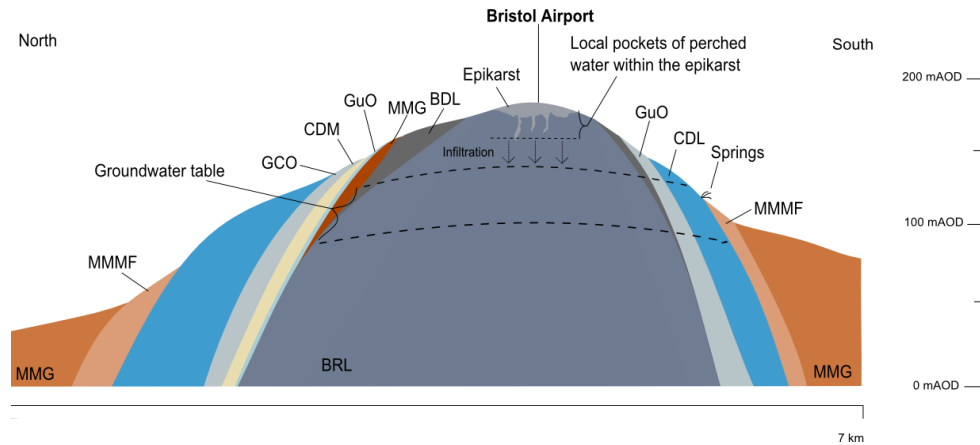




Bristol Airport Groundwater Monitoring & Compliance

11 April 2022

Site Overview from the Water Perspective



Hydrogeology Context

- The airport sits on high ground.
- Local geology is black rock limestone.
- Groundwater level 70-100m below ground.
- Areas of perched groundwater near surface



Surface Water Management

- Surface water drains to a number of soakaways.
- Protection measures maintained on each and covered by EA discharge permit.
- Ricardo conduct routine compliance sampling of perimeter boreholes.
- Results reported to the EA every 6 months (last meeting March 2022).



Groundwater Monitoring

- Perimeter boreholes located strategically to cover key risk areas.
- Boreholes sampled on a quarterly basis.
- Boreholes are purged of 3x their volume then allowed to recharge.
- Samples analysed at UKAS accredited laboratory.

Analysis Results

- Analysis suite includes indicators for sewage, heavy metals, hydrocarbons, de-icers and PFAS.
- Review against EQS and DW Standards.
- Low level PFAS results, all below DWS and similar to concentrations in wider catchment.
- PFAS assessment to be undertaken.

