



No. 02/08/2019- Hyd(NE)/ 227 /

Dated : 22/11/2019

**Subject : Training on "Project Hydrology- Hydrological Aspects in Planning and Preparation of DPR"- Reg.**

**To,**

- 1. Secretaries, State Irrigation and Water Resources Department. (List-I)**
- 2. Chief Engineers, CWC (Head Quarters and Field Offices) (List-II)**

Sir,

Central Water Commission is organising a three days Training Programme on **"Project Hydrology- Hydrological Aspects in Planning and Preparation of DPR"** at CWC office, Sewa Bhawan, R.K.Puram, New Delhi from 08-10 January, 2020. The information bulletin giving brief of the training is enclosed herewith.

The main objective of the training on Project Hydrology shall be to acquaint the practicing Engineers with various Hydrological aspects, Hydrological analysis techniques which are essentially required for the planning and management of Water Resources Project and preparation of Hydrological portion of DPR. The training would give emphasis on case studies and use of modern techniques such as GIS, Hydrological models etc.

There shall be no registration fee for the Training Programme. However travelling, boarding and lodging expenses of the out station participants will have to be borne by the respective Departments / Organisation.

It is requested to kindly nominate one / two middle level officers preferably involved in the Hydrological studies of Water Resources Project from your State / Department. The nomination may please be sent to this office latest by 15<sup>th</sup> December, 2019.

The particulars of the nominated officers such as address, Contact number/Fax, e-mail address, Current responsibilities etc. may be given in the format attached along with the nomination. Field Chief Engineers may kindly coordinate with State Governments and encourage them to nominate suitable young officers who are interested in the above said programme.

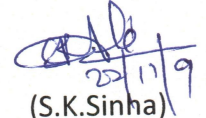
The nomination may be sent to:

Director, Hydrology (NE) Directorate,  
Central Water Commission, 7th Floor  
Sewa Bhawan, R.K.Puram,  
New Delhi-110066  
Email – hydne @nic.in

For any query and details please contact the program co-ordinator Shri S.K.Sinha, Director (Mobile No.09868275360) or Sh. Dileep Singh Meena, Deputy Director, (Mobile No. 09555552579), Hydrology (NE) Directorate, Central Water Commission.

Yours sincerely

Encl: As above

  
(S.K.Sinha)  
Director

Copy to:

- 1 Director, Training, Central Water Commission, New Delhi.
- 2 Deputy Director, SMD, CWC. It is requested to kindly upload the request letter on CWC's Website.

Copy for information to:

- 1 Sr. PPS to Chairman, Central Water Commission.
- 2 PPS to Member, D&R, Central Water Commission.
- 3 PPS to Member, RM, Central Water Commission.
- 4 PPS to Member WP&P, Central Water Commission.





## Information Bulletin

### Training Program

on

“Project Hydrology-  
Hydrological Aspect in Planning and Preparation  
of DPR”

**08<sup>th</sup> - 10<sup>th</sup> January, 2020**

at

**New Delhi**

Organized by

**Hydrological Studies Organisation  
Central Water Commission**

**New Delhi-110066**

**Central Water Commission (CWC)** is a premier Technical Organisation of the country in the field of Water Resources. Hydrological Studies Organisation (HSO) is one of the formations under Design & Research Wing (D & R Wing) in CWC. The main function of the HSO is to provide basic inputs in the field of Hydrology for pragmatic planning of the water resources projects at pre-planning, planning, design stage and also at project operation stage. The Organisation also provides support in the hydrological activities relating to education and training, standardisation, development of computer software as well as technical coordination with national and international organisations.

### OBJECTIVES

Hydrological Analysis & Studies is the most important component for the Planning Process of any Water Resources Development Projects. These studies are required at all sites of Water Resources Projects, viz Pre-feasibility state, preparation of feasibility report, in Planning and designing of project, during execution of project and for operation and maintenance of the project.

As per guidelines of Working Group Report for preparation of Detailed Project Report, the Hydrology forms an important chapter of DPR. Hydrology of any water resources project comprises of mainly 3 components viz. Water availability studies, Design Flood Studies and Sedimentation Studies.

The whole planning of any project depends on availability of water resources at the proposed project site.

The success of the Project depends on the accurate estimate of water availability at the DPR stage both in terms of temporal as well as spatial scale. Both over estimation as well as under estimation of the quantitative availability of water may lead to reduction in overall benefits expected from the project. Therefore, the water availability needs to be assessed carefully and judiciously considering both upstream as well as downstream requirements in addition to other technical aspects. Estimation and selection of a rational design flood is equally important. A higher value would obviously lead to an uneconomic structure whereas a lower value may result in a greater risk of structure failure.

Lastly, Sedimentation studies help us in determining the life of the structure and the duration till which is benefits of the projects can be reaped. Through these studies, the volumetric silt deposition as expected from the catchment is estimated and based dead storage needed; new zero elevations for the reservoir are fixed.

As Hydro-meteorological data forms the basis for any of the above basic knowledge of working with the available data sets. Method of data measurements, methodology for processing, analysis and validation of data to arrive at accurate estimate of Hydrological parameters shall also be included.

The proposed training programme shall cover all above aspects of Hydrology and mainly aims to acquaint the in-service design engineers with various Hydrological analysis techniques and other related aspect of Hydrology.



## TECHNICAL DETAILS

The Programme will consist of technical lectures and case studies/Hands on sessions covering all aspects of Project hydrology. The faculty will be drawn from, CWC, Ministry of Jal Shakti having long professional experience in the discipline.

## PROGRAM CONTENTS

The one week programme will focus on:

- Hydrological aspects in preparation of DPR
- Hydrological Data requirement, Collection & its Processing
- Water availability analysis for gauged as well as ungauged catchments along with case studies
- Design storm analysis for small/Medium and large catchments including analysis of critical storm using PMP Atlases along with Design flood estimation by Hydro-meteorological approaches as well as Flood Frequency approach including case studies.
- Sedimentation studies including silt rate estimation, Trap efficiency and sediment distribution in Reservoir
- Remote sensing and GIS applications in Hydrology

## VENUE AND DATE

The Training will be held between 09:30 Hrs. and 18:00 Hrs. from 08<sup>th</sup> - 10<sup>th</sup> January, 2019 at Computer Centre, 2<sup>nd</sup> Floor, Library Building, Central Water Commission, R.K.Puram, Sector-1, New Delhi-110066.

## TARGET GROUP

The training course is intended to benefit practicing Design Engineers in the rank of AE/AEE/EE/SE or equivalent and working in State and Central Government agencies involved in Hydrological Studies.

## REGISTRATION

There is no registration fee for the Training Programme. However travelling, boarding and lodging expenses of the outstation participants will have to be borne by the respective Departments/Organizations.

## PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the below mentioned contact latest by 15<sup>th</sup> December, 2019.

## CONTACT

For any information with regard to the programme, Please contact

1. S. K. Sinha, Director, Hydrology (NE)  
Mob: 09868275360

2. Dileep Singh Meena, Dy. Director, Hydrology (NE)  
Mob. No. 09555552579  
7<sup>th</sup> Floor, Central Water Commission, Sewa Bhawan,  
R.K.Puram, New Delhi-110066  
Tel: 01129583701/01129583704  
Email: hydne @nic.in

## Registration Form

For

### Training Program on "Project Hydrology- Hydrological Aspects in Planning & Preparation of DPR"

08<sup>th</sup> to 10<sup>th</sup> January, 2020

New Delhi

Name	
Designation	
Organization	
Mailing Address	
Email	
Mobile No.	
Area of Work	
Experience in Hydrology (Years)	
Whether Interested in Optional Technical tour	



**LIST OF SECRETARIES OF STATE IRRIGATION AND WATER RESOURCES DEPARTMENT**

- 1 The Commissioner and Secretary, Agriculture Production Department, Government of Jammu and Kashmir.
- 2 The Principal Secretary, Irrigation and Public Health Department, Government of Himachal Pradesh.
- 3 The Secretary, Department of Irrigation, Government of Punjab.
- 4 The Secretary (Irrigation), Government of Uttarakhand.
- 5 The Commissioner and Principal Secretary (Irrigation), Government of Haryana.
- 6 The Principal Secretary, Irrigation Department, Government of Uttar Pradesh.
- 7 The Principal Secretary, CAD &WR Department, Government of Rajasthan.
- 8 The Principal Secretary, Water Resources Department, Government of Madhya Pradesh.
- 9 The Principal Secretary, Water Resources Department, Government of Chhattisgarh.
- 10 The Commissioner and Secretary (CAD&WR), Water Resources Department, Government of Bihar.
- 11 The Principal Secretary (Irrigation), Government of Jharkhand.
- 12 The Secretary (Irrigation and Waterways Department), Government of West Bengal.
- 13 The Principal Secretary, Narmada Water Resources, Water Supply and Kalapsar Department, Government of Gujarat.
- 14 The Commissioner-cum-Secretary, Department of Water Resources, Government of Odisha.
- 15 The secretary (Water Resources and CAD), Government of Maharashtra.
- 16 The Secretary, (Water Resources Department), Government of Goa.
- 17 Principal Secretary, Irrigation and CAD, Government of Telangana.
- 18 The Principal Secretary (Irrigation and CAD Department), Government of Andhra Pradesh.
- 19 The Principal Secretary (Water Resources), government of Karnataka.
- 20 The Additional Chief Secretary, Water Resources and Agriculture, Government of Kerala.
- 21 The Secretary (Irrigation and PWD), Government of Tamilnadu.
- 22 The Commissioner –cum-Secretary, Public Works Department (PHE and WR), Government of Tripura.
- 23 The Secretary, Irrigation and flood control Department, Government of Sikkim.
- 24 The Commissioner and Secretary, Water Resources Department, Government of Meghalaya.
- 25 The Secretary (Irrigation), Government of Assam.
- 26 The Secretary, Department of Agriculture, Government of Mizoram.
- 27 The Commissioner (CAD), Government of Manipur.
- 28 The Secretary, Irrigation and Flood Control Department, Government of Nagaland.
- 29 The Secretary, Irrigation and Flood Control (Water Resources) department, Government of Arunachal Pradesh.



**LIST OF CHIEF ENIGEERS OF CENTRAL WATER COMMISION**

- 1 The Chief Engineer, B&BBO, Central Water Commission, Shillong.
- 2 The Chief Engineer, C&SRB, Central Water Commission, Coimbatore.
- 3 The Chief Engineer, IBO, Central Water Commission, Chandigarh.
- 4 The Chief Engineer, M&ERO, Central Water Commission, Bhubaneswar.
- 5 The Chief Engineer, K&GBO, Central Water Commission, Hyderabad.
- 6 The Chief Engineer, YBO, Central Water Commission, New Delhi.
- 7 The Chief Engineer, UGBO, Central Water Commission, Lucknow.
- 8 The Chief Engineer, TBO, Central Water Commission, Siliguri.
- 9 The Chief Engineer, Monitoring (Central), Central Water Commission, Nagpur.
- 10 The Chief Engineer, Monitoring (South), Central Water Commission, Bangalore.
- 11 The Chief Engineer, N&TBO, Central Water Commission, Gandinagar.
- 12 The Chief Engineer, NBO, Central Water Commission, Bhopal.
- 13 The Chief Engineer, LGBO, Central Water Commission, Patna.
- 14 The Chief Engineer, BPMD, Central Water Commission, New Delhi.
- 15 The Chief Engineer, CMO, Central Water Commission, New Delhi.
- 16 The Chief Engineer, EMO, Central Water Commission, New Delhi.
- 17 The Chief Engineer, IMO, Central Water Commission, New Delhi.
- 18 The Chief Engineer, PAO, Central Water Commission, New Delhi.
- 19 The Chief Engineer, PMO, Central Water Commission, New Delhi.
- 20 The Chief Engineer, PPO, Central Water Commission, New Delhi.
- 21 The Chief Engineer, PO&MIO, Central Water Commission, New Delhi.
- 22 The Chief Engineer, Design, NW&S, Central Water Commission, New Delhi.
- 23 The Chief Engineer, Design, N&W, Central Water Commission, New Delhi.
- 24 The Chief Engineer, Design, E&NE, Central Water Commission, New Delhi.
- 25 The Chief Engineer, DSO, Central Water Commission, New Delhi.
- 26 The Chief Engineer, HSO, Central Water Commission, New Delhi.
- 27 The Chief Engineer, NBPO, Central Water Commission, New Delhi.
- 28 The Chief Engineer, FM, Central Water Commission, New Delhi.
- 29 The Chief Engineer, P&D, Central Water Commission, New Delhi.