

I/18760/2020

भारत सरकार
केन्द्रीय जल आयोग
प्रशिक्षण निदेशालय

संख्या:- A-33022/35/2020-TRNG DTE/दिनांक: मई, 2020

परिपत्र

विषय:- Purpose Oriented Training through Distance Learning on "Drainage & Watershed Delineation and Jurisdiction Demarcation using GIS" for the CWES Officers during 26 May to 5 June 2020- reg.

कृपया उपरोक्त विषय से संबंधित पत्र / विवरणिका की प्रति संलग्न पायें। अनुरोध है कि यदि कोई नामांकन हो तो दिनांक **14/05/2020** तक निश्चित रूप से सदस्य / मुख्य अभियंता मा. स. प्र. (मा. सं. प्र. से सम्बंधित)/ मुख्य अभियंता रा. ज. अ. से सम्बंधित अनुमोदन के पश्चात् भेजने की कृपा करें। साथ में नामित अधिकारियों के जीवन वृत्त (uploaded and downloaded from CWC website along with their e-mail and mobile number) भी संलग्न करें, जिसमें उनके द्वारा अब तक के सेवा काल के दौरान भाग लिए गए विभिन्न कार्यक्रमों का ब्यौरा दर्शाया गया हो।

यह भी सूचित किया जाता है कि नामित अधिकारी के नामांकन पर दर्शायी गई तिथि के उपरान्त प्राप्त होने पर विचार नहीं किया जायेगा साथ ही अध्यक्ष की स्वीकृत होने के पश्चात् नाम वापस लेने की अनुमति नहीं दी जाएगी।

संलग्नक :- यथावत

(एस.के. सिन्हा)
निदेशक (प्रशिक्षण)

1. अध्यक्ष केन्द्रीय जल आयोग के निजी सचिव, नई दिल्ली।
2. सदस्य जल आयोजन एवं परियोजना / अभिकल्प एवं अनुसंधान / नदी प्रबंध के निजी सचिव, केन्द्रीय जल आयोग, नई दिल्ली।
3. सभी मुख्य अभियंता, केन्द्रीय जल आयोग।
4. निदेशक समन्वय, आयोजन एवं परियोजना / अभिकल्प एवं अनुसंधान / नदी प्रबंध, केन्द्रीय जल आयोग, नई दिल्ली।
5. सचिव/निदेशक (तकनीकी समन्वय) केन्द्रीय जल आयोग, नई दिल्ली।
6. सभी निदेशक/ अधीक्षण अभियंता, केन्द्रीय जल आयोग, नई दिल्ली।
7. आशुलिपिक, प्रशिक्षण निदेशालय, कृपया परिपत्र को केन्द्रीय जल आयोग की वेब साइट पर अपलोड करें।



संख्या: A-

दिनांक: 04-05-2020

सेवामें,
The Chief Engineer (HRM)
Central Water Commission
SewaBhawan, R K Puram
New Delhi – 110 066

विषय: **Purpose Oriented Training** through Distance Learning on “**Drainage & Watershed Delineation and Jurisdiction Demarcation using GIS**” for the CWES Officers during 26 May to 5 June 2020.

महोदय,

It is to intimate that on the direction of the Chairman, CWC, NWA is in the process of developing training programs which serve practical needs of various offices of CWC. Due to ongoing Pandemic situation arose because of COVID-19, it became necessary to deliver such trainings through Distance Learning tools. Accordingly, NWA has developed, in-house, first **Purpose Oriented Training** to be delivered through Distance Learning tools on “**Drainage & Watershed Delineation and Jurisdiction Demarcation using GIS**” on Google Classroom platform.

The aim of this DL training is to give awareness regarding GIS technology and learn its use to extract various watershed parameters through a series of voice PPTs, Videos of practical hands-on open source GIS (QGIS) and Quizzes which will be hosted online on GOOGLE CLASSROOM platform. This training would enable the field officers to delineate watersheds/catchments and other parameters based on location of hydrological data collection sites and also in the presentation the data in a GIS MAP format which will provide an efficient and effective method to view and analyze the spatial data. The program has been designed in such a way that the participants will have to devote only about their two hours daily, as per his/her choice, during the training period and will not affect much in their day to-day official work. *A Whatsapp group of the participants would also be created for clarifications and hand holding by the experts for some period.*

Content of the program (Annex-I) as well as How to use Google Classroom (Annex-II) are enclosed. The target audience would be the CWC officers working in the field offices at the level of Executive Engineer and Assistant Executive Engineer. It would be desirable that participation of at least one officer from each Division Office of the said level is made essential for training. Nominations of the officers along with their email (preferably in Google domain) and mobile nos. may be sent well in advance for making necessary arrangements at this end. A certificate would be awarded to the Officials after successful completion of the training.

This issues with the approval of Chief Engineer, NWA.

संलग्न: यथोपरि

भवदीय

प्रदीप कुमार
(निदेशक IT & GIS एवं कार्यक्रम समन्वयक)
M: 9992079049

Copy for kind information to: PPS to the Chairman, CWC.





Content of the Purpose Oriented Trainingon “Drainage & Watershed Delineation and Jurisdiction Demarcation using GIS”

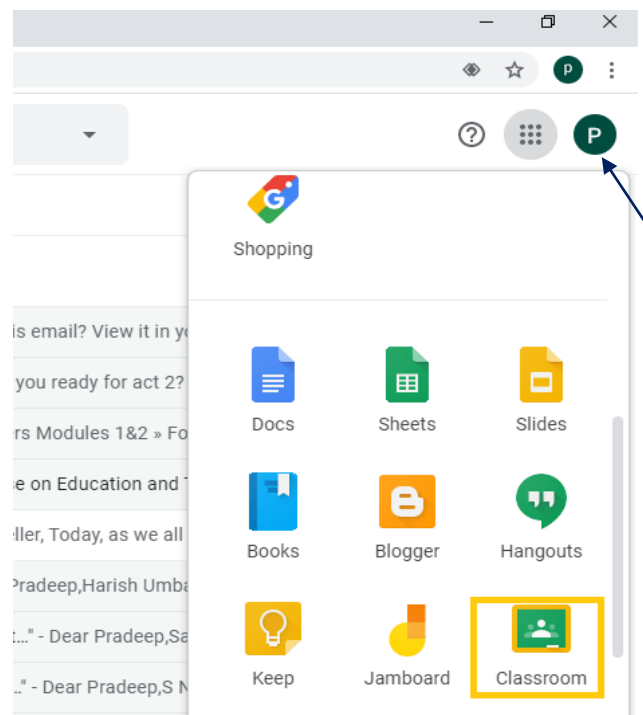
1. Installing QGIS and sample data
2. Working with Vector data and Raster Data
3. Geo-referencing the base map
4. Clipping and merging the data
5. Map composer
6. Downloading and processing sample data (later participant may be asked to download DEM of their jurisdiction)
7. Watershed modeling
 - Create a depression less DEM
 - Create flow direction
 - Create flow accumulation
 - Create watershed pour points
 - Delineate watersheds
 - Delineate Drainage
 - calculates area, relief etc. of the watershed
8. Download national, state and district boundaries (village, if available) and Download road/rail network
9. Generation of Jurisdiction Map by digitization
10. Generation of final GIS MAP and exporting into printable format.

How to join and use Google Classroom

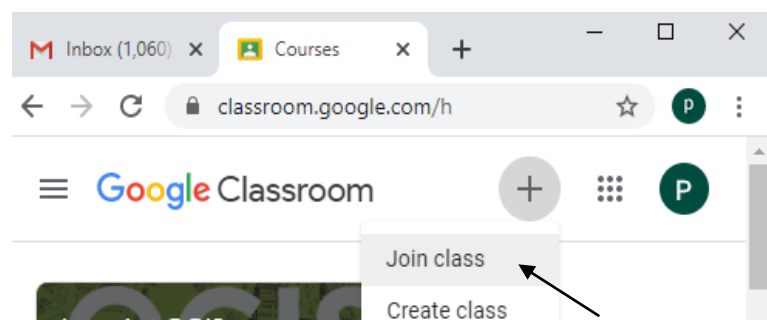
Google Classroom is a free online learning application which helps teachers and students to communicate and can be used to organize and manage assignments, sharing teaching material like PPTs, Videos, to go paperless, for collaboration between students and between teachers, for teaching from a distance.

How to Join Google Classroom

1. **Sign in with your Google Gmail Account.**
2. **Click Google Apps and open Google Classroom**



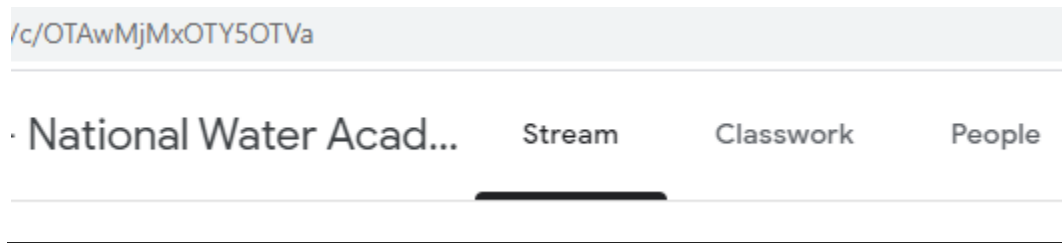
3. **Click (+) sign and Click Join the Class.**



4. **Enter the Class Code shared by Teacher and Join the class**

How to use Google Classroom

Google classrooms are divided into three sections i.e , Stream, Classwork and People as shown in below image:



In the **Stream Section**, students/trainees find the assignments, announcements, and questions that teacher/faculty create. This is the section in which students/trainees will spend most of their time after the classes are set up.

In **Classwork Section**, assignments are created for the students/trainees with due date and time. Teacher/faculty can add a file, Voice PPTs from their computer, a file from Google Drive, a YouTube video, or a link to a Website as training material. Trainees have to download the file or see the material and complete the assignment as specified by the teacher. Students can also submit any type of file to your Classroom. Once assignment is completed or files are downloaded, trainees have to mark it as done.

Google Classroom allows one to ask any question within a specific class. As with assignments teacher/faculty can add files to the questions you post, and can assign a due date to it he want. He can post short answer or multiple choice questions for your students to respond to in Classroom.

In addition to creating assignments and questions, Google Classroom allows to create announcements. Students can respond to the announcements. In reality the entire class can have a conversation based on one announcement. Once again teacher/faculty has the option of adding a file, a YouTube video, or a link to an announcement. Announcements are a great way to post reminders about assignment due dates to trainees.

In **People Section**, one can see about the participants who have joined the particular Google class.

To learn more about the Google Classroom please refer the below Link:

<https://www.youtube.com/watch?v=pl-tBjAM9g4>