

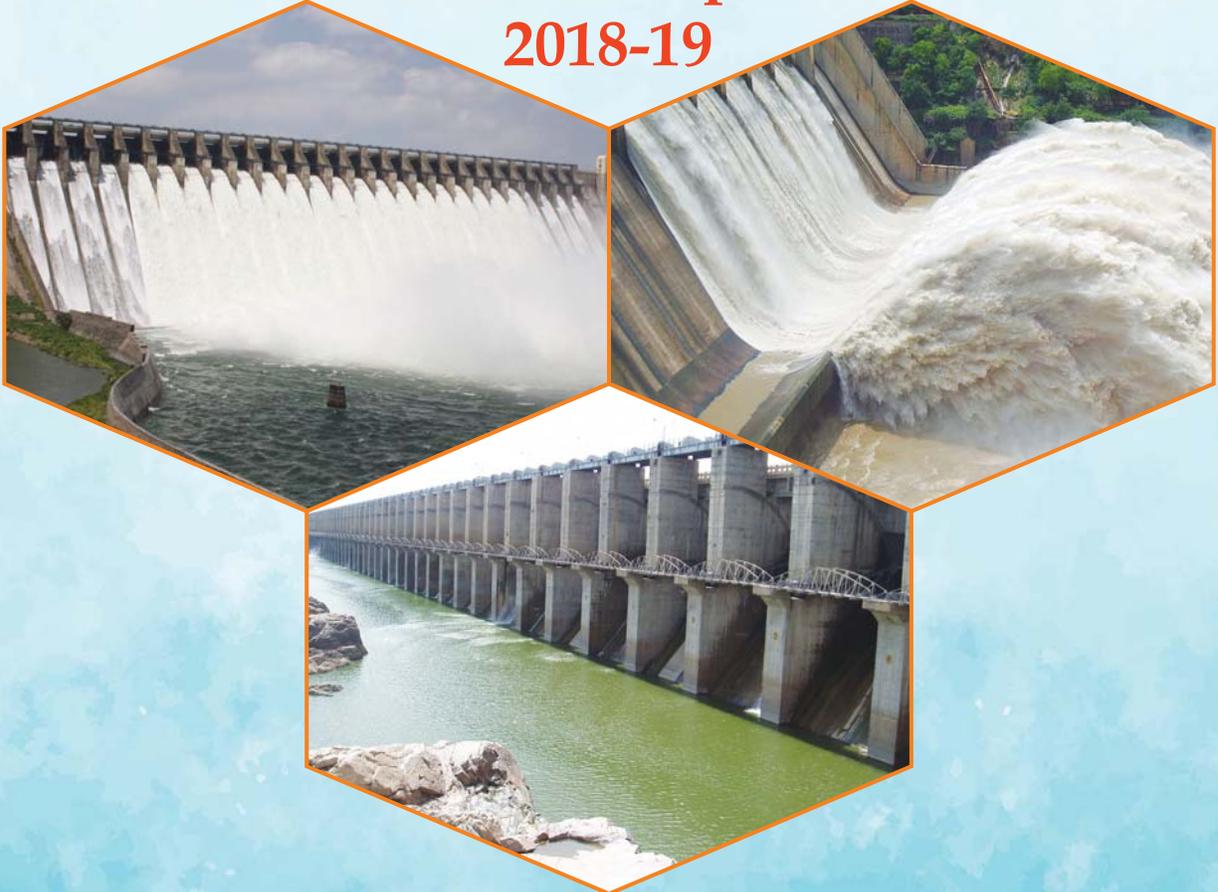


भारत सरकार / Government of India
जल शक्ति मंत्रालय / Ministry of Jal Shakti
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग /
Department of Water Resources, River Development
& Ganga Rejuvenation



कृष्णा नदी प्रबंधन बोर्ड
Krishna River Management Board
కృష్ణానది యాజమాన్య బోర్డు

Annual Report
2018-19



POTHIREDDYPADU HEAD REGULATOR





भारत सरकार
Government of India
భారత ప్రభుత్వం



जल शक्ति मंत्रालय
Ministry of Jal Shakti
జలశక్తి మంత్రిత్వశాఖ

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
Department of Water Resources,
River Development & Ganga Rejuvenation
జలవనరులు, నది అభివృద్ధి మరియు గంగా పునరుద్ధకరణ విభాగం

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Annual Report

2018 - 19



FROM CHAIRMAN'S DESK

The function of regulation of supply of water from the projects has been carried out by the Board by a mechanism of Three Member Committee, consisting of Member Secretary, KRMB, Engineer-in-Chief (I), I&CAD Dept., Telangana and Engineer-in-Chief (I), WRD, Andhra Pradesh, constituted by the MoWR, RD & GR. The regulation is done by the Board by issuing water release orders in respect of the schemes/projects drawing water from the two common reservoirs, namely Srisaillam and Nagarjuna Sagar, based on the quantum of water to be shared as mutually agreed on adhoc basis by the States.

As per the AP Reorganisation Act, 2014, the Governments of the successor States have to provide necessary funds to the Board to meet all the expenses. Accordingly, during the FY 2018-19 the two successor States have provided the necessary funds to KRMB. The expenditure in the FY 2018-19 was Rs. 423.69 lakhs.

Two meetings (eighth and ninth) of the Board were held on 06-06-2018 and 16.10.2018 during the year 2018-19. Various important decisions were taken in those meetings such as, ratio of water to be shared by the two States in the year 2018-19, budget approval, furnishing of reports of technical committees constituted for resolving issues related to water assessment and accounting, placing of telemetry stations of phase-I under AMC and finalization of locations of telemetry stations under phase-II.

This Annual Report 2018-19 includes an overview of the Krishna River Management Board, functions of the Board, details of various technical and administrative activities carried out by the Board, etc.

I express my appreciation for the contributions made by Shri Ch. K. Malleswara Rao, Director (Finance), Shri R.V. Prakash, Superintending Engineer and all those staff who contributed in bringing out this Report.

Jai Hind.

(A. Paramesham)
Chairman, KRMB

PREAMBLE

Krishna River Management Board (KRMB) has been constituted as an autonomous body under the administrative control of Union Ministry of Water Resources, River Development and Ganga Rejuvenation, in accordance with Andhra Pradesh Re-organization Act, 2014 for management of Krishna River for just, fair and equitable distribution of water and power to the successor States of Andhra Pradesh and Telangana.

The Krishna River provides water for irrigation, drinking and industrial uses in the basin. Since, it is fed by seasonal monsoon rains, the river flow undergoes great fluctuations during the year. Therefore, the management of its water by Regulating Structures is of crucial importance. For automation of water accounting, KRMB is in the process of installation of Telemetry Stations for water measurement in both States.

KRMB has been regulating the water supply from two common projects viz. Srisailem and Nagarjuna Sagar to both the States based on the mutually agreed ad-hoc arrangement for water sharing.

I express my sincere thanks to Shri A. Paramesham, Chairman, KRMB, for his valuable suggestions and guidance in preparation of this report in its revised format. I compliment the officers and staff of the KRMB specially Shri R. V. Prakash, Superintending Engineer and Shri S. Siva Sankaraiah, Executive Engineer for their efforts in bringing out this report and other staff for their support.

This report is an effort to provide an overview to administrators and planners in the area of Inter-State Water Resources Management. Any suggestions for further improvement, both in the contents and coverage, will be highly appreciated.

Jai Hind.



(H. K. Meena)

Member Secretary, KRMB

HIGHLIGHTS OF THE YEAR 2018-19

- 8th Board Meeting of KRMB was held on 6th June, 2018.
- 9th Board Meeting of KRMB was held on 16th October, 2018.
- As per the decisions of Three Member Committee, seven (07) water release orders were issued by KRMB.
- Team from CWPRS, Pune visited the proposed sites in the months of January and March 2019 for phase-II telemetry stations and finalized the proposed sites.
- Field visits were undertaken by senior officers of KRMB to calibrate the telemetry data with Acoustic Doppler Current Profiler (ADCP) observations.
- A Committee was constituted by Ministry of Jal Shakti, GoI to ensure supply of Krishna water to augment the drinking water supply to Chennai city.
- KRMB website is updated and hosted on NIC server.
- Performed of e-Governance activities in office working viz. LIMBS, RTI Online, e-Samiksha, GeM.
- Collected and compiled information on water resource projects in Krishna Basin in the States of Andhra Pradesh and Telangana.
- Various mass awareness programmes of Govt. of India viz. Swachhta Hi Sewa, Swachhta Pakhwada, Vigilance Awareness Week, International Yoga Day etc. were organized.
- Budget estimate of Rs. 9.00 Crore for the FY: 2018-19 approved by Board.
- Capacity building of the officers of the Board was done through participation in Training programmes/ Conferences/ Seminars/Workshops/ Meetings.

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Abbreviations Used in the Report

ADCP	Acoustic Doppler Current Profiler
AMRP	Alimineti Madhava Reddy Project
AP	Andhra Pradesh
AP GENCO	Andhra Pradesh Power Generation Corporation Limited
APR Act, 2014	Andhra Pradesh Reorganisation Act, 2014
CEA	Central Electricity Authority
CVC	Central Vigilance Commission
CWC	Central Water Commission
CWES	Central Water Engineering Service (Group-A service)
CWPRS	Central Water and Power Research Station
DPR	Detailed Project Report
FRL	Full Reservoir Level
GWDT	Godavari Water Dispute Tribunal
HNSS	Handri Niva Sujala Sravanthi
I & CAD	Irrigation and Command Area Development
ISRWDA	Inter-State River Water Disputes Act
KRMB	Krishna River Management Board
KWDT	Krishna Water Disputes Tribunal
MoJS,	Ministry of Jal Shakti
NIH	National Institute of Hydrology
NRSC	National Remote Sensing Centre
LIS	Lift Irrigation Scheme
LMC	Left Main Canal
RMC	Right Main Canal
MDDL	Minimum Draw Down Level
MW	Mega Watt
NSP	Nagarjuna Sagar Project
NSRSSP	Neelam Sanjeeva Reddy Sagar Srisailam Project
RDS	Rajolibanda Diversion Scheme
RTI	Right to Information
SCADA	Supervisory Control and Data Acquisition
SLDCP	Side-Looking Doppler Current Profiler
TMC	Thousand Million Cubic Feet (283.68 ha m)
TS	Telangana State
TS GENCO	Telangana State Power Generation Corporation Limited
WRD	Water Resources Department

CHAPTER-1**AN OVERVIEW OF KRISHNA RIVER MANAGEMENT BOARD****1.1 Constitution of Krishna River Management Board (KRMB)**

The Andhra Pradesh Reorganisation Act, 2014 was promulgated in Parliament by the Central Government for bifurcation of the erstwhile State of Andhra Pradesh into the States of Andhra Pradesh and Telangana, and under the Presidential Orders, Ministry of Law and Justice published the Act vide Gazette No.6 (part-2) of 2014 on 1st March 2014. Part IX of the Act deals with Management and Development of Water Resources of the successor States.

In exercise of the powers conferred under Section 85 (part IX) of the APR Act, 2014, the Central Government constituted Krishna River Management Board (KRMB) with autonomous status under the administrative control of Central Government vide Ministry of Water Resources Notification dated 28th May, 2014 for the administration, regulation, maintenance and operation of such projects, as may be notified by the Central Government from time to time. Part-IX of the Act and relevant Section 92 of part X of the Act are reproduced and placed as **Annexure - 1**.

A copy of notification of KRMB by MoWR, RD & GR is placed as **Annexure - 2**.

The composition of KRMB in brief is as given below:

(1)	An officer of the level of Additional Secretary to the Government of India from the Central Water Engineering (Group 'A') Service	Chairperson
(2)	Two members, to be nominated by each of the successor States of Telangana and Andhra Pradesh, of which one shall be the technical member not below the rank of Chief Engineer and the other administrative member to represent the concerned States	Members
(3)	One expert from the Central Power Engineering (Group 'A') Service	Member
(4)	An Officer not below the rank of Chief Engineer from the Central Water Engineering (Group 'A') Service	Member Secretary

1.2 Headquarters

As per APR Act, 2014, the headquarters of Krishna River Management Board is to be in the successor State of Andhra Pradesh. However, as per the MoWR notification dated 28.05.2014 regarding constitution of the KRMB, the headquarters of the Board is presently at Hyderabad for administrative convenience.

1.3 Staff of the Board

In pursuance of Section 86(1) of the APR Act, 2014, the Board has employed staff as per its requirement for the efficient discharge of its functions under this Act on deputation from the successor States.

1.4 Apex Council

The Central Government constituted an Apex Council for the supervision of the functioning of the Krishna River Management Board.

The Apex Council consists of -

- (a) Minister of Water Resources, Government of India- Chairperson,
- (b) Chief Minister of State of Andhra Pradesh- Member,
- (c) Chief Minister of State of Telangana- Member.

The functions of the Apex Council include-

(i) supervision of the functioning of the Godavari River Management Board and Krishna River Management Board;

(ii) planning and approval of proposals for construction of new projects, if any, based on Godavari or Krishna river water, after getting the proposal appraised and recommended by the River Management Boards and by the Central Water Commission, wherever required;

(iii) resolution of any dispute amicably arising out of the sharing of river waters through negotiations and mutual agreement between the successor States;

(iv) reference of any disputes not covered under Krishna Water Disputes Tribunal, to a Tribunal to be constituted under the Inter-State River Water Disputes Act, 1956.

CHAPTER-2 KRISHNA RIVER

2.1 Introduction

The Krishna River originates from the Western Ghats near Jor village of Satara district of Maharashtra at an altitude of 1,337 m just north of Mahabaleshwar. The total length of river from origin to its outfall into the Bay of Bengal is 1,401 km. Its principal tributaries joining from right are Ghataprabha, Malaprabha and Tungabhadra whereas those joining from left are Bhima, Musi and Munneru.

The Krishna Basin extends over Maharashtra, Karnataka, Telangana and Andhra Pradesh having a total area of 2,58,948 sq.km, which is nearly 8% of the total geographical area of the country.



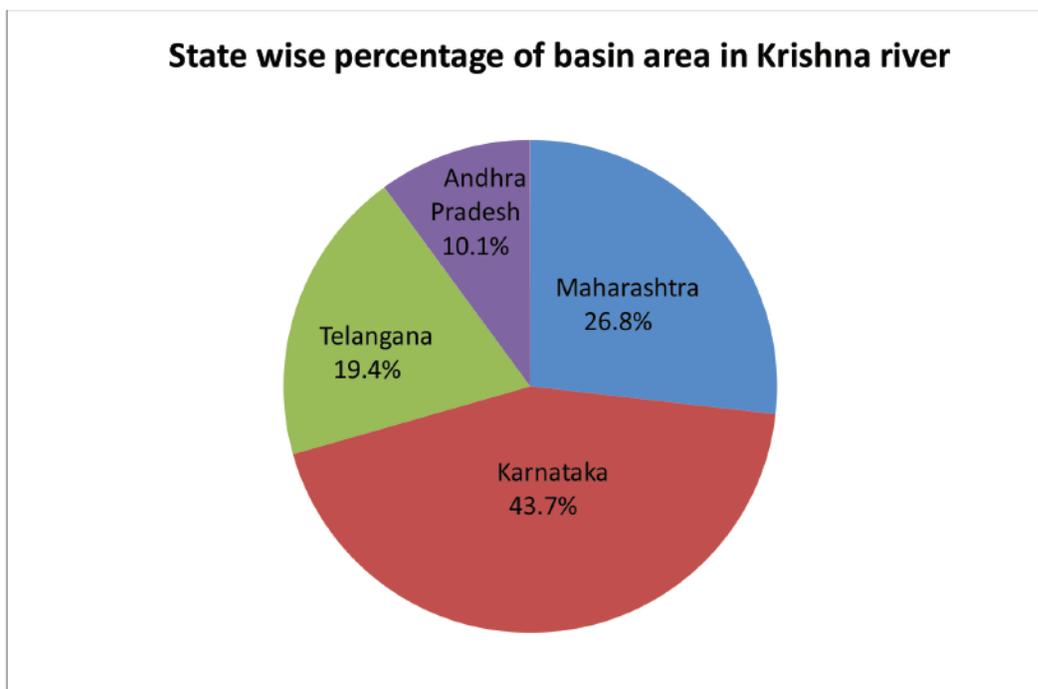
The basin has a maximum length and width of about 701 km and 672 km and lies between 73°17' to 81°9' east longitudes and 13°10' to 19°22' north latitudes. It is bounded by Balaghat range on the north, by the Eastern Ghats on the south and east and by the Western Ghats on the west.

The major part of basin is covered with agricultural land accounting to 75.86% of the total area and 4.07% of the basin is covered by water bodies.

The State-wise distribution of catchment area and length of river Krishna are as given in Table - 2.1.

TABLE - 2.1

Basin State	Length in km	Catchment Area in sq km
Maharashtra	306	69425
Karnataka	483	113271
Telangana	612	50155
Andhra Pradesh		26097
Total	1401	258948



2.2 Major Tributaries

Principal tributaries of Krishna River are as given below in Table - 2.2.

TABLE - 2.2

Sl. No.	Tributary	Length in km (Approx.)
1	Koyna (R)	119
2	Ghataprabha (R)	283
3	Malaprabha (R)	306
4	Tungabhadra (R)*	531
5	Vedavati (R)	391
6	Bhima (L)*	861
7	Musi (L)	267
8	Paleru (L)	153
9	Munneru (L)	196

* The rivers Tungabhadra and Bhima, tributaries of the Krishna, are themselves Major Inter-State rivers.

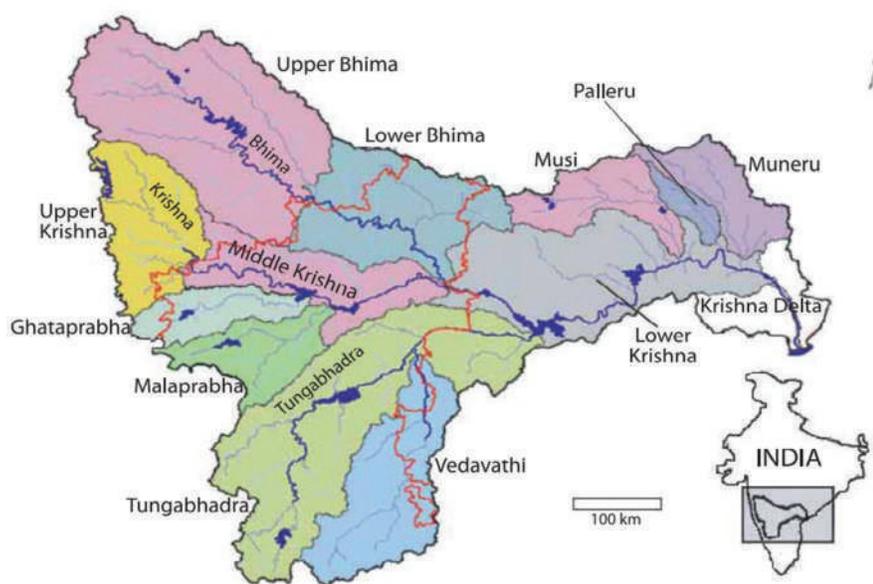
2.3 Sub - Basins

For the purpose of planning and development of water resources in the basin, the Krishna River Basin has been divided into the following 12 sub-basins as given below in Table - 2.3.

TABLE - 2.3

Sl. No.	Sub-Basin	Number	Area in sq km	Area in Percentage
1	Upper Krishna	K1	17972	7
2	Middle Krishna	K2	17558	7
3	Ghataprabha	K3	8829	3
4	Malaprabha	K4	11549	4
5	Upper Bhima	K5	46066	18
6	Lower Bhima	K6	24548	10
7	Lower Krishna	K7	36125	14
8	Tungabhadra	K8	47827	19
9	Vedavathi	K9	23590	9
10	Musi	K10	11212	4
11	Paleru	K11	3263	1
12	Munneru	K12	10409	4
Total			258948	100

Map showing Major Sub-Basins of the Krishna River is given below.



2.4 Krishna River in Andhra Pradesh and Telangana

Priyadarshini Jurala is the upstream most project built on river Krishna in erstwhile Andhra Pradesh State and is presently in Telangana State. The project is located in lower Krishna sub basin. The other sub basins in Telangana and Andhra Pradesh are Tungabhadra, Vedavathi, Musi, Palleru and Munneru.

The river Krishna including the tributaries joining the river Krishna viz., Tungabhadra, Musi, Palleru and Munneru are flowing both in Telangana and Andhra Pradesh and are Inter State Rivers.

The Neelam Sanjeeva Reddy Sagar Project (Srisaillam), Nagarjuna Sagar Project, Dr K.L. Rao Pulichintala Project and Prakasam Barrage are major existing projects on Krishna River. The two major projects Srisaillam and Nagarjuna Sagar serve both the States. Salient features of two major projects of Priyadarshini Jurala and Neelam Sanjeeva Reddy Sagar Reservoir (Srisaillam) are given in **Annexures A** and **B** respectively. Salient features of the other two major projects namely Nagarjuna Sagar and Prakasam Barrage are given in **Annexures C** and **D** respectively.

Tungabhadra Dam, Rajolibanda Diversion Scheme (RDS) and Sunkesula Barrage are existing on Tungabhadra river, which is a major tributary of river Krishna. Tungabhadra Dam constructed across river Tungabhadra, serves Karnataka, Andhra Pradesh and Telangana.

CHAPTER-3
FUNCTIONS OF THE BOARD

3.1 Functions of KRMB

The functions of the Board as laid down in the APR Act, 2014 under clause 85(8) are-

- (a) the regulation of supply of water from the projects to the successor States having regard to
 - (i) awards granted by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956;
 - (ii) any agreement entered into or arrangement made covering the Government of existing State of Andhra Pradesh and any other State or Union territory;
- (b) the regulation of supply of power generated to the authority in-charge of the distribution of power having regard to any agreement entered into or arrangement made covering the Government of the existing State of Andhra Pradesh and any other State or Union territory;
- (c) the construction of such of the remaining on-going or new works connected with the development of the water resources projects relating to the rivers or their tributaries through the successor States as the Central Government may specify by notification in the Official Gazette;
- (d) making an appraisal of any proposal for construction of new projects on Krishna river and giving technical clearance, after satisfying that such projects do not negatively impact the availability of water as per the awards of the Tribunals constituted under the Inter-State River Water Disputes Act, 1956 for the projects already completed or taken up before the appointed days; and
- (e) such other functions as the Central Government may entrust to it on the basis of the principles specified in the Eleventh Schedule.

3.1.1 The Eleventh Schedule

The Eleventh Schedule of APR Act, 2014 covers the principles governing the functioning of the River Management Boards and is enclosed as **Annexure - 3**.

3.1.2 The Twelfth Schedule

Section 92 under Part X of APR Act, 2014 covers “Infrastructure and special economic measures” under which power generation, transmission and distribution as enumerated in the Twelfth Schedule shall be implemented by the successor States. Twelfth Schedule is enclosed as **Annexure - 4**.

3.2 Jurisdiction

As per Section 87(1) of the APR Act, 2014 the Board shall ordinarily exercise jurisdiction on Krishna river in regard to any of the projects over headworks (barrages, dams, reservoirs, regulating structures) part of canal network and transmission lines necessary to deliver water or power to the States concerned, as may be notified by the Central Government, having regard to the awards, if any, made by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956.

As per Section 87(2) of the APR Act, 2014, if any question arises as to whether the Board has jurisdiction under sub-section (1) over any project referred there to, the same shall be referred to the Central Government for decision there on.

In the first meeting of the Apex Council held on 21.09.2016 under the Chairpersonship of Hon’ble Minister (Jal Shakti), the Government of Telangana stated that only after the final KWDT - II Award, jurisdiction of KRMB may be notified. The Government of Andhra Pradesh stated that pending allocations to be made by KWDT - II, jurisdiction of KRMB may be notified by GoI as there is no linkage between jurisdiction and project wise allocations by KWDT - II.

In the meeting taken by the Secretary, DoWR, RD & GR on 15.02.2018, it was decided that final decision in this matter will be taken by the Apex Council.

CHAPTER-4
BOARD ORGANISATION

4.1 Organisation

Krishna River Management Board was established on 2nd June, 2014 in pursuance of Section 85 (1) of APR Act, 2014.

4.2 Board Secretariat

The following officers of the Board are appointed by the Central Government.

- (i) Chairperson,
- (ii) Member Secretary,
- (iii) Expert Member and
- (iv) Member.

KRMB is headed by the Chairperson who is vested with the administrative and financial powers for smooth functioning of the Board. Chairperson is assisted by Member Secretary, Expert Member and Member (in the Board Secretariat). Member Secretary, appointed from Central Water Engineering (Group 'A') Services is in-charge of the supervision of Board's administration and financial matters. The Expert Member, appointed from Ministry of Power is responsible to look after the power related matters. The Member in the Board Secretariat, of the rank of Chief Engineer from Central Water Engineering (Group 'A') Service is responsible for technical matters.

Member Secretary, Expert Member and Member in KRMB are assisted by Superintending Engineer, Executive Engineer level officers. Allied duties and functions are grouped under respective units and each unit is divided into divisions, headed by Executive Engineers, Deputy Director, Director (F). The Executive Engineers, Deputy Director, Director (F) are supported by the officers of the level of Dy. Executive Engineer, Assistant Director, Assistant Executive Engineer, Superintendent, Accounts Officer, Sr. Assistant and Jr. Assistant.

The structure of KRMB under Member Secretary, Member and Expert Member is as follows:

- (i) Administration and Finance Unit under Member Secretary
 - 1. Administration and Coordination Division
 - 2. Finance Division
 - 3. Water Management Division
- (ii) Technical Unit under Member
 - 1. Appraisal and Monitoring Division
- (iii) Power Unit under Expert Member

4.3 Incumbents

The incumbents to the posts of Chairperson and Members of KRMB during the year 2018-19 are given in Table - 5.3.

TABLE - 5.3

Sl. No.	Designation	Name	Period
1	Chairperson	Shri Y. K. Sharma	01-04-2018 to 04-05-2018
		Shri H.K.Sahu (Link Officer)	04-05-2018 to 31-07-2018
		(No Chairperson)	01-08-2018 to 18-09-2018
		Shri A.S.P.Sinha	19-09-2018 to 03-12-2018
		Shri R.K.Jain (Link Officer)	04-12-2018 to 25-02-2019
		Dr. R.K.Gupta	26-02-2019 to 31-03-2019
2	Member Secretary	Shri A. Paramesham	01-04-2018 to 31-03-2019
3	Member (Power)	Shri T. Venkateshwarlu	01-04-2018 to 10-12-2018
		Shri L.B.Muanthang	10-12-2018 to 31-03-2019
4	Member	Shri Harikesh Meena	01-04-2018 to 31-03-2019

4.4 Nominated Board Members from the State Governments

Particulars of the Board Members from the States are given in the following Table:

Government of Andhra Pradesh		
1	Member (Admin)	Shri Shashi Bhusan Kumar, IAS Secretary to Govt. of Andhra Pradesh, WRD
2	Member (Technical)	Shri M.Venkatesawar Rao Engineer-in- Chief (I), WRD
Government of Telangana		
1	Member (Admin)	Dr S.K. Joshi, IAS Chief Secretary to Govt. of Telangana, In-Charge of I & CAD Dept.
2	Member (Technical)	Shri C. Muralidhar Engineer-in-Chief (I), I & CAD Dept.

4.5 Other Officers/ Staff of the Board

In addition to the personnel from the Central Government, other engineering officers from the level of Superintending Engineer to Assistant Executive Engineers and Financial/ Administrative/ Ministerial officials from the level of Director (Finance) to Assistants are deployed on deputation/ diversion/ loan basis from the Governments of Telangana, Andhra Pradesh and CWC.

In KRMB, 24 officers are in position as on 31.03.2019 and the break-up is as follows:

Government of India	-- 4
Government of Andhra Pradesh	-- 13
Government of Telangana	-- 7

Organisation Chart of Board Secretariat is at **Annexure - 5**.

CHAPTER-5
BOARD MEETINGS

5.1 Board Meetings

During the water year 2018-19, two Board meetings were held:

Sl. No.	Meeting	Date	Chair
1	8 th Board Meeting at Hyderabad	06.06.2018	Shri H.K.Sahu Chairman, KRMB
2	9 th Board Meeting at Hyderabad	16.10.2018	Shri R.K Jain Chairman, KRMB

5.1.1 8th Meeting of the Board



8th Meeting of the Board

The 8th meeting of the Board was held on 06.06.2018 at Hyderabad and following decisions were taken:

- The Board empowered the Chairman, KRMB to engage required supporting staff in KRMB through outsourcing agencies within the total of 15 personnel as and when required, duly following the due procedures/ norms.

- Both the State Governments will share the budget estimate approved by the Board in equal proportion (50:50) from the Financial Year 2018-19 onwards.
- The Board had agreed in principle for the cost estimate an amount of Rs.87.30 lakhs, for CWPRS consultancy services, procurement of ADCP and expenses to carry out ADCP observations.
- Committees constituted as per the decisions in 7th meeting of the Board:
 - i) A committee was constituted by KRMB with representatives from the both the States of AP, Telangana and KRMB on 01.12.2017 for the following issues:
 - a) “Accounting of only 20% of water utilized for domestic and municipal water supply for Hyderabad Metro Water Supply and Sewerage Board (HMWS&SB) as per clause VII of KWDT-1 final order”.
 - b) “To Study the gap between the releases from Srisaïlam and realization at NSP during the year 2017-18”.

The committee has submitted its report to the KRMB on 20.2.2018. The same was placed before the 8th meeting of the Board for discussion.

After detailed deliberations, the Board has taken following decisions.

- a) The States will furnish their views to Chairman, KRMB, who will take a final view.
 - b) This issue needs a detailed scientific study to establish the reasons for discrepancy. For this purpose CWPRS, Pune may be consulted.
- ii) A committee was constituted by KRMB with representatives from both the States of AP, Telangana and KRMB on 16.11.2017 for “Accounting of Losses in Nagarjuna Sagar Left Canal – common to both the States of Andhra Pradesh and Telangana”

The committee has submitted its report to the KRMB on 23.2.2018. The same was placed before the 8th meeting of the Board for discussion.

After detailed deliberations, it was agreed to conduct observation of losses in Nagarjuna Sagar Left Canal in the water year 2018-19 also.

- Chairman, KRMB decided that reconciliation of data should be done fortnightly or monthly by the representatives of both the States and KRMB and corrective action should be taken.

- Both States agreed for sharing of power generation benefits at Srisaillam in 50:50 ratio during the water year 2018-19.
- Both States agreed to furnish the DPRs of the Projects in Krishna Basin to KRMB.

5.1.2 9th Meeting of the Board



9th Meeting of the Board

The 9th meeting of the Board was held on 16.10.2018 at Hyderabad and following decisions were taken:

- Both the State Governments agreed for water sharing in the ratio of 66:34 during the water year 2018-19.
- Selection of locations for installation of Telemetry System in Phase-II and status of Phase-I was discussed.
- Board decided that two SLDCPs will be installed on hiring basis to measure the discharges on trial basis one each at NS Left Canal and NS Right Canal.
- Draft Working Manual of the Board was discussed and members suggested to place the same in next Board meeting.
- Board discussed the issue of shifting of KRMB to Vijayawada as per APR Act, 2014 and decided to identify the buildings for KRMB office.

5.2 Three Member Committee Meetings and Outcomes

One (01) meeting of the Three Member Committee consisting of Engineers-in-Chief of both the States and Member Secretary, KRMB was held during the water year 2018-19. Water release orders were issued keeping in view primarily the following factors:

- i) Drinking and Irrigation water requirements;
- ii) Storage positions in the reservoirs;
- iii) Generation of power as an incidental benefit.

Further, it was also seen that the overall ratio of sharing of the water between the States was adhered to.

As per the decisions of Three Member Committee, seven (07) water release orders were issued by KRMB during the water year 2018-19 from common projects of Srisaïlam and Nagarjuna Sagar for irrigation needs from different outlets and also drinking water supply to Hyderabad city and Chennai city.

5.3 First meeting of the committee to ensure supply of Krishna water to augment drinking water supply to Chennai city.

As per the decision taken in the 10th meeting of the Standing Committee of the Southern Zonal Council held at Bengaluru on 28th November 2017, a Committee was constituted by MoWR, GoI to ensure supply of Krishna water to augment the drinking water supply to Chennai city.

- I. Relevant extracts of the agreements of 1976 and 1977 among Maharashtra, Karnataka, erstwhile Andhra Pradesh, Tamil Nadu and Union Ministry of Agriculture and Irrigation are as given below.
 - (i) Maharashtra, Karnataka and erstwhile Andhra Pradesh have to spare 5 TMC each during the period from 1st July to 31st October of every year towards drinking water supply to Chennai city.
 - (ii) Government of Tamil Nadu shall draw not more than 15 TMC in a water year from Srisaïlam reservoir during the period 1st July to 31st October.
- II. Relevant extracts of the agreement of 1983 between erstwhile Andhra Pradesh and Tamil Nadu - Andhra Pradesh shall ensure to provide 8 TMC during the period from July to October and 4 TMC during the period from January to April.

The 1st meeting of the committee was held on 09.01.2019 under the Chairmanship of Chairman, KRMB. Detailed deliberations have taken place on the subject and the following main decisions were taken:

1. Government of Andhra Pradesh shall release water to Tamil Nadu for Chennai city to the maximum possible extent against the request of Tamil Nadu to release 2 TMC of water. The water will be released by A.P along with the releases required to be made for drinking water requirements of their own State in the months of March/ April 2019.
2. To ensure that all the States are utilising water within their allocation, sensor based real time data acquisition systems have to be installed in all the projects/ schemes.
3. In compliance to the clause XIII of the KWDT - I Award, all the basin States shall exchange the utilisation data from water year 2008-09 to 2017-18 in the same formats as submitted to KWDT - II within 3 months time. The data for water year 2018-19 onwards will be exchanged within one month after end of each of the water year. While exchanging data, the same will also be furnished to KRMB.
4. Tamil Nadu may consider construction of pipeline from Kandaleru/ Srisailam reservoir. However, as it will involve huge investment it has to be first ensured that water will be available at specified locations i.e., Kandaleru/ Srisailam.
5. The 2nd meeting of the Committee will be held in June 2019 to ensure water supply to Tamil Nadu during the months of July - October and also to evolve long term mechanism so that Krishna water supply to Tamil Nadu is ensured as per the Inter-State agreements.

During the water year 2018-19, a quantity of 2.476 TMC water released at Srisailam with a realization of 1.981 TMC at A.P - T.N border.

CHAPTER-6
ADMINISTRATIVE MATTERS

6.1 Working Manual

As per Section 88 of the APR Act, 2014, the Board may make regulations consistent with the Act and the rules made there under, to provide for -

- a) regulating the time and place of meetings of the Board and the procedure to be followed for the transaction of business at such meetings;
- b) delegation of powers and duties of the Chairman or any officer of the Board;
- c) the appointment and regulation of the conditions of service of the officers and other staff of the Board;
- d) any other matter for which regulations are considered necessary by the Board.

Accordingly, Krishna River Management Board prepared the draft Working Manual including the rules required for day to day functions of the Board, procedure for transaction of business, conduct meetings, staff requirement, etc.

The draft Working Manual of KRMB was discussed in various Board Meetings.

As per the decision taken in the 8th Meeting of the Board held on 06.06.2018 KRMB convened a meeting under the Chairmanship of Chairman, KRMB on 04.07.2018 for finalization of Working Manual of KRMB.

Based on the decisions taken in the meeting held on 04.07.2018, finalized Working Manual of KRMB was circulated along with the minutes of the meeting vide KRMB letter dated 09.07.2018. In response, comments were received from both the State Governments and are under scrutiny.

6.2 Development of Web Site

The KRMB launched its web site on National Informatics Centre (NIC) server with domain name as “**krmb.gov.in**”. All the project authorities have been instructed to upload the daily data of reservoirs inflows and outflows in this web site. Accordingly, the same is also considered in water use account of both the States.



Chairman launching the KRMB web site

6.3 e-Governance

The goal of e-governance is to offer a variety of information and communication technology services to citizens in an efficient and economical manner and to strengthen the relationship between Government and citizens using technology. The Government of India has been initiating different Digital India Components. The following Digital India Components have been adopted by KRMB.

e-Procurement: The Government initiated to commence e-Procurement of all procurements made with minimum tender value limit of Rs.2.00 lakhs w.e.f. 01.04.2016. Accordingly, the process of e-Tendering through <https://eprocure.gov.in/> is followed by KRMB.

e-Samiksha Software: e-Samiksha is a real time online system for monitoring of follow-up action on the decisions taken in meetings held in the cabinet secretariat. For implementation of the e-Samiksha Software in all organisations of the Ministry, the KRMB had nominated its Nodal Officer and communicated to MoWR for registration in e-Samiksha Software System.

Government e-Marketplace (GeM): GeM is a one stop portal to facilitate online procurement of common use Goods and Services required by various Government Departments/ Organizations/

PSUs. GeM aims to enhance transparency, efficiency and speed in procurement. The purchases through GeM by Government users have been authorized and made mandatory by Ministry of Finance by adding a new Rule No. 149 in the General Financial Rules, 2017. Since then the procurement for Goods and Services are carried out in KRMB through the GeM.

Legal Information Management & Briefing System (LIMBS): LIMBS is to create a national portal of all cases pending in various courts/ tribunals as a part of the e-Governance initiative. Once completed, information relating to all court/ tribunal cases being handled by the various ministries/ departments and other organisations of the Government of India will be available on a single web-based online application. The KRMB has been uploading data from the year 2018 onwards in the LIMBS web site.

6.4 Infrastructure/ Office Accommodation

Infrastructure/ Office accommodation for the Board was provided by Govt. of Telangana in the 5th floor of Jalasoudha Building, Errum Manzil, Hyderabad.

CHAPTER-7
FINANCIAL MATTERS

7.1 Budgetary funds

In pursuance of Section 86 (2) of the APR Act, 2014, Govt. of AP and Govt. of TS shall at all times provide the necessary funds to the Board to meet all the expenses required for the discharge of its functions and such amounts shall be apportioned between the States concerned in such proportion as the Central Government may, having regard to the benefits to each of the said States, specify.

Initially, the expenditure incurred in respect of KRMB was processed by GoAP through PAO, Vijayawada under HOD, Chief Engineer, Krishna Delta System, Vijayawada. However, certain difficulties were faced for timely settling of the bills (including salary bills) through this process.

Hence, in the 3rd meeting of the Board held on 16th December, 2015 it was decided that,

- i. Both the States shall deposit the Budget funds and the Board should be made functionally independent.
- ii. GoAP shall deposit every year the amount as per the budget estimate approved by the Board in full in the first quarter of the financial year.
- iii. The share of the GoTS shall be adjusted by the GoAP independently.
- iv. The saving bank account shall be operated independently by the Board secretariat as Chairperson is fully authorized to use the amount for the identified tasks.
- v. He can delegate the operation of the finances within the Board Secretariat.
- vi. All transactions shall be done under two signatures. The signatories are Member Secretary and Drawing & Disbursing Officer.
- vii. The unutilized funds at the end of the year are non-lapsable and shall be adjusted in the subsequent year.

The Board secretariat shall place the annual account of expenses before the Board. The accounts of the Board are subjected to audit as per provisions of the State/ Central Government.

During the 6th meeting of the Board held on 22nd August 2017, Board has decided to have a reserve fund of at least Rs.10.00 crore. It was decided that the Board may gradually build up the reserve fund out of savings from the approved/ allocated fund subject to maximum of Rs.1 crore per year.

In the 8th meeting of the Board held on 6th June, 2018, to avoid the process of apportionment of share of expenditure between both the States and reimbursement to AP, which is time taking, it was agreed that both the State Governments will share the Budget estimate approved by the Board in equal proportion (50:50) from the Financial Year 2018-19 onwards.

However, in the 9th meeting of Board held on 16th October, 2018, on request of the Chief Secretary, GoTS, it was decided that AP State shall release full budget requirement of KRMB quarterly and GoTS would subsequently reimburse 50% of its share through KRMB for proper accounting. With this the decision of previous meeting of the Board stands superseded.

The budget estimate of Rs.9.00 crore was approved by the Board for the FY: 2018-19. During F.Y. 2018-19 the GoAP have released an amount of Rs.1.65 crore and GoTS have released Rs.4.07 crore. The details of budget estimate, funds released and expenditure incurred by the Board during financial year 2018-19 are given at **Annexure – 6**.

7.2 Procurement

KRMB procures all necessary items through Government e-Marketplace (GeM) and Local Market. The major items procured during the financial year 2018-19 were computers and peripherals.

7.3 Audit

KRMB is not operating the Head of accounts of both the States directly. However, as per the Board's decision the accounts are audited by the CAG empanelled Chartered Accountant. Accordingly, the accounts of KRMB were audited for the financial years 2015-16, 2016-17 and 2017-18 and financial Statements prepared i.e. balance sheet along with audit report.

CHAPTER-8
TECHNICAL MATTERS

8.1 Water Management

Arrangements of water sharing between Andhra Pradesh and Telangana

A tentative distribution of water between Government of Andhra Pradesh and Government of Telangana in Krishna basin was agreed in a meeting held on 18th - 19th June, 2015 at New Delhi under the Chairmanship of Additional Secretary, MoWR, RD & GR (*A copy of the minutes of the meeting is at Annexure - 7*). The issues related to regulation of water use by Krishna River Management Board (KRMB) between Andhra Pradesh and Telangana State were also discussed. The meeting was attended by Principal Secretary, Water Resources Department of Government of Andhra Pradesh and Principal Secretary, I & CAD Dept., Government of Telangana.

In the meeting, it was agreed to share the quantity of 811 TMC (allocated enbloc by KWDT for utilization in various projects to erstwhile State of Andhra Pradesh) as 298.96 TMC for Telangana and 512.04 TMC for Andhra Pradesh. It was agreed that for current year the quantity of water available after allocation of 811 TMC would be shared proportionately. Similarly, the deficit below 811 TMC would also be shared accordingly. The ratio works out as 63.13 : 36.87 between Andhra Pradesh and Telangana States.

It was also agreed in the meeting held on 18th - 19th June, 2015 that a three member committee comprising of Engineers-in-Chief of both the States and Member Secretary of KRMB would assess the availability of water from time to time and requirements raised by the concerned State and accordingly decide the release of water to both the States. The decision taken by KRMB shall be implemented by the concerned State project authorities.

8.2 Water use Account

Utilisations in Krishna Basin:

In Krishna basin, during water year 2018-19, the total utilisation by both the States is 630.223 TMC out of which utilisation of Andhra Pradesh is 422.946 TMC and utilisation of Telangana State is 207.276 TMC.

Utilisations in two common reservoirs:

During water year 2018-19, 474.318 TMC of water was drawn by both States from the two common reservoirs namely, Neelam Sanjeeva Reddy Sagar Srisailem Project and Nagarjuna Sagar Project. Out of this, 194.603 TMC was drawn from Srisailem reservoir and 279.715 TMC was drawn from Nagarjuna Sagar. Canal/ Scheme-wise Drawals of Water by Andhra Pradesh and Telangana from two Common Reservoirs is enclosed at **Annexure - 8**.

8.3 Implementation of Telemetry system during 2018-19

KRMB has taken up implementation of telemetry system as per the decision taken in the 1st meeting of the Apex Council held at New Delhi on 21st September 2016, to have real time data of inflows and outflows of various projects/ schemes of Andhra Pradesh and Telangana in Krishna basin.

Eighteen telemetry stations were installed in various locations of Jurala, Srisailem, Nagarjuna Sagar projects (List is enclosed as **Annexure - 9**).

To expand the telemetry system in Krishna Basin another nine telemetry stations were finalized for installation (List is enclosed as **Annexure - 10**).

It was observed by the telemetry committee constituted by KRMB that some of the telemetry stations installed in phase-I were not functioning properly due to adverse hydraulic conditions. To resolve the discrepancy in discharge observations at a few of the telemetry stations of phase-I and to finalize telemetry stations of phase-II and as per the decision in the 8th meeting of the Board, brainstorming sessions were convened on 21.06.2018 & 04.07.2018 under the Chairmanship of Chairman, KRMB in the presence of the technical experts from the office of KGBO (Hyderabad), CWPRS (Pune) and Chief Engineers of both the States.

The recommendations of brainstorming sessions were placed in the 9th meeting of the Board held on 16.10.2018. After detailed deliberations Board has approved total 27 telemetry stations including 18 nos. in phase-I (List is enclosed as **Annexure - 11**).

Out of the 18 phase-I telemetry stations, 14 telemetry stations have been placed under warranty except those at Pothireddypadu Head Regulator, Nettempadu LIS, Palair intake canal and HNSS LIS due to need of further calibrations and prevailing hydraulic conditions.

The Board has also decided that all the telemetry stations of phase-I and phase-II may be commissioned and the data may be used for accounting simultaneously. As per the decision of the Board, KRMB has taken up the process of setting up of nine Side-Looking Doppler Current Profilers (SLDCPs) in phase-II (List is enclosed as **Annexure - 12**).

On request of KRMB, a team from CWPRS, Pune visited the proposed sites for phase-II telemetry installation in the month of January and March 2019 and suggested suitable locations and also furnished their technical expert report along with suitable specifications of SLDCPs for measuring the discharge in canals at the proposed nine telemetry sites.

Photographs showing some of the telemetry stations installed in phase-I



Checking the telemetry station at Priyadarshni Jurala RMC



Measuring discharge with ADCP at Paleru Off Take



Telemetry model centre

8.4 Hydro Power

On Krishna river in both the States, hydro power plants are located at Priyadarshini Jurala, Lower Jurala, Srisailam Right Bank power house, Srisailam Left Bank power house, Nagarjuna Sagar Dam power house, Nagarjuna Sagar Right Canal power house, Nagarjuna Sagar Left Canal power house, Nagarjuna Sagar Tail Pond power house and Pulichintala power house. The Details of Hydro Power Projects on Krishna River in the States of Andhra Pradesh and Telangana are given at **Annexure - 13** in the order of location from upstream to downstream. At present, these are operated by the concerned States based on the geographical location of the plants.

In the meeting taken by Additional Secretary, MoWR, RD & GR, New Delhi on 18th – 19th June, 2015 both States agreed that while making releases for power generation the committed utilizations for Nagarjuna Sagar and Srisailam Reservoir as mentioned in the **Appendix to Annexure - 7** may be ensured. Further, both States have also agreed to release water from power house of Srisailam to derive power benefits in 50:50 ratio.

Hydro Power Generation (million units) of various power plants on the Krishna River during the water year 2018-19 is given in the following table:

Month	Srisailam RB	NS RBC	Srisailam LB	NS Dam	NS LBC	Priyadarshini Jurala	Lower Jurala	Pulichintala	NS Tail pond
Jun-18	0.0	0.0	0.0	8.062	0.0	0.0	0.0	0.0	0.328
Jul-18	7.671	0.0	30.495	12.917	0.0	40.940	31.937	0.0	0.032
Aug-18	370.206	5.042	430.045	62.822	3.304	93.200	85.101	0.0	13.412
Sep-18	106.540	36.728	188.453	74.572	21.488	30.580	33.686	14.890	6.869
Oct-18	45.807	23.059	166.731	43.769	15.226	0.310	1.310	6.177	9.816
Nov-18	0.0	13.972	40.123	9.744	9.485	0.0	0.884	0.0	3.682
Dec-18	0.0	12.539	91.161	16.864	2.188	0.0	0.0	0.0	6.475
Jan-19	0.423	9.541	36.329	28.122	1.576	0.0	0.170	0.0	0.100
Feb-19	0.253	0.638	0.468	33.750	0.0	0.0	0.0	0.0	2.471
Mar-19	0.242	0.0	0.202	34.644	0.0	0.0	0.043	0.0	5.759
Apr-19	28.228	0.0	20.676	17.714	0.0	0.0	0.0	0.0	0.0
May-19	0.042	0.0	0.036	0.0	0.0	0.0	0.0	0.0	3.026
Total	559.412	101.519	1004.719	342.979	53.267	165.03	153.131	21.067	51.973

8.5 Regulation of Power Generated from Interstate Projects

As per Section 85(8)(b) of the APR Act, 2014, KRMB is required to undertake regulation of supply of power generated to the authority in-charge of the distribution of power having regard to any agreement entered into or arrangement made covering the Government of the existing State of Andhra Pradesh and any other State or Union territory.

There is a separate “Tungabhadra Board” constituted by the President of India in exercise of the powers vested under sub section (4), Section 66 of the Andhra Pradesh State Act, 1953 for completion of the Tungabhadra Project and its operation and maintenance.

In case of **Tungabhadra Interstate Power Project**, it is noted that there are two Inter-State power houses (namely Hampi power house – 4 x 9 MW and Tungabhadra dam power house – 4 x 9 MW) on Tungabhadra river. Earlier, the power produced was being shared by the States of Karnataka and undivided Andhra Pradesh.

8.6 Committees Constituted by KRMB

In compliance of decision taken during the 8th meeting of the Board held on 06.06.2018, KRMB had constituted Committees with representatives from Krishna River Management Board, Andhra Pradesh State and Telangana State to examine the following issues and furnish reports for taking decisions in its next meeting:

1. Committee for accounting of losses in Nagarjuna Sagar Left Canal – Common to both the States of Andhra Pradesh and Telangana vide OM No.2/27/2018/KRMB/3026-31 dated 06.11.2018. Due to non-release of water in the canals after kharif season, the Committee could not carry out observations and submit its report during water year 2018-19.
2. Committee to study the gap between the discharges measured at CWC gauge stations at Huvenhedgi and Yadgir and realization at Jurala project and the reasons for such gap vide OM No.2/27/2018/KRMB/3354-62 dated 17.12.2018.

A representative from Central Water Commission is also a member in this Committee.

KRMB addressed Government of Karnataka to accord permission for the inspection of the structures by the Committee between Huvenhedgi & Deosugur and Yadgir & Deosugur to carry out the analysis. But, due to denial of permission from the Government of Karnataka, the Committee could not carry out the study.

CHAPTER-9

**PARLIAMENT QUESTIONS, RTI, VIP REFERENCES, CAPACITY BUILDING
AND COURT CASES**

9.1 Parliamentary Questions

During the year 2018-19, KRMB furnished relevant information/ inputs to the Ministry of Water Resources, RD & GR for preparation of replies to eight (08) Parliament Questions (Lok Sabha and Rajya Sabha).

9.2 RTI

For implementing RTI Act, 2005 in KRMB, Superintending Engineer was designated as Central Public Information Officer (CPIO) for Krishna River Management Board and Member Secretary was designated as Appellate Authority.

During the year 2018-19, Krishna River Management Board has received eighteen (18) RTI applications from various persons/ organisations and replies have been sent to all the applicants.

9.3 VIP References

KRMB has furnished relevant material to the Ministry of Water Resources, RD & GR for replying to two (2) VIP references received during the year 2018-19.

9.4 Capacity Building (Training/ Conference/ Seminar/ Workshops/ Meetings)

1. Three officers attended the training **course** on “Special course on Geodesy” during 12th-16th November, 2018 at IISM, Hyderabad.
2. Two officers attended the “Management Development Program” for non technical officers during 3rd- 7th December, 2018 at National Water Academy, Pune.
3. An Executive Engineer attended the training program on “Use of Statistics in Hydrology” during 5th- 7th March, 2019 at CWC, New Delhi.
4. Two officers attended the “Capacity building on GeM **Procurement**” - Training to procurement officers on 15th May, 2018 at Central Soil and Materials Research Station, DoWR, RD & GR, New Delhi.

9.5 Court Cases : Nil

CHAPTER-10

OTHER ACTIVITIES

10.1 Swachhta Pakhwada

The Government of India launched the Swachh Bharat Mission on 2nd October, 2014 to accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation and to achieve Swachh Bharat by 2019, as a fitting tribute to the 150th Birth Anniversary of Mahatma Gandhi. The Mission shall strive for this by improving the levels of cleanliness in rural/ urban areas by removing the bottlenecks that were hindering the progress.

To ensure a continuous engagement and higher awareness among the citizens, a participatory approach by Government departments, institutions, etc., for implementation of the Swachh Bharat Mission is being planned in the form of theme-based cleanliness drives at regular intervals.

During the year 2018-19, the Government of India has taken up Swachhta Pakhwada Programme from 16th March 2019 to 31st March 2019.

In pursuance of MoWR, RD & GR directions, the **Swachhta Pakhwada - 2019** was observed with great enthusiasm and activities went in full swing as per **Swachhta Action Plan** in KRMB, Hyderabad. During this programme several activities both in-door and out-door were initiated. Activities conducted during the Swachhta Pakhwada are listed below:

1. **Inauguration of Swachhta Pakhwada - 2019:** All the officials and staff of the KRMB have taken Swachhta Pledge on 16.03.2019 and then conducted cleanliness drive in the office premises.
2. **World Water Day:** As part of the **Swachhta Pakhwada** the KRMB officials have explained the purpose of observing **World Water Day** and conducted water conservation awareness programme for school children in Rabindra Niketan High school, Errum Manzil, Hyderabad on 22.03.2019 and also explained with examples how to conserve water in our daily lives.
3. **Cleaning of Water Tank:** A village water tank named, Lakshminarayana Cheruvu, Edulabad village at Ghatkesar mandal, Medchal Malkajgiri District, Telangana State was cleaned as a part of the **Swachhta Pakhwada** drive on 26.03.2019.

KRMB organized and actively participated in the cleanliness drive to clean the water body as part of the Swachhta Pakhwada - 2019 programme. Irrigation & CAD Department, Telangana Government staff, local Sarpanch and villagers have voluntarily participated in the programme. Further, KRMB explained and conveyed to the local people that -

(i) Throwing/ dumping plastic waste in and around the water body affects the quality of water by leaching toxic chemicals out of plastic. Exposure to such water bodies cause health hazards like cancers, birth defects and impaired immunity.

(ii) Ground water is recharged with this polluted water which affects the quality of water being used for drinking and irrigation purposes.



Swachhta Pledge by KRMB Officers/ Staff



World Water Day at Rabindra Niketan High school, Errum Manzil, Hyderabad



World Water Day at Rabindra Niketan High school, Errum Manzil, Hyderabad



*Cleaning of Water Tank
(Lakshminarayana Cheruvu, Medchal Malkajgiri Dist., Telangana State)*



KRMB Staff during Cleaning



After Cleaning

పరిసరాల పరిశుభ్రత అందరి బాధ్యత **స్వచ్ఛతా పక్వదా**

ఘటికేసర్ రూరల్ : పరిసరాల పరిశుభ్రత అంది భార్యలని ఇరిగేషన్ వనం షి పహేందర్ అన్నారు. మంద లంలోని ఏదులాబాద్ లక్షనారాయణ రెడవు వద్ద మంగళవారం ఏప్రిల్ నీటిపా రుదంబాణ అధ్యక్షులలో కృష్ణ రివర్ మేనే జీమెంట్ బోర్డు గౌరవరి రివర్ మేనేజీ మెంట్ బోర్డు సమక్షంలో స్వచ్ఛతా పక్వదా కార్యక్రమంలో పరిసరాలను పరిశుభ్రం చేశారు. ఈ సందర్భంగా ఆయన మాట్లాడుతూ పరిసరాలను పచ్చటికొస్తుంది పరిశుభ్రంగా ఉంచుకోవా లని కోరారు. అవినీతిపట్టణాన్ని వ్యాపిస్తోందన్నారు. రెడవులను పరిశు భంగా ఉంచుకోవడం వల్ల నీటి తాయింపు కాబి దీంతో రెడవులు స్వచ్ఛ మైవ నీటితో తగినంతగా ఉంటాయి తెలి పారు. ఈ కార్యక్రమంలో కృష్ణ రివర్ మేనేజీమెంట్ బోర్డు సభ్యులు పరమేశం, షివా, గౌరవరి రివర్ మేనేజీమెంట్ బోర్డు సభ్యులు కుట్యూర్, పాండే, జిల్లా డీఈ సీఐఐ అధికారులు పాల్గొన్నారు.

చెరువులను పరిశుభ్రంగా ఉంచుకోవాలి

ఘటికేసర్ : చెరువులను పరిశుభ్రంగా ఉంచుకోవాలి స్వచ్ఛత ప్రతి ఒక్కరిపై ఉందని ఇరిగేషన్ ఎస్ఈ (సూపరింటెండెంట్ ఆఫ్ ఇంజి నీర్) మహేందర్ అన్నారు. ఘటికేసర్ మండలం ఏదులాబాద్ లక్షి నారాయణ చెరువులో స్వచ్ఛత పక్వదా - 2019 కార్యక్రమాన్ని ఇరిగేషన్ అధికారులు మంగళవారం చేపట్టారు. ఇరిగేషన్ అధికా రులు సిబ్బందితో చెరువు ఒడ్డున గల ప్లాస్టిక్ వ్యర్థాలు, చెత్త చెరా రాన్ని ఎత్తి లూక్లర్లో వేసి కొంత బాగాన్ని శుభ్రం చేశారు. కృష్ణ రివర్ మేనేజీమెంట్ బోర్డు సెక్రటరీ పరమేశ్వర్, మీనా, గౌరవరి రివర్ మేనేజీమెంట్ బోర్డు సభ్యులు కుట్యూర్, పాండే, జిల్లా డీఈ మంజుల, డ్రాఫ్ట్, స్థానిక సర్పంచ్ కాలేరు సురేశ్ పాల్గొన్నారు.

ఆంధ్రజ్యోతి Wed, 27 March 2019
<https://epaper.andhrasjyothy.com/c/37979820>

NT News Wed, 27 March 2019
<https://epaper.ntnews.com/c/37979866>

Local Paper Clippings about KRMB Swachhta Pakhwada

10.2 Swachhta Hi Seva Campaign

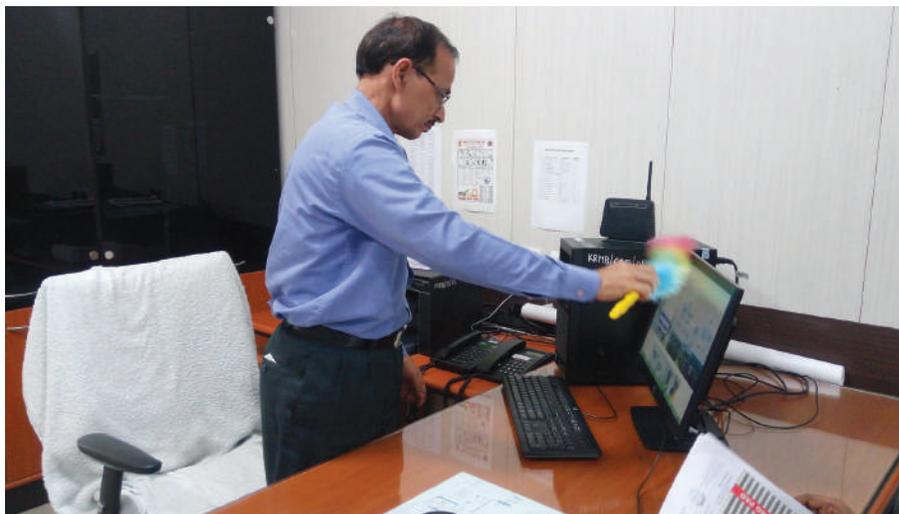
The Government of India has taken up Swachhta Hi Seva Campaign from 15th September 2018 to 2nd October 2018. In pursuance of MoWR, RD & GR's directions, the Swachhta Hi Seva Campaign - 2018 was observed with great enthusiasm and activities went in full swing in KRMB, Hyderabad.

During this programme several activities were performed as listed below:

1. Cleaning of computers, printers, xerox machine and electrical boards etc.
2. Cleaning of office tables, chairs, ac machines, almirahs and wardrobes.
3. Disposal of old news papers and rough papers.
4. Cleaning of sofa sets, cleaning of office corridors.
5. Cleanliness drive in toilets.
6. Cleaning of window glasses and curtains.



Member Secretary during Swachhta Hi Seva Campaign-2018



Member during Swachhta Hi Seva Campaign-2018



Member (Power) during Swachhta Hi Seva Campaign-2018



Director (Finance) during Swachhta Hi Seva Campaign-2018



Superintending Engineers during Swachhta Hi Seva Campaign-2018

10.3 International Day of Yoga

The International Day of Yoga has been celebrated annually on 21st June since 2015, following its inception in the United Nations General Assembly (UNGA) in 2014. The idea of International Day of Yoga was first proposed by the Hon'ble Prime Minister of India, Shri Narendra Modi, during his speech at the UNGA, on 27th September 2014 and suggested the date of 21st June, as it is the longest day of the year in the Northern Hemisphere and shares a special significance in many parts of the world.

He stated:

Yoga is an invaluable gift of India's ancient tradition. It embodies unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature; a holistic approach to health and well-being. It is not about exercise but to discover the sense of oneness with yourself, the world and the nature. By changing our lifestyle and creating consciousness, it can help in well being. Let us work towards adopting an International Yoga Day. —Sri Narendra Modi, UN General Assembly.

The first International Day of Yoga created a record for the largest yoga class, and another for the largest number of participating nationalities.



KRMB Chairman, Member Secretary and Members participating in International Day of Yoga



The pictures of KRMB participating in International Day of Yoga

10.4 Field Visits

Chairperson, KRMB accompanied Smt. T. Rajeshwari, Additional Secretary, MoWR, RD & GR during her visit on 09.10.2018 to Nagarjuna Sagar and Srisailam projects. The team visited BCCR Complex, Telemetry Station @ Km. 12.265 and Pothireddypadu Head Regulator and Sunkesula barrage.



Welcoming Smt. T. Rajeshwari, Additional Secretary, MoWR, RD & GR



Additional Secretary, Chairman, KRMB and other officials at Nagarjuna Sagar Project


भारत का राजपत्र
The Gazette of India

THE ANDHRA PRADESH REORGANISATION ACT, 2014

NO. 6 OF 2014

PART IX

MANAGEMENT AND DEVELOPMENT OF WATER RESOURCES

Apex Council for Godavari and Krishna river water resources and their Management Boards.

84. (1) The Central Government shall, on and from the appointed day, constitute an Apex Council for the supervision of the functioning of the Godavari River Management Board and Krishna River Management Board.

(2) The Apex Council shall consist of—

- (a) Minister of Water Resources, Government of India—Chairperson;
- (b) Chief Minister of State of Andhra Pradesh—Member;
- (c) Chief Minister of State of Telangana—Member.

(3) The functions of the Apex Council shall include—

(i) supervision of the functioning of the Godavari River Management Board and Krishna River Management Board;

(ii) planning and approval of proposals for construction of new projects, if any, based on Godavari or Krishna river water, after getting the proposal appraised and recommended by the River Management Boards and by the Central Water Commission, wherever required;

(iii) resolution of any dispute amicably arising out of the sharing of river waters through negotiations and mutual agreement between the successor States;

(iv) reference of any disputes not covered under Krishna Water Disputes Tribunal, to a Tribunal to be constituted under the Inter-State River Water Disputes Act, 1956.

33 of 1956.

Constitution and functions of River Management Board.

85. (1) The Central Government shall constitute two separate Boards to be called the Godavari River Management Board and Krishna River Management Board (to be known as the Board), within a period of sixty days from the appointed day, for the administration, regulation, maintenance and operation of such projects, as may be notified by the Central Government from time to time.

(2) The headquarters of Godavari River Management Board shall be located in the successor State of Telangana and of the Krishna River Management Board shall be located in the successor State of Andhra Pradesh.

(3) The Godavari River Management Board and Krishna River Management Board shall be autonomous bodies under the administrative control of the Central Government, and shall comply with such directions as may, from time to time, be given to them by the Central Government.

(4) Each Board shall consist of the following Chairperson and Members, namely:—

(a) a Chairperson not below the rank or level of Secretary or Additional Secretary to the Government of India to be appointed by the Central Government;

(b) two members, to be nominated by each of the successor States, of which one shall be the technical member not below the rank of Chief Engineer and the other administrative member to represent the concerned States;

(c) one expert to be nominated by the Central Government.

(5) Each Board shall have a full-time Member Secretary, not below the rank of Chief Engineer in the Central Water Commission, to be appointed by the Central Government.

(6) The Central Government shall create such number of posts of the rank of Chief Engineer in the Central Water Commission, as it considers necessary.

50 of 1968. (7) Each Board shall be assisted in the day to day management of reservoirs by the Central Industrial Security Force constituted under the Central Industrial Security Force Act, 1968, on such terms and conditions as the Central Government may specify.

(8) The functions of each Board shall include—

(a) the regulation of supply of water from the projects to the successor States having regard to—

33 of 1956. (i) awards granted by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956;

(ii) any agreement entered into or arrangement made covering the Government of existing State of Andhra Pradesh and any other State or Union territory;

(b) the regulation of supply of power generated to the authority in-charge of the distribution of power having regard to any agreement entered into or arrangement made covering the Government of the existing State of Andhra Pradesh and any other State or Union territory;

(c) the construction of such of the remaining on-going or new works connected with the development of the water resources projects relating to the rivers or their tributaries through the successor States as the Central Government may specify by notification in the Official Gazette;

33 of 1956. (d) making an appraisal of any proposal for construction of new projects on Godavari or Krishna rivers and giving technical clearance, after satisfying that such projects do not negatively impact the availability of water as per the awards of the Tribunals constituted under the Inter-State River Water Disputes Act, 1956 for the projects already completed or taken up before the appointed day; and

(e) such other functions as the Central Government may entrust to it on the basis of the principles specified in the Eleventh Schedule.

86. (1) The Board shall employ such staff as it may consider necessary for the efficient discharge of its functions under this Act and such staff shall, at the first instance, be appointed on deputation from the successor States in equal proportion and absorbed permanently in the Board.

Staff of the
Management
Board.

(2) The Government of the successor States shall at all times provide the necessary funds to the Board to meet all expenses (including the salaries and allowances of the staff) required for the discharge of its functions and such amounts shall be apportioned between the States concerned in such proportion as the Central Government may, having regard to the benefits to each of the said States, specify.

(3) The Board may delegate such of its powers, functions and duties as it may deem fit to the Chairman of the said Board or to any officer subordinate to the Board.

(4) The Central Government may, for the purpose of enabling the Board to function efficiently, issue such directions to the State Governments concerned, or any other authority, and the State Governments, or the other authority, shall comply with such directions.

Jurisdiction of Board.

87. (1) The Board shall ordinarily exercise jurisdiction on Godavari and Krishna rivers in regard to any of the projects over headworks (barrages, dams, reservoirs, regulating structures), part of canal network and transmission lines necessary to deliver water or power to the States concerned, as may be notified by the Central Government, having regard to the awards, if any, made by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956.

33 of 1956.

(2) If any question arises as to whether the Board has jurisdiction under sub-section (1) over any project referred thereto, the same shall be referred to the Central Government for decision thereon.

Power of Board to make regulations.

88. The Board may make regulations consistent with the Act and the rules made thereunder, to provide for—

(a) regulating the time and place of meetings of the Board and the procedure to be followed for the transaction of business at such meetings;

(b) delegation of powers and duties of the Chairman or any officer of the Board;

(c) the appointment and regulation of the conditions of service of the officers and other staff of the Board;

(d) any other matter for which regulations are considered necessary by the Board.

Allocation of water resources.

89. The term of the Krishna Water Disputes Tribunal shall be extended with the following terms of reference, namely:—

(a) shall make project-wise specific allocation, if such allocation have not been made by a Tribunal constituted under the Inter-State River Water Disputes Act, 1956;

33 of 1956.

(b) shall determine an operational protocol for project-wise release of water in the event of deficit flows.

Explanation.— For the purposes of this section, it is clarified that the project specific awards already made by the Tribunal on or before the appointed day shall be binding on the successor States.

Polavaram Irrigation Project to be a national project.

90. (1) The Polavaram Irrigation Project is hereby declared to be a national project.

(2) It is hereby declared that it is expedient in the public interest that the Union should take under its control the regulation and development of the Polavaram Irrigation Project for the purposes of irrigation.

(3) The consent for Polavaram Irrigation Project shall be deemed to have been given by the successor State of Telangana.

(4) The Central Government shall execute the project and obtain all requisite clearances including environmental, forests, and rehabilitation and resettlement norms.

Arrangements on Tungabhadra Board.

91. (1) The Governments of the successor States of Andhra Pradesh and Telangana shall replace the existing State of Andhra Pradesh on the Tungabhadra Board.

(2) The Tungabhadra Board shall continue to monitor the release of water to High Level Canal, Low Level Canal and Rajolibanda Diversion Scheme.

PART X

INFRASTRUCTURE AND SPECIAL ECONOMIC MEASURES

Successor States to follow principles, guidelines, etc., issued by Central Government.

92. The principles, guidelines, directions and orders issued by the Central Government, on and from the appointed day, on matters relating to coal, oil and natural gas, and power generation, transmission and distribution as enumerated in the Twelfth Schedule shall be implemented by the successor States.

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99



भारत का राजपत्र
The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 1148]

नई दिल्ली, बुधवार, मई 28, 2014/ज्येष्ठ 7, 1936

No.1148]

NEW DELHI, WEDNESDAY, MAY 28, 2014/JYAISTHA 7, 1936

MINISTRY OF WATER RESOURCES

NOTIFICATION

New Delhi, the 28th May, 2014

S.O. 1391(E).—In exercise of the powers conferred by sub-sections (1), (4) and (5) of Section 85 of the Andhra Pradesh Reorganisation Act, 2014 (6 of 2014), the Central Government hereby constitutes the Krishna River Management Board for the administration, regulation, maintenance and operation of such projects on Krishna river, as may be notified by the Central Government from time to time, consisting of the following Chairperson and Members, namely:—

- | | | | |
|-----|---|---|------------------|
| (1) | An officer of the level of Additional Secretary to the Government of India from the Central Water Engineering (Group 'A') Service | - | Chairperson |
| (2) | Two members, to be nominated by each of the successor States of Telangana and Andhra Pradesh, of which one shall be the technical member not below the rank of Chief Engineer and the other administrative member to represent the concerned States | - | Members |
| (3) | One expert from the Central Power Engineering (Group 'A') Service | - | Members |
| (4) | An Officer not below the rank of Chief Engineer from the Central Water Engineering (Group 'A') Service | - | Member Secretary |

2. The headquarters of the Krishna River Management Board shall be at Hyderabad.

[F. No.1/1/2014-SPR]

URVILLA KHATI, Jt. Secy.

THE ELEVENTH SCHEDULE

[See section 85(8) (e)]

Principles governing the functioning of the River Management Boards

1. The operation protocol notified by the Ministry of Water Resources with respect to water resources arrived at based on appropriate dependability criteria after the adjudication by the Krishna Water Disputes Tribunal shall be binding on both the successor States.
2. In the event of conflicting demand of water for irrigation and power, the requirement of water for irrigation shall take precedence.
3. In the event of conflicting demand of water for irrigation and drinking water, the requirement of water for drinking water purpose shall take precedence.
4. The allocations made by the River Water Tribunals with regard to various projects on Godavari and Krishna Rivers or for the regions of the existing State of Andhra Pradesh, in respect of assured water shall remain the same.
5. Allocations, if any, to be made on excess flows by any Tribunal in future shall be binding on both the State of Telangana and the successor State of Andhra Pradesh.
6. While the successor State Governments shall be responsible for managing natural calamities, the Boards shall advise the two State Governments on the management of disaster or drought or flood in the rivers of Krishna and Godavari, particularly in reference to the release of water for the management and mitigation of the natural calamities. The Boards shall have the full authority to get their orders implemented by the two successor State Governments promptly and effectively in respect of operation of the head works of the dams, reservoirs or head works of canals and works appurtenant thereto including the hydel power projects, as notified by the Central Government, on Krishna and Godavari Rivers.
7. No new projects based on water resources arrived at based on appropriate dependability criteria on Godavari or Krishna rivers can be taken up by the State of Telangana or the State of Andhra Pradesh without obtaining sanction from the Apex Council on River

water resources. All such proposals shall be first appraised and technically cleared by the respective Board, before sanction by the said Apex Council.

8. Execution of ongoing projects and future new projects on Godavari and Krishna rivers shall be the responsibility of the State Government concerned where the project is located.
9. In case of non-implementation of the decision by either of the States, the defaulting State shall bear the responsibility and shall face financial and other penalties imposed by the Central Government.
10. The following irrigation projects which are under construction shall be completed as per the plan notified by the existing State of Andhra Pradesh and the water sharing arrangement shall continue as such :-

- (i) Handri Niva
- (ii) Telugu Ganga
- (iii) Galeru Nagiri
- (iv) Venegondu
- (v) Kalvakurthi
- (vi) Nettempadu

THE TWELFTH SCHEDULE
(See section 92)

A. Coal

1. Of the total equity of Singareni Collieries Company Ltd. (SCCL), 51% shall be with the Government of Telangana and 49% with the Government of India.
2. Existing coal linkages of SCCL shall continue without any change.
3. New linkages shall be allotted to the successor States as per the New Coal Distribution Policy by Government of India.
4. End use plants of the allocated coal blocks shall continue with coal from the block to be supplied in proportion to their respective capacities.

B. Oil and Gas

1. Allocation of natural gas will continue to be done as per the policies and guidelines issued by the Government of India from time to time.
2. The royalties payable on domestic onshore production of oil and gas shall accrue to the State in which such production takes place.

C. Power

1. Units of APGENCO shall be divided based on geographical location of power plants.
2. Existing Power Purchase Agreements (PPAs) with respective DISCOMS shall continue for both on-going projects and projects under construction.
3. The existing Andhra Pradesh Electricity Regulatory Commission (APEREC) shall function as a joint regulatory body for a period not exceeding six months within which time separate SERCs will be formed in the successor States.
4. The existing State Load Despatch Centre (SLDC) shall function for both successor States for a period not exceeding two years within which time separate SLDC shall be set up for each successor State. During this period, the existing SLDC shall function under the direct administration and control of the Southern RLDC at Bengaluru.

5. Transmission lines of APTRANSCO of 132 KV and higher voltage cutting across the successor States shall be deemed as Inter-State Transmission System (ISTS) lines. The transmission lines falling within the territory of each successor State shall be transferred to the respective State Transmission Utilities. The maintenance of ISTS lines shall also be done by successor States in their respective jurisdictions.
6. The power of the Central Generating Stations will be allotted in such ratio to the State of Telangana and the State of Andhra Pradesh based on the actual energy consumption of the last 5 years of the relevant DISCOMS in the respective successor State.
7. For a period of ten (10) years, the successor State that has a deficit of electricity shall have the first right of refusal for the purchase of surplus power from the other successor State.
8. The districts of Anantapur and Kurnool which fall within the jurisdiction of the AP Central Power Distribution Company Ltd. will now be reassigned to the AP South Power Distribution Company Ltd.

Annexure – 6

The details of budget estimate, funds released and expenditure incurred by the Board during Financial Year 2018-19

(Rs. in Lakhs)

S.No	Particulars		Amount
I.	Budget approved by Board		900.00
II.	Amount of Budget released during 2018-19		572.40
III.	Expenditure during 2018-19		446.89
1	Salaries of staff	337.67	341.19
	Medical treatment	3.52	
2	Other than salaries		81.76
(i)	Domestic travel expenses	16.97	
(ii)	Office expenses (telephone, postage stamps, water, stationery & misc.exp) etc.,	4.21	
(iii)	Publications	0.41	
(iv)	Other administrative expenses (imprest, wages to out sourcing staff, meetings exp)	29.86	
(v)	Minor works (motor vehicles T&P)	28.14	
(vi)	Machinery & equipment	2.17	
3	Telemetry works		23.94
IV	Balance as on 31.3.2019 including previous year saving amounts (excluding grant from GoI)		276.44

Note: One time grant-in-aid of Rs.1.00 crore was received as initial amount to be reimbursed by the Board on receipt of funds from the State Government of Andhra Pradesh and Telenagana vide MoWR, RD & GR Letter no: R.160011/8/ 2014- Pen.Riv /009 dated 16.12.2014.

Copy of Minutes of the Meeting Held on 18th - 19th June, 2015 to discuss the issues related to regulation of water by KRMB.

Brief record of the discussion of the meeting held on 18th and 19th June, 2015 to discuss issues related to regulation of water by Krishna River Management Board

1. A meeting was held on 18th and 19th June, 2015 under the Chairmanship of Additional Secretary, MoWR, RD & GR to discuss the issues related to regulation of water use by Krishna River Management Board between Andhra Pradesh and Telangana State. In addition to the officials of Ministry of Water Resources, River Development and Ganga Rejuvenation, officials from Government of Telangana and Andhra Pradesh and Krishna River Management Board were present in the meeting.
2. While welcoming the participants, Additional Secretary, MoWR, RD & GR requested the representatives of both the States to present their views in this regard.
3. The representative of Govt. of Andhra Pradesh requested to notify the projects for taking over under the jurisdiction of Krishna River Management Board urgently for the purpose of regulation of water. He also cited that at present the directives of the Board are not followed. Representative of the State of Telangana stated that before taking any decision regarding notification of projects and regulation of water, it is necessary that Broad principles of water regulation and an appropriate implementation mechanism are worked out. In this regard, he highlighted that as per KWDT - I award the erstwhile State of Andhra Pradesh has been allocated 811 TMC for utilization in various projects as enbloc. However, as per the arrangement/various decisions taken by the erstwhile State of Andhra Pradesh revised allocations in both the parts of the State came to be 512 TMC in Andhra Pradesh and 299 TMC in Telangana.
4. The representative of Andhra Pradesh contested that the share of Telangana is only 279 TMC and additional 20 TMC will be available to them for Bhima Lift Project only after the completion of modernization of Krishna Delta System. The representative of Telangana

contended that revised allocations statement submitted by the erstwhile Andhra Pradesh before KWDT - II has to be adhered to by both the States.

5. It was agreed in the meeting that the figures of share of the two States as mentioned in the list of projects dated 18-10-2013 (appended herewith as Annexure) may be followed as the working arrangement for the current year only without prejudice to the rights of the two States about their entitlements which have been raised or to be raised before appropriate fora.
6. The representatives of both the States agreed that they may utilize their share of water wherever they decide subject to availability of water at that place and without affecting the rights of other State.
7. Thereafter, project related issues were discussed and following working arrangements for the water year 2015-2016 only were agreed as a temporary measure.

Nagarjuna Sagar Project

8. After detailed deliberations, it was agreed that the water share of both the States from this project would be as mentioned in the Annexure. KRMB would duly consider the requirements of both Andhra Pradesh as well as Telangana State as per existing practice while regulating the water of Left Bank Canal.
9. It was agreed that while considering the demands of two States the due priority would be given to the drinking water requirements of all the areas including the twin cities of Hyderabad and Secunderabad as per Schedule XI of the AP Reorganisation Act, 2014.

Krishna Delta System

10. As per the Tribunal award, 181.2 TMC of water has been allocated for Krishna Delta Project, i.e. Prakasham Barrage at Vijayawada. However, as per Annexure enclosed the share of Krishna Delta is 151.2 TMC.
11. The water requirements for Krishna Delta are met from intermediate contribution supplemented by NSP. In so far utilizable water yield downstream of Nagarjuna Sagar by

Paleru, Munneru and Musi is concerned, Govt. of Andhra Pradesh stated that this is only 20 TMC. According to representative of Govt. of Telangana, this yield is 101.2 TMC. It was agreed that actual utilizable water from intermediate catchment may be taken into consideration by KRMB while determining releases to Krishna Delta.

The utilizable quantity of water from the intermediate catchment downstream of Nagarjuna Sagar would be assessed by the CWC for consideration of KRMB by taking the flow data from Musi, Paleru and Munneru Streams, storage in Pulichintala and measurement of actual discharges through the canals in Krishna Delta. That quantity shall be deducted from the total allocation and the same shall be supplemented through Nagarjuna Sagar Project for the irrigation and command of Krishna Delta System.

12. The representative of Govt. of Andhra Pradesh mentioned that the cost of Krishna Delta Modernization should be shared by Govt. of Telangana if 20 TMC of water is to be utilized for Bhima Project. Representation of Govt. of Telangana vehemently opposed this idea of cost sharing.
13. It was suggested that the water would be regulated at Nagarjuna Sagar Project duly considering the requirements of its Canal System and requirements of Krishna Delta System.

Srisailem Reservoir Project

14. It was noted that there is 5 TMC requirement for Chennai Water Supply (AP and TS share) through Telugu Ganga Canal and another 19 TMC requirement for SRBC. It was agreed that while making releases for power generation the committed utilizations for Nagarjuna Sagar and Srisailem Reservoir as mentioned above/in the Annexure may be ensured.

Implementation Mechanism

15. A Committee comprising of E-in-Cs of the two States and Member Secretary of KRMB would consider the indents raised by the project authorities keeping in view of the overall availability of water and requirements raised by the concerned project authorities and

make recommendation to KRMB. The decision taken by KRMB shall be implemented by the concerned State project authorities.

16. The above mentioned Committee will also regulate the release of water through KC Canal, Jurala and RDS as mentioned in the Annexure.
17. It was agreed that for current year the quantity of water available after allocation of 811 TMC would be shared proportionately. Similarly, the deficit below 811 TMC would also be shared accordingly.
18. The entire arrangements agreed for the current year would be without any prejudice to the stand of both the States before any forum.

The meeting ended with a Vote of Thanks to the Chair.

Sd/- dt. 19.06.2015

A. N. DAS
Principal Secretary, WRD
Govt. of Andhra Pradesh

Sd/- dt. 19.06.2015

S. K. Joshi
Principal Secretary, I & CAD Dept.
Govt. of Telangana

Sd/- dt. 19.06.2015

Dr. Amarjith Singh
Additional Secretary
Ministry of WR, RD & GR

Appendix to Annexure - 7

Andhra Pradesh and Telangana Projects in Krishna Basin

Sl. No.	Name of the Project	As per Bachawat Report	Re-allocation	Region-wise allocations			Total
				Rayalaseema	Coastal Andhra	Telangana	
1	2	3	4	5	6	7	8
I	Specific Projects in Region						
1	Krishna Delta	181.20	152.20	-	152.20	-	152.20
2	Muniyeru Project	3.30	3.30	-	3.30	-	3.30
3	Pakhal Lake	2.60	2.60	-	-	2.60	2.60
4	Wyra	3.70	3.70	-	-	3.70	3.70
5	Palair	4.0	4.0	-	-	4.0	4.0
6	Dindi	3.70	3.50	-	-	3.5	3.5
7	Kurnool-Cuddapah Canal	39.90	31.90	31.90	-	-	31.90
8	Koilsagar	3.90	3.90	-	-	3.90	3.90
9	Tungabhadra Right Bank Low Level Canal	29.50	29.50	29.50	-	-	29.50
10	Tungabhadra Right Bank High Level Canal Stage- I & II	32.50	32.50	32.50	-	-	32.50
11	Rajolibunda Diversion Scheme	15.90	15.90	-	-	15.90	15.90
12	Bhairavanitippa	4.90	4.90	4.90	-	-	4.90
13	Musi	9.40	9.40	-	-	9.40	9.40
14	Lankasagar	1.0	1.0	-	-	1.0	1.0
15	Vaikuntapuram Pumping Scheme	2.60	2.00	-	2.0	-	2.0
16	Kotipallivagu	2.0	2.0	-	-	2.0	2.0
17	Guntur Channel	4.0	4.0	-	4.0	-	4.0
18	Okachettivagu	1.90	1.90	-	-	1.90	1.90
19	Gajuladinne	2.0	2.0	2.0	-	-	2.0

20	Jurala	17.84	17.84	-	-	17.84	17.84
21	Water Supply to twin cities of Secunderabad and Hyderabad	3.90	5.70	-	-	5.70	5.70
22	Minor Irrigation	116.26	111.26	12.24	9.87	89.15	111.26
Total (I)		486.00	445.00	113.04	171.37	160.59	445.00
II Common Projects							
23	Nagarjuna Sagar Project	281.00	280.00		174.30	105.70	280.00
24	Srisaillam (Evaporation losses)	33.00	33.00	11.00	11.00	11.00	33.00
25	Chennai city Water Supply		5.00	1.66	1.67	1.67	5.00
Total (II)		314.00	318.00	12.66	186.97	118.37	318.00
III New Projects based on savings & return flows							
26	Srisaillam Right Branch Canal		19.00	19.00			19.00
27	Pulichintala Project		9.00		9.00		9.00
28	Rajiv (Bhima) Lift Scheme (from Jurala foreshore)		20.00			20.00	20.00
29	Return flows	11.00					
Total (III)		11.00	48.00	19.00	9.00	20.00	48.00
Total (I+II+III)		811.00	811.00	144.70	367.34	298.96	811.00

Note:

1. The above statement is prepared based on the location of the projects for which allocations are made by KWDT - I.

2. Hyderabad water supply scheme was taken up with consumptive use of 3.3 TMC by making reallocations of 0.2 TMC from Dindi Project, 0.6 TMC from Vikuntapuram P.S, 1.0 TMC from Nagarjuna Sagar Project and saving of 1.50 TMC out of 3.9 TMC towards water supply to twin cities. (Govt. of Andhra Pradesh Irrigation Dept G.O.Ms.No.19 dt: 05.02.2003).

3. Bhima Lift Irrigation project in Mahabubnagar District (20 TMC) and Pulichintala project (9 TMC towards evaporation losses) are taken up against the savings proposed by modernizing the Krishna Delta. (CWC approval vide 64th meeting of the Advisory Committee letter No.10/27/96-PA (N)/502-550 dt: 16.04.1996).
4. Srisailem Right Branch Canal was taken up with the return flow of 11 TMC allocated by Bachawat Tribunal and 8 TMC by way of savings due to modernization of K.C Canal system. (CWC approval vide 58th meeting of the Advisory Committee letter no.16/27/94-PA (N) dt: 04.07.1994).
5. 5 TMC reallocated towards AP's contribution for Chennai water supply as per the Agreement dated 14.04.1976 among the Govt. of A.P., Karnataka and Maharashtra. This 5 TMC is shown equally among three regions out of minor irrigation allocations.
6. The evaporation loss of 33 TMC for Srisailem reservoir is shown equally among three regions.
7. The allocation of Nagarjuna Sagar Project is shown as per "Nagarjuna Sagar Project, Third Revised project Estimate 2000" and the evaporation loss is included in proportion to allocations.

Yours faithfully,

Sd/- dt.18.10.2013

Chief Engineer (OSD), IS & WR
For Chief Engineer (OSD) / IS & WR

Annexure - 8

**The Canal/ Scheme-wise Drawals of Water by Andhra Pradesh and Telangana from
Common Reservoirs of Srisailem and Nagarjuna Sagar during 2018-19 (in TMC)**

Sl. No.	Name of the Project	Water drawn by AP	Water drawn by TS	Total
I	Srisailem			194.603
	(i) From Pothi reddy padu Head Regulator (Including Srisailem Right Branch Canal, Telugu Ganga Project, etc)	113.015	---	
	(ii) Handri Niva Sujala Sravanthi & Mutchumarri LI Scheme	43.764	---	
	(iii) Chennai Water Supply	1.586	0.793	
	(iv) Mahatma Gandhi Kalwakurthy Lift Irrigation Scheme	---	35.445	
II	Nagarjuna Sagar Project			
	(i) Nagarjuna Sagar Right Canal (Jawahar Canal)	111.714	---	279.715
	(ii) Nagarjuna Sagar Left Canal (Lal Bahadur Canal – Common to both the States)	89.297		
	(iii) Alimineti Madhava Reddy Project (AMRP) Lift Irrigation Scheme	---	41.542	
	(iv) Hyderabad Metro Water Supply & Sewerage Board (HMWS & SB)			
	(v) Krishna Delta System	37.162	---	
Total				

List of Telemetry Stations in Phase -I

Sl. No.	Name of the Telemetry station
	Phase-I
1	AMRP Lift Scheme at km 1.10 of Link canal connecting to Akkampalli Balancing Reservoir
2	Nagarajuna Sagar Project (NSP) Dam at Diversion Tunnel Intake Tower
3	NSP Right Bank Canal at 0.44 km
4	NSP Left Bank Canal at 0.10 km
5	Palair Reservoir upstream of intake structure at km 136.345 of NSP LBC
6	Palair Reservoir Off take at km 0.20 downstream of confluence of NSLC and Power House outlet
7	NSP LBC km 101.362 at Andhra Pradesh Telangana Border
8	Mahatma Gandhi Kalwakurthy LI Scheme (MGKLIS) at Cistern
9	Srisailam Reservoir near Block 17/18
10	At SLB @ km. 12.265 of SRMC of Pothireddypadu Head Regulator
11	Handri Niva Sujala Sravanthi (HNSS) LI Scheme near Culvert at km (-) 1.62 of old pump house
12	Jurala Reservoir
13	Jurala Right Main Canal near head regulator
14	Jurala Left Main Canal near head regulator
15	Jurala Left Parallel Canal near head regulator
16	Bhima LI Scheme - I at lift point
17	Koilsagar LI Scheme at lift point
18	Nettampadu LI Scheme at lift point

Sl. No.	Name of the Telemetry stations
1	Polavaram canal confluence
2	KC Canal off take at Sunkesula Barrage
3	West Main Canal of Prakasam Barrage
4	East Main Canal of Prakasam Barrage
5	Rajoli Banda Diversion canal
6	Pulichintala Dam (Reservoir)
7	Prakasam Barrage
8	NS tail pond dam.
9	Guntur channel of Prakasam barrage

Annexure - 11

Sl. No.	Name of the Telemetry station	Existing type of sensor	Finalized type of sensor
1	AMRP Lift Scheme at km 1.10 of Link canal connecting to Akkampalli Balancing Reservoir	Level Sensor	No change in Level Sensor
2	Nagarajuna Sagar Project (NSP) Dam at Diversion Tunnel Intake Tower		
3	NSP Right Bank Canal at 0.44 km	Level cum Velocity Sensor	Replacement with Side Looking Doppler Current Profiler (SLDCP) in Phase-II
4	NSP Left Bank Canal at 0.10 km		
5	Palair Reservoir upstream of intake structure at km 136.345 of NSP LBC		
6	Palair Reservoir off take at km 0.20 downstream of confluence of NSLC and Power House outlet	Level Sensor	No change in Level Sensor
7	NSP LBC km 101.362 at Andhra Pradesh Telangana Border	Level Sensor	Replacement with SLDCP in Phase-II
8	Mahatma Gandhi Kalwakurthy LI Scheme (MGKLIS) at Cistern	Level Sensors	No change in Level Sensors
9	Srisailem Reservoir near Block 17/18		
10	At SLB @ km. 12.265 of SRMC of Pothireddypadu Head Regulator	Level cum Velocity Sensor	Replacement with (SLDCP) in Phase-II
11	Handri Niva Sujala Sravanthi (HNSS) LI Scheme near Culvert at km (-) 1.62 of old pump house	Level Sensor	No change in Level Sensor
12	Jurala Reservoir		
13	Jurala Right Main Canal near head regulator	Level Sensor	Replacement with Level cum Velocity Sensor of NSP RMC
14	Jurala Left Main Canal near head regulator	Level Sensor	Replacement with Level cum Velocity Sensor of NSP LMC
15	Jurala Left Parallel Canal near head regulator	Level Sensor	No change in Level Sensor
16	Bhima LI Scheme - I at lift point		
17	Koilsagar LI Scheme at lift point		
18	Nettampadu LI Scheme at lift point	Level cum Velocity Sensor	No change in Level cum Velocity Sensor

19	Polavaram canal confluence (Right bank canal)	-	SLDCP in Phase-II
20	KC Canal off take at Sunkesula Barrage	-	SLDCP in Phase-II
21	West Main Canal of Prakasam Barrage	-	
22	East Main Canal of Prakasam Barrage	-	
23	Rajoli Banda Diversion canal	-	Level cum Velocity Sensor of Palair U/s of Phase-I
24	Pulichintala Dam (Reservoir)	-	Level Sensor of Jurala right canal of Phase-I
25	Prakasam Barrage	-	Level Sensor of Jurala left canal of Phase-I
26	NS tail pond dam	-	Level Sensor of NSP border point of Phase-I
27	Guntur channel of Prakasam barrage	-	Level cum Velocity Sensor of PRP of Phase-I

Annexure - 12

Sl. No.	Name of the Telemetry station	Location	Type of sensor
1	SRMC of Pothireddypadu Head Regulator	15.880° N and 78.437° E	Side Looking Doppler Current Profiler (SLDCP) (Appropriate site and specification as per CWPRS)
2	NSP Right Bank Canal	16.549° N and 79.322° E	
3	NSP Left Bank Canal	16.737° N and 79.280° E	
4	Palair Reservoir upstream of Intake structure of NSP LBC	17.158° N and 79.887° E	
5	NSP LBC at Andhra Pradesh Telangana Border	17.072° N and 80.717° E	
6	Polavaram Canal Confluence	16.628° N and 80.629° E	
7	West Main Canal of Prakasam Barrage	16.496° N and 80.601° E	
8	East Main Canal of Prakasam Barrage	16.511° N and 80.613° E	
9	Kurnool Cuddapah Canal	15.878° N and 77.848° E	

**Details of Hydro Power Projects on Krishna River in the States of
Andhra Pradesh and Telangana**

Sl. No.	Hydro Power Project	Capacity (MW)	FRL	MDDL	Discharge	Pump mode operation facility	State
1	Priyadarshini Jurala	6 x 39	+318.516 m	+314.86 m	--	--	Telangana
2	Lower Jurala	6 x 40	+299.000 m	+294 .00 m	--	--	Telangana
3	Srisaillam Right Bank	7 x 110	+269.748 m	+254.200 m	--	--	Andhra Pradesh
4	Srisaillam Left Bank	6 x 150	+269.748 m	+245.375 m	--	All turbines are of reversible type for pump mode operation	Telangana
5	Nagarjuna Sagar Dam	1 x 110 + 7 x 100.8	+179.832 m	+154.230 m for conventional and +150.880 m for reversible unit	4700 cusec for conventional / 4300 cusec per unit for reversible	7 x 100.80 MW turbines are of reversible type for pump mode operation	Telangana
6	Nagarjuna Sagar Right Canal	3 x 30.6	+179.832 m	+161.544 m	5000 cusec per unit	--	Andhra Pradesh
7	Nagarjuna Sagar Left Canal	2 x 30.6	+179.832 m	+167.030 m	--	--	Telangana
8	Nagarjuna Sagar Tail pond	2 x 25	+75.50 m	+74.0 m	--	--	Andhra Pradesh
9	Pulichinthala	4 x 30	+53.34 m	+42.67 m	--	--	Telangana



Priyadarshini Jurala Project

Salient Features of Priyadarshini Jurala Project**A. LOCATION**

Latitude	:	16 ⁰ 20' 15" N
Longitude	:	77 ⁰ 42' 15" E
Catchment area	:	1,29,499 sq km (50,000 sq miles) (Maharashtra 54%, Karnataka 43%, Telangana 3%)
Designed Max Flood Discharge	:	35,396 cumecs (12.50 lakh cusecs)
Net dependable yield	:	10,930 m cum (386 TMC)
KWDT allocation	:	505.17 m cum (17.84 TMC out of 800 TMC allocated to combined AP)

B. BARRAGE (Composite structure with stone masonry & cement concrete)

FRL/ MWL	:	+318.516 m (+1045.00 ft)
MDDL	:	+314.860 m (+1033.00 ft)
Sill level of LMC & RMC	:	+312.420 m (+1025.00 ft)
Crest level/ Gate sill level	:	+310.000 m/ 309.500 m
Road top level/ total width / clear road way	:	+325.000 m / 8.40 m / 5.30 m
Hoist platform level	:	+328.900 m
Average bed level of Krishna/deepest:		+301.360 m / +297.800 m
Average foundation level/deepest	:	+294.000 m / +285.000 m
Gross storage at FRL/ MWL	:	273.440 m cum (9.657 TMC)
Live storage (above MDDL)	:	168.476 m cum (5.950 TMC)
Dead storage (below MDDL)	:	104.964 m cum (3.707 TMC)
Storage above crest level of 310.0 m	:	258.511 m cum (9.130 TMC)
Water spread area at FRL/ MWL	:	67.68 sq km (16,724 acres) including river course

Length of barrage between core walls:	1322 m (spill way 927 m & power blocks 162 m)
No. of crest gates and size of vent :	62 radial gates with vent size 12 m x 8.516 m
Drainage gallery in barrage :	1.50 m width x 2.25 m height

C. EARTH DAM

Length of earth dam :	Left side 1.74 km, Right side 1.47 km
TBL of Earth Dam :	+321.500 m (+1054.79 ft)
Free board :	2.984 m (9.79 ft)
Top width of Earth dam/	8.0 m/ 6.40 m
clear road way	

D. HEAD REGULATORS

	LMC H/R @ km 0.520	RMC H/R @ km 3.720
No of vents and size	4 nos. of 2.5 x 2.0 m	4 nos. of 1.5 x 2.0 m
Discharge	41.34 cumecs (1460 cusecs)	20.80 cumecs (735 cusecs)

E. MAIN CANALS

	LMC (NTR canal)	RMC (Nala Somanadri canal)
Bed width / FSD		
(initial reach)	21.00 m/ 1.95 m	9.75 m/ 1.90 m
Bed fall	1 in 9,000	1 in 5,800 & 1 in 14,000
canal	85.277 km	46.275 km
Ayacut	69,084 acres	35,657 acres
Mandals benefited	Amarachintha, Atmakur, Madanapur, Kothakota, Pebbair, Srirangapur, Weepanagandla, Chinnambavi and Pentlavelly.	Gadwal, Dharur, Itikyala and Manopadu.



Neelam Sanjeeva Reddy Sagar (Srisailam) Project

Salient Features of Neelam Sanjeeva Reddy Sagar (Srisailam) Project

A. Location

Latitude : 16 05' 00" N

Longitude : 78 54' 00" E

B. Hydrology

Catchment Area : 79,530 sq miles (2,06,030 sq km)

Mean Annual Rainfall

Maximum : 1016 mm (40 inches)

Minimum : 635 mm (25 inches)

Design Flood : 53,770 cumec at Srisailam 19 lakh cusec
moderated to 38,365 cumec (13,55,680 cusec)

Deep Bed level of River : EL 152.4 m (EL 500 ft)

Minimum Tail Water Level : EL 163.00 m (EL 535.00 ft)

Maximum Flood Level : EL 187.25 m (EL 614.35 ft)

Observed at Dam site

C. Dam

Type : Gravity Dam

Top elevation : EL 275.54 m (EL 904.0 ft)

Height above the deepest : 143.26 m (470 ft)

Foundation level

Total Length at Top : 512 m (1680 ft)

D. Spill Way

Maximum discharging capacity : 37,356 cumec (13,20,00 cusec)

Over the crest

Discharging capacity of river : 1009 cumec (35,680 cusec)

Sluices at MWL

Total discharging capacity at MWL	:	38,365 cumec (13,55,680 cusec)
Crest Level of Spill way	:	EL 252.98 m (EL 830.00 ft)
Gross Length of Spill way	:	266.39 m (874 ft)
(between) Faces of training walls		
Spill way gates Number	:	12 nos
Size	:	18.3 m x 16.7 m (60'x55') (clear)
River Sluices Number	:	2 nos
Size	:	3.65 m x 9.14 m (12 ft x 30 ft)

E. Reservoir

Maximum water level	:	271.88 m (EL 892 ft)
Full Reservoir Level	:	EL. 269.75 m (EL 885 ft)
Gross storage	:	6110.9070 million cubic metres
Capacity at F.R.L	:	(215.8070 TMC)
Water spread area at F.R.L	:	615.20 sq km (6622 m sq ft)
MDDL (for IRR)	:	854.00 (260.30 m)
Storage capacity	:	89.29 TMC (2528.396 cum)
MDDL (for Power)	:	834.00 (254.20 m)
Storage capacity	:	53.851 TMC (1524.871 cum)
Crest level	:	830.00 (252.98 m)
Storage capacity	:	49.49 TMC (1401.387 cum)

F. Power Houses

Right Side Capacity	:	7 x 110 MW
Left Side Capacity	:	6 x 150 MW

G. Water Allocation

Srisailam Right Branch Canal	:	19.00 TMC
Chennai Water Supply	:	15.00 TMC



Nagarjuna Sagar Project

Salient Features of Nagarjuna Sagar Project**A. Location**

Latitude	:	16	34'	23"	N
Longitude	:	79	18'	47"	E

B. Hydrology

Catchment area at Dam site	:	83,083 sq miles (2,15,185 sq kms)
Maximum annual rain fall in the Catchment	:	35" (889 mm)
Maximum observed flood	:	30,050 cumec (10.61 lakh c/s)
1000 years design flood	:	58,340 cumec (20.60 lakh c/s)
Routed flood	:	45310 cumec (16.00 lakh c/s)

C. Reservoir

F.R.L	:	+590.00 ft (+179.832 m)
Maximum water level	:	+594.00 ft (+181.051 m)
M.D.D.L	:	+510.00 ft (+155.450 m)
Water spread area	:	110 sq miles (285 sq kms)
Live storage above +510.00 ft	:	181 TMC

D. Masonry Dam

Length of spill way Dam	:	1545 ft (470.916 m)
Length of Non-over flow Dam	:	3211 ft (978.612 m)
Total length of Masonry Dam	:	4756 ft (1449.628 m)
Maximum height of Dam above deepest Foundation	}	409 ft (124.663 m)
Top width of Dam	:	28 ft (8.534 m)
Maximum base width of Dam	:	320 ft (97.536 m)
Over-all width of road way at top	:	30 ft 9 inch (9.373 m)
Deepest foundation level	:	+196.00 ft (+59.741 m)
Average river bed level	:	+245.00 ft (+74.676 m)

Spillway crest level	:	+546.00 ft (+166.421 m)
Top of crest gates		+590.00 ft (+179.832 m)
Top of Dam	:	+605.00 ft (+184.404 m)
Invert level of flip bucket	:	+240.00 ft (73.15 m)
Crest gates	:	26 no of size 45' x 44' (13.716 m x 13.410 m)
Chute sluices	:	2 vents of size 10' x 25' with sill at +450' (137.16 m)
(Operable upto +549.00 ft)	:	Discharging 17,000 c/s at full gate opening
Diversion Tunnel	:	2 vents of size 10' x 25'
(Operable up to +560.00 ft)		Discharging 20,000 c/s at full gate opening
Right Canal Head sluice	:	9 vents of size 10' x 15' with sill At +489' (149.047 m)
Left Canal Head sluice	:	3 vents of size 10' x 25' with sill At +489' (149.047 m)

E. Earth Dam

Length of Left Earth Dam	:	8400 ft (2560.32 m)
Length of Right Earth Dam	:	2800 ft (853.44 m)
Total Length	:	11,200 ft (3413.76 m)
Maximum height	:	85 ft (25.908 m)
Top width	:	30 ft 6 inch (9.296 m)
Top level	:	+610 ft (+185.928 m)

F. Power Generation

Penstocks (8 numbers)	:	16.00 ft dia (4.88 m)
Centre line elevation	:	+405.00 ft (+123.40 m)
Power Units	:	1 no conventional (with 110 MW capacity) 7 nos reversible (with 100 MW capacity)

MDDL	:	+506.00 ft (+154.23 m) (for conventional) +495.00 ft (+150.88 m)
Discharging capacity	:	4,700 c/s (133.09 cumec) (for conventional) 4,300 c/s (121.76 cumec) (for reversible)

G. Right Canal Power House

Sluices	:	3 numbers 15' x 38' (4.57 m x 38 m)
Sill level	:	+479.00 ft (146.00 m)
Units	:	3 numbers conventional
Capacity	:	30 MW
Discharging capacity	:	5,000 cusec each

H. Left Canal Power House

Units	:	2 numbers conventional
Capacity	:	30.6 MW

I. Ayacut & Water Allocation

N.S.R.C.

Guntur District	:	2.70 lakh ha (6.68 lakh acres)
Prakasam District	:	1.80 lakh ha (4.45 lakh acres)
Total	:	<u>4.50 lakh ha (11.13 lakh acres)</u>

N.S.L.C.

Nalgonda District	:	1.54 lakh ha (3.81 lakh acres)
Khammam District	:	1.12 lakh ha (2.77 lakh acres)
Krishna District	:	1.52 lakh ha (3.76 lakh acres)
West Godavari District	:	0.03 lakh ha (0.07 lakh acres)
Total	:	<u>4.21 lakh ha (10.41 lakh acres)</u>

Water Supply to Twin Cities of Secunderabad and Hyderabad	:	5.70 TMC
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Prakasam Barrage

Salient Features of Prakasam Barrage**A. LOCATION**

Latitude	:	16° 30' 34" N
Longitude	:	80° 37' 57" E
Total Catchment area (sq kms)	:	251372
Area capacity Curves (Water spread area)	:	30.00 sq kms
Spillway Gates	:	70 nos of 12.19 m x 3.66 m each
Scouring sluices Left Side	:	6 nos of 5.18 m x 3.66 m each
Right Side	:	8 nos of 5.18 m x 3.66 m each
Levels		
Floor of Regulator	:	+ 12.21 m (+40.05 ft)
Floor of Scour Vents	:	+ 11.06 m (+36.30 ft)
Sill Level of Regulator gates	:	+ 13.73 m (+45.05 ft)
FRL	:	+ 17.39 m (+57.05 ft)
Average River Bed Level at Regulator site	:	+ 11.28 m (+37.00 ft)
Bottom Level of the Floor of Sitanagararam	:	+ 8.53 m (+28.00 ft)
Under sluices		
Vijayawada Under Sluices	:	+ 9.69 m (+31.80 ft)
Bottom of Wells	:	+ 4.88 m (+ 16.00 ft)
M.F.L. of Barrage (Designed)	:	+ 22.13 m (+72.60 ft)
Bottom of “ T “ Beams	:	+ 23.65 m (+ 77.60 ft)
Top of Road way on Bridge	:	+ 25.02 m (+ 82.10 ft)
Top of Regulator Hoist Bridge	:	+ 30.36 m (+ 99.06 ft)
Height of Shutters	:	3.66 m (+ 12-0 ft)
Three rows of cutoff wells of size	:	2.13 m x 3.81 m (7 ft x 12.5 ft)

	Anicut	Barrage
B. M.F.L. Recorded at		
M.F.L. Record on	07-10-1903	05-10-2009
Level in Front	+21.50 m (+70.55 ft)	+ 20.97 m (+68.78 ft)
Level in rear	+ 20.73 m (+68.00 ft)	+ 20.57 m (+67.50 ft)
Maximum Discharge	33,700 cumec (11,90,000 c/s)	31,431 cumec (11,10,000 c/s)
Afflux due to interposition	0.66 m (2.16 ft)	-

C. Eastern Delta Head Sluice

Vents	:	6 nos of 6.10 m x 3.35 m (20 x 11 ft) each
Discharge	:	300 cumec (10, 600 c/s)
Length of Main canals	:	370 km
		+12.360 m
Sill level	:	

D. Western Delta Head Sluice

Vents New (Exiting)	:	+16 nos 2.44 m x 2.90 m (8 x 9.5 ft) each
Discharge	:	+232 cumec (8, 200 c/s)
Length of Main Canals	:	+322 km
Sill Level U/S	:	+12.210 m

E. Important salient features

Gross Storage	:	3.071 TMC
Dead Storage	:	1.301 TMC
MDDL	:	854 ft
Ayacut Created	:	6,79,000 acres
Present Stage	:	Completed

OKACHETTUVAGU PROJECT





कृष्णा नदी प्रबंधन बोर्ड
Krishna River Management Board
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