



Llanmiloe proposed groundwater Nitrate Vulnerable Zone

The groundwater methodology has highlighted the area around the groundwater quality network sampling point at Westmead Farm as a candidate for nitrate vulnerable zone (NVZ) designation.

We have used various sources of information (geological, hydrological and hydrogeological) to delineate the areas where data shows that water is polluted, and the land draining into polluted waters (as per the Nitrates Directive).

Following the previous designation process in 2012 the Farming Unions advised that where practical additional water samples should be collected from private water supplies and other water features within any proposed NVZ to improve the evidence base. For the Llanmiloe area we have engaged with the farms affected and have collected additional water samples during 2015 from several locations. Figure 1 shows the additional data collected. Several of these record nitrate concentrations above the 11.3mg/l as N threshold.

Figure 2 shows the proposed area for inclusion within the NVZ designation. The map has been designated on the following basis:

Southern boundary

The southern boundary of the proposed NVZ has been drawn around the village of Llanmiloe (as this will not be contributing a source of agricultural nitrate). It has also been drawn along the road as there is no groundwater data available for the area to the south to support extending it further at this time.

Eastern Boundary

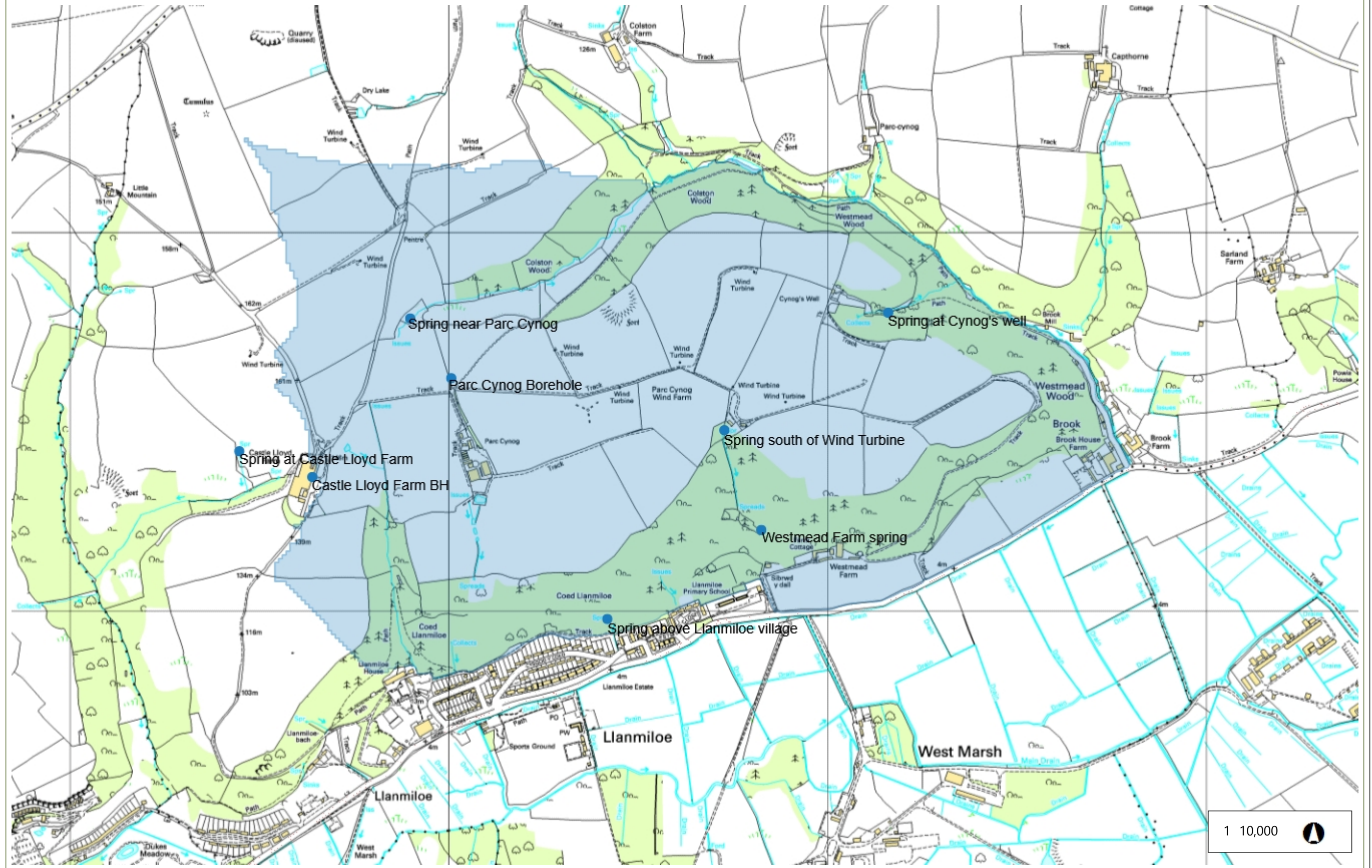
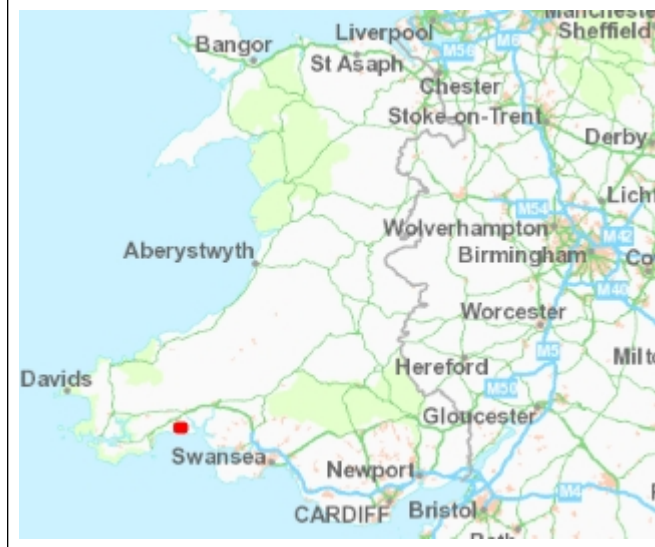
The surface water catchment has been used to define this boundary, and the stream through Colston Wood and Westmead Wood has been used as the eastern boundary. The area to the east has not been included at this time due to a lack of additional water quality information.

Western Boundary

The surface water catchment divide has been used to define the western boundary. This also reflects the additional water quality information from springs and borehole at Castle Lloyd Farm which recorded nitrate below the threshold of 11.3mg/l as N.

Northern boundary

Additional water quality information from the borehole at Parc Cynog has shown nitrate above the relevant threshold in all samples. In addition the spring to the north of Parc Cynog has also recorded exceedances. The boundary has been drawn to reflect the catchment of the stream running through Colston Wood which is fed by Parc Cynog spring.



Legend

Notes

0.5 0 0.25 0.5 Kilometers



British_National_Grid

1:10,000