

## TRAINING COURSE

on

### Conservation and Management of Inland Water Bodies (August 05 - 09, 2024)



Organized by

**NATIONAL INSTITUTE OF HYDROLOGY  
JAL VIGYAN BHAWAN,  
ROORKEE, UTTARAKHAND-247667**

## INTRODUCTION

Inland water bodies, including lakes, rivers, reservoirs, and wetlands, are critical components of the Earth's hydrological system. These ecosystems provide essential services such as water supply for drinking, agriculture, and industry, support biodiversity, and offer recreational and cultural benefits to human societies. However, these water bodies face significant threats from pollution mainly agricultural runoff, industrial discharge, and urbanization threatens water quality, leading to issues such as eutrophication and habitat degradation. Climate change exacerbates these problems, altering precipitation patterns, increasing temperatures, and disrupting aquatic ecosystems. Additionally, overuse and mismanagement, including excessive water extraction and habitat destruction, further strain inland water bodies. To safeguard the health of these vital resources, concerted efforts are needed to address these affecting factors through sustainable management practices, pollution control measures, and climate resilience strategies.

From a future perspective, the conservation and management of inland water bodies are indispensable for ensuring sustainable development, environmental resilience, and human well-being. Inland water bodies serve as vital sources of freshwater, thus securing water availability for future generations. Additionally, these ecosystems harbor rich biodiversity and provide essential services such as flood regulation, groundwater recharge, and carbon sequestration, contributing to climate resilience and adaptation. By conserving and managing inland water bodies effectively, we can safeguard ecosystem health, mitigate the impacts of climate change, and ensure the continued provision of ecosystem services essential for human survival and prosperity in the future.

## COURSE CONTENTS

The training course will consist of lectures and field visits led by esteemed Scientists and Professors with wide range of experience in this field. The course begins with a detailed exploration of water resources management in India. The **Conservation and Management of Inland Water Bodies** course is designed to equip participants with the knowledge and skills needed to address these challenges and promote the sustainable use and preservation of these vital resources. This comprehensive training program covers the ecological significance of inland water bodies, the environmental pressures they face, and practical techniques for their conservation and management. Participants will delve into topics such as the formation and types of inland water bodies, the impacts of human activities and natural processes on these ecosystems, and modern conservation practices. The course emphasizes the importance of an integrated approach that includes scientific research, community involvement, policy development, and sustainable practices.

Through a combination of theoretical knowledge and practical applications, attendees will learn how to effectively monitor, assess, and manage inland water bodies. The course also highlights the role of education and public awareness in fostering community stewardship and engagement in conservation efforts. This comprehensive course is design to be highly interactive, enabling participants to share and discuss field-related challenges.

## WHO CAN PARTICIPATE?

The course is intended for professionals (Engineers, Scientists, Policymakers & Academicians) of various governments, private organizations actively working in water conservation and management. Masters' students and research scholars are encouraged to attend this course.

## REGISTRATION

There is **NO** registration fee for the participation. However, the candidate need to be sponsored by their Institute or Organization. The course material, high tea and the working lunch will be provided to the registered participants. The participant will have to arrange for TA/DA and any other expenditure to participate in the course from their own institution/Organization. A certificate will be given to all the participants. For accommodation, the Guest House facility of NIH Roorkee can be availed on a payment basis depending on the availability.

Seats are limited to **25 (twenty-five)** participants on a first-come, first-served basis. The interested participants are required to fill the registration form online link <https://forms.gle/FPXZ5JdZ5DAR7nKo8> latest by **23<sup>rd</sup> July 2024**. For any kind of details information, please contact the course coordinator.

## VENUE

The training course will be hosted by National Institute of Hydrology, Roorkee in physical mode during **August 05 - 09, 2024**.

## ABOUT NIH

National Institute of Hydrology (NIH) is a premier Research and Development organization under the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, Government of India. It was established as an autonomous society in 1978 with its headquarters at Roorkee, Uttarakhand. The main objectives of NIH are to undertake, aid, promote and coordinate systematic and scientific work in all aspects of hydrology and water resources management. The Institute was declared a Science and Technology (S&T) organization in 1987.

The Institute is an ISO 9001:2015 Certificated organization. Over the years, the Institute has grown as a center of excellence for pursuing research activities in hydrology and water resources with emphasis on technology transfer and demand driven, user-defined, strategic research. The research in the Institute has been carried out under six scientific divisions at the headquarter at Roorkee and seven Regional Centers located at Jammu, Patna, Guwahati, Jodhpur, Bhopal, Belgaum, and Kakinada. The institute has state of the art laboratories for Water Quality, Nuclear Hydrology, Soil & Water, Remote Sensing, and Hydrological Instrumentation. The institute pursues capacity development by way of organizing specialized training courses. For more information about NIH, please visit

<https://nihroorkee.gov.in/>

## PATRON

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## CONVENOR

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## COURSE COORDINATOR (S)

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## For course related queries, please contact:

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**All correspondence related to the course should be made with the course coordinators.**