

**Training Program on
Design Flood Analysis
(22-25 June 2026)
NOMINATION FORM**

Name (in capitals):

Designation:

Organization:

Responsibilities (in
brief):

Full Postal Address

Tel Nos (with STD Code):

Email:

Mobile

Whether require accommodation? YES / NO

Date: (Signature of the Participant)

SPONSORING AUTHORITY

Full Postal Address

Tel Nos (with STD Code):

Email :

Mobile

Date (Signature and Seal)

Completed Registration Form may be sent by email:

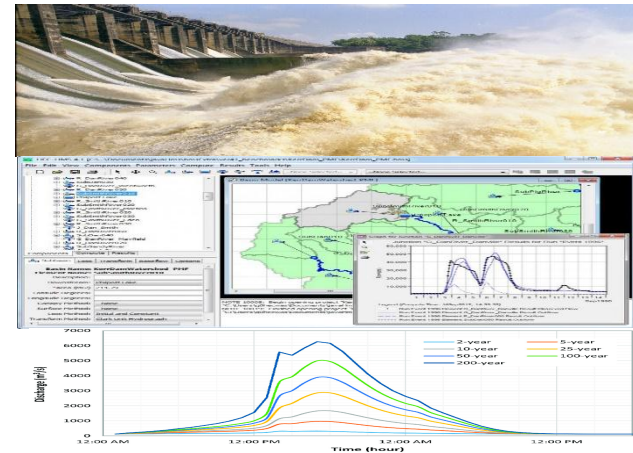
nwa.pune@gmail.com directordes-nwa@gov.in



**Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Water Commission**



**Training Program on
Design Flood Analysis
(22-25 June 2026)**



**Organized by
National Water Academy, CWC, Pune**

INTRODUCTION AND OBJECTIVE

India having around 6600 specified dams stands third globally after China & USA. These dams are vital for ensuring the water security of the Country; and these also constitute a major responsibility in terms of asset management and safety. The Dam Safety Act 2021 mandates the monitoring, inspection, operation, and maintenance of dams to prevent dam failure-related disasters. As per Clause 38.2 of Chapter IX of Dam safety act, general assessment of hydrologic and hydraulic conditions with mandatory review of design floods as specified by the regulations must be done. There is a huge need for capacity building of not only the officials of State, Central Government departments, PSUs but also of the various private institutions, consultants, academia, NGOs etc working in this area as well.

Design Flood Analysis of the dams is an important step towards dam safety protocol as several of the ageing and existing dams were designed for floods based on empirical formulae, local historical records or even a limited number of measurements. With the technological advances and availability of more data, there have been improvements in the analysis of extreme flows and tools for evaluating the hydrological events and selection of the Inflow Design Flood (IDF). IDF means the magnitude of the reservoir flood selected viz-a-viz design requirement of the spillway in view of the dam size and hazard potential. Historical data for the area gives the hazard potential to the planners. Design Flood Analysis of dams can successfully reduce the hydrological risk of reservoirs by undertaking various structural and non-structural risk-reduction measures. Whenever there is high flood, excess water is let off the dam reservoir through an emergency spillway or the increase in the design flood can be safely accommodated through reservoir operations.

PROGRAM CONTENTS

Main topics for technical sessions are:

- Overview and Analysis of Design Flood & hydrological safety review
- Regulation related to Design Flood Review of Dams, RS & GIS in Design Storm and Design Flood Analysis using GIS tool, Delineation of a catchment area and estimation of physiographic parameters of catchment using GIS tool, Design Storm Analysis and Use of PMP Atlas.
- Unit hydrograph preparation using FER, Grid point location, SPS/PMP and hourly distribution coefficient selection from PMP Atlas, Design Flood estimation for single catchment, Hands on Unit Hydrograph and design flood computations, Channel routing by Muskingum method using HEC-HMS, Reservoir routing by Modified puls method using HEC-HMS, Design Flood Estimation using Quasi Distributed Model on HEC-HMS, Flood frequency approach to design flood analysis.

PROGRAM FEE

There is no program **fee for participants from Central and State Govt. departments**. Charges for participants from various categories are as below:

Category	Description	Fee in ₹(per participant)
A.	Central/State/Local Government Depts. including their autonomous bodies:	Nil
B.	'Not for Profit' Central and State PSUs	Nil
C.	Recognized academic institutions, NGOs	1200/-
D.	Central and State Public Sector Undertakings	8,000/-
E.	Private Companies, individuals	12,000/-

- Discounts applicable: (a) 50% for PSUs of MoJS i.e. WAPCOS & NPCC (no group discount); (b) For others – 20% discount for 3-4 participants; 30% discount for 5 or more participants from the same organization.

PAYMENT

Course fee Payment is accepted through Online/ Demand Draft without deducting any TDS. DD drawn in favour of PAO-Ministry of Water Resources payable at Pune or through electronic transfer in the Account No: 11382328092; IFSC Code: SBIN0001904; Account holder name: PAO - Ministry of Water Resources. Receipt for the amount will be issued by NWA

RESOURCE PERSONS The resource persons for the program would be subject experts from CWC, NDSA etc.

DURATION

The program is for four days duration scheduled during 22-25 June 2026. The participants are expected to reach NWA by the evening of 21 June 2026 and should plan to leave only after 1900 Hrs. 25 June 2026.

VENUE National Water Academy, CWC, Pune-Sinhagad Road, Khadakwasla, Pune – 411024

TARGET GROUP

This training course is intended to all the stakeholders including Private Organizations/ Research Institutions/ Academia/ Consultants/ NGOs as well as the officers of Central/State Govts/PSUs/ Dam owners involved in the activities of Dam Safety/Dam operation /Dam maintenance etc.

Participants are advised to bring their own laptops so that they can independently complete the hands-on with their data.

HOW TO APPLY

- The authorities of Central Govt./State Govt./PSUs/ Private Organizations/Consultants/Academia etc. are requested to send nominations of their officers/personnel in the Nomination form given in the brochure through email to nwa.pune@gmail.com / directordes-nwa@gov.in. The last date of sending nomination is **15.06.2026**.
- All nominated and interested participants shall register in the google form given at: https://docs.google.com/forms/d/e/1FAIpQLScOIIZas6eLBmQkyVGQV_4AL5VZiiyUjeS6Zit_eT49O4gbqdg/viewform.
- The nominated officers/personnel are requested to start their journey for the program only after confirmation of their nomination. The accepted nominations will for displayed on NWA's website on 16 June 2026 in the evening.
- All participants whose nominations are accepted by the NWA, Pune will now be required to register on e-learning platform of NWA i.e <https://elearning.nwapune.co.in>. After completing the registration & login to the e-learning website of NWA, they are also required to enroll themselves for the program "**Design Flood Analysis**" scheduled during 22nd -25th June 2026. The enrollment key will be shared with the participants after their nomination is confirmed by NWA. The links for various activities of the training program as well as the presentation material will be made available on this platform.

ACCOMODATION

The trainee officers would be accommodated in NWA hostel on applicable payment basis. Lodging & boarding charges as per government rates (about Rs.275/- per person per day) will have to be borne by the participants. Working Lunch during the training program will be provided by NWA, CWC Pune. Participants from CWC will be provided with free lodging & boarding facilities. Other participants will have to bear breakfast, evening snacks and dinner charges, as applicable. Airport/ Railway station pickup/drop will also have to be arranged by the trainee officers themselves.

WEATHER

In Junel, Pune experiences a little warm but pleasant weather. The average maximum temperature during the day ranges from 30 to 35 degrees Celsius, while the average minimum temperature at night ranges from 22 to 25 degrees Celsius.

CONTACT

For sending nominations or for any information about this program, please contact:

Sh. Vivek Kumar Verma, Director & Course Coordinator
National Water Academy, CWC, Khadakwasla R S ,Pune – 411 024
Mobile: # 9140706811

Email: nwa.pune@gmail.com ; directordes-nwa@gov.in