



Optimum Operating Policies
for
Multiple Reservoir Systems

by

P. Crawley, B.E. (Hons)

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Statement of Originality

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university and that, to my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the text. I consent to the thesis being made available for photocopying and loan if accepted for the award of the degree.

Philip Crawley

Date 20/4/90

Synopsis

Using the Adelaide system as a case study, this research work examines the use of linear programming as an aid in the identification of optimum operating policies for water supply headworks systems. Such policies are aimed at achieving maximum yield for a given level of reliability. In systems where a large fraction of the supply is pumped a further objective is to minimise pumping cost.

The results obtained for the Adelaide system indicate that significant savings in pumping costs can be achieved by the use of linear programming. In systems with little pumping it is expected that an increased system yield can be achieved.

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