



# JALANSH



The Monthly Newsletter of Central Water Commission



## Message

**S. Masood Husain**  
Chairman, CWC

The first International Conference on Sustainable Water Management under World Bank aided National Hydrology Project (NHP) is being organized by the Bhakra Beas Management Board (BBMB) in technical collaboration with CWC and CBIP during 10-11th December, 2018. It would provide opportunity for discussions and deliberations on different facets of water management. A team of CWC officers would be sharing their expertise and experience on this platform.

Further, the bulletin for International Dam Safety Conference (IDSC) to be held during 13-14th February, 2019 in Bhubaneswar has been issued. The Conference program will include enlightening presentations from leading professionals in the water resources sector, an exhibition of latest technology and services and a study tour to Hirakud dam - the longest earthen dam in India. We look forward to wider participation of all concerned in the Conference.

The Hydro-meteorological Data Dissemination Policy, 2018 has been released by Ministry during November, 2018 which has relaxed the norm for

release of classified data pertaining to rivers draining into Bangladesh and Myanmar for Implementing Agencies under NHP.

On international front, India EU Water Partnership (IEWP) is progressing well. The Team of Experts (ToE) constituted by MoWR, RD&GR visited the project site of Pancheshwar Multipurpose Project.

The North Koel project is being actively monitored by the Technical Evaluation Committee (TEC) headed by Member (WP&P), CWC.

An important legislations related to water sector viz. Dam Safety Bill is likely to be introduced in upcoming winter session of the Parliament.

We are constantly upgrading the skill set of officials working on ground through training programmes on various latest technologies and tools and are also involved in upgrading the capacities of State Govt. officers dealing with water resources.

We have been striving to upgrade our important Water Quality Labs as per international standards across the country. In this context, three additional labs at Kochi, Pune and Gandhinagar have been recommended for grant of NABL accreditation in accordance with standard ISO/IEC 17025:2005. I hope more labs would be brought on this standard by our field organizations.

As we are welcoming 2019, the New Year, I wish everyone success, a healthy long life and a fresh new start.

## Announcement

Ministry of Water Resources,  
River Development & Ganga Rejuvenation  
Government of India



## INTERNATIONAL DAM SAFETY CONFERENCE

Bhubaneswar, Odisha, India



**2019**  
13-14 February



**Water being the wealth of the people and its distribution being uncertain, the correct approach is not to complain against nature but to conserve water... to dam rivers at various points to conserve water permanently in reservoirs.**

**Dr. B R Ambedkar, Cuttak, Nov. 8' 1945**

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## Visits of CWC Officials



Hon'ble MoS Sh. Manoj Sinha, Sh. A K. Nayak, Chief Engineer, CWC, Patna along with a team of officers from CWC, GFCC, officers of Govt. of UP visited erosion site in Gazipur district of UP on 28.11.2018

## Erosion Site in Gazipur, Uttar Pradesh

Sh. Manoj Sinha, Hon'ble Union Minister of State for Communication (Independent Charge) and MoS for Railways visited the locations along the left bank of river Ganga in the Karanda Block of Ghazipur district on 28.11.2018. A team comprising of CWC & GFCC officers along with officers of Irrigation & Water Resources Department, Govt. of UP accompanied the Minister during the visit. The erosion sites located on the left bank of river Ganga are Puraina, Bayepur, Sokani, Badahariya, Rafipur, Dinapur and Sri Shiv Pujan Baba Ashram.

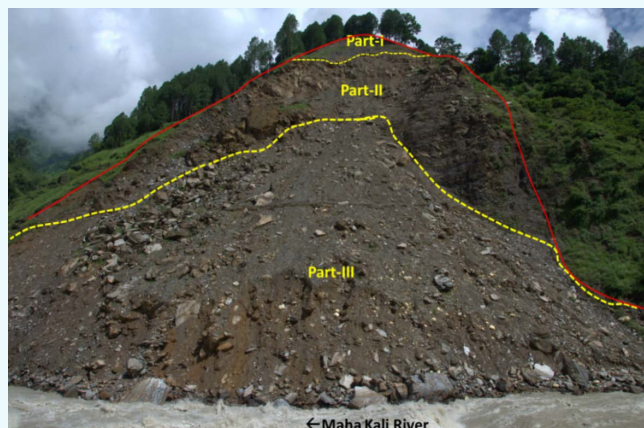
Officials from Irrigation Department, UP informed that a project namely "Constructing Geo Textile Tube Cutter for Protection of Village Group Puraina, Bayepur, Sokani, Badahariya, Rafipur, Dinapur & Sri Shiv Pujan Baba Ashram on Left Bank of River Ganga in District- Ghazipur" has been prepared for protection of around 3.150 km of left bank of river Ganga (estimated cost- Rs. 12.45 crore).

Based on the visit, CWC/GFCC team suggested for increasing the length of the boulder pitching/launching apron as proposed in above project and usage of Porcupines to increase the rate of siltation.

## Landslide Location in Pithoragarh, Uttarakhand

In Oct 2016, there was a landslide at Khotila Village of Dharchula Tehsil, Pithoragarh that caused blockade in Mahakali (Nepal)/Kali (India) River, which flows along the international boundary between India and Nepal. The landslide caused the deposition of a huge amount of debris material and constricted the channel of the River. This resulted in the diversion of the flow of the river to the left bank towards Nepal side. Based on the request of District Administration, a team of officers from CWC, NIH, CSMRS, GSI, GFCC visited the landslide location during Oct 2018 and submitted their report in Nov 2018.

The team in its report suggested some immediate measures to be taken up in Part I and Part II of the landslide as depicted on the adjacent figure. Team also recommended for regular monitoring of river flow, X-section, L-section, etc. which can be used for a model study.



Landslide region on Mahakali (Nepal)/Kali (India) River, Dharchula, Pithoragarh, Uttarakhand

## Dholaithabi Barrage Project, Manipur

Dholaithabi Barrage Project costing Rs. 508.48 crore on Iril River is located at Dolaithabi village in Imphal East District of Manipur that envisages construction of a Barrage and a Canal System to serve a CCA of 5500 Ha in 15 villages on the left bank and 12 villages on the right bank of the river in the Imphal East District, Manipur. The Project, on its completion, will create an ultimate Irrigation Potential of 7545 Ha with an Intensity of Irrigation of 137.20%. Total irrigation potential created up to Nov 2018 is 5110 Ha. The project is included in the 99 prioritized projects under PMKSY-AIBP and rescheduled for completion by March 2019.

Recently, Officers from CWC visited the project site and reported the physical progress of the project- Barrage (RCC) (100%), Gates (83.33%), Canal- (i) LA(63%)(ii) Alignment/investigation of structures(100%) (iii) RCC tunnel (83%) and Cross Drainage Structures (100%). It was also reported that the CADWM works under the project are targeted for completion by March 2020.



Sh. V D Roy, Director(M&A), CWC & Sh. Jeeta Ram, DD(M&A) on Monitoring visit to Dholaithabi Barrage Project on 20.11.2018

## North Koel Project

The North Koel Reservoir Project is located in the tribal areas in Palamau /Garhwa districts of Jharkhand State. The project was originally accepted by the Advisory Committee of MoWR in its 13th meeting held on 19.03.1980. The estimated cost of the project was 113.17 crore. The construction of the project was initiated in 1972 and continued till 1993. In the same year, it was stopped by Forest Department, Bihar as the installation of gates in the dam would threaten the Betla National Park and Palamau Tiger Reserve. Further, in the year 2016, it was decided that the Full Reservoir Level (FRL) of the reservoir may be restricted to Elevation (EL) 341.0 m for saving of core area of Palamau Tiger Reserve.

Later, the approval of Union Cabinet was received in Aug 2017 for completion of balance works of the North Koel Reservoir Project at an estimated cost of Rs. 1622.27 crore. As per cabinet decision, MoWR, RD&GR reconstituted an Empowered Committee (EC) under the Chairmanship of CEO, NITI Ayog to monitor the execution of the Project. A Contract Agreement amongst CWC, Water Resources Departments of State Govts. of Bihar and Jharkhand and WAPCOS was signed in September 2017 for execution/completion of balance works of North Koel Project.

MoWR, RD & GR also constituted a Technical Evaluation Committee (TEC) under the chairmanship of Member (WP&P), CWC for completing the balance works of North Koel Project in May, 2017. Till date, total 15 meetings of TEC were held and the last being held on 26.11.2018. During this meeting, discussions concerning the issues regarding completion of land acquisition process, status of Stage-II Forest Clearance (FC), design and cost estimates of Right Main Canal (RMC), the status of progress of various components of the balance works of the project, payment to WAPCOS for works related to Left Main Canal (LMC), status of finalization of structural safety & integrity of the existing structures and status of (R & R) of villages in dam area were held.

## Rim Embankment around Maithon Reservoir

The Feasibility Study Report of Rim Embankment around Maithon Reservoir, in Jharkhand, has been submitted to Damodar Valley Corporation(DVC) by CWC on 30.11.2018.

Construction of rim embankment around the Maithon Reservoir has been proposed in order to create more flood storage without additional submergence to minimize the flood in Lower Damodar Region. The work was entrusted to CWC by DVC to ascertain its techno-economic viability for augmenting storage of Maithon Reservoir by 148 MCM. The tentative cost of the project is Rs. 1165 crore with BC ratio of 1.261.

## JGE on Flood Management

A Joint Group of Experts (JGE) on Flood Management has been constituted between India and Bhutan to discuss and assess the probable causes and effects of the recurring floods and erosion in the southern foothills of Bhutan and adjoining plains in India. The eighth meeting of JGE was held in Guwahati during 01.11.2018 to 02.11.2018. Next day, JGE members visited NERIWALM and HO site of CWC. Sh. T S Mehra, Commissioner(B&B), MoWR, RD&GR was the leader from Indian Side.

Besides JGE, a Joint Technical Team (JTT) on Flood Management between the two countries is also constituted, with Chief Engineer(B&BBO), CWC, Shillong as its team leader (Indian Side).



Sh. S K Halder, Member (WP&P), CWC chairing 15th meeting of TEC on North Koel Project at New Delhi on 26.11.18

<b>Project on River</b>	North Koel river (tributary of Sone River)
<b>Location</b>	Palamau District, Jharkhand
<b>Project Benefits</b>	Annual Irrigation 1,11,521 Ha Benefited districts- Drought prone area of Palamau & Garhwa (Jharkhand), Aurangabad & Gaya districts (Bihar)
<b>Canal System</b>	Off-taking from Mohammadganj Barrage
<b>Gross storage capacity</b>	190 MCM
<b>cost</b>	Estimated Cost-Rs. 2391.37 crore. Expenditure incurred till March 2016-Rs. 769.09 crore Cost of balance work -Rs. 1622.27 crore.



Sh. P M Scott, CE, B&BBO, CWC along with other officers with Feasibility Study Report for Construction of Rim Embankment around Maithon Reservoir which was submitted to DVC on 30.11.2018



8th Meeting of Joint Group of Experts (JGE) of Govt. of India and Royal Govt. of Bhutan between 01.11.2018 to 02.11.2018



## CWC Library

e-Granthalaya is a Library Management Software developed by NIC, Govt of India with the aim of automation of in-house activities of libraries and to provide various online member services for Government and Semi-Organizations. In this context, the organizations under ministry have initiated steps for usage of this software.

CWC has a departmental reference library on the subject of Water Resources Engineering and other allied technical subjects. It has catalogued more than 88,000 records on e-Granthalaya. The catalogue that can be accessed through the following URL:

<https://eg4.nic.in/WaterMinistry/HOME/OPACAdvance.aspx>

## NABL Accreditation

9 Water Quality Labs of CWC have been granted/recommended for NABL Accreditation in accordance with ISO/IEC 17025:2005 up to Nov 2018.



Sh. Pramod Narayan,  
Director(DSR), CWC

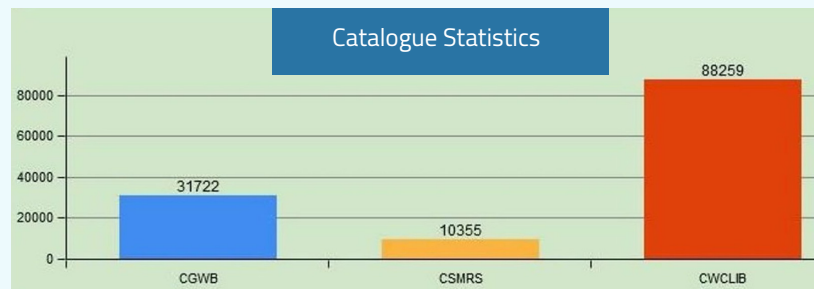
## Article Published in IAHR Journal

An article on the topic "Sediment - Induced Problems Under the Dam Rehabilitation and Improvement Project in India" by Sh. Sanjay Giri and Sh. Pramod Narayan got published in Hydrolink, a primary magazine of IAHR (International Association for Hydro-Environment Engineering and Research) community.

Sh. Pramod Narayan, Director( Dam Safety Rehabilitation), CWC is Project Director (DRIP). To access the journal following link can be followed-

<http://iahr.org/Portal/Journals/Hydrolink.aspx>

Since CWC library is a technical departmental library, it is generally not open to the public. However, bonafide users from other organizations are allowed to use the library for reference.



Source <https://eg4.nic.in/WaterMinistry/HOME/Default.aspx>

## Coastal Management Information System



Demonstration of equipment used in coastal data collection to participants of training programme

Central Water Commission (CWC) is implementing a project namely Coastal Management Information System (CMIS) through IIT Madras, for the collection of nearshore parameters which will be used in the Planning, Design and Management of Coastal Protection Structures. As part of the CMIS Project, three Sites (1) Devaneri-Tamil Nadu (2) Karaikal- Puducherry and (3) Ponnani- Kerala were established and coastal data is being collected from last two years. The coastal data being collected includes Tide, Current, Wave, Shoreline change, Bathymetry, Sediment analysis, Conductivity, Salinity, and weather parameters like Wind, temperature, rainfall etc. To train the officials of Central Water Commission and State/U.T Govts in the field of Coastal Data collection, a CMIS- Hands-on Training was organized at IIT Madras from 19.11.18 to 29.11.18. This training also included the demonstration of equipment used for coastal data collection at selected coastal sites.



## PMKSY-AIBP Monitoring

CWC is extensively monitoring the water resources projects included under PMKSY-AIBP. This helps in the identification of bottlenecks, ensures that the funds are being utilized properly and forms the basis for assessing further funding requirements.

During 2018-19, 52 on-going prioritized projects under PMKSY-AIBP were monitored by CWC field units with aim of sending the proposal of recommendation for release of 1st instalment. Further, CA proposals for release of Rs. 1339.94 crore has been sent to the Ministry with the due recommendation of CWC.

In addition to above, the Revised Cost Estimate of Borolia Project (Assam), Lower Wardha Project (Maharashtra) and Rajiv Bhima Lift Irrigation Scheme (Telangana) have been accorded Fast Track Proforma Clearance (FTPC). The details of the same has been given in the table.

Project	Total Cost (Rs. crore)	AIBP Comp. (Rs. crore)
Borolia Assam	295.97	256.158
Lower Wardha Maharashtra	3615.29	2915.61
Rajiv Bhima LIS Telangana	2509.66	1942.66

Name of the State	Recommended amount (in Cr. Rs.)
Bihar	6.67
Gujarat	729.05
Jammu & Kashmir	17.3612
Madhya Pradesh	86.79
Maharashtra	275.28
Manipur	49.73
Odisha	138.53
Rajasthan	7.10
Telangana	2.67
Uttar Pradesh	26.75
<b>Total</b>	<b>1339.94</b>

## Hydro-meteorological Data Dissemination Policy 2018

The Hydro-meteorological Data Dissemination Policy, 2018 has been released by Ministry during November 2018. As per the new policy, the data sharing mechanism for Region-2 (Ganga-Brahmaputra-Meghna Basin & Other rivers and their tributaries discharging to Bangladesh/Myanmar) has been modified.

Now such data will be shared freely among the attached and sub-ordinate offices of MoWR, RD&GR and co-basin State

Government's organization dealing with water resources and acting as Implementing Agency under NHP. Data sharing, in this case, would be through secured login/protocol and one-time secrecy statement.

Other provisions of old policy would remain unchanged and classified data would be released through Classified Data Release Committee (CDRC) headed by Chairman, CWC.

## India – EU Water Partnership (IEWP)

The IEWP is an outcome of the 13th Indo-EU summit held in March 2016. Under India-EU Water partnerships following activities were identified for India EU technical collaborations.

1. Sustainable River Basin Management
2. Environmental Flows
3. River Rejuvenation
4. Groundwater Use and Recharge
5. Water Use in Irrigation
6. Solar pumping for Irrigation
7. Capacity Building
8. Blueprint for Water Accounting
9. Research, Innovation, Technology



Sh. U P Singh, Secretary, MoWR, RD&GR took a meeting to review the progress of IEWP on 26th November 2018 wherein nodal officers from the Indian side and EU were present.

## Chair on Water Sector Conflicts and Governance

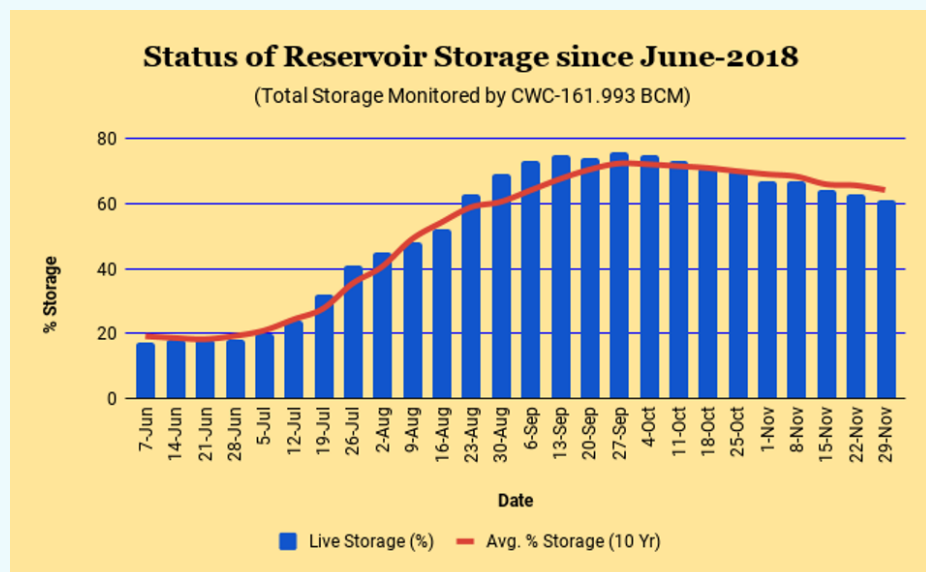
Centre for Policy Research (CPR) and the Ministry of Water Resources, River Development & Ganga Rejuvenation have signed an agreement for establishing a 'MoWR Research Chair - Water Conflicts and Governance' at CPR, with a mandate to pursue independent and evidence-based research to inform policy making, and enabling institutional transformation towards addressing the evolving challenges in India's water sector. Dr Srinivas Chokkakula has been appointed as the

MoWR Research Chair - Water Conflicts and Governance. The Research Chair will pursue a broader research agenda in trans-boundary water conflicts/cooperation, initially focusing on interstate river water cooperation and disputes resolution targeting policy-relevant research outputs. The Research Chair will also help foster an enduring CPR-CWC (Central Water Commission) collaborative research relationship, beginning with a forum for dialogue on contemporary water sector issues and challenges.

## Reservoir Monitoring

CWC monitors live storage status of 91 reservoirs around the country on a weekly basis, and is issuing a bulletin every Thursday. The total live storage capacity of these 91 reservoirs is 161.993 BCM, which is about 63% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country.

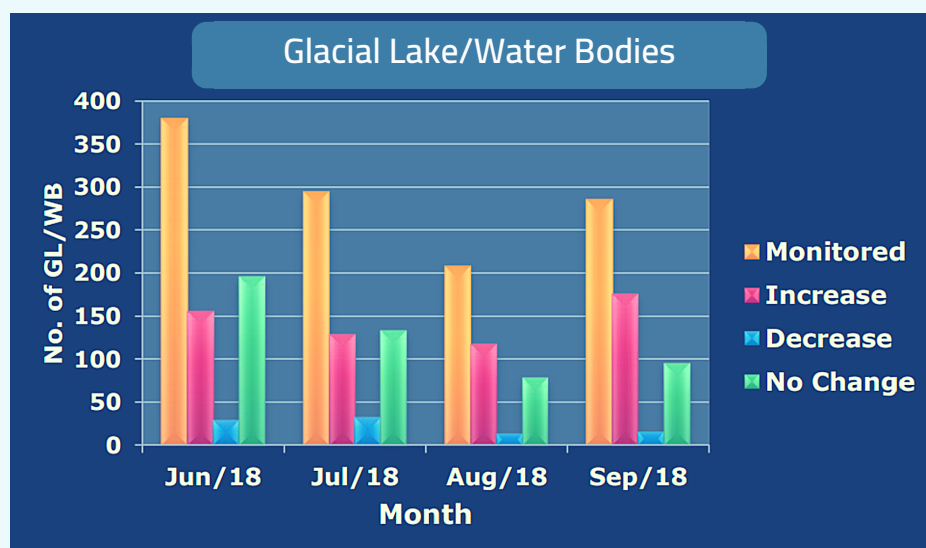
As per the reservoir storage bulletin, dated 29.11.2018, the live storage available in these reservoirs is 98.353 BCM, which is 61% of the total live storage capacity of these reservoirs. This is 99% of the live storage of the corresponding period during last year, and 95% of the average storage over the last ten years.



## Glacial Lake Monitoring

Every year during June to October, CWC monitors the size of Glacial Lakes (GL) & Water Bodies (WB) that are larger than 50 ha in Himalayan region using satellite data. These were digitised in year 2009 and their current sizes are analyzed with respect to size in year 2009. The number of GL & WB monitored vary due to availability of cloud free data. Summary of their size variation has been highlighted in the adjacent chart. The detailed report for month of September-2018 covering methodology, finding etc. can be accessed from website at following URL.

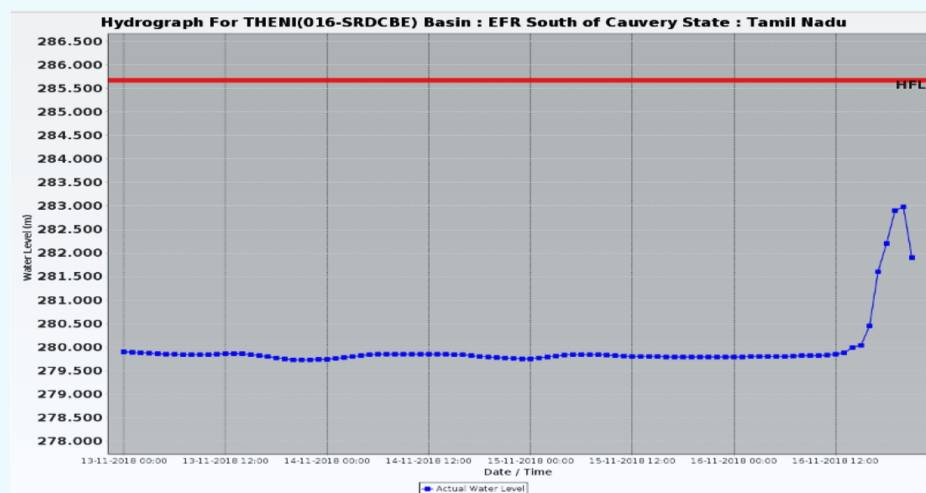
[http://cwc.gov.in/main/downloads/CWC\\_lakes\\_monitor\\_report\\_September\\_2018.pdf](http://cwc.gov.in/main/downloads/CWC_lakes_monitor_report_September_2018.pdf)



## Severe Cyclonic Storm- Gaja

During 10th to 17th November 2018 severe cyclonic storm affected different regions of South India viz. Tamil Nadu, Kerala and Union Territory of Puducherry. On 10th Nov it was only a depression that converted into a severe cyclonic storm on 15th Nov. The cyclone crossed the Tamilnadu Coast between Nagapattinam and Vedaranyam during intervening night of 15th and 16th Nov.

The cyclone majorly affected the regions viz. lower Cauvery and Vaigai Basins in Tamil Nadu and central Kerala around Kottayam. During Gaja Cyclone water level at Flood Monitoring Stations Theni on Suruliyar river in Theni district of Tamilnadu and Kidangoor on river Meenachil in Kottayam District of Kerala rose rapidly on 16th Nov.



Hydrograph for River Suruliyar at Theni in Theni District, Tamil Nadu on 16.11.18



## Trainings



Sh Narendra Singh Shekhawat, DD, CWC attended International Course on "Urban Water Technologies and Management" in Israel during 4.11.18 to 23.11.18



Training programme on "HO, FF, WQ, Telemetry System & eSWIS" organized at Guwahati campus during 12.11.18 to 16.11.18



Training Programme organized at MTBO, Gandhinagar on "HO, WQ, Telemetry and e-SWIS" during 12.11.18 to 16.11.18



Sh. Y K Sharma, Member (RM), CWC inaugurated hands on training on CMIS at IIT Madras, Chennai on 19.11.18















Sh. N K Mathur, Member (D&R), CWC with participants during the training on "Project Hydrology" organized at CWC HQ, New Delhi during 26.11.18 to 30.11.18



Sh. P.M.Scott, CE, B&BBO, CWC inaugurating Training Programme on "Hydrological & Meteorological Observation" at Shillong on 29.11.18

## Water Sector in News

-  Andhra Pradesh gets Rs. 1250 crore World Bank loan for agriculture projects in climate vulnerable districts (*Mumbai Mirror*, 05.11.18)
-  Polavaram Project is set to cross a new milestone: Erection of radial gates to be launched on December 17 (*The Hans India*, 06.11.18)
-  Maharashtra Govt. to ask Centre for Rs. 7000 crore drought assistance (*The Times of India*, 07.11.18)
-  Pak 'diplomatic sabotage' busted: India to go ahead with Ratle hydroelectric project, govt to send team to J&K (*Times Now* 07.11.18)
-  NOC must for using groundwater for infra projects (*The New Indian Express*, 10.11.18)
-  PM Modi inaugurate Varanasi Port, receives India's first inland cargo vessel from Bengal (*The New Indian Express website*, 12.11.18)
-  Indus waters: India to expedite 3 projects. The three projects includes Shahpurkandi Dam project, a second Sutlej-Beas Link in Punjab and the Ujh project in Jammu & Kashmir (*The Statesman*, 26.11.18)
-  NHPC's Arunachal projects to resume work after NGT move, Green tribunal quashes appeal to stall hydroelectric projects at Lower Subanisri and Dibang (*The Economic Times*, 26.11.18)
-  Mekedatu project gets CWC nod amid protest. The nod was given for preparation of DPR. (*The Pioneer*, 29.11.18)
-  SC orders public hearing on Polavaram: Directs centre to file affidavit detailing conduct of hearing in Odisha, Chhattisgarh (*The Hindu*, 30.11.18)
-  Kerala Floods: Centre approves additional Rs. 2500 cr relief. The Centre had earlier sanctioned Rs. 600 cr for the same (*The Indian Express*, 30.11.18)
-  India Nepal resolve technical issues on Pancheshwar dam (*The Week*, 30.11.18)

## Gallery



Sh. S Masood Husain, Chairman, CWC, delivering the inaugural address in presence of Sh. Rajendra Singh and Prof. (Dr.) Tariq Mansoor, VC, AMU, at the International Conference at AMU, Aligarh on 10.11.18



Sh. U P Singh, Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation taking meeting with officers of M&ERO, CWC, Bhubaneswar on 17.11.18



Sh. N K Mathur, Member (D&R), CWC and other officers inspecting one of undersluice gates of Vaigai dam on 20.11.18

## From History-Chairmen of CWC

Name	From	To
A N Khosla	05-04-1945	16-06-1953
Kanwar Sain	17-06-1953	15-10-1958
M Hayath	16-10-1958	31-03-1961
S S Kumar	01-04-1961	14-07-1962
M R Chopra	15-07-1962	17-08-1966
C L Handa	18-08-1966	07-12-1966
D B Anand	08-12-1966	05-06-1968
G A Narasinh Rao	06-06-1968	12-02-1970
S K Jain	29-03-1970	16-01-1974
Dr Y K Murthy	25-05-1974	31-10-1978
Dr K C Thomas	01-11-1978	30-06-1980
R Ghosh	01-07-1980	30-09-1981
C C Patel	01-10-1981	03-01-1982
R Ghosh	04-01-1982	03-07-1982
M G Padhye	05-07-1982	15-09-1982
Pritam Singh	05-10-1982	31-12-1984
Gokul Prasad	01-01-1985	30-04-1985
N K Sarma	01-05-1985	24-09-1985
M A Chitale	25-09-1985	22-02-1989
M S Rao	23-02-1989	30-06-1989
R B Shah	01-07-1989	28-02-1990
V B Patel	29-03-1990	31-07-1991
Dr C D Thatte	16-01-1992	10-09-1992
M S Reddy	11-09-1992	06-03-1994

Name	From	To
A B Joshi	07-03-1994	31-07-1995
Ramesh Chandra	01-08-1995	31-12-1997
Z Hasan	01-01-1998	24-09-1998
A D Mohile	25-09-1998	31-08-2000
Z Hasan	01-09-2000	22-11-2000
R S Prasad	23-11-2000	28-02-2001
Dr B K Mittal	01-03-2001	31-07-2001
Suresh Chandra	01-08-2001	31-10-2001
Smt Radha Singh	01-11-2001	02-01-2002
Suresh Chandra	03-01-2002	31-10-2002
R Jeyaseelan	01-11-2002	30-11-2006
S K Das	01-12-2006	31-07-2007
B S Ahuja	01-08-2007	31-03-2008
S Manoharan	01-04-2008	15-04-2008
A K Bajaj	16-04-2008	31-08-2011
R C Jha	01-09-2011	31-07-2012
S P Kakran	01-08-2012	31-10-2012
Rajesh Kumar	01-11-2012	31-07-2013
Bibhas Kumar	01-08-2013	31-10-2013
A B Pandya	05-11-2013	31-12-2015
G S Jha	01-01-2016	31-01-2017
Narendra Kumar	02-03-2017	31-10-2017
S Masood Husain	18-12-2017	

**Published By:**  
**Water Systems Engineering Directorate**  
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 Govt. of India



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