

OIL SHALE NEWS

GROUNDWATER FLOW MODEL OF THE WESTERN PART OF THE ESTONIAN OIL SHALE DEPOSIT

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Dynamic groundwater model was elaborated as a modern estimation method from the environmental and economical aspects while mine development or closure is planned. This method allows estimating waterflow directions and capacities, groundwater table elevations and pumping capacities for the planned mine site.

The research describes possibilities to estimate model accuracy using statistical values through the process of model calibration.

The case study of estimating water inflow into the working Estonia mine site from the closed Ahtme mine nearby and a mine dewatering process of a prospect mine were visualised. A scenario using an impermeable wall to reduce water inflow to the planned mine site was tested to show a possibility to minimise groundwater table cone of depression.

Full text: <http://digi.lib.ttu.ee/i/?492>