

Form WRE: Application for a new impoundment licence, technical variation to an impoundment licence or the removal of an existing impoundment

Reference number (The number you generated in form WRA). Example:
WRNATURALRESOURCESWALES1101

WRHYDROCK1010

Are you applying for a licence for a new impoundment or an existing impoundment

a new impoundment

Impoundment details

All information should correspond with any maps and drawings submitted with this application

	Impoundment location name/reference	Left bank National Grid Reference	Right bank National Grid Reference
	Dare Valley Upper Lake	SN 97749 02786	SN 97754 02794
	-	-	-
	-	-	-

Provide details about the type of impoundment you propose to construct at the points specified above and how the works will operate. This should include a description of any existing works and how your proposal will affect the flow of inland water.

Tell us the purpose of the works. If the water is to be impounded for more than one purpose, list both the primary and secondary purpose

Modification of the existing weir to accommodate an abstraction and compensation notch for a run of river hydropower scheme, which will return the water to the existing waterway downstream.

Description of impoundment

Name of watercourse

Dare River

Will your proposed impoundment result in a change to the submerged area (downstream) or new submerged areas behind (upstream of) the impounding works?
(If yes, ensure this is shown on any map or drawings submitted)

No

Will the ponded area created by the impoundment be lined?

No

Give the height of the impoundment structure, from the downstream toe to crest or top of spillway (in metres above Ordnance Datum). If the proposal involves an existing impoundment, state the change in height (in millimetres).

Change in height: 0.22m below existing weir level

What is the overflow or crest level of the impoundment (in metres above Ordnance Datum)?

205.91mAOD

Will the proposal create a raised reservoir?

(A raised reservoir is one where water is stored at a level above the natural level of the lowest level of the surrounding area.)

No

What is the proposed capacity of the impoundment when full to spillway level (in cubic metres)?

Same as existing: 13,000m² lake area at assumed average depth of 2m = 26,000m³

Does the proposal involve the controlled release of water to safeguard downstream flows?

This could be the release of flood attenuation flows, reservoir compensation flows or a residual flow via a notch or orifice.

Yes

Tell us what the proposed flow at the outlet will be and how you intend to measure this. If the works involve monitoring of levels or flows, include details of this.

235l/s design flow rate, measured via the power outlet calculation using system efficiency and water head. Hands-off flow of 50l/s kept via a V notch.

Is the impounded water to be used for a subsequent purpose?

No

How will the impounded area be filled initially, and subsequently refilled if applicable?

Example: by rainwater, overland flow or pumped from another source.

As existing

Fish and eel passage

Confirm the fish species present at your site.

Within the last five years the local data search has returned records for brown trout in the vicinity of the site however, the existing weir already acts as a natural barrier to migratory fish.

Please confirm type of fish screen

Intake High capacity coanda screen

Outfall 10mm bar spacing screening

Please confirm screen height and width - intake (millimetres)

Width 4040

Height Approximately 2000mm

Please confirm screen height and width - outfall (millimetres)

Width 1000

Height 1200

Please confirm screen aperture size (millimetres)

Intake 2

Outfall 10

Please confirm type of upstream fish/eel passage intake

As existing: None

Please confirm type of downstream fish/eel passage

None

Please confirm proposed flow for fish pass

N/A

Construction, maintenance and operation

Provide details of maintenance or activities relating to the operation of the impoundment. Include the extent and frequency of activities. This could include the operation of scour valves or maintenance of a fish pass.

Describe any sediment management plan associated with the impoundment.

Routine inspection and periodic cleaning of coanda screen (every 6 months) and general maintenance where required.

Do you intend to divert the flow of the inland water while you are building, changing or removing the impounding works?

No

How do you intend to divert the flow of the inland water while you are building, changing or removing the impounding works. Give details.

The water will be diverted temporarily around the existing intake via a channel. This is to allow the concrete sump and chamber pipeline to be installed.

Proposed Design of Structure

Upload design drawings and calculations here. (Spreadsheet file formats need to be: .xls, .xlsx, or .ods)

- File: 34564-HYD-XX-XX-DR-C-1010 - Weir General Arrangement Plan.pdf - [Download](#)
- File: 34564-HYD-XX-XX-DR-C-0101 - Overall Key Plan.pdf - [Download](#)
- File: 34564-HYD-XX-XX-DR-C-1610 - Weir Sections & Details.pdf - [Download](#)
- File: 34564-HYD-XX-XX-DR-C-1620 - Power House Sections & Details.pdf - [Download](#)
- File: 34564-HYD-XX-XX-DR-Y-0005 - Location Plan.pdf - [Download](#)
- File: Dare Valley Hydro - Supporting Info NRW Rev2 0.pdf - [Download](#)
- File: 34564-HYD-XX-XX-DR-C-0100 - Site Location Plan.pdf - [Download](#)

Please upload your stage 1 geomorphology photosurvey. Find out more on how to complete your survey on our Geomorphology Photosurveys for Hydropower developments page

- File: 34564-HYD-XX-XX-RP-Y-0003 - Geomorphology Photo Survey.pdf - [Download](#)

Other permissions

Planning permission advice received?

No

Is planning permission required?

Yes

What is the status of the planning permission?

Not Submitted

Planning permission reference

N/A

Have you applied for or do you hold a Flood Risk Activity Permit (FRAP) for the proposed works?

No

Commercial confidentiality and national security

Are you applying for Commercial Confidentiality?

No

Have you applied to the Welsh Ministers for national security for your application?

No

Declaration

By signing below, you are declaring that, to the best of your knowledge; the information given in this form, on any map and in any supporting or additional information; is true.

Signed George Trigg
Print name George Trigg
Position Consultant at Hydrock Consultants Ltd (Agent)

If an agent is to sign on behalf of the Licence Holder, a letter of authorisation from the Licence Holder is required.

- File: Hydrock - LoA Dare Valley Abstraction License Authorisation.pdf - [Download](#)

Date

* 11/10/2024

Would you like a copy of your submission?

Yes

Your email address

Georgetrigg@hydrock.com