

GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI DEPARTMENT OF WATER RESOURCES, **RIVER DEVELOPMENT & GANGA** REJUVENATION CENTRAL WATER COMMISSION

#### PURPOSE ORIENTED TRAINING THROUGH DISTANCE LEARNING ON FLOOD FORECASTING AND MIKE MODELLING

## 19-30 April-2021



#### Being Organized by

### NATIONAL WATER ACADEMY, PUNE

# INTRODUCTION

For centuries, several parts of the country have been witnessing flooding because of intense rainfall activity particularly in monsoon season. Flood forecasting is an effective nonstructural tool which seeks to issue advance warning of the magnitude of flood and its time of occurrence; and thus let concerned authorities and people at large to take necessary measures to safeguard lives & properties and also to regulate release through a dam in a manner not harmful to structure itself and lives and properties both in upland and downstream areas. CWC, under Ministry of Jal Shakti, Govt of India, issues River water Level Forecast to 198 Stations and Inflow forecast to 130 reservoirs spread across India in order to ensure the people against possible loss of properties and lives.

Water Resources professionals have been continually endeavouring to forecast future events as accurate and as early as possible by adopting newer techniques to speed up the data observation, real time transmission and formulation of forecast with enhanced accuracy. This program aims to introduce newer techniques emerged in recent past besides revisiting the conventional techniques.

## **PROGRAM OBJECTIVE**

The program will comprise of online classroom sessions, case studies and discussions.

Following topics will be covered;

- Overview of Flood Management in India and Introduction to Flood Forecasting & Warning
- Flood Forecasting by Statistical  $\triangleright$ 
  - methods
- **Overview of Flood Modelling**
- ⊳ Basics of RS and GIS for Flood Modelling
- $\triangleright$ Water shed Delineation using ArcGIS DEM
- Hydro-Meteorological Data inputs  $\geq$ for Flood Modelling
- Components of MIKE Model
- Development of 1 D model using  $\triangleright$ MIKE 11
- $\triangleright$ Automation for Flood Modelling & Flood Forecasting
- Preparation of Flood Forecast (FF)  $\geq$ Bulletin & FF Appraisal Report and CWC's Flood Forecast **Dissemination website**
- Assessments/Assignments through MCQ
- $\triangleright$ Hands on Training sessions

## **PROGRAM FORMAT**

Program contains online lecture modules and Discussions using "Google Classroom". For facilitating to join the training, the participants have to register themselves in the "Google Classroom" using their "Gmail account". The Registered participants will be given the Class Code by this Institute, on entering which they will access to the training modules.

Participants will be required to complete an online Assessment through Multiple Choice Questions (MCQ) after completion of each module.

As this is an online course, the Officers can participate in the program without taking any leave. A WhatsApp group would be created for resolving technical issues in respect of training.

# FACULTY

The faculty has been drawn from the core faculty of NWA and Flood Management Organisation under RM wing of CWC, New Delhi, and experts of the relevant topics.

The faculty will be available for online and offline interaction during the program duration.

# TARGET GROUP

The program is intended to benefit the Officers and Staff of CWC involved in the Flood Management & Flood Forecasting activities.

Computer skills is a pre-requisite. Participants must have access to a good internet connection at home and/or at office.

### PROGRAM FEE

There is no program fee.

### **PROGRAM DURATION**

19-30 April-2021 (10 Days)

## PARTICIPATION

The willing CWC officers & Staff with the consent of their controlling officers and other interested professionals may register themselves through the Google form link given below latest by 15 April 2021.

Confirmation on acceptance of nominations will be uploaded on NWA website (https://nwa.mah.nic.in) under the "Upcoming Events" link by 16<sup>th</sup> April 2021 and the individuals will also be informed by email. The nominated professionals have to attend the program from their respective place of duty and are not supposed to come to NWA for the same.

# CONTACT

For any information about this Program, Please contact:

# R.Thangamani

**Director &** Program Coordinator National Water Academy, CWC, Khadakwasla Pune - 411 024 Mob: 9449070298 Tel: 020 – 24380296

### S. Senthil

Assistant Director-II, NWA Mob: 8884547577

E-mail: nwa.mah@nic.in

Website: http://nwa.mah.nic.in

Please click the link and fill the online Google form before 15th April 2021.

https://qrgo.page.link/rJfKZ

