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THE FLOW OF STREAMS.

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In any undertaking which involves the utilization of surface water supplies it is of prime importance to determine the volume which may be expected to flow from a given area of watershed, and particularly the portion of that volume which may be made available for the purpose in view.

The rate of discharge of a stream for different months, seasons and years varies widely, because it is dependent on many extremely variable conditions, whose changes have often no apparent relation to each other. If a constant daily supply of water is required, only a small part of the total flow can be utilized; the rest must run to waste. It may be practicable to increase this minimum natural flow considerably by artificial means, and so add proportionately to the supplying capacity of the watershed; or it may be that the nature of the demand for water is compatible with occasional, temporary diminution in the supply; or it will perhaps be advantageous to plan for a minimum regular demand considerably higher than can be provided by the stream at all times, and to arrange that the deficiencies, when they occur, may be supplied from some separate source. In any case, no matter for what purpose the water may be