

# 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

WRBAKERHICKS1703

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
	weirs at Tynybryn	see spreadsheet	see spreadsheet
	-	-	-
	-	-	-

If there is more than three impoundments, upload additional details. (Spreadsheet file formats need to be: .xls, .xlsx, or .ods)

- File: Tynybryn estimated impoundment calc.xlsx - [Download](#)

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

The purpose of the works is to help control the flow rate as part of the revised river realignment at the former Tynybryn Bridge. The new weir system will help to reduce further future scour and also provide a volume of water to help with salmon swimming during the spawning season

## Description of impoundment

Name of watercourse

River Ely

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).

see spreadsheet

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

see spreadsheet for weir crest level

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)?

See spreadsheet

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 proposed flows will be as per Tynybryn\_Modelling\_Options\_Tech\_Note\_v3.0

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.

Rainwater & Overland Flow into River Ely

## Fish and eel passage

Confirm the fish species present at your site.

- Brown Trout
- Salmon

Please confirm type of fish screen

**Intake** Not Applicable

**Outfall** Not Applicable

Please confirm screen height and width - intake (millimetres)

**Width** Not Applicable

**Height** Not Applicable

Please confirm screen height and width - outfall (millimetres)

**Width** Not Applicable

**Height** Not Applicable

Please confirm screen aperture size (millimetres)

**Intake** Not Applicable

**Outfall** Not Applicable

Please confirm type of upstream fish/eel passage intake

Not Applicable

Please confirm type of downstream fish/eel passage

Not Applicable

Please confirm proposed flow for fish pass

See Tynybryn\_Modelling\_Options\_Tech\_Note\_v3.0

## 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.

The blockstone weir will consist of a series of v notch gaps which will be naturally kept clear by the action of the river water passing over the blockstone even during low flow events. The bottom of the v notches are required to coincide with the top of the river bed just upstream of the weir. If there is a need to clear any blockages of the v notches then this is expected to be done by Rhondda Cynon Taf County Borough Council after every major storm event

Upload documents here

- File: Tynybryn\_Modelling\_Options\_Tech\_Note\_v3.0.pdf - [Download](#)

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.

Ton Bag Flume throughout proposed works length will be used to divert water through proposed works area until complete. Refer to temporary FRAP application DFR/S/2023/0001 and DFR/S/2023/0004

## Proposed Design of Structure

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

- File: Site location at 1-25000 scale.pdf - [Download](#)
- File: 30003219-BHK-00-XX-DR-C-1102.pdf - [Download](#)
- File: 30003219-BHK-00-XX-DR-C-2501.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: A8066 Tynybryn River Channel Survey Report\_V3.pdf - [Download](#)
- File: Tynybryn\_Modelling\_Options\_Tech\_Note\_v3.0.pdf - [Download](#)

## Other permissions

Planning permission advice received?

Yes

Is planning permission required?

No

What is the status of the planning permission?

Not required

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

Yes

Please give permit/permit application reference number

DFR/S/2023/0001 and DFR/S/2023/0004

## 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**      nick wood

**Print name**   NICK WOOD

**Position**      Associate Director

Date

\*   23/03/2023

Would you like a copy of your submission?

Yes

Your email address

nick.wood@bakerhicks.com