

WORKSHOP
ON
GROUND WATER MODELLING
TYSON - WEBER MODEL

18-22 NOVEMBER, 1985



NATIONAL INSTITUTE OF HYDROLOGY
ROORKEE

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WORKSHOP ON GROUND WATER MODELLING TYSON-WEBER MODEL
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The workshop is intended to impart the training for the use of Tyson Weber Model for the field engineers who are associated with the problem of regional aquifer simulation and who have basic knowledge in computer programming.

The institute developed a Finite Difference Tyson-Weber Model for aquifer simulation studies and it was used and tested for a field problem successfully. It is intended to transfer the expertise thus obtained through this workshop. The subject material will be presented through lectures, tutorials and practicals (involving use of computer) and the main emphasis will be on the transfer of know-how related to this technique. The lectures will impart a fairly comprehensive knowledge of basic principles and relevant details of the technique and will be supplemented by necessary tutorials and computer work to illustrate the application to the field problems. It is expected that after attending the workshop the participants will be adequately prepared to effectively apply the technique to the field problems.

COURSE CONTENTS

- i) Introduction
- ii) Objectives of Study
- iii) Ground Water Management problems
- iv) Ground Water balance - hydrologic balance, land use balance, component of ground water balance, stress period and time interval

- v) Computer based models-basic concepts, physical features, modelling concepts and capabilities, mathematical basis, and model capabilities
- vi) Physical system and mathematical simulation-system processes to be modified, mathematical equations, finite difference approximation, modelling approaches and basic concepts to numerical solution
- vii) Tyson Weber Model Discretization of the area, boundary conditions, initial conditions and time step
- viii) Solution technique
- ix) Preparation of data
- x) Fortran Program
- xi) VAX-Utilities and Commands

The following officers would be delivering lectures and conducting tutorials, computer and video tape sessions:

Dr. G.C. Mishra	Scientist F
Dr. P.V. Seethapathi	Scientist E
Dr. Deepak Kashyap	Reader
Sri A.K. Sikka	Scientist C
Sri S.K. Jain	Scientist B
Mrs Deepa Karawada	Scientist B