

عنوان مقاله:

(An Eco-environmental fragility model utilizing FAHP and GIS (case study: Büyük Menderes Basin

محل انتشار:

دومین کنگره بین المللی مهندسی عمران، معماری، مصالح ساختمانی و محیط زیست (سال: 1401)

تعداد صفحات اصل مقاله: 13

نویسندگان:

Hamid Jafarzadeh - Faculty of landscape architecture, Çukurova University

Süha Berberoğlu - Faculty of landscape architecture, Çukurova University

Tuba Kayrea - Faculty of landscape architecture, Çukurova University

خلاصه مقاله:

The Büyük Menderes Basin's (BMB) eco-environmental fragility was investigated using spatial data and the Fuzzy Analytic Hierarchy Process (FAHP) to determine the relative significance of factors and sub-criteria. Environmental fragility is the degree to which an eco-system can tolerate changes brought about by artificial or natural sources. The BMB's spatial fragility and sensitivity assessment will reveal sensitive and fragile areas, allowing humane actions that would otherwise harm the environment in these areas to be halted. Following a review of prior research, eight factors, including roads, residential areas, elevation, slope, streams, precipitation, temperature, and vegetation, were identified as key factors in evaluating the spatial fragility of eco-environmental fragility. A comparison matrix was constructed based on FAHP principles, and seven experts' interviews were used to determine their relative importance. The spatial layers for these criteria were created in GIS and their relative weights were applied, along with the Büyük Menderes Basin Eco-environmental fragility map. The findings indicate that there is no spatial concentration of the fragility level of BMB regions. Spatial majority, however, has a very low fragility level.

کلمات کلیدی:

Eco-environmental fragility, Ecological factors, Fuzzy Analytic Hierarchy Process (FAHP), Geographic Information System (GIS), Basin sustainability and Büyük Menderes Basin

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1566637>

