

# *e-Sanchar*



## MONTHLY NEWSLETTER

### September 2022

## WAPCOS PARTICIPATION IN GOVERNMENT OF INDIA SCHEMES

### VISION

“A Global Leader in Consultancy and Engineering, Procurement & Construction (EPC) providing Integrated & Customized Solutions for Sustainable Development of Water, Power and Infrastructure Projects”

### MISSION

“Sustained Profitable Growth, Excellence in Performance, Use of State-of-the-art Technical Expertise, Innovativeness and Capacity Building to Meet Society’s Needs Globally”



#### Smart City

- Guwahati, Assam
- Shimla, Himachal Pradesh
- New Delhi
- Kohima, Nagaland
- Aizawl, Mizoram
- Thoothukudi, Tamil Nadu



#### Atal Mission for Rejuvenation and Urban Transformation

- Madhya Pradesh
- Bihar
- Rajasthan
- Haryana
- Meghalaya
- Uttar Pradesh
- Odisha
- Andhra Pradesh
- Telangana
- Kerala



#### Pradhan Mantri Awas Yojana

- Gujarat
- Uttar Pradesh
- Rajasthan
- Uttarakhand
- Chhattisgarh
- Jharkhand



#### Deen Dayal Upadhyaya Gram Jyoti Yojana

- Uttar Pradesh
- Assam
- Tripura
- Karnataka
- West Bengal
- Tamil Nadu
- Jharkhand
- Himachal Pradesh
- Haryana
- Maharashtra
- Bihar
- Rajasthan
- Sikkim
- Kerala
- Nagaland
- Manipur



#### Integrated Power Development Scheme

- Himachal Pradesh
- Jammu & Kashmir
- New Delhi & Goa
- Nagaland
- Sikkim
- Tamil Nadu
- Andhra Pradesh
- Telangana
- Maharashtra
- Chhattisgarh
- Odisha
- Uttar Pradesh



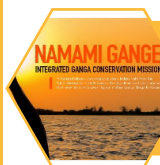
#### Pradhan Mantri Gram Sadak Yojana

- Gujarat
- Assam
- Jharkhand
- Goa
- Uttarakhand
- Madhya Pradesh



#### Pradhan Mantri Krishi Sinchayee Yojana

- Setting up of PMU at Ministry of Jal Shakti, DoWR, RD & GR



#### Namami Gange, Integrated Ganga Conservation Mission

- Uttarakhand
- Uttar Pradesh



#### Jal Jeevan Mission West Bengal

- National PMU at Ministry of Jal Shakti
- Himachal Pradesh
- Rajasthan
- Madhya Pradesh
- Assam
- Punjab
- Maharashtra
- Andhra Pradesh
- Jammu & Kashmir
- West Bengal



## MESSAGE



**Mr. R.K. Agrawal,**  
CMD, WAPCOS & NPCC

**Dear Readers,**

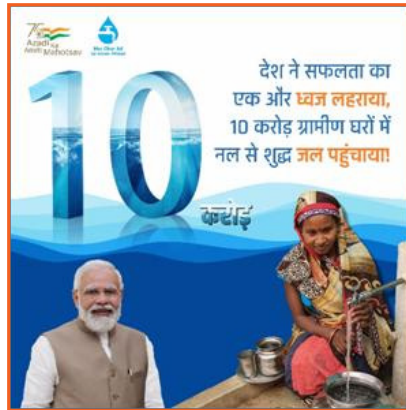
The month of August holds a special place in the heart of every Indian as our country attained independence from the British Rule during this month. To commemorate the 75<sup>th</sup> anniversary of the country's independence, our Government under the leadership of Hon'ble Prime Minister Shri Narendra Modi Ji launched Har Ghar Tiranga campaign as part of Azadi Ka Amrit Mahotsav to encourage citizens to hoist the National Flag at their homes from the 13<sup>th</sup> to 15<sup>th</sup> August. To support this campaign, we distributed flags and encouraged our employees to hoist the tricolour at their homes. On 15<sup>th</sup> of August, to mark the celebrations we organized an event where our employees sang patriotic songs and medleys and we remembered those who laid down their lives to free our beloved nation from the shackles of the British Rule. The glimpses of this event are given in this newsletter.

It gives me immense pleasure to inform our readers that on 28<sup>th</sup> of August Hon'ble Prime Minister inaugurated 320.35 km long Kutch Branch Canal wherein WAPCOS has played an instrumental role as the project's Consulting Institution. This newsletter also covers details about the work entrusted to WAPCOS for basin-wise reassessment of Hydro Electric potential of the country by reviewing all six basins to identify new sites with potential for energy generation. We are also providing project management consultancy services for the Navada to Chavand Bulk Pipeline in Gujarat. This newsletter also contains updates about the Kundah Pumped Storage project, Gujarat Natural Farming and Organic Agricultural University in Halol, an international project in Fiji and some other projects.

## UPDATES FROM MINISTRY OF JAL SHAKTI

### 10 Crore Rural Households get Access to Clean Tap Water

Last month, Jal Jeevan Mission (JJM) achieved a new milestone with additional 10 crore rural households getting clean drinking water through taps. Three states (Goa, Telangana and Haryana) and three UTs (Puducherry, D&D and D&NH and A&N Islands) have reported 100% coverage.



The relentless efforts of the union and state governments have also resulted in ensuring provision of tap water supply in 8.67 lakh (84.35%) schools and 8.96 lakh (80.34%) anganwadi centres in the country. In the 117 aspirational districts of our country, at the time of launch of the mission, only 24.32 lakh (7.57%) households had access to tap water which has now increased to 1.54 Crore (48%). Three aspirational districts from Telangana (Komaram Bheem Asifabad, Jayashankar Bhupalpalli and Bhadrabri Kothagudem) and one district each in Punjab (Moga), Haryana (Mewat) and Himachal Pradesh (Chamba) have reported 100% tap water coverage.

### Arth Ganga to Serve as Economic Bridge for People

At a recently held event, Union Minister for Jal Shakti, Shri Gajendra Singh Shekhawat said that in a country like India where rivers are revered it is imperative to keep them and other water bodies aviral and nirmal. Emphasizing on the importance of using limited water resources efficiently, the minister added that the very beginning of economic development is through our water resources and energy. Praising Namami Gange Programme, he added that the difference can be seen now as exemplified in the form of good water quality during the Haridwar and Prayagraj Kumbh Melas. "A lot of infrastructure has been created to clean Ganga and its tributaries and projects worth more than Rs. 30,000 crores have been sanctioned," he added. The event also marked the launch of many new initiatives under Arth Ganga so that can serve as economic bridge for people.



### NMCG Signs Agreement for Development of Sewage Treatment Plants in Agra

A tripartite Concession Agreement worth Rs 583 crore was signed between National Mission for Clean Ganga (NMCG), Uttar Pradesh Jal Nigam and M/s Vishvaraj Environment Private Limited (VEPL) for development of Sewage Treatment Plants (STPs) for Agra under Hybrid Annuity Mode (HAM). In order to abate pollution in River Yamuna through basin-approach, NMCG approved the project for construction of Sewage Treatment Plants (STPs) of total capacity of 177.6 MLD. The project aims to take care of the existing sewerage problems in the Agra city which pollutes River Yamuna. On implementation of the project, there will be no discharge of untreated sewage from Agra city into River Yamuna.



### 38<sup>th</sup> Meeting of India-Bangladesh Joint Rivers Commission in Delhi

At the meeting the Indian delegation was led by Shri Gajendra Singh Shekhawat, Union Minister for Jal Shakti, while the Bangladesh delegation was led by Mr. Zaheed Farooque, State Minister for Water Resources and Mr. AKM



Enamul Hoque Shameem and Deputy Minister for Water Resources. Held after a long gap of 12 years, this meeting saw discussions on issues of mutual interest such as river water sharing of common rivers, sharing of flood data, river pollution, conducting joint studies on sedimentation management, river bank protection works etc.



## PROJECT UPDATE:

### PM Modi inaugurated Kutch Branch Canal in Gujarat

Hon'ble Prime Minister Shri Narendra Modi inaugurated 320.35 kms long Kutch Branch Canal on 28<sup>th</sup> August in the presence of Hon'ble Chief Minister of Gujarat, Shri Bhupendra Patel.

WAPCOS has played an instrumental role in the construction of the canal by providing consultancy

services for the project. The scope of work included Detailed Design, Drawings and preparation of Detailed Project Report. The project will provide potable water to 7 Talukas, 948 villages, and 10 cities of the Kutch region and will serve irrigation to 1.12 lakh hectares of land in 182 villages.





9<sup>th</sup> August, 2022

## THE MONTH AT A GLANCE:

Hon'ble Prime Minister launched the "Har Ghar Tiranga" campaign as part of "Azadi Ka Amrit Mahotsav" to inspire every Indian to hoist the National Flag at their home so as to invoke the feeling of patriotism in the hearts of citizens.

Under the guidance of Hon'ble Minister of Jal Shakti, WAPCOS actively participated in this campaign and an event was organized under the chairmanship of CMD WAPCOS. CMD WAPCOS expressed his views regarding

significance of the campaign and encouraged everyone to hoist the National Flag at their homes from 13<sup>th</sup> to 15<sup>th</sup> of August and distributed the National Flags to employees.





15<sup>th</sup> August, 2022

## THE MONTH AT A GLANCE:

On the occasion of 76<sup>th</sup> Independence Day, Sh. R.K. Agrawal, CMD, WAPCOS and NPCC hoisted the National Flag at WAPCOS Corporate Office, Gurugram

Sh. Pankaj Kapoor, Director (Finance); Sh. Anupam Mishra, Director (Commercial & HRD); Sh. Anupam Chandra, Chief Vigilance Officer and all senior officers of WAPCOS & NPCC also participated in the event. On

this occasion, WAPCOS - NPCC Choir team presented patriotic songs and medleys to remember the supreme sacrifices made by freedom fighters. All officials celebrated the occasion with great zeal and patriotism.





24<sup>th</sup> August, 2022

## THE MONTH AT A GLANCE:

### Study Visit of Parliamentary Standing Committee on Water Resources

WAPCOS team led by Mr. R.K. Agrawal, CMD briefed the Hon'ble Committee Members about the activities being carried out by WAPCOS in the western region at Daman on 24<sup>th</sup> August. Dr. Aman Sharma, Chief

Executive Director; Mr. S. K. Srivastava, Regional Project Director (Western Region) and other senior officials from WAPCOS were also present during the event.





## PROJECT UPDATE:

### Stone Laying Ceremony of Gujarat Natural Farming and Organic Agricultural University, Halol



**H**on'ble Governor of Gujarat, Shri Acharya Devrath laid the foundation stone for the development of a new campus at Halol for Gujarat Natural Farming and Organic Agricultural University on 25.08.2022. It will be India's first-ever Organic Agricultural University where organic farming-related research and education will be provided. The university shall cater to PHD and post-graduate students and provide farming training.

At the ceremony, the Hon'ble Governor of Gujarat, delivered the inaugural speech stating the advantages of the organic agricultural practices and its positive results that can also help curb the climate change menace in the future. In attendance at the event were Smt. Nimishben Suthar, the Hon. State Minister for Women's and Children's Welfare, Social Justice, and Empowerment, Sh. Ratansinh Rathod, Honorable Member of Parliament (Panchmahal), Sh. Jaydhrathsinhji Parmar, Honorable MLA (Panchmahal), Smt. Sumanben Chauhan, Honorable MLA (Kalol), Dr. C.K. Timbadiya, and Honorable Vice Chancellor (Gujarat Natural Farming and Organic Agricultural University).

The project site is located at Jambudi Village, Halol Taluka, District Panchmahal near Pavagdh hills. The proposed site is 42 km away from the Vadodara City and has good connectivity with the Vadodara Airport.

WAPCOS has been entrusted the entire work from concept to commissioning for construction of the university campus including University Bhavan, P.G. Institute, Organic Entrepreneurship Development Institute, Boys Hostel, Girls Hostel, Guest House, Sport Complex with various activity grounds, Auditorium, International Student Hostel, Canteen, Museum, VC & Director Bungalows, Resident quarter for research professor and staff, Farm Structure, Cattle shade and service staff quarter. The entire master plan layout of the campus has been developed with intricate details of each building, i.e. detailed project planning and report, which is approved by the client's assigned committee.

#### THE SALIENT FEATURES OF THE PROJECT:

- **Project Location:** Taluka: Halol, Panchmahal District, Gujarat
- **Campus area:** 23 Ha.
- **Total number of building:** 20 Nos.





## PROJECT UPDATE:

### Preparation of DPR for remedial measures on River Chathe erosion abatement in district of Choumoukedima, Nagaland

On 18th August, WAPCOS signed an agreement with Water Resources Department, Govt. of Nagaland for preparation of Detailed Project Report for remedial measures to be taken on River Chathe erosion abatement in the district of Choumoukedima of Nagaland. The project aims at providing sustainable solutions to the persistent problem of the river bank erosion.

WAPCOS will study the historical stream bank retreat during the past 25 years through satellite imageries and prepare a flood model with inputs from the topographical survey, geo-technical investigation and document remedial measures in the form of a DPR. A socio-economic survey shall be conducted and rehabilitation plan will be prepared for vulnerable settlements.





## PROJECT UPDATE:

### Basin-Wise Reassessment of Hydro Electric Potential in India

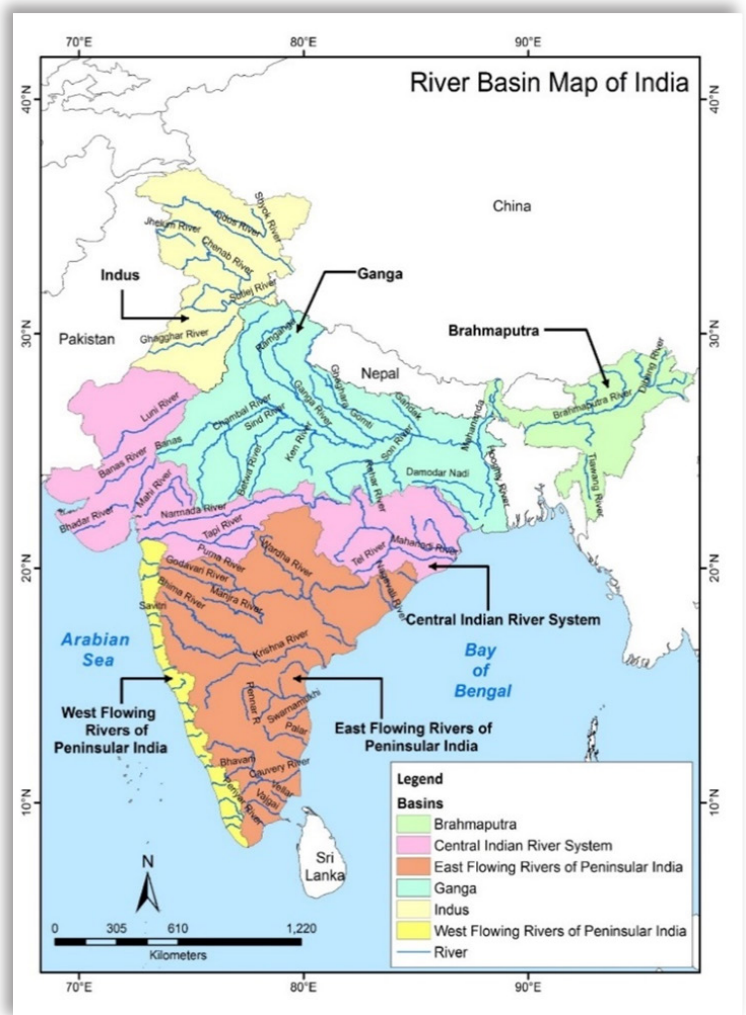
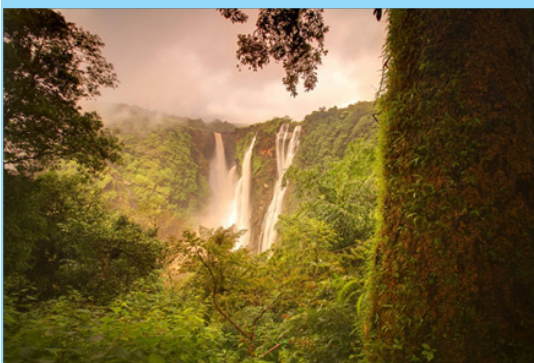
Ministry of Power, Govt. of India has initiated the scheme for basin-wise review of Hydro Electric Potential in the country and has assigned the task to Central Electricity Authority (CEA) and WAPCOS. The project includes the complete review work of Hydro Electric Potential in all six basins as per new guidelines on environmental aspects by utilizing the latest hydrological data of the past 25 years, which will be used for carrying out studies and to identify the new probable sites, if any. We are delighted to announce that out of six basins five basin reports have been submitted and one basin report is about to be submitted.

This one of its kind study will aid Govt. of India in long term planning of Hydropower Development and preparation of Master plan for the country.

#### Benefits

**New sites will be identified to increase the hydropower share in total energy generation of the country.**

**Robust policy planning and structured road map for harnessing the hydropower potential of the country in a time-bound manner.**



#### Report Preparation of Six Major Indian River Basins

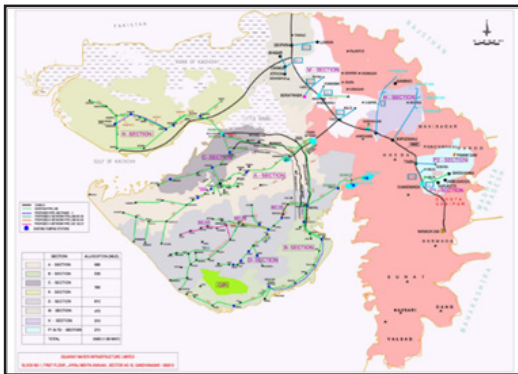
- 1 Indus Basin
- 2 Ganga Basin,
- 3 Brahmaputra Basin,
- 4 Central Indian River System,
- 5 West flowing Rivers of Peninsular India,
- 6 East flowing Rivers of Peninsular India

## PROJECT UPDATE:

### Navada to Chavand Bulk Pipeline Project, District of Botad, Gujarat

WAPCOS has been entrusted with the project management consultancy services for Navada to Chavand Bulk Pipeline under Gujarat Water Infrastructure Limited (GWIL).

GWIL is supplying raw water to Bhavnagar, Gir Somnath, Amreli, Botad, Rajkot, Junagadh and Porbandar districts of Saurashtra Region of Gujarat through bulk pipelines from Navda Pumping Station.



The purpose of the proposed bulk pipeline is to enhance the water supply capacity between Navada to Gadhada and Gadhada to Chavand as well as to mitigate the future water demand of various villages of Amreli, Junagadh, Botad, districts to fulfill the future demand of year 2031. Thus, it has been proposed to lay pipeline between Navda to Chavand.

WAPCOS has successfully completed Detailed Project Report and Bid Process Management project to appoint the agency for execution. The Hon'ble Chief Minister, Sh. Vijay Rupani had laid the foundation stone for the project on 06.12.2020.

WAPCOS is providing project management services during the execution work on site. At present, the physical progress of the project is 88% and financial progress is 65%. The project is expected to be completed by 31.12.2022. It is a challenging task to get ROU, crop compensation, farmer issues etc but our engineers managed to overcome all the hurdles.

#### THE SALIENT FEATURES OF THE PROJECT:

- Source: Vallabhipur Branch Canal
- Design flow : 280 MLD
- Project Location: Botad District, Gujarat
- Taluka's: Amreli, Junagadh, Botad
- Total length of rising main:
  - 1850mm Dia M.S pipe – 33.50km
  - 1950mm Dia M.S pipe – 52.00km
- R.C.C Raw water sump – 3 nos.
  - Navada pumping station- 10ML
  - Gadhada pumping station-10ML
  - Chavand Pumping station -20ML
- Pump house with machinery
  - Navada – 2130m<sup>3</sup>/hrs, 109m head
  - Gadhada – 2273m<sup>3</sup>/hrs, 69m head
- Electrical
  - 66KV switch yard at Gadhada pumping station
- PLC & SCADA System





## PROJECT UPDATE:

### Condition Assessments of FPCL Jetties & Structural Assessment of Harbour Master Building, Suva, Fiji

**W**APCOS has been awarded the work for carrying out Condition Assessment of Muaiwalu-1 (M1) & Muaiwalu-2 (M2) Jetties and Structural Assessment of Harbour Master Building, Suva for Fiji Ports Corporation Limited (FPCL) at a cost of FJD 162,000.

The brief scope of work includes Visual Inspection, Underwater Inspection of Jetties, NDT testing. Condition rating of structural elements, Cyclone Compliance Study of Harbour Master Building, Load rating analysis, Repair Options, Dredging feasibility and review of fenders.

WAPCOS project team undertook the visual inspections (above & below water) of Jetties and Building at Fiji. Inspections were carried out in three stages i.e. over the deck, under deck and underwater inspection. The field work was completed in the month of July 2022.

Under deck inspections of Jetties were carried out in a challenging environment due to limited headroom

availability by boarding a small boat to navigate under the deck within the limited time available during the low tide. Photographs and field observation of the defects were taken with measurements.

As part of FPCL's capacity development, all inspections were conducted alongside FPCL engineer who was briefed on-site by the WAPCOS team about defects identification, potential causes of deterioration, etc. They were also trained to conduct on-site minor NDT test.

Underwater inspection of jetties were conducted under the supervision of WAPCOS team by engaging local divers in Fiji by complying necessary safety precautions due to the presence of sharks in the Jetty vicinity. A wrap-up meeting of field work was held on 29<sup>th</sup> of July with FPCL to brief them on the preliminary findings of inspection before demobilizing the project team from Fiji.



Joint Site visit with FPCL team



On-site Training to FPCL Engineers



Underwater inspection of Piles at M1 Jetty



WAPCOS Engineer with Divers after completion of underwater inspections

## PROJECT UPDATE:

### Rehabilitation of existing 45 MGD (204.3 MLD) STP at Kondli

WAPCOS has been awarded the work of rehabilitation and upgradation of 45MGD STP at Kondli for improving treated effluent parameters.

#### Need of the project:

- Existing plant was designed on ASP technology for BOD/TSS: 20/30ppm and as per new guidelines of NGT BOD/TSS: 10/10ppm is required.
- The plant is not being able to achieve design parameters of BOD/ TSS: 20/30ppm due to faulty design.

#### Scope of work

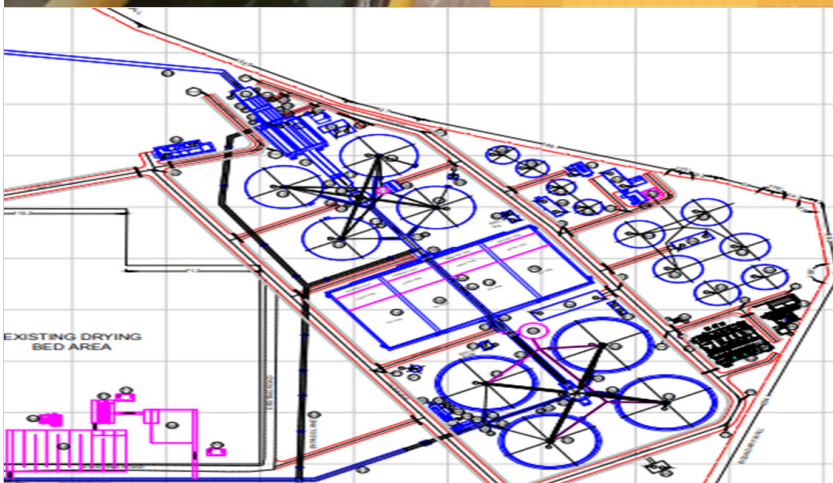
The scope of work involved condition assessment of existing civil structures and E&M equipments, preparation of DPR and DNIT for upgradation of existing STP so as to achieve revised treated effluent norms of NGT Technical, Evaluation, Financial Evaluation and PMC.

#### Approach adopted for the project

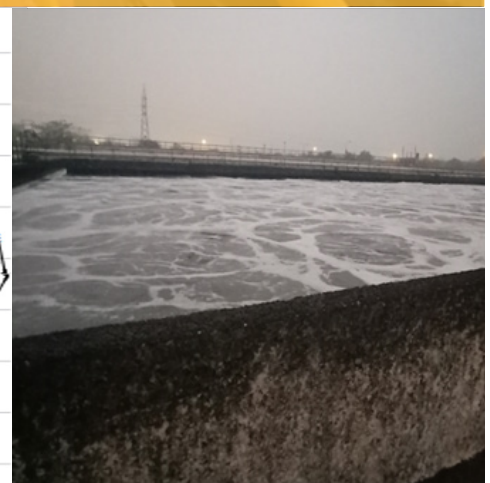
- The existing condition of civil works, mechanical and electrical works was assessed for replacement/ repair/upgradation etc.
- Technologies were explored for increasing the flow and improving the effluent parameter. Thereafter, three technologies i.e. SBR, IFAS, ASP + BNR were shortlisted for this STP.
- Samples were collected in line with CPHEEO guidelines. All influent parameters were taken based on the results of composite sample and the same were used for design.
- Detailed Project Report and Cost Estimates were prepared for the chosen technologies.
- Tenders were called on IFAS technology due to land constraints.
- L1 was selected on the basis of (Capital + O&M + power cost).
- Implementation ongoing



Existing Status of Primary Units



Existing & Proposed Layout Plan



Existing Aeration Tank



## PROJECT UPDATE:

### Kundah Pumped Storage Hydro Power Project (4X125MW), Tamil Nadu

This project site is located in Tamil Nadu. It is a pumped storage scheme of 4x125MW capacity. The 500MW Power would be generated at 11kV during peak demand period during the day, which would be transmitted to Grid through 220kV 3 Phase, 3x152MVA substation. During off peak period the power would be consumed by the plant to pump back the water and fill the upper reservoir. Construction activities (both for Civil & E&M works) are ongoing at the site.

Pumped Storage Hydro Electric Project required to stabilize southern region grid.



Power House Cavern

#### This Project is being executed in five packages:

- Package-I:** Civil & HM work for downstream to Power House Complex & switch-yard area
- Package-II:** Civil & HM work for Upstream to Power House (Including PH) & foundation works for First Machine
- Package-III:** E&M work for one machine i.e. 1X125 MW & GIS
- Package-IV:** E&M work for two machines i.e. 2X125 MW
- Package-V:** E&M work for one machine i.e. 1X125 MW

#### Benefits

- Cater peak power demand for Tamil Nadu
- Storage of water/ energy during off-peak time
- Improves grid stability of southern region



Report  
Preparation



Tender  
Engineering



Construction  
Supervision



Project  
Monitoring



TRT Gate Shaft

9<sup>th</sup> August, 2022

## THE MONTH AT A GLANCE:

Signing of Agreement with National Housing Development Corporation Limited (NHDCL), Royal Government of Bhutan as Project Implementation Assistance Consultant (PIAC) for the prestigious Asian Development Bank (ADB) funded Green and Resilient Affordable Housing Sector Project (GRAHP), at Thimphu, Bhutan



The agreement was signed by Mr. Rinchen Wangdi, Chief Executive Officer, NHDCL and Mr. S.M. Thakurdesai, Team Leader, WAPCOS in the presence of Mr. Karchung, Project Director, NHDCL and Mr. Amit Gawande, Additional Chief Engineer, WAPCOS and other senior officials from both sides.

4<sup>th</sup> August, 2022

Special COVID -19  
Vaccination Camp  
held at WAPCOS  
Corporate Office,  
Gurugram





## EMPLOYEES OF THE MONTH

WAPCOS recognizes employee's efforts for exemplary contribution in achievement of Turnover, New Business and Payment Realization

### CONSULTANCY SEGMENT

#### Turnover



**Mr. Gollu Deepak**  
Sr. Engineer  
T&D Unit (Power Division)

#### New Business



**Mr. Vineet Chaudhary**  
Addl. Chief Engineer  
Infrastructure

#### Payment Realization



**Mohd. Farooq Khan**  
Addl. Chief Engineer  
Infs & Legal

### CONSTRUCTION SEGMENT

#### Turnover



**Mr. Vibhu Goel**  
Sr. Engineer  
CMU-I

#### New Business



**Mr. Prasad Naik**  
Addl. Chief Engineer  
CMU-III

#### Payment Realization



**Mr. R. Debnath**  
Dy. Chief Engineer  
CMU-II

## Operations Abroad



**WAPCOS**  
**LIMITED**

ISO 9001:2015

(A Government of India Undertaking)  
Ministry of Jal Shakti

(A Global Leader in Consultancy and Engineering, Procurement & Construction (EPC)  
Providing Integrated & Customised Solutions for Sustainable Development of  
Water, Power and Infrastructure Projects)

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