

DECISION STATEMENT

ABSTRACTION/IMPOUNDMENT LICENCE APPLICATION(S)

S & A Soft Fruits Limited

Application number: NPS/WR/035191

Licence number: WA/055/0012/024

EA Area: West Midlands

Date of Application: 01 December 2021

Applicant details:

S & A Soft Fruits Limited, Brook Farm, Marden, Hereford, HR1 3ET

Summary of the proposal:

The Environment Agency has refused a transfer licence application from S & A Soft Fruits Limited for a “put and take” scheme on the River Lugg. The application was to discharge water from the Brierley Reservoir into the Brierley Cut, which confluences with the River Lugg 2 kilometres downstream. The water would have then been “re-abstracted” 16 kilometres downstream under licence WA/055/0012/011.

The “put and take” scheme would have only been operational when Hands Off Flow conditions on abstraction licence WA/055/0012/011 prevent abstraction directly from the River Lugg, i.e. it is a proposal to allow for continued abstraction whilst restrictions are in force on the existing licence. The water would have been used for trickle irrigation and storage for subsequent trickle irrigation at Brook Farm.

Source of supply:

Off-stream reservoir known as Brierley Reservoir.

Points of abstraction and quantities:

Abstraction point: SO 49401 56589

Discharge point: SO 49456 56601

285 cubic metres per hour

6,826 cubic metres per day

240,993 cubic metres per year

Instantaneous rate not exceeding 79 litres per second.

Means of abstraction:

Static pump.

Purpose of abstraction (abstraction only):

Transfer for the purpose of subsequent re-abstraction under licence serial number WA/055/0012/011.

Abstraction period (abstraction only):

From 01 April to 31 October inclusive.

Case history:

The applicant submitted a pre-application on 25 March 2021 and received response on 19 May 2021. The formal application was accepted by the Environment Agency on 01 December 2021 for a full abstraction licence. The licence type was changed on 12 July 2022 to a transfer licence. The application was advertised in the Hereford Times on 22 July 2022. On 30 June 2023 Natural England advised that the Agency refuses the application on the grounds that it is likely to result in an adverse effect on the River Lugg SSSI.

Justification of quantities:

A full licence was applied for a “put and take” scheme, and subsequently changed to a transfer licence, whereby water would be discharged from the Brierley Reservoir at Brierley Court Farm into the Brierley Cut to then be abstraction downstream from the River Lugg at the operators second site at Brook Farm under the licence WA/055/0012/011. This licence has a Hands off Flow (HoF) condition of 200 Megalitres per day as gauged on the River Lugg at Lugwardine gauging station. This transfer licence would have reduced the impact of the HoF condition on the business as they intended to transfer the water when the HoF condition was in force to allow continued abstraction under this licence. The licence WA/055/0012/011 authorised a daily abstraction volume of 4,320 cubic metres. The applicant undertook a hydrological study that found a discharge efficiency of 62.4 % between the discharge location and the “re-abstraction” point, therefore they applied for a daily volume of 6,826 cubic metres.

Resource assessment:

The source of the water in the reservoir comes from the River Arrow. The proposal would in no way draw more water from the waterbody as the reservoir fills naturally from high flows / flood events. Any impact from the proposal would be on the receiving watercourses of the Brierley Cut and the River Lugg in the Wye Abstraction Licensing Strategy (ALS).

Impact assessment of proposal:

The act of abstraction from the reservoir will not impact on water resources as it does not draw water from a source of supply as the reservoir fills naturally from flood flows from the Little Arrow. However, the impact of discharging large volumes of water into a small, periodically dry channel has the potential to cause geomorphology impacts such as changes to the sedimentation regime and increased scouring. Large influxes of water into the channel during periods of low flow when the scheme would be operational has the potential to flush out fish eggs, and changes to sedimentation regime has the potential to smother gravels where fish lay their eggs.

It is likely that the temperature of water stored in the reservoir would be higher than that of the receiving watercourses, which poses risks for the fish species

that use the watercourses to complete their lifecycle due to thermal stress, such as salmonids and European eel. Discharging warm, nutrient rich water into the Brierley Cut and subsequently into the River Lugg (a SSSI designated river) during periods when they would already be under stress has the potential to adversely impact dissolved oxygen levels and cause algae proliferation, thus potentially deteriorate water quality and adversely impact on species utilising the watercourse.

Phosphate levels are already an issue within the Wye catchment. The scheme has the potential to exacerbate issues with phosphate derived eutrophication from the reservoir discharge. Although the reservoir is currently filled with fluvial water, the fact that the water will have been stored for potentially significant periods of time is likely to have caused the quality to deteriorate. There are also concerns regarding the relationship between phosphate and increased sedimentation, as phosphate binds readily to sediments and can persist on riverbeds for prolonged periods of time.

These impacts would be likely to cause deterioration to the WFD Ecology and Geomorphological classifications of the local waterbody and impact on designated watercourses.

We do not have sufficient confidence in any mitigation measures to guarantee protection to the features and species to a degree where damage would not be reversible.

Statutory consultation:

The statutory water undertaker, Dwr Cymru Welsh Water, and the River Lugg Internal Drainage Board were consulted on 22 July 2022. No comments were received.

External representations:

No external representations were received.

Protected rights:

No protected rights were considered to be at risk by the proposal.

Conservation issues:

Natural England were consulted on the Habitats Regulation Assessments Stage 1 and 2 on 30 June 2023 and recommended that the application should be refused on the grounds that it is likely to result in an adverse effect on the interest features for which River Lugg SSSI is notified.

We have concluded that the proposal would be likely to result in damage to the River Lugg SSSI, and there would be likely significant effect upon the River Wye SAC (which is legally underpinned by the River Lugg SSSI), and Severn Estuary SAC, SPA, Ramsar with no suitable conditions identified to confidently avoid these impacts beyond scientific doubt.

Biodiversity and sustainable development:

We have concluded that the proposal would be likely to cause damage to ecology and geomorphology, alongside the likely impacts related to water quality. We have concluded that this proposal would not further conservation and enhancement of biodiversity. The principles of sustainable development

and biodiversity have been considered as a part of our refusal of this application.

The River Lugg SSSI condition is currently failing on Phosphate targets. Due to the ongoing issues with phosphate on the River Lugg and the River Wye, it cannot be concluded that granting this proposal would not cause further deterioration in the River Lugg Water Framework Directive (WFD) Physico-chemical status and may prevent the cycle 3 objective from being met. The River Lugg is a Nutrient Neutrality area whereby a project must be able to demonstrate that there will be no net increase in nutrients as a result of operations. It cannot be concluded that this project will produce no net increase in nutrients, namely phosphate, in the River Lugg.

The proposal would be likely to cause deterioration to the WFD Ecology and Geomorphological classifications due to excessive sedimentation and habitat modification as a result of altered flow dynamics impacting on local channel morphology, invertebrates, and coarse fish species.

Social and economic welfare of rural communities:

We have considered the potential impacts on the social and economic wellbeing of local communities in the rural area or the beauty or amenity of urban or rural areas through refusing this proposal.

This refusal has been deemed necessary for the purposes of protecting the environment, and, in particular, preventing the contribution that this scheme may have had to the potential adverse effects on to the River Lugg SSSI, River Wye SAC, and Severn Estuary SPA, SAC and Ramsar.

Costs/ Benefits:

Refusing the application represents a cost to the applicant through not having access to the water. The applicant will need to seek an alternative supply of water, which may incur additional costs and may not be available with the same quantity of water. We have taken this into account in our decision in accordance with Section 39 Environment Act 1995.

However, this refusal has been deemed necessary for the purposes of protecting the environment, in particular the potential adverse impacts that the proposal could have on the River Lugg SSSI, River Wye SAC, Severn Estuary SPA, SAC and Ramsar, and ensuring no deterioration under WFD.

Conclusion and recommendation:

It is recommended that the application is refused for the following reasons:

- Likely to result in damage to the River Lugg SSSI, and likely significant effect upon the River Wye SAC, and the Severn Estuary SAC, SPA, Ramsar with no suitable conditions identified to confidently avoid these impacts beyond scientific doubt.
- Likely to cause deterioration in WFD Physico-Chemical, Morphology and Ecological classifications, and prevent the cycle 3 objective of the Physico-Chemical classification being met.
- Potential to impact on local channel morphology, invertebrates, and coarse fish species, particularly in the Brierley Cut.

- Adverse effects of the proposal cannot be mitigated by licence conditions.

Contact the Environment Agency:

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