

**PLANNING FOR CLEAN WATER NEEDS AT THE LAWU TIRTA  
PDAM MAGETAN REGENCY IN THE BRANCH SERVICE AREA 1  
FROM 2022 TO 2036**

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**ABSTRACT**

In the Magetan Regency area, at branch 1 PDAM service area, it was found that the problem of decreasing spring discharge and increasing demand for clean water from the community and the absence of planning for the next 15 years based on general social networks, special social networks, 2A households, 2B households, agencies government, small business, big trade. The purpose of this study is to determine the need for clean water for residents in the service area of Branch 1 PDAM Lawu Tirta, Magetan Regency until 2036.

This research method uses random sampling method on secondary data from PDAM. The type of research is descriptive. The sample population is 42,486 people who have been served using the results of a survey on the use of clean water, 225 houses in 15 villages that have been fed by the PDAM network.

The results of the analysis of water needs from all domestic networks (Household 2A) and non-domestic (General Social, Special Social, Household 2B, Government Agencies, Small Commerce, Large Commerce) for the next 15 years (year 2022-2036) obtained the results the discharge of 261.45 liters/second from the initial available discharge in 2021, which is 193.93 liters/second, is only able to serve 95% of the clean water needs of the population in the branch I service area for 2036, experiencing a debit shortage of 67.52 liters/second so that PDAM Lawu Tirta The service area of Branch I, Magetan Regency can add a discharge of 67.52 liters/second to meet water needs in the next 15 years

To overcome this problem, the steps that must be taken are efficiency in the use of clean water at home and in public places, reducing the level of leakage, maintaining existing springs, looking for new springs that can be utilized, and perhaps building reservoirs.

Key word : Discharge, Water Needs, Leakage