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3 An introduction to well and borehole design
3.1 Drilled wells; 3.1.1 General design principles; 3.1.2 Wells in crystalline aquifers; 3.1.3 Wells in consolidated aquifers; 3.1.4 Wells in unconsolidated aquifers; 3.1.5 Economic considerations in well design; 3.2 Hand-dug wells; 3.2.1 Design for yield; 3.2.2 Design for health; 3.3 Infiltration galleries; 3.4 Radial collector wells; 3.5 Observation boreholes; 3.6 Exploration boreholes; 3.7 Pump selection; 3.7.1 Vertical turbine pumps; 3.7.2 Electrical submersible pumps; 3.7.3 Motorized suction pumps; 3.7.4 Helical rotor pumps; 3.7.5 Hand pumps
4 Specific issues in well and borehole design
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5.7.1 Well and aquifer damage

Sommario/riassunto

Water Wells and Boreholes provides the necessary scientific background together with practical advice using global case studies, in an accessible easy to use style suitable for both postgraduates/researchers and practitioners. The book begins with an introduction to the type and uses of water wells from water supply and irrigation through to groundwater remediation. It then covers well siting detailing how to source data from geophysical surveys, remote sensing etc. Well design is then summarised to ensure the well is stable and cost-effective. The book ends with three chapters coveri
