



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

**Training Program on  
Operation Analysis of  
Reservoir Systems  
(15 - 18 September 2026)**



**Organized by  
NATIONAL WATER ACADEMY, PUNE**

**in collaboration with  
NATIONAL INSTITUTE OF HYDROLOGY, ROORKEE**



## **INTRODUCTION & OBJECTIVES**

Due to the high temporal and spatial variability of rainfall and the uncertain nature of the monsoon in India, reservoirs play a crucial role in the efficient utilization and regulation of country's water resources. The actual realization of benefits from water resources projects depends significantly on how effectively these structures are operated and managed. Reservoir operation is therefore a critical aspect of water resources planning and management, encompassing tasks such as allocation among competing uses, mitigation of shortages and floods, and optimization of overall utility.

In recognition of the critical importance of reservoir operation and the need for indigenous, accessible analytical tools, the 'NIH ReSyP' software—developed by the National Institute of Hydrology (NIH), Roorkee—offers a user-friendly platform for performing a wide range of reservoir-related hydrological analyses. This hands-on training program, spread over four days, will cover the following topics:

- Computation of reservoir capacity using the Sequent Peak algorithm.
- Interpolation the Elevation-Area-Capacity table for any elevation interval.
- Determination of the firm power from a reservoir or to simulate the operation of a hydropower project.
- Simulation of the operation of a multi-purpose multi-reservoir system for conservation purposes.
- Out flow routing through a reservoir using hydrologic routing methods.
- Determination of the reservoir operation policy using the Stretched Thread method.
- Determination of the rule curve levels using the mass balance approach.
- Determination of the required reservoir storage for a given yield or vice versa.

## **PROGRAM FORMAT**

The program will be held in person at the National Water Academy (NWA) campus in Pune.

## TARGET GROUP

Engineers from Central/State Water Resources Departments, other professionals and planners involved in reservoir design, operation, and water resources management, and all other stakeholders. All participants are suggested to bring their own laptops for hands-on sessions.

## PROGRAM FEE

There is no program fee for participants from Central and State Govt. departments. Charges for participants from other agencies are as follows:

| Category | Description                                                                                                                       | Fee per participant |
|----------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|
| A        | Central/State Government/Departments including their autonomous bodies                                                            | Nil                 |
| B        | 'Not for Profit' Organizations/authorities/bodies of Central and State governments (if they certify that they are not for profit) | Nil                 |
| C        | Recognized academic institutions, NGOs                                                                                            | 1200/-              |
| D        | Central and State PSUs                                                                                                            | 8000/-              |
| E        | Private Companies, individuals                                                                                                    | 12000/-             |

• *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.*

## LOCATION

National Water Academy is located on the south-western side of the Pune city on Pune-Sinhgad Road between Nanded Phata and Kirkatwadi villages. It is 12 Kms from Swargate Bus Stand, 18 Kms from Pune Station and 29 Kms from Pune Airport.

[Click here for directions from Pune Airport to NWA](#)

[Click here for directions from Pune Railway Station to NWA](#)

## LOCAL HOSPITALITY AND WEATHER

NWA has a self-contained residential campus, and all out-station participants would be provided with accommodation in the NWA hostels on twin sharing basis. Hostel rooms are comfortable and fully furnished (viz. television with cable connection, refrigerator, micro-oven, tea maker, intercom etc.). Meals are available (self-service dining) in Canteen/Mess which is on the same residential campus. Participants (except for CWC officers) are required to pay for lodging and boarding charges, which are nominal. During the month of September, normally the weather is warm, with temperatures ranging between 27°C to 32° C

## PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Course Director latest by 10.09.2026. Nominated officer may also fill in the online registration form: <https://forms.gle/25PMGpmg4vnaMFAz9>

The list of accepted nominations will be displayed on the NWA website <https://www.nwapune.gov.in/ongoingevents.jsp> on 11.09.2026.

## CONTACT

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

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