

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

WRSTANTECCLYDACH01

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 |
|--|--------------------------------------|-----------------------------------|------------------------------------|
| | Clydach Vale Country Park Upper Lake | SS 98328 92803 | SS 98339 92807 |
| | - | - | - |
| | - | - | - |

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

Build of a new weir to accommodate abstraction for a run of river hydropower scheme, just upstream from the existing culvert intake. The scheme will return the water to the existing waterway (Nant Clydach), downstream of the culvert outflow, in the De Winton Street Car Park.

Description of impoundment

Name of watercourse

Nant Clydach

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).

Impoundment structure height from bed level - 2.00 metres

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

190.40m above OD

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)?

Negligible increase to channel capacity (see drawing). Approx. 9,500m² lake area at assumed average depth of 2m = 19,000m³.

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.

390l/s design flow rate, measured via the power outlet calculation using system efficiency and water head. Hands-off flow of 36l/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. |
| Survey to be completed |

| |
|------------------------------------|
| Please confirm type of fish screen |
| Intake TBD |
| Outfall TBD |

| |
|---|
| Please confirm screen height and width - intake (millimetres) |
| Width TBD |
| Height TBD |

| |
|--|
| Please confirm screen height and width - outfall (millimetres) |
| Width TBD |
| Height TBD |

| |
|---|
| Please confirm screen aperture size (millimetres) |
| Intake TBD |
| Outfall TBD |

| |
|---|
| 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

Proposed Design of Structure

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

- File: 37199-HYD-XX-XX-C-0100 Site Location Plan.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1000 Pipe Route General Arrangement.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1001 Private Wire General Arrangement.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1002 Alternative Pipe Route General Arrangement.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1010 Weir General Arrangement Plan.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1020 Power House General Arrangement Plan.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1600 Pipe Details.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1601 Pipe Long Section.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1602 Pipe Long Section.pdf - [Download](#)
- File: 37199-HYD-XX-XX-C-1603 Pipe Long Section.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

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 Susan 'T Hart

Print name Susan 'T Hart

Position Renewable Energy Consultant at Stantec

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

- File: Stantec - LoA Clydach Abstraction License Authorisation.pdf - [Download](#)

Date

* 10/07/2025

Would you like a copy of your submission?

Yes

Your email address

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