



ANAHTAR KELİMELEER

- ✓ Groundwater
- ✓ Vulnerability
- ✓ Water quality
- ✓ DRASTIC
- ✓ GIS
- ✓ Bursa
- ✓ TURKEY

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GROUNDWATER VULNERABILITY ASSESSMENT TO CONTAMINATION USING GIS-BASED DRASTIC METHOD IN MUSTAFAKEMALPAŞA AND KARACABEY PLAIN, BURSA

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BURSA ULUDAĞ ÜNİVERSİTESİ

FEN BİLİMLERİ ENSTİTÜSÜ

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BURSA – TÜRKİYE



TEZ ÖZETİ

The groundwater vulnerability is assessed using the GIS-based DRASTIC method in the Mustafakemalpaşa and Karacabey plain, as well as applying the sensitivity analysis to calculate the effect of each used parameter on the resulting vulnerability map. Also, various relationships between the resulting vulnerability indices and the Nitrate concentration, TDS measurements, sulfate measurements, coliform bacteria measurements, and other water quality parameters were considered. Depends on the vulnerability assessment, 16.3% and 18.8% of the study area are under low and moderate vulnerability to contamination, respectively, while 39% has a high vulnerability, and about 25.5% of the study area can be specified as an area of very high groundwater vulnerability.

TEZ SONUÇLARININ UYGULAMA ALANLARI

Bursa municipality.

Bursa Su ve Kanalizasyon İdaresi – Water and Sewerage Administration, Bursa (BUSKI).

Devlet Su İşleri – State Hydraulic Works (DSİ).

Environmental policy-makers.

YAYINLAR

