metres (approximately) of the outfall?	Go to test 6	Significant effect not likely
6. Is the proposed emission from an existing discharge's outfall?	Go to test 8	Go to test 7
7. Would the length of mixing zone in which environmental standards are exceeded be approximately the same as it is currently if the proposed emission were authorised?	Go to test 8	Significant effect not likely
8. Within the part of the channel over which the plume would extend, is the habitat unsuitable for freshwater pearl mussels? <i>Habitat lacking areas of riffle-type flow over beds comprised of mixtures of rocks, cobbles and fine gravel/coarse sand is likely to be unsuitable.</i>	Go to test 9	Significant effect not likely
9. Within the part of the channel that would be covered by the plume, is there evidence that pearl mussels are absent?	Significant effect considered likely	Significant effect not likely

¹ SEPA's Environmental and Spatial Informatics Unit should be contacted to calculate the mixing zone. Mixing zone lengths vary with flow. For the purposes of Table 1(a), SEPA will estimate mixing zone lengths at Q50 flow – the flow exceeded for 50% of the time.

Outfall design

The mixing zone length over which environmental standards are exceeded can be shortened by maximising initial mixing. SEPA will:

- (i) consider proposals to improve initial mixing where it would otherwise conclude that a discharge would be likely to have a significant effect on freshwater pearl mussels; and
- (ii) in all cases, encourage developers to take such steps as are reasonably practical to promote rapid initial mixing of continuous discharges.

Proposed new intermittent discharges should be designed to:

- operate only where river flows are expected to be high; and
- meet the appropriate standards for intermittent discharges (see Annex 1)

Potential steps to improve initial mixing

- locating discharge points under water such that the effluent emerges at around mid-depth when river flow is at a medium to low level. This allows the discharge to mix vertically in both directions (up and down) at once;
- using appropriately protected discharge pipes that protrude into the channel so that the effluent is not discharged at the channel edge. A protruding outfall allows the discharge to mix horizontally in both directions (left and right) at the same time. However, a protruding outfall can instigate bed scour and erosion. This risk increases in higher energy rivers and needs to be taken into account at the design stage if this option is to be used;
- discharging the effluent through more than one port along a diffuser line; or
- orienting ports and designing effluent exit speeds so as to maximise shearing action between the effluent jet and river flow.

Annex 3: Risk assessment criteria for proposed abstractions

Annex 3 – Relevant protected interests					
Freshwater pearl mussel	Lamprey habitat	Atlantic salmon	Ranunculus river habitat	Loch habitat (& slender naiad)	SPA lochs

Table 3A: Criteria for assessing whether a proposed abstraction or increase in flow is likely to have a significant effect on freshwater SACs

Flow or level	Type of water affected	Applicable environmental standards reference is to Tables in 2014 Standards Directions with the exception of reference to UKTAG guidance.	Criteria for identifying where a significant effect is likely			
			Breach of any standard	Compromise future achievement of a standard for good	Breach of any criterion for good ecological potential flow	Increased departure from any criterion for good ecological potential flow
River flow	Watercourses not designated as heavily modified in relation to a water storage scheme & parts of water bodies so designated whose flows are not worse than good as a consequence of the scheme	Applicable standards in Part B of Schedule 2 – Tables B1.1 to B1.7	✓	✓	-	-
	Any part of a river water body designated as heavily modified in relation to a water storage scheme whose flows are worse than good as a consequence of that scheme	UKTAG guidance on good ecological potential river flows	-	-	✓	✓ (where the relevant UKTAG mitigation for good ecological potential is not in place)
	Any watercourse	Standards in Schedule 3 – Table 2.1 for increased flow	✓	✓	-	-
Lake level	Any freshwater loch	Table B2.1	✓	✓	-	-

Note: SEPA will require that any proposed new intakes and outfalls in river SACs follow best practice in their design and location to avoid damage to, or diversion of, migrating fish.

Annex 4: Risk assessment criteria for proposed registration-level engineering works

To use Table 4A, identify the activity first then if there is not a tick in the box for the relevant protected interest, the LSE test is passed. If there is a tick, the notes will help you decide if there is an LSE or not.

Table 4A: Circumstances in which engineering works authorised by registration will be assessed as likely to have a significant effect

Engineering activity (see CAR Practical guide for further details)	Relevant protected interests						
	Pearl mussel	Salmon	Lamprey	Otter	Alluvial woodland	Loch habitat, Slender Naiad	SPA lochs with nesting/roosting birds
Activity K: Limited sediment removal from 1/3 of dry bars in a 1 km river length	-	-	-	-	✓	-	-
Activity B: Sediment removal from <u>wet part</u> of river bed - within 10 m of a bridge	✓ ₁	-	-	-	-	-	-
Activity C: Sediment removal from <u>wet part</u> of bed at an open culvert < 2 m wide	✓ ₁	-	-	-	-	-	-
Activity A: Sediment removal from <u>wet part</u> of a lade	✓ ₁	-	-	-	-	-	-
Activity H: Cable/pipe crossing beneath bed or mole-plough	✓ ₁	-	✓ ₃	✓ ₄	-	✓	✓
Activity D: Green bank protection of < 50m where works undertaken on <u>wet part</u> of the bed	✓ ₁	-	✓ ₃	✓ ₄	✓	✓	✓
Activity E: Bank re-profiling of < 50m where works undertaken on <u>wet part</u> of the bed	✓ ₁	-	✓ ₃	✓ ₄	✓	✓	✓
Activity F: Bridge with < 20m bank works	✓ ₁	-	-	✓ ₄	✓	-	-

Activity I: Bed reinforcement within 10m of a culvert exit	✓ ₁	-	-	-	-	-	-
Activity J: In loch structures ≤50m ²	-	-	-	✓ ₄	-	✓	✓
Activity L: Removal of sediment from previously straightened watercourses with specific impact features less than 5 metres wide	✓ ₂	-	-	-	-	-	-
Activity O Grey Bank reinforcement (≤20m length associated with an existing manmade structure)	✓ ₁	-	✓ ₃	✓ ₄	✓	✓	✓
Activity G: Bridging culvert of river < 2 m wide for single track road or smaller path	✓ ₁	-	-	✓ ₄	-	-	-

Notes:

1. SEPA will conclude that a significant effect on pearl mussels is likely unless there is evidence that pearl mussels are absent from the location or a recent previous appropriate assessment has concluded that impacts on pearl mussels at the location would not have implications for the designated site's objectives. For this purpose, evidence of absence includes evidence that habitat suitable for pearl mussels is absent.
2. SEPA will conclude that a proposal for this activity in a pearl mussel SAC would be likely to have a significant effect on pearl mussel interests unless:
 - a) the channel downstream has the same characteristics (i.e. previously straightened with specific high impact features) until its confluence with a loch; for a distance of ≥ 2 km; or until its confluence with a river with an annual mean flow at least 5x greater; or
 - b) where there is channel not of the same characteristics within the downstream channel distances referred to in point (a), there is evidence that pearl mussels

are absent from the location or a previous appropriate assessment has concluded that impacts on pearl mussels at the location would not have implications for the site's objectives. For this purpose, evidence of absent includes evidence that habitat suitable for pearl mussels is absent.

3. SEPA will conclude that a significant effect on lamprey interests is likely if the activity proposed coincides with a location known to support lamprey populations and identified to SEPA by NatureScot.

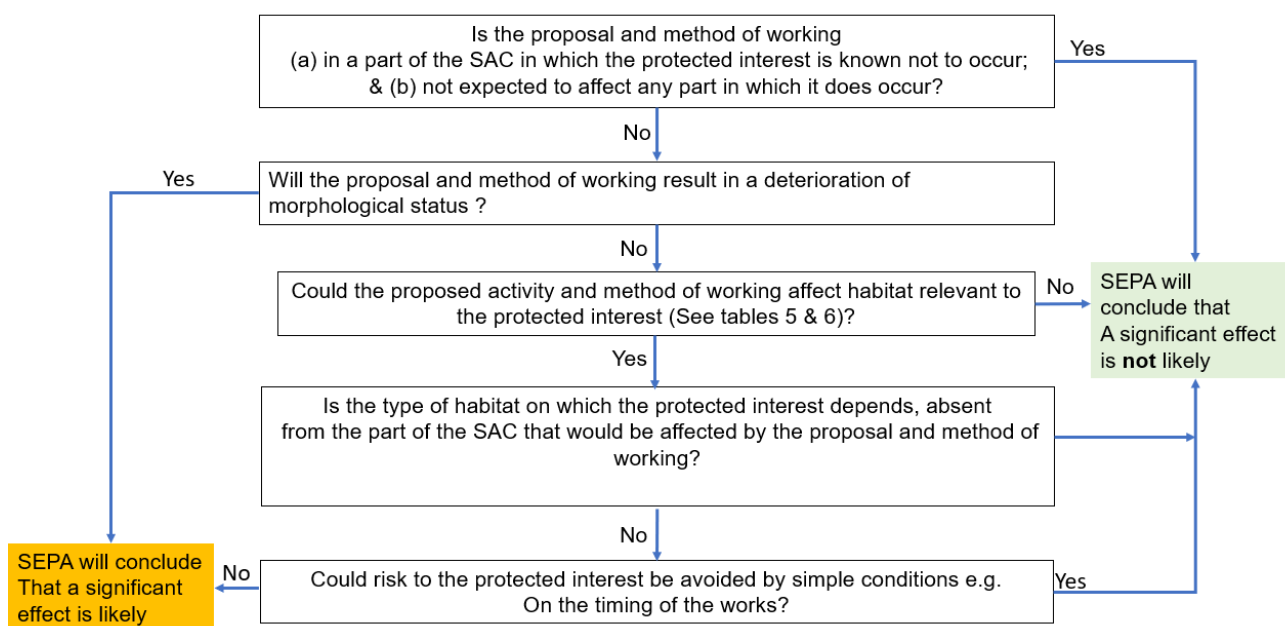
To view these sites please use the 'Conservation Layer' on SEPA's GIS Interactive Map making sure 'Lamprey Habitat Sites' and the 'Lamprey Habitat buffers' boxes are ticked and navigate to the area of interest. (Note the buffers area shown on GIS will vary according to the size of the lamprey habitat)

4. SEPA will only conclude that a proposal would be likely to have a significant effect on otter interests if it is to be located in one of the following SACs: Ardvar and Loch a'Mhuilinn Woodlands; Glen Beasdale; Ness Woods; River Borgie; Loch Fada; or Loch Ruthven.

Annex 5: Risk assessment criteria for proposed licence-level engineering works

Part 1 Annex 5 - relevant protected interests							
Lamprey species	Freshwater pearl mussel	Atlantic salmon	Alluvial woodland	Otter	Ranunculus river habitat	Loch habitat (& slender naiad)	SPA lochs with nesting/roosting birds

Figure 3



To use Table 5A, identify the activity and any temporary works including the method of working, then if there is not a tick in the corresponding box for the protected interest you are concerned about, the LSE test is passed. If there is a tick, the relevant notes will help you decide if there is an LSE or not.

Table 5A: Activities in river SACs that could affect habitat relevant to a protected species or habitat

Activity	Freshwater pearl mussel	Atlantic salmon	Lamprey	Ranunculus habitat	Alluvial woodland	Otter
1. Construction of artificial walls, artificial earth banks or other artificial structures which are: (i) further from the bank top than 2 channel widths* or 10 metres	-	-	-	-	✓	✓
2. Construction of artificial walls, artificial earth banks or other artificial structures, excluding revetments, which are: (i) closer to the bank top than 2 channel widths* or 10 metres (whichever is shorter)	-	-	-	-	✓	✓
3. Alteration of the structural complexity of vegetation within 2 metres of the channel, ranging from complete removal of vegetation to a partial change to the density of one structural component of the vegetation, such as woody vegetation.	-	-	-	✓	✓	✓
4. Bank revetment using vegetation; biodegradable geotextiles; wood placed at the toe of the bank; or non-grouted stone rip-rap placed at the toe of the bank.	✓ ₁	✓ ₂	✓ _{3 a&b}	✓ _{3a}	✓	✓
5. Bank revetment using materials or methods other than vegetation; biodegradable geotextiles; wood placed at the toe of the bank; or non-grouted stone rip-rap placed at the toe of the bank where:						
5a. no structure is placed between revetments on opposite banks so as to span the channel width	✓ ₁	✓ ₂	✓ _{3a&b}	✓ _{3a&b}	✓	✓

	and create a culvert through which the river flow passes;						
5b.	(i) the revetment is applied to the bank faces of each bank; and (ii) a structure is placed between the revetments and joined or abutted to them so as to span the channel width and create a culvert through which the river flow passes;	✓	✓ ₂	✓ _{3b}	✓	✓	✓
5c.	(i) the revetment is applied to the bank faces of each bank; (ii) the channel bed is altered to increase its resistance to erosion, such as by lining it, or replacing it, with concrete; bricks; wood; sediments larger than those typically capable of being transported by the river; or any other materials resistant to erosion; and (iii) a structure is placed between the bank revetments and joined or abutted to them so as to span the channel width and create a culvert through which the river flow passes.	✓	✓ ₂	✓ _{3b}	✓	✓	✓
6.	Removal and/or reintroduction/introduction of sediment from the channel bed where ≤ 50 % of the channel width affected.	✓ ₁	✓ ₂	✓ _{3a&b}	✓ _{3a}	✓	✓ ₄
7.	Removal and/ or reintroduction/introduction of sediment from the channel bed where > 50 % of the channel width.	✓	✓ ₂	✓ _{3a&b}	✓ _{3a}	✓	✓ ₄
8.	Alterations to the channel bed which increase its resistance to erosion, such as the lining of the bed, or the replacement of the bed, with concrete; bricks; wood; sediments larger than those typically capable of being transported by the river; or any other materials resistant to erosion.	✓	✓ ₂	✓ _{3b}	✓ _{3a}	✓	✓ ₄

9. Placement of any structure on the bed of the channel such that the structure abuts one of the banks and deflects part of the river flow to another part of the channel.	✓	✓ ₂	✓ _{3b}	✓	✓	✓
10. Placement of a structure on the bed of the channel such that the structure deflects part of the river flow to another part of the channel and, on its own or combination with other in-stream structures, occupies more than 10 % of the channel width	✓	✓ ₂	✓ _{3b}	✓	✓	✓
11. Construction of any dam, weir or other works by which water is impounded.	✓	✓ ₂	✓ _{3b}	✓	✓	✓
12a. Alteration of the channel length or the channel width which pose a high risk of destabilising the balance between erosion and deposition of sediment and hence the structure and condition of the bed or banks.	✓	✓ ₂	✓ _{3b}	✓	✓	✓
12b. Alteration of the channel length or the channel width which pose a low risk of destabilising the balance between erosion and deposition of sediment and hence the structure and condition of the bed or banks.	✓	✓ ₂	✓ _{3b}	✓	✓	✓

Notes:

- The activity should be considered relevant unless (i) the part of the channel affected is dry at the time of the works; and (ii) in the case of activity 6, the removal of sediment is not of a scale likely to result in sediment starvation and consequent bed erosion downstream².
- The activity should be considered relevant if (a) it affects the wetted part of the

² SEPA's Ecology Unit should be contacted for advice on the scale of sediment removal likely to produce habitat change downstream.

channel in spawning areas during spawning periods or during the period prior to the emergence of juvenile fish from the river gravels; or (b) the works will involve prolonged periods of blasting or pile driving during times during which migratory fish are likely to be in passage.

3. a) The activity should only be considered relevant if the works are undertaken in the wetted part of the channel.

b) SEPA will conclude that a significant effect on lamprey interests is likely if the activity proposed coincides with a location known to support lamprey populations and identified to SEPA by NatureScot.

To view these sites please use the 'Conservation Layer' on SEPA's GIS Interactive Map making sure 'Lamprey Habitat Sites' and the 'Lamprey Habitat buffers' boxes are ticked and navigate to the area of interest. (Note the buffers area shown on GIS will vary according to the size of the lamprey habitat)

4. The activity should only be considered relevant if the works are likely to affect instream islands or access to undertake the works is likely to damage riparian zone habitats.

Table 5B: Activities in loch SACs or SPAs that could affect habitat relevant to a protected species or habitat

Activity (as listed in 2014 Standards Directions)	Loch habitats & slender naiad	Otter	Nesting/roosting birds
1. Impounding works or works causing the lowering of the river bed immediately downstream of the loch outlet.	✓	✓	✓
2. Bank revetment using materials other than vegetation; geotextiles; or soil.	✓	✓	✓
3. Bank revetment using vegetation; geotextiles; or soil.	✓	✓	✓
4. Any structure on the bed other than an outfall, pipe, cable or part of a structure referred to in alteration 1, 5 or 6.	✓	✓	✓
5. Any structure which: (i) is suspended above the surface of the water between foundation structures on the bed; and (ii) extends from the bank.	✓	✓	✓
6. In-filling by any means of a part of a loch with the effect of extending the adjacent terrestrial land surface into the area previously occupied by loch water.	✓	✓	✓
7. Depositing of any material containing bedrock, boulders, gravel, sand, silt, mud or any mixture thereof on the bed other than as part of alterations 1, 2, 3, 4, 5 or 6.	✓	✓ ₁	✓ ₂
8. Removal of bed material by excavation from the bed	✓	✓ ₁	✓ ₂
9. Alteration of the structural complexity of vegetation on land within 10 metres of the loch edge, ranging from complete removal of vegetation and replacement with impermeable surfaces to a partial change to the density of a structural component of the vegetation.	✓	✓	✓

Notes:

1. Not to be treated as relevant unless the carrying on of the activity is likely to damage otter holts in the shore zone or prevent/limit the use of the loch by otters for a significant period of time.
2. Not to be treated as relevant unless the carrying on of the activity is likely to cause damage to nests or nesting sites in the shore zone or prevent the use of the loch by the birds for a significant period of time.

Annex 6: Indicative Distance Criteria for screening of licence applications for possible effects on SSSIs, SACs and SPAs

Controlled activities which are within a SAC, SPA or SSSI or within the screening distances set out in the tables below must have a LSE (SACs/SPAs) and or Likely Damage (SSSIs) assessment.

However please note that these are indicative screening distances that can be increased at the discretion of the Co-ordinating Officer and this can be recorded in WAT FORM 32.

a. Point Source Discharges and Disposals to Land

The following table provides suggested screening distances for potential impacts from point source and disposal-to-land licence applications in SSSIs, SACs or SPAs.

All discharges to water from PPC sites should be considered to be equivalent to a simple licence and screened at 1km unless they meet the thresholds for a complex licence, where they should be screened at 3 km.

Category of application	Inland Waters / Soakaways**
Registrations	No screening
Simple Licence (surface waters)	1km
Complex Licence (surface waters)	3km
Simple Licence (disposal to land), for waste pesticide or waste sheep dip	100m (0.1km)
Complex Licence (disposal to land), for waste pesticide or waste sheep dip	500 m (0.5km)
** Sewage and trade effluent disposals to groundwater via land are controlled under the CAR point source regime. Soakaways should be considered on a site-by-site basis where the SSSI, SAC, SPA or Ramsar Site may be influenced by groundwater e.g. a site with groundwater dependent wetland features.	

1.1.1 Abstractions and Impoundments

The following tables provide suggested screening distances for potential impacts from surface water and groundwater abstraction and impoundment applications.

Surface Water Abstraction and Impoundment activities screening distances

Registrations	500m
Licence	500m

Groundwater Abstraction Screening Distances

Registrations	250m
Licences <500m ³ /d	850m
Licences >500m ³ /day	1200m
Complex Licences >500m/day	1200m

1.1.2 Engineering

The following table provides suggested screening distances for potential impacts from engineering activity applications.

Engineering Activities screening distances

Registration	Within the site only
Licence	250m

Key References

Key Documents

- [WAT-FORM-32 SEPA Conservation Procedure Recording Form.docx](#) (under CAR)
- [WAT-LETT-86 v3 NatureScotConsultation.docx](#)
- [WAT-SG-53: Environmental Quality Standards and Standards for Discharges to Surface Waters](#)

Other Information

- Tables [2014 Standards Directions](#) (www.gov.scot/publications)
Scotland River Basin District (Standards) Directions 2021
- [UKTAG guidance](#) on good ecological potential river flows (wfd.co.uk)

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If you are a user of British Sign Language (BSL) the Contact Scotland BSL service gives you access to an online interpreter enabling you to communicate with us using sign language.

<http://contactscotland-bsl.org/>



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