

# 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

WRDIMBATH2511

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
	Intake 1	SS 95672 89812	SS 95672 89812
	-	-	-
	-	-	-

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

To provide water for a hydropower scheme.

## Description of impoundment

Name of watercourse

Unnamed tributary to Nant Lechyd

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)

Yes

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).

0.625m from toe to crest

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

299mAOD

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.)

Yes

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

17

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.

The Hands Off Flow proposed is Q95, 1.5l/s. In addition, 30% of the watercourse's flow, above the Hands Off Flow, will also bypass the turbine. A rectangular notch will be cut in the crest of the new wooden weir and it will provide both of these flows.

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

No

Provide details of subsequent purpose (for abstractions, state the daily and annual quantities in cubic metres).

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

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

Overland flow.

## Fish and eel passage

Confirm the fish species present at your site.

Brown trout.

Please confirm type of fish screen

**Intake** Perforate stainless steel sheet

**Outfall** Vertical flat bar

Please confirm screen height and width - intake (millimetres)

**Width** 600

**Height** 600

Please confirm screen height and width - outfall (millimetres)

**Width** 515

**Height** 515

Please confirm screen aperture size (millimetres)

**Intake** 3

**Outfall** 40

Please confirm type of upstream fish/eel passage intake

None

Please confirm type of downstream fish/eel passage

300mm deep plunge pool

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.

If gravel builds up behind the 'Hands Off Flow' notch it will be removed by hand or with a shovel to ensure the flow is not affected. The screen may need brushing regularly with a nylon brush to remove peat residue or algae.

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

Yes

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

By using a sandbag dam to divert the water around the construction site. The works will be done in a period of low flow.

## Proposed Design of Structure

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

- File: 21102401 Dimbath Intake 1 Front Elevation.pdf - [Download](#)
- File: 21102701 Dimbath Intake 1 General Layout.pdf - [Download](#)
- File: 21102702 Dimbath Outfall.pdf - [Download](#)

## Other permissions

Planning permission advice received?

No

Is planning permission required?

Yes

What is the status of the planning permission?

Not Submitted

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

Would you like a copy of your submission?

Yes

Your email address

liam@greenearthhydro.co.uk