

Form WRD: Application for a new abstraction licence or a technical variation to an abstraction licence

Application type

Reference number (The number you generated in form WRA). Example:
WRNATURALRESOURCESWALES1101

WRHOCHTIEF(UK)CONSTRUCTION2406

Are there any applications currently being assessed by us that are linked to this application?

No

Is the proposed abstraction going to be aggregated with another existing abstraction?

No

Are any applications, at the same site; being assessed by the Environment Agency?

No

Tell us when you want your abstraction licence to end: [DD/MM/YY]

01/12/2026

Abstraction details

Abstraction location name/reference

WA/065/0006/0023 - Garth Abstraction

Abstraction point type

Single point

National Grid Reference

SH 59377 38672

Do you have any further points of abstraction?

No

Means of abstraction

Provide full details of the equipment you propose to use to abstract water, such as maximum pump capacity and any relevant dimensions, e.g. pipe diameter. For groundwater abstractions, include details about the borehole (depth and diameter) and details of screening and lining.

A pump. Existing abstraction license in place (this application is for a technical variation) and the existing agreed abstraction rate of 40 l/s will be retained. All details in WA/065/0006/0023 remain unchanged other than the total annual abstraction quantity.

Abstraction quantities

Abstraction location name/reference

WA/065/0006/0023 - Garth Abstraction

What purpose will the water be used for?

Dewatering of the tunnel shaft to relieve groundwater pressure and enable construction. Water is not being abstracted for a specific use i.e water supply

Period of abstraction Will it be all year?

Yes

Maximum quantities (cubic metres)

Annual 222,650

Daily 610

Hourly 25.42

Peak abstraction rate (in litres per second)

40

Number of hours of abstraction per day

24

Add quantities for another location?

No

Calculations and supporting information

Use this section to show us how you have calculated the amount of water you require. This should include details of your operational regime (for example, number of hours and days you intend to abstract, number of units produced or area to be irrigated). We use this information to determine if the volumes you propose to abstract are appropriate for the purpose. Depending which industry you are in, you may need to provide additional information below.

If your proposal involves the provision of a residual flow via a notch or orifice, provide information on how this is being calculated. This should include details of the equation being used.

The abstraction is required for dewatering and as such abstraction volumes are estimates based on the shaft size, ground conditions and construction techniques. A technical variation of license WA/065/0006/0023 is being made as to increase the total annual abstraction quantity as the shaft design has been altered to incorporate a greater number of concrete secant piles and fewer steel sheet piles. This was prompted by the ground conditions encountered. The proposed increase in annual abstraction is to cater for the potential higher groundwater ingress into the launch shaft.

The current abstraction license allows an annual abstraction of 76,030 cubic metres, averaging 210m³ per day. We would like the annual abstraction to be increased to 222,650 cubic metres. This allows the daily maximum of 610 cubic metres to be abstracted all year round and for the duration of the tunnel boring machine tunnelling work, estimated to be 12-14 months from January 2025.

Means of measurement

State how you intend to measure the quantity of water you abstract. You do not need to do this for a temporary or transfer licence.

Meter

Water efficiency

Provide details of what measures you provide or intend to implement, to ensure efficient use of water. This could include water storage, re-use or recirculation, monitoring and checking for leaks, undertaking water audits or other industry specific good practice.

The abstraction is associated with dewatering. Dewatering will only be undertaken where necessary.

An existing discharge permit is in place for removal of abstracted water to the River Glaslyn, however, opportunities will be taken to re-use water for operation of the tunnel boring machine. 4no lagoons are placed in the Garth construction compound for storage of water for re-use.

Discharge details

If you intend to return any of the abstracted water to the environment, provide details below. Details of discharge location(s) should correspond with any maps submitted. Do not include discharges to a public sewage system.

	Discharge location name / reference	National Grid Reference of discharge point (12 digit)	Total volume to be discharged (cubic metres)	Environmental Permit for Water Discharge Activity number (if applicable)
	Afon Glaslyn	SH 58894 38974	610 per day	EPR/DB3190FD
	-	-	-	-
	-	-	-	-
	-	-	-	-

Provide a description of the structure and equipment involved in discharge.

Existing discharge in place. Pumped discharge via overground pipe to the Afon Glaslyn. Mesh in place on the outlet to protect fish and eels

Other abstractors / water users

Provide details of nearby abstractors or users of water who could be affected by your proposal. This should include deregulated users (exempt activities or abstractions < 20 cubic metres per day), anglers and canoeists. Your local authority's environmental health will hold details of exempt domestic abstractors.

Existing discharge in place (EPR/DB3190FD) - this technical variation to the abstraction license does not require a change to the discharge volume.

This abstraction license technical variation is for dewatering and does not impact water users or other abstractors.

Planning application

Have you sought advice on your planning application?

Yes

Submit a copy of the Planning Authority's response.

- File: Decision Notice - Gwynedd CC.pdf - [Download](#)

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 Aled Williams
Print name Aled Williams
position Associate - Flood Risk & Drainage

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

- File: Environmental Consent Application - 31.10.23.pdf - [Download](#)

Date

* 24/06/2024

Would you like a copy of your submission?

Yes

Your email address

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