भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग
केन्द्रीय जल आयोग
प्रशिक्षण निदेशालय

Government of India
Ministry of Jal Shakti
Department of WR, RD&GR
Central Water Commission
Training Directorate

परिपत्र/Circular

विषय: ***Training Workshop on* Hydrologic Unit Model for InDia (HUMID) *(A Web Enabled Platform for Hydrologic Modelling of Indian River Basins) to be held on 01-02 December, 2022 at IIT Madras*-Reg.**

Department of Civil Engineering, IIT Madras and NRSC, ISRO Jointly organizing a two day *Training Workshop on* **"Hydrologic Unit Model for InDia" (HUMID)** *(A Web Enabled Platform for Hydrologic Modelling of Indian River Basins) on* ***01-02 December, 2022 at IIT Madras.*** *The details of the programme is enclosed herewith.*

It is requested that interested officers may forward their nomination to this office with the approval of the concerned Member/Chief Engineer(HRM) in respect of HRM Unit/Chief Engineer(NWA) in respect of NWA Officers, **Latest by 23.11.2022.**

Nominations received after the above date may not be considered.

संलग्नक: यथोक्त

Sd/- 20.11.2022
(वेंकटेश्वर्लु ई।)
उप-निदेशक(प्रशिक्षण)

प्रतिलिपि सूचनार्थ प्रेषित:

1. PPS to Chairman, CWC.
2. PPS to Member (RM/WP&P/D&R), CWC
3. All Chief Engineers, CWC
4. Director, RMC/WP&PC/D&RC, CWC
5 CWC Website/E-Office Notice Board

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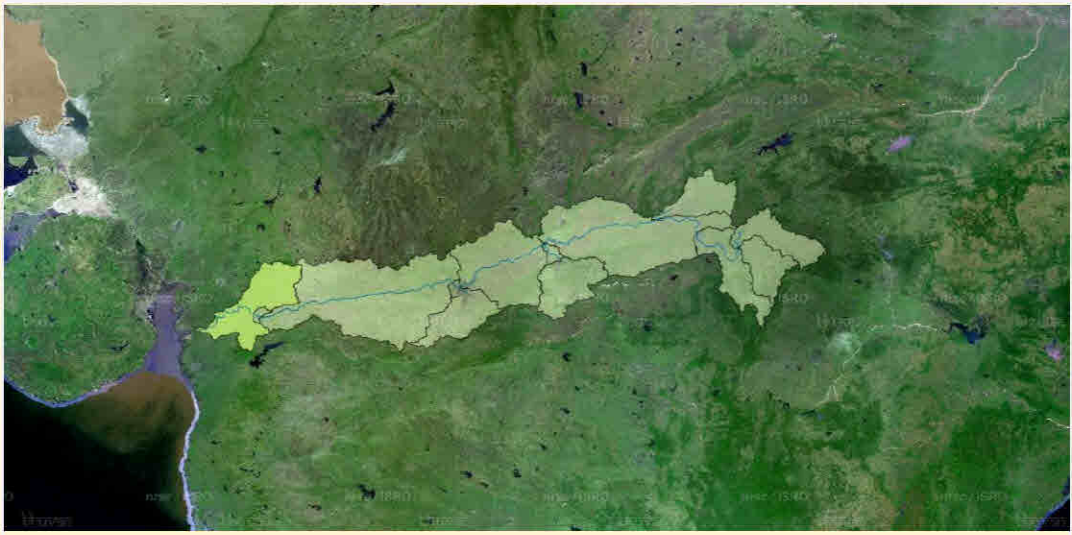

Training Workshop
on
Hydrologic Unit Model for InDia (HUMID)
(A Web Enabled Platform for Hydrologic Modelling of Indian River Basins)

Jointly Organised by

National Remote Sensing Centre
Indian Space Research Organisation

Department of Civil Engineering
Indian Institute of Technology-Madras

National Hydrology Project

1 - 2 December, 2022
IIT-Madras, Chennai

Training Workshop on Hydrologic Model for InDia (HUMID)

Background

Hydrologic models are simplified, conceptual representations of hydrologic processes which aids in understanding, predicting, and managing water resources. Various geospatial datasets and field data are used to ensure distributed parameterization of hydrologic models. Using these datasets demands the technical expertise, time, and infrastructure for processing. Due to these constraints, hydrologic model application and utilization studies get limited to a few user communities in the country. Also, in time-bound studies, the time spent by users in model data preparations restricts the time for analysis of model outputs.

To overcome this limitation in hydrologic modelling, IIT-Madras and NRSC jointly developed **Hydrologic Unit Model for InDia (HUMID)** under National Hydrology Project (NHP). HUMID is a web-based hydrologic modeling platform for the Indian Water Resources community. The system uses Soil and Water Assessment Tool (SWAT) as its core hydrologic model.

The first version of the system was launched on 5th July 2022 by the Secretary, DoWR, RD & GR, Ministry of Jal Shakti. For familiarisation and capacity building of the HUMID system, a series of regional workshops are planned for implementing agencies of the National Hydrology Project. In view of this, it is proposed to conduct the first workshop of the series on 1st & 2nd of December 2022 at **Department of Civil Engineering, IIT-Madras**.

Target Audience

Engineers, managers, decision makers working in State and Central Implementing Agencies under NHP from Southern India States.

Registration

There is ***no registration fee*** for workshop. Interested candidates may register through https://nhp.mowr.gov.in. ***Last Date:*** 25th November 2022.

Accommodation

Arrangements for accommodation for the participants shall be made.

Training Workshop on Hydrologic Model for InDia (HUMID)

About HUMID

The Hydrologic Unit Model for InDia (HUMID) is a web-based hydrologic modeling platform that uses SWAT as its core hydrologic model. The HUMID system has calibrated SWAT model frameworks for selected basins of India. The model frameworks are pre-defined, with soil, land cover, topography, and crop and water management practices derived from Indian data sets.

SWAT model datasets are available in three hydrologic unit scales: sub-basin (4000-10000 sqkm), watershed (500-1000 sqkm), and sub-watershed (50-100 sqkm). The user can select the scale based on the intended application of model outputs. HUMID substantially augments the usability of the SWAT model, as the time involved in input data preparation, is minimized, and the system facilitates multi-scenario runs at ease.

Why HUMID?

- ❑ No Efforts required for Data Collection and Pre-processing
- ❑ Download and Installation of ArcSWAT/QSWAT not required
- ❑ Easy Customization of Model Parameters
- ❑ Faster Model Run
- ❑ Graphical Demonstration of Results
- ❑ Remote Access to Model setup and results
- ❑ Choice of Spatial Resolutions

https://bhuvan.nrsc.gov.in/humid/

Training Workshop on Hydrologic Model for InDia (HUMID)

Tentative Schedule

Date	Time	Course Content
1-Dec-2022	10:00 am - 11:00 am	Inaugural Session
	11:30 am - 1:00 pm	Introduction to SWAT
	2:00 pm - 3:30 pm	HUMID - Introduction and Demonstration
	4:00 pm - 5:30 pm	**Hands on Session** - HUMID Default Project Setup Multiple Scenarios
2-Dec-2022	9:30 am - 11:00 am	**Hands on Session** - HUMID Customised Tool 1. Climate Variation 2. Land Use Land Cover Change
	11:30 am - 1:00 pm	**Hands on Session** - Self Exercise
	2:00 pm - 3:30 pm	**Hands on Session** - Self Exercise
	3:30 pm - 4:00 pm	Feedback Session

Computer labs with internet connection will be arranged for the hands on session. Wi-Fi connection will be made available to participants who prefer working on their laptops.

Contact

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