STUDY ON ANALYSIS OF WATER LOSS IN IRRIGATION CANALS
IN THE IRRIGATION WAY NEGARA RATU

By

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ABSTRACT

The effectiveness of irrigation depends greatly of the availability of water or discharge water on irrigation channels. The reduced water discharge that occurs as a result of the loss of water in the irrigation channels, either in part or in whole, is certain it will negatively impact the performance of irrigation systems. Given the bad impact of decreased discharge water on irrigation channels, the authors are interested in doing an analysis of the water loss in irrigation channels. As the object of case studies this study, the author Selects The Irrigation Way Negara Ratu.

The purpose of this research is to know the magnitude of volume and discharge water irrigation channels lost on primary, secondary and tertiary Irrigation Area in the Way Negara Ratu, at once to find out the factors that led to the loss of water in the irrigation channels.

Method to be used in estimating water loses in irrigation channels is velocity area method, that is to measure the magnitude of inflow and outflow of water supply in an irrigation channel segment. The next step is to measure the water loses volume during a certain period of time to determine the total amount of water loses per square meter.

Water loss in irrigation channels Way Negara Ratu of South Lampung district in Primary channels (BNR BNR I-III; BNR BNR IV and III-IV-V BNR BNR) lost an average of 27.8206% and on the secondary channel (BBS BBS IV-Va; BBS BBS V and Va-BBS BBS V-VI) water loss on average by 19.7035%. Whereas the limit water loss in irrigation networks, namely between 5%-10%. The main factor causing the occurrence of water loss in irrigation channels Way South Lampung Regency Queen Country due to damage to the channel causing the leakage.

Keywords: irrigation Network, water loss, water discharge.