RIVER TARRANT

Meeting with the Environment Agency

4 September 2026

STATUS	Agreed note, incorporating Environment Agency comments received 17 September 2026	
PRESENT	Akshay Sanghrajka	The Ferals
	Ben Bayer	Chair, River Tarrant Protection Society
	Charles Rangeley-Wilson	Representing the River Tarrant interest
	Christopher Greenwell	Environment Agency
	Matt Akers	Environment Agency
	Henry Quinney	Environment Agency

OVERALL SUMMARY

The meeting was positive and constructive. The most important point of common ground was that the discussion should move beyond arguing over which existing hydrological model is "right" or "wrong".

There was recognition that uncertainty remains about the nature, scale and geographical extent of the effects of public water supply abstraction on the River Tarrant. The parties discussed working towards a more detailed investigation capable of resolving that uncertainty through additional evidence, fieldwork and testing.

Christopher Greenwell accepted that abstraction has an effect on groundwater levels. The principal unresolved question is whether that effect is sufficiently significant to affect the river's formal hydrological status under WFD. The fact that the status is "high" is a blocker. He also raised the possibility that abstraction may not be the sole or principal cause of the observed drying and that the physical structure of the riverbed may be a contributory factor.

The meeting identified a number of potentially complementary avenues for investigation, including longer pumping tests, additional observation boreholes, examination of the riverbed and groundwater levels, ecological and geomorphological work, and investigation of how water could be redistributed between abstraction sources.

HYDROLOGICAL UNCERTAINTY AND POSSIBLE CAUSES

It was agreed that the immediate objective should not be to resolve the differences between the existing models through debate alone. Instead, the focus should be on identifying what further evidence would help us better understand the interaction between abstraction and the leakiness of the stream-bed.

Christopher's position was that public water supply abstraction has an effect, including causing groundwater levels to fall more rapidly than they otherwise would. However, the remaining question is whether that effect is large enough to change the WFD hydrological status.

Christopher also raised the possibility that the physical structure and permeability of the riverbed might be playing an important role, and that previous river-restoration works, including the removal of weirs, may have changed the river's hydraulics, storage and patterns of water loss.

This was discussed as a hypothesis requiring investigation rather than as an established conclusion.

Charles countered this argument by pointing out that RTPS is not disputing the increased leakiness, so much as arguing that the increased leakiness is caused by falling groundwater levels which are caused by increased abstraction.

MODELLING AND PUMPING TESTS

Christopher explained that a new chalk groundwater model is being developed.

Christopher suggested that, ideally, the existing short-duration pumping tests could be supplemented by substantially longer tests at selected abstraction sources, potentially lasting several months. Further observation boreholes might also be required to measure how pumping affects groundwater levels across the catchment.

The abstraction sources at Stubhampton, Shapwick and Black Lane were discussed. It was noted that Stubhampton had not been operating and that Shapwick had been operating at a reduced level. This led to discussion of the respective "zones of influence" of the three sources, that is, the areas within which pumping from each source may affect groundwater levels. Albeit the RTPS position is that the impact of abstraction radiates beyond the so-called "zones of influence", which are in fact simply zones of drawdown that are measurable in short-duration cut-off tests.

Wessex Water's position is understood to be that geological barriers prevent abstraction at Black Lane from affecting the Tarrant. Charles raised an alternative hypothesis: that the drawdown caused by Black Lane may extend outwards and lower the wider groundwater equilibrium on which the Tarrant depends. This is one of the matters that further investigation could be designed to test.

> ENVIRONMENT AGENCY COMMENT, 17 SEPTEMBER 2026 There was considerable discussion over groundwater modelling during the meeting, but I would like to reiterate the Environment Agency's position that further refinement at this time, even if it could be funded, is unlikely to provide the necessary clarity and reassurance to all parties involved in the discussion. We feel that no further action in this regard should be considered, until the new chalk basin model has been signed off and the backlog of modelling investigations cur-

rently required of the water company by the regulators are completed. Once this point has been reached, this can then be reconsidered to see whether we believe any further refinement can be justified.

AN INDEPENDENT INVESTIGATION

Matt asked what an "independent" investigation would mean in practical terms. It was suggested that independence need not necessarily mean that Wessex Water could not fund the work. Rather, the investigation should be undertaken at arm's length from the water company and, preferably, by specialists who were not responsible for producing the previous models.

The discussion indicated that a credible investigation could include:

- Longer-duration, source-specific pumping tests.
- Additional observation boreholes.
- Monitoring sufficient to distinguish the effects of individual abstraction sources.
- Testing of the possible hydraulic connection between Black Lane and the Tarrant catchment.
- Examination of groundwater levels relative to the riverbed.
- Investigation of riverbed structure, permeability and possible water losses.
- Consideration of ecological, fisheries and geomorphological evidence alongside hydrogeological modelling.
- Assessment of whether abstraction could be redistributed between sources without transferring environmental harm to another river or catchment.

It was suggested that core samples could be taken from the lower reaches of the Tarrant. These could help establish the composition and permeability of the riverbed and to what degree parts of the channel are "perched", meaning that the riverbed sits above the local groundwater level, allowing water to drain from the river into the underlying ground.

The Environment Agency's geomorphological specialist was reported to be interested in ground investigation to establish the relationship between the riverbed and the actual groundwater level.

WATER-RESOURCE PLANNING AND FUNDING ROUTES

There was discussion of whether Wessex Water's Water Resources Management Plan and future asset-management planning could provide a route for examining the redistribution of abstraction between sources and funding a fuller investigation.

It was recognised that the supply network is complex and cannot necessarily be micromanaged by directing individual day-to-day source choices. Any redistribution proposal would therefore need to be tested for operational practicality as well as environmental benefit.

There was also agreement on the importance of avoiding a solution that benefits the Tarrant merely by transferring abstraction pressure and environmental harm elsewhere.

The Chalk Stream Prioritisation Exercise was identified as another possible route through which the Tarrant could be considered. The potential for investigation or capital works through the Water Industry National Environment Programme (WINEP) was also discussed.

ECOLOGICAL AND COMMUNITY WORK

The conversation extended beyond abstraction to consider the ecology and morphology of the river and the practical measures that might improve its condition.

Possible partners included Wessex Rivers Trust, the Farming and Wildlife Advisory Group (FWAG), local landowners and community groups. This work could continue while the more substantial hydrological investigation and modelling programme is being developed.

Matt also raised the possibility of involving a PhD researcher or university team in studying the river. Charles has contacts at the University of Southampton, including Professor David Sear, who may be relevant to this possibility.

Charles offered to prepare a map or diagram showing how a more natural or "wild" River Tarrant might function. This could assist discussion about the river's morphology, historic modifications and potential restoration objectives.

TIMING

Christopher explained that the Environment Agency's capacity over approximately the next six months would be heavily affected by its response to the current drought conditions. He also suggested that the new groundwater model should first be completed and signed off.

In the meantime, the group can continue developing the community, ecological and geomorphological strands of the work and put the principal investigation proposals in writing.

NEXT STEPS AND ENVIRONMENT AGENCY RESPONSE

The following emerged as proposed next steps, subject to confirmation of responsibilities and resources. The Environment Agency's comments, received on 17 September 2026, are shown beneath each item. Its general comment on modelling appears under *Modelling and pumping tests*.

1. Record the meeting's conclusions and investigation proposals in writing.

   EA RESPONSE Agree.

2. Develop a clearer written scope for an independent investigation, including what independence would mean, the questions to be answered and the evidence required.

   EA RESPONSE See the Environment Agency's comment under *Modelling and pumping tests* above. We do not feel that this should be prioritised at this point. If though in the interim, the RTPS wishes to refine this suggestion, we would be happy to discuss it again at our next meeting.

3. Consider the feasibility of longer-duration pumping tests, further observation boreholes and source-specific monitoring at Stubhampton, Shapwick and Black Lane.

   EA RESPONSE This would probably be an integral part of any future refinement of the model, should that be deemed necessary, but there are risk and challenges associated with this, ignoring the funding element. As discussed in the meeting, longer duration pumping tests would provide greater confidence but may not be feasible for operational sources. In combination with any such test should they be agreed, it's likely that additional boreholes would also need to be constructed which adds considerably to time and expense. There is also a genuine risk that climatic conditions may not be favourable during the investigative period, as wet summers are likely to mask any impacts.

4. Clarify how the new groundwater model will represent and be validated for the River Tarrant catchment.

   EA RESPONSE When the model is signed off, and that looks like it may occur soon, this can be considered but as stated in the meeting, we have a considerable backlog of modelling work which is going to take the consultants at least 6 months to clear, before any new assessment or reviews can be considered.

5. Explore riverbed sampling and ground investigation in the lower Tarrant, including the relationship between riverbed levels, groundwater levels and possible losses through the bed.

   EA RESPONSE This is an interesting proposal from our hydrogeological colleagues, but we'll need to scope this out, so we can refine the concept and assess how much funding this might require (and where that might come from). We'll take this away as an action for us to investigate and then feedback when we know a little more.

6. Consider how abstraction-redistribution scenarios could be represented and tested through the Water Resources Management Plan or related water-company planning processes.

   EA RESPONSE I feel in this case, what we were suggesting, was that the RTPS and other interested parties, could take the opportunity to make representations to the water company during the WRMP developmental stage. This could focus on expressing concerns over the sources and their possible impact on the Tarrant, or you might wish to promote greater resilience between sources in the Stour catchment, which might then enable a different operating procedure in the summer.

7. Explore the Chalk Stream Prioritisation Exercise, WINEP and future asset-management planning as possible routes for investigation, funding or capital works.

   EA RESPONSE Agreed.

8. Continue community, ecological and geomorphological work with Wessex Rivers Trust, FWAG, landowners and other relevant partners.

   EA RESPONSE Action: Henry, Ben and Akshay to meet and discuss next steps for landowner engagement in the catchment. HQ to speak to the Catchment Partnership about further engagement with the RTPS.

9. Explore the potential for university or PhD involvement, including possible contact with Professor David Sear at the University of Southampton.

10. Charles to develop a map or diagram illustrating how a more natural River Tarrant might look and function.

    EA RESPONSE Charles offered to undertake this himself, but he also wondered if it might be handled as a PhD project. Either way, we feel that this would provide additional information that would be beneficial when considering restoration.

11. Sue to coordinate a follow-up meeting in approximately six months, provisionally in March or April 2027.

    EA RESPONSE There was some discussion on this, but it appeared as if a number of the attendees are likely to be fully committed in March, so we will aim for a follow up discussion in April.

CONCLUSION

The meeting represented a constructive step forward. Although no conclusion was reached about the precise extent to which abstraction is responsible for the Tarrant's condition, there was useful common ground: abstraction has an effect, important uncertainty remains, and additional investigation is justified.

The opportunity now is to convert that common ground into a defined programme of work, with clear questions, suitable field testing, appropriate independence, agreed responsibilities and a route by which the findings can influence future regulatory and water-resource decisions.