link; https://jurnal.umpar.ac.id/karajata/article/view/3490/2343

Analisis Debit Andalan Sub DAS Pucak Untuk Berbagai Kebutuhan Di Kabupaten Maros

Amiruddin ,Muzakkar Yasin,Riswal K,Amrullah Mansida

,

Mahasiswa Program Studi Teknik Pengairan, Universitas Muhammadiyah Makassar, Indonesia ,Dosen Program Studi Teknik Sipil, Universitas Hasanuddin , Indonesia *E-mail:amirbendungan@gmail.com

Abstract

.

The availability of water in the Pucak watershed is not always sufficient to meet all these needs simultaneously. This problem is exacerbated by climate change which causes changes in weather and erratic river flows. Climate uncertainty causes the weather to be unpredictable as it should be . This research aims to analyze the mainstay discharge of the Pucak Sub watershed to ensure sustainable water vailability. The analysis was carried out using daily discharge data for the last 10 years obtained from the nearest observation station. Data processing methods include the F.J Mock method and the Arithmetic method with certain reliability Q80%, Q90% and Q99%). The research results show that the availability of water in the pucak watershed for irrigation, raw water and hydroelectric power needs I s met every month except in September . In the F.J Mock method the reliable Q80% discharge is 44.05 m³/sec, the Q90% discharge is 36.08 m³/sec and the Q99% discharge is 33.66 m³/sec. Meanwhile, the reliable Arithmetic method of Q80% discharge is 27.92 m³/se cond. Q90% discharge is 21.96 m³/second and Q99% discharge is 16.64 m³/second. These discharges are sufficient to meet various needs, but there is the potential for water shortages at the peak of the dry season

Keywords

: Pucak sub watershed; Mainstay d ischarg e Water a vailability F.J Mock method