

## Planning for a future drought

The South West Water, Bristol Water, and Bournemouth (SBB) Water Drought Plan 2027



The long and hot summers in the last two years are focussing the minds of the national water suppliers on how to deal with climate change. Clean, potable water has in the past been something that people in Britain have come to take for granted. Our expanding population and ever more demand for water is now stressing the supply system in ways that can be anticipated but the development and maintenance of the infrastructure is a very expensive business. The current plan and the successor plan for 2027 onwards is currently for to public consultation.

*“The purpose of this Drought Plan is to explain our operational approach to how we will manage water resources and reduce the demand for water during periods of drought. The Drought Plan sets out possible actions and interventions that we might take, while seeking to provide the most benefit to our water supply position whilst having the least impact on our watercourses, waterbodies and their ecology.”*

The plan is a comprehensive document that covers the legal requirements and restrictions that apply to the provision of the supply of water and the protection of the environment. The authors of the plan have had to consider our biodiversity, flora and fauna, the water quality, soil, air, climatic factors, population and human health, the historic environment, landscape and its material assets.

As you might imagine, balancing all of the above is going to be a complicated task, especially as we have lately experienced the warmest summer on record and the climatologists are predicting that the likelihood of further drought conditions in the UK is rising steadily.

From the point of view of the ecology alone, droughts can lead to lower river flows and groundwater levels, change in water quality, and habitat degradation, which could lead to significant adverse effects on the qualifying features of designated sites, which are



protected for their ecological importance. The fish in our rivers are at risk due to loss of physical habitat, physio-chemical pressures including high water temperatures and low dissolved oxygen when river flows decline.

Low rainfall amplifies the problems of pollution. For both the South West and the

Severn river basin districts, pollution from rural areas affect the highest proportions of waterbodies, followed by pollution from wastewater and physical modifications.

El Nino events that are expected to occur more frequently in the Pacific Ocean have widespread effects around the globe. The opposite of drought in the summer months can be excessive and prolonged periods of rainfall which brings about flooding. “Flood risk across the SBB Drought Plan area is diverse and can occur from a wide range of sources including rivers, sea, groundwater, reservoirs and surface water. Notable areas for flood risk from rivers, sea and surface water include areas around the Rivers Exe and Axe in Devon; the Hampshire River Avon; and the Severn Estuary and Bristol River Avon”.

The combined effects of prolonged drought and periodically excessive rainfall are affecting agriculture. “Agricultural drought can arise due to lack of rainfall and moisture in soils, leading to a decline in crop production. Water shortages could also impede certain farming practices, such as spray irrigation as well as livestock rearing. Dryness of soils brought by droughts can lead to cracks and changes in soil structure, changing water infiltration, and could lead to increased surface water runoff.”

The SBB Drought Plan is very ambitious. Here is a summary of the elements that they are considering:

| SEA Topics                           | Objective No. | SEA Objectives                                                                                                                    |
|--------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Biodiversity, Flora and Fauna</b> | 1.1           | Protect and enhance designated ecological sites.                                                                                  |
|                                      | 1.2           | Protect and enhance ecology and biodiversity, including habitats and species of principal importance and water-sensitive sites.   |
|                                      | 1.3           | Reduce the spread or presence of INNS.                                                                                            |
| <b>Water</b>                         | 2.1           | Protect and enhance the quality of the water environment and water resources.                                                     |
|                                      | 2.2           | Provide a sustainable water supply in times of drought.                                                                           |
|                                      | 2.3           | Reduce flood risk.                                                                                                                |
| <b>Soil</b>                          | 3             | Protect and enhance the functionality, quantity and quality of soils, including the protection of sites of geological importance. |
| <b>Climatic Factors</b>              | 4.1           | Reduce embodied and operational carbon emissions.                                                                                 |
|                                      | 4.2           | Increase resilience to climate change risks and hazards.                                                                          |
| <b>Historic Environment</b>          | 5             | Protect and enhance the historic environment, including archaeology.                                                              |
| <b>Population and Human Health</b>   | 6.1           | Maintain and enhance the health and wellbeing of the local community, including recreation and visual amenity.                    |
|                                      | 6.2           | Sustaining water supplies for the local economy, including tourism, business and agriculture.                                     |
| <b>Resources</b>                     | 7             | Minimise resource use and waste production.                                                                                       |

(INNS - Invasive Non-Native Species)

With reduced replenishment of water bodies from which the suppliers can take water, there are likely to need measures to conserve the stocks during future periods of drought.

Abstraction limits are being set for the

various reservoirs around the region. Such measures will affect visual amenity, tourism, and recreation use such as fishing and kayaking in some areas and require expensive additional pumping and transfer of water from one area to another. For our area, the Bristol Water Resource Zone (WRZ) drought supply options comprise:

- Blagdon Reservoir - reduce compensation flow
- Blagdon Reservoir - delay water bank releases
- Reduction of Chew Valley Lake compensation release
- Chew Valley Lake - delay water bank releases
- Chew Magna Reservoir - reduce compensation flow
- Cheddar Ponds - reduce compensation flow
- River Axe to Cheddar Reservoir - extend pumped storage abstraction season to include October
- River Axe to Cheddar Reservoir - extend pumped storage abstraction season to include May
- River Axe to Cheddar Reservoir - early commissioning of pumped storage abstraction.

To manage water conservation the SBB-wide demand options comprise:

- Customer Communications.
- Water Saving Devices.
- Reward Through Billing.
- Customer-Side Leakage.
- Active Leakage Control.
- Pressure Management.
- Temporary Use Bans.
- Non-Essential Use Bans.

Essentially, we will have to get used to the prospect of future significant water restrictions at times. The planning cycle for new reservoirs is very long, given the multiplicity of factors that have to be taken into account, even before the question of funding is resolved.

For our part, we will need to think more about how and when we use water and find ways to conserve rainfall in our homes and gardens. Gardeners might care to look at the Royal Horticultural Society publication posted previously on this website in the Environment section. “Gardening in a Changing Climate”.

[Draft Drought Plan Public Consultation](#)  
[Appendix 2 SEA Environmental Report.pdf](#)

Peter Smith – September 2026