

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 20.09.2018)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 37 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 91 reservoirs is 161.993 BCM which is about 63% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated **20.09.2018**, live storage available in these reservoirs is **120.087 BCM**, which is **74%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **97.633 BCM** and the average of last 10 years live storage was **114.097 BCM**. Thus, the live storage available in 91 reservoirs **as per 20.09.2018 Bulletin** is **123%** of the live storage of corresponding period of last year and **105%** of storage of average of last ten years.

The overall storage position is **better than the** corresponding period of last year in the country as a whole and is also **better than the** average storage of last ten years during the corresponding period.

2. REGION WISE STORAGE STATUS:

a) NORTHERN REGION

The northern region includes States of Himachal Pradesh, Punjab and Rajasthan. There are 6 reservoirs under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated **20.09.2018**, the total live storage available in these reservoirs is **13.87 BCM** which is **77%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **84%** and average storage of last ten years during corresponding period was **83%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is also less than the average storage of last ten years during the corresponding period.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirs under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **20.09.2018**, the total live storage available in these reservoirs is **15.85 BCM** which is **84%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **62%** and average storage of last ten years during corresponding period was **70%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

c) WESTERN REGION

The Western region includes States of Gujarat and Maharashtra. There are 27 reservoirs under CWC monitoring having total live storage capacity of 31.26 BCM. As per Reservoir Storage Bulletin dated **20.09.2018**, the total live storage available in these reservoirs is **17.16 BCM** which is **55%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **68%** and average storage of last ten years during corresponding period was **66%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years during the corresponding period.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs under CWC monitoring having total live storage capacity of 42.30 BCM. As per Reservoir Storage Bulletin dated **20.09.2018**, the total live storage available in these reservoirs is **33.30 BCM** which is **79%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **60%** and average storage of last ten years during corresponding period was **73%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is also better than the average storage of last ten years during the corresponding period.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG (2combined projects in both states), Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs under CWC monitoring having total live storage capacity of 51.59 BCM. As per Reservoir Storage Bulletin dated **20.09.2018**, the total live storage available in these reservoirs is **39.91 BCM** which is **77%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **46%** and average storage of last ten years during corresponding period was **67%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

The region wise and reservoir wise details are given in the following pages of the Bulletin.

BROAD ANALYSIS OF OTHER TABLES IN THE BULLETIN

- Normal storage means average storage of last ten years, Close to normal storage means where shortfall is upto 20% of normal, deficient storage is where shortfall is more than 20% of the normal and upto 60% of the normal, highly deficient means where shortfall is more than 60% of normal.
- In the table on page 4, better than normal storage is available in Ganga, Krishna, Narmada, Godavari, Mahanadi & Neighbouring East Flowing Rivers, and West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Indus, Deficient in Tapi, Mahi and Rivers of Kutch and Highly Deficient in Sabarmati.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **52** and reservoirs having storage more than average of last ten years are **61**. The numbers of reservoirs having storage less than 20% with respect to last year is **1** and having storage less than 20% with reference to average of last ten years is **2**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **3** and having storage less than or equal to 50% with reference to average of last ten years are **6**.

Disclaimer: The Data contained in this Bulletin is as received from the State Government/Project Authorities.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 20.09.2018

- 1 Central Water Commission is monitoring storage status of 91 important reservoirs spread all over the country, in which **37** reservoirs have hydropower benefit each with installed capacity of more than 60 MW. These reservoirs are identified thus(*) in the enclosed weekly report.
- 2 The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **20.09.2018** is **120.087** BCM (**74** percent of the live storage capacity at FRL).The current year's storage is nearly **123** percent of last year's storage and **105** percent of the average of last ten years.

3 Region wise storage status:-

REGION (Monitoring No. of Reservoirs)	Filling position of 91 reservoirs w.r.t. FRL								Departure from Normal storage		
	100%	91%-99%	81%-90%	71%-80%	61%-70%	51%-60%	41%-50%	40% & below			
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	-	3	2	1	-	-	-	H.P.	-10	%
									PUNJAB	10	%
									RAJASTHAN	-7	%
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	2	5	4	1	-	2	1	-	JHARKHAND	9	%
									ODISHA	24	%
									W. BENGAL	-6	%
									TRIPURA	61	%
WEST (Guj.& Mah.), (27 Resv.)	4	4	1	4	2	1	5	6	GUJARAT	-31	%
									MAH.	-3	%
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	1	4	2	1	1	2	-	1	U.P.	27	%
									UTTARAKHAND	-3	%
									M.P.	5	%
									CHHATISGARH	14	%
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	2	10	8	3	2	4	-	2	AP&TG	-2	%
									A,P	53	%
									TG	29	%
									KARNATAKA	16	%
									KERALA	21	%
									T.N.	56	%
Status of 91 reservoirs	9	23	18	11	6	9	6	9			

4 Basin wise storage position:

- Better than normal:** Ganga, Krishna,Narmada , West Flowing Rivers of South,Godavari , Mahanadi & Neighbouring EFRS and Cauvery & neighbouring EFRS .
- Close to normal:** Indus.
- Deficient:** Tapi, Mahi and Rivers of Kutch.
- Highly deficient:** sabarmati

- 5 Out of 91 reservoirs, **77** reservoirs reported more than 80% of normal storage & **14** reservoirs reported 80% or below of normal storage. Out of these **14** reservoirs **6** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
KADANA	10		
VANIVILAS SAGAR	17		
YELDARI	22		
PENCH (TOTALADOH)	34		
SABARMATI(DHAROI)	36		
DANTIWADA	46		

8 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
4	2	2

- 6 Out of **37** reservoirs with significant(*) hydropower generation, the storage build up is less than or equal to normal in

11 reservoirs.

NOTE : **Normal:** Average of previous ten years, **Close to normal:** Where shortfall is up to 20% of the normal, **Deficient:** Where shortfall is more than 20% of the normal and up to 60% of the normal, **Highly deficient** : Where shortfall is more than 60% of the normal

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 20.09.2018

NAME OF BASIN	LIVE CAP. AT FRL	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		LAST 10 YEARS' AVG. STORAGE		% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	19.377	68.97%	19.209	68.37%	18.895	67.25%	2.55
INDUS	14.730	11.362	77.14%	12.504	84.89%	12.249	83.16%	-7.24
NARMADA	21.608	16.737	77.46%	10.827	50.11%	14.672	67.90%	14.07
TAPI	7.394	3.261	44.10%	3.719	50.30%	5.526	74.74%	-40.99
MAHI	4.012	2.162	53.89%	3.547	88.41%	3.063	76.35%	-29.42
SABARMATI	0.735	0.188	25.58%	0.735	100.00%	0.528	71.84%	-64.39
RIVERS OF KUTCH	0.887	0.301	33.93%	0.737	83.09%	0.478	53.89%	-37.03
GODAVARI	15.394	10.575	68.70%	7.985	51.87%	9.019	58.59%	17.25
KRISHNA	32.831	24.502	74.63%	16.751	51.02%	23.608	71.91%	3.79
MAHANADI & NEIGHBOURING EFRS	13.181	11.228	85.18%	8.717	66.13%	10.339	78.44%	8.60
CAUVERY& NEIGHBOURING EFRS	8.359	6.956	83.22%	3.582	42.85%	4.720	56.47%	47.37
WEST FLOWING RIVERS OF SOUTH	14.766	13.438	91.01%	9.320	63.12%	11.000	74.50%	22.16
TOTAL	161.993	120.087		97.633		114.097		
PERCENTAGE								5.25

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 20.09.2018

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
NORTHERN REGION											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	503.35	6.229	4.629	20-09-2018	74	87	88	676	1200
*2	PONG DAM	423.67	419.65	6.157	4.973	20-09-2018	81	86	84	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	520.46	2.344	1.760	20-09-2018	75	75	68	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	278.50	1.711	1.412	19-09-2018	83	100	86	63	140
5	JHAKAM	359.50	357.90	0.132	0.116	19-09-2018	88	100	86	28	-
*6	RANA PRATAP SAGAR	352.81	350.38	1.436	0.980	20-09-2018	68	55	76	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	259.78	0.821	0.408	19-09-2018	50	51	46	-	-
8	MAITHON	146.3	146.81	0.471	0.471	19-09-2018	100	86	89	342	-
*9	PANCHET HILL	124.97	125.22	0.184	0.184	19-09-2018	100	64	88	\$	80
10	KONAR	425.81	424.30	0.176	0.149	20-09-2018	85	68	85	\$	-
11	TILAIYA	368.81	368.51	0.142	0.131	19-09-2018	92	90	84	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	191.11	5.378	4.241	20-09-2018	79	61	83	153	307
*13	BALIMELA	462.08	461.50	2.676	2.546	19-09-2018	95	38	45	-	360
14	SALANADI	82.30	79.75	0.558	0.478	20-09-2018	86	45	48	42	-
*15	RENGALI	123.50	122.74	3.432	3.187	19-09-2018	93	82	78	3	200
*16	MACHKUND(JALPUT)	838.16	837.73	0.893	0.849	19-09-2018	95	72	78	-	115
*17	UPPER KOLAB	858.00	856.57	0.935	0.800	19-09-2018	86	47	55	89	320
*18	UPPER INDRAVATI	642.00	640.91	1.456	1.335	19-09-2018	92	53	69	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	116.40	0.480	0.260	19-09-2018	54	75	59	227	-
20	KANGSABATI	134.14	129.39	0.914	0.534	19-09-2018	58	73	61	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	92.70	0.312	0.273	18-09-2018	88	98	54	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	96.82	6.615	2.759	20-09-2018	42	48	77	348	300
23	SABARMATI(DHAROI)	189.59	182.35	0.735	0.188	19-09-2018	26	100	72	95	1
*24	KADANA	127.7	125.81	1.472	0.099	19-09-2018	7	78	66	200	120
25	SHETRUNJI	55.53	52.72	0.300	0.127	19-09-2018	42	61	65	36	-
26	BHADAR	107.89	105.28	0.188	0.095	19-09-2018	51	90	61	27	-
27	DAMANAGANGA	79.86	78.10	0.502	0.398	20-09-2018	79	88	86	51	1
28	DANTIWADA	184.1	172.39	0.399	0.079	19-09-2018	20	96	43	45	-
29	PANAM	127.41	127.15	0.697	0.535	19-09-2018	77	80	72	36	2
*30	SARDAR SAROVAR	138.68	125.89	5.760	2.285	20-09-2018	40	55	29	2120	1450
31	KARJAN	115.25	113.26	0.523	0.457	20-09-2018	87	90	85	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 20.09.2018

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
MAHARASHTRA											
32	JAYAKWADI(PAITHON)	463.91	460.39	2.171	0.999	19-09-2018	46	88	47	227	-
*33	KOYANA	657.90	658.62	2.652	2.652	19-09-2018	100	100	97	-	1920
34	BHIMA(UJJANI)	496.83	496.93	1.517	1.517	19-09-2018	100	100	73	125	12
35	ISAPUR	441.00	437.70	0.965	0.648	19-09-2018	67	11	54	104	-
36	MULA	552.30	548.56	0.609	0.425	19-09-2018	70	90	78	139	-
37	YELDARI	461.77	450.40	0.809	0.075	17-09-2018	9	8	42	78	-
38	GIRNA	398.07	391.88	0.524	0.253	19-09-2018	48	64	38	79	-
39	KHADAKVASLA	582.47	581.25	0.056	0.040	19-09-2018	71	100	79	78	8
*40	UPPER VAITARNA	603.50	603.28	0.331	0.325	19-09-2018	98	100	92	-	61
41	UPPER TAPI	214.00	213.92	0.255	0.249	19-09-2018	98	95	79	45	-
*42	PENCH (TOTALADOH)	490.00	476.88	1.091	0.287	19-09-2018	26	26	77	127	160
43	UPPER WARDHA	342.50	338.54	0.564	0.265	20-09-2018	47	84	91	70	-
44	BHATSA	142.07	140.66	0.942	0.903	19-09-2018	96	98	94	29.378	15
45	DHOM	747.70	746.76	0.331	0.310	18-09-2018	94	86	86	36.2	2
46	DUDHGANGA	646.00	645.52	0.664	0.664	19-09-2018	100	100	97	2.441	24
47	MANIKDOH (KUKADI)	711.25	707.08	0.288	0.217	19-09-2018	75	76	56	2.2	6
48	BHANDARDARA	744.91	744.72	0.304	0.304	19-09-2018	100	100	96	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	308.52	0.707	0.641	19-09-2018	91	25	85	-	30
*50	RIHAND	268.22	264.29	5.649	3.956	20-09-2018	70	64	53	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	351.92	2.196	1.283	20-09-2018	58	54	68	1897	198
*52	TEHRI	830.00	824.80	2.615	2.402	20-09-2018	92	91	88	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	391.64	6.827	2.539	19-09-2018	37	68	63	220	115
54	TAWA	355.40	351.98	1.944	1.447	20-09-2018	74	68	94	247	-
*55	BARGI	422.76	422.50	3.180	3.125	20-09-2018	98	81	90	157	90
*56	BANSAGAR	341.64	341.62	5.166	5.166	19-09-2018	100	76	75	488	425
*57	INDIRA SAGAR	262.13	261.48	9.745	9.166	20-09-2018	94	31	76	2380	1000
58	BARNA	348.55	345.41	0.456	0.257	19-09-2018	56	65	87	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	358.27	3.046	2.654	20-09-2018	87	66	76	-	120
60	MAHANADI	348.70	347.66	0.767	0.668	19-09-2018	87	48	77	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	266.55	8.288	4.460	20-09-2018	54	37	69	0	770
*62	NAGARJUNA SAGAR	179.83	178.03	6.841	4.621	20-09-2018	68	0	52	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	94.43	1.994	1.164	20-09-2018	58	26	38	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	330.62	2.300	1.866	20-09-2018	81	53	55	411	27
65	LOWER MANAIR	280.42	271.46	0.621	0.176	20-09-2018	28	33	52	199	60

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GOVERNMENT OF INDIA

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							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
KARNATAKA											
66	KRISHNARAJA SAGRA	752.50	751.34	1.163	1.130	19-09-2018	97	49	75	79	-
*67	TUNGABHADRA	497.74	497.04	3.276	2.612	20-09-2018	80	62	78	529	72
68	GHATAPRABHA	662.95	662.94	1.391	1.387	19-09-2018	100	73	87	317	-
69	BHADRA	657.76	657.68	1.785	1.776	19-09-2018	99	63	83	106	39
70	LINGANAMAKKI	554.43	553.84	4.294	4.113	20-09-2018	96	58	81	-	55
71	NARAYANPUR	492.25	491.21	0.863	0.610	20-09-2018	71	84	86	425	-
72	MALAPRABHA(RENUKA)	633.83	631.12	0.972	0.655	19-09-2018	67	31	58	215	-
73	KABINI(Sancherla Tank)	696.16	695.93	0.444	0.430	19-09-2018	97	94	60	85	-
74	HEMAVATHY	890.63	889.32	0.927	0.904	19-09-2018	98	34	76	265	-
75	HARANGI	871.42	870.26	0.220	0.192	19-09-2018	87	98	89	53	-
76	SUPA	564.00	562.15	4.120	3.892	20-09-2018	94	57	67	-	-
77	VANIVILAS SAGAR	652.28	632.14	0.802	0.015	18-09-2018	2	1	11	123	-
*78	ALMATTI	519.60	519.25	3.105	2.966	20-09-2018	96	100	94	@	290
*79	GERUSOPPA	55.00	53.67	0.130	0.122	20-09-2018	94	85	82	83	240
KERALA											
80	KALLADA(PARAPPAR)	115.82	112.94	0.507	0.421	19-09-2018	83	68	66	62	-
*81	IDAMALAYAR	169.00	161.66	1.018	0.807	19-09-2018	79	71	72	33	75
*82	IDUKKI	732.43	727.80	1.460	1.205	19-09-2018	83	55	62	-	780
*83	KAKKI	981.46	976.17	0.447	0.360	19-09-2018	81	62	74	23	300
*84	PERIYAR	867.41	864.30	0.173	0.104	19-09-2018	60	61	48	84	140
85	MALAPMUZHA	115.06	113.89	0.224	0.195	20-09-2018	87	54	73	21	3
TAMIL NADU											
86	LOWER BHAWANI	278.89	278.94	0.792	0.792	19-09-2018	100	50	48	105	8
*87	METTUR(STANLEY)	240.79	237.93	2.647	2.244	19-09-2018	85	43	56	122	360
88	VAIGAI	279.20	275.74	0.172	0.100	19-09-2018	58	12	35	61	6
89	PARAMBIKULAM	556.26	556.04	0.380	0.375	19-09-2018	99	45	75	101	-
90	ALIYAR	320.04	319.25	0.095	0.090	19-09-2018	95	39	74	#	60
*91	SHOLAYAR	1002.79	1002.44	0.143	0.128	19-09-2018	90	64	87	-	95
TOTAL FOR 91 RESERVOIRS				161.993	120.087						
PERCENTAGE							74	60	70		

Sd/-

Director

W. M. , CWC

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

@' TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.