Impact of Ogbourne abstraction on water levels in the Og

The abstraction at Ogbourne is licensed at a maximum of 8 Ml/d. In practice, it has been used less than the full licensed amount, typically an average of about 4 Ml/d. Groundwater modelling studies (WS Atkins and John Lawson) have shown that the historic effect of abstraction has been to reduce river flows by:

- about 15 Ml/d when flows are naturally high in winter , say from 120 Ml/d to 105 Ml/d – this is equivalent to about 3 cm in the water level (see below flow-height curve for the Poulton gauging station)
- about 5 Ml/d when flows are at typical summer level, say from 30 to 25 Ml/d– this is equivalent to about 1.5 cm in river level
- about 2 Ml/d when flows are very low, say from 5 Ml/d to 3 Ml/d – this is equivalent to about 3 mm in river level

So, the effect of shutting off the Ogbourne abstraction will be to increase river water levels in the meadow by about 3 cm in winter and less than 1 cm in summer.