

## Environment Agency data sets

### **Bathing water quality.**

The Environment Agency samples at designated bathing waters for viable microbes during the bathing season which in the UK is designated to be from 15th May to 30<sup>th</sup> September only. Samples are taken at approximately weekly intervals in that period. Once the site is accessed, [Bathing water quality \(data.gov.uk\)](#), enter Dorset to see data for all monitored bathing sites. All in the CROWD area are from the sea and were assessed as Excellent in 2022 except Lyme Regis It was considered to be in a lower category, Good. Further details on interpretation are given in the CROWD evidence base.

The EA provides additional information under the menu of the site. The glossary includes that EA does have the capacity to carry out Microbial Source Tracking (MST) This is DNA tracing to establish whether pollution at a bathing water is from humans, farm animals, birds or other sources.

### **Water quality archive**

The Environment Agency assesses water several sites in the CROWD area. Sometimes not all measurements are made on the same occasion and not all sites are current. The measurements made vary by site particularly with the 14 different sub-categories. These are: agriculture, exemption, freshwater, groundwater, mine water, miscellaneous discharges, miscellaneous environment, pollution/investigation points, rainwater, saline water, sewage, sewage & trade combined, sewage discharges not water company, sewage discharges water company, sewage system discharge, trade discharges and waste site.

The freshwater sub-category sampling sites in the CROWD area are: River Char at Beach Pond, River Char at Charmouth A35 Bridge, River Char at Whitchurch Canonicorum, River Asker at Boarsbarrow, River Asker at Bridport, River Bride at Burton Bradstock, River Brit at Bridport, Litton Cheney Stream, River Bride at Chicks Bridge, River Bride U/S Modbury Fish Farm.

As an example, the following are measured in the freshwater sub-category at the River Asker at Boarsbarrow (between Loders and Bradpole): pH; Temperature of Water; Conductivity at 25 C; Ammoniacal Nitrogen as N; Nitrogen, Total Oxidised as N; Nitrate as N; Nitrite as N; Ammonia un-ionised as N; Alkalinity to pH 4.5 as CaCO<sub>3</sub>; Orthophosphate, reactive as P; Oxygen, Dissolved, % Saturation and Oxygen dissolved as O<sub>2</sub>. These measurements are taken at about weekly intervals and are ongoing.

There are CROWD sites in additional sub-categories. I suggest each CROWD member [Open WIMS data](#), selects EA Wessex and each subcategory of interest in turn and then clicks on the blue indicators on the map in the CROWD sub-area that interest them. Each entry will then open by clicking on it.

### **Catchment Plan Explorer**

Open [West Dorset Rivers Operational Catchment | Catchment Data Explorer](#) and enter the river of interest. There is an abundance of data. Table 1 provides the summary for the Asker for both biological and non-biological assessments including pollutants. It possible to look further into reasons for not achieving good status and reasons for deterioration. For instance, the Asker lacks large river plants that may relate to its narrow width and overhanging trees. Its poor status for fish is related to the lack of such plants and also obstacles to fish movement e.g. Loders weir. The EA site also suggests future improvement is not likely because of the high cost involved.

**Table 1:** Summary for the Asker from the EA Catchment Plan Explorer.

<b>Ecological</b>	<b>Poor</b>
<b>Biological quality elements</b>	<b>Poor</b>
Fish	<b>Poor</b>
Invertebrates	<b>High</b>
Macrophytes and Phytobenthos Combined	<b>Moderate</b>
Macrophytes Sub Element	<b>Moderate</b>
<b>Physico-chemical quality elements</b>	<b>Good</b>
Ammonia (Phys-Chem)	<b>High</b>
Dissolved oxygen	<b>High</b>
Phosphate	<b>Good</b>
Temperature	<b>High</b>
pH	<b>High</b>
<b>Hydromorphological Supporting Elements</b>	<b>Supports good</b>
Hydrological Regime	<b>Supports good</b>
Morphology	<b>Supports good</b>
<b>Chemical</b>	<b>Fail</b>
<b>Priority hazardous substances</b>	<b>Fail</b>
Benzo(a)pyrene	<b>Good</b>
Dioxins and dioxin-like compounds	<b>Good</b>
Heptachlor and cis-Heptachlor epoxide	<b>Good</b>
Hexabromocyclododecane (HBCDD)	<b>Good</b>
Hexachlorobenzene	<b>Good</b>
Hexachlorobutadiene	<b>Good</b>
Mercury and Its Compounds	<b>Fail</b>
Perfluorooctane sulphonate (PFOS)	<b>Good</b>
Polybrominated diphenyl ethers (PBDE)	<b>Fail</b>
<b>Priority substances</b>	<b>Good</b>
Cypermethrin (Priority)	<b>Good</b>
Fluoranthene	<b>Good</b>
<b>Other Pollutants</b>	<b>Does not require assessment</b>