

भारत सरकार
केंद्रीय जल आयोग
जल विज्ञान (मध्य) निदेशालय
सप्तम तल(दक्षिण), सेवा भवन रामकृष्ण पुरम, नई दिल्ली -110066
दूरभाष: 011-29583525 ईमेल: hydcent@nic.in

Lt No. T-980119/22/2021-HYD(C)

Date: 12 /07/2022

Office Memorandum

Subject: Physical based Mathematical Modelling for Estimation of Sediment Rate and Sediment Transport in Seven (7) River Basins- Training #5 & #6 –Regarding

Approval of the Chairman, CWC is hereby conveyed in respect of the following officers for their participation in "Data processing and database management (GIS-based web application & ISMIS), Modelling and Morphological analysis revision - Theory and practical" under the project "Physical based Mathematical Modelling for estimation of Sediment Rate and Sediment Transport in Seven River Basins" to be conducted by the Consultant M/s Haskoning DHV Consulting Pvt Ltd during 25th - 29th July 2022 (10 A.M to 04:00 P.M) & 22nd - 26th August 2022 in 2nd Floor, Library Building, CWC, New Delhi.

S.N	Name	Designation
1.	Ms Shachi Jain	DD, Instrumentation
2.	Sh Shobhit Chandra Misra	DD, HYD(N) Dte
3.	Sh Gaurav Singhai	DD, HYD(NE) Dte
4.	Ms Chetna	DD, HYD (C) Dte
5.	Sh Akshat Jain	DD, HYD(DSR) Dte.
6.	Sh Rakesh Kumar Gupta	DD, RDC-II
7.	Sh Manoj Kumar	DD, Morphology Dte
8.	Sh Altaf Hussain	DD, RDC-I
9.	Sh Ankit Kumar	DD, FE&SA
10.	Ms Payal Goyal	DD, HYD(S) Dte
11.	Sh Vijay Singh Meena	DD, HYD(N) Dte
12.	Sh. K. Vysakh	DD, HCD(E&NE) Dte
13.	Sh. Adarsh M.S	DD, HCD(E&NE) Dte
14.	Sh Yogesh Kumar Gupta	AD, FE&SA
15.	Sh Devendra Patel	AD, RDC-II

16.	Sh Rekhraj Meena	AD, Morphology Dte
17.	Sh. Amir Suhil	AD, HCD (N&W) Dte
18.	Sh. Vivek Kumar	AD, CMDD (N&W) Dte
19.	Ms. Aparna C.B	AD-II, HYD(N) Dte
20.	Sh. Vivek Kumar Singh,	AD-II, BCD (NW&S) Dte

The theory part of the training will also be conducted on virtual mode. Interested Officers can participate in the virtual mode with the permission of their Controlling Officers. The online link for participation will be shared subsequently.

Participants are advised to followed government guidelines and protocols regarding COVID19.

**Signed by Goverdhan
Prasad**

Date: 12-07-2022 18:06:15 (Goverdhan Prasad)

Reason: Approved *Director Hydrology(C)
& Member Secretary (TARC)*

Copy to:

1. PPS to Chairman, CWC, New Delhi
2. PPS to Member (D&R/WP&P/RM)
3. Director (Training)/ Director (PCP)/ Director, SMD, CWC, New Delhi with the request to make requisite arrangements at 2nd floor, Library Building, CWC, New Delhi.
4. Director Cord (D&R/WP&P/RM) CWC, New Delhi.
5. To all Participating Officers & Their Controlling Officer's through CWC website
6. CWC website
7. Shri Anil Kumar, Managing Director-Water India, Haskoning DHV Consulting Pvt Ltd. with the request to make the requisite arrangement for the training

To
The Director,
Hydrology Central HSO,
Central Water Commission,
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Tel. No. +91 (0) 1129583525
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info.india@rhdhv.com E-mail
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Noida, 6th July 2022
Our Ref.: HDC/WAT/2022/07/403

Subject: Consultancy Services of Physical based Mathematical Modelling for estimation of Sediment Rate and Sediment Transport in Seven (7) River Basins– reg. Workshops and Trainings

Dear Sir,

With reference to the above and as per the requirement of the Contract, we will be conducting the third and fourth workshop, and fifth and sixth training at CWC as proposed below:

Workshops 3 and 4:

Date	Time	Workshops 3 and 4 topics	Venue
Thu 14 th to Fri 15 th July	10 AM to 4PM	Overview of adopted approaches and methods, Outcome of morphological analysis and Sedimentation modelling on Ramganga, Barak and Narmada basins	Sewa Bhawan, CWC
Thu 21 st to Fri 22 nd July		Overview of adopted approaches and methods, Outcome of morphological analysis and Sedimentation modelling on Cauvery, Kuttidipuzha, Mangalam and Peechi basins	

The session details and the meeting link to attend the workshop online through M S Teams meeting platform are in the Annexure No.1.

We look forward for your kind cooperation and will be grateful if the key officers and engineers of CWC and other stakeholders can participate in this workshop.

Trainings 5 and 6:

Date	Time	Training	Venue
Mon 25 th to Fri 29 th July	10 AM to 4PM	Data processing and database management (GIS-based web application & ISMIS) – Theory and Practical	2 nd floor, CWC Library building
Mon 22 nd to Fri 26 ^h August		Modelling and morphological analysis revision– Theory and Practical	

The session details are in the Annexure table No.2 and the training materials will be shared during the training.

We look forward for your kind cooperation and will be grateful if the key officers and engineers of CWC can participate in this training.

Thanking you,

Yours sincerely,

For HaskoningDHV Consulting Pvt. Ltd.

Kihassan

Dr Iqbal Hassan
Team Leader - Sediment Studies of River Basin Project

Annexure -1 – Workshop sessions

Workshop #3 –Overview of adopted approaches and methods, Outcome of morphological analysis and Sedimentation modelling on Ramganga, Barak and Narmada basins

Venue: Sewa Bhawan, CWC

Online participants can use the following meeting link to attend the workshops online through M S Teams meeting platform:

https://teams.microsoft.com/join/19%3ameeting_MjZmNWNhNmQtZDNhZS00ODM3LWE3MzMtZmMxYjZmYzU3NTNk%40thread.v2/0?context=%7b%22Tid%22%3a%2215f996bf-aad1-451c-8d17-9b95d025eafc%22%2c%22Oid%22%3a%225a718cbe-d9c3-4674-aa41-90b1d8f39e1d%22%7d

Or **Join on your computer or mobile app:** [Click here to join the meeting](#)

Session time	Session title – Day 1 (14 th July 2022)
10.30AM to 11.00 AM	Registration and Welcome address
11:00AM to 11:15AM	Tea break
11:15AM to 11:45 AM	Project overview
11:45AM to 1:00 PM	System understanding of Ramganga basin
1:00PM to 2:00PM	Lunch break
2:00PM to 3:00PM	Morphological analysis of Ramganga
3:00PM to 3:15PM	Tea break
3:15PM to 4:00PM	Sediment generation and sediment transport modelling of Ramganga basin
4:00PM to 4:30PM	Suggestive measures and conclusion for Ramganga basin

Session time	Session title – Day 2 (15 th July 2022)
10.00AM to 11.00 AM	System understanding of Barak basin
11:00AM to 11:15AM	Tea break
11:15AM to 11:45 AM	Morphological analysis of Barak
11:45AM to 12:30 PM	Sediment generation and sediment transport modelling of Barak basin
12:30 to 1:00PM	Suggestive measures and conclusion for Barak basin
1:00PM to 2:00PM	Lunch break
2:00PM to 3:00PM	System understanding and Morphological analysis of Narmada
3:00PM to 3:15PM	Tea break
3:15PM to 4:00PM	Sediment generation and sediment transport modelling of Narmada basin
4:00PM to 4:30PM	Suggestive measures and conclusion for Narmada basin

Workshop #4 –Overview of adopted approaches and methods, Outcome of morphological analysis and Sedimentation modelling on Cauvery, Kuttidipuzha, Mangalam and Peechi basins

Venue: Sewa Bhawan, CWC

Online participants can use the following meeting link to attend the workshops online through M S Teams meeting platform:

https://teams.microsoft.com/join/19%3ameeting_MjZmNWNhNmQtZDNhZS00ODM3LWE3MzMtZmMxYjZmYzU3NTNk%40thread.v2/0?context=%7b%22Tid%22%3a%2215f996bf-aad1-451c-8d17-9b95d025eafc%22%2c%22Oid%22%3a%225a718cbe-d9c3-4674-aa41-90b1d8f39e1d%22%7d

Or **Join on your computer or mobile app** : [Click here to join the meeting](#)

Session time	Session title – Day 1 (21 st July 2022)
10.00AM to 11.00 AM	Web and GIS based data dissemination portal and offline Integrated Sediment Modelling for India Suite (ISMIS)
11:00AM to 11:15AM	Tea break
11:15AM to 12:30 AM	System understanding and Morphological analysis of Cauvery basin
12:30 to 1:00PM	Sediment generation and sediment transport modelling of Cauvery basin
1:00PM to 2:00PM	Lunch break
2:00PM to 3:00PM	Sediment generation and sediment transport modelling of Cauvery basin
3:00PM to 3:15PM	Tea break
3:15PM to 4:00PM	Suggestive measures and conclusion for Cauvery basin

Session time	Session title – Day 2 (22 nd July 2022)
10.00AM to 11.00 AM	System understanding and morphological analysis of Kuttidipuzha basin
11:00AM to 11:15AM	Tea break
11:15AM to 11:45 AM	Sediment generation and sediment transport modelling of Kuttidipuzha basin
11:45AM to 12:15 PM	Suggestive measures and conclusion for Kuttidipuzha basin
12:15 to 1:00PM	System understanding and Morphological analysis of Mangalam and Peechi basins
1:00PM to 2:00PM	Lunch break
2:00PM to 2:30PM	Sediment generation and sediment transport modelling of Mangalam and Peechi basins
2:30 to 3:00PM	Suggestive measures and conclusion for Mangalam and Peechi basins
3:00PM to 3:15PM	Tea break
3:15PM to 4:00PM	Summary of the outcomes, accomplishments, challenges, and way forward

Annexure -2 – Training sessions

Training#5 – Data processing and database management (GIS-based web application & ISMIS), Modelling and morphological analysis at basin level Part 1 – Theory and Practical

Day	Session	Topic	Theory and practicals
Mon 25th July	11AM to 1PM	Hydrometric and time series data processing	- Types of data - Processing of data
	2PM to 5PM		- Calculations and Plots - Understanding of data
Tue 26th July	11AM to 1PM	Database management and basin understanding	- Installation of Web-GIS application and ISMIS application - Application architecture - Overview of Application development - Database management - Practicals on input, visualise and edit the data in the Web-GIS based data management system - Practicals on input, visualise and edit the data in the ISMIS
	2PM to 5PM		Understanding of Barak basin through topography, climate, geology, geomorphology, hydrology, and hydraulic, and human activities
Wed 27th July	11AM to 1PM	Morphological analysis	Morphological analysis of Barak
	2PM to 5PM		Morphological analysis of Barak
Thu 28th July	11AM to 1PM	Sediment generation modelling	Catchment sediment generation modelling of Barak
	2PM to 5PM		Catchment sediment generation modelling of Barak
Fri 29th July	11AM to 1PM	1d sediment transport modelling	1D modelling of Barak
	2PM to 5PM		1D modelling of reservoir operation in Cauvery

Lunch break- 1 to 2PM and tea breaks – 11:30AM & 3.30PM

Training#6 - Modelling and morphological analysis at basin level part 2 – Theory and Practical

Day	Session	Topic	Theory and practicals
Mon 22nd Aug	11AM to 1PM	System understanding	Understanding of Ramganga basin through topography, climate, geology, geomorphology, hydrology, and hydraulic, and human activities
	2PM to 5PM		Morphological analysis of Ramganga
Tue 23rd Aug	11AM to 1PM	Morphological analysis	Morphological analysis of Ramganga
	2PM to 5PM		Morphological analysis of Ramganga
Wed 24th Aug	11AM to 1PM	Sediment generation modelling	Catchment sediment generation modelling of Ramganga
	2PM to 5PM		Catchment sediment generation modelling of Ramganga
Thu 25th Aug	11AM to 1PM	1d modelling	1D modelling of Ramganga
	2PM to 5PM		1D modelling of Narmada with reservoir operation effects
Fri 26th Aug	11AM to 1PM	2d modelling	2D modelling of Kuttiyadipuzha reservoir
	2PM to 5PM		2D modelling of Kuttiyadipuzha reservoir

Lunch break- 1 to 2PM and tea breaks – 11:30AM & 3.30PM