

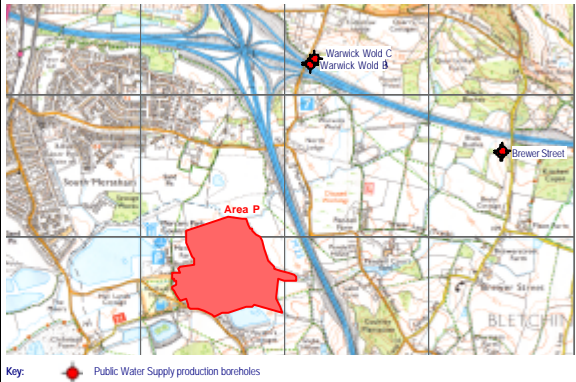


Water Resource Associates

A network of consultants in hydraulics, hydrology, groundwater & environmental issues

Project title: Hydrological Appraisal of Sand Extraction at Mercers Farm, Nutfield Marsh.

Summary: To support local residents group in questioning the viability of proposals in the Draft Surrey Minerals Plan for the period 2004-2016, and potential impact on public water supplies.

Client: Nutfield Marsh Residents Group	Financed by: Nutfield Marsh Residents Group
Period of assignment: Jan-May 2007	Location: Surrey [United Kingdom]
Project Value: £7,040	WRA services: £7,040
 <p>📍 View of Proposed Mercer Farm quarry site in 2007</p>	<p>Background</p> <p>In April 2006 Surrey County Council [SCC] presented their draft preferred option plan to meet aggregate and soft sand production target of 2.62 Mt/a for the period 2004 to 2016. This will supersede the 1993 Minerals Local Plan, which included 106 Proposed Mineral Zones [PMZ]. A 'sieving' approach was adopted by SCC to identify those PMZ suitable for inclusion in the new plan, thereby reducing the number of PMZ to 18 Preferred Areas.</p>
 <p>📍 Groundwater issuing below Grebe Lake in 2002</p>	<p>One of the preferred options, Area P, comprising PMZ 74 and 25 with a combined area of 58 ha, is situated at Mercers Farm within the Nutfield Marsh Planning Consent [NMPC] area east of Redhill. This site lies within the Green Belt and is a Site of Nature Conservation Importance [SNCI]: local residents are concerned that the planning process has not given due technical consideration to the options and consequences of further quarrying and waste management in the area.</p>
 <p>📍 Location of Study Area close to the M23- M25 Junction</p>	<p>Scope of work</p> <p>WRA's task was to carry out an appraisal of past and proposed quarrying activities in the Redhill area. The surface-groundwater regime of the Nutfield Mineral Planning Consent area is complex due to the extensive history of mineral workings in the area, in particular, for sand and Fullers Earth. The Surrey Minerals Plan [SMP] recognises that the hydrology and restoration of quarried areas are key issues in the selection of sites. At Nutfield, consideration was given to the potential impact on groundwater resources and possible contamination of the site. The potential hydrological impacts of the proposals for Nutfield Marsh are complex, and can only be properly quantified through further investigation, supported by a fully calibrated and verified groundwater model.</p>
<p>Results</p> <p>It was found that Sutton & East Surrey Water's groundwater source at Brewer Street would most likely be affected by the proposals, although contradictory mapping of EA source protection zones highlights the need for further evaluation, before the County Council includes Area P in the new Minerals Plan.</p>	

Project Number 000179

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