

## Evaluation of Water Quality for the Kurtbogazi Dam Outlet and the Streams Feeding the Dam (Ankara, Turkey)

**Authors :** Gulsen Tozsin, Fatma Bakir, Cemil Acar, Ercument Koc

**Abstract :** Kurtbogazi Dam has gained special meaning for Ankara, Turkey for the last decade due to the rapid depletion of nearby resources of drinking water. In this study, the results of the analyses of Kurtbogazi Dam outlet water and the rivers flowing into the Kurtbogazi Dam were discussed for the period of last five years between 2008 and 2012. The quality of these surface water resources were evaluated in terms of pH, temperature, biochemical oxygen demand (BOD5), nitrate, phosphate and chlorine. They were classified according to the Council Directive (75/440/EEC). Moreover, the properties of these surface waters were assessed to determine the quality of water for drinking and irrigation purposes using Piper, US Salinity Laboratory and Wilcox diagrams. The results revealed that the quality of all the investigated water sources are generally at satisfactory level as surface water except for Pazar Stream in terms of ortho-phosphate and BOD5 concentration for 2008.

**Keywords :** Kurtbogazi dam, water quality assessment, Ankara water, water supply

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020