

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

WRWELSHWATER2408

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

removal of an impoundment

Impoundment detailsAll 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
	Llyn Bran Reservoir - dam	SH 96227 58895	SH 96188 58893
	-	-	-
	-	-	-

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

Discontinuance of Llyn Bran reservoir.

This reservoir is no longer required as part of Dwr Cymru Welsh Water's (DCWW) water resources. The reservoir in its current form present a significant inundation flood risk in the event of dam failure. If the reservoir is to be retained extensive remedial and improvement works will be required to the dam to satisfy current reservoir safety standards and to ensure ongoing compliance with the Reservoirs Act 1975. The preferred option for this reservoir is to remove the dam which will result in the full discontinuance of the reservoir.

The lowering of the water level upstream of the dam, once it is removed, will result in the site returning to the original natural lake and watercourse. This will yield significant biodiversity opportunities in relation to the marginal areas around the retained natural lake and with the restoration of the water course upstream of and through the location of the dam. Of particular interest is the opportunity to use the retained lake as a receptor site for aquatic plants to be translocated from Llyn Anafon, as part of the forthcoming discontinuance of that reservoir.

Description of impoundment

Name of watercourse

Un-named

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).

Approx. height of existing dam (toe to crest) = 3m. Entire dam to be removed.

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

Crest level of existing dam is 435.15m AOD

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)?

n/a

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.

No

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.

n/a

Fish and eel passage

Confirm the fish species present at your site.

Biological records state European Eel and Pike.

Please confirm type of fish screen

Intake n/a

Outfall n/a

Please confirm screen height and width - intake (millimetres)

Width n/a

Height n/a

Please confirm screen height and width - outfall (millimetres)

Width n/a

Height n/a

Please confirm screen aperture size (millimetres)

Intake n/a

Outfall n/a

Please confirm type of upstream fish/eel passage intake

Removal of the dam will remove a potential barrier to fish / eel passage

Please confirm type of downstream fish/eel passage

Removal of the dam will remove a potential barrier to fish / eel passage

Please confirm proposed flow for fish pass

Removal of the dam will remove a potential barrier to fish / eel passage

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 lowering of the water level with the removal of the dam will result in the site returning to the original natural lake and watercourse. It is proposed that the retained natural lake will be used as a receptor site for aquatic plants to be translocated from Llyn Anafon, as part of the forthcoming discontinuance of that reservoir. Appropriate maintenance of ecological mitigation measures, including the translocated aquatic plants, will form part of the discontinuance project until such time as these measures have become established.

Initially the silt will be pumped into silt tubes laid either side, and following the route of the new reinstated watercourse, set back from the watercourse sufficiently so that pre-vegetated coir matting can be placed to form the banks of the new watercourse. As the silt tubes are filled additional silt material will be pumped to the area behind the silt tubes to marginally raise the levels between the watercourse and the banks of the reservoir.

The silt tubes and matting will provide the stable structure for the route of the watercourse and to retain silt in the areas behind. The silt margins will be seeded to re-establish to a condition similar to the heathland currently surrounding the reservoir.

Upload documents here

- File: ED14327100_Llyn Bran Environmental Report_Ver2 [Jun21].pdf - [Download](#)
- File: Llyn Bran Environment and Ecology Baseline Report [Feb20].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.

To enable the removal works to be carried out the reservoir level will be lowered by the use of siphon pipes and over-pumping at the dam. The works will be undertaken by a contractor with existing and recent experience of similar reservoir discontinuances in Wales, paying particular attention to the careful management of silt. Silt will be retained on site using appropriate and proven techniques to hold the silt in place while new vegetation establishes.

Proposed Design of Structure

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

- File: 210709 Llyn Bran Scheme Summary R2.pdf - [Download](#)
- File: DCWW Llyn Bran Reservoir - Photo Record [Jun21].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?

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

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