

# **Water Use**

Regulatory Method (WAT-RM-41)

Derogation Determination – Improvements

to the Water Environment

August 2023

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### **Update Summary**

Version	Description	
v1	First issue for Water Use reference using approved	
	content from the following documents:	
	RM41 to WMfinalv2.doc	
v2	Revised guidance to accommodate change in method to	
	determine disproportionate expense of improvements	



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# **Background and key principles**

## When to use this guidance

This regulatory method (WAT-RM-41) and its accompanying supporting guidance (WAT-SG-67) and (WAT-SG-68) should be used when:

- An Operator is requesting an exemption to a proposal (either SEPA or Operator initiated) to vary an authorisation under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) in order to improve the status of the water environment and so contribute to the achievement of one or more of the Water Framework Directive's objectives referred to in points (A) to (D) of Table 1 or (E) of Table 2 below.
- SEPA is considering measures to improve the physical condition of a water body.

#### **Note**

Coordinating Officers (CO) should contact the Water Resources, Reservoirs and Engineering Unit (WRREN Unit) for support when using this method. Experience gained on other cases will help the decision-making process for new variations. In addition revised guidance maybe available. SEPA also has a series of sector based review groups who can also provide advice and peer review decisions. Early contact with the WRREN Unit is advisable if one or more of the principal objectives in 1.2 are not met.

CAR gives SEPA powers to vary authorisations for controlled activities. SEPA is expected:

 a. to exercise these powers to improve the water environment in order to contribute to the achievement of the environmental objectives of the Water Framework Directive (Directive 2000/60/EC); and



b. when exercising the powers, to have regard to the social and economic impact of the exercise of these powers; to promote sustainable flood management, and to act in the way best calculated to contribute to the achievement of sustainable development.<sup>1</sup>

SEPA will take account of the balancing considerations referred to in point (b) above in accordance with objective setting provisions of Article 4 of the Water Framework Directive. These provisions provide the flexibility needed to prioritise improvements over successive planning cycles whilst ensuring the pace of improvement is feasible and proportionate. The approach set out in this method takes account of European guidance on the Directive's objective setting provisions.<sup>2</sup>

The Regulatory Method applies only to variation conditions being proposed in order to modify a controlled activity in such a way as to reduce the adverse impact of that activity on the status of the water environment. SEPA may also propose conditions it considers necessary for other purposes (e.g. in relation to data returns etc). The regulatory method does not apply when considering objections to these latter sorts of conditions.



<sup>&</sup>lt;sup>1</sup> See Part 1 of the Water Environment and Water Services (Scotland) Act 2003

<sup>&</sup>lt;sup>2</sup> See Environmental Objectives Under Water Framework Directive, EC/CIRCABC 20/06/2005

# **Objectives of the Water Framework Directive**

The principal objectives of the Water Framework Directive are set out in Table 1 below:

Table 1: The Directive's principal objectives

A	protect, enhance or restore all bodies of surface water not designated as Heavily Modified or Artificial with the aim of achieving good surface water status by 21/12/2027;
В	protect or enhance all bodies of surface water designated as Heavily Modified or Artificial with the aim of achieving good ecological potential and good surface water chemical status by 21/12/2027;
С	protect, enhance or restore all bodies of groundwater with the aim of achieving good groundwater status in all bodies of groundwater by 21/12/2027; and
D	achieve compliance with any water-related standards or objectives for Protected Areas by 21/12/2027, unless an earlier or later date for achieving such compliance is specified in the Community legislation under which the Protected Area was established

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The Directive permits Member States to exempt from achieving the objectives referred to in points (A) to (D) of Table 1 where certain tests are met. Where an exemption is applied, an alternative objective must be set. The Directive's alternative objective is listed in Table 2 below:



### Table 2: The Directive's alternative objectives

Ε

achieve less stringent objectives than the objectives referred to in, as relevant, points (A), (B) or (C) in Table 1 while representing the greatest improvement towards good status or good ecological potential that could reasonably be achieved.

The extended deadline provisions under article 4.4 does not apply beyond 2027 therefore every effort must be made to secure the necessary improvements to meet 3<sup>rd</sup> cycle objectives by 2027: as we reach the 2027 deadline circumstances may change and it may be possible to extend the deadline in exceptional circumstances.

Where the alternative less stringent objective referred to in point (E) of Table 2 is applied, its applicability must be reviewed every six years with the aim of securing further environmental improvements. Less stringent objectives will be defined in terms of targets for each relevant quality element (e.g. water quality determinand).

The achievement of an environmental objective such as good status may be at risk because of both the impacts of pressures which SEPA can control through the exercise of its powers under CAR and those that it cannot. SEPA will use its powers to contribute to, and enable, the achievement of the Directive's objectives by seeking to address those impacts for which controlled activities are responsible.

More generally, SEPA will use its powers to seek to resolve impacts resulting from controlled activities causing particular impacts whether or not it knows that the impact of other controlled activities or other pressures on the water body concerned will be addressed. In practice, this means that SEPA will seek improvements on a quality element (determinand) by quality element basis.



## **Handling Claims for Exemption**

An operator may claim an exemption to a proposed variation where he or she considers that the improvements being proposed by SEPA are:

- technically infeasible;
- · disproportionately expensive; or
- with respect to improvements to the hydromorphological characteristics of water bodies designated as heavily modified or artificial, likely to have significant adverse effects on the use for which the water body has been designated or have significant adverse impacts on the wider environment.

Where an operator makes such a claim, SEPA will normally require the operator to advertise the proposed variation and the reasons why the operator considers an exemption would be appropriate. SEPA will take account of the responses to such advertisements in determining whether an exemption should apply and hence how to vary the authorisations concerned.

SEPA will aim to ensure that the information it requires from operators, and the complexity of analysis it uses, to determine claims for exemption are proportionate to the difficulty of the decision at hand and the issues at stake. SEPA will also ensure that the reasons for its decisions are clearly set out and explained.

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# **Process Summary**

Stage	Guidance topics [Control + Click to see]
Preparing and issuing	When to use WAT-RM-41
a proposed variation	Objectives of WFD



	Preparing a proposed variation
	Information to communicate to the operator
	Additional considerations in preparing proposed variations
	when there are Multiple Contributory Pressures
Handling claims for	General approach to claims for exemption
exemption prior to making	Requirement to advertise proposed variations
a determination	Grounds on which an operator may claim exemption
	Exemptions specific to heavily modified & artificial water
	<u>bodies</u>
Making a proposed	Approach where operator is not objecting to the proposed
determination	variation
	Information needed to determine a claim for exemption
	Step-wise approach to applying the exemption tests
	Determining if the exemption tests are passed
	• Technical infeasibility test
	Disproportionate expense test
	Significantly better options test
	<u>Significant adverse impact test</u> (heavily modified
	and artificial water bodies only)
	Identifying an alternative timetable
	Determining an appropriate timetable for improvements
	Determining an appropriate less stringent improvement
	Reviewing the level of confidence in the determination



Preparing a summary report on a proposed determination
Recording the outcome of a determination



# Preparing and issuing a proposed variation

## Preparing a proposed variation

The first step in the variation procedure is to prepare a proposed variation. The proposed variation should be designed to:

- a. enable the achievement of one or more of the environmental objectives in points (A), (B), (C) or (D) of Table 1;
- b. enable the achievement of one of the appropriate alternative objectives listed in point (E) of Table 2 where, prior to the variation being initiated, SEPA has already assessed that the improvement needed to achieve one of the objectives listed in Table 1 would be technically infeasible or disproportionately expensive to make; or
- c. bring back on track the achievement of any objective that has been agreed in the most recent version of the River Basin Management Plan

With respect to points (a) and (b) above, the date for compliance with conditions proposed to enable the achievement of the environmental objectives shall be 21/12/2027. In deciding the appropriate variation to propose, if any, the **CO** should take account of the level of confidence that there is truly an adverse impact placing the achievement of one or more of the Directive's objectives at risk; and the level of confidence in the magnitude of the action needed from the operator to achieve the objective (See Table 3).

Table 3: Taking account of confidence in deciding the appropriate variations to seek

	Variation
Low confidence that a standard	Further investigation and data gathering
needed to enable the achievement of	to reduce uncertainties. Seeking a
one or more of the objectives listed	variation to reduce the pressure is not
in Table 1 or Table 2 is failed	applicable in this scenario
n	needed to enable the achievement of one or more of the objectives listed



2. High confidence that a standard needed to enable the achievement of one or more of the objectives listed in Table 1 is failed but low confidence that measures beyond low cost/standard good practice measures would be needed to enable the objective(s) to be achieved

Seek appropriate variation based on the operator implementing the low cost/standard good practice measures

- 3. High confidence that that a standard needed to enable the achievement of one or more of the objectives listed in Table 1 is failed and high confidence that measures beyond low cost measures/standard good practice would be needed to enable the objective(s) to be achieved
- (i) Seek appropriate variation to enable the achievement of the relevant objective or objectives listed in Table 1
- (ii) Seek variation based on the operator implementing those measures that have not be ruled out as technically infeasible or disproportionately expensive as a result of an appropriate generic assessment as may be set out in national SEPA guidance

Where multiple pressures are contributing to an adverse impact, proposed variations should reflect the cost-effective contribution to addressing the impact which SEPA considers is appropriate for each operator concerned to make. Guidance on identifying cost-effective contributions from multiple contributory pressures can be found in <a href="mailto:Annex F: Multiple">Annex F: Multiple</a>
Contributory Pressures.



## Communicating a proposed variation

The **CO** should ensure that the operator is aware (i.e. through meetings with SEPA officers) that SEPA is about to formally propose a variation, and why, before the variation is proposed in writing. The **CO** should also ensure that the operator understands the process and what will be required of them. The information in Table 4 should help explain the process.

The **CO** should ensure that a record is kept of the minutes of any meetings with the operator and of any correspondence with the operator.

Table 4: Information that should be provided to the operator at the start of the variation process

1.	Why SEPA is initiating the variation?	(i) the water body or bodies adversely impacted by the activity;
		(ii) the environmental standards being caused to be failed;
		(iii) the estimated spatial extent of the impact of the activity; and
		(iv) the achievement of which environmental objective or objectives the variation is intended to contribute;
2.	The conditions SEPA is proposing to vary in order to deliver the required environmental improvement	(i) the discharge limit, abstraction limit, etc which SEPA considers necessary to enable the objective to be achieved;
	·	(ii) a draft of the proposed variation; and (iii) the timetable for complying with the proposed new conditions



- If the operator is considering making the case to SEPA that an exemption is appropriate, what they have to do
- (i) the exemption conditions that would have to be met (See the exemption tests section);
- (ii) the factors SEPA will take into account in considering any claim for exemption;
- (iii) the information SEPA will expect the operator to provide to enable it to determine the case and an appropriate and reasonable timetable for providing that information (See Table 8);
- (iv) the requirement for any claim for exemption to be advertised;
- (v) the content of the advert, which will should include the reasons the operator believes that an exemption is appropriate and the alternative level of environmental improvement, if any, the operator believes would be feasible and proportionate to make and the timetable for doing so;
- (iv) the timetable for third parties to make representations following the placement of an advertisement and the opportunities for third parties to request that Scottish Ministers determine the case if they disagree with SEPA's proposed determination (See WAT-RM-20: Advertising and Consultation);
- (vii) the right of the operator to appeal to Scottish Ministers if they so wish after SEPA has determined the case and the timetable within which they must do so (i.e. within 2 months of the date of service of the



		notice is issued – See <u>WAT-RM-20</u> and <u>WAT-RM-09</u> : <u>Modifications to CAR Authorisations</u> )
4.	How the mechanics of the process will work?	(i) the powers under which SEPA is seeking the variation;
		(ii) the requirements in relation to requests for information made by SEPA;
		(iii) the placement of information on the public register and issues of commercial confidentiality;
		(iv) the roles of other responsible authorities;
		(v) the relevant contacts on the behalf of SEPA and on the behalf of the operator;
		(vi) the expected timetable for the process

The **CO** should also specify in writing the period within which SEPA expects the operator to respond to the proposed variation. In identifying this period, the **CO** should aim to ensure that the operator is given a reasonable period of time to consider the implications of the proposed variation and to decide on a response to it.

Where the operator fails to respond within the period identified and does not make a reasonable case for an extension of this period, the **CO** should, following discussion with the Unit Manager, impose the variation proposed to the operator.



## **The Exemption Tests**

## Tests necessary to agree less stringent objectives

#### Note:

The extended deadline provisions under article 4.4 does not apply beyond 2027 therefore every effort must be made to secure the necessary improvements to meet 3<sup>rd</sup> cycle objectives by 2027: as we reach the 2027 deadline circumstances may change and it may be possible to extend the deadline in exceptional circumstances.

Where an operator wishes to claim an exemption from making an improvement to the water environment, SEPA will determine whether an exemption is applicable by applying the relevant exemption tests set out in paragraphs 3, 5, 8 and 9 of Article 4 of the Water Framework Directive and summarised in Table 5 below.

Table 5: The exemption test

## Less stringent objective

- (a) For reasons of technical infeasibility or disproportionate expense, the scale of improvements being sought cannot reasonably be achieved by 2027
- (b) The environmental and socio-economic needs served by the activity cannot be achieved by other means, which are a significantly better environmental option not entailing disproportionate costs
- (c) The alternative scale of improvement proposed represents the greatest improvement that could reasonably be delivered
- (d) Setting a less stringent improvement target would not compromise compliance with other EU legislation (e.g. achievement of the objectives for Protected Areas)
- (e) The justification for the less stringent improvement target will be reviewed in each river basin planning cycle



# Specific exemptions for heavily modified and artificial Water Bodies Mitigation and heavily modified and artificial water bodies

SEPA will not seek mitigation for the impacts of the modified hydro morphological characteristics of a heavily modified or artificial water body where that mitigation:

- a. is impracticable given currently known techniques;
- b. would have significant adverse effects on the use for which the water body was designated; or
- c. would have significant adverse effects on the wider environment interests for the protection of which the body has been designated as heavily modified or artificial.

However, an operator may believe that, in their particular circumstances, one or more of points a), b) or c) above applies to the mitigation SEPA is proposing. If SEPA determines that such a claim is valid, it will withdraw the proposed mitigation as, by definition, the mitigation is not required to achieve the objective of good ecological potential. No 'exemption' will therefore be needed.

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### Claims for designation of a water body as heavily modified

SEPA has already identified a number of heavily modified water bodies. Other water bodies may also qualify for designation but have not yet been designated. The information needed to decide whether designation is appropriate may only become available at the time a variation to an authorisation is being proposed. Designation may be appropriate if:

- SEPA is proposing improvements to the hydromorphological characteristics of a water body; and
- the operator claims those improvements would have significant adverse impacts on the use of the water body; or
- the improvements would have significant adverse impacts on the wider environment



For designation to be considered, the water body must be worse than good status as a result of a substantial change to its hydromorphological characteristics. A substantial change to a water body's characteristics will involve a major change in the appearance of the water body. The change will be extensive/widespread or profound. Typically it will involve substantial change to both the hydrological and morphological character of the water body. It will also be permanent rather than temporary or intermittent.

Many alterations to the hydrological characteristics of water bodies, such as abstractions and discharges, are not associated with morphological changes, and, therefore, may be relatively easily reversible, temporary or short-term. Consequently, such alterations would not constitute substantial changes in the character of a water body and designation would not be appropriate. In contrast, water bodies that are failing to achieve good status because of major impounding works will tend to be substantially changed in character and therefore potentially heavily modified water bodies.

Where a water body is potentially heavily modified, SEPA will apply the designation tests set out in Table 6 to determine whether designation is appropriate. If designation is appropriate, SEPA will withdraw any proposed improvements to the hdyromorhological characteristics of the water body which are unnecessary for the achievement of good ecological potential. Further guidance on mitigation measures for the classification of ecological potential is available in <a href="Guidance for defining Good Ecological">Guidance for defining Good Ecological</a>
<a href="Potential">Potential</a> (WFDUK).

### Table 6: Heavily modified water body designation tests

- (a) the hydromorphological alterations needed to achieve good status would have significant adverse effects on:
  - the wider environment;
  - navigation, including port facilities;



- recreation;
- drinking water supply, power generation, irrigation or other activities for which water is stored;
   flood protection
- · land drainage; or

other sustainable development activities

- (b) the benefits dependent on the modified hydromorphological characteristics cannot, for reasons of technical feasibility or disproportionate costs, be provided by other means which are a significantly better environmental option; and
- (c) the improvements are not necessary to comply with other Community legislation (e.g. failing to make the improvement would not compromise the achievement of an objective for a Protected Area)

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## Stepwise consideration of exemption tests

Where it is unclear which alternative objective could be applicable, SEPA will use the stepwise procedure set out in Table 7 below to determine which, if any, alternative objective is appropriate.



Table 7: Step-wise consideration of exemption tests

	Step-wise tests	Key
1.	Is mitigation being sought for the impacts of	YES -go to step 10
	the hydromorphological alterations for	NO - go to step 2
	which a water body has been designated as heavily modified?	
2.	Ignoring issues relating to the time	If 'yes', go to step 3
	needed for implementation and the costs, is there a known technique that could, in principle, deliver the scale of improvement being sought?	NO - go to step 8
3.	For reasons of technical infeasibility	YES - go to step 4
	due to constraints governing the time needed to implement a technique (which are not to do with costs), would	NO - go to step 5
	the scale of improvement being sought require a longer timescale to deliver	
	than 2027? For example the	
	requirement to obtain other permissions	
	such as planning consent or landowner access permissions etc.	
4.	Can the technical constraints referred	YES - the exemption tests
	to in step 3 reasonably be overcome by 2027?	are failed and exemption is not applicable
		NO - go to step 8



<ul><li>5.</li><li>6.</li></ul>	Could the scale of improvement being sought be made by 2027 without disproportionate expense?  Is the greatest improvement that could reasonably be achieved without disproportionate expense being proposed?	YES - the exemption tests are failed and exemption is not applicable  NO - go to step 6  YES - go to step 7  NO - exemption cannot be granted until such improvement is proposed
8.	Would the scale of improvement proposed, if any, enable compliance with other relevant EU legislation?  Could the environmental and socioeconomic needs served by the activity be delivered by other means, which are a significantly better environmental option not entailing disproportionate costs?	YES - go to step 8  NO - exemption cannot be granted until such improvement is proposed  YES - the exemption tests are failed and exemption is not applicable  NO - the exemption tests are passed and an exemption to the proposed less stringent improvement (if any at all)
9.	Ignoring issues relating to the time needed for implementation and the costs, in the particular circumstances is there a known technique that could, in principle, deliver the mitigation being sought?	YES - go to step 10  NO - exemption is needed and the request for mitigation should be withdrawn as the mitigation is not practicable and therefore not



		required to achieve the objective of good ecological potential
10.	In the particular circumstances, would	YES -no exemption is needed and
	the mitigation measure have a	the request for mitigation should
	significant adverse impact on the use,	be withdrawn as the mitigation is
	or the wider environment interest, which	not compatible with the reason for
	is the reason behind the designation of	designation and therefore not
	the water body as heavily modified?	required to achieve the objective
		of good ecological potential
		NO - go to step 3

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# Making a proposed determination

# Determination procedure where an operator does not object to a proposed variation

If the operator does not object to the proposed variation, the CO should issue the variation as proposed. The CO should do this by serving notice (under Regulation 23) on the operator of the variations being made to the authorisation and the date on which those variations will take effect. In such cases, SEPA will not normally have required advertisement of the proposed variation. Refer to <a href="WAT-RM-20">WAT-RM-20</a>: Advertising and <a href="Consultation">Consultation</a> for guidance on advertising and consultation.

On issuing the variation, the CO must ensure that the relevant information describing the measures and the environmental improvement expected of the measures is entered into the Measures Database (<u>recording the outcome of a determination</u>).



## Information necessary to determine a claim for exemption

Where an operator has notified SEPA that they wish to object to a proposed variation, the CO should review the information provided by the operator and by third parties in response to the advertisement of the proposed variation (See <a href="WAT-RM-20">WAT-RM-20</a>). The aim of the review should be to identify whether additional information is needed from the operator or from third parties in order to reach a judgement on whether an exemption is applicable. Table 8 below outlines the information likely to be needed from operators.

If the CO identifies that further information is needed from the operator or from third parties to determine the case, the CO should request that further information using a Regulation 14 information notice.

The notice should specify the date by which SEPA expects the operator or third party to provide the information requested in the notice. This date should provide for a period of time which the CO, having discussed the matter with the operator or third party, considers reasonable for the operator or third party to collect and collate the requested information. The CO should ensure that SEPA does not demand more information than it reasonably needs from any operator or third party.

The CO should not seek information unless he or she is of the view that the information will facilitate the decision at hand. Information requests should be targeted at obtaining information that will help SEPA better assess issues that are likely to be decisive or otherwise influential in the determination of the case. The level of detail requested should be reasonable and proportionate to the difficulty of the decision, the likely added value of the information and the implications of a wrong decision.

If a Responsible Authority or other public body has suggested that further information be obtained from an operator and the CO is unsure whether it is reasonable to request such information, the CO should contact the relevant Responsible Authority or other public body and discuss the matter before issuing an information notice.



If an operator or third party fails to provide the requested information within a reasonable timescale, despite appropriate reminders from SEPA, the CO should make a proposed determination based on the information that is available.

Table 8: Information required from the operator to determine whether an exemption is applicable

1.	The reasons why the operator is objecting to the proposed variation,	The reasons should be:  (i) one or more of the reasons given in point (a) or in point (d) of Table 5; or  (ii) one or more of the reasons given in 'specific exemptions for heavily modified or artificial water bodies section' (or 'Step-wise consideration of exemption tests section' if applicable) with respect to a heavily modified or artificial water body
2.	The information needed to evaluate the operator's case that these reasons referred to in point (1) above apply	(i) A report on the appraisal of the options for making the improvements that were considered by the operator (See Annex A)  And, as relevant, the reasons why the operator considers that complying with the proposed variation would be:  (ii) technical infeasible (See Annex B:)  (iii) disproportionately expensive (See Annex C); or (iv) have a significant adverse impact on the use of a heavily modified or artificial water body or on the wider environment interest for the protection of



		which a water body is designated heavily modified (See Annex E)
3.	Information relevant to determining if the exemption tests listed in points (b) and (c) in Table 5, as relevant, are met]	(i) information on why there are no environmentally significantly better means of providing the benefits served by the activity (See Annex D); and (ii) if there are environmentally significantly better means, why these would entail disproportionate costs



## Determining whether an exemption is appropriate

Where an operator is objecting to a proposed variation, the CO should use WAT-FORM-28 to help structure and record the results of his or her determination of whether the tests for exemption (See <a href="the exemption tests">the exemption tests</a> section) are passed. Please contact the WRREN Unit to discuss the form. Guidance on applying the exemption tests can be found in:

- Annex B: Technical Infeasibility Test
- Annex C: Disproportionate Expense Test
- Annex D: Significantly better environmental options test
- Annex E: Significant Adverse Impact Test

In making a proposed determination, the CO should take as balanced and as objective a view as possible. The basis for the proposed determination must be clear and defensible. If the CO considers that an exemption is appropriate, he or she should aim to identify the alternative improvements (if any) expected of the operator in the current and subsequent planning cycles.

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### Determining an appropriate less stringent improvement

An operator may propose to make less ambitious improvements than those initially proposed by SEPA. If the CO believes that there may be grounds for such less stringent improvements, he or she should determine whether the level of improvement (if any) being proposed by the operator is reasonable.

Where necessary to make this determination, the CO should ask operators to explain why improvements additional to those which they are proposing would be technically infeasible or disproportionately expensive. Such requests should be made using a Regulation 14 Information Notice.



To pass the exemption tests, any alternative less stringent improvement must represent the greatest improvement to each quality element affected by the activity which it is technically feasible and not disproportionately expensive to make. This may mean, for example, that the improvements are sufficient to achieve 'good' for some (but not all) of the quality elements affected by the activity.

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### Reviewing the level of confidence in the determination

Before making a recommended determination, the CO should assess how confident he or she is in the results of the key assessments that have been made in relation to the tests applied. The key assessments are those on which the decision is likely to hinge.

If a decision is particularly sensitive to the results of a particular assessment and there is significant uncertainty about whether that assessment is correct, the CO should decide whether further information could reasonably be obtained that would significantly increase confidence in the results of the assessment. If so, the CO should seek to obtain that information before making a recommendation on the case.

If confidence in the results of a key assessment is low and cannot reasonably be improved, the CO should highlight that this is the case, and why, when making his or her recommendation.

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### Preparing a summary report on a proposed determination

COs should prepare a summary of the reasons for his or her proposed determination. The summary should include the following:

a. the improvement to the water environment that will be delivered, and the timetable for its delivery, should the CO's recommendation stand;



- b. a copy of the proposed variation notice, as revised following consideration of the applicability of the exemption tests (the date for compliance with the varied conditions should be specified)<sup>3</sup>
- c. a summary of the changes to the proposed variation notice compared with SEPA's original proposals
- d. a summary which sets out the CO's judgement on each of the relevant exemption tests; and
- e. Annexes which provide sufficient further detail to make clear the basis on which the judgements referred to in point (d) were reached and references to the detailed sources of the information used.

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## Recording the outcome of a determination

Once a determination has been made, the CO must ensure that the following information is recorded:

- a. the water bodies that will be affected by the variation;
- b. for each affected water body, the status expected to be achieved for the water quality, water resource or morphological quality elements improved by the variation (e.g. ammonia expected to improve to good);
- c. by which update of the River Basin Management Plan (i.e. before 2027; etc); the improvements referred to in point (b) will be delivered;
- d. the estimated length/area of improvement in each affected water body;
- e. a summary of the measures expected to be used to deliver the improvement (e.g. reduce discharge by increasing treatment); and
- f. where an exemption has been applied, a summary of the reasons justifying the application of an exemption



<sup>&</sup>lt;sup>3</sup> The date for compliance should be 21/12/2027

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## **Annexes**

- Annex A: Using options appraisal apply exemption tests to appropriate measure
- Annex B: Technical Infeasibility Test
- Annex C: Disproportionate Expense Test
- Annex D: Significantly better environmental options test
- Annex E: Significant Adverse Impact Test
- Annex F: Multiple Contributory Pressures



# Annex A: Using options appraisal to apply exemption tests to appropriate measures

Before determining whether the exemption tests are met, SEPA will normally expect operators claiming exemption to demonstrate that they have considered and appraised relevant options for complying with the proposed variation.

An options appraisal is necessary because some options may be:

- technically infeasible whereas others would not be; and
- significantly less expensive, less carbon intensive or more effective than others

If an inappropriately narrow range of options is considered, the disproportionate expense test could be applied to an option which was far more costly or carbon intensive than other lower cost options and the conclusion wrongly drawn that making the improvement would be disproportionately expensive.

SEPA will not require operators to undertake an options appraisal where:

- the improvements are expected to be delivered as a result of standard good practice water use efficiency measures expected of operators in the sector concerned; or
- it is clear to the CO which option would be most cost-effective (e.g. based on past experience of similar circumstances)

Where an options appraisal is required, SEPA will expect the operator to appraise the appropriate options, or combinations of options, listed in Table 9 and to provide a report describing, in so far as is relevant:

- a. why the operator considers particular options to be technically infeasible; and
- b. the relative cost-effectiveness of different options and combinations of options the operator considers technically feasible



For the purposes of point (b) above, the CO should request the information indicated in Table 10.

Table 9: Types of generic options to be considered before an exemption can be applied

	Improvement required		Potential options for mitigation
1.	Reduce impact of point	a.	Improve treatment
	source discharge	b.	Reduce at source
			(e.g. waste minimisation; substitution)
		C.	Relocate discharge to another location
			(with available carrying capacity)
		d.	Change timing of discharge
			(e.g. discharging at certain states of the
			tide)
2.	Reduce impact of	a.	Reduce leakage
	abstraction	b.	Reduce usage (e.g. reduce demand by
			increasing use efficiency, etc)
		C.	Use water from an alternative source
		d.	Change timing of abstraction
3.	Reduce impact of	a.	Cease maintenance works to allow
	maintenance engineering		natural recovery
	works	b.	Use 'softer' maintenance techniques in
			place of 'hard' engineering techniques

Deciding whether one option is more cost-effective than another is a matter of judgement based on experience and information on the relative magnitude of the costs of different options. The CO should note that the aim of an options appraisal is only to make sure that



claims of technical infeasibility have not ignored options that would be feasible and that claims of disproportionate expense or significant adverse impact have not ignored options that have significantly lower costs/adverse impacts. The aim is not to dictate the choice of option on the basis of minor differences in costs and effectiveness.

In some cases, an options appraisal may involve trade-offs between reducing costs at the expense of a loss of effectiveness (i.e. the likelihood the improvement will be delivered) (See Table 16 in Annex F).

Operators will usually have a far greater knowledge than SEPA of the techniques that could feasibly be used to reduce the impact of their controlled activities, including the costs of those techniques. The focus of the CO should be to make sure there is evidence that:

- the operator has appraised a reasonable range of different options;
- options that SEPA is aware have been used in similar circumstances are included in the appraisal;
- where the costs of an option appear unusually high (e.g.; experience from other cases; information provided in representations from third parties), reasons are given why this is the case

Table 10: Summary information expected in a report on an options appraisal

	Option A	Option B	Option C
Summary description			
financial costs to operator <sup>5</sup>	£s	£s	£s
Any significant differences in negative impacts on the factors listed in Table 13	Use supporting	ng guidance <u>V</u>	VAT-SG-67
Any significant positive side-effects on the factors listed in Table 13 that may	Use supportir	ng guidance <u>V</u>	VAT-SG-67



off-set differences in financial costs or other negative impacts			
Effectiveness* (i.e. likelihood that the option will be effective in making the required improvement)	High Medium Low	High Medium Low	High Medium Low
Option considered most cost-effective and the reasons why			

#### Notes

\* The effectiveness rating refers to the confidence that the option will deliver the required improvement in the required timescale. This confidence will depend on the extent of past experience of the environmental effectiveness of the option; the ability to predict the potential effect of any differences in the circumstances under which the option will operate compared to those under which it has been used before; and the margin of potential overshoot designed into the option to account for uncertainties

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Annex B: Technical Infeasibility Test

Annex C: Disproportionate Expense Test

Annex E: Significant Adverse Impact Test



## **Annex B: Technical infeasibility test**

SEPA will expect any operator claiming an exemption on the grounds of technical infeasibility to have considered all potential options for making the environmental improvement and established that none of the options would be technically feasible (See <a href="#">Annex A</a> on options appraisals). SEPA will not grant an exemption on the grounds of technical infeasibility unless an appropriate options appraisal has been undertaken.

Only practical issues of a technical nature should be taken into account in applying the technical infeasibility test. In some cases, there may be no known practical techniques for making the changes to the activity that would be required to comply with the proposed variation. In these circumstances, it is clearly technically infeasible for the operator to deliver the environmental improvements being sought. This means that:

- an exemption to an alternative, less stringent objective should be applied; or
- if the variation or a part thereof was designed to improve
  the hydromorphological characteristics of a heavily modified or artificial water body,
  the variation or relevant part thereof should be appropriately modified or withdrawn
  (See specific exemptions for heavily modified and artificial water bodies section).

In other cases, there may be practical techniques which, in principle, could be used to comply with the proposed variation but would be technically infeasible to put in place in time. In this context, practical constraints relating to the time needed to design, gain permissions for, commission, construct and bring into operation, any capital works are relevant in deciding whether or not making the improvements would be technically infeasible. In contrast, any cost-related benefits that may accrue to an operator (or third party) should be taken into account in determining whether complying with a proposed variation would be disproportionately expensive and not whether it is technically infeasible (See Annex C).



The deadline for making measures operational (i.e. for compliance with varied authorisation conditions) for the third river basin management plan is 21<sup>st</sup> December 2027. This is the deadline which should take account when determining if an exemption on the grounds of technical infeasibility is warranted.

Table 11 sets out the different reasons why it may be technically infeasible for an operator to make the improvements being sought by SEPA.

SEPA will expect operators to demonstrate that they have made reasonable and proportionate efforts to overcome the technical constraints which they claim are preventing the timely delivery of the environmental improvements sought by SEPA. The bigger the potential benefits of these improvements, the greater SEPA will expect the operators' effort to be.

Table 11: Reasons why making an improvement may be technically infeasible

	Reason for infeasibility
(a)	for practical reasons of a technical nature, a technique necessary to make the improvement cannot reasonably be made operational by the deadline required
(b)	for practical reasons of a technical nature, it is sensible to implement a technique in phases as the appropriate design of successive phases depends on knowledge of the effectiveness of earlier phases
(c)	there is currently no known practical technique for making the improvement required or
(d)	the cause of the adverse impact on the status of the water environment is not yet known and consequently a technique necessary to address the impact cannot be identified



## **Annex C: Disproportionate expense test**

### General principles

Before considering a claim for exemption on the grounds of disproportionate expense, SEPA will require operators to demonstrate that they have:

- a. considered the potential options available to them for making the improvements being sought by SEPA;
- b. identified which of the options would be the most cost-effective<sup>4</sup> and why; and
- c. estimate the costs<sup>5</sup> associated with the option referred to in point (b) above

Guidance on options appraisal is provided in <u>Annex A.</u> SEPA will not grant an exemption on the grounds of disproportionate expense unless an appropriate options appraisal has been undertaken.

In determining whether making an environmental improvement would be disproportionately expensive, SEPA will take into account whether or not:

- a. on the basis of the balance of costs and benefits involved, making the improvement would be worthwhile in principle; and
- b. requiring the operator to make the improvement would impose unfair and unjustified burdens.

The burdens referred to in point (b) above are relevant to deciding if the pace of improvement is proportionate (e.g. can we afford to do it now without imposing an unfair burden?) rather than deciding whether the ultimate goal is worthwhile. An improvement may be determined to be disproportionately expensive on the basis that it is not worthwhile in principle [point (a)] or because making it would impose unfair burdens [point (b)]. These



<sup>&</sup>lt;sup>4</sup> Decisions should be prioritised based on low cost and low carbon solutions.

<sup>&</sup>lt;sup>5</sup> Cost should be expressed in 40 year NPV terms and should include all costs associated with the improvement i.e. both capital and revenue costs.

issues should not be seen as entirely independent. For example, if substantial benefits are expected from a proposed variation, SEPA will take this into account in determining whether the burdens referred to in (b) are sufficient to justify postponing the proposed variation, and if so, how long a postponement would be acceptable. All other things being equal, if the benefits are large, a shorter postponement may be justified on the grounds given in point (b) than would be the case if the benefits were relatively small.



Fig 2: Outline of the disproportionate cost assessment process

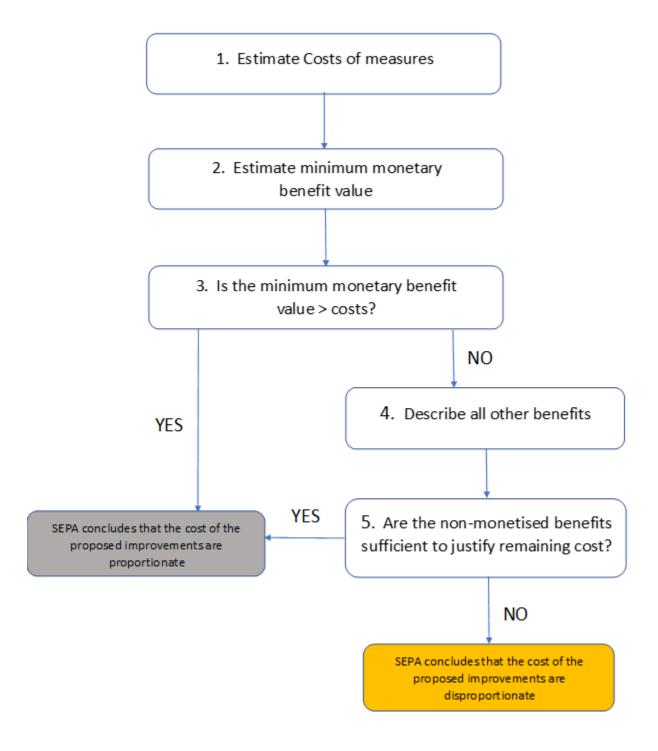




Table 12 outlines the information the CO should collect in order to carry out the disproportionate cost assessment.

**Table 12: Information Required for Disproportionate Cost Assessment** 

General Water Body Information Required	Where to Obtain Information
Overall Status	
Pressures on the water body	Water environment hub
Specific to Disproportionate Cost	
Assessment	
Cost estimate for improvement	Operator
Minimum monetised benefit value	Water Benefit Costs spreadsheet

#### Estimation of Costs and Benefits<sup>6</sup>

SEPA has derived minimum monetised values for the benefits associated with improving the water environment in Scotland. These values are used to estimate a monetary value for the proposed improvement to the environment (see <a href="water-benefits">water-benefits</a> cost spreadsheet) and are based on improving the overall ecological status, or potential, of waterbodies. The detailed methodology on how these values were derived can be found in the document 'Development and use of monetary values for the Scottish water environment'.

#### Step 1: Estimate costs to improve the overall status of the water body

When carrying out the comparison of the improvement costs against the benefit value the CO must also identify all other pressures are on the water body and include cost estimates to resolve those pressures. This is to ensure that the cost and benefit values are comparable (the benefit values are for improving the OVERALL water body status which may require resolution of additional pressures as well as the one being considered for derogation). To aid



the process of estimating overall improvement costs for the water body, SEPA has prepared costs as a benchmark guide (<u>water benefits cost</u> spreadsheet).

# Step 2: Identify the minimum value for the benefits associated with improving the water body status

- 1. Identify the catchment
- 2. Add the monetary values for the present values relating to the class(es) uplift expected from the improvement. For example, if the water body is at poor status and the improvement will lead to good status, then add the values together for poor to moderate and moderate to good
- 3. Multiply the figure obtained above by the length<sup>6</sup> or area of water body that will be improved.

#### Step 3: Is the minimum benefit value > costs?

Divide the present value for costs by the present value for benefits of improving overall status/potential. A cost benefit ratio of 1 or less means the improvement(s) are proportionate and greater than 1 indicates that you need to consider the benefit that will be delivered by an improvement in more detail for a proportionality decision to be made (this is described in step 4 but the derogation support group should be contacted at this stage).

### Step 4: Describe all other benefits<sup>7</sup>

1. Using local information note all additional benefits anticipated to arise from the proposed improvement. The significance of these benefits are then determined using the guidance in WAT-SG-67.



<sup>&</sup>lt;sup>6</sup> Length improved e.g. length to which fish will have access taking account of natural barriers or length being re-watered.

<sup>&</sup>lt;sup>7</sup> This step is not required if the cost benefit ratio is <or=1

# Determining, if, in principle an environmental improvement is worth making

In determining whether the cost of an improvement is proportionate or disproportionate, SEPA will take account of the financial cost of the improvement and the positive and negative impacts on the factors listed in Table 13. Please see <a href="WAT-SG-67">WAT-SG-67</a>: Assessing the Significance of Impacts - Social, Economic, Environmental for more detail.

Table 13: Factors taken into account in disproportionate cost assessments

Economic impacts	Social impacts	Environmental impacts
Scottish Economy	Health	Water environment
Third party businesses	Safety	Biodiversity
	Recreation	Landscape
	Nuisance	Green house gas emissions
	Vulnerable/disadvantaged	Built heritage
	groups	Earth heritage
		Waste and resource use

SEPA will use the screening criteria illustrated in <u>Table 13</u> when judging whether the scale of the financial costs mean that an improvement is:

- unlikely to be disproportionate on cost verses benefit grounds;
- likely to be disproportionate on cost verses benefit grounds; or
- the judgement is dependent on a more detailed assessment of the factors referred to in Table 13.



For guidance on weighing up positive and negative impacts on the factors listed in Table 13, the **CO** should refer to supporting guidance <u>WAT-SG-67</u>. The **CO** should also take account of this supporting guidance when identifying the information needed from the operator or from other public bodies in order to make a determination.

It may be unclear on the basis of the information available whether or not making an improvement would be disproportionate. In such circumstances, the **CO** should contact the Water Unit for advice. Where the judgement is difficult and the consequences of the decision potentially controversial, the Water Unit will provide direct support to the **CO**. This will include advising the **CO** on the information needed from the operator and third parties, helping to analyse the information and structuring the presentation of the results of the analysis.

SEPA will not normally expect non-monetary costs and benefits (e.g. impacts on biodiversity, landscape, etc) to be assigned a monetary value for the purposes of judging whether making an improvement would be disproportionately expensive or not. If an operator wishes to provide monetised information to support his or her case for exemption, the **CO** should seek advice from the Water Unit in order to identify:

- whether or not any delay in determining the variation associated with the production
  of such information would be justified by the contribution the information might
  make to facilitating the decision, taking into account the difficulty in making the
  decision and the implications of a wrong decision; and
- if relevant, the advice to give to the operator on the methods that should be used to monetise costs and benefits



# Determining if requiring an environmental improvement would impose unfair burdens and hence be disproportionate

A proposed variation may impose unfair burdens on the operator if:

- a. the contribution of the proposed variation to remedying an adverse impact on the water environment would represent more than the operator's contribution to that impact (i.e. deviate from the polluter pays principle);
- b. complying with that variation would not be reasonably affordable; or
- c. complying with the proposed variation would require the operator to make significant investment in a part of their operation in which they have already invested at SEPA's request within the last five years

With respect to point (a) above, SEPA will normally consider an improvement disproportionate if an operator would have to address more than 130 % of his or her contribution to the impact. Where there is no additional cost to the operator for addressing more than 130 %, this rule shall not apply (See also Annex F).

With respect to point (b), the **CO** should take account of the considerations outlined in Table 14 when deciding if making an improvement would not be reasonably affordable.

Table 14: Considerations relevant to deciding if an improvement would be disproportionate on affordability grounds

	Considerations	Guidance notes
1.	Have other similar sized businesses within the sector implemented similar compliance measures or different compliance measures with similar costs?	Subject to considerations 2, 3 and 4 in column 1 of this Table, a compliance measure is unlikely to be unaffordable if:  (i) it has been implemented elsewhere in the sector by similar sized businesses; or



		7
		(ii) its costs are not significantly greater than other compliance measures that have been implemented elsewhere in the sector by similar sized businesses.
2.	Would the costs of compliance for the operator concerned be significantly higher than the typical costs of compliance for other businesses within the sector?	Subject to considerations 3 and 4 in column 1 of this Table, a compliance measure is unlikely to be unaffordable if:  (i) the cost of the measure to the operator is reasonably comparable with (or less than) the cost to other similar sized businesses within the sector that have already implemented the measure; or
		(ii) its costs are not significantly greater than other compliance measures that have been implemented elsewhere in the sector by similar sized businesses.
3.	Is the sector widely acknowledged as experiencing a particularly difficult period?	During periods in which a sector is experiencing unusually difficulties in terms of economic viability, the costs of complying with proposed variations may impose unaffordable additional burdens on operators and hence be disproportionate.
4.	Has the operator concerned had to make an unusually large investment in recent years?	Where an operator has had to make unusually large investment in recent years (e.g. to comply with other environmental legislation), additional investment in the short-term may be unaffordable for the operator.
5.	Is the operator proposing an alternative timetable for complying with the proposed variation?	Where operators are proposing alternative timetables for complying with a proposed variation, this should be taken into account in determining if the claim for exemption on the grounds of affordability is fair and reasonable



The deadline for making measures operational (i.e. for compliance with varied authorisation conditions) for the third river basin management plan is 21<sup>st</sup> December 2027. SEPA will take into account whether requiring compliance with a proposed variation by this deadline would impose unfair and unjustified burdens.

# Reviewing exemptions granted on the grounds of disproportionate expense

The basis for an improvement being considered disproportionately expensive may change over time. Where these changes can be predicted in advance, the deadline for complying with a proposed variation should be appropriately post-dated. Where they cannot, reviews of the objectives set for water bodies should be undertaken in each planning cycle (See <u>objectives of the Water Framework Directive</u> section). Table 15 provides examples of future changes in circumstance that may affect whether or not making an environmental improvement remains disproportionately expensive.

Table 15: Examples of changes in circumstances which may affect whether an improvement is disproportionately expensive

1.	There is a reduction in the financial costs of making the improvements	(i) the improvement is timed to coincide with the normal maintenance or replacement of a capital asset so reducing its cost;
		(ii) the cost of a technique for making the improvement reduces;
		(iii) a lower cost technique for making the improvement becomes available
2.	The improvement can now be afforded without unfair burden	(i) the operator has had time to plan and phase the investment, including appropriate financing arrangements;



		(ii) a reasonable period has elapsed significant investment has been required of the operator; (iii) the sector is no longer experiencing an unusually difficult period in terms of economic viability
3.	There is reduction in adverse impacts on factors listed in Table 12	(i) a technique becomes available that could deliver the improvements with reduced adverse economic, environmental or social consequences; or  (ii) the importance or sensitivity of environmental or social factors that would be adversely affected by the improvement has reduced or the factors are no longer relevant
4.	There is an increase in the expected environmental, social or economic benefits	(i) the social, environmental or economic benefits were contingent on other improvements to the water environment being made (e.g. minewater remediation) and those other improvements have now being made; or (ii) the expected benefits increase because of other social or environmental changes to the area (e.g. wider regeneration initiatives or other developments; increased demand for uses of the affected waters)

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# **Annex C: Example of disproportionate cost calculation**

# Values for benefits of improving status of rivers impacted.

The catchment has a low population density so the following values in £/km and are 40 year present values (similar to whole life values) have been used:

Population density in catchment	Ecological status change			
	Bad to poor	Poor to moderate	Moderate to good	
Low	250,000	250,000	300,000	

These are values in £/km. The measures would improve 6.9km of water body length. The value for improvement is in the table below:

Water	WB Name	WB	Bad to	Poor to	Moderate
body ID		Length (Km) or Area (km²) improved	Poor	Moderate	to good
WB A		6.9	1,725,000	1,725,000	2,070,000

So the whole benefit value for moving the water body from overall poor to overall good is: £3,795,000 for 6.9km.

These benefit value assumes that following the introduction of measures the water bodies overall status will achieve the target objective of Good.



## Annex D: Significantly better environmental options test

The significantly better environmental options test must be applied where an operator is:

- a. claiming exemption from making the improvements needed to achieve an objective listed in point A, B or C of Table 1.; or
- b. claiming that the relevant water body or water bodies should be designated as heavily modified ((See <u>step-wise consideration of exemption tests</u> section) and point (b) of Table 6)

The **CO** should refer to supporting guidance <u>WAT-SG-68</u>: <u>Assessing Significantly Better Environmental Options</u> to help identify the information required of the operator and other public bodies in order to apply the test and for guidance on applying the test.

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# Annex E: Significant adverse impact test

The 'significant adverse impact test' should be applied where an operator is claiming that:

- a proposed improvement to the hydromorphological characteristics of a heavily
  modified water or artificial body or group of bodies would have significant adverse
  impacts on the designated use of the body or group of bodies or on the wider
  environment interest for the protection of which the body has been designated
  (See specific exemptions for heavily modified and artificial water bodies section); or
- the relevant water body or group of water bodies should be designated as heavily
  modified because the proposed improvement to
  the hydromorphological characteristics of the body or group of bodies would have a
  significant adverse impact on the use of the water body or on a wider environment
  interest which depends on the physical modifications that are affecting status of the
  body or group of bodies (See <u>step-wise consideration of exemptions tests</u>
  section);

Before applying the test, SEPA will expect the operator to provide an options appraisal demonstrating that the improvements sought could not be delivered using other options that would have lesser adverse impacts. Guidance on options appraisal is provided in Annex A. A significant adverse effect on the wider environment means a significant effect on an environmental interest such as biodiversity, landscape or built heritage which is dependent on the hydromorphological characteristics of the water body rather than on the use being made of the body. For example, a reservoir may be designated as a Special Protection Area under the Birds Directive. Removal of the reservoir dam would be likely to have a significant adverse impact on the biodiversity conservation interest. The CO should refer to the supporting guidance WAT-SG-67 for guidance on determining the significance of impacts on wider environment factors.

Some objectives may impact on the generation of hydroelectricity. Delivering improvements may require changes to the volume of water available for generation so we will strike the



right balance between supporting renewable energy generation and improving the water environment. The Scottish Government has provided a clear policy steer to allow SEPA to determine whether an improvement would be considered to have a significant adverse impact on use.

A significant adverse effect on a **use** means a significant adverse impact on the benefits provided to the environment and society by the use or uses being made of a body. Only uses which rely on the body's hydromorphological characteristics are relevant. For example, the removal of a dam would prevent the operation of hydropower scheme reliant on water stored behind the dam. This would significantly affect the scheme's contribution to renewable energy generation. The financial cost of an improvement is not relevant to determining whether making an improvement would have significant adverse effects The significance of an adverse effect should be judged at the appropriate scale or scales. For example, the reduction in renewable energy output attributed to mitigation at a particular hydropower scheme may be insignificant in the context of total renewable electricity generation across Scotland. However, if a similar reduction was made at a large number of hydropower schemes across Scotland, the cumulative impact on Scotland's renewable energy output might be very significant. Where there is potential for such cumulative impacts, SEPA will prioritise where improvements are sought. In doing this, it will take account of the magnitude of the environmental benefits that would result from the improvements. The **CO** should refer to the supporting guidance WAT-SG-67 for help in determining the significance of impacts on uses such as renewable energy generation, recreation, flood defence and drinking water supply.

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# **Annex F: Multiple contributory pressures**

Before proposing any variation, SEPA should identify:

- the estimated scale of the environmental improvement that would be required to achieve the desired environmental objective; and
- the pressure, or pressures, that would have to be addressed in order to deliver such improvements.

This section provides general guidance on what to do if several pressures are found to be contributing to a particular adverse impact (e.g. a failure of an environmental standard needed for good status). The Coordinating Officer (**CO**) should aim to decide the appropriate contribution with respect to each contributory pressure as part of the review process leading up to the initiation of one or more variations. Situations in which multiple pressures contribute to failure of an environmental standard can occur, for example, in rivers used intensively for irrigation and in waters receiving significant loads of point and diffuse source nutrients.

For the purposes of this guidance, pressures are contributory where:

- a. they contribute to the failure of a particular environmental standard in a particular part of a water body and that failure would have to be resolved to improve the status of a water body; and
- b. their relative contribution to the failure is more than very minor

To apply, the condition referred to in point (a) above must be the case even if all failures<sup>8</sup> for which any pressure is solely responsible (e.g. a failure upstream of the stretch in which other pressures contribute to failure) were addressed



#### **Note**

Decisions relating to the contribution to improvements expected from the agriculture sector and Scottish Water in water bodies impacted by nutrients will continue to be made nationally. SEPA will input to the relevant national planning processes at the appropriate time. SEPA will not use its regulatory powers to seek a greater contribution to environmental improvements from Scottish Water than those agreed as part of the Quality and Standards process.

When multiple pressures are contributing to the failure of a standard, the starting point should be to consider reductions in direct proportion to each pressure's relative contribution to the failure. However, in certain circumstances, it may be more cost-effective (i.e. cheaper overall) to seek greater reductions than a pressure's actual contribution to the failure of the environmental standard (See Figure 2).

SEPA should only seek improvements that are not in direct proportion to the contribution made by a pressure to the failure of a standard where:

- a. the operators of the contributory pressures have reached an agreement between each other; or
- b. one operator is responsible for all the contributory pressures and wishes to make the overall reduction required in a particular way; or
- c. doing so would significantly reduce the overall social, economic or environmental costs of delivering the improvement; or
- d. doing so would significantly increase the likelihood of an objective being achieved

   (i.e. because of differences in the effectiveness of the techniques, including their likelihood of being implemented)

Except where (a) or (b) apply, SEPA will not normally require an operator to address less than 70 % or more than 130 % of their contribution to the failure.



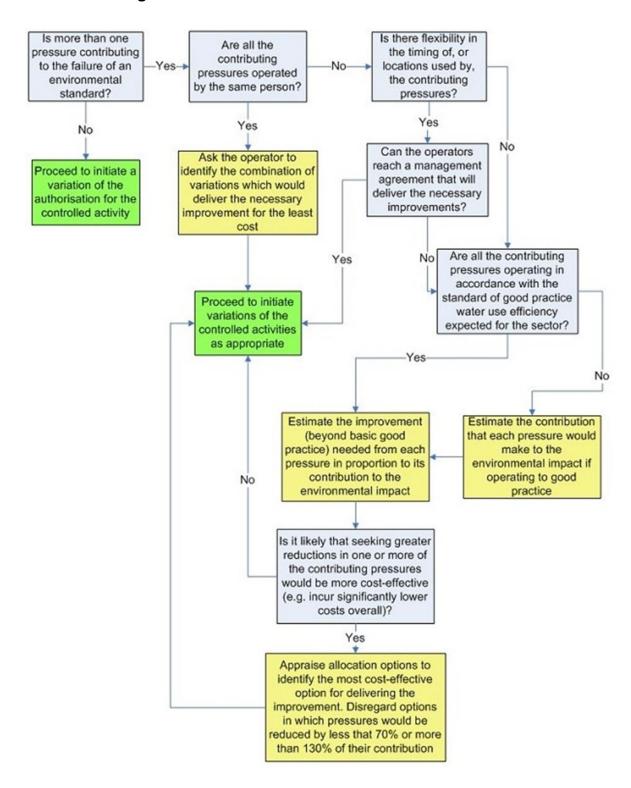
With respect to point (c), the overall 'cost' of one option may be significantly less than another because the measures a particular operator would use have significant social, economic or environmental benefits that help off-set its higher financial costs. For example, the measures might, as a side-effect, help address another adverse impact on a water body. The CO should use (WAT-SG-67) to help assess the significance of any non-financial costs and benefits associated with different options.

Examples of situations in which it may be more cost-effective for one or more operators to contribute relatively more to the improvement than their contribution to the failure include situations where:

- there would be little additional cost associated with the extra improvement because of expenditure already required for other reasons; or
- other contributions are relatively small and either difficult to address effectively or addressing them would incur significantly greater social, economic or environmental costs



Figure 2: Identifying the appropriate improvement to seek from each pressure contributing to a failure of an environmental standard





Deciding whether one option is more cost-effective than another is a matter of judgement based on an assessment of the relative magnitude and significance of the financial costs and other positive and negative impacts of the different options. In some cases, it may also involve trade-offs between reducing costs and losing effectiveness (i.e. the likelihood the improvement will be delivered and maintained). Such trade-offs are illustrated in Table 16.

Table 16: Indicative guide to assessing cost effectiveness
Which of the two options, A or B, is likely to be more cost-effective than the
other? (The larger the font size, the greater the likelihood that the option indicated is the
most cost-effective option)

Difference in	Difference in the relative magnitude of financial costs and other						
effectiveness	significant social, economic or environmental impacts						
	Costs of	Costs of Costs of Costs of Costs of					
	option B	option B less	difference in	option A less	option A		
	significantly	but only	costs	but only	significantly		
	lower	moderately		moderately	lower		
		so		so			
Option A much		Α	Α	Α	Δ		
more effective	A	<b>A</b>	^	^			
Option A							
moderately	В	В	Α	Α	Α		
more effective							
No or only slight	_				_		
difference	В	В	Equivalent	Α	Α		
in effectiveness							
Option B							
moderately	В	В	В	Α	Α		
more effective							
Option B much	R	В	В	В	_		
more effective		B	D	В	В		

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### References

#### **SEPA Documents**

- WAT-RM-09: Modifications to CAR Authorisations
- WAT-RM-20: Advertising and Consultation
- WAT-SG-67: Assessing the Significance of Impacts Social, Economic,
   Environmental
- WAT-SG-68: Assessing Significantly Better Environmental Options

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#### **External Documents**

- Guidance for defining Good Ecological Potential (WFDUK)
- Water Environment and Water Services (Scotland) Act 2003 (www.netregs.org.uk)
- Environmental Objectives Under Water Framework Directive (EC/CIRCABC 20/06/2005)

**End of Document** 



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