



ANAHTAR KELIMELER

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

ILETIŞİM

E-POSTA:

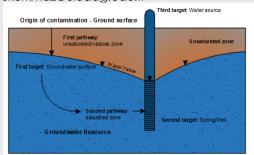
ahmadabuarra96@gmail.com 501826040@ogr.uludag.edu.tr

TEZ DANISMANI

TELEFON: 05322064960

E-POSTA:

skorkmaz@uludag.edu.tr



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

AHMAD SULAIMAN AHMAD ABU ARRA

0000-0001-8679-1752
BURSA ULUDAĞ ÜNİVERSİTESİ
FEN BİLİMLERİ ENSTİTÜSÜ
İNŞAAT MÜHENDİSLİĞİ ANABİLİM DALI
YÜKSEK LİSANS PROGRAMI

DANIŞMAN

Prof. DR. Serdar KORKMAZ 0000-0002-3393-1632 BURSA ULUDAĞ ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ İNŞAAT MÜHENDİSLİĞİ ANABİLİM DALI 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 Idaresi – Water and Sewerage Administration, Bursa (BUSKI).
Devlet Su İşleri – State Hydraulic Works (DSI).
Environmental policy-makers.

YAYINLAR