

Hampshire Avon Fish Counter

Knapp Mill, February - April 2026



Figure 1 – A pike descending into the deeper water below the Turbine House fish pass.

Summary

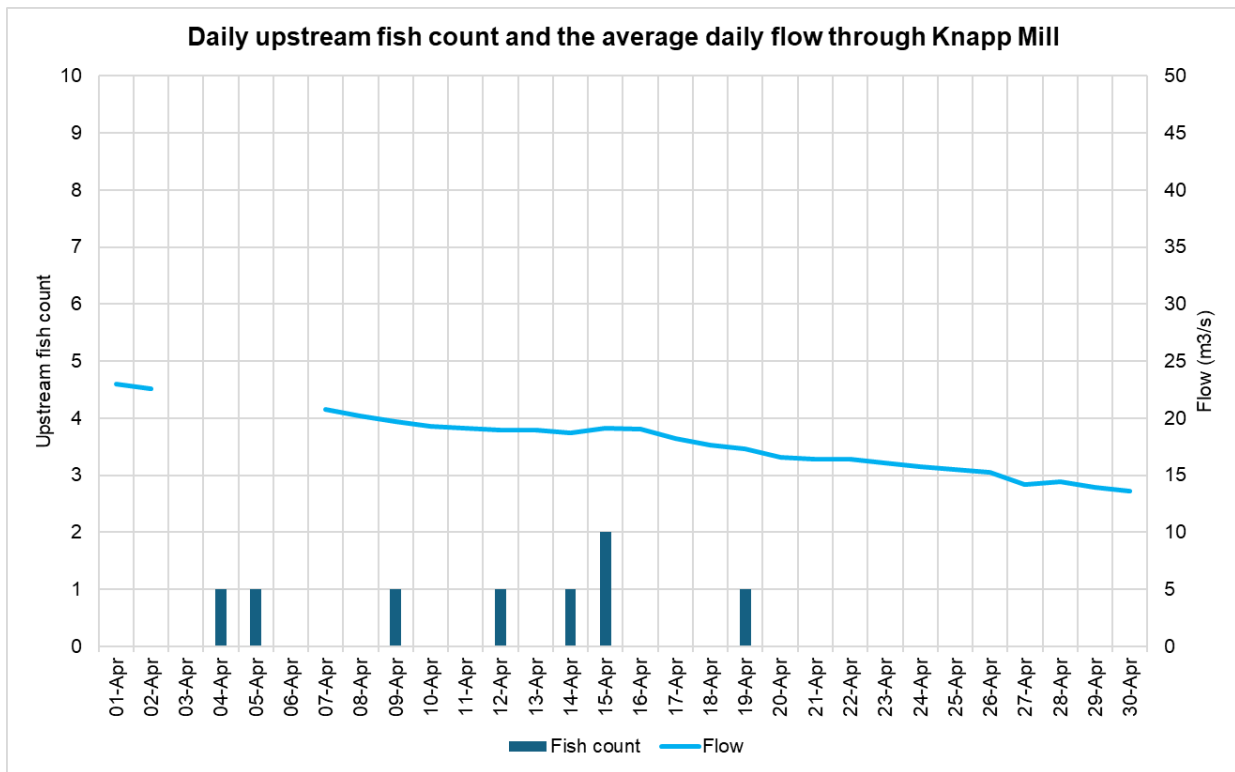
The counters at Knapp Mill operated without fault during April. However, from the 22nd to the end of the month the device that saves the counter data for channels 17 and 18 stopped doing so without any giving indication that this was the case. This is particularly frustrating as all recorded fish until this point had used these two channels, and most of the flow was through here.

Unfortunately camera images are very limited for April, as due to health and safety concerns we have been unable to access channels 17 and 18 for maintenance. With the drop in flow, I was able to install additional cameras into the downstream ends of these channels at the start of May (see fig 5). Cameras were placed in other channels during April, but no fish were recorded here and some of these hatches are already closing with the falling flow.

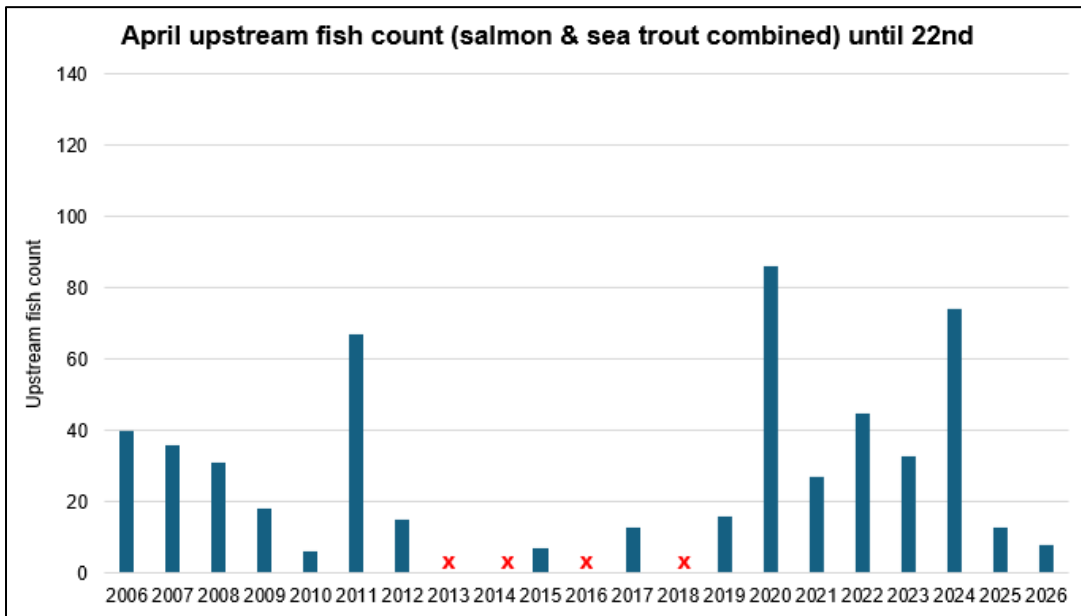
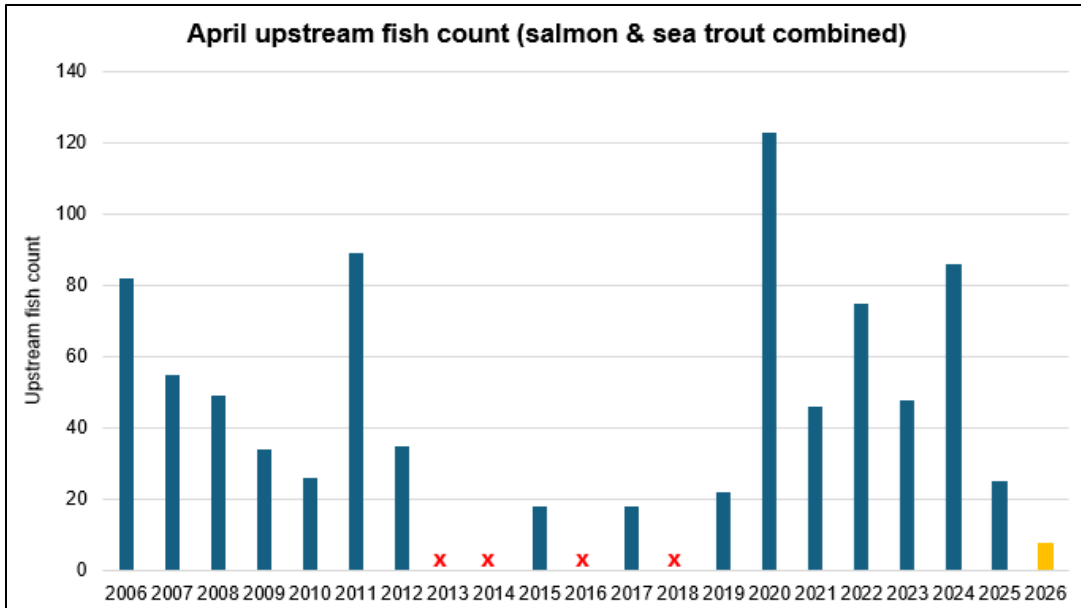
Prior to the 22nd, 8 fish were recorded moving upstream in April, which is 31% of the long-term average for this same period. Additionally, 4 fish were recorded moving downstream. Historically during April, fish movement through the counters increases

towards the end of the month, and numbers in the final week appear roughly proportional to those of the opening three weeks (see the similar patterns across graph 2). 2010 and 2015 recorded similar fish counts (6 and 7) during the opening 21 days of April, and ended the month with 26 and 18 respectively. Therefore, it is likely the total fish count for April 2026 is like those in 2010 and 2015.

April Data

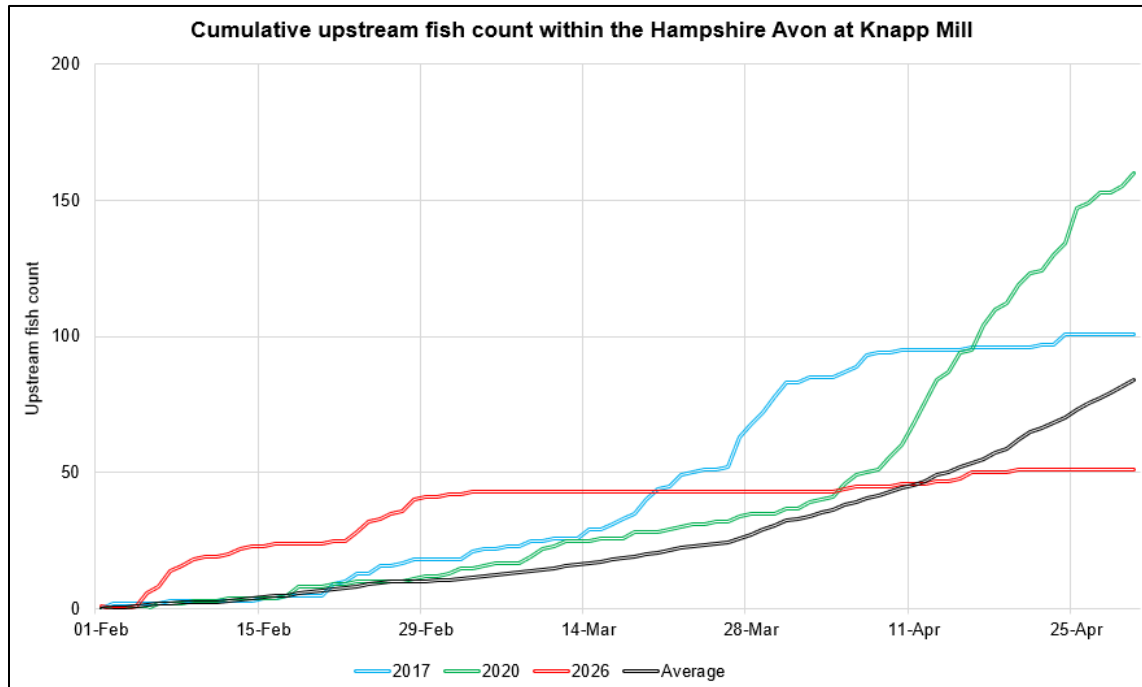


Graph 1 - 2025 upstream fish count (salmon & sea trout combined) each day in April alongside the flow through Knapp Mill for the same period. The gap in flow data was due to a power cut at the gauging station.

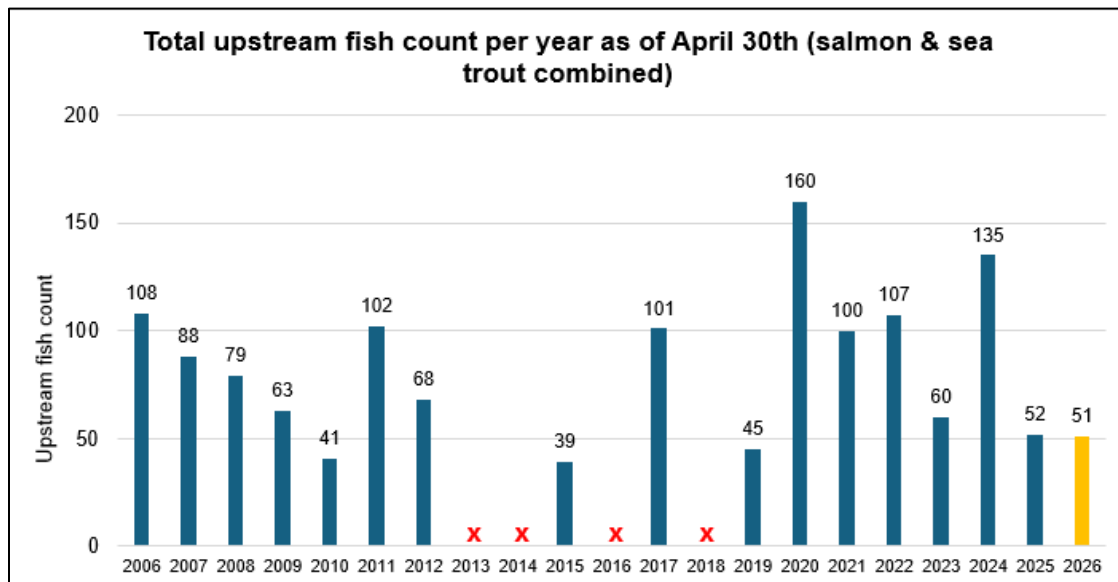


Graph 2 – A comparison of the total upstream fish count for April across each year (no valid data was available for 2013, 2014, 2016 and 2018), as well as a comparison of only the opening 21 days for which data was available this year. 2026 is in orange in the top graph to highlight that the data is partially missing.

Q1 Data



Graph 3 - A comparison of the long-term average since 2006 (excluding 2013, 2014, 2016 and 2018) with the current year's cumulative fish count (2026), as well as the highest previously recorded annual count (2020) and lowest (2017).

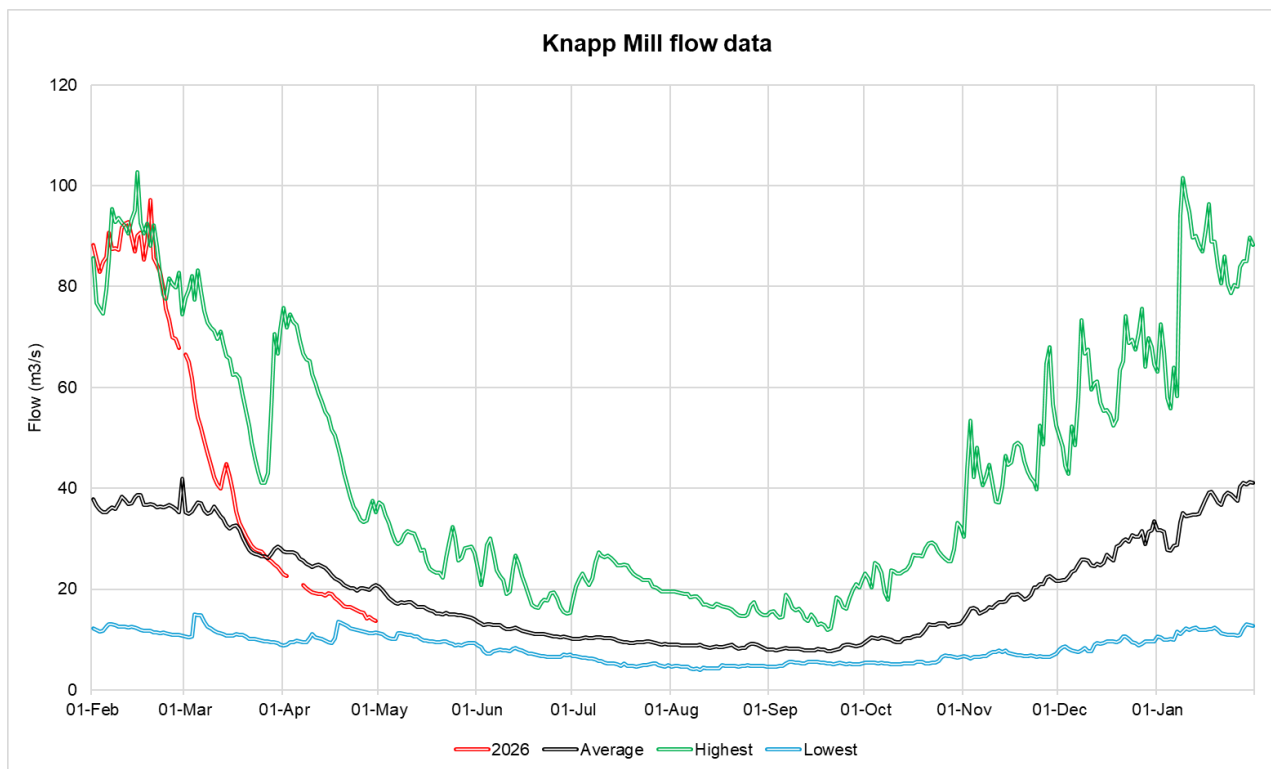


Graph 4 - Total upstream fish count through Knapp Mill for each year, beginning February 1st, as of April 30th (no valid data was available for 2013, 2014, 2016 and 2018). 2026 is in orange to highlight that the data from late April is missing.

The missing data for 2013, 2014, 2016, and 2018 is due to issues with the fish counters during these years that resulted in erroneously low counts being recorded. Therefore, data from these years is not included in any of the long-term averages for fish counts.

As graph 3 suggests, the three months of Quarter 1 have either seen record monthly highs or record lows (or at least close to a record low for April, given the uncertainty on the total). As December and January also experienced high fish numbers, Knapp Mill hasn't recorded a monthly total close to the long-term average since November. As a look ahead, 13 fish have been counted at the weir in the first 10 days of May which remains below average (although this doesn't include Turbine House data which can only be processed on a monthly basis).

Flow and Temperature

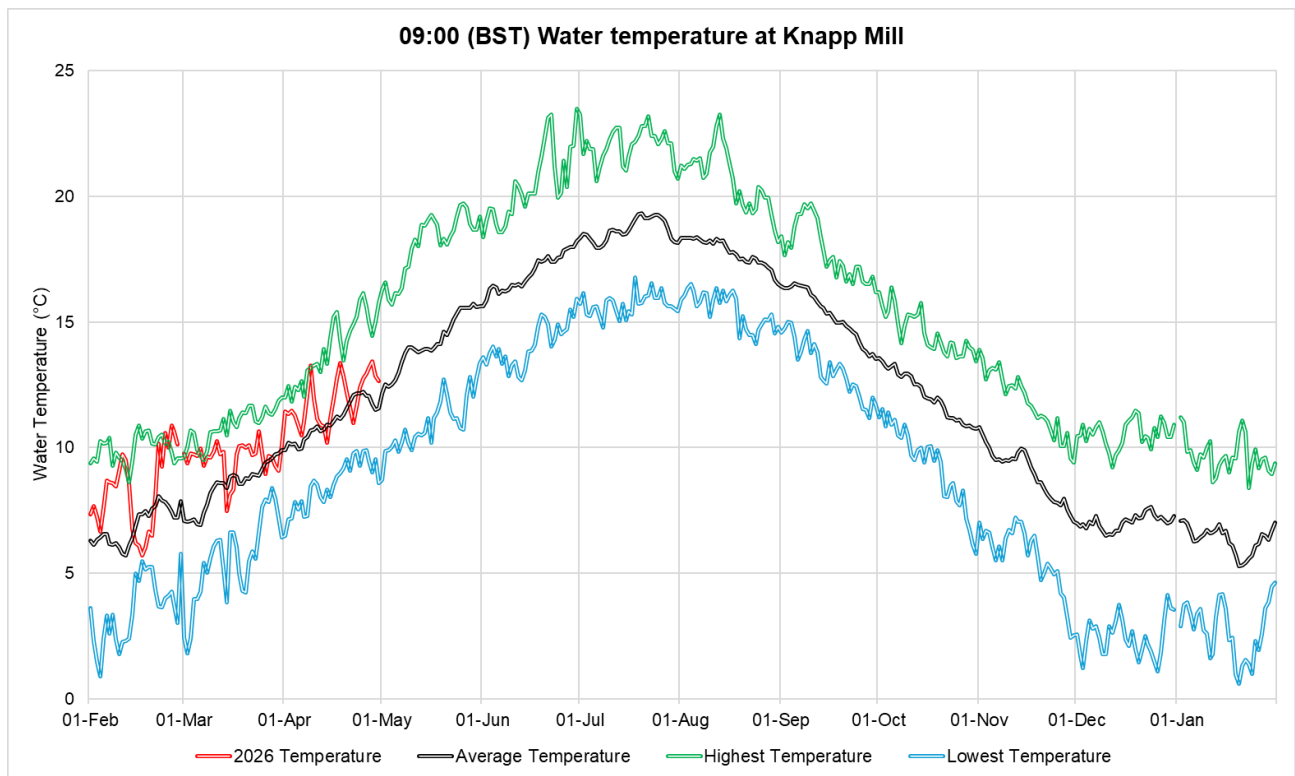


Graph 5 - A comparison of the long-term average flow data, as well as highest and lowest mean daily flow, for the period of 01/02/2006 – 31/01/2026, with the current year's flow data.

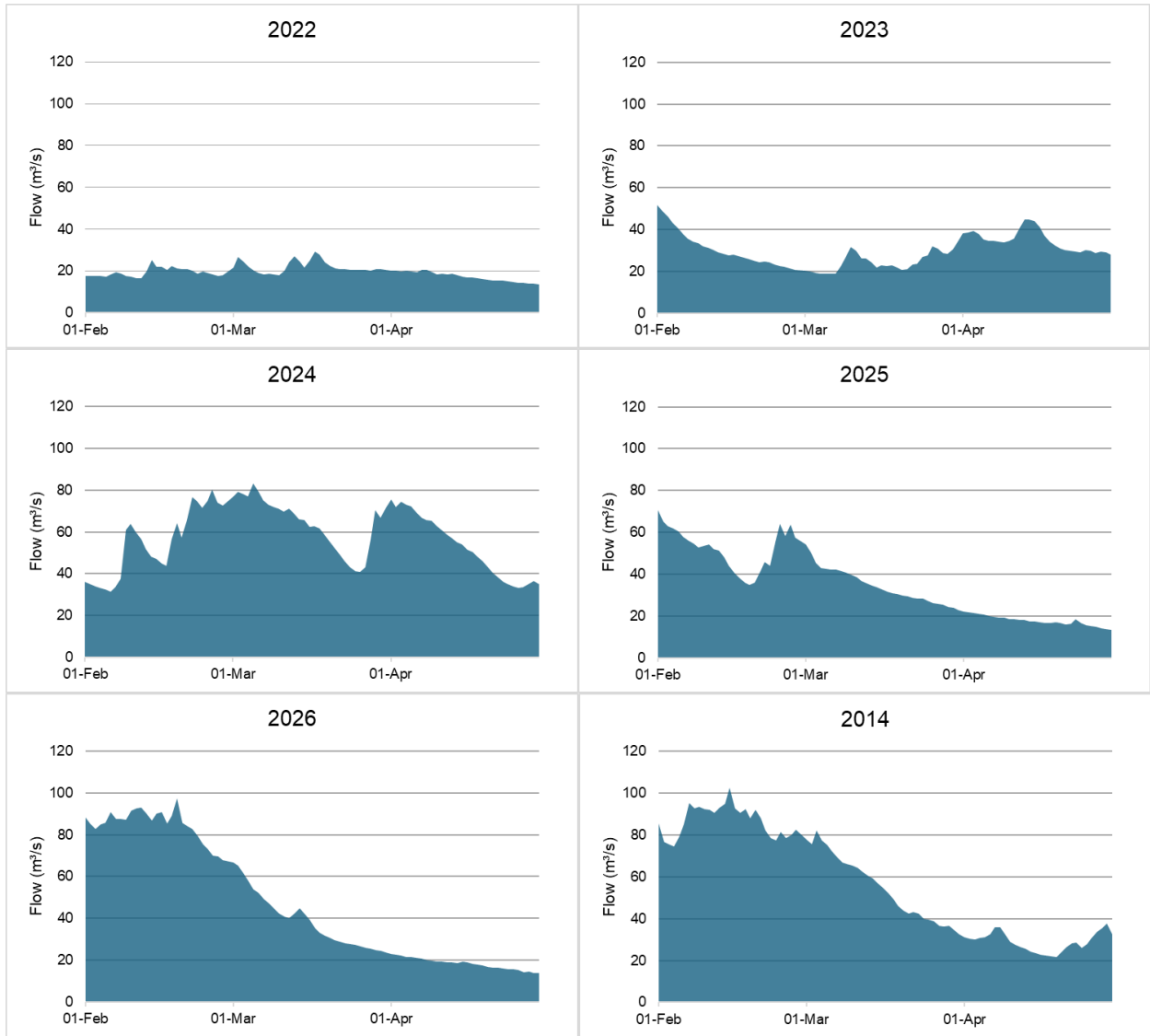
Despite the record high figures of February, the river flow at Knapp Mill has been consistently below the daily average since 27th March. With March and April in southern England both experiencing below average rainfall and above average sunshine, 2026 is following a similar trend to last spring. The timings that the weir hatches are closing this year very closely matches 2025.

Just for comparison, graph 7 illustrates the Knapp Mill flow during quarter 1 for the past five years, as well as 2014 for similar winter flows. The steep drop off in flow for 2026 is clear, as well as the degree of variability across the graphs. Looking back through the data for these months specifically, there doesn't appear to be a strong correlation between total flow and fish migration through the counters, nor fish movement through the counters being tied to any spikes in flow.

During quarter 1, the 09:00 water temperature set a record daily high on nine occasions and was above average on 73 of the 90 days.



Graph 6 - A comparison of the long-term average 09:00 water temperature data, as well as highest and lowest daily 09:00 water temperature (all from 01/02/2006 to 31/01/2026), with the current year's water temperature data.



Graph 7 - A comparison of river flow through the Avon at Knapp Mill during spring. 2014 is included as the only other recent year with such high February flows.

Gallery

Below is a collection of images taken from the counter cameras. Figure 2 offers a sense of scale for any images taken within the fish counters.



Figure 2 – Overhead view of the Turbine House (left) and Fish Pass (right). The distance between neighbouring electrodes, as indicated by each yellow line, is 45 cm.



Figure 3 – The first roach that the cameras have seen this year or last, at the bottom of the fish pass. 09/04/26.



Figure 4 – A collection of roach and dace that have spent much of April hanging around the downstream end of the fish pass. 14/06/25.

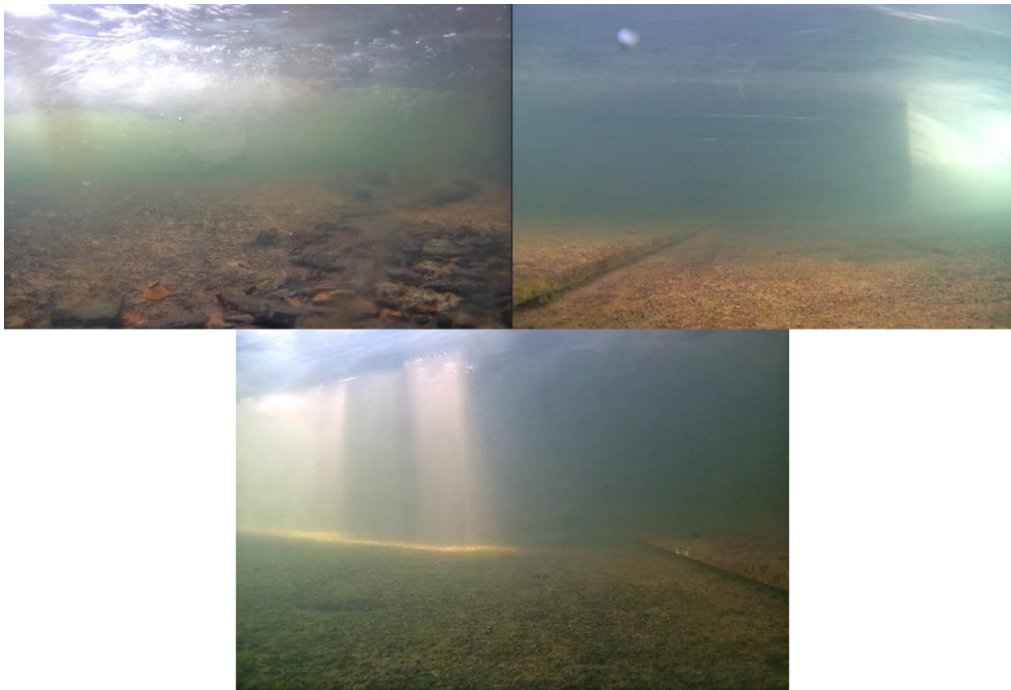


Figure 5 – Three of the new cameras installed at the weir. Top right faces channel 18 and the bottom is on channel 17. The top left image is from a camera positioned within an area of still water adjacent to channel 18 in the hope of seeing how fish are approaching the higher velocities of the counters.



Figure 6 – *This is cheating a bit to include a May fish, but it's only so we can see a salmonid in this report. The motion sensor at the Turbine House has picked up a few salmonids in the first week of May, so hopefully this month sees more activity. 05/05/26.*

For further information

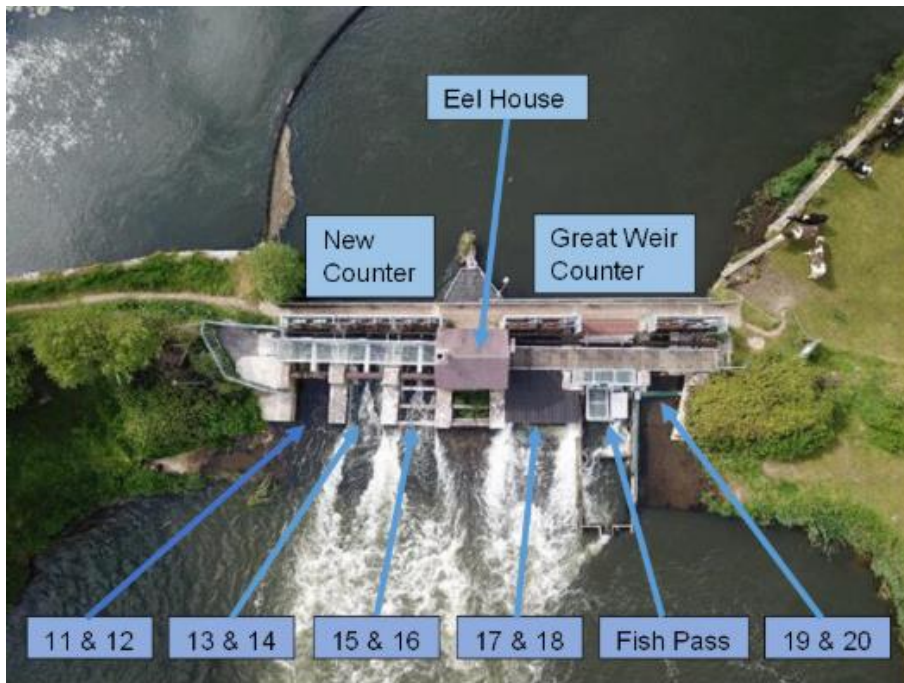
Contact: KnappMill@environment-agency.gov.uk



Route 1 – Turbine House
Open to fish movement throughout the year in all flow conditions.

Route 3 – Side Weir
This weir unfortunately has no fish counters and so an unrecorded number of fish may use it when the hatches open in high flows.

Route 2 – Great Weir
Majority of fish pass through this structure as it sits within the main channel. The fish pass is located here.



Great Weir showing the location of each channel.