



JALANSH

THE MONTHLY NEWSLETTER OF CENTRAL WATER COMMISSION

NO.3

OCTOBER 2024
VOLUME-07

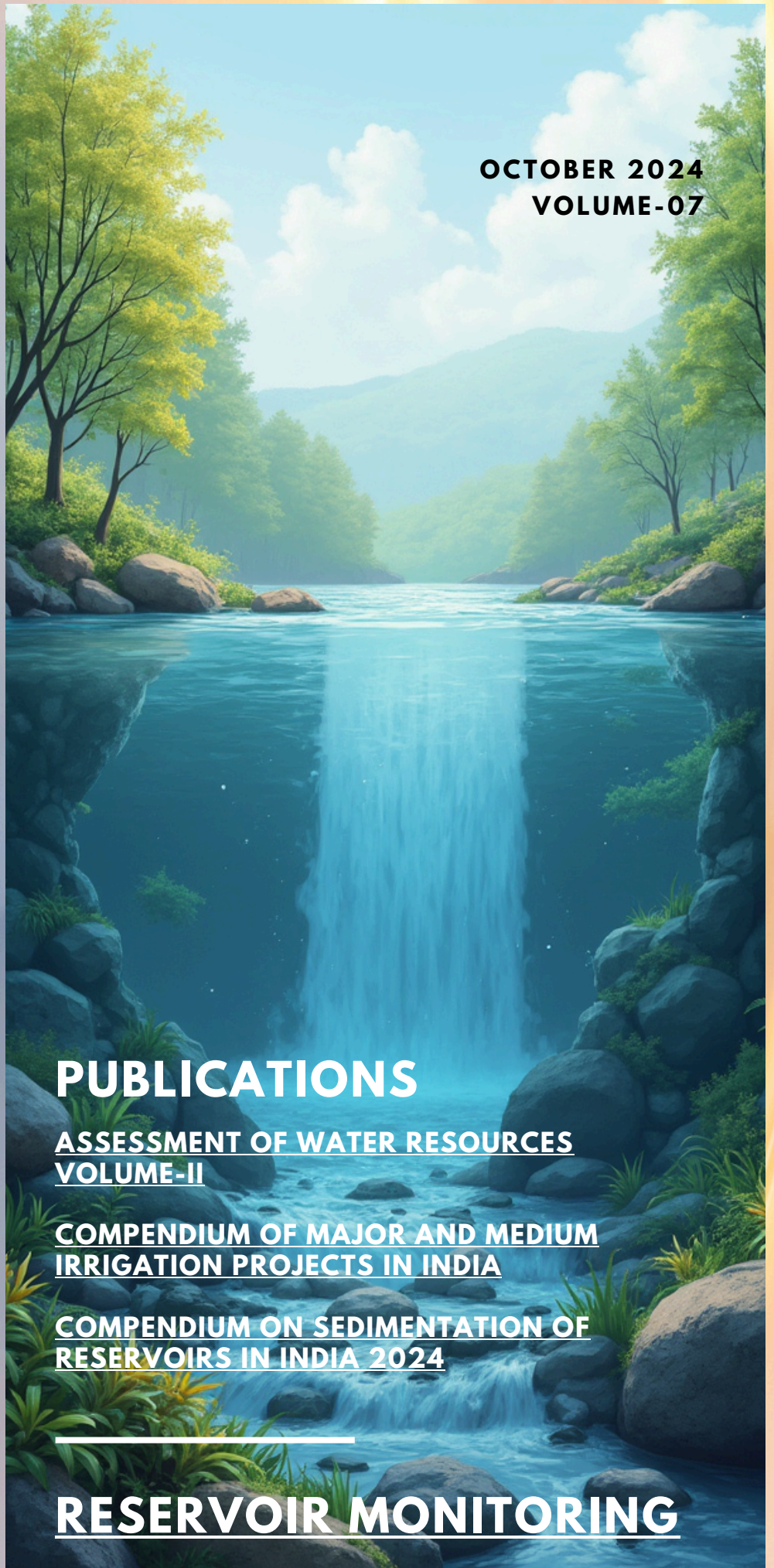
PUBLICATIONS

ASSESSMENT OF WATER RESOURCES
VOLUME-II

COMPENDIUM OF MAJOR AND MEDIUM
IRRIGATION PROJECTS IN INDIA

COMPENDIUM ON SEDIMENTATION OF
RESERVOIRS IN INDIA 2024

RESERVOIR MONITORING





CONTENTS

PAGE 1

MEETING REGARDING PROJECTS:

North Koel Project, Bihar & Jharkhand
Sirhind Feeder and Rajasthan Feeder

PAGE 2

TRAINING/WORKSHOP/CONFERENCE:

Training programme organised by
NWA, Pune

PAGE 3

DAM SAFETY ACT, 2021/NDSA/DRIP

Second meeting of National Level Steering
Committee (NLSC) of DRIP Phase II & III

PAGE 4

OTHER IMPORTANT ACTIVITIES:

Flood Situation in the Country-
September 2024

PAGE 5

OTHER IMPORTANT ACTIVITIES:

The 8th and 9th Meeting of the Negotiation
Committee
The 6th Meeting of the Joint Committee on
Ganga-Padma River system in W.B.

PAGE 6

OTHER IMPORTANT ACTIVITIES:

18th meeting of Technical Sub Committee
to discuss data to be shared with Neutral
Expert
Publications of CWC launched during 8th
India Water Week

PAGE 7

OTHER IMPORTANT ACTIVITIES:

Certificate Distribution for Different
Publications of CWC
MoU between CWC & NIH, Roorkee
Internal Hackathon 2024

PAGE 9

RESERVOIR MONITORING

Chairman Message



Shri Rakesh Kumar Verma
Chairman, CWC

Significant advancements and collaborative endeavors in India's water resources sector was achieved in September, 2024. The 8th India Water Week, held at the iconic Bharat Mandapam in New Delhi, served as a pivotal platform under the theme "Partnerships and Cooperation for Inclusive Water Development and Management." Graced by the Hon'ble President of India, Smt. Droupadi Murmu, and the Union Minister of Jal Shakti, Shri C.R. Patil, the event brought together a confluence of global and domestic expertise. Esteemed organizations like the World Bank, Asian Development Bank, and ICID joined hands to deliberate on sustainable water management strategies, reaffirming our shared commitment to an equitable and resilient future.

In the realm of technical advancements, the 39th Technical Expert Committee (TEC) meeting of North Koel Project, discussions were held on land acquisition by WRD Bihar, progress of various components of the balance works of the project by the WAPCOS etc., while the 9th Negotiation Committee meeting on the Pennaiyar River Water Dispute demonstrated collaborative efforts to resolve complex inter-state water issues. These deliberations underline the importance of consensus in addressing the multifaceted challenges of water management.

Another highlight of the month was the release of three key publications during India Water Week:

- "Study on Basin Wise Assessment of Water Resources" – A comprehensive analysis that underscores the importance of data-driven methodologies for efficient resource management.
- "Compendium of Major and Medium Irrigation Projects in India" – A valuable resource offering insights into the scope and scale of irrigation projects across the country.
- "Compendium on Sedimentation of Reservoirs in India 2024" – A critical document addressing the challenges posed by sedimentation in reservoirs and presenting actionable insights to enhance their operational efficiency.

Furthermore, the signing of a Memorandum of Understanding with NIH, Roorkee, marks a transformative leap in hydrological research, fostering innovation in river monitoring and allied areas.

Capacity-building initiatives was another cornerstone of our achievements in this month. Training programs organized by the National Water Academy (NWA), Pune, equipped stakeholders with essential skills and knowledge across diverse domains of water resource management. The Internal Hackathon 2024 emerged as a platform for innovation, presenting cutting-edge solutions to address pressing challenges in the water sector.

As we reflect on these achievements, it is evident that our collective efforts are steering the nation towards a sustainable and inclusive water future. Moving forward, I urge all members of our fraternity to actively engage, share their insights, and contribute towards shaping a resilient water ecosystem. Together, let us continue to build on these milestones and forge a future where water resources are managed equitably and sustainably for generations to come.



Meetings Regarding Projects

39th meeting of TEC for completing the balance works of North Koel Project, Bihar & Jharkhand



The 39th meeting of the Technical Evaluation Committee (TEC) for completing the balance works of North Koel Reservoir Project (NKP) was held on 10.09.2024 at CWC, New Delhi under the Chairmanship of Member (WP&P), CWC and Chairman (TEC), NKP. The officers from DoWR, CWC HQ & field units, State Governments of Bihar, Jharkhand and WAPCOS participated in the meeting.

There were discussion on important agenda items such as status of land acquisition by WRD Bihar, progress of various components of the balance works of the project by the WAPCOS, Status of Tender for the work of "Lining, Repair, & Construction of RMC and it's structures in Bihar portion (RD 68.37 Km to 109.09 Km), Status of Tender for the work of "Earthwork, Repair, & Construction of Distribution Network (12 Nos. Minors) of Right Main Canal, Jharkhand, Status of Tender for the work of the construction of distribution system off taking from RMC in Bihar, Status of Shifting of electric poles from RMC, Status of refund of unspent amount lying with Govt. of Jharkhand etc.

Sixth meeting of the EPRC to Sirhind Feeder and Rajasthan Feeder

Sixth meeting of the Expert Project Review Committee (EPRC) to oversee relining works of Sirhind Feeder and Rajasthan Feeder was held under the chairmanship of Shri Navin Kumar, Member (WP&P), CWC and Ex-Officio Additional Secretary to Govt. of India on 4th Sep, 2024 at Sewa Bhawan, R.K Puram, New Delhi in hybrid mode.

The Members of the Committee, Officials from CWC, representatives from Government of Punjab and Government of Rajasthan were present.

The EPRC reviewed the status of the relining works, reasons of delays due to protests lodged by farmers and NGOs. The committee emphasized the need for expediting the evaluation of pilot work, finalizing the work plan for the remaining sections of both the feeders, and completing the projects, including construction of Pucca structures like bridges, regulators etc.

WRD Punjab apprised the EPRC, regarding progress / action taken on follow up of review meeting chaired by the Secretary, DoWR, RD&GR held on 04.07.2024. It was informed that a committee consisting of experts from CWC, CSMRS, IIT Roorkee, and IIT Ropar to evaluate the pilot work comprehensively, considering all technical aspects and potential loading conditions has been formed on 30th July 2024 and committee has visited the pilot work site on 13th August 2024. The committee's report is awaited. In this regard, the EPRC emphasized the officers of Punjab Govt. to expedite the evaluation of Pilot Work as per decision taken in the meeting chaired by the Secretary, DoWR RD&GR, MoJS.



Rangawan Dam, Chhatarpur (MP)

Training Programs organized by NWA, Pune

Sl No.	Name of Training	Durations	No. of participants	Objective
1	One Day Workshop for Civil Engineering Students on Water Resources Management	One Day	59	Students of 2nd Year Civil Engineering
2	Instrumentation in Dams	Five Days	57	Focuses on crucial aspects such as the need and importance of instrumentation in hydraulic structures, various monitoring techniques, and the application of advanced technologies
3	Introduction to Python Programming & Applications in Water Resources Sector	Two Weeks	850	Overview of Python Programming, Jupyter notebooks, Basic Data Types and Data Structures in Python, Functions, Loop and Control Flow, Error and File Handling in Python, Working with Pandas and NumPy, Data Visualization, Time Series Analysis, Geospatial Analysis, and QGIS customization using Python.
4	Overview of Water Resources Sector of India	Four Days	61	For the newly appointed Group 'A' Officers of Water Resources Department, Government of Maharashtra.



Second meeting of National Level Steering Committee (NLSC) of DRIP Phase II & III

The second National Level Steering Committee (NLSC) meeting for the externally funded Dam Rehabilitation and Improvement Project (DRIP-II) Scheme was held on 25th September 2024 under the chairmanship of Ms. Debashree Mukherjee, Secretary, DoWR, RD&GR at New Delhi. Officials from DoWR, CWC, CPMU, World Bank, AIIB, states/Implementing agencies and Academic Institutions under DRIP Phase-II were participated in this meeting.

During the meeting, various issues like Action Taken Report on the Minutes of the 1st NLSC meeting, progress of the project, Inclusion of Category I and II dams under DRIP, Reimbursement of expenditure to pursue M. Tech Program and other scheduled agenda of the items discussed among all the officials.

All the officials from CPMU unit led by Sh. Rakesh Kashyap, Project Director, CPMU-DRIP participated and provided their support to the successful organising the 2nd NLSC meeting.



I. Flood related matters

Flood Situation in the country - September 2024

Regular Flood Forecasting Activity commenced on 01.05.2023 in Brahmaputra and Barak and Jhelum basins. During the period from 1st May to 30th September 2024, Total 9119 (6325 level+2794 Inflow) flood forecasts were issued, and 8661 (6044 Level+2617 Inflow) forecasts were within permissible limit with a 94.98 % percent accuracy . 212 nos. of Red Bulletin (for Extreme flood situation) and 120 no. of Orange Bulletin (for severe flood situation) were issued during the month of September 2024 from Central Flood Control Room.

Summary of Flood Situation during 01.05.2024 to 30.09.2024

Extreme Flood Situation

Six FF station observed Extreme Flood Situation.

Sl No.	State	District	River	Station	Period	
					From	To
1	Assam	Jorhat	Brahmaputra	Neamatighat	30/06/2024	02/07/2024
2		Sonitpur	Jiabharali	Jia-Bharali NT Road Crossing	01/07/2024	01/07/2024
3		Sivasagar	Dikhow	Sivasagar	02/07/2024	02/07/2024
4		Dibrugarh	Buridehing	Khowang	02/07/2024	03/07/2024
5	Bihar	Sitamarhi	Bagmati	Dheng Bridge	28/09/2024	29/09/2024
6		Muzaffarpur	Bagmati	Runisaidpur	29/09/2024	30/09/2024

66 flood monitoring station observed Extreme flood situation.

Severe Flood Situation

87 FF Stations observed Severe Flood Situation in Assam, Bihar, Sikkim, West Bengal, Uttar Pradesh, Andhra Pradesh, Kerala, Telangana, Maharashtra, Tamilnadu, Tripura, Jharkhand, Odisha, Madhya Pradesh, Rajasthan, Gujarat and Chhattisgarh.

126 monitoring station observed Severe Flood Situation in Assam, Bihar, Manipur, Kerala, Karnataka, Tripura, Uttar Pradesh, Uttarakhand,

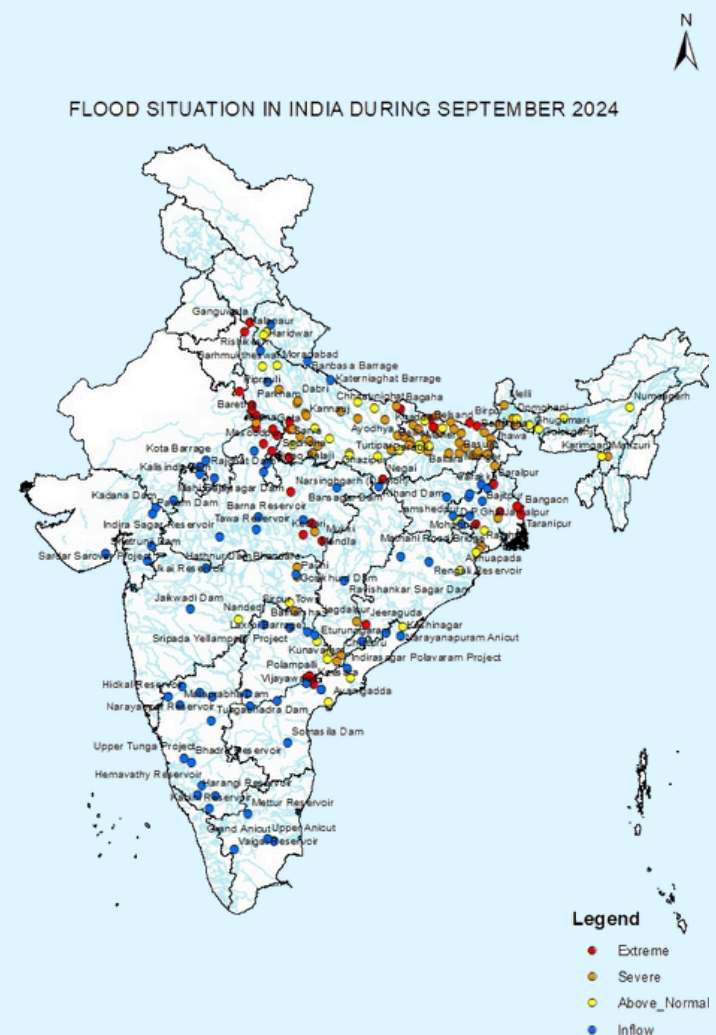
Maharashtra, Madhya Pradesh, Odisha, Gujarat, Goa, Tamilnadu, Telangana, Jharkhand, Chhattisgarh, Rajasthan and West Bengal.

Above Normal Flood Situation

49 FF Stations in Arunachal Pradesh, Assam, West Bengal, Bihar, Uttar Pradesh, Uttarakhand, Andhra Pradesh, Maharashtra, Jharkhand, Odisha, Telangana, Tripura, Karnataka and Gujarat observed Above Normal Flood Situation.

Reservoirs having Inflow above threshold limit

77 reservoir received inflows above their threshold limit in Tamilnadu, Telangana, Karnataka, Kerala, Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand and West Bengal.



II. Inter-State Disputes

The 8th Meeting of the Negotiation Committee w.r.t complaint of State of Tamil Nadu under Section 4(1) of ISRWD Act, 1956

Sh. Kushvinder Vohra, Chairman, Central Water Commission & Ex-Officio Secretary to the Government of India held 8th meeting of the Negotiation Committee on Pennaiyar River Water Dispute on 20th September, 2024. Officials from the States of Karnataka, Tamil Nadu, Andhra Pradesh and Union Territory of Puducherry, NIH and Senior officers from Central Water Commission (Head quarter & field offices) attended the meeting.

Chairman, CWC informed the Committee Members that Report of the Negotiation Committee (Part-1) has been submitted to DoWR, RD&GR on 19.09.2024. During the meeting, Hydrological Studies as done by the State of Karnataka and State of Tamil Nadu have been discussed in detail. After detailed deliberations, Chairman, CWC proposed certain propositions so as to address concerns of Tamil Nadu regarding water availability in the basin specially downstream of Yargol Dam of Karnataka. Both the States of Karnataka and Tamil Nadu agreed to submit their response on the proposed propositions.

The 9th Meeting of the Negotiation Committee w.r.t. Complain to Pennaiyar Issues

Shri Kushvinder Vohra, Chairman, Central Water Commission & Ex-Officio Secretary to the Government of India held 9th meeting of the Negotiation Committee on Pennaiyar River Water Dispute on 28th September, 2024. Officials from the States of Karnataka, Tamil Nadu and Union Territory of Puducherry, NIH, Roorkee and Senior officers from Central Water Commission (Head quarter & field offices) attended the meeting.

During the meeting, the concerns of Tamil Nadu regarding water availability in the basin specially downstream of Yargol Dam of Karnataka have been discussed in details. State of Karnataka has agreed to all the suggested propositions with some modifications. However, the Member from Tamil Nadu expressed reservations in this regard.

Subsequently, Report of the Negotiation Committee (Part-2) has been finalized during the meeting.



III. Other Activities

The 6th Meeting of the Joint Committee on Ganga-Padma River system in W.B.



Shri Kushvinder Vohra, Chairman, Central Water Commission & Ex-Officio Secretary to the Government of India held 6th meeting of the Committee for conducting a joint detailed technical study to formulate an integrated plan to combat threat of erosion posed by Ganga-Padma river system in West Bengal on 3rd September, 2024 in hybrid mode.

Officers from DoWR, RD & GR, GFCC, FBP, CWPRS, NRSC, IWAI, Govt of Bihar, Jharkhand, West Bengal and CWC attended the meeting.

The Draft Report of the Committee was deliberated. The comprehensive discussions were made regarding outcome of 1D and 2D studies. The vulnerable reaches and measures to be taken were also discussed in details. The draft report was accepted by the committee with minor modifications as per suggestions in the meeting.

Other Important Activities

18th meeting of Technical Sub Committee to discuss data to be shared with Neutral Expert



The Third meeting of Neutral Expert appointed to resolve point of differences between India and Pakistan is IWT issues was held at Vienna, Austria during September 08-12, 2024.

Sh. Kushvinder Vohra (Chairman, CWC), Sh. Vivek Tripathi (Chief Engineer), Sh. Narendra Singh Shekhawat (Director) and Sh. Samarth Agarwal (Director) were part of Indian delegation who attended the meeting. The CWC team was led by Chairman, CWC.

Neutral Expert was appointed by World Bank under Article IX of Indus Water Treaty specifically to address technical difference between the two nations regarding Kishenganga and Ratle HEPs.

Publications of CWC launched during 8th India Water Week



The three publications of Central Water Commission were released by Shri Raj Bhushan Choudhary, Hon'ble Minister of State, Ministry of

Jal Shakti on 19th September 2024 during the valedictory session of 8th India Water Week at Bharat Mandapam, Pragati Maidan, New Delhi in the presence of Ms. Debashree Mukherjee, Secretary, DoWR, RD & GR, Ministry of Jal Shakti, Shri Kushvinder Vohra, Chairman, Central Water Commission (CWC) and other senior officials of the Ministry of Jal Shakti.

Central Water Commission has completed basin wise assessment of water resources for the period 1985-86 to 2022-23 employing remote sensing projections in "Study on Basin Wise Assessment of Water Resources". As per the study, water availability in India is 2116 BCM. This study will be useful for planning and development of water resources by all Stakeholders including Central Government and State Government departments and authorities.

Also, CWC has compiled the information regarding completed and ongoing major, medium and ERM irrigation projects in the Country. As per "Compendium of Major and Medium irrigation projects in India", there are 1323 completed major / medium irrigation projects in the country having total potential irrigation potential of 47.62 million hectare (mha). Further, 397 major/ medium projects are under execution having total ultimate irrigation potential of 17.40 mha. The Compendium would be useful in further planning of water resources projects, policy formulation and improvement in irrigation use efficiency.

Further, CWC has completed the study and prepared publication "Compendium on Sedimentation of Reservoirs in India 2024" analyzing data of 548 reservoirs using both the Hydrographic technique as well as remote sensing technique. As per the study, average loss of gross and live storage of these projects is 0.74% and 0.49% respectively. This study is useful in correct estimates of the rate of sedimentation and proper estimation of loss of storage at the planning stage itself besides evaluating the effectiveness of soil conservation measures carried out in the catchment area of River Valley Projects. PDF versions of the publication are available on CWC website.

Other Important Activities

Certificate Distribution for Different Publications of CWC

A ceremony to distribute certificates of appreciation to all the officers involved in the successful compilation of recently released publications of CWC namely Assessment of Water Resources of India, Assessment of Area Affected Due to Floods in India, Report on Flood Damage Statistics, National Register of Major & Medium Irrigation Projects and Compendium on Sedimentation of Reservoirs in India was held on 30th September 2024 at Sewa Bhawan. Shri Kushvinder Vohra, Chairman, Central Water Commission & Ex-Officio Secretary to the Government of India, presented the certificates to the respective officers.



Memorandum of Understanding (MoU) between Central water Commission (CWC) and National Institute of Hydrology (NIH), Roorkee

A Memorandum of Understanding (MoU) between Central water Commission (CWC) and National Institute of Hydrology (NIH), Roorkee, is signed on 27.09.2024 to collaborate on key hydrological research and development projects. This partnership aims to advance scientific knowledge and technological innovation in water resource management, hydrology, and related fields.

In the presence of Sh. Kushvinder Vohra, Chairman, CWC & Ex-officio Secretary, Govt. of India, this MoU was signed by Shri D.P. Mathuria,



Chief Engineer, P&DO, CWC and Shri M. K. Goel, Director, NIH Roorkee.

The MoU focuses on a research project titled "Entropy-Based Non-Contact Discharge Monitoring Techniques: Testing and Implementation for Indian Rivers." The collaboration will cover five sites across the Krishna and Godavari rivers, with NIH Roorkee leading the installation of advanced monitoring systems. This partnership is expected to enhance research in discharge monitoring, improving water management and hydrological data accuracy for India's river systems.

Internal Hackathon 2024

In line with the vision and direction of Sh. Kushvinder Vohra, Chairman, Central Water Commission (CWC) & Ex-officio Secretary to Govt. of India, the Internal Hackathon 2024 was successfully conducted in July 2024. The Hackathon aimed to foster innovation and leverage the talent of CWC officers to address key challenges in the water sector.

Nominations were invited from interested officers across the organization, resulting in a total of six innovative entries on various water-related topics. A screening committee comprising domain experts was formed to evaluate the merits of the proposed solutions.

After the initial demonstrations, the top solutions were shortlisted for a final presentation, held on September 14, 2024, in the presence of the Chairman, CWC. The top two entries were:

1. Design Module
2. Web Application for Area-Capacity Analysis of Reservoirs

Other Important Activities

These solutions were recognized as the most promising and impactful ideas from the

Hackathon, contributing valuable innovations to the water management sector.



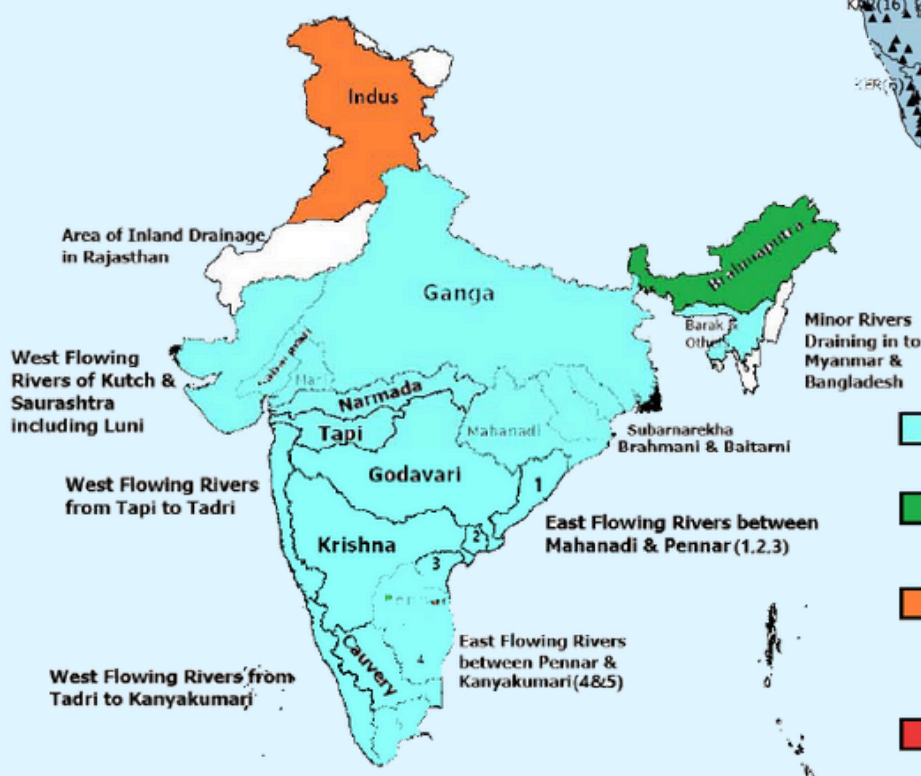
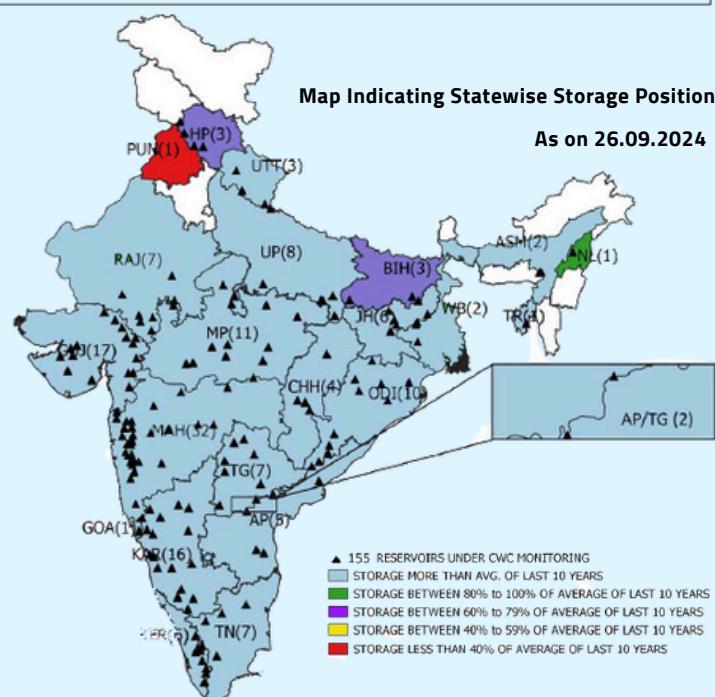
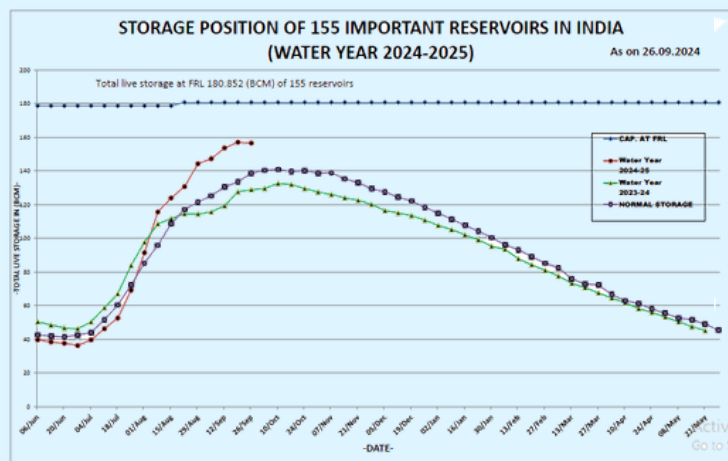
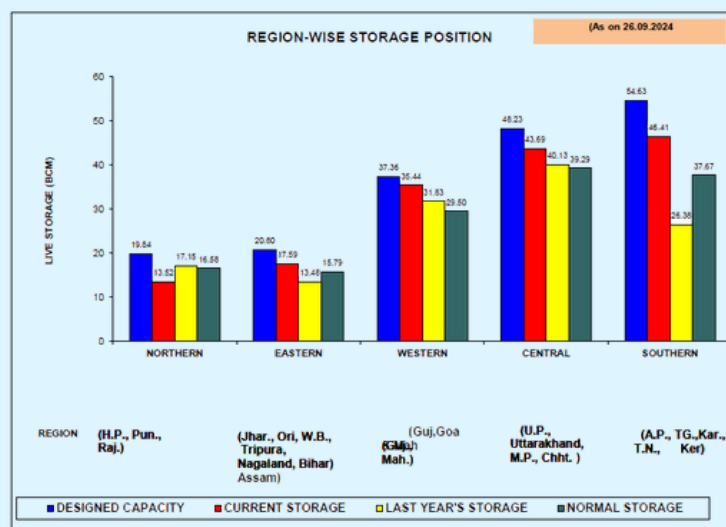
Urnil Dam, Uttar Pradesh

Reservoir Monitoring

Central Water Commission is monitoring live storage status of 155 reservoirs of the country and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 20 reservoirs are of hydro-electric projects having total live storage capacity of 35.299 BCM. The total live storage capacity of 155 reservoirs is 180.852 BCM which is about 70.15% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country.

As per reservoir storage bulletin dated 26.09.2024, live storage available in these reservoirs is 156.639 BCM, which is 87% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 128.969 BCM and average of last 10 years live storage was 138.226 BCM. Thus, the live storage available in 155 reservoirs as per

26.09.2024 Bulletin is 121% of the live storage of corresponding period of last year and 113% of storage of average of last ten years.



हिंदी पखवाड़ा आयोजन 2024

केंद्रीय जल आयोग (मुख्यालय) में सरकारी कामकाज में हिंदी के प्रगामी प्रयोग को बढ़ावा देने के उद्देश्य से हिंदी पखवाड़ा-2024 का आयोजन किया गया। केंद्रीय जल आयोग में हिंदी पखवाड़ा-2024 का आयोजन 14 सितंबर से 30 सितंबर, 2024 तक किया गया। इस उपलक्ष्य में अध्यक्ष, के.ज.आ. द्वारा एक अपील जारी की गई जिसमें के.ज.आ. (मुख्यालय) तथा क्षेत्रीय कार्यालयों में कार्यरत अधिकारियों/कर्मचारियों को हिंदी में अधिकाधिक कार्य करने का निदेश दिया गया। इसके अलावा माननीय गृहमंत्री महोदय का संदेश भी परिचालित किया गया। हिंदी अनुभाग द्वारा सभी क्षेत्रीय कार्यालयों को हिंदी पखवाड़ा-2024 के आयोजन हेतु दिशा निर्देश जारी किए गए। सचिव, राजभाषा विभाग, गृह मंत्रालय महोदय के निदेशानुसार, हिंदी पखवाड़ा-2024 का उद्घाटन हिंदी दिवस समारोह एवं चतुर्थ राजभाषा सम्मेलन के माध्यम से भारत मंडपम, नई दिल्ली से हुआ एवं समापन समारोह का आयोजन केंद्रीय जल आयोग (मुख्यालय) में किया गया। हिंदी पखवाड़ा के दौरान सभी प्रतियोगिताएं सफलतापूर्वक आयोजित की गईं।

हिंदी पखवाड़ा-2024 के तहत निम्नलिखित प्रतियोगिताएं आयोजित की गईं:-

1. हिंदी टिप्पण-आलेखन प्रतियोगिता (हिंदी भाषी एवं हिंदीत्तर भाषियों के लिए)
2. अनुवाद प्रतियोगिता (सभी के लिए)
3. निबंध प्रतियोगिता (सभी के लिए)
4. हिंदी टंकण प्रतियोगिता (कम्प्यूटर पर)
5. श्रुतलेख प्रतियोगिता (एमटीएस कर्मचारियों के लिए)
6. काव्य प्रतियोगिता (हिंदी भाषियों एवं हिंदीत्तर भाषियों के लिए)
7. तकनीकी भाषण प्रतियोगिता (हिंदी भाषियों एवं हिंदीत्तर भाषियों के लिए)

हिंदी पखवाड़ा-2024 के दौरान आयोजित विभिन्न प्रतियोगिताओं में केन्द्रीय जल आयोग के अधिकारियों/कर्मचारियों ने उत्साहपूर्वक भाग लिया। पखवाड़ा के दौरान, लगभग 220 अधिकारियों/संस्थानों ने 14 कार्यक्रमों में भाग लिया और 77 प्रतिभागियों को पुरस्कार प्रदान किए गए। केन्द्रीय जल आयोग (मुख्यालय) के विभिन्न राज्यों में स्थित अधीनस्थ कार्यालयों में भी हिंदी पखवाड़ा का सफल आयोजन किया गया तथा इस दौरान विभिन्न प्रतियोगिताएं आयोजित की गईं तथा विजेताओं को पुरस्कार वितरित किए गए।



Gallery



The School Students of Sarvodya Kanya Vidyalay, RK Puram sec 2 and Pushp Vihar Sec 1, on 27 & 28 September 2024 visited Engineering Museum & National River Water Quality Laboratory (NRWQL), Yamuna Basin Organization, CWC, New Delhi under the IEC program of MoJS on the Subject of "जल संरक्षण विषय पर स्कूली छात्र - छात्रों के लिए शिक्षा" |

"एक पेड़ मां के नाम"



Central Water Commission

An attached office of Dept. of Water Resources,
River Development and Ganga Rejuvenation,
Ministry of Jal Shakti, Govt. of India

Editorial Board

- Shri Bhupinder Singh, CE(HRM)- Editor-in-Chief
- Shri Yogesh Paithankar, CE(PAO)- Member
- Shri Rakesh Toteja, Director(RM-C)- Member
- Shri S. K. Gangwar, Director(TC)- Member
- Shri Sunil Kumar-II, Director(WP&P-C)- Member
- Shri Shekharendu Jha, Director(WSE)- Member
- Shri Ravi Ranjan, Director(D&R-C)- Member
- Shri Kailash K. Lakhe, DD(WSE)- Member-Secretary

Designed & Published by

Water Systems Engineering Directorate
Central Water Commission

2nd Floor(South), Sewa Bhawan, R K Puram, New Delhi-110 066
E-mail: media-cwc@gov.in

