INTISARI

DAS sebagai sarana penyimpan dan pendistribusian air untuk pemanfaatan irigasi dan sebagainya perlu dikelola dengan baikdemi terjaganya ketersediaan dan kualitas air. Salah satu upaya pengelolaan DAS yakni melakukan kegiatan konservasi SDA.Analisis hidrologi menghasilkan informasi hidrologi yang mewakili kondisi DAS yang kemudian digunakan sebagai pendukung kegiatan konservasi SDA.

Informasi hidrologi yang dibutuhkan, antara lain curah hujan, debit banjir terukur yang diperoleh dari analisis debit *rating curve*, kemudian angkutan sedimen diperoleh melalui hasil olahan laboratorium dari pengambilan data sampel air di lokasi. ketersediaan air diperoleh dari pemodelan Mock dan debit andalan diperoleh dari *probability* debit terukur DAS.

Dari hasil analisis hidrologi, diperoleh nilai hujan bulanan rerata Sub DAS antara 2 mm dan 1323 mm. Hujan harian maksimum musim hujan rerata (2010-2014) berkisar antara 117,68 mm hingga 184,76 mm dan terjadi antara bulan November hingga Januari. Debit banjir dan angkutan sedimen maksimum tahunan berkisar antara 3,93 m^3/s hingga 74,21 m^3/s dan 0,1 g/s hingga 547,64 g/s. *Trend* hubungan debit aliran air dan debit angkutan sedimen menunjukkan indikasi dampak positif konservasi SDA, dimana laju angkutan sedimen cenderung turun serta ketersediaan air yang meningkat, namun debit andalan 80% relatif rendah yaitu sebesar 0,05 m^3/s sehingga peningkatan kinerja konservasi SDA perlu terus dilakukan.

Kata Kunci: Konservasi, debit andalan, angkutan sedimen.

ABSTRACT

Watershed's functions as a water storage, a distributor for irrigation activity, et cetera, need a good management so the availability and quality of its water can be guarded. One of watershed's management is watershed's conservation. A good and proper hydrological analysist will produce hydrological information that represent the actual condition of the watershed that can be used as a support for watershed's conservation activity.

Hydrological information that were needed such as rainfall was measured with *Poligon Thiessen* method, measured flood discharge was obtained from rating curve analysist, sediment transport was obtained from laboratory result from picking up water sample's data from a certain location.Water availability can be obtained from Mock modelling and calculation of dependable flow was obtained from watershed calculate flow probability.

From hydrological analysist, the average monthly rainfall value is between 2 mm − 1323 mm. the maximum daily rainfall value from average rain season (2010-2014) is between 117,68 mm − 184,76 mm thus happened from November to January. Flood discharge value is between 3,93 m^3/s - 74,21 m^3/s and maximum sediment transport value is between 0,1 g/s to 547,64 g/s. the relation between stream flow and sediment transport shows a positive trend indication for watershed's conservation where its sediment transport speed tends to decrease and the water availability tends to increase. But, the value of dependable flow ($Q_{80\%}$) is 0,05 m^3/s which is relatively low, so the increasing of watershed's conservation is need to be done continuously.

Keywords: Conservation, dependable flow, sediment transport.