

# Consultation on the Hydro Abstraction Scheme charges

Proposals to change the annual charges paid by those holding authorisations to operate hydroelectric schemes in Scotland.

December 2020

Every day SEPA works to protect and enhance Scotland's environment, helping communities and businesses thrive within the resources of our planet.



We call this **One Planet Prosperity**

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## 1 Overview

This consultation document outlines the proposed changes for the subsistence fees we charge under The Environmental Regulation (Scotland) Charging Scheme for hydro-electric installations regulated by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 for abstraction charges. It sets out, how these revised charges have been developed, and how you can respond to this consultation. These changes will amend the Environmental Regulation (Scotland) Charging Scheme 2018.

As part of SEPA's work to deliver our "[One Planet Prosperity - Our Regulatory Strategy](#)" we ensure that changes still meet our goals.

## 2 Why we are consulting

SEPA is the regulator for the authorisation, compliance and enforcement of water abstractions from the Scottish environment, for example, for distilleries taking water for whisky production or farmers taking water for irrigation. This consultation deals with water abstraction for hydropower generation only.

Abstraction of water can cause harm to the environment, if for example, too much water is taken leaving rivers with too little flow to support the eco-systems (plants, microorganisms and animals to thrive). For this reason, SEPA regulates those who abstract more than 10 cubic metres a day and imposes charges to cover the costs of this work.

Charges for abstractions and impoundments were introduced in 2006 but it was not until 2018 that charges were introduced for small hydropower schemes with an installed capacity of less than or equal to 2MW but greater than 0.1MW. The recent introduction of charges for small hydropower was phased-in with charges increasing up to their final levels in 2020-2021.

Representatives of small-scale hydropower have told SEPA that while the current charges take into account the environmental impact of their activities, the scheme treats certain schemes unfairly. They also considered their charges as disproportionate compared to the larger hydropower schemes. As a result, they asked SEPA to review how the rules of the scheme had been applied to small hydropower schemes.

We have reviewed the way we assess the impact of hydropower abstractions and are proposing modifications to the way we allocate charges whilst avoiding impacts upon charging out with hydropower.

SEPA and industry representatives have been in discussion since 2018. As this has progressed there has been a greater understand of the main issues: for SEPA to ensure that charges are related to the work undertaken and industries drive for a more straightforward scheme that smaller operators can understand.

### **How to respond**

You can respond to this consultation [online](#). As our offices are currently closed, please do not mail your response. You can email your responses on the proposal to: [ncc@sepa.org.uk](mailto:ncc@sepa.org.uk)

Responses should be submitted to us by 10 February 2021.

- Q1.** What is your name? (optional)
- Q2.** What is your email address? (optional)
- Q3.** What is your interest in our consultation? (optional)

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## 3 Background

### 3.1 Scale of water resource charges

SEPA is the water resource manager for Scotland.

SEPA is responsible for monitoring water resources to provide information to support sustainable development. To deliver this responsibility we maintain a network of coastal, river and loch level monitoring stations together with a network of rain gauges. We use this information to protect the environment, protect human life and wellbeing and support sustainable development:

- We protect the river and loch ecology which is sensitive to change in flow regimes such as salmon and pearl mussels.
- We set limits within permits on the pollution that can be discharged based upon the level of dilution available.
- We set limits on the amount of water that can be abstracted to protect environment and other water users.
- We regulate the flow regime from dams.
- We determine flood risks, issue flood warnings and provide the strategic planning which underpins the allocation of funding for flood defence.
- We provide the planning approach to droughts and manage the allocation of water resources during low flow conditions.

SEPA is required to fully recover our costs. The guidance which we have to follow in the Scottish Public Finance Manual (SPFM) and the Treasury (HMT) ([Managing Public Money - HM Treasury](#))<sup>1</sup> states:

*“Charges for **services** provided by public sector organisations normally pass on the full cost of providing them. There is scope for charging more or less than this provided that ministers choose to do so, parliament consents and there is full disclosure.”*

SEPA provides a statutory service under CAR which sets out what we should recover costs against. The SPFM makes a distinction between services which are either statutory or non-statutory. “A statutory service is one set out in legislation and the legislation will normally

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<sup>1</sup> managing public money document

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specify whether or not a fee may be charged and, sometimes, how the charge should be calculated. A non-statutory service is a discretionary service that may or may not be provided in competition with the private sector.”

SEPA recovers its costs via charging schemes from nearly all the activities that it regulates. These schemes have two main components:

- Application fees which cover the costs of setting permit conditions which protect the environment and other users of the water environment. We receive about 12,500 applications (new, variation transfer etc.) for permits per year (across all regimes).
- Annual charges which cover the costs of SEPA on-going regulatory work. On average we impose annual charges upon 10,000 permits (across all regimes).

SEPA has a budget of £84m of which £12m expenditure is used to run the water resource regime (this includes all associated work with the regulatory activities). We recover our on-going costs incurred as Scotland’s water resource manager from two sources:

- 61% from Government who pay for SEPA flood risk management tasks;
- 39% from operators who operate dams and who make abstractions

### **3.2 History of water resource charging**

Charges for abstractions and impoundments were introduced in 2006 at the same time as our responsibility for regulating these activities commenced. Operators who had a permit to abstract more than 10 cubic metres per day had potentially to pay charges. The charges for abstraction and impoundments are kept separate since many abstractions do not have impoundments and some impoundments do not have abstractions. These charges should not be confused with the reservoir charging scheme which was brought in later and has a separate remit associate with dam security.

Over the period from 2010 to 2015<sup>2</sup>, we [developed proposals for a new unified charging scheme](#) which would apply across all our regulatory regimes. The proposals were presented in the [2015 consultation](#)<sup>3</sup>. These proposals incorporated the existing abstraction and impoundment charging rules with some modifications.

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<sup>2</sup> <https://www.sepa.org.uk/regulations/authorisations-and-permits/charging-schemes/charging-scheme-development/>

<sup>3</sup> <https://consultation.sepa.org.uk/charging-team/2016/>

The resultant 2016 charging scheme calculated annual charges on the basis of two components.

- the activity component that recovered direct costs (e.g. inspections);
- the environmental component that recovered indirect costs (e.g. environmental monitoring and modelling).

The bulk of the environmental charge was paid by the larger activities and for abstraction these were defined as abstractions greater than 2,000 cubic metres per year.

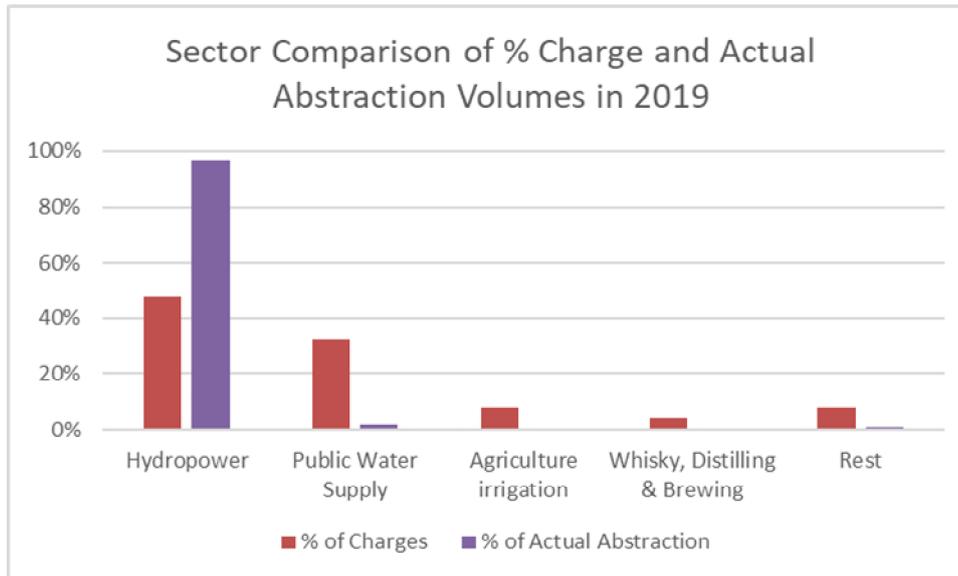
A few exceptions to the requirement to pay charges in the 2006 scheme were created amongst which was small scale hydropower schemes (<2MW installed generating capacity). One of the changes proposed and consulted in 2015 was the phased removal of the exemption from charging for <2MW scheme hydropower schemes, this change was not implemented until 2018. Another change introduced in 2016 was that instead of tiered charging (which had a maximum charge possible), charges would not have a cap – this impacted the larger hydro schemes.

The Environmental Regulations (Scotland) Charging Scheme 2018 which introduced charges for these smaller hydro schemes for the first time, did so without any differentiation between sites within the power output band of 0.5-2MW. The 0.1 – 0.5MW schemes had a flat charge put in place until a review was undertaken. Both these types of charges being phased in with the operators being required to pay 33.3% of the charge in 2018-2019, 66.6% in 2019/20 and the full charge in 2020-2021.

### **3.3 Charges for abstractions**

This consultation is covering the abstraction charges only. The amount that we recovered from operators of dams and abstraction in 2020-2021 is £4.8m. Figure 1 shows how these costs are allocated across sectors in comparison to the cumulative volume abstracted by all licences within each sector. This consultation is looking at the abstraction charges which make up the bulk of the hydropower charges for the sub 2MW schemes.

**Figure 1: Comparison of percentage of the total abstraction volume taken by five sectors with the percentage of the total charge paid by the same sectors**



Although hydropower is responsible for 94% of the permitted levels of abstraction, it only pays 47% of the charge. This is for two reasons.

1. The environmental charge is imposed upon all licences that abstract more than 2,000 cubic metres. The environmental charges apportion our indirect charges such as modelling, monitoring and reporting. We apportion the indirect costs to individual licences by reference to the scale of their activity: abstraction volume for water resources, scale of pollutants emitted for factory emissions to air or discharges to water and the weight of waste for waste management activities. We found that the distribution of our work amongst licenced activity did not increase directly in proportion to the scale of abstractions or emission or waste managed. We have dampened the extent to which large activities attract the charges (by taking the square root of the total abstraction). Taking the square root reduces the relative importance of the larger activities and distributes charges more widely across other activities more correctly reflecting the distribution of our costs.
2. Hydropower schemes return the water to the environment and therefore we reduced charges in a manner that took account of the length of river between the abstraction point and the return of the water. The application of this rule further reduces the contribution made by hydropower to the total water resource charges.

The hydropower charges are currently allocated across licences by applying these rules. There are 328 hydro schemes above 0.1MW. This compares to a total of 1650 licences which are charged for abstraction related activities.

**Table 1: Total current charge for each power band (installed capacity in MW): 2020/21 figures.**

Hydro Generation Band	No. of Sites	% of Sites	Total (2020/21 Charge)	% of Charge	% of Hydro Abstraction
>0.1MW and <=0.5MW	154	47%	£31,920	2%	3%
>0.5MW and <=1MW	74	23%	£315,732	16%	4%
>1MW and <=1.5MW	35	11%	£167,834	8%	1%
>1.5MW and <=2MW	27	8%	£185,825	9%	3%
>2MW and <=5MW	17	5%	£158,642	8%	2%
>5MW	21	6%	£1,119,841	57%	87%
Grand Total	328	100%	£1,979,792	100%	100%

## 4 Analysis to support the review

Our aim in this review is to further develop the alignment of charges against the regulatory and monitoring effort we undertake around abstraction. This effort is distributed according to environmental risk – the higher the risk the more effort we undertake on assessing impacts and ensuring compliance, though this is not a linear relationship it flattens off.

Our charging scheme must be clear, transparent and understandable and, as such, the assessment of environmental risk must strike a balance between complexity and representativeness.

To undertake this review we have chosen a small number of factors which, when combined, give a realistic and transparent assessment of environmental risk. These factors are:

- installed capacity of the scheme;
- total licensed abstraction;
- length of impacted river;
- magnitude of environmental impact.

## 4.1 Installed capacity

This captures the amount of potential generation capacity across licences but the actual generation depends on the abstraction limit, rainfall and the demand for electricity placed on them (certain specific schemes). It is not necessarily a good indication of revenue given different schemes within a licence since they have different business models and income streams such as feed in tariffs, ROCs etc.

**Table 2: Total installed capacity for each power band.**

Hydro Generation Band	No of Permits	Sum of Power output (kW)	% of Generation Capacity
>0.1MW and <=0.5MW	154	59429	3%
>0.5MW and <=1MW	74	60828	3%
>1MW and <=1.5MW	35	45279	2%
>1.5MW and <=2MW	27	52640	2%
>2MW and <=5MW	17	48614	2%
>5MW	21	2067059	89%
Grand Total	328	2333848	100%

## 4.2 Total licenced abstraction

The amount of water abstracted by itself is a coarse measure of the potential impact and has to be considered in tandem with the other charging factors. To allow comparison we have used the permitted abstraction limits (cubic metres / day). A comparison with the actual abstraction level is given as well – we have taken 2019 since this reflects virtually all sites that are considered – however we do know that some sites have very variable levels of abstraction in that year – particularly the newer sites.

Whilst the 2019 abstraction data is better it is still not complete particularly for the smaller newer sites.

**Table 3: Total licenced volume abstracted per day for each power band (with % actual based on 2019 data returns)**

Hydro Generation Band	No of Permits	% Permitted Abstraction	% 2019 Actual Abstraction (where data returned)
>0.1MW and <=0.5MW	154	4%	3%
>0.5MW and <=1MW	74	4%	4%
>1.5MW and <=2MW	27	1%	1%
>1MW and <=1.5MW	35	3%	3%
>2MW and <=5MW	17	2%	2%
>5MW	21	87%	87%
Grand Total	328	100%	100%

### 4.3 Length of impacted rivers

The Scottish Directions make it clear that the proportion of a water course impacted by an abstraction is an important consideration in assessing the significance of the environmental impact. Rivers flows are impacted by hydropower schemes in the stretch between the abstraction at an intake and the discharge at the tail race downstream of the turbine.

Although, in broad terms, the longer the distance between intake and tail race, the greater the potential environmental impact, as unimpacted rivers join the depleted stretch this impact does not increase consistently. Typically, the degree of environmental impact decreases as you proceed downstream from the intakes. As a consequence, we do not distinguish between lengths impacted that are greater than 5km and the water is returned.

The following table summarises the total length of river impacted. Note for very long stretches we do not have accurate measurements for individual schemes under a licence. Please note SEPA looks at a licence level when undertaking work, whereas hydro scheme operators may consider a licence to cover several schemes.

**Table 4: Total river length affected for each power band.**

Power band	Total No of Licences	Schemes impacting >1.5km	Total Length affected (km)	% of total length affected
>0.1MW and <=0.5MW	154	81	245	22%
>0.5MW and <=1MW	74	52	187	17%
>1MW and <=1.5MW	35	21	68	6%
>1.5MW and <=2MW	27	18	85	8%
>2MW and <=5MW	17	17	70	6%
>5MW	21	20	436	40%
Grand Total	328	209	1090	100%

#### 4.4 Magnitude of environmental impact

The environmental impact of all abstractions is assessed using environmental standards for river flows set out in the [Scottish Directions](#)<sup>4</sup>. These standards have been set based upon a wide range of ecological studies, including national scale assessments of the link between [hydrological regimes and macrophytes \(river plants\), macroinvertebrates and fish](#)<sup>5</sup>.

The river flow standards are used to set licence conditions, and to ensure the environmental flows released from intake weirs are sufficient to meet these conditions, SEPA undertakes a programme of inspections by hydrologists to measure the flows in the reach downstream of hydropower intakes. Data from these inspections allied to flow records from our long-term flow monitoring network give an assessment of the environmental impact.

<sup>4</sup> <https://www.gov.scot/publications/implementing-water-environment-water-services-scotland-act-2003-assessing-scotlands/>

<sup>5</sup> <http://wfd.uk.org/resources/category/environmental-standards-202>

Where it is deemed that the environmental impact is likely to be either major or severe across a significant part of a water body, the hydrological assessment is followed up by an [ecological indicators assessment](#)<sup>6</sup>

In some instances, investigations have been made using electro-fishing surveys to assess the impact of depleted flows on fish populations, and we also undertake river sediment surveys where it is deemed there is an elevated risk of impact on river ecology due to the interruption of sediment movement by weirs and dams.

#### 4.5 Defining impact categories

The following summarises the impact category that each licence / scheme has been assessed in. This gives a feel of the relative impact within each category.

**Table 5: Total number of licences in the three impact categories within each power band.**

Power band	Large	Moderate	Minor	Grand Total
>0.1MW and <=0.5MW	30	106	18	154
>0.5MW and <=1MW	34	33	7	74
>1MW and <=1.5MW	22	7	6	35
>1.5MW and <=2MW	19	4	4	27
>2MW and <=5MW	16	1		17
>5MW	21			21
Grand Total	142	146	35	328

The analysis completed by SEPA found that the group of licences which had relatively low and moderate impacts was dominated by hydropower schemes with relatively small power outputs. The way the charging scheme had been arranged however, meant that this group of relatively low impact and low power output hydropower schemes were subject to a disproportionate share of the overall charges for the sector.

When the data was examined, to look at different bands of hydropower output and the scale of impact, it shows that for the smaller scale sites about 80% of them fall into the minor / moderate environmental impact categories. The proportion of sites in the minor and moderate impact categories decreases as the scale of the hydropower sites increases such

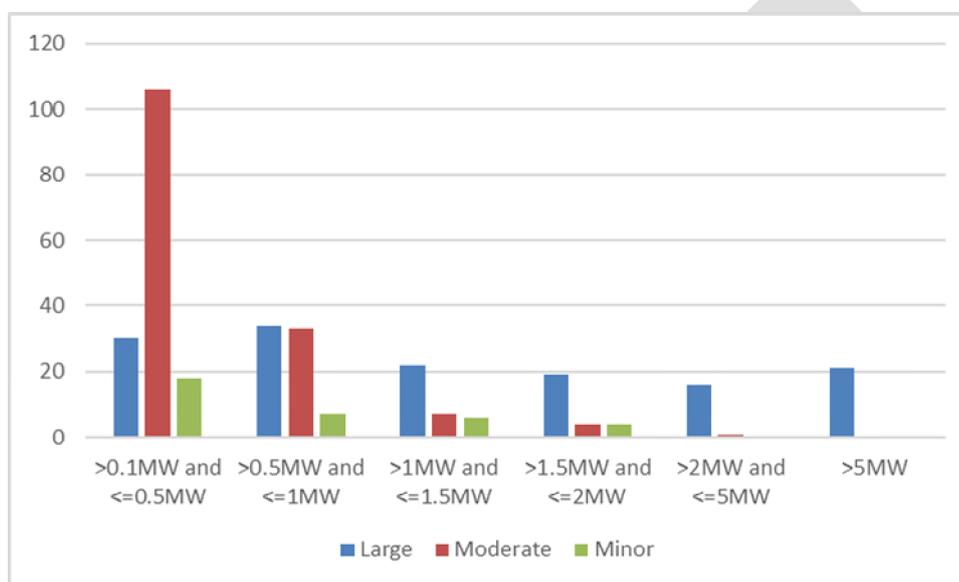
<sup>6</sup> <http://wfduk.org/resources/category/biological-standard-methods-201>

that only about a quarter of sites in the larger power output categories are classed as minor or moderate impact. The details of the number of schemes of different sizes across the range of environmental impacts is set out in

Figure 2 below.

Those which fell into the large impact category had on average higher power generation as well as higher combination of abstraction rates and length of river depleted.

**Figure 2: Number of hydroelectric licences in each power and impact band**



## 5 What are the proposed revisions to the charging scheme?

### 5.1 Summary of changes

There are three main proposed changes which are listed below.

- 1) For the hydro scheme licences with greater than 0.1MW but less than or equal to 2MW we intend to split these licences into four bands and have fixed activity charge for each band depending on the environmental impact categories. This will mean that the charges for these schemes will no longer be calculated using the activity and environmental components.
- 2) We are proposing to introduce three environmental impact categories reflecting whether a site has minor, moderate or major impact on the environment, allocating all schemes to one of these categories based on the data we have.

- 3) Amend the way we consider large hydro licences cover schemes totals greater than 2MW. This amendment will reflect the greater impact of these licences and the costs of ongoing monitoring work which has to be conducted by SEPA.

While the proposals change the charges that are levied across different parts of the sector, it is the intention not to change the overall gross revenue raised by the charging scheme from the hydropower sector.

### **5.1.1 Smaller hydropower scheme power output bands**

SEPA's analysis in response to the representations made by the sector, has indicated that the simplistic activity component banding in the current scheme does not allow the nuances of the structure of the sector and variances in their environmental impacts to be taken into account. It is for this reason that SEPA has chosen to subdivide the smaller hydropower schemes into four bands:

- a. >0.1MW and <=0.5MW;
- b. >0.5MW and <=1MW;
- c. >1MW and <=1.5MW;
- d. >1.5MW and <=2MW.

### **5.1.2 Environmental impact categories**

In general, while there are some pollution risks associated with hydropower schemes, the environmental impact relates to changes to the flow of the watercourse associated with removal of water to power hydroelectric turbines and barriers to fish migration and sediment movement associated with dams. This can be large scale, as seen in cases where major rivers or lochs have a substantial dam constructed, fundamentally changing the shape or size of the water body. This was the case with many of the large hydropower schemes built during the 1950-70s. The impacts can also be at a very much smaller scale where a minor dam or diverting weir is built to take a proportion of the flow from a river to power a small turbine.

In either case, the impact that is of concern is a change in the amount of water present in the river and the effect that it has on the aquatic ecosystem as a whole. As discussed above, the Scottish Directions set out standards relating to the amount of water flowing in watercourses that must be taken into account when assessing the state of the water environment.

- 1) The following identifies how we classify the minor, moderate and large impact categories:
- a. Minor impact: The abstraction(s) has/have not impacted the flow sufficiently to lead to a deterioration of the relevant environmental flow standards as set out in tables B1.1 to B1.7 in the [Scottish Directions](#)<sup>7</sup>.
  - b. Moderate impact: The abstraction(s) has/have impacted the flow sufficiently to lead to a failure of the relevant environmental flow standards but this impact is either on a small river with a catchment area of less than 10km<sup>2</sup> or the impact is not across a significant proportion of the river water body as set out in tables 1.1 and 1.2 of Schedule 4 of the Scottish Directions.
  - c. Major impact: The abstraction(s) has/have impacted the flow sufficiently to lead to a deterioration of the relevant environmental flow across a significant proportion of a river water body with a catchment area greater than 10 km<sup>2</sup> as set out in tables 1.1 and 1.2 of Schedule 4 of the Scottish Directions.

**Table 6: Allocation of scheme to impact categories for each power band.**

<b>Generation Capacity Band</b>	<b>Minor</b>	<b>% In Band</b>	<b>Moderate</b>	<b>% In Band</b>	<b>Large</b>	<b>% In Band</b>	<b>Grand Total</b>
>0.1MW and <=0.5MW	18	12%	106	69%	30	19%	154
>0.5MW and <=1MW	7	9%	33	45%	34	46%	74
>1MW and <=1.5MW	6	17%	7	20%	22	63%	35
>1.5MW and <=2MW	4	15%	4	15%	19	70%	27
>2MW and <=5MW			1	6%	16	94%	17
>5MW					21	100%	21
<b>Grand Total</b>	<b>35</b>	<b>11%</b>	<b>151</b>	<b>46%</b>	<b>142</b>	<b>43%</b>	<b>328</b>

Table 6 shows the number of schemes that fall into each category by power band. This shows that as the generation capacity increases a greater percentage of schemes fall into the major impact category and at 2+ MW all bar 1 scheme falls into this category.

<sup>7</sup> <https://www.gov.scot/publications/scotland-river-basin-district-standards-directions-2014/>

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This is not surprising as most of these schemes were built 50 or more years ago before the advent of much of our current environmental legislation. These substantial infrastructure projects provide significant societal benefits in the form of renewable energy production. They do however also require a substantial amount of regulatory and monitoring work by SEPA to ensure that these benefits do not come at an unacceptable cost to the water environment.

Owners and operators of small hydropower schemes have consistently flagged the need for fixed and transparent charges to allow easy understanding of how and why the charges are applied. SEPA have taken account of the views of the sector and propose to introduce this approach. In revising the Charging Scheme we also want to make sure that the environmental impact aspect, which is a significant driver in how we allocate our resources and therefore our costs, is adequately reflected. This is the reason we have used the environmental impact categories to re-distribute the charges across the smaller schemes.

### **5.1.3 Hydro Schemes in excess of 2MW**

Larger hydro schemes under a licence with an output in excess of 2MW are likely to have a greater (moderate to large) environmental impact. The scale of impacts arising from such facilities mean that SEPA deploys more resources to regulate and monitor them. It is for this reason that an increase in charges for this component of the sector is justified, in the same way that a reduction in charges is justified for small, relatively low impact schemes.

While there is a change to the charges applied to larger sites, it is not proposed to change the basis of how charges are calculated for this component of the sector as it is considered that the nature of this sector and its environmental impacts is too complex to be encompassed by a simple system of charge bands. It is proposed however that a greater emphasis will be attached to the environmental impact of such schemes.

The following table shows the factor which will be used to multiply the score currently calculated and use for the abstraction environmental component based in the current [Environment Assessment Scheme guidance](#)

**Table 7: Factors used for each impact category**

<b>Impact Category</b>	<b>Factor used to Multiple the Original Environment Component Score Used under current charging scheme.</b>
Minor	0.66
Moderate	1.0
Large	1.3

## 6 The charging proposals

### 6.1 Permit charges

The discussion above has explained the justification for the proposed changes in the charges applied to hydro power generation schemes in Scotland, authorised under the Water Environment (Controlled Activities) (Scotland) Regulations 2011. This section provides details of those charging proposals and a comparison with the existing charges for this sector.

The proposals for charges for hydro schemes within each of the power bands based on their environmental impact are set out in Table 8.

**Table 8: Summary of proposed charges for small hydro schemes**

<b>Power Band</b>	<b>Environmental Impact Category</b>			
	<b>Minor</b>	<b>Moderate</b>	<b>Unknown</b>	<b>Large</b>
>0.1MW and <=0.5MW	£200	£220	£220	£600
>0.5MW and <=1MW	£500	£1,000	£1,000	£2,100
>1MW and <=1.5MW	£1,000	£1,500	£1,500	£3,200
>1.5MW and <=2MW	£1,500	£2,200	£2,200	£4,500

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## 6.2 Total charge per category

Table 8 shows how the proposed changes in licence charges affect the overall charge for each power band category of hydropower scheme. More detailed information is available in Table 9 in Annex 1.

The proposed changes result in an overall reduction of 50% in charges for the smaller hydropower schemes with a generating capacity of 2MW or less. However, charges for the smallest category of schemes (0.1 to 0.5MW) do go up by an average of £90 (with a maximum increase of £422 – see table 10). This is because the charges were kept low in the previous scheme and we are proposing to increase charges where there is a moderate or major environmental impact.

The proposed charges for the larger scheme licences will result in an overall increase of 25% for those schemes greater than 2MW.

## 6.3 Summary

**Error! Reference source not found.** shows the total charge per power band in comparison the factors that determine our charges.

The proposed changes in charges will mean that the schemes larger than 5MW will pay a larger proportion of the total hydropower charge. It will increase from the current 60% to 77%. This means that 23% of the charges are then allocated across the remaining 307 schemes across the country.

**Table 9 Comparison of the proportion of charge which would be paid by each Power Band and factors that influence our charges**

Hydro Generation Band	% of Permits	% of Current Charge	% 2019 Actual Abstraction (where data returned)	% of Length Affected	% of Proposed Charges
>0.1MW and <=0.5MW	47%	2%	3%	22%	2%
>0.5MW and <=1MW	23%	16%	4%	17%	5%
>1MW and <=1.5MW	11%	8%	1%	8%	4%
>1.5MW and <=2MW	8%	9%	3%	6%	5%
>2MW and <=5MW	5%	8%	2%	6%	10%
>5MW	6%	57%	87%	40%	73%
Grand Total	100%	100%	100%	100%	100%

As explained in section 3.3, there is not a direct relationship between a measure of the scale of impact and SEPA activity. The allocation of work (therefore charges) to larger schemes is not a linear relationship between any given measure.

## 6.4 Common elements of charges

### 6.4.1 Pro-rata charges for subsistence fees

Where a permit is issued part way through the year the charges will be calculated on a pro-rata basis for the remaining period up to the end of the year.

### 6.4.2 Retail Price Inflation (RPI) increases

Each year SEPA may increase charges up to (and including) the Retail Price Inflation (RPI) in line with increases in the Office for National Statistics measures of inflation as at 30 September in the immediately preceding year. For example, the charges on 1 April 2020 were increased by 2.4% which was the RPI on the 30 September 2019.

As yet SEPA have not agreed the changes for RPI for 2021-2022.

Increases beyond RPI would only occur after we have consulted on such changes and got them signed off by ministers.

### 6.4.3 Payment reference

We will consider that payment has been made when such payments clearly reference:

1. the permit number (where a permit exists which is associated with the charge);
2. if for a new permit, the name of the operator or operator account if relevant.

The reason for this change is that we receive a considerable number of payments, many of them via BACs or similar electronic transfers. Until we have verified the payment we cannot start the determination process and, in addition, we can spend a lot of time reconciling these payments which can cause frustration for operators as well as ourselves.

If a payment is not clearly referenced then we will assume it has not been received and this may make the permit / application invalid. It would also mean we would send any outstanding debt to our debt collection providers.

## 7 Questions

### 7.1 Impact Bands

- Q4 Do you agree that charges should vary dependant on the environmental impact arising from the scheme?
- Q5 Do you agree with the criteria used to define minor, moderate and large impacts?

### 7.2 Power Bands

- Q6 Do you agree with the proposal to subdivide the small hydropower schemes into four bands based on power output?
- Q7 Do you agree with the power bandings chosen?

### 7.3 Charging Proposals

- Q8 Do you think that in general, smaller schemes should bear a lower burden of charges and a greater burden should fall on the very large schemes with greater environmental impact?
- Q9 Do you agree with the proposal to set fixed charging bands for smaller hydropower schemes?

Q10 Do you think the distribution of charges across the power and impact bands is appropriate?

Q11 Do you have any further comments?

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## 8 Annex I: Summary of Charges under the Environment Regulation Scotland Charging Scheme

The following summarises the charges under SEPA’s main Environment Regulation Scotland charging scheme. This covers charges for abstraction (Table 9) and impoundment (Table 10). The consultation is about the abstraction charges only and does not cover the impoundment charges or the reservoir charges (which is currently a different scheme under a specific set of regulations).

**Table 9: Effect of the application of the new charges per impact class upon charges within each power band for abstraction charges only.**

	Impact class	No of Licences	Total Abstraction Charges (current)	Proposed Abstraction Charges	% Change
>0.1MW and <=0.5MW	Large	30	£6,218	£18,000	189%
	Moderate	106	£21,971	£23,320	6%
	Minor	18	£3,731	£3,600	-4%
>0.5MW and <=1MW	Large	34	£150,949	£71,400	-53%
	Moderate	33	£121,224	£33,000	-73%
	Minor	7	£43,558	£3,500	-92%
>1MW and <=1.5MW	Large	22	£117,926	£70,400	-40%
	Moderate	7	£29,918	£10,500	-65%
	Minor	6	£19,990	£6,000	-70%
>1.5MW and <=2MW	Large	19	£137,999	£85,500	-38%
	Moderate	4	£25,357	£8,800	-65%
	Minor	4	£22,469	£6,000	-73%
>2MW and <=5MW	Large	16	£151,565	£193,705	28%
	Moderate	1	£7,076	£7,076	0%
>5MW	Large	21	£1,119,841	£1,428,465	28%
Total		328	£1,979,792	£1,969,266	-1%

**Table 10: Impoundment charges for hydro schemes**

Note the impoundment charges are not part of the consultation and will not change except for RPI increases.

	Impact class	Total Impoundment Charges
>0.1MW and <=0.5MW	Large	£870
	Moderate	£0
	Minor	£0
>0.5MW and <=1MW	Large	£12,977
	Moderate	£1,679
	Minor	£0
>1MW and <=1.5MW	Large	£17,790
	Moderate	£0
	Minor	£0
>1.5MW and <=2MW	Large	£2,495
	Moderate	£0
	Minor	£0
>2MW and <=5MW	Large	£8,351
	Moderate	£1,863
>5MW	Large	£186,927
Total		£232,951