

Hydroelectric-power schemes

Pre-application form



Please read through this form and the guidance notes (form guidance WR316) carefully before you fill this form in. Please write clearly in the answer spaces.

This form is designed to help you, and us, understand your hydroelectric-power scheme. It will help you to prepare the information we will need to consider a formal application for your scheme.

There are two parts to the form – part A and part B. Fill in all of part A and as much of part B as you can. Send your form to us with the supporting information shown in section 9.

If you need more help, please phone the National Customer Contact Centre on 03708 506 506 (8am to 6pm Monday to Friday), or send an email to enquiries@environment-agency.gov.uk.

It should take you about 30 minutes to fill in this form.

1 Part A

This part will not involve providing technical information.

For all schemes we need a basic level of information to allow us to identify any problems or issues. You need to read 'Guidance for run-of-river hydropower development', available from the National Customer Contact Centre (details above).

Please make sure you give as much detail as you can in this form so we can make an initial evaluation of your proposal. We do not expect you to be carrying out detailed work at this stage.

If you can provide more detailed technical information on your proposed scheme, please fill in part B.

2 Part B

This part will involve providing technical information on the design of the scheme. You do not need to fill in this part at the moment if you do not have the information we ask for.

Before we approve your scheme we need more detailed information on its design. Through discussions with us we will tell you what information you need to provide and how you can get it.

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Part A

1 Licence you are applying for

1.1 What type of pre application are you applying for?

Basic pre application

Enhanced pre application (further charges apply)

1.2 Licence you are applying for

Please tick one of the boxes below to let us know what type of licence you are applying for.

New full abstraction licence

New transfer licence

New impoundment licence

<https://www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence>.

Replacement licence when the existing licence expires

Formal variation to an existing abstraction licence

Formal variation to an existing impoundment licence

2 Contact details

2.1 Are you:

The applicant?

Give your details at 2.3 then go to question 2.4.

The applicant's agent or advisor?

Give your contact details in question 2.2 and the applicant's details in 2.3.

2.2 Agent's or advisor's contact details

First name

Last name

Name of company or organisation, if appropriate

Address

Postcode

2 Contact details, continued

Contact numbers, including the area code

Phone

Mobile

Email

2.3 Applicant's name

First name

Last name

Name of company or organisation, if appropriate

Address

Postcode

Contact numbers, including the area code

Phone

Mobile

Email

2.4 Have you spoken to anyone in the Environment Agency about the proposal?

Yes

First name

Last name

Phone

No

2 Contact details, continued

2.5 Have you approached any of the conservation agencies (for example, Natural England) about your proposed scheme?

No

Yes Include details below and a copy of any comments they have made.

Part B

You may not yet have all the information we ask for below. We will however, need this information for any formal application submitted for your proposed hydroelectric power scheme.

3 Site details

Please provide a map (see the guidance notes) labelling all the site details you give in the following section.

3.1 Site name

3.2 Name of watercourse

3.3 Location details – specify the location of the proposed scheme, using 12-character National Grid References (NGRs; see the guidance notes)

NGR of abstraction point

NGR of discharge point

NGR of any proposed impoundment
(for example, weir, sluice, hatch)

Description of any proposed impoundments

3 Site details, continued

NGR of any existing impoundment

Description of any existing impoundment

NGR of any proposed or existing water-control structure (for example, lock, waterwheel, fish pass or canoe pass)

NGR and description of any other relevant features

3.4 Does the applicant have or expect to have a current or proposed right of access to any proposed abstraction point? (Include any details on a separate map – see the guidance notes.)

Yes

No You will need to make arrangements to get access.

3.5 Please provide a brief description of the proposal

3.6 Length of any depleted reach created

_____ metres

3.7 What type of turbine do you propose to use?

If you are using an Archimedes screw turbine, provide the following information.

Diameter

_____ metres

Number of blades

3 Site details, continued

Tip speed

_____ metres per second

3.8 How many turbines do you propose to use?

Will the turbine be enclosed?

No

Yes

3.9 Proposed turbine flows

Maximum design flow (sometimes called the instantaneous turbine flow)

_____ litres per second

Maximum hourly turbine flow

_____ cubic metres per hour

Maximum daily turbine flow

_____ cubic metres per day

Maximum annual turbine flow

_____ cubic metres per year

Minimum turbine start-up flow

_____ litres per second

Please provide information on how these quantities have been calculated on a separate sheet

3.10 If you are proposing to raise the level of an existing impoundment, how much by?

_____ millimetres

3.11 Have you applied for planning permission?

Yes

Name of local planning authority

Application reference number

Status: pending approved refused

No

4 Scheme details

4.1 Gross head

_____ metres

4.2 Net head

_____ metres

4.3 Estimated generating potential

_____ kilowatts

4.4 Annual generating potential

_____ kilowatt-hours

4.5 Explain how the scheme would be controlled

5 Water resource considerations

You will need to support this pre-application, and your formal application, with an assessment of the existing hydrology and hydromorphology (the physical properties of the watercourse and its effect on the land) at the site.

For more help please see the guidance notes (form guidance WR316) and ‘Guidance for run-of-river hydropower development’.

Questions 5.1 to 5.5 will give you your ‘indicative design flows’ for your scheme. These are only estimates and will need to be confirmed when submitting any formal application.

5.1 Flow duration statistics

Please send us a copy of the flow duration curve for the site (graph and data).

What are the relevant flow duration statistics?

Q95

Q80

Q50

Q40

5 Water resource considerations, continued

Q10

Qmean

Are these flow duration statistics for natural or gauged flow?

5.2 Base-flow indicator value (BFIV)

You need your BFIV figure to help work out your indicative design flows.

Your BFIV figure is your Q95 value divided by your Qmean value.

Use the values in question 5.1 to work out your BFIV figure and enter it below.

BFIV

5.3 Abstraction sensitivity band (ASB)

We give all watercourses an ASB of either 3 for ‘high sensitivity’, 2 for ‘medium sensitivity’ or 1 for ‘low sensitivity’. Contact us to get your ASB figure and enter it below.

ASB

5.4 Indicative design flows

Using table A from the ‘Flow and Abstraction Management for hydropower’ section in ‘Guidance for run-of-river hydropower development’, give the indicative design flows for a hydropower scheme at your site.

Hands-off flow (HOF)

Maximum abstraction

Percentage take above HOF

5.5 Applying for higher levels of abstraction

Do you want to apply for higher design flows than indicated in 5.4 above?

No Go to section 6

Yes

Hands-off flow (HOF)

5 Water resource considerations, continued

Maximum abstraction

Percentage take above HOF

Describe any other design or operational features you are proposing for protection of flow variability.

6 Fisheries considerations

6.1 Give details of the fish and eel screening for both the intake and outfall proposed for your hydroelectric-power scheme

	Intake	Outfall
Type of screen		
Screen size (mm)		
Screen dimensions (mm) (width × height)		
Angle to main flow path (degrees)		
Approach velocity (m/s)		
How did you work this out?		
NGR (12-character)		

6.2 Is the fish and eel screening in line with the 'Screening guidance' section in 'Guidance for run-of-river hydropower development'?

No Explain why not in the space below.

Yes

6 Fisheries considerations, continued

6.3 Give details of any proposed bywash channel, if one is present, for your hydroelectric-power scheme

Main features of the bywash channel

Flow needed to effectively operate the bywash channel, including units

6.4 Give details of any other screening methods proposed (for example, behavioural)

6.5 Does the proposed scheme include an upstream fish, eel and lamprey pass or passes?

Yes

What type of fish and eel pass are you proposing?

What are the intended target species?

What is the proposed flow for the fish pass?

metres per second

No Explain why not and the reasons for not following our guidelines.

7 Flood risk considerations

7.1 Have you completed a flood risk assessment or flood consequence assessment?

Yes Send us a copy with this form and go to section 7.

No Go to question 6.2.

7 Flood risk considerations, continued

7.2 Give details of any proposed in-watercourse construction or modification which could change the flood risk

8 Planning considerations

8.1 Have you asked the local planning authority what information you need to include in your planning application and to discuss issues that may arise for your proposal?

Yes Please provide a copy of any written advice or summary of verbal advice you have received.

No We recommend you do this before continuing with your application.

8.2 Have you considered the need for an environmental impact assessment?

Yes Go to question 8.5.

No Answer questions 8.3 and 8.4.

8.3 Will your scheme produce 0.5 MW or more of power?

Yes Go to question 8.5.

No

8.4 Is your scheme in a sensitive area (for example, a site of special scientific interest, a nature reserve and so on)?

Yes Please also answer question 8.5.

No

8.5 Have you asked your local planning authority for a screening opinion to find out if you have to carry out an environmental impact assessment or provide an environmental statement with your planning application?

Yes If you have received a screening opinion, please attach it to this form.

No

8.6 Is land contamination potentially an issue:

With the existing use of the site?

Yes

No

From previous uses of the site?

Yes

No

8 Planning considerations, continued

8.7 Are you sending a preliminary risk assessment with this form?

Yes

No

9 Checklist

Please read through this list and tick the items you are sending to us:

Filled-in form

Copy of any comments made by conservation agencies

Map or sketch plan showing site details

Map or sketch plan showing rights of access

Design drawings of the scheme

Hydrology assessment

Flow duration curve (graph and data)

Environmental report

Flood risk assessment or flood consequence assessment

Advice from the local planning authority on information needed for the planning application and issues that may arise

Screening opinion from the local planning authority

Enough photographs of the site to give a clear impression of the proposed location of the scheme and any control structures

Continuation sheets for answers to questions

How many continuation sheets?

10 Fees

To find out the pre application fee for your abstraction or impounding licence, see the <https://www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence>.

Do you need a receipt for this payment?

Yes

No

11 General Data Protection Regulations

Privacy notice: how we use your personal data

We are the Environment Agency and we run the water abstraction licence and impoundment licence service. We are the data controller. A data controller determines how and why personal data (personal information) is processed.

Our Personal Information Charter (<https://www.gov.uk/government/organisations/environment-agency/about/personal-information-charter>) explains how we deal with your personal information. Go to GOV.UK and search 'Environment Agency personal information charter'.

Why we are collecting personal data and what we will do with it

We the Environment Agency are the data controller. We are collecting and processing personal data to:

- process your abstraction or impounding licence applications including pre-application
- advertise your application, if required
- make your application available to the public and organisations that we have to notify, as required by the Water Resources Act 1991
- keep public registers up to date
- charge you for your abstraction or impounding licence as set out by our charges scheme
- process your records of abstraction (returns)
- make sure you keep to the conditions of your abstraction or impounding licence
- contact you about managing your abstraction or impounding licence or applying for other licences you may need
- contact you to gather feedback to improve the level of service that we provide
- register you to use our online water resources service

Processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the data controller. This is to undertake our responsibilities for managing water resources in England through our abstraction and impoundment licensing system.

We do not use your personal data to make an automated decision or for automated profiling.

Sharing and transferring personal data

We will not share your personal data with anyone outside of the Environment Agency without your consent unless we are allowed to do so by law. But we may pass your data on to our agents or representatives to process it for us.

We transfer your data through servers in the UK and Amazon Web Service (AWS) servers in Ireland. We store the data on servers in the UK and AWS servers in Ireland. The data will not be transferred outside the European Economic Area.

How long we hold personal data for

We will keep your personal data as required by law to maintain the Water Abstraction and Impounding Licence public register with details of all applications and our decisions on those applications.

We will keep other personal data for 7 years once the abstraction or impoundment licence ceases to have effect. After 7 years we will review retention in line with our standard information retention policy.

We will keep your personal data required to access the 'Manage your water abstraction or impoundment licence' service for as long as you require access to the service.

11 General Data Protection Regulations, continued

Contact details

Our Data Protection Officer (DPO) is responsible for independent advice and monitoring of the Environment Agency's use of personal information.

If you have any concerns or queries about how we process personal data, or if you would like to make a complaint or request relating to data protection, please contact our DPO:

Data Protection Officer, Environment Agency, Horizon House, Deanery Road, Bristol, BS1 5AH

Email: dataprotection@environment-agency.gov.uk

You can find out about your personal data rights from the Information Commissioner's Office (ICO) at www.ico.org.uk. The ICO regulate the data protection legislation. You have the right to lodge a complaint with them at any time.

12 Where to send the form

Please send this form and any supporting documents to:

Permitting and Support Centre
Water Resources Team
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Or email to:

psc-waterresources@environment-agency.gov.uk

If you are not sure about anything in this form, phone us on 03708 506 506.

13 Next steps

We will check this application and contact you if we have any questions.

If we approve this application, we will send you the licence. We will contact you once this is done.

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, or you would like us to review a decision we have made, please let us know.

More information on how to do this is available from our complaints and appeals procedures (www.gov.uk/government/organisations/environment-agency/about/complaints-procedure)

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

