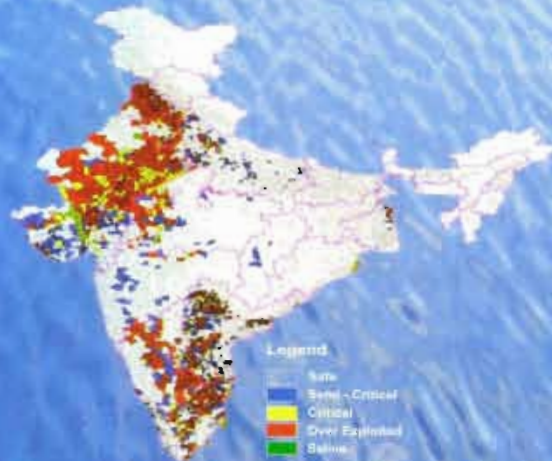




WORKSHOP ON GROUND WATER RESOURCES ESTIMATION



Organised by :
CENTRAL GROUND WATER BOARD
STATE UNIT OFFICE DELHI
MINISTRY OF WATER RESOURCES
GOVERNMENT OF INDIA
NEW DELHI

In association with :
INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI

February 23-24, 2010

PARTNERS :



Central Ground Water Board (CGWB) is the national apex organization dealing in ground water in the country. The mandate of CGWB includes ground water resources assessment. CGWB plays an active role in formulation of Ground Water Assessment Methodology being used by the States for ground water resources estimation.



Indian Institute of Technology Delhi is one of the fifteen Institutes of Technology created as centres of excellence for higher training, research and development in science, engineering and technology in India. The Civil Engineering Department offers courses dealing with groundwater hydrology, groundwater flow modeling, groundwater pollution modeling and groundwater resources management at undergraduate and postgraduate levels. The faculties and students of the department carry out studies on various aspects of ground water resources. The department also has interaction with other departments and institutions for collaborative research studies in these areas.

CONCEPT :

Groundwater use is of fundamental importance to meet the rapidly expanding agricultural, domestic and industrial water requirements in the country. Quantification of ground water resource which is available for exploitation is thus a pre-requisite for efficient and sustainable ground water resource management. The National Water Policy, 2002 also stresses the need for periodical re-assessment of the ground water potential on a scientific basis, taking into consideration of the quality of the water available and economic viability of its extraction.

The challenges in the field of ground water resource estimation has ushered various organizations including Central and State Govt. Agencies and Research & Academic Institutes to take up special projects/ R&D studies in this field which form the base for formulation of a unified methodology for estimation of the ground water resources by the states. There is a need to assimilate the results of recent research activities in the field of ground water resources estimation for further refinements in the assessment methodology and parameter norms. With this objective in view, a Workshop will be organized at New Delhi to discuss the current issues and R&D studies on ground water estimation. The deliberations of the workshop on ground water estimation would help in -

- providing an exposure to the studies on applications of various methodologies for ground water resources assessment being undertaken in various parts of the country.
- review of the existing methodology of ground water resources assessment used by the CGWB & State Governments.
- generation of database on parameter estimations used in resources assessment.
- widening the scope for application of new and alternate methods of resources assessment.
- ushering studies on assessment of additional sources of ground water resources like spring discharge, deeper aquifers etc.

Focal Theme

The focal theme of the Workshop is Ground Water Resources Estimation. Technical papers on the following sub-themes are invited.

- **Review of Ground Water Resources Estimation Methodology**
 - Existing methodology (GEC -1997)
 - Comparison & applicability of various methods

➤ **Estimation techniques for Ground Water Recharge**

- WLF method
- Tracer techniques
- Base flow separation method
- Soil moisture balance method
- Numerical ground water modeling technique
- Remote sensing & GIS
- Gravity Recovery & Climate Experiment (GRACE) Mission

➤ **Ground Water Recharge from various sources**

- Rainfall recharge
- Canal seepage
- Return flow from irrigation
- Water conservation structures
- Tanks, ponds & water bodies
- Surface - ground water interaction
- Spring discharge
- Assessment of deeper aquifers

➤ **Recharge parameter estimation**

- Specific yield
- Rainfall recharge factor
- Canal seepage factor
- Return flow factor

➤ **Discharge parameter estimation**

- Ground water draft
- Evapo-transpiration
- Base flow component

➤ **Hydro-fracturing**

- Techniques
- Equipment
- Case studies
- Environmental issues

Call for papers :

Full length papers of about 10 pages should reach to the organizers latest by 5th February, 2010. Submission of an article will be held to imply that it has not been previously published and is not under consideration for publication elsewhere. Manuscripts should be typed double-spaced in Times New Roman font size 12 on one side of A4 size sheet. It should have following broad sub-sections - Title, abstract, keywords, main text including figures/plates, tables etc., acknowledgement, references. The pages of the manuscript should be numbered consecutively, starting with the title page and through the text, reference list, tables

and figure legends. Along with the hard copy of the paper, the soft copies of the entire document to be mailed in the following e-mails:

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akeshari@hotmail.com

Selected papers from the Workshop are proposed to be published in a reputed International/ National Journal / Book form.

Address for communication :

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Date & Venue :

February 23 and 24, 2010
Indian Institute of Technology Delhi,
Hauz Khas, New Delhi

Registration:

There is no registration fee for the participants. However, TA/DA, if any has to be borne by the nominating organizations/agencies.



Registration Form
WORKSHOP ON

GROUND WATER RESOURCES ESTIMATION

February 23 - 24, 2010

1. Name :
2. Designation :
3. Affiliation :
(Department/Organization/institute) :
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4. Mailing Address :
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5. Telephone/Mobile No. :
6. e mail id :
7. Remarks, if any :
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Place :

Date :

Signature