

Environment Agency Reference:

DP2022-  
NE0270016028 -  
Hewenden



## Drought Permit – modify existing abstraction

Section 79A Water Resources Act 1991 as amended by the Environment Act 1995

The Environment Agency (“the Agency”) grants this drought permit to:

Yorkshire Water Services Limited (“the Water  
Company”)

Western House  
Halifax Road  
Bradford  
West Yorkshire  
BD6 2SZ

Registered Company Number: 02366682

This drought permit modifies Paragraph LXXIV of the Bradford Waterworks Act 1854 dated 3<sup>rd</sup> July 1854 (“the Act”) but with provisions that the Act suspended and/or modified as set out in the Schedule to this drought permit.

This drought permit commences from the effective date shown below and shall remain in force until the date of expiry shown below.

All other provisions of the Act remain in full force and effect.

**Signed** Victoria Slingsby  
Yorkshire Area Drought Manager  
On behalf of Mike Dugher  
Yorkshire Area Director

**Date of issue**.....24 October 2022

**Date effective** ..... 24 October 2022

**Date of expiry**.....31 March 2023

Environment Agency  
Lateral House  
8 City Walk  
Leeds  
LS11 9AT

## SCHEDULE OF CONDITIONS

### 1. COMPENSATION FLOW

Paragraph LXXIV of the Act is substituted with the following:

Unless Condition 2.2.2 or 2.4 of this drought permit applies:

- i) Subject to 1.1(ii) below, the Water Company shall make a uniform and continuous release of compensation flow of not less than 3,150 cubic metres per day from Hewenden Reservoir to Hewenden Beck at National Grid Reference SE 07400 35600 (or such other location as agreed in writing by the Agency).
- ii) If the regional reservoir stocks are below the Regional Drought Control Line as defined in the Yorkshire Water Services 2022 Drought Plan for a period of more than four consecutive weeks, then the Water Company shall make a uniform and continuous release of compensation flow of not less than 2,100 cubic metres per day from Hewenden Reservoir to Hewenden Beck at National Grid Reference SE 07400 35600 or other location as agreed in writing by the Agency.

'Regional Drought Control Line' is stated in Figure 2.1 in Section 2.1 of the Yorkshire Water Services 2022 Drought Plan, marked 'DCL' in the graph for the Regional Reservoir Group (with the left hand vertical column representing in percentage terms how full the reservoirs in the entire Region are).

A day means any period of 24 consecutive hours reckoned from 9.00am.

### 2. ENVIRONMENTAL MONITORING AND MITIGATION

2.1 The Water Company shall undertake the monitoring as set out in Appendices 1 and 2.

2.2 If the monitoring identifies signs of environmental problems, including but not limited to fish in distress, a pollution incident, water quality deterioration, algae blooms or spread of invasive non-native species, the following actions shall be undertaken by the Water Company:

2.2.1 (i) upon finding any signs of environmental problems the Water Company shall notify the Agency in writing and by telephone on 0800 80 70 60 and shall provide details of the signs of distress and the location;

(ii) a remedial course of action shall be formulated to address the signs of environmental problems, which shall be implemented as directed in writing by the Agency.

2.2.2 If, upon being notified of any signs of environmental problems in accordance with condition 2.2.1(i), or at its own instigation, the Agency gives written notice that there is a disruption to the ecology, the Water Company shall increase compensation flow from Hewenden Reservoir to Hewenden Beck at National Grid Reference SE 07400 35600 to a rate of not less than 6,300 cubic metres per day, or a lesser quantity as may be agreed in writing by the Agency.

The Water Company shall commence the stated compensation flows as soon as possible and within 48 hours of receipt of written notification from the Agency.

The Water Company shall not reduce compensation flow to that specified in Condition 1 until it has confirmed in writing that appropriate remedial action has been taken, and the Agency has confirmed in writing that it is satisfied with this.

2.3 The changes to the compensation water specified in conditions 1.1, 2.2.2 and 2.4 of this drought permit shall be made in a steady and controlled manner, at a rate so as not to cause any flooding of land, disturbance to water users downstream, any adverse effects on the quality of water in the inland water, or any adverse impacts on the ecology of the inland water or dependent ecosystems

2.4 **Freshet flows**

If, upon being notified by the Agency, or upon discovering through environmental monitoring, or other evidence that an increase in flow is needed to support riverine ecology, as identified in the Water Company Environmental Monitoring Plan North West Area Appendix, termed IDMIT\_9, the Water Company shall increase flow at a time, to a rate and for a duration, as agreed in writing by the Agency, at National Grid Reference SE 07779 34112, or other location as agreed in writing by the Agency.

2.5 **Combined Sewer Overflows**

The additional monitoring and maintenance activities, specified in the Combined Sewer Overflows (CSO's) Optimisation and Maintenance for Drought Plan 2022, shall be applied by the Water Company to the following combined sewer outfall assets, in accordance with Appendix A of the same plan;

- i) Buck Mill Lane CSO, at discharges into Brackendale Beck at National Grid Reference SE 16893 38881.  
Dock Lane CSO, discharges to Bradford Beck at National Grid Reference SE 15161 37590.  
Coach Road CSO, discharges into River Aire at National Grid Reference SE 14449 38149.
- ii) As agreed in writing by the Agency, any combined sewer overflow assets not identified in Appendix A, but subsequently deemed by the Water Company or the Agency to risk adverse impact to a watercourse while compensations flows are reduced.

3. **FURTHER CONDITIONS**

3.1 Unless the Agency otherwise agree in writing, this drought permit shall not be relied upon unless the Water Company has imposed Temporary Use Ban restrictions from Yorkshire Water Services 2022 Drought Plan for the Grid Resource Zone, and such restrictions remain in force.

**APPENDIX 1  
ENVIRONMENTAL MONITORING SCHEDULE: STANDARD SCHEDULE**

Assessment Type	<p>Surveillance walkover surveys of habitat quality and ecological stress, recording signs of environmental problems.</p> <p>The Water Company shall discuss and agree with the Agency any proposed changes to this monitoring schedule in advance of carrying out any of the survey work.</p>
Duration of Monitoring	<p>The environmental monitoring surveys shall take place from the first day that the total compensation flow from Hewenden Reservoir to Hewenden Beck is reduced under this drought permit until this drought permit expires or is revoked, unless otherwise agreed by the Environment Agency.</p>
Environmental Distress	<p>The following are suggested signs of environmental problems but are not exhaustive. If advice is required then the Agency can be contacted on 0800 80 70 60.</p> <ul style="list-style-type: none"> <li>• Fish in distress, for example gasping at the surface or leaping out of the water.</li> <li>• Dead fish.</li> <li>• Concentration of fish in restricted areas/pools which could increase susceptibility to predation.</li> <li>• Inhibition of movement of fish past river structures or other barriers.</li> <li>• Reduced habitat availability for adult and juvenile life stages (including spawning/nursery areas).</li> <li>• Reduced depth of flow over brown trout redds.</li> <li>• Signs of polluting discharges during walkover surveys, problems exacerbated during lower flows and/or reduced dilution.</li> <li>• Algal blooms.</li> </ul> <p>Establishment and/or expansion of invasive non-native species.</p>
Monitoring Method & Standard of Assessment	<p>The water company shall measure and record the following information. For all environmental problems identified:</p> <ul style="list-style-type: none"> <li>• The location of the site of environmental problems observed.</li> <li>• A photo or photos should be taken of any signs of environmental distress.</li> <li>• Weather conditions at the time of the observations.</li> <li>• Dissolved oxygen concentration</li> <li>• Ammonium concentration</li> </ul> <p>Where relevant to the environmental problem observed:</p> <ul style="list-style-type: none"> <li>• Approximate number of dead fish.</li> <li>• Any signs of damage or disease.</li> <li>• Approximate number of fish in distress, gasping at the surface or leaping out of the water.</li> <li>• Whether the fish are being stranded in shallow pools.</li> <li>• Depth of water over brown trout redds</li> <li>• Description of structures and stretches of any watercourses that have no flow or significantly reduced flow. <ul style="list-style-type: none"> <li>• Approximate size of the fish affected.</li> <li>• The species affected.</li> <li>• Signs of pollution.</li> <li>• Presence of algal blooms/scums.</li> </ul> </li> </ul> <p>Species, location and extent of invasive non-native species.</p>

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Frequency of monitoring	On the day of any flow changes implemented under conditions 1.1, or 2.2.2 the day after and then weekly thereafter until no further flow changes are made. If no signs of environmental distress are noted from two consecutive walkover surveys no further walkover surveys are necessary until there are further flow changes.
Location of Monitoring	<ul style="list-style-type: none"><li>• Hewenden/Harden Beck between SE 10100 38598 to SE 10500 38455</li><li>• Aire 1 between SE 131233 8376 and SE 13675 38239.</li><li>• Aire 2 between SE 17481 39782 to SE 18025 40113.</li></ul>
Survey Results	<p>At the same time each week for the duration of the Drought Permit, the water company shall provide to the Environment Agency in the form of a calendar week report, the following details:</p> <ul style="list-style-type: none"><li>• Monitoring data as required from Condition 2.1,</li></ul> <p>The report shall be sent to <a href="mailto:drought.yorkshire@environment-agency.gov.uk">drought.yorkshire@environment-agency.gov.uk</a></p> <p>Note: a calendar week is a period of 7 consecutive days beginning on a Monday.</p>
Responsibility	<p>Unless otherwise discussed and agreed in writing, the water company will be responsible for all of the costs associated with this monitoring programme.</p> <p>Health and safety requirements whilst carrying out the surveys are the responsibility of the water company.</p>

## APPENDIX 2

### ENVIRONMENTAL MONITORING SCHEDULE: SHORT-TERM POLLUTION SCHEDULE

Assessment Type	Targeted surveillance walkover surveys of water quality and ecological stress local to 'significant' water quality pressures', to include water quality spot sampling in priority areas such as pools and weirs where aquatic species may become isolated during low flows.
Duration of Monitoring	The environmental monitoring surveys shall take place from the first day that the total compensation flow from Hewenden Reservoir to Hewenden Beck is reduced under this drought permit until this drought permit expires or is revoked, unless otherwise agreed by the Environment Agency.
Environmental Distress	<p>The following are suggested signs of environmental problems but are not exhaustive. If advice is required then the Agency can be contacted on 0800 80 70 60.</p> <ul style="list-style-type: none"> <li>• Fish in distress, for example gasping at the surface or leaping out of the water.</li> <li>• Dead fish.</li> <li>• Concentration of fish in restricted areas/pools which could increase susceptibility to predation.</li> <li>• Inhibition of movement of fish past river structures or other barriers.</li> <li>• Reduced habitat availability for adult and juvenile life stages (including spawning/nursery areas).</li> <li>• Reduced depth of flow over brown trout redds.</li> <li>• Signs of polluting discharges during walkover surveys, problems exacerbated during lower flows and/or reduced dilution.</li> <li>• Algal blooms.</li> </ul> <p>Establishment and/or expansion of invasive non-native species.</p>
Monitoring Method & Standard of Assessment	<p>The water company shall measure and record the following information in priority areas such as pools and weirs where aquatic species may become isolated during low flows.</p> <p>For all environmental problems identified:</p> <ul style="list-style-type: none"> <li>• The location of the site of environmental problems observed.</li> <li>• A photo or photos should be taken of any signs of environmental distress.</li> <li>• Weather conditions at the time of the observations.</li> <li>• Dissolved Oxygen concentration</li> <li>• Ammonium concentration</li> </ul> <p>Where relevant to the environmental problem observed:</p> <ul style="list-style-type: none"> <li>• Approximate number of dead fish.</li> <li>• Any signs of damage or disease.</li> <li>• Approximate number of fish in distress, gasping at the surface or leaping out of the water.</li> <li>• Whether the fish are being stranded in shallow pools.</li> <li>• Depth of water over brown trout redds</li> <li>• Description of structures and stretches of any watercourses that have no flow or significantly reduced flow.</li> <li>• Approximate size of the fish affected.</li> <li>• The species affected.</li> <li>• Signs of pollution.</li> <li>• Presence of algal blooms/scums.</li> </ul>

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	Species, location and extent of invasive non-native species.
Frequency of monitoring	On the day of any flow changes implemented under conditions 1.1 or 2.2.2, the day after and then weekly thereafter until no further flow changes are made. If no signs of environmental distress are noted from two consecutive walkover surveys no further walkover surveys are necessary until there are further flow changes.
Location of Monitoring	Hewenden/Harden Beck 10m upstream and at least 100m downstream of the Harecroft WwTW discharge outfall at SE 07800 35900.

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## ADDITIONAL INFORMATION

Note: the following information is provided for information only. It does not form part of the licence.

### REASONS FOR MODIFICATIONS AND CONDITIONS

#### Mitigation

Condition 2 of this drought permit has been included to mitigate against any environmental problems that may be caused by or affected by the Water Company reducing compensation flows.

The Agency will take into consideration any other actions the Water Company are taking or plan to take in order to mitigate effects on the environment, such as mitigation actions identified in their 'Drought Plan: Environmental Assessment Report –North West Area Reservoirs', 07/09/2022.

For the purpose of condition 2.2.1 the Water Company shall notify the Agency via email to: [drought.yorkshire@environment-agency.gov.uk](mailto:drought.yorkshire@environment-agency.gov.uk) and by telephone on 0800 80 70 60 and make reference to that fact that this is in regard to the 'Hewenden Drought Permit.'

#### Freshet Flows

Condition 2.4 allows for compensation flows to be temporarily increased from the quantities specified under Condition 1.1 and 1.2 through the range of flows up to the maximum authorised under the Bradford Waterworks Act 1854. Section 3.4.'In Drought Mitigation Options' of Yorkshire Water's Environmental Monitoring Plan identifies Freshet Flows in the context of this drought permit as;

IDMIT\_9 - Artificial freshet release to provide temporary variation in the flow regime (fish, white-clawed crayfish, fine-lined pea mussel, water vole, otter)

For the purpose of Condition 2.4, the Water Company shall, prior to making any increase in compensation flows, first seek agreement of the Agency via email to: [drought.yorkshire@environment-agency.gov.uk](mailto:drought.yorkshire@environment-agency.gov.uk) and by telephone on 0800 80 70 60 and make reference to that fact that this is in regard to the 'Hewenden Reservoir Drought Permit.'

#### Combined Sewer Overflows (CSO's)

Condition 2.5 identifies the CSO assets where the risk of adverse impact has been established. These are detailed in Appendix A to the Combined Sewer Overflows (CSO's) Optimisation and Maintenance for Drought Plan 2022. The implementation of the measures detailed in this plan are referred to as IDMON\_3 in Section 6.2, Table 6.2 of the North West Reservoirs Environmental Impact Assessment 07/09/2022.

The reach of watercourse identified as at risk of adverse impact through the CSO's detailed in Condition 2.6 are defined in Section 4.2, Table 4.2 of the North West Reservoirs Environmental Impact Assessment 07/09/2022 which, in the context of this licence is:

- Aire 1

The Water Company or the Agency may be deem it necessary to implement the monitoring and maintenance measures on CSO assets that are not listed in Appendix A of the above mentioned plan. Condition 2.6 (ii) provides for this possibility.



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### **Monitoring Locations**

The Monitoring Locations referred to in Appendix 1 and Appendix 2 are the downstream reach or reaches where monitoring is required, in accordance with Water Company Environmental Monitoring Plan North West Area Appendix A2, termed IDMON\_1 and IDMON\_2 and the Water Company Drought Options Impact Screening – Appendix 4 North-West Area Reservoirs.

### **IMPORTANT NOTES**

#### **Temporary Use ban**

You must follow your 2022 drought plan and implement a Temporary Use Ban (under sections 76 and 76A – C of the Water Industries Act 1991) before using the powers granted by this permit, unless the Agency agrees that such ban is not necessary due to the circumstances at the time.

#### **Environmental Monitoring Plan**

The conditions and monitoring incorporated on this permit is in addition to the Environmental Monitoring Plan agreed between the Agency and the water company.