The study area located in the western part of the Tauride carbonate axis consist mainly of Mesozoic to Tertiary autochthonous and allochthonous rock assemblages, Plio-Quaternary volcanics and pyroclastic deposits. In this study, to determine of the hydrogeochemical features of drinking water system in Isparta and environs a great number of water samples was collected from total 46 locations. According to the hydrogeochemical analyses, the waters in the study area can be considered as CaMg-HCO₃ and Ca-HCO₃ exchange type waters. It is concluded that the results are comparable with national (Turkish Standards Institution – TS 266 2005) and international (World Health Organisation – WHO 2006, United States-Environmental Protection Agency – US EPA 2002 and European Union – EU 1998) drinking water standards. The results of hydrogeochemical analyses show that the Eğirdir Lake waters are dominated in drinking water system of Isparta. Nowadays, the high fluorine contents in drinking waters from Isparta and environs are reduced by mixing process with the waters of Eğirdir Lake so that the drinking waters of Isparta have standard fluorine values in some cases and have fluorine contents below standard values (<0.5 mg/l) in most cases. F- contents in waters below the standard value (<0.5 mg/l) may give rise to dental and medicine problems. Therefore, mixing operations for the drinking waters used in Isparta must be carried out very carefully.