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A MATHEMATICAL MODEL STUDY TO

FORECAST INFLOW TO

SENANAYAKE SAMUDRA

By

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A Dissertation submitted in partial fulfilment of the Requirements
for the Degree of Master of Engineering.

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ACKNOWLEDGEMENT

I wish to express my sincere gratitude to all those who assisted me in completing this project with much success. Particular mention has essentially to be made on

- * Staff of the University of Moratuwa, the Vice Chancellor, the Dean of the faculty of Engineering, the head of the Civil Engineering Department, course co-ordinator, Dr. C. Kariyawasam who had spent his valuable time on this project.
- * Mr. N. Kumarasamy, Senior Deputy Director of the Irrigation Department.
- * Mr. N. Madusuthanan, Deputy Director, Irrigation Department who granted permission to use the computer in his division for the water balance studies and his staff whose assistance was invaluable in developing the computer program.
- * Executive Engineer, Bibile Highways Department, Superintendent, Adawatte Tea Estate, Agriculture Inspector Agrarian Service Centre Dambagalla and Irrigation Engineer Bibile and his staff for supplying rainfall Data.
- * Staff of the Meteorological Department for helping to collect the rainfall data.
- * Director of Irrigation, Deputy Directors of Irrigation Department and all other friends who gave their fullest co-operation to complete this report successfully.

 University of Moratuwa, Sri Lanka.
This Dissertation has not been previously presented
in whole or part, to any University or Institution
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ABSTRACT

The Objective of this Study is to develop a Mathematical Model to Forecast Inflows to Senanayake Samudra, given the rainfall in its Catchment. This forecast can effectively be used in establishing the reservoir operating criteria. The Model is a self cleansing one, which will modify its basic parameters as new data are fed in.

The Water Balance Equation is used to develop the Model.

Original plan was to collect the rainfall data for the past thirty years of all the rainfall stations within and adjoining the catchment and characteristics of the basin. However the useful rainfall data were available only for the past five years.

Hence the Monthly Model and the Weekly Model were developed with the available data.



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