

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

WRPLASFARM1604

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
	Plas Farm Hydro Intake	SN 75410 03946	SN 75410 03943
	-	-	-
	-	-	-

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

Intake weir to enable abstraction of water. Weir is a coanda screen installed on the front face of a waterfall. So the amount of impounded water is negligible but in our experience its is prudent to apply for an impoundment licence as well as an abstraction licence for hydro power.

Description of impoundment

Name of watercourse

Unnamed Watercourse flowing into the River Clydach downstream of our project

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).

2 meters but on face of 1.9m waterfall so can be considered as 0.1m

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

214mAOD

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)?

less than 1m³

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 flow will be 2lps via a sized notch in the wingwall

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

Yes

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

For flowing over the coanda screen and its abstraction. Abstraction is for generation of electricity (hydro power)

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

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

By watercourse flows

Fish and eel passage

Confirm the fish species present at your site.

Resident Brown Trout

Please confirm type of fish screen

Intake 1.3mm coand screen

Outfall 25mm outfall vertical bar screen

Please confirm screen height and width - intake (millimetres)

Width 500

Height 700

Please confirm screen height and width - outfall (millimetres)

Width 300

Height 300

Please confirm screen aperture size (millimetres)

Intake 1.3

Outfall 25

Please confirm type of upstream fish/eel passage intake

none, existing large waterfall

Please confirm type of downstream fish/eel passage

none, existing large waterfall

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.

The impoundment is so small that it will naturally fill with sediment and this is appropriate no significant sediment sink will be present as coanda weir is on the face of an existing waterfall

Upload documents here

- File: PFH-DWG-Intake-B-190324-ARC.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.

With Sandbags and two 225mm pipes

Proposed Design of Structure

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

- File: PFH-DWG-Intake-B-190324-ARC.pdf - [Download](#)
- File: PFH-DWG-Outfall-A-010324-ARC.pdf - [Download](#)
- File: Plas Farm General Layout RevA 27.02.24.pdf - [Download](#)
- File: Plas Farm Site Plan RevA 19.03.24.pdf - [Download](#)
- File: PFH_Power_House_RevA.pdf - [Download](#)
- File: Plas Farm Open Rectangular Notch Broad Crested Compensation Discharge.pdf - [Download](#)
- File: PF-DOC-Design and AccessStatement-A-010324-ARC.pdf - [Download](#)
- File: PF-DOC-EcologyReport-A-110424-ARC.pdf - [Download](#)
- File: PF-DOC-Flood Risk Assessment-A-040324-ARC.pdf - [Download](#)
- File: PF-DOC-Method Statement-A-040324-ARC.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: PFH-DOC-Hydromorphology Survey Report-A-280224-AC.pdf - [Download](#)
- File: Locations 1 to 6.pdf - [Download](#)
- File: Locations 6 to 11.pdf - [Download](#)
- File: Locations 11 to 17.pdf - [Download](#)

Other permissions

Planning permission advice received?

No

Is planning permission required?

Yes

What is the status of the planning permission?

Submitted

Planning permission reference

Only just submitted so no reference yet

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 Richard Bowen

Print name Richard Bowen

Position Owner

Date

* 16/04/2024

Would you like a copy of your submission?

Yes

Your email address

adam@ellergreen.com