

**NATIONAL WATER ACADEMY, PUNE**

**Training Workshop under NHP on  
“Water Information & Analytics Generation  
using Free Online Tools”  
(26-30 November, 2018)**

**REGISTRATION FORM**

Name (in capitals): \_\_\_\_\_

Designation: \_\_\_\_\_

Organization: \_\_\_\_\_

Responsibilities (in brief): \_\_\_\_\_

Full Postal Address: \_\_\_\_\_

Tel Nos.(with STD Code) : \_\_\_\_\_

Fax No: \_\_\_\_\_ Mobile : \_\_\_\_\_

E-mail: \_\_\_\_\_

Whether require accommodation at NWA complex? YES / NO

Date \_\_\_\_\_ (Signature of the participant)

**SPONSORING AUTHORITY**

Full Postal Address: \_\_\_\_\_

Tel Nos.(with STD Code) : \_\_\_\_\_

Fax No: \_\_\_\_\_

Mobile : \_\_\_\_\_

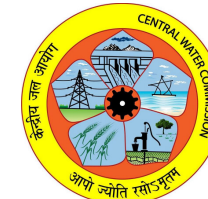
E-mail: \_\_\_\_\_

Date \_\_\_\_\_ (Signature and Seal)

Completed Registration Form may be sent by Fax to: 020-24380110 or by email to nwa.mah@nic.in

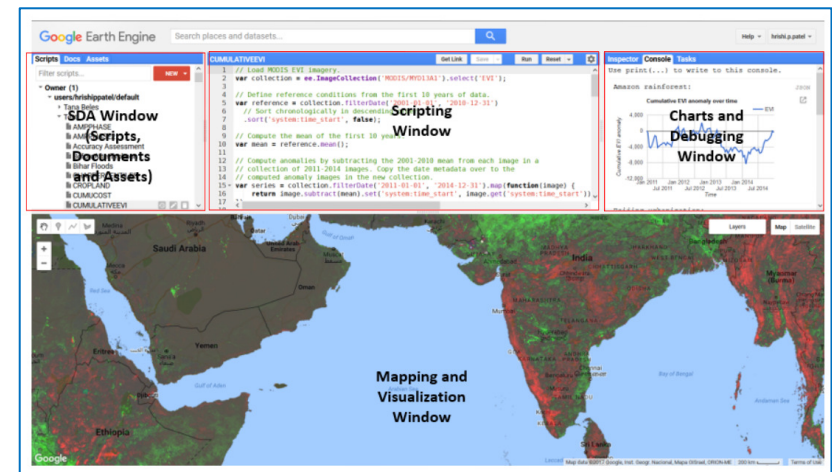
**Government of India  
Ministry of Water Resources, RD & GR  
Central Water Commission  
National Water Academy Pune**

**Training Workshop under NHP on**



**Water Information & Analytics Generation  
using Free Online Tools**

*(26 - 30 November 2018)*



**Organized by  
National Water Academy Pune**

## INTRODUCTION AND OBJECTIVE

Google Earth Engine (GEE) is a cloud based platform for planetary scale analysis and utilization of Remote Sensing Datasets and translating these data into meaningful analytics and decisions. It combines a multi-petabyte catalog of satellite imagery and other geospatial datasets to detect changes, map trends and quantify differences on the Earth's surface. The beauty of it lies in the fact that the platform is free and there are no additional software licenses or hardware that is required for the same to be leveraged. This also makes remote sensing satellite data analytics accessible to a much wider audience as all you need to get started is a browser with an internet connection. GEE leverages Google's extensive cloud infrastructure to present several varied applications.

Given that a vast number of satellite data sets are made available on GEE, there are a plethora of applications from the perspective of Water Resources and Natural Resource Management. For example, this platform can be utilized to map surface water trends using the Landsat archive, do flood detection using Sentinel 1 radar data and SRTM terrain information or understand seasonal land cover dynamics such as wetlands. Other applications have included mapping global deforestation for past 20 years, understanding water dynamics in lakes and reservoirs over last 30-35 years and other complex applications such as understanding cropland dynamics.

The goal of this training workshop is to introduce Implementing Agencies of National Hydrology Project to the potential of the Google Earth Engine platform through some specific examples showcasing its utility for water resources.

## PROGRAM CONTENTS

The program will comprise of classroom sessions, case studies and discussions and will cover the following topics:

The training workshop will cover:

- Brief Introduction to Java Script Language
- Brief Introduction to Remote Sensing
- Google Earth Engine Overview & Applications
- Interacting with Google Earth Engine using JS
- Showcasing results/ output of analytics as Apps
- Other resources/tools.

## RESOURCE PERSONS

The resource persons for the program would be subject experts.

## DURATION

The participants are expected to reach NWA by 0900 Hrs of 26<sup>th</sup> November 2018 and should plan to leave only after 1800 Hrs. of 30<sup>th</sup> November 2018.

## VENUE

National Water Academy, Khadakwasla, Sinhgad Road, Pune 411024.  
(for more info on NWA, visit <http://nwa.mah.nic.in>)

## PROGRAM FEE

There is **no program fee** for participants from **Central and State Govt. implementing agencies of NHP**:

## TARGET GROUP

The program is aimed for water sector professionals working in from Central and State Govt. departments implementing agencies of NHP.

## PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Program Coordinator **latest by 09<sup>th</sup> November 2018**. The nominated officers are requested to start for the program **only after** confirmation of their nomination. The accepted nominations will be displayed on NWA's website on **12<sup>th</sup> November 2018**. No separate confirmation letters will be issued.

**The participants are requested to bring their own laptop for the program, so that the work that they do or the software they load during the program will remain with them for future reference.**

## LOCAL HOSPITALITY

NWA has a self-contained residential campus, and out-station participants would be provided with accommodation in the NWA Hostel (as per the availability). **Boarding and Lodging charges will have to be borne by participants.** Airport/Railway station pickup/drop will also have to be arranged by the participants themselves.

## WEATHER

During the month of November the average temperature of Pune is generally around 25<sup>o</sup>C with pleasant climate and occasional rainfall.

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## CONTACT

For sending nominations or for any information, please contact:

**Manish Rathore**

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National Water Academy, CWC, Khadakwasla, Sinhgad Road, Pune 411024

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**E-mail:** [nwa.mah@nic.in](mailto:nwa.mah@nic.in) **Website:** <http://nwa.mah.nic.in>