

THE WATER RESOURCES ACT 1991 (AS AMENDED)

THE WATER RESOURCES (ABSTRACTION AND IMPOUNDING) REGULATIONS 2006

OBJECTION BY: MR M F FURSDON

**SITE AT: WEST WEBBURN RIVER IN THE AREA OF WIDECOMBE-IN-THE-MOOR AT
NATIONAL GRID REFERENCE SX 700 749**

PLANNING INSPECTORATE REFERENCE: ENV/3378112

ENVIRONMENT AGENCY'S STATEMENT OF CASE

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1.0 INTRODUCTION

1.1 This statement of case is made in response to an objection by Mr M F Fursdon (the licence holder) against the Environment Agency's proposal to vary the licence to abstract water reference number 14/46/004/0685 (the licence).

1.2 The licence holder operates a hydropower scheme on his farm on Dartmoor for the purpose of power generation. Using our powers under section 52 of the Water Resources Act (WRA) 1991, we are proposing to vary the licence to replace some of the existing conditions, and add new conditions, as follows:

- A hands-off flow (HoF) of $0.146\text{m}^3/\text{s}$ (Q95)¹.
- A 35% take condition above the HoF.
- (Maximum instantaneous abstraction remains at $0.80\text{m}^3/\text{s}$.)
- When the flow upstream of the weir is below the HoF of $0.146\text{m}^3/\text{s}$, abstraction is restricted to a sweetening flow of 20l/s .
- When the flow upstream of the weir is $< 40\text{l/s}$, all flow shall be directed to the river.
- Means of controlling and measuring the abstraction at the head of the leat.
- 6 mm permanent screen at head of leat.
- Tail race screen (max 25 mm bar spacing).
- Addition of a time limit to the licence in line with the Catchment Assessment Management Strategies Common End Date (CAMS CED).

1.3 The licence holder objected to our proposal on both technical and compensation² grounds on 4 February 2026.

¹ Q95 is the flow that is exceeded in the river 95% of the time

² Explained in the WRA 1991 sub-section in section 4 below

2.0 RESTORING SUSTAINABLE ABSTRACTION

- 2.1 We are proposing to change the licence as part of the Restoring Sustainable Abstraction (RSA) programme.
- 2.2 RSA is a programme of work we are undertaking that identifies, investigates and solves environmental risks or problems caused by unsustainable licensed water abstraction throughout England. Restoring water levels and flows improves the environment for wildlife, help protect endangered species, and provide beautiful places for people to enjoy.
- 2.3 RSA work is closely linked to implementing EU Water Framework Directive 2000/60/EC (WFD) requirements, delivered by the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. These Regulations provide a framework for the management and protection of water bodies and are summarised in section 4 below.
- 2.4 We are responsible for investigating sites to find out where unsustainable abstraction is occurring and working with the affected parties to restore sustainable water resources.
- 2.5 A leaflet explaining RSA was sent to licence holders when the RSA programme commenced (**Annex 1**) and is also available on [.GOV.UK](https://www.gov.uk)

3.0 BACKGROUND

Location and relevant authorisations

- 3.1 The licence (**Annex 2**) allows the holder to abstract 69,120 cubic metres (m³) per day and 16,054,984 m³ per year from the West Webburn River for power generation, at Old Walls, Newton Abbot, Devon. The West Webburn River rises on the eastern side of Dartmoor (Figure 1), flows past Widecombe-in-the-Moor and joins the East Webburn River at Lizwell Meet in Oakmoor Wood. These rivers then feed into the River Dart near Buckland Bridge, which flows through Buckfastleigh and on to Totnes (Figure 2). The catchment is mainly agricultural and home to traditional Dartmoor farms.
- 3.2 The West Webburn River is a fast-flowing, ‘flashy’ upland river characterised by a rapid response to rainfall and low baseflow³. River levels rise quickly and steeply following rainfall contributing to ‘spate’ flows that recede rapidly once rainfall ceases. The limited baseflow support means that extremely low flows are possible during periods of dry weather. The low baseflow means that natural variability in flow plays a key role in encouraging and permitting the movement of migratory species like Atlantic salmon and sea trout.

³ Baseflow is the part of the river flow that is derived from groundwater sources rather than surface runoff and is what sustains the flow between rainfall events. The baseflow contribution therefore depends on the geology of the catchment, with lower baseflow in impermeable catchments.

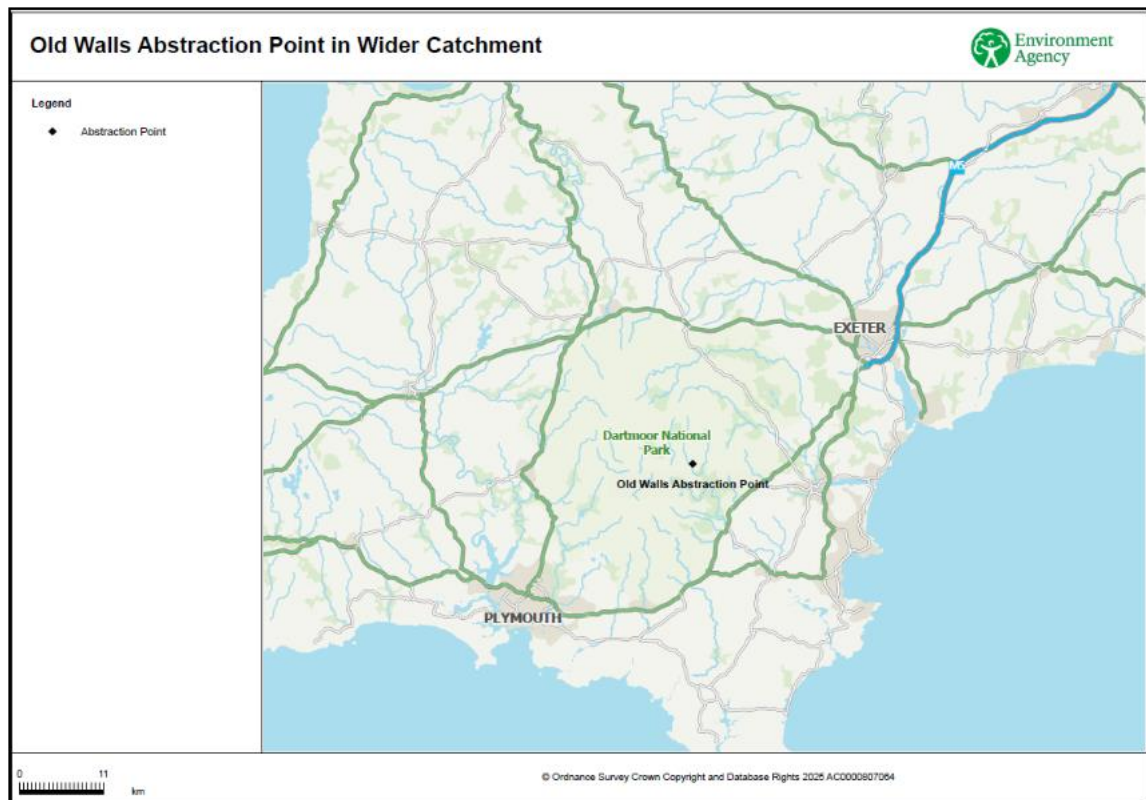


Figure 1: Location of Old Walls abstraction, wider area

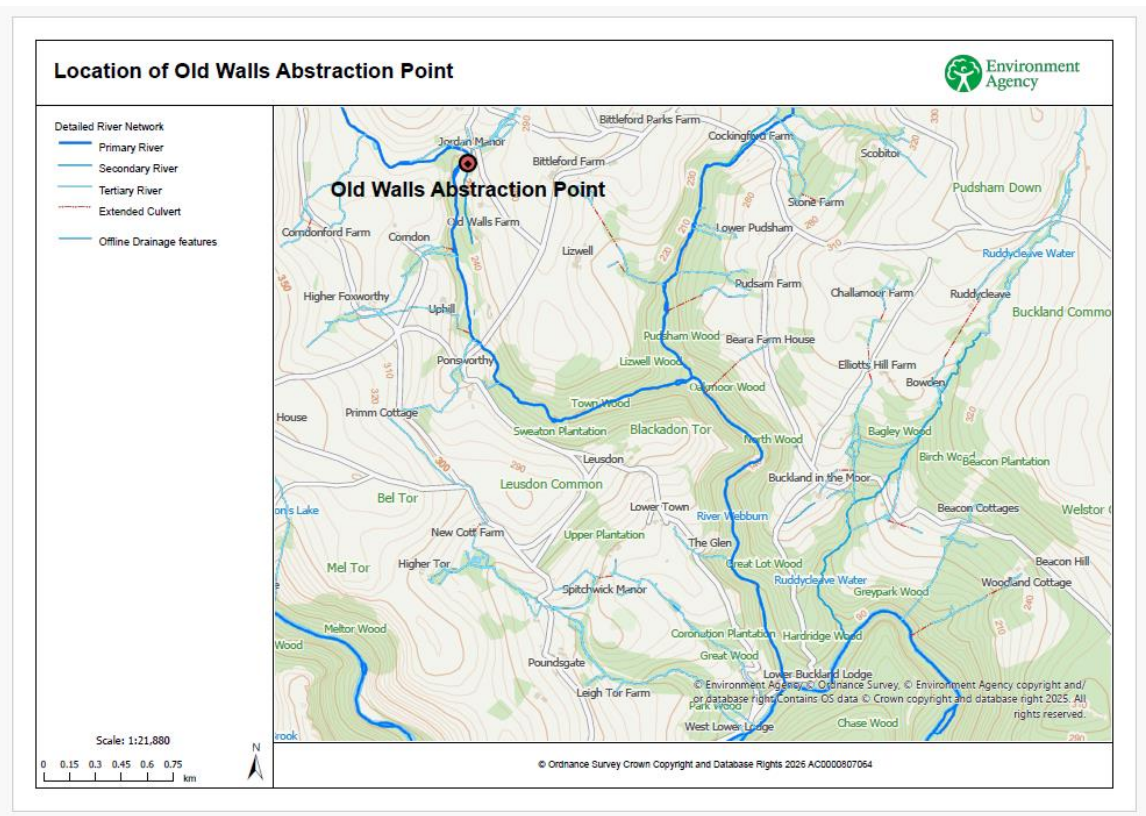


Figure 2 - Location of Old Walls abstraction, detailed view

- 3.3 The scheme was originally developed for power generation in 1936, due to the farm having no mains electricity. The licence was issued on 21 July 1992 (**Annex 3** contains the licence in its original form) as a ‘Licence of Entitlement’ for an existing abstraction for domestic power generation, following changes introduced by the Water Act 1989 which removed the licensing exemption. Licences of Entitlement were granted to reflect existing operations, typically without restriction but this licence included a condition requiring abstraction to reduce (to nil if necessary) so as to ensure that the flow over the notch on Jordan Weir (explained below) would not be less than 0.025 cubic metres per second (0.025 m³/s). However, this small HoF provided (and continues to provide) little protection to the river downstream of the abstraction point and - for the reasons explained below – it is not in line with current licensing practice.
- 3.4 The licence (**Annex 2**), was varied in 2010, simply to change the address details (and as such the HoF remained the same). It allows the holder to take water from the West Webburn River, for power generation, at National Grid Reference (NGR) SX 700 749.
- 3.5 Jordan Weir lies across the river at the abstraction point into the leat and is not in the ownership of the licence holder. Water is abstracted by gravity to a sluiced leat, leaving a deprived reach of approximately 600 metres (m) in the river before the discharge point (Figure 3). This is the abstraction point authorised by the licence (not the subsequent intake of water from the leat into the turbine). There was an agreement in 1992 between our predecessor the National Rivers Authority (NRA) and licence holder for fish screening at the turbine, rather than at the head of the leat (**Annex 4**). This was superseded by the 2010 licence variation, with condition 10.7 stating *‘Intake must be adequately screened against the ingress of fish’*.

The layout of the scheme and the design of key elements such as the head of leat are provided below in Figures 3 to 6.

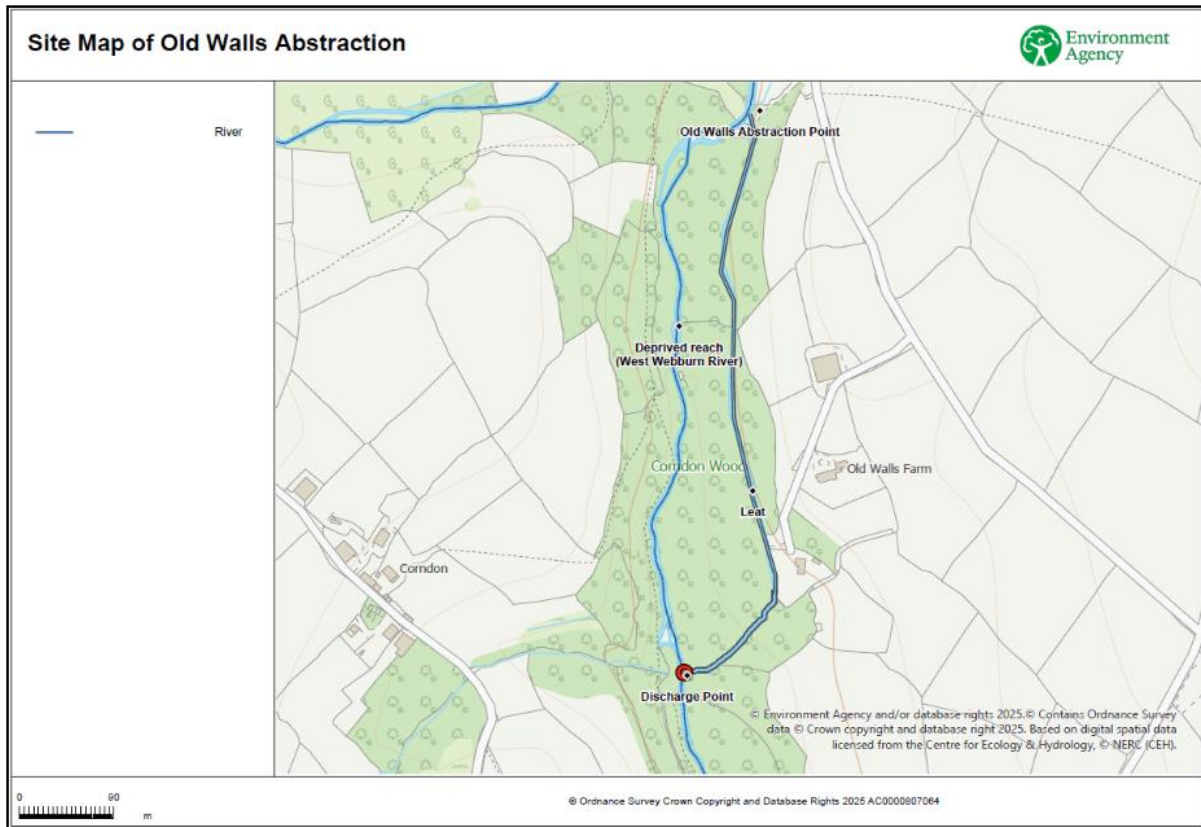


Figure 3: Site Map of Old Walls Abstraction

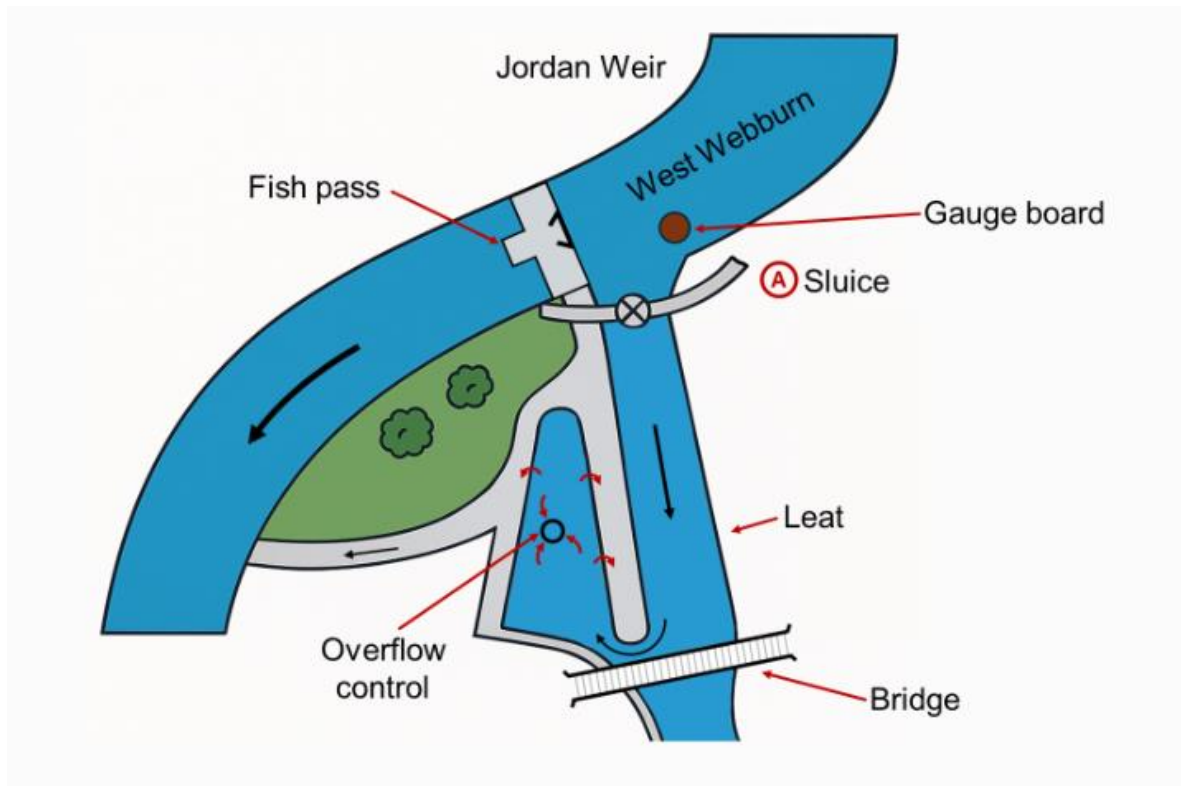


Figure 4: Schematic drawing of the head of leat

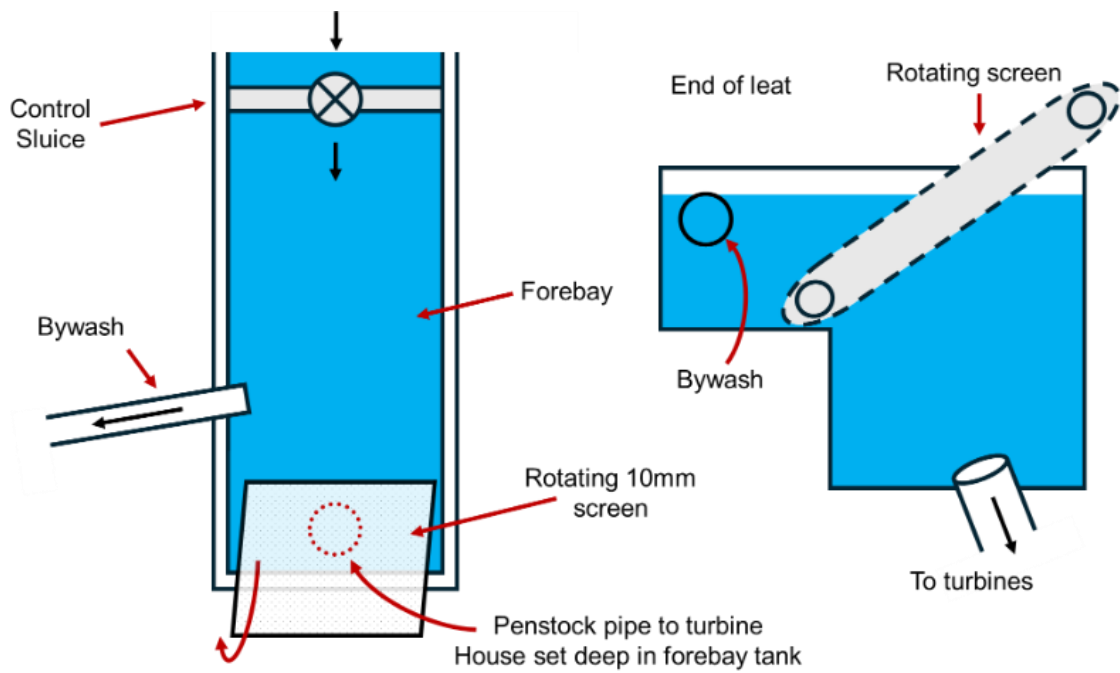


Figure 5: Schematic drawings of the forebay, screen and bywash entrance

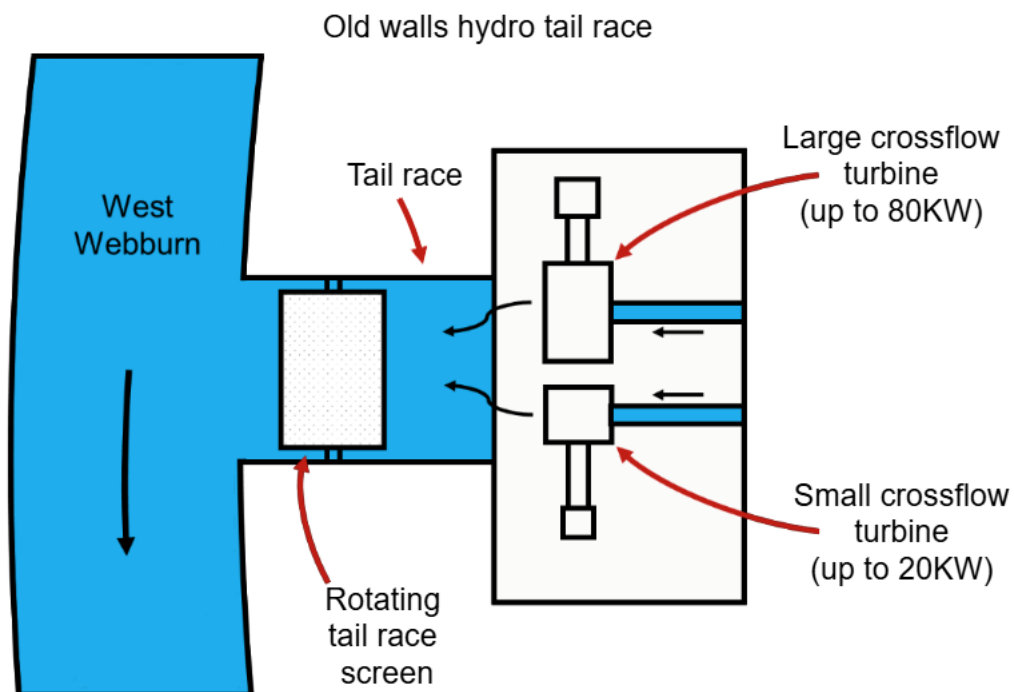


Figure 6: Schematic drawing of the tail race

3.6 Photographs of the site ordered upstream to downstream, with site map reference are in **Annex 5**.

3.7 The site has been in the RSA Programme since 2009. This site was included in the Programme on account of concerns raised by local area staff relating to the low flows in the River Webburn and risks of fish entrainment. In putting forward the proposals to vary the licence we are seeking to improve the balance of natural river flows between the river and the leat (which leads to the HEP turbine); and upgrade the screening infrastructure to meet current best practice within the 'Guidance for run-of-river hydropower development' (**Annex 6**) – relevant aspects explained below.

4.0 RELEVANT LEGAL DUTIES

4.1 The EA summarises the various legal powers and duties which apply to and underpin this proposal, which are contained in several pieces of legislation:

Water Resources Act 1991 (WRA 1991)

4.2 The EA's function in relation to water resources management include the administration of the abstraction licensing system contained in Part II of this Act.

4.3 Abstraction of water from any source or supply except in pursuance of and in accordance with a licence is prohibited under section 24.

4.4 In carrying out our duties as an environmental regulator, under section 52 we may formulate proposals to vary or revoke an abstraction licence in order to better manage the water environment at a particular location, or to implement a statutory driver (e.g. ensuring compliance with Habitats Directive requirements). Notice of the proposals must be served on the licence holder and advertised (s.52(4)). The notice must specify a period of 28 days during which a licence holder may give notice of an objection. At the end of the notice period, the Environment Agency may proceed with the proposals to revoke or vary the licence, unless it receives an objection from the licence holder (s.53(2)-(4)). If the licence holder objects to the proposal during the notice period, the EA must - as here - refer the matter to the Secretary of State if it wishes to persevere with them.

- 4.5 If a reference is made, under section 54 the Secretary of State is required to consider the proposals and the objections raised against them, and determine whether the proposals should be brought into effect. The Secretary of State may approve a proposal to revoke or vary or may direct us to otherwise vary the licence as considered appropriate.
- 4.6 Where a licence is revoked or varied following a determination of the Secretary of State under section 54, compensation may be payable to the licence holder under section 61, for expenditure rendered abortive by the revocation/variation and to compensate for loss and damage which is directly attributable to it.
- 4.7 Section 54(4) says that the duty to have regard to minimum acceptable flows from which water is abstracted (which by virtue of section 40 applies to the EA when determining applications for the grant of abstraction licences) equally applies to the Secretary of State when making variation and revocation decisions. Section 40(2) says that where - as here - no minimum acceptable flows have been set for a river, when determining a licence application, the EA must have regard to the factors in sections 21(4) and (5) when determining the licence application. In particular section 21(4) requires the EA, when setting minimum acceptable flows, to have regard to '*(a) the flow of water in the inland waters from time to time*' and (b) '*the characters of the inland waters and their surroundings*' in light of the Agency's duties under sections 6(1) and 7 of the Environment Act 1995 (explained in the next sub-section below).

Environment Act 1995

- 4.8 Section 4(1) sets out the principal aim and objective of the EA:

'It shall be the principal aim of the Agency...in discharging its functions to protect or enhance the environment, taken as a whole, as to make the contribution towards attaining the objective of achieving sustainable development.'

- 4.9 Sections 4(2) and 4(4) go on to provide that the Ministers shall provide guidance to the EA regarding the objectives which it should pursue in the discharge of its functions. The guidance, (issued by the Secretary of State in 2002 is entitled '*The Environment Agency's Objectives and Contributions to Sustainable Development: Statutory Guidance*'. Paragraph 4.2 of this states that the Agency should pursue the following objectives in discharging its main operational water resources functions:

‘To plan and secure the proper use of water resources by using strategic planning and effective resource management which takes into account environmental, social and economic considerations, and in particular:

- To ensure that the abstraction of water is sustainable, and provides the right amount of water for people, agriculture, commerce and industry and an improved water-related environment; and,*
- To develop and maintain a framework of integrated water resources planning for the Agency and water users.’.*

4.10 In respect of abstraction licences, the general duties contained in sections 6 and 7. In particular, sections 6(1), (2) and (6) and 7 (1)(c) provide:

‘(1) It shall be the duty of the Agency, to such extent as it considers desirable, generally to promote (a) the conservation and enhancement of the natural beauty and amenity of the inland and coastal waters and of land associated with such waters; (b) the conservation of the flora and fauna which are dependent on an aquatic environment;...’

‘(2) It shall be the duty of the Agency to take all such action as it may from time to time consider...to be necessary or expedient for the purpose of conserving, redistributing or otherwise augmenting water resources in England and Wales (including the efficient use of those resources) ...’ .

‘(6) It shall be the duty of the Agency to maintain, improve and develop fisheries of salmon, trout, eels, lampreys, smelt and freshwater fish’

Section 7(1)(c) places a duty on the EA, when considering any proposals relating to its functions (including abstraction licensing), to take into account (amongst other things) any effect which the proposal would have on the beauty or amenity of any urban or rural area.

4.11 Section 39 places a duty on the EA to take into account the likely costs and benefits of our decisions on the applications (costs being defined as including costs to the environment as well as to any person). But section 39(2) goes on to provide that this requirement does not affect the EA’s obligation to discharge any duties given to it under any other legislative provisions (such as its duties under the WFD)

Water Environment (Water Framework Directive) Regulations 2017

- 4.12 The EA has a duty under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (“the WFD Regulations”) to exercise its functions so as to secure compliance with the WFD. The purpose of the WFD is set out in Article 1 and includes the establishment of a framework which “(a)...*prevents further deterioration of and protects and enhances the status of aquatic ecosystems*” and “(b) *promotes sustainable water use based on a long-term protection of available water resources*”.
- 4.13 The core obligation in the WFD Regulations is for the EA to exercise its relevant functions⁴ so as to prevent deterioration of the surface water status of a body of water and otherwise to support the achievement of the environmental objectives set for a body of water (regulation 3).
- 4.14 The EA uses a catchment-based approach to identify where reduced water flow or water level may be causing problems in particular waterbodies. Where water bodies have been identified as not supporting ‘Good Environmental Status (GES)’ the EA needs to identify where water may need to be recovered and then seek to improve the ecological status of that water body, as well as prevent deterioration.
- 4.15 Under Article 4 of the WFD the EA was obliged to aim to achieve at least ‘Good’ status for all water bodies by 2015. Regulation 13 of the WFD Regulations 2017 says that, the objective is to ‘protect enhance and restore’ each body of surface water with the aim of achieving GES, if not already achieved, by 22 December 2021 (subject to the extended deadlines and less stringent objectives provided for in regulations 16 and 17).
- 4.16 As far as surface water bodies are concerned, status is either High, Good, Moderate, Poor or Bad. Ecological status applies to surface water bodies and is based on the following quality elements: biological quality, general chemical and physico-chemical quality, water quality with respect to specific pollutants (synthetic and non synthetic), and hydromorphological quality. There are five classes of ecological status (High, Good, Moderate, Poor or Bad). Ecological status and chemical status together define the overall surface water status of a water body. To achieve GES, every ecological element assessed must be at Good status or better. The concept of ‘deterioration of the status’ of a body of surface water in Article 4 of the WFD must be interpreted as meaning that there is

⁴ Which are defined to include those powers exercised under Part II of the WRA 1991, such as putting forward proposals to vary abstraction licences under section 52

deterioration as soon as the status of at least one of the quality elements, within the meaning of Annex V to the directive, falls by one class, even if that fall does not result in a fall in classification of the body of surface water as a whole⁵.

4.17 Regulations 26-31 require the EA to draw up River Basin Management Plans (RBMPs) for each river basin district for the Secretary of State's approval, and under regulation 33 both the Secretary of State and the EA must have regard to the approved plans when exercising their functions. The Agency's Catchment Data Explorer provides up to date RBMP information on the status of individual waterbodies as explained in footnote 11 in section 5 below.

4.18 These WFD requirements have informed our approach to abstraction licensing and RSA.

Salmon and Freshwater Fisheries Act 1975 (SAFFA)

4.19 In addition to our general duties to maintain, develop and improve fisheries under section 6(6) of the Environment Act 1995, the EA has powers, in waters frequented by salmon and migratory trout, to require fish passes to be constructed and maintained in dams and other obstructions (sections 9 and 10). More significant to this proposal, section 14 contains requirements for screens to be installed and maintained in abstraction structures (emphasis added):

'[14 Screens]

[(1) This section applies in any case where--

(a) by means of any conduit or artificial channel, water is diverted from waters frequented by salmon or migratory trout; and

(b) any of the water so diverted is used for the purposes of...f any mill⁶...

and in this section "the responsible person" means ...the occupier of the mill....

(2) Where this section applies, the responsible person shall, unless an exemption from the obligation is granted by the Agency, ensure (at his own cost)

⁵ As confirmed by the decision of the European Court of Justice in Case 461/13, Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland. See also [Surface water status - GOV.UK](https://www.gov.uk/government/news/surface-water-status-under-wfd-regulations) 'Under WFD Regulations the one-out-all-out approach means that if just one quality element fails good status, the overall water body classification will be less than good.'

⁶ Defined by section 41 to 'include any erection for the purpose of developing water power'

*that there is placed and maintained **at the entrance of, or within, the conduit or channel** a screen which--*

(a) subject to subsection (4) below, prevents the descent of the salmon or migratory trout; ...

(3) Where this section applies, the responsible person shall also, unless an exemption from the obligation is granted by the Agency, ensure (at his own cost) that there is placed and maintained across any outfall of the conduit or channel a screen which--

(a) prevents salmon or migratory trout from entering the outfall; ...

(4) Where a screen is placed within any conduit or channel pursuant to subsection (2) above, the responsible person shall ensure that a continuous by-wash is provided immediately upstream of the screen, by means of which salmon or migratory trout may return by as direct a route as practicable to the waters from which they entered the conduit or channel...

(5) Any screen placed, or by-wash provided, in pursuance of this section shall be so constructed and located as to ensure, so far as reasonably practicable, that salmon or migratory trout are not injured or damaged by it.

(8) If any person who is required to do so by this section fails to ensure that a screen is placed or maintained, or that a by-wash is provided, in accordance with the provisions of this section, he shall be guilty of an offence.

4.20 The Eels Regulations 2009 also contain powers (in regulation 17) requiring the owner of an abstraction structure to install an eel screen.

Natural Environment and Rural Communities Act 2006 (NERC Act)

4.21 Section 40 of this Act requires the EA to consider the general biodiversity objective, which is to further the conservation and enhancement of biodiversity through the exercise of its functions. This includes assessing how proposals can protect, restore or enhance nature conservation when considering the exercise of any of our functions.

Deregulation Act 2015

4.22 In making regulatory decisions, the EA has a duty to have regard to the desirability of promoting economic growth, as set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that.

4.23 Paragraph 1.3 of the statutory guidance issued by the Department of Business, Energy and Industrial Strategy in March 2017 says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

- 4.24 The guidance is clear at paragraph 1.5 that the growth duty its purpose is not to achieve or pursue economic growth at the expense of necessary environmental protections.

Legislative and Regulatory Reform Act 2006 (LRR)

- 4.25 Section 21 of the LRR requires the Agency, when making decisions, to have regard to the need to be transparent, accountable, proportionate and consistent, and the need to target action where it is needed.
- 4.26 In accordance with section 22 of the LRR the Agency must have regard to the Regulators’ Code. In particular, when making decisions it must assess the degree of environmental risk, and support the applicant to comply and grow, so that burdens are only imposed where they are necessary and proportionate.

5.0 THE CASE FOR LICENCE CHANGE

- 5.1 The following sub-sections explain why the hydrological impact of the abstraction on the 600m deprived reach in the river is significant. From hydrological modelling, and our understanding of the infrastructure associated with the site, we have drawn conclusions regarding the risk to protected migratory fish species. These arise from both the reduced flow in the deprived reach and the passage of fish into the leat, which is a dead-end unless the licence holder opens a bywash⁷ to transfer the fish back to the river.

⁷ Where a screen is located within a leat, rather than at river frontage/head of the leat (as is the case at Old Walls), a bywash is required to transfer fish entrained in the leat back to the river. A bywash generally consists of a pipe, but it can be an open channel. The ‘Guidance for run-of-river hydropower development’ referred to below provides best practice design specifications for bywashes.

Modelled impact

5.2 Using the maximum abstraction quantities and HoF in the licence, we have modelled the maximum daily impact that the abstraction can have on the flow in the deprived reach of the West Webburn River. This modelling is described in the EA's hydrology report, 'Old Walls RSA Scheme Hydrological Modelling', June 2025 (**Annex 7**, pp. 5-9), and summarised in sections 5.3 to 5.6 below.

5.3 In this modelling we used the maximum permitted abstraction quantities because we do not have suitable data on actual abstraction quantities. The licence holder has provided weekly abstraction data under an agreement reached with us in 2008. However, this data was not suitable for use in our modelling, for the following reasons:

- We could not calculate the actual daily impact of the abstraction on flows in the river using weekly data as we did not know how abstraction varied through the week.
- We know from site visits that there is an overflow approximately 4m along the leat, which acts to protect the turbine downstream from flooding. The overflow passes water back to the river approximately 40m downstream of Jordan Weir. This water is not recorded by the abstraction returns.
- It is likely that the weekly readings under-record the volume of water that is abstracted into the leat at the abstraction point (because abstracted volumes are calculated from power generated at the turbine, they are not a measurement at the head of leat of the total amount of water abstracted).

Analysis of the licence holder's abstraction returns shows that on average, between 2000-2022, the annual abstraction (calculated from power generated at the turbine) was approximately 90% of the abstraction allowed under the licence in its current form. As explained above, the abstraction returns likely under-record water abstracted into the leat, therefore it is fair to assume that actual abstraction is similar to the fully licensed abstraction rate. We therefore consider that our modelling of the fully licensed abstraction impact is a fair representation of the actual impact that the abstraction has on flows in the deprived reach.

5.4 When flows are at low or mid-range, the licence allows abstraction of all the flow in the river, apart from 0.025 m³/s. In the absence of abstraction, flows downstream of the abstraction point would not have fallen as low as 0.025 m³/s in our standard 1991-2020

assessment period⁸. However, in dry years, when abstraction is taking place, it could cause flow in the deprived reach to drop to 0.025 m³/s and flatline at this flow for long periods.

- 5.5 According to Table A in 'Guidance for run-of-river hydropower development', December 2017, (**Annex 6**, p.13) a Q95 HoF is required for this type of abstraction to support the ecology in the river – see section 6 below. Under the licence, the flow in the deprived reach drops below this threshold (0.146 m³/s) for 255 days per year on average (i.e. 70% of the year), compared to an expected 18 days under natural conditions.
- 5.6 When considering what level of abstraction is sustainable from rivers, we use the Environmental Flow Indicator (EFI)⁹. When flows are above this indicator, then the flow is considered sufficient to support Good Ecological Status. The EFI defines the proportion of the natural flow that is required for the environment, and therefore what proportion of the flow can be abstracted. The proportion of the flow that can be abstracted is different at different flows. For example, 10% of the natural flow can be abstracted at Q95 (low flows) but this increases to 25% at mid-range flows (Q50). The assessment of river flow against the Q95 EFI is used for the hydrological regime supporting element in the classification for ecological status for waterbodies under WFD. If flows are below the EFI, this indicates that the proportion of the flow abstracted is too large and therefore the abstraction may have an impact upon river habitats and species. We have calculated the EFI for the West Webburn River at the abstraction point. Our modelling shows that abstraction under the licence in its current form can cause flows in the deprived reach to drop below the EFI for most of the time (336 days a year on average, equivalent to 92% of the time), including at Q95 meaning that flows are not sufficient to support Good Ecological Status. This indicates that the proportion of the river flow abstracted is too large and therefore the licence conditions are insufficient to protect the environment from abstraction pressures.

⁸ 1991-2020 is the standard 30-year period used for assessment of water availability by the Environment Agency and is equivalent to the standard long-term average period used for rainfall by the Met Office.

⁹ For further information about the EFI please see our position statement 'Environmental Flow Indicator Application of the EFI for Water Resources licensing (**Annex 8**)

Ecological status

- 5.7 The West Webburn River is a water body regulated under the WFD Regulations 2017, with the Waterbody ID GB108046008410. In 2025 the overall water body status was assessed as Moderate, with Moderate status for the fish element classification primarily driven by lower than expected numbers of eels and salmon. There are three survey locations for the fish classification within this water body. All three of the sites are upstream of the abstraction point and the classification was based on surveys undertaken in 2024. Two of the sites, at Grendon Bridge and Challacombe Farm, were assessed as being of Moderate status and the site at Lower Cator Bridge was Poor. Our surveys observed consistently good juvenile trout densities, indicating that habitat and water quality are unlikely to be key drivers for failure of fish populations in the river. Abstraction is considered to be a contributing factor.
- 5.8 The reduction in eel and salmon densities over time (i.e. since WFD monitoring commenced in 2019) at the survey sites is considered to reflect a combination of pressures, including local factors such as the impact of the weir and abstraction at Old Walls and the combination of acidic pH and diffuse metal water pollution from historic mining, coniferous forestry and the underlying granite geology. These local pressures are set against a background of wider decline (e.g. linked to factors such as reduced marine survival for salmon).
- 5.9 A more detailed assessment, taken from the EA's Catchment Data Explorer¹⁰ (**Annex 9**) identifies several Reasons for Not Achieving Good (RNAG) for the fish element:

5.9.1 Morphology – Physical Modification / Barrier / Hydropower - Probable

The weir at Jordan Leat on the river and the lack of screen at the head of the leat, together with the lack of control of abstraction at the head of leat and reduced flow in the deprived reach, creates a break in the river's natural continuity. These changes make it harder for salmon, sea trout and eels to move upstream and they also affect the downstream journey of smolts, kelts and silver eels. While Old Walls is not considered to be the sole driver responsible for declining fish population status on

¹⁰ The **Catchment Data Explorer (CDE)** is an Environment Agency online mapping and data portal, available via Gov.uk, which provides authoritative water environment data for England to support RBMPs under the WFD, including waterbody status, pressures, objectives and measures relevant to regulatory assessment and licensing decisions. (**Annex 9**)

the West Webburn, the hydropower operation and infrastructure is considered to be a significant local pressure impacting fish populations, in combination with other local and more general pressures.

5.9.2 Priority Substances (Metals) – Diffuse Pollution from Abandoned Mines - Probable

Pollution from old, abandoned metal mines may be adding small but harmful amounts of lead, nickel and related compounds into the river. In the upper reaches of the West Webburn River catchment, there was significant historic mining activity. These substances are classed as Priority Substances under the WFD. Although the pollution is diffuse and difficult to pinpoint, it is likely contributing to the river's overall chemical pressures.

5.9.3 Low pH – Forestry Activities and Atmospheric Deposition - Suspected

Past and current forestry work in the catchment may be adding to the river's acidity. The local geology—granite bedrock with peaty or podzolic soils—naturally has very little ability to neutralise acids. This means the rivers and streams here are more vulnerable to becoming acidic when affected by forestry and wider land management practices.

5.9.4 Other – Background pressures – Probable

The decline in salmon numbers observed on the river mirrors the national decline in salmon numbers and is similar to other tributaries in the River Dart catchment. While anecdotal evidence from local landowners and stakeholders confirms that salmon still return to the West Webburn catchment in low numbers, the most recent record of salmon in EA electric fishing surveys was in 2014.

- 5.10 The EA is working to resolve identified RNAGs across the River Dart catchment. We have a specific focus on the West Webburn River and resolving the abstraction at Old Walls forms a significant part of this package of works. We are working closely with Forestry England to improve management of their Soussons landholding to better protect the river. We are also investigating potential funding and delivery mechanisms for work in the upper catchment to ameliorate pH and heavy metal issues. We have also put significant resource into advising the Central Dartmoor Landscape Recovery project which will be

submitting its project proposal to Government in May 2026 (including potentially significant interventions such as river and floodplain restoration).

- 5.11 Under the South West District RBMP 2022, the objective for the West Webburn River is to reach overall Good Status by 2063. The overall objective for a waterbody is derived by combining the ecological and chemical status objectives, and hydromorphological influences. For the river, Good status for biological elements (including Fish) had a deadline of 2015 ,which was achieved, and for chemical elements it is 2063. The extended deadline of 2063 for achieving Good chemical status is due to the extended deadline set for achieving good status for Polybrominated diphenyl ethers (PBDEs) justified under regulation 16(3)(c) of the WFD Regulations 2017, which allows extensions where natural conditions do not allow timely improvement. In 2019, the chemical status deteriorated to 'fail'¹¹ due to Mercury and PBDEs and in the 2021 RBMP an extended deadline for achieving Good status was set for 2040, now extended to 2063.
- 5.12 In the first RBMP published in 2009, the objective for the West Webburn River waterbody was to achieve Good Ecological Status by 2015 (**Annex 10**, p 600). This was achieved, and all biological elements were then at Good or High. The Fish element was of Good status from 2009 to 2013 and it improved to High status for 2014 and 2015. Since 2016, the fish element has been classed as Moderate (taken from West Webburn River Catchment Data Explorer) (**Annex 9**) and so this represents a deterioration in the ecological status for the waterbody. All other biological elements considered for ecological status classification have remained at Good or High since 2015, so it is the fish element driving deterioration. Where deterioration in an element has occurred, the EA is required to identify the cause and ensure relevant measures to reverse the deterioration are put in place as soon as practicable. This is the driver for the EA's recent work in the catchment with a specific focus on impacts identified as RNAGs.

¹¹ Which means that it is not 'Good' – there are only two categories

Fisheries receptors and status

- 5.13 The key species in the river relevant to the operation of the Old Walls scheme are the migratory species Atlantic salmon, sea trout and European eel, as well as resident brown trout.
- 5.14 Atlantic salmon are a NERC Act 2006¹² Species of Principal Importance (SPI)¹³ classified on the IUCN's¹⁴ Red List as 'Endangered' in Great Britain since 2023. The most recent Annual Salmon Stock Assessment¹⁵ (published in 2025, assessing data up to 2024) indicates that the River Dart Atlantic salmon stock continues to decline and is classified as 'At Risk'. Analysis of the EA's long-term fish survey data (from the late 1980s to present) for the River Dart shows a significant decline in juvenile salmon densities across the catchment since the early to mid-2000s, which accelerated in the early 2010s. This was accompanied by a marked contraction in the spatial scale of salmon spawning, with many previously utilised spawning areas now largely unused as indicated by the available data, despite suitable habitat still being present. This trend is noticeable in the fish survey data for the West Webburn, specifically with fish surveys at sites such as Grendon Bridge and Cator Bridge recording no juvenile salmon since 2014. This corresponds with the deterioration in status of the WFD fish element classification from High to Moderate in 2016. While anecdotal evidence from landowners and stakeholders suggests that salmon are still present in the river in low densities, the loss of juvenile salmon from previously productive areas is symptomatic of the decline in the salmon population seen across the wider Dart catchment and explains why salmon conservation in the catchment is critical.
- 5.15 Sea trout are a NERC Act 2006 SPI. The latest 2024 sea trout fishery performance assessment (**Annex 11**) concluded that the River Dart sea trout population is 'Not at risk' based on improved rod catch in 2024 (**Annex 11**, p. 3). This was an improvement on previous years where the sea trout population had been assessed as 'Probably at risk' of continued decline. However, the population has been impacted over a prolonged period by compounding events including disease (2015/16) and drought (2022 and 2025) and is

¹² Natural Environment and Rural Communities Act 2006

¹³ This replaced and updated the UK Biodiversity Action Plan (BAP)

¹⁴ International Union for Conservation of Nature

¹⁵ Available at <https://www.gov.uk/government/publications/assessment-of-salmon-stocks-and-fisheries-england-and-wales-2024> (**Annex 12**)

considered to remain susceptible to any additional pressures. Sea trout are known to migrate into the West Webburn to spawn, and sea trout progeny will constitute a proportion of juvenile trout recorded in EA fish surveys.

- 5.16 European eel are a NERC Act 2006 SPI, classified on the IUCN's Red List as 'Critically Endangered' since 2008. Low densities of adult eel are present in fish survey data from West Webburn River sites over recent years including sites on the river and Broadaford Stream above Old Walls.
- 5.17 Atlantic salmon and sea trout are anadromous meaning they migrate from freshwater to the sea as juveniles but return to freshwater as adults to spawn. This means that two life stages, adult and juvenile, must migrate past Old Walls. Eels are catadromous meaning they migrate to sea once mature to spawn with the juveniles then returning on the Gulf Stream to colonise freshwater systems. Again, this means that two life stages, adult and juvenile, must migrate past Old Walls.

Fisheries Impacts

- 5.18 Continued operation under the licence poses unacceptable risks to salmon, sea/ brown trout and European eel populations in the West Webburn River, given current stock status and life stage vulnerabilities. The status of the Dart salmon population is currently highly vulnerable to any additional pressures so the potential for loss or delay to salmon smolts in particular is of significant concern.
- 5.19 Fisheries impacts include:
- Adverse impacts on upstream and downstream migration of migratory species due to reduced flow
 - Entrainment (fish entering the leat)
 - Loss of habitat in the deprived reach – see further paragraph 5.29 below.
 - Attraction (fish entering the tailrace or being delayed by the HEP discharge) – see Figure 6 above

Adverse impacts on upstream and downstream migration of migratory species due to reduced flow

- 5.20 Operation under the licence at Old Walls results in a significant impact on flow over the 600m deprived reach (see sections 5.2 to 5.6 for a description of these impacts). This leads to entrainment of downstream migrating fish and this is discussed further in the next section below. There are also potential impacts on upstream migrating adult salmon and sea trout.
- 5.21 The HoF is not considered adequate to allow upstream migration of salmonids due to the nature of the deprived reach¹⁶. In addition, upstream migration relies on ‘cues’, including increasing flow to stimulate movement. The licence does not make any allowance for flow variation (such as a proportional - or percentage - take) as would be required under current best practice guidance. This lack of flow variability can reduce both the stimulus and opportunity for upstream migration of fish.
- 5.22 When combined with a poorly designed fish pass¹⁷ on Jordan Weir, the hydropower scheme has been assessed as having the potential to impact upstream migration under low to mid-range flow conditions. In wet years, this is unlikely to be significant, however, in years with prolonged dry periods extending into late summer and autumn, the impact is likely to be more pronounced (particularly in very dry years such as 2022 and 2025). While low to mid-range flows and relatively small flow peaks do not represent the optimal conditions for upstream migration this high-up in the catchment, in dry years the lower flows, and uplift in flow from smaller rainfall events, are all that is available for the majority of the year. The impact of flow reduction and the loss of flow variability through

¹⁶ The deprived reach includes a boulder weir just above the discharge point as well as a number of small boulder cascades, all of which would limit migration at the HOF.

¹⁷ The fish pass does not meet best practice standards set out in the EA's Fish Pass Manual (effectiveness is compromised by the height of the upper jump, insufficient energy dissipation related to pool size/depth and the lack of a suitable pool downstream). These specific issues were confirmed by an independent consultant in 2011. Improvements to the fish pass are not being pursued through the RSA programme because the licence holder does not own the structure. If the weir were to be materially altered (e.g. requiring major repairs) we would seek to use our powers under Section 9 of the Salmon and Freshwater Fisheries Act 1975 to require construction of a new or improved pass. Without such a trigger, the EA is not in a position to oblige improvement at the site and so any improvements rely on funding being available. To date and with the limited funding available, the EA's focus has been on remedying barriers further down the catchment (such as the removal of the weir in River Dart Country Park in 2021).

‘flatlining’ is therefore likely to be exaggerated and result in the complete cessation of migration.

Entrainment (fish entering the leat)

- 5.23 There is currently no permanent exclusion screen stopping fish entering the leat at river frontage (i.e. at the head of the leat) as recommended by current best practice, namely the Guidance in **Annex 6** referred to in the next paragraph below. Having originally been located at river frontage, the screen required as a condition of the licence was relocated in 1992 with the agreement of the NRA (**Annex 4**) approximately 450 m further down the leat to the forebay. Locating a screen away from river frontage is referred to as ‘set back’.
- 5.24 The reasoning behind this was that the then licence holder (the current licence holder’s father) was elderly and removing bed material build-up was proving difficult. Whilst the EA felt that this was understandable at the time, it is no longer considered acceptable as it does not offer an adequate standard of protection for protected fish species such as Atlantic salmon, sea trout and European eel. Since this agreement, relevant best practice guidance has been produced for hydropower schemes (Guidance for run-of-river hydropower development (**Annex 6**). Paragraphs 6.16-17 below indicate what this guidance says about screens.
- 5.25 Concerns around entrainment are particularly relevant to the presence of juvenile salmon and trout¹⁸ and the downstream migration of salmon and sea trout smolts¹⁹ and kelts²⁰, and silver eel²¹, which all tend to migrate passively following the main river flow. This makes these migratory life stages particularly susceptible to entrainment at the Old Walls abstraction point when the majority of flow is abstracted because migrating fish tend to naturally follow the main path and, where two paths are available, the ‘natural’ flow path may be obscured. While parr, smolt, kelt and silver eel are primarily likely to be

¹⁸ The lifestages of salmon and trout before they undertake the physiological changes required to go to sea are called fry and parr. This generally equates to juvenile salmonids between when they emerge from their gravel spawning beds to when they mature (generally at between 2 and 3 years of age but exceptionally from 1 year and up to 4 years), either into adult brown trout or smolts in sea trout and salmon.

¹⁹ Juvenile salmon and sea trout which undertake physiological changes in the lead up to the spring when that year’s cohort migrate downstream to the sea as smolts.

²⁰ Adult salmon and sea trout which survive spawning and migrate back downstream to the sea.

²¹ Mature eel which migrate to the sea to spawn in the autumn and early winter.

impacted, upstream migrating adults can also be affected, however, generally to a lesser degree. Potential impacts of entrainment during these focused migrations include delay, loss of condition, damage and mortality through mechanical damage and predation.

- 5.26 The existing set-back screen has a mesh aperture of 10 mm. This does not meet current best practice for the type of turbine as set out in the 'Guidance for run-of-river hydropower development' which requires 6 mm screening where juvenile salmonids are present, see (**Annex 6**, pp. 21-23). It is also unlikely that the current screen meets best practice criteria for approach velocity given its orientation (90° to the flow) and size²².
- 5.27 A capped bywash is present at the existing, set-back screen at the forebay (**Annex 5**, Photograph 6). The bywash is operated at the licence holder's discretion in order to allow fish which are trapped in the leat at the set-back screen to be transferred back to the river. This bywash does not meet current best practice in terms of its design (e.g. entrance design and discharge arrangement) and its use is not conditioned within the licence. There is therefore the potential for fish to be delayed for prolonged periods within the leat with subsequent impacts in terms of loss of condition and mortality through predation.
- 5.28 Similarly, fixings for a temporary kelt screen has been observed just inside the leat entrance (**Annex 5**, Photograph 4) although this screen has not been observed as having been deployed. If/when deployed, it would provide some protection from entrainment, however, its design does not meet best practice and its use is not conditioned within the licence.

Loss of habitat in the deprived reach

- 5.29 While the HoF condition in the licence ensures that a minimal flow is retained within the deprived reach under low flow conditions, as explained in the paragraph 6.10 it is significantly below what is considered sufficient for the protection of the environment (Guidance for run-of-river hydropower development (**Annex 6**). The deprived reach would be able to support a greater wetted width with an appropriate HoF and thus provide greater habitat for different life stages of fish, as well as wider ecology such as invertebrates.

²² In order to meet the required approach velocity, compliant screens in relatively narrow leats such as at Old Walls would usually be elongated and set at an acute angle to the flow (<90°), however, this has not been assessed because the mesh size does not meet best practice.

Attraction (fish entering the tailrace or being delayed by the HEP discharge)

- 5.30 Downstream of the turbine there is a short tail race that returns flow to the river. The tail race can be seasonally screened with a rotating drum screen (**Annex 5**, Photograph 9) to prevent the ingress of migrating fish. The screen is deployed voluntarily by the licence holder at his discretion during undefined high-risk periods.
- 5.31 There is therefore the potential for upstream migrating salmon and sea trout to be delayed if the screen is not deployed.

Stakeholder representations

- 5.32 The Environment Agency has engaged with the Dart Fisheries & Conservation Association (DFCA) following requests for information regarding the licence. The Association's concerns are based on observed declines in Atlantic salmon stocks within the catchment. The Association has highlighted the following issues:
- Potential ecological impacts of abstraction during sensitive life stages, particularly smolt out-migration and adult return.
 - Insufficient mitigation measures, including screening, flow protection, and monitoring infrastructure.
 - Cumulative pressures on salmon populations, including low flows, sedimentation, and turbine-related mortality.
- 5.33 The issues raised by the DFCA have been considered by the EA's abstraction licensing and fisheries management frameworks, in line with statutory duties to protect water-dependent habitats and species.

6.0 OPTIONS APPRAISAL

- 6.1 To undertake the options appraisal, we made reference to existing best practice for HEP abstractions 'Guidance for run-of-river hydropower development', December 2017, (**Annex 6**) taking into account legislative requirements, the outcomes we are seeking and also the limitations regarding retrofitting changes to an existing, operational abstraction.
- 6.2 To aid us in the options appraisal so that we could develop feasible changes to the licence, we sought to engage with the licence holder. We attended a meeting on 17 April

2025 to explain the outcomes we are seeking for the river and to discuss how the operation of the site could change to deliver these. We met at the licence holder's house but were not invited to view the abstraction point, leat or HEP turbines. Prior to the meeting, we requested that a site walkover be undertaken by Hydrology and Fisheries officers; however, this request was declined on the basis that officers had previously visited the site. We invited the licence holder to submit proposals, based on our discussion, for us to review and consider.

- 6.3 Subsequent to the meeting, the licence holder confirmed that he would decline to submit a proposal for our consideration. However, as there were two equivalent options for screening (a new 6 mm screen at the head of leat or improved screen and bywash at the existing set back screen) we did seek and were provided with a preference by the licence holder. The licence holder preferred the head of leat 6 mm screening, because a redesigned bywash channel would require a proportion of the abstracted water, resulting in less water for power generation.

- **Preferred Option - Flow**

- 6.4 The Options Appraisal Report, October 2025, (**Annex 13**) documents consideration of four flow options for the licence. These are outlined below and then further detail is given for the proposed licence change:

1. **No change to licence** - This option was discounted as it does not deliver outcomes for the river.
2. **Revoke licence** – This option would return the deprived reach to a natural state. It is however unnecessary to deliver the desired environmental improvements, which can be achieved by changing the licence to provide a balance between the needs of the licence holder and environment.
3. **Change licence to meet Environmental Flow Indicator (EFI) target** – This option was discounted because the restriction on abstraction which would be required is beyond what we consider to be sustainable for a non-consumptive HEP abstraction as set out in 'Guidance for run-of-river hydropower development', December 2017, (**Annex 6**) and therefore meeting the EFI in full would be unnecessarily onerous for the licence holder. As the percentage of allowable abstraction under the EFI varies at different river flows, (see para 5.6) it would require the licence holder to either install infrastructure capable of automatically changing the abstraction rate in response to changes in flow, or to monitor and continuously adjust the abstraction rate manually

on site in accordance with the variable percentage and hence to achieve compliance with the licence conditions.

4. **Requirement in line with Table A in ‘Guidance for run-of-river hydropower development’, December 2017** - This is the preferred option and proposed licence change. It delivers the environmental improvements for the site, is consistent with our approach to new licences, and will allow the site to continue to operate and generate HEP. In line with table A, we are also proposing the control structure and measurement of the abstraction at the head of the leat. Table A was developed by the EA, following consultation with the public in 2013, as the appropriate licensing approach for hydropower schemes taking into account the EFI. The inclusion of a Q95 HoF ensures that the EFI is achieved at low flows and therefore supports Good Ecological Status.

The preferred option is Option 4 - Requirement in line with Table A in Guidance for run-of-river hydropower development’, December 2017 (**Annex 6**, p.13).

Table A licence change

- 6.5 At the site visit in April 2025, we made reference to the ‘*Guidance for run-of-river hydropower development*’, December 2017, (**Annex 6**) which is used to determine applications for new HEP schemes. For a new HEP scheme on the West Webburn River, we would apply Table A, which would provide flow protection with a Q95 HoF and a 35% ‘take’ above the HoF. Within the guidance, there is flexibility for proposers of HEP schemes to submit an alternative with mitigation measures, and so at the site visit the licence holder was directed to this possibility and invited to do so, however, the licence holder declined.
- 6.6 As stated above, the EA’s preferred option includes changing licence conditions for the abstraction in line with ‘*Guidance for run-of-river hydropower development*’, December 2017, (**Annex 6**). This guidance sets out the environmental safeguards required for hydropower schemes in order to protect the environment. Table A of the guidance (which is on page 13 of the guidance and which is reproduced in Table 1 below) sets out the flow requirements for hydropower schemes. Under some circumstances we need to set more

protective flow conditions than those given in Table A, for example, if a scheme could affect a weir pool that is highly important to the status of the water body or wider catchment, or if reducing flow would be likely to have an impact on fish passage) but these considerations are not applicable in this case).

6.7 An applicant may apply for a licence that allows higher abstraction than that permitted by Table A, but only if evidence demonstrates that the scheme will:

- not prevent the achievement of WFD objectives
- maintain or improve fisheries and fish passage
- not have unacceptable impacts on protected sites or species
- not have unacceptable impacts on the rights of other water users, including anglers

6.8 During our options appraisal (accompanying report in **Annex 13**) we determined that Table A should apply.

TABLE A DESIGN FLOWS FOR HYDROPOWER SCHEMES						
	High sensitivity ASB3		Medium sensitivity ASB2		Low sensitivity ASB1	
River type Q95 / Qmean value	Low/med base flow Below 0.2	High base flow 0.2 & above	Low/med base flow Below 0.2	High base flow 0.2 & above	Low/med base flow Below 0.2	High base flow 0.2 & above
HOF	Q95	Q97	Q95	Q97	Q95	Q97
Maximum abstraction	1.3 x Qmean	Qmean	1.3 x Qmean		1.3 x Qmean	
% take above HOF	35%		40%		45%	

Table 1: Table A from Environment Agency Guidance for run-of-river hydropower development December 2017 (**Annex 6**, page 13)

6.9 We have used Table A to determine the HoF, maximum abstraction and percentage take required to protect flows in the river based on its site-specific characteristics. The EA assigns an Abstraction Sensitivity Band (ASB) to each river according to how sensitive the environment is to changes in river flow resulting from abstraction. The river has the highest abstraction sensitivity band of 3. The Q95: Qmean ratio for the site is 0.160 which puts it in the low to medium baseflow category. This means that the licence requires a

HoF representing the natural Q95 flow, a maximum abstraction of 1.3 x mean flow, and a maximum take above the HoF of 35% of the flow. This is summarised in Table 2 below.

Old Walls Flow Characteristics based on Table A guidance	
ASB	3
Q95: Qmean ratio	0.160
River type	Low/med baseflow
HoF	Q95 = 0.146 m ³ /s
Max abstraction	1.3*mean = 1.3*0.908 = 1.181 m ³ /s
Percentage take	35%

Table 2: Hydrological flow characteristics of the West Webburn River at Old Walls

6.10 Following Table A has the following implications for the licence:

- We could have proposed increasing the instantaneous maximum abstraction rate to increase the potential for energy generation while still meeting the requirements of Table A. Table 2 shows that the maximum abstraction rate allowed based on the guidance for run-of-river hydropower development is 1.181 m³/s which is higher than the current licensed instantaneous rate of 0.80 m³/s. However, the licence holder has advised that he is not able to utilise an abstraction rate higher than the current licence instantaneous rate, therefore an increase in maximum abstraction rate has not formed part of our preferred option.
- An increased HoF from 0.025 m³/s to 0.146 m³/s and a percentage take of 35% above the HoF. The licence has a very low HoF and no percentage take and is therefore not consistent with the recommendations in the guidance.

6.11 To prevent the leat from drying out during natural low flow periods, we have also included provision of a reasonable 'sweetening flow' of 0.020 m³/s (20 litres per second l/s) in our preferred option, to provide flow benefit to the ecology (including aquatic life and habitats) in the leat once the HoF is reached. However, at extremely low flows we must prioritise the flow in the river to protect this higher value ecosystem, therefore if flow in the river upstream is naturally below 0.040 m³/s, then abstraction into the leat for the purpose of sweetening flow must cease.

6.12 We have modelled the benefit to river flows that would result from implementing the licence changes described above. This is described in the EA's hydrology report, 'Old Walls RSA Scheme Hydrological Modelling', June 2025 (**Annex 7**, pp. 9-13), and summarised below. The modelling shows that the proposed licence changes provide a significant improvement in the flow regime in the deprived reach:

- Flows in the deprived reach would be below the natural Q95 threshold of 0.146 m³/s for only 30 days a year (8% of the time), compared to 225 days a year in the current version of the licence. On these 30 days, the sweetening flow causes flows in the deprived reach to drop only marginally below the Q95 threshold.
- The inclusion of a 35% take provides variability of flow across the whole flow range. This is a significant improvement on the licence which allows abstraction of almost all the flow in river, causing 'flatlining' for long periods of time (65% on average). Flow variability plays a key role in encouraging and permitting the movement of migratory species like Atlantic salmon and sea trout. The percentage take condition means that the flatlining does not occur in our preferred option.
- Although we rejected option 3 (compliance with the EFI across the full flow range) during options appraisal - because this would restrict abstraction beyond what is necessary for a sustainable non-consumptive hydropower licence and be technically challenging for the licence holder to comply with - our preferred option comes very close to meeting it. It was noted in Section 5.6 that modelled licence residual flows are below the EFI for 336 days a year on average. Under the proposed licence, this reduces to 197 days a year on average and when residual flows are below the EFI, they are only marginally below. . At Q95, the marginal failure to meet the EFI results from the need to provide a sweetening flow to the leat. We consider that these flows will still support Good Ecological Status.

6.13 The hydrological modelling additionally shows that with the introduction of the HoF and percentage take, it is not possible to abstract the current annual licence quantity, as the availability of river flows will restrict abstraction. Based on historic flows for the period 1991-2020 we have calculated the water that would have been available to abstract under the proposed licence conditions such as the HoF and percentage take. The maximum annual abstraction possible during this time would have been 9,547,725 m³. We therefore propose to reduce the annual licence quantity because we cannot authorise the abstraction of a quantity of water that it is not possible to abstract. To allow

flexibility for the licence holder to take advantage of additional flows that may be available in the future due to changes in rainfall patterns, our preferred option increases this volume by 10%, giving a maximum licence volume of 10,502,497 m³ per year.

- 6.14 Our assessment concluded that introduction of the proposed licence conditions will provide significant environmental benefits and will mitigate the risk to the ecology from the abstraction. The inclusion of the Q95 HoF in particular will ensure that flows within the deprived reach achieve the EFI at Q95 and therefore support Good Ecological Status. A copy of the proposed licence is in **Annex 14**.
- 6.15 To control the abstraction to meet the HoF and percentage take, the licence holder is likely to require improvements to the existing infrastructure on site.

Preferred Option - Screening

- 6.16 Old Walls currently has a crossflow turbine. EA ‘Guidance for run-of-river hydropower development’, December 2017, (**Annex 6**, p. 22) states that this type of turbine is likely to cause a high mortality rate if fish enter it. Therefore, year-round screening is considered best practice. Within the guidance the suggested screen mesh aperture for sites where juvenile salmonids²³ are present is 6 mm, compared to the existing permanent screen at the forebay of 10 mm aperture. The best practice location for screening this site is to screen at river frontage, namely the head of leat. Screening at the head of leat ensures that all life stages of fish are excluded from entering the leat, so minimising entrainment which risks causing injury or direct mortality.
- 6.17 The ‘Guidance for run-of-river hydropower development’ delivers the requirements of the Salmon and Freshwater Fisheries Act 1975 and at this site, forms the primary legal driver for screening improvements rather than the Eels (England and Wales) Regulations 2009. This is because the 6 mm screening requirement (attributable to the presence of juvenile salmonids) is more protective than the 9mm screening requirement for the adult eel life stage known to be present from EA fish survey data. The preferred option presented in this document would satisfy the requirements of the Eels Regulations 2009.
- 6.18 Guiding design principles are set out below in line with best practice guidance (**Annex 6**):

²³ ‘Salmonids’ is an umbrella term for the family Salmonidae and in this context refers to Atlantic salmon and sea trout.

- An automated 6 mm screen at the head of leat is likely to be the most practical option – a manual screen would need to be significantly larger (to account for partial blinding²⁴). This would be required to meet requirements in terms of sizing to account for blinding as well as meet the relevant approach velocity criteria.
- If the screen is at river frontage (i.e. not set back into the leat) then no bywash is needed, as entrainment cannot occur.
- If the screen is situated in the forebay area (i.e. setback screen) then a permanently operating bywash will be required to return fish to the river (design to be agreed with the EA). This water would form part of the abstraction volume but could not be used for power generation.
- The tail race screening should be formalised by adding it as a condition on the licence (max 25 mm bar spacing).

Preferred Option Summary

FLOW		
	Preferred Option	Notes
Hands off Flow	Q95 HoF of 0.146 m ³ /s	This is an increase from 0.025 m ³ /s and provides protection to low flows in line with 'Guidance for run-of-river hydropower development', December 2017 (Annex 6)
Maximum quantity	No change to instantaneous flow of 0.80 m³/s or daily abstraction quantity of 69,120 cubic metres per day (m³/d) Annual maximum abstraction quantity of 10,502,497 cubic metres per year (m³/year)	Annual maximum abstraction quantity has been reduced from 16,054,984 m³ per year to 10,502,497 m³ per year. Natural variability in river flows restricts the abstraction.

²⁴ Partial blinding in the context of fish screens (especially those with fine meshes required to protect small fish and eels) refers to blocking of the screen with debris such as sediment, vegetation and other organic matter or man-made litter. This blockage, or 'blinding' reduces the functional area of the screen which reduces the ability of the screen to divert fish to safety as the approach velocity is increased. This can result in impingement (fish becoming stuck on the screen face resulting in damage or mortality).

Proportional take	35% Abstraction above HoF	The percentage take provides protection of mid-range flows because the quantity of water available for abstraction reduces as natural river flows drop.
Sweetening flow to leat (NGR SX 700 749)	Sweetening flow of 20l/s when the flow upstream of the weir is below the HoF of 0.146 m ³ /s, this must cease when river flows drop below 40l/s	This provides a flow to the leat when the flow upstream of the weir is below the HoF and so abstraction for HEP has ceased
Means of control and measurement	Means of control and measurement to be at head of leat	This ensures that only the water permitted is abstracted into the leat
SCREENING		
	Preferred Option	Notes
Intake Screening	6 mm permanent screen at head of leat (to protect salmonid parr, smolts, adults and kelts plus adult and silver eel)	Licence holder was given two screening options. -6 mm head of leat screen -set back 6 mm permanent screen, with improved bywash supplied, with a proportion of the abstracted water used for power generation. The licence holder expressed a preference for head of leat screening as this allows him to use all water abstracted for power generation.
Tail Race Discharge Point	Rotating Tail Race screening with maximum 25 mm bar screening (currently installed by local agreement)	This should form part of the licence conditions.

Table 3: Preferred option summary

7.0 COMMUNICATION

- 7.1 For completeness, **Appendix 1** at the end of this document contains a table which summarises the correspondence exchanged between the Environment Agency and the licence holder, beginning with a site visit on 17 July 1992 and continuing through to the issuing of the s.52 notice in January 2026.

8.0 RESPONSE TO LICENCE HOLDER'S GROUNDS OF OBJECTION DATED 4/2/26

Concerns from licence holder raised in grounds of objection are written in bold and italics.

8.1 **The evidence base is flawed- there is an absence of observed harm, and the evidence is 'theoretical'**

-no evidence of fish/ species injury, eel entrainment or injury (existing screens and bypasses have been tested by EA)

EA Response: Our proposals are based on an assessment of risk rather than actual physical evidence of harm and follow best practice guidance.

-no evidence that the reach represents a critical or limiting habitat for spawning or juvenile salmonids, or that fish population recovery is affected- no geomorphic evidence or site specific fisheries assessment proves otherwise

EA Response: We are not suggesting that salmonid habitat within the deprived reach is the critical issue (although it is relevant). The key issues are around entrainment and migration. While we have no direct evidence of harm at Old Walls, our assessment is risk-based and follows best practice guidance.

-EA monitoring demonstrates there is no evidence of impact on invertebrate communities

EA Response: It is correct that the macroinvertebrate surveys carried out by the EA in the West Webburn River in May and July 2018 did not detect a difference in the macroinvertebrate communities which could be attributable to the abstraction (Restoring Sustainable Abstraction Ecology Report 2018, **Annex 15**), however, it is important to put the conclusions of the report into context – the data was limited by the fact that there was no 'pre' data available and the deprived reach had naturalised over the decades of use prior to the surveys. The surveys did not specifically assess the reduction in wetted width (i.e. the dry river bed) associated with the abstraction during prolonged periods at or near the HoF. Over time and given natural process, deprived reaches can adjust themselves to the new flow regime, forming narrower channels but, crucially, containing a similar array of habitats and flow conditions. Therefore, the assessment which looked primarily at indices of community composition only reflected the conditions of this adjusted environment.

The indices and analysis used are not adept at assessing and quantifying change in rivers where habitat and flow velocity remain of good quality despite a loss of wetted width. For example, Lotic-invertebrate Index for Flow Evaluation (LIFE) scores²⁵ assess the presence of flow sensitive taxa within the wetted area only. Provided habitat and flow are available, these are unlikely to be impacted in the results, despite the loss of potential habitat associated with areas of dry channel. The loss of macroinvertebrate biomass is therefore not highlighted in the results, only that the diversity and composition of the samples remains consistent with the river upstream in the remaining areas of wetted channel. This fails to consider the potential of the deprived reach.

The limitations of the macroinvertebrate assessment mean that we cannot conclude that the Old Walls abstraction has no impact on invertebrate communities.

8.2 *-existing evidence shows ecological stability, EA monitoring and investigation demonstrates no deterioration-no evidence of adverse impacts from the abstraction have been identified*

-The EA is disregarding real world evidence, including its own (2018 survey mentioned in Gail Fursdon's representation) and as such the changes proposed are too precautionary

EA Response: The primary justification for the proposed changes to the licence is to reduce the impact of the abstraction on the hydrological regime of the river. The hydrological modelling we have undertaken demonstrates that for 600m of the river, flows are below that which is considered sufficient to support Good Ecological Status by a great degree. This hydrological modelling also demonstrates that the flows which support salmonid migrations are impacted. The location of the permanent screening at the forebay tank by the HEP turbine, in combination with the existing manual bywash, is considered highly likely to impact downstream migration. We do not consider our proposals to be overly precautionary; they modernise licence conditions to meet the required levels of environmental protection for the river which is consistent with our approach across the UK.

²⁵ Lotic-invertebrate Index for Flow Evaluation (LIFE) scores are used to assess ecological effects of river flow conditions on aquatic macroinvertebrates

There is a lack of legal driver, and has been a lack of procedural fairness

- 8.3 *Licence holder questions the legal driver behind the changes- the EA documentation states that its driver is local, and not legislation based. The proposals do not have statutory grounding*

- EA has statutory duty under Section 4 Environment Act 1995 to contribute to sustainable development

EA response: The proposal is underpinned by legal drivers: in proposing the revised HoF and maximum 35% take condition we are having regard to minimum acceptable flows in the deprived reach of the river under section 40 of the WRA 1991. Section 14 of SAFFA 1975 supports the case for fish screens at the entrance to the leat. And in WFD Regulations terms (a) there has been deterioration, arising from the status of the fish element for the waterbody falling from High to Moderate in 2016, and remaining there; and (b) the EA is obliged to take action to support the environmental objective of restoring GES, by returning the fish element to Good status. That will be achieved by the EA addressing this abstraction and the other RNAGs referred to in paragraph 5.10 above.

These specific duties are supported by the more general legal requirements in Environment Act 1995 and Natural Environment and Rural Communities Act 2006 referred to in section 4 above (which include the sustainable development duty in section 4 of the former).

The site had no 'statutory designation' in the RSA programme, (arising from, for example, contravening the requirements of the Habitats Directive) it was given a 'local driver'. It was considered to be a local priority due to concerns regarding the risks of entrainment and low flows observed in the deprived reach of the river.

- 8.4 *-EA not using own judgment- instead using 3rd party concerns*

EA Response: We have independently assessed the impact of the abstraction and proposed the changes to the licence based on our guidance and in line with our standard approach for HEP abstractions. There have been previous complaints and concerns raised with the EA by interested parties.

8.5 *-LCPR (Licence Change Proposal Report) and other key documents withheld from licence holder*

EA Response: We have responded to a number of FOI requests relating to this site from Mr Miles F Fursdon, in accordance with regulatory requirements. The LCPR was not provided to Mr Fursdon in response to the most recent FOI requests received on 21 February 2025 and 10 November 2025 as it had not been written at that time. The LCPR was not required to be provided to the licence holder when the s.52 Notice was issued and so it was not provided to the licence holder. The LCPR was not available for public inspection at the Environment Agency office in Exeter with the s.52 notice. However, the LCPR (**Annex 16**) was provided to the licence holder via his consultant on 22 January 2026 .

8.6 *-Following ROC [The EA's Review of Consents to ensure that licences granted before the implementation of the Habitats Directive conformed with the requirements of the Directive] EA confirmed that it was reprioritising licence reviews and no further action was proposed.*

EA response: No further action was proposed under the RoC programme for this abstraction licence as the RoC was concerned with reviewing the licence with regards to the Habitats Directive 92/43/EEC. This licence was 'screened out' as the West Webburn River is not on a salmon migratory route to the Dartmoor SAC. As the abstraction is non-consumptive (the abstracted water being returned to the river at the downstream end of the deprived reach) it was concluded that it had no likely significant effect on the flow in the River Dart, which forms the migratory route to salmon habitat within the SAC. This does not mean that we concluded no action was required in relation to this licence for impacts on the West Webburn River itself under the RSA programme. The RoC programme was different to the RSA programme, with different regulatory requirements.

8.7 **There will be significant cost and feasibility issues associated with proposed changes**

-no details of cost-benefit analysis have been provided

-This is inconsistent with normal licensing practice and with the Regulators' Code requirement to consider practicability and proportionality.

EA Response: The cost benefit analysis (**Annex 17**) was not available when the most recent FOI request was submitted in February 2025; the analysis was only completed in August 2025. It was not shared with the licence holder when the s.52 Notice was issued as this was not required.

The cost benefit undertaken used the same approach as the EA uses for the costs and benefits assessment RBMPs (Water Appraisal Guidance). This approach is formed of three parts -

1. BENEFITS

An assessment of the benefits, from an overall view of high level benefits to a more detailed assessment of the anticipated benefits to elements within the ecological status classification.

For the West Webburn River, the following benefits were identified -

Fish element – Improvement from moderate status to good status for 18.7km (to take into account that the species to benefit were migratory).

Hydrological regime element – Improvement of flow from bad to good for 0.6km (to take into account that flows in the deprived reach are below that needed to support good status).

The value of the benefits was £0.7m over 40 years.

2. COSTS

Generic estimated costs for the proposed licences changes were used to estimate the total costs for the changes to the licence for a 40 year period. The total costs were estimated at £0.1m over 40 years.

These costs did not include the value of lost power generation as although the impact of the proposals on the Appellant's scheme may be significant, a figure of a 75% reduction is quoted, and we consider that is a matter for any compensation claim under section 61 WRA 1991 and not for this determination.

3. STAGE 1 VALUATION

Comparison of the benefits and costs found an overall difference of £0.6m and the ratio of benefits to costs was 7.2. It was therefore concluded that the proposal was cost beneficial and should proceed. That said, as stated in paragraph 4.11 above the EA's duty to have regard to costs and benefits when taking decisions does not apply where it is obliged to discharge legal duties. For the reasons given in paragraph 8.3 above the EA considers that its duty to

act under the WFD Regulations, in order to prevent water body deterioration and support the environmental objective of returning the water body to GES, means that the section 39 EA 1995 costs/benefits duty is disapplied.

*-extensive engineering work required- substantial capital and operational costs-
significant cost detriment to business (compensation claim estimate £1,000,000 plus)
-installing changes within timeframe may not be feasible*

EA Response: Our proposal to vary the licence is a separate process to any compensation discussions. Compensation claims, discussions and payments can only happen after a licence has been changed.

In the EA's view, any proposed dates to undertake works should be updated at the direction of the Inspector to take into account time for any works to be completed. Typically, this is 18 months but can be longer or shorter depending on the site.

8.8 Proposals would have potential to harm local environment

- The proposal would remove an existing leat habitat without assessment of consequences

EA Response: Our primary aim is to improve the West Webburn River and we have prioritised this over the leat during periods of exceptionally low flow, however, our proposals seek to protect the leat as much as possible while prioritising the river. The proposed sweetening flow abstraction of 20 l/s when natural river flows are between 146 l/s and 40 l/s is to ensure that the leat does not dry out in order to protect the resident ecology. Under exceptionally dry conditions, when the natural river flow is 40 l/s, the sweetening flow would be required to cease.

Objection against conditions

8.9 1.1 Source of supply. Spelling mistake (*Widecombe in the Moor*).

EA Response: Noted – spelling to be updated ahead of any variation upheld.

8.10 3.1 Means of abstraction – *the abstraction is currently controlled by the turbine and it should continue to be so.*

The means of abstraction has remained consistent since the licence was in its original form. The current version of the licence states the means of abstraction as '*Gravity to sluiced leat*' and the proposed condition states '*Gravity flow to an open channel (leat) controlled by a sluice*', which has the same meaning but follows our current naming convention. It is important that the abstraction is controlled at the point of offtake from the river to ensure that as much water as possible is retained in the river. If the abstraction is not controlled at the head of the leat there will still be a 600m deprived reach with more water than is needed for power generation being taken into the leat.

8.11 6.1 Reduction in annual volume will not provide environmental benefit.

EA response: We agree that the proposed reduction in annual volume will not provide additional environmental benefit; the environmental benefit is provided by the increased HoF and 35% take restriction. However, our internal guidance '*Determining water resources licence applications*', at stage 2, states that '*the rates need to be achievable when multiplied up by the periods abstraction which will take place*'. In our Hydrology modelling (**Annex 7**, p. 12), we explain that the current annual limit on the licence is not achievable under the proposed licence conditions as abstraction is restricted by river flow under the HoF and 35% take condition. Therefore, the proposed annual quantity has been reduced to the maximum quantity which would have been available for abstraction each year from the river flow during the 1991-2020 period under the proposed licence conditions, with an additional 10% buffer to recognise future variability of climate. The reduction in annual quantity will not further restrict the licence holder's ability to abstract beyond the reductions resulting from the introduction of the HoF and 35% take.

- 8.12 *7.1 The means of measurement proposed is unnecessarily specific and will waste head and hence power for no increase in accuracy.*

EA Response: We acknowledge that the means of measurement of the quantity of water abstracted from the West Webburn River in the draft licence specifies measurement of head through a control structure. However, we also acknowledge that this is only one possible way to measure the abstracted volumes. We would be amenable to the licence holder submitting to the Inquiry an alternative approach for consideration before any licence variation is finalised. This method must be capable of accurately measuring the total volume of water abstracted from the river into the leat at the abstraction point. The existing arrangement, which is based on the amount of power generated, does not include the additional water abstracted into the leat which is unused by the turbines. It is therefore not acceptable as it does not record the total volume abstracted from the river.

- 8.13 *8.1 Wording of records needs to change to reflect change in 7.1.*

EA Response: Acknowledged. Record keeping and submission to the Agency supports the conditions in 7.1 and will enable the licence holder to demonstrate compliance. Subject to the direction of the Inspector, 8.1 will be reworded in accordance with 7.1.

- 8.14 *9.1 The proposed date is certainly unrealistic if the EA succeed in forcing screening at the intake.*

EA Response: Noted – in the EA's view any proposed dates to undertake works should be updated at the direction of the Inspector to take into account time for any works to be completed (for fish migration periods/high flows/low flows etc). Typically, this is 18 months but can be longer or shorter depending on the site.

- 8.15 *9.2 Hands Off flows and sweetening flows. The revised Hands Off Flow is unnecessary, the 35% proportional take is unnecessary.*

EA Response: In lieu of any site-specific proposal from the licence holder, as explained in section 6 we have used Table A in 'Guidance for run-of-river hydropower development', December 2017, (**Annex 6**). We have used the appropriate column from Table A for the West Webburn River based on its assigned Abstraction Sensitivity Band 3 and low / moderate baseflow. The

guidance sets out that it is possible for us to consider alternative abstraction scenarios for hydropower schemes, subject to mitigation measures proposed, but as we did not receive proposals from the licence holder it is necessary for us to use the Table A recommendations.

- 8.16 *9.3 Intake and flow measurement design details. These items should not be changed from the current layout, if a change was forced upon the licence holder the dates are unrealistic.*

EA Response: Licence conditions require control of the abstraction and measurement of the quantity of water abstracted at the licensed abstraction point from the West Webburn River. This is to ensure that only the authorised quantity is abstracted, and that the proposed new conditions, such as the sweetening flow and percentage take, can be complied with.

As above, any proposed dates to undertake works can be updated at the direction of the Inspector to take into account time for any works to be completed. Typically, this is 18 months but can be longer or shorter depending on the site.

- 8.17 *9.4 Screening at intake. Screening should not be changed from its current position at the forebay. If it was, the dates are unrealistic.*

EA Response: As part of our negotiations with the licence holder, we asked for his preference re the improvements to the screening. We provided two options - either improve the existing screening and bywash at the existing location at the forebay or the provision of new screening at the abstraction point from the river. The licence holder expressed a preference for new screening at the abstraction point so this is our preferred option. Please see para 6.18 for our reasoning why this is our preferred option.

Again, any proposed dates to undertake works can be updated at the direction of the Inspector to take into account time for any works to be completed (for fish migration periods/high flows/low flows etc). Typically, this is 18 months but can be longer or shorter depending on the site.

- 8.18 *9.5 Written plans. As 9.4 should not be imposed, 9.5 is unnecessary.*

EA Response: Condition 9.5 is required so that the licence holder seeks the agreement of the Agency before installing the new screens at the abstraction point, to ensure that the screens provided meet Agency requirements.

- 8.19 *9.7 Outflow velocity. No evidence has been provided that the current speed is causing attraction to the outfall so this requirement is unnecessary.*

EA Response: The outflow velocity condition is a standard condition attached to new licences. The figure used (0.5 metres per second in this case) is based on the species present and is set by the local Fisheries Team based on protection being required for upstream migrating salmon and sea trout. This is 'to prevent upstream swimming fish that may be attracted to a discharge flow from entering the discharge or being distracted from the natural flow' (Screening for Intake and Outfalls: a best practice guide, 2005) (**Annex 18**)

- 8.20 *9.8 Prior approval of repair work. Not acceptable since the EA has no competence to make such judgements.*

EA Response: The EA is the competent authority for abstraction and impoundment works under the WRA 1991, and Flood Risk Activity Permits granted under the Environmental Permitting Regulations 2016. As such, contrary to the views of the objector, it is competent to make the judgements referred to.

- 8.21 *9.9 Annual volume. As per 6.1, this provides no protection to the environment.*

EA Response: The annual quantity is repeated in condition 9.9 of the licence with reference to Section 46(2A) WRA1991 as this provision requires abstraction licences which are for a term exceeding 12 years to specify a minimum value, for the purpose of assessing any compensation which may be payable to the licence holder in due course under section 61. This is a standard condition in abstraction licences that have a time limit of greater than 12 years. Repeating the annual quantity means that there is no detriment to the licence holder.

- 8.22 We received third party presentations from Dr Tom Greeves, Cara Jenkinson (Sustainable Towns and Cities), Kate Gilmartin (British Hydropower Association) Gail Fursdon, Gerry Pope (GP Electronics), Kirsty Russell, and Sandra Ashford, which have been assessed, and addressed in **Appendix 2**.

9.0 CONCLUSION

- 9.1 For the reasons set out above, we believe the proposed variation of this licence to be justified in order to comply with our duties to protect the environment and support sustainable development.
- 9.2 The proposed option is the one that best meets the needs of the environment, balanced with the licence holder's ability to abstract. The licence holder was given the opportunity to make his own proposal but, with the exception of the location of the head of leat screen, chose not to do so.
- 9.3 Introduction of the proposed licence conditions will provide significant environmental benefit and will mitigate the risk to the ecology from the abstraction, whilst still allowing the licence holder to continue to abstract for the purpose of power generation.
- 9.4 Taking all of this into account, the Inspector is respectfully requested to direct the EA to vary the licence in accordance with our proposals.

Annexes	
Annex 1	EA leaflet 'Changing water abstraction and impoundment licences'
Annex 2	Copy of licence
Annex 3	Copy of licence in its original form
Annex 4	NRA Screen relocation agreement
Annex 5	Map and photographs of abstraction site
Annex 6	EA Guidance for run-of-river hydropower development, December 2017
Annex 7	Hydrology Report- 'Old Walls RSA scheme Hydrological modelling' June 2025
Annex 8	EA's Environmental Flow Indicator Position Statement
Annex 9	EA's Catchment Planning Waterbody Data
Annex 10	River Basin Management Plan South-West River Basin District 2009
Annex 11	2024 England Sea Trout Fishery Performance Results
Annex 12	Samon Stocks and Fisheries in England and Wales in 2024 – Report
Annex 13	Old Walls Options Appraisal Report, October 2025
Annex 14	Draft of the proposed licence
Annex 15	Restoring Sustainable Abstraction Ecology Report 2018
Annex 16	Licence Change Proposal Report
Annex 17	EA's Cost Benefit Analysis
Annex 18	Screening for Intake and Outfalls: a best practice guide

Appendices	
Appendix 1	Summary of correspondence between EA and licence holder since 1992
Appendix 2	EA's Response to third party representations