



5 September 2016

Comments by the Ouse & Adur Rivers Trust (OART) to Lewes District Council on the application for the creation of ponds (part retrospective) and the provision of associated buildings with a supervisory dwelling to service a fish farm producing caviar on land south of Chiltington House, Chiltington Lane, East Chiltington, East Sussex.

Reference: LW/16/0695

Alternative Reference: PP-05401897

There have been reports that OART supports this application. Those reports are inaccurate.

We have read through proposals for the creation of a caviar farm as above and we would like to make the following submission in respect of the application. This submission repeats some of the points made in our earlier submission in respect of the similar application, Reference: LW/16/0180.

Our main concern is that abstraction of water from the stream (known locally as Roman's Winterbourne, a tributary of Bevern Stream) will have adverse effects on the seasonal population of brown trout and sea trout that spawn in the stream during most winters when the stream is flowing. Roman's Winterbourne, as the name suggests, is a non-perennial stream and usually flows during the period late-December until April – although this can vary in wetter- or drier-than-average years. Nonetheless, the stream is valuable spawning water for both brown and sea trout; these usually appear in the stream in late December/early January and spawning occurs soon after. Despite the small size of the stream, some very large sea trout have been observed up to 5–6 kg in weight.

The offspring, which emerge from the gravel in February depending on temperature, must be able to exit the stream before dry back occurs. That they are able to do this is confirmed by the fact that brown/sea trout persistently return to the stream year after year if there is sufficient flow; all salmonid species in the UK possess a homing instinct that directs them to return to spawn in the stream where they hatched. At times when the stream does not possess sufficient flow, sea trout congregate in Bevern Stream below the confluence with Roman's Winterbourne often spawning just below the confluence when unable to gain access into the stream.

Although the stream remains dry during some winters, it provides essential spawning habitat for trout and sea trout in wet winters and a high survival rate for offspring due to the lack of aquatic predators. Last winter was wet enough to provide for reasonable flows and in mid-February two redds were identified during our routine surveys; these were

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located ~200 metres upstream of the site.

Our objection is that there is no minimum flow allowed for in the application and, as it stands, the applicant will be able to abstract whenever the stream is flowing. We suggest, instead, that a minimum flow of 2.5 litres per second should be imposed to provide for sufficient flow to safeguard both spawning activities and the survival of offspring.

A secondary concern relates to the applicant's proposed reliance on a reed bed system for water purification. Although the current application states that a "closed-loop" system will be in operation and that there will be no discharge into the stream, we believe that the setup is infeasible because there is no mention of any system for phosphorus removal - the reed bed system is supposed to deal only with high ammonia and low dissolved oxygen levels. None of the documents submitted mentions phosphate or phosphorus. Both sturgeon faeces and uneaten food will contribute to high phosphorus levels in the closed-loop system, resulting in eutrophic conditions and high algae levels. Without the means to strip out the phosphorus (not mentioned in his application) he will have no recourse but to tanker away large volumes of water on a regular basis and there appears to be no mention of this in the planning application. Bevern Stream already suffers from extraordinarily high levels of phosphate as shown by OART survey data since the 1990s.

Bevern Stream is one of the most important tributaries for sea trout in the River Ouse catchment. A reduction in recruitment of brown/sea trout could potentially impact on the WFD fish status, and hence overall WFD status, of Bevern Stream and conflict with the primary stated objectives of the 2nd WFD 6 year cycle, which is to ensure that there is no deterioration in status of WFD waterbodies during the period 2015–21.

On behalf of the Ouse & Adur Rivers Trust

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