River Test Stage 0.1 Drought Order Application

1.1 Description of the Proposals and Stage 0.1 Drought Order

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from Southern Water

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1 Background

1.1 Context

Southern Water are applying for a Stage 0.1 Drought Order to make temporary amendments to the abstraction licence 11/42/18.16/546 to abstract water from the River Test. The purpose of this Drought Order application is to secure supplies for customers primarily within the Hampshire Southampton West (HSW) supply area, but also the need to maintain a minimum transfer of 12 Ml/d from HSW to the Isle of Wight (IOW) to ensure supplies can be maintained on the island.

A River Test Drought Permit is included in the Section 20 Agreement (S20) between the company and the Environment Agency (EA), signed in April 2018 as the outcome of the March 2018 Public Inquiry into the EA's proposed changes to Southern Water licences for abstraction from the River Test and the River Itchen. The S20 sets out a special protocol for preparing and applying for a Drought Permit. However, subsequent to the Section 20 Agreement, the conclusion of the Stage 2 assessment was that "*no adverse effect on integrity cannot be concluded for the River Itchen SAC, even with mitigation in place*". In consequence, consistent with the Environment Agency's guidance (Environment Agency, 2021) and advice, it was considered that an application should be made to the Secretary of State for Environment, Food and Rural Affairs for a Drought Order in relation to the proposed Hands-off Flow (HOF) relaxation, having considered imperative reasons of overriding public interest and provided compensation.

Therefore, Southern Water has applied for a Drought Order to lower the HOF, as opposed to Drought Permit. This approach that has been taken in light of Environment Agency's guidance and advice and is the approach that has been assessed in the Habitats Regulations Assessment - Report to inform an assessment under Regulations 63 and 64 of the Conservation of Habitats and Species Regulations 2017 dated 17 July 2025 (Ref No. UK0028294.1948_R001.3).

2 Description of the Proposals

2.1 Catchment Overview

The River Test is a chalk stream that rises in Overton in Hampshire, flowing in a southerly direction for approximately 50 km before discharging into Southampton Water (Figure 1). The River Test has a catchment area of 443 ha, consisting of two operational catchments; Test Upper and Middle, underlain predominantly by chalk, and the Test Lower and Southampton Streams, which is underlain by clay, silt, sand, and gravel.

Like all chalk rivers, the River Test is characterised by a baseflow dominant flow regime. The reaches downstream of the Test Lower and Southampton Streams operational catchment are characterised by several significant flow splits, which divert water away from the main channel, for example, at the Great Test-Little Test divide. This is due to historical modifications (realignment and deepening) for land drainage, flooding of water meadows, navigation, and water mills. The river is still heavily managed with many control structures, some of which support commercial activities, including fishing, which occur along the river. The significant flow splits within the River Test are detailed further in Section 2.1.1.

The entirety of the River Test from Overton to downstream to the Normal Tidal Limit (NTL) is designated as a Site of Special Scientific Interest (SSSI) (Figure 2). Additionally, the Lower Test Valley is designated as an SSSI and overlaps with several European designated sites, including the Solent and Southampton Water Special Protection Area (SPA), Ramsar, and the Solent Maritime Special Area of Conservation (SAC). Part of the Middle Test and several tributaries have also been designated as River Test Compensatory Habitat SAC,

which performs a compensatory function for protected features of the River Itchen SAC that will suffer adverse effects as a result of abstraction in drought conditions in respect of the Lower Itchen Drought Order and the Candover Drought Order.

Southern Water's Testwood abstraction intake is located at Testwood on the Great Test, approximately 1.4 km above the NTL at Testwood Mill. As the proposed River Test Stage 0.1 Drought Order would temporarily modify the abstraction licence conditions at the Testwood intake, this report will focus on the lower reaches of the Test, downstream of the M27 motorway crossing at Nursling.

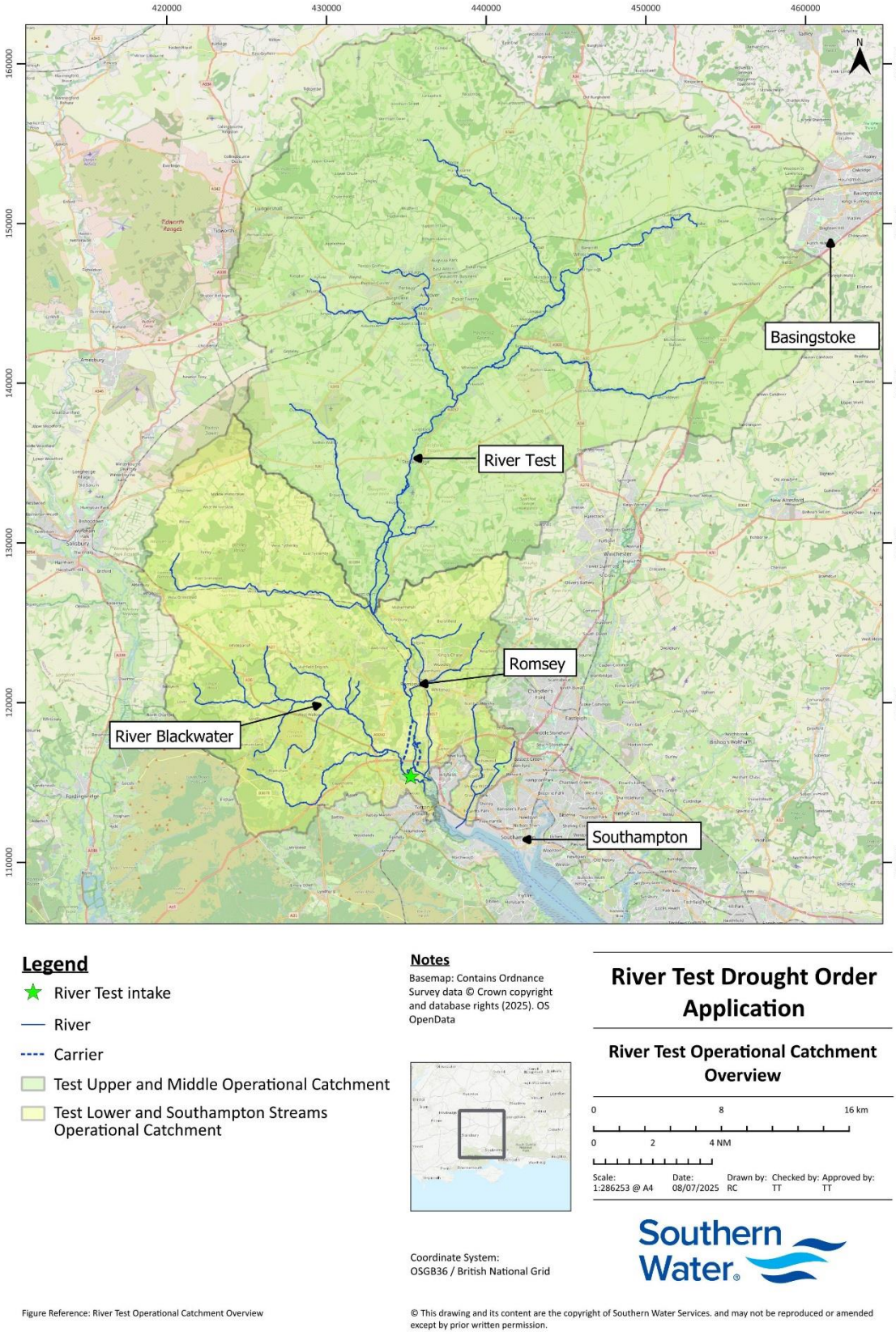

Figure 1: Operational catchments for the River Test.

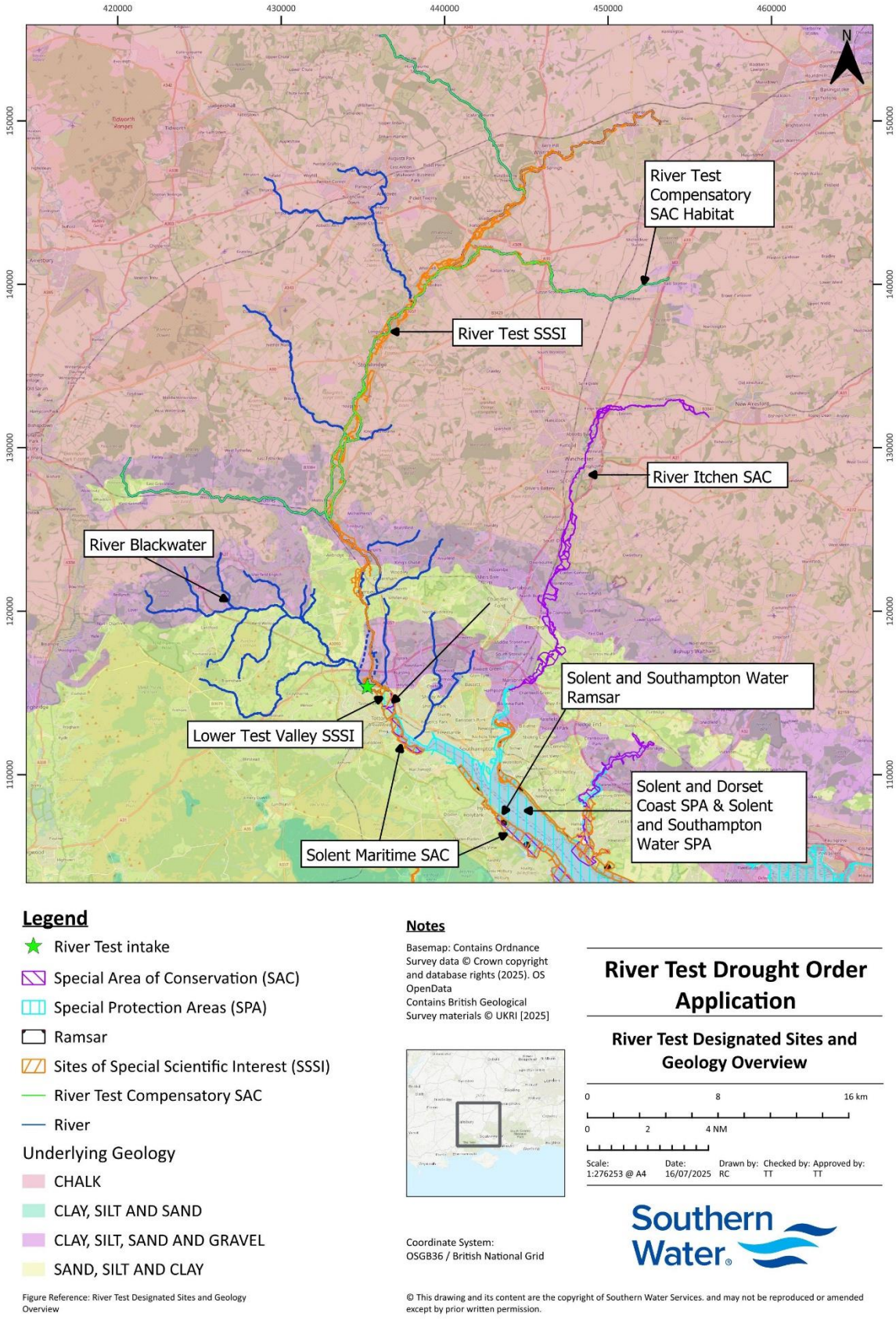

Figure 2: Catchment overview of the River Test with designated sites and underlying geology.

2.1.1 Channel modifications and operation – flow splits

The Lower Test is characterised by several significant flow splits which impact the operation of the river. A simplified representation of the distribution of the channels in this area is shown in **Error! Reference source not found.**. The main splits of relevance to this Drought Order application are the Broadlands fish farm carrier, the Test Back carrier, the Great Test-Little Test split, and the Nursling Fish Farm diversion.

2.1.1.1 Broadlands Fish Farm carrier

The Broadlands Fish Farm carrier is an old water meadow carrier controlled by a sluice on the Broadlands estate, with the flow taken from the River Test immediately upstream of the gauging station at Broadlands and passing via the carrier to the River Blackwater downstream of the Ower gauging station. Flows in the carrier are measured at M27 TV1 gauging station.

2.1.1.2 Test Back carrier

The Test Back carrier is a small off-take from the Test just downstream of the Broadlands gauging station. The carrier has not been maintained recently, and under summer low-flow conditions, there is no flow in the carrier. Flows are measured by spot flow gaugings when required.

2.1.1.3 Split between the Great Test and the Little Test

The flow split between the Great Test and the Little Test was set by legally binding arbitration in 1831 (the Coleridge Award), which allows one-third of the flow through the Little Test and two-thirds through the Great Test. However, both branches of the river are in single ownership and management is at the discretion of the owners and their tenants. The flow split is controlled by Conagar sluice and is reasonably stable, but under very low flow conditions, more than one-third of flows have been measured at the Little Test. The Little Test is measured at Conagar Bridge gauging station.

2.1.1.4 Nursling Fish Farm

This Fish Farm carrier diverts water from the Great Test above Testwood (under abstraction licence 11/42/18.16/547) to Nursling Fish Farm and can then return the water to the River Test either directly downstream of the fish farm or through settling ponds to downstream of the Testwood gauging station and abstraction. The diversion can have a significant impact on flows in the downstream reaches and at the Testwood abstraction location.

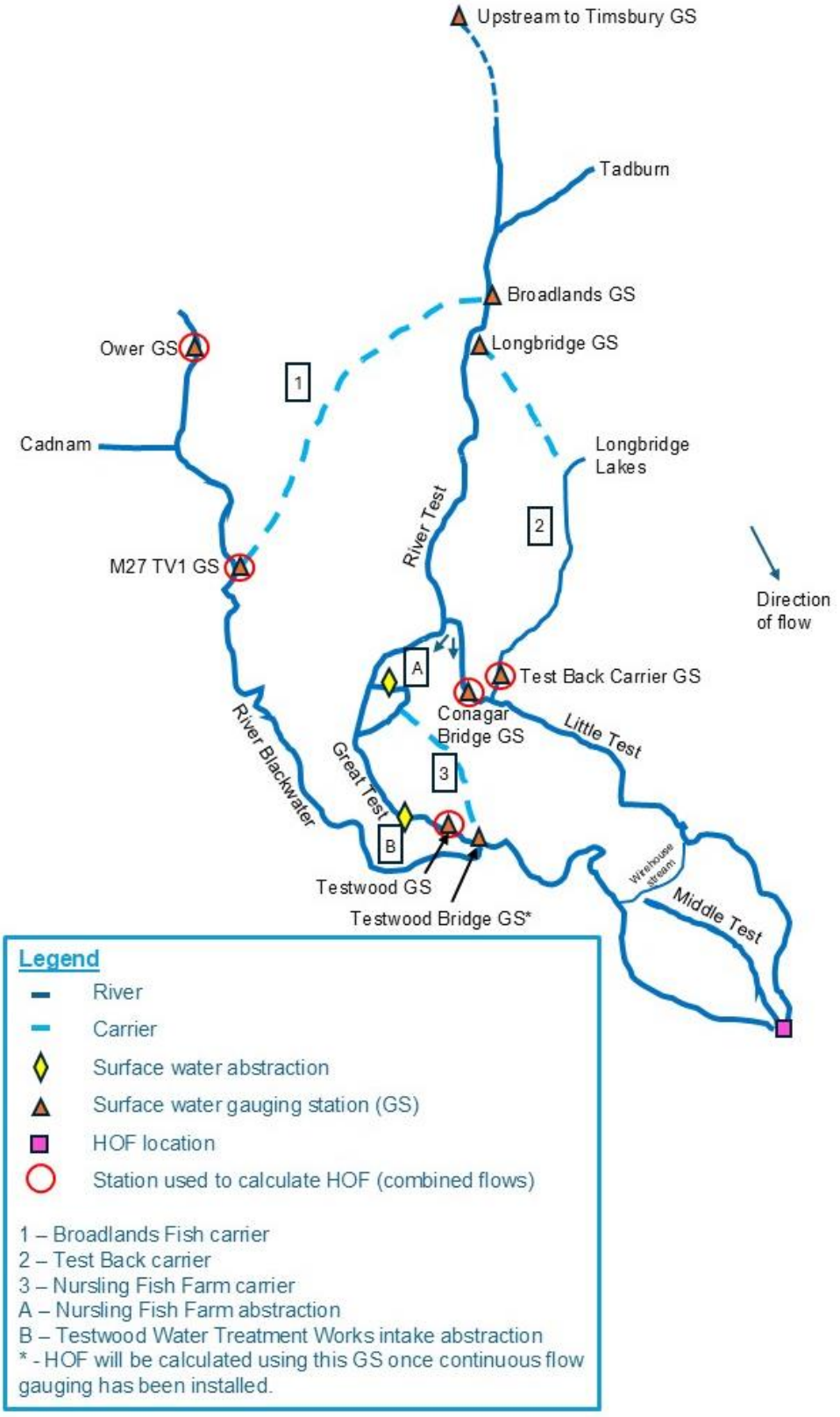

Figure 3: Schematic of the hydrology of the lower River Test. Adapted from Figure 27 of the Test and Itchen CAMS (Environment Agency, 2006).

2.2 River Test Abstraction

2.2.1 The Testwood Abstraction Licence

The current version of the abstraction licence for Southern Water's source at Testwood (licence 11/42/18. 16/546) was issued in March 2019. The abstraction licence authorises Southern Water to abstract up to 3.5 megalitres (Ml) per hour, 80 Ml per day and 29,200 Ml per year, subject to the River Test flow (Total Test Flow or TTF) remaining above 355 Ml/d.

2.2.2 HOF condition

The abstraction licence also has a HOF condition that dictates that abstraction should not take place when the TTF, being the summation of flows as measured by the EA at Testwood Bridge (the Great Test downstream of the confluence with the River Black water), Test Back Carrier and Conagar Bridge (both branches of the Little Test) is less than 355 Ml/d. This condition is time-limited in the abstraction licence to March 2027, and after then the abstraction licence conditions become more stringent in the months from March to December, with the HOF increasing to 390 Ml/d. In practice, as the EA has not yet established a real-time gauging station at Testwood Bridge, the TTF has to be summed from five flow records as per Section 2.2.3.

2.2.3 Monitoring of river flows for the HOF condition

Testwood Bridge does not have a continuous flow gauging station, even though it forms part of the abstraction licence condition. If or when flows fall close to the HOF, the EA has specified that spot flow gaugings at Testwood Bridge undertaken by the EA will inform the definitive basis for compliance with the abstraction licence conditions. As this river flow information is not available in real time, it is unsatisfactory from Southern Water's perspective of ensuring compliance with the abstraction licence or Drought Order conditions. In practice, Southern Water will use the available real-time information to form this assessment.

Flows at Testwood Bridge can be approximated by gauged measurements of the three main channels which contribute to the Test at this point, namely the Testwood flow gauge on the River Test, River Blackwater flows as measured at Ower gauging station, and the Broadlands Fish carrier as measured at M27 TV1 gauging station.

Southern Water monitoring of flows in relation to the abstraction licence condition is therefore based on the combined flows at the following gauging stations:

- River Great Test at Testwood.
- River Blackwater at Ower.
- Broadlands Fish carrier at M27 TV1.
- River Little Test at Conagar Bridge.
- Test Back carrier (not included at present due to extremely low/no flow).

Together, these form the best estimate available for continuously monitored and telemetered flow data for the Test Total Flow (TTF) sequence in relation to the abstraction licence condition.

Data from each of these stations are available via the EA API data transfer system, although sometimes with a lag of a couple of days. Southern Water use this data transfer system to update our monitoring of the flow recession and our forecasts to indicate when flow triggers may be crossed in the future (see **Section 3.4** of Document **1.2 Reasons for the Order**).

2.2.4 Force Majeure

There is also a 'Force Majeure' condition on the abstraction licence, meaning 'an unexpected threat to provision of public water supply beyond the control of the Licence Holder, arising from circumstances of natural cause or force majeure which are exceptional or could not reasonably have been foreseen…"

The Force Majeure clause makes provisions for the daily limit to be increased to 96 Ml/d and/or for the HOF condition to be lowered, if EA is satisfied that a Force Majeure event is occurring.

The Force Majeure condition on the abstraction licence is not intended to supersede Southern Water's statutory requirements to follow its current Drought Plan, published in 2019, and to apply for Drought Permits and Drought Orders at Testwood in accordance with the S20 agreement (Appendix 1, Appendix 2 for a summary of the S20 agreement).

2.3 The Intended Stage 0.1 Drought Order

2.3.1 Proposed abstraction licence change

The proposed Stage 0.1 Drought Order will involve an amendment to the abstraction licence to:

- Reduce the River Test HOF condition (Condition 9.1) from 355 Ml/d to 265 Ml/d.

The lowered river flow condition is the sole change to the abstraction licence intended for this Drought Order as represented in the S20 Agreement and Southern Water Drought Plan.

The lowered river flow condition does not mean that abstraction will be increased to reduce the flow to the lower limit; it only means that Southern Water may carry on abstracting to the flow of 265 Ml/d if necessary, depending on the continued recession of flows.

The application is made for a Drought Order lasting six months from the date of determination. Therefore, the Drought Order is expected to cease by end of February 2026.

Two Drought Order Templates are included in document ref: ***1.1 Appendix 3 Draft Drought Orders Template***; one for the Drought Order and one fore the NEUBs Order

2.3.2 Further conditions to the Stage 0.1 Drought Order

When the Environment Agency granted a Drought Permit for the Testwood abstraction in September 2019 (which was subsequently withdrawn by Southern Water prior to implementation), several additional conditions were added to it. These included:

- A condition (1.1.3) that the aggregate quantity of water should not exceed 55,000 m^3/day over a rolling 30-day period
- A condition (1.2) that Temporary Use Bans (TUB) should be in place before the drought permit is implemented, as included in the Section 20 Agreement
- A condition (2.1) setting out when / under what conditions the drought permit would cease to be in force
- Conditions (3.1 – 3.2) for a number of automated water quality monitoring sites to be installed and operational, with trigger thresholds for actions
- Conditions (4.1) for further spot water quality sampling and monitoring at a number of locations
- Conditions (5.1 – 5.10) for fisheries and biodiversity monitoring

It is anticipated that, further to this Drought Order application, discussions will be held with the EA to review the need for the above or other conditions before any further conditions are finalised for the Stage 0.1 Drought Order. Southern Water suggest these discussions should include reflection on whether the '55,000 m^3/day – 30-day rolling average' is desirable relative to the implications of reduced flexibility of transfer support to the River Itchen supply area should the River Itchen flows also decline and, also reflection as to implications of reduced flexibility to cover risks to supplies on the Isle of Wight.

Southern Water's monitoring and mitigation plan for the Testwood Stage 0.1 Drought Order has been updated and is included in this application (document ref: ***2.2 Monitoring, Mitigation and Compensation Plan July 2025***). Southern Water encourage the EA and Natural England to consider this before concluding what conditions may be necessary for the Stage 0.1 River Test Drought Order.

Southern Water also remind the EA of the access constraints within the Lower Test area for monitoring and mitigation work and recommend that the EA consider using its power of entry to undertake essential monitoring.

References

Environment Agency (2006) Test and Itchen Catchment Flood Management Plan Final Strategy. Environment Agency.

Environment Agency (2021) Drought permits and drought orders Supplementary guidance from the Environment Agency and Department of Environment, Food and Rural Affairs.

Southern Water (2019) Final Drought Plan. Southern Water Services Ltd.