

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 08.11.2018)

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 **08.11.2018**, live storage available in these reservoirs is **107.883 BCM**, which is **67%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **105.913 BCM** and the average of last 10 years live storage was **109.842 BCM**. Thus, the live storage available in 91 reservoirs **as per 08.11.2018 Bulletin** is **102%** of the live storage of corresponding period of last year and **98%** 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 but is **less 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 **08.11.2018**, the total live storage available in these reservoirs is **15.35 BCM** which is **85%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **71%** and average storage of last ten years during corresponding period was **74%** 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.

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 **08.11.2018**, the total live storage available in these reservoirs is **13.22 BCM** which is **70%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **79%** and average storage of last ten years during corresponding period was **74%** 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.

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 **08.11.2018**, the total live storage available in these reservoirs is **16.52 BCM** which is **53%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **69%** 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 **08.11.2018**, the total live storage available in these reservoirs is **31.47 BCM** which is **74%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **57%** and average storage of last ten years during corresponding period was **68%** 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 **08.11.2018**, the total live storage available in these reservoirs is **31.33 BCM** which is **61%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **64%** and average storage of last ten years during corresponding period was **65%** 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.

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, Indus, Narmada, Mahi, and West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Godavari and Mahanadi & Neighbouring East Flowing Rivers, Deficient in Tapi and Krishna and Highly Deficient in Sabarmati and Rivers of Kutch.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **41** and reservoirs having storage more than average of last ten years are **41**. 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 **1**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **9** and having storage less than or equal to 50% with reference to average of last ten years are **10**.

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 08.11.2018

- 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.
- The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **08.11.2018** is **107.883** BCM (**67** percent of the live storage capacity at FRL).The current year's storage is nearly **102** percent of last year's storage and **98** 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.)	2	-	3	-	-	-	1	-	H.P.	14	%
									PUNJAB	51	%
									RAJASTHAN	0	%
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	3	6	-	3	1	2	JHARKHAND	-13	%
									ODISHA	-4	%
									W. BENGAL	-31	%
									TRIPURA	40	%
WEST (Guj.& Mah.), (27 Resv.)	-	3	2	6	2	4	1	9	GUJARAT	-19	%
									MAH.	-20	%
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	3	1	1	4	1	2	-	U.P.	7	%
									UTTARAKHAND	3	%
									M.P.	13	%
									CHHATISGARH	1	%
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	2	2	9	4	2	6	3	3	AP&TG	-35	%
									A,P	-1	%
									TG	-29	%
									KARNATAKA	1	%
									KERALA	10	%
									T.N.	54	%
Status of 91 reservoirs	4	8	18	17	8	14	8	14			

4 Basin wise storage position:

Better than normal: Ganga,Indus Narmada ,Mahi, West Flowing Rivers of South and Cauvery & neighbouring EFRS .

Close to normal: Godavari and Mahanadi & Neighbouring EFRS

Deficient: Tapi and Krishna .

Highly deficient: sabarmati and Rivers of Kutch

- Out of 91 reservoirs, **65** reservoirs reported more than 80% of normal storage & **26** reservoirs reported 80% or below of normal storage. Out of these **26** reservoirs **10** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	20		
PENCH (TOTALADOH)	21		
DANTIWADA	21		
VANIVILAS SAGAR	22		
SABARMATI(DHAROI)	36		
BHADAR	42		
UPPER WARDHA	44		
UKAI	47		
SRISAILAM	48		
SHETRUNJI	50		

16 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
3	7	6

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

16 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 :- 08.11.2018

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	17.577	62.56%	17.005	60.52%	17.130	60.97%	2.61
INDUS	14.730	12.860	87.30%	10.688	72.56%	10.876	73.84%	18.24
NARMADA	21.608	17.132	79.29%	11.128	51.50%	13.966	64.63%	22.67
TAPI	7.394	2.842	38.44%	3.998	54.07%	5.542	74.95%	-48.72
MAHI	4.012	3.425	85.37%	3.440	85.74%	3.030	75.52%	13.04
SABARMATI	0.735	0.183	24.90%	0.636	86.53%	0.509	69.25%	-64.05
RIVERS OF KUTCH	0.887	0.194	21.87%	0.697	78.58%	0.502	56.60%	-61.35
GODAVARI	15.394	8.511	55.29%	9.501	61.72%	9.631	62.56%	-11.63
KRISHNA	32.831	17.614	53.65%	23.544	71.71%	22.450	68.38%	-21.54
MAHANADI & NEIGHBOURING EFRS	13.181	8.958	67.96%	10.550	80.04%	10.506	79.71%	-14.73
CAUVERY& NEIGHBOURING EFRS	8.359	6.175	73.87%	4.797	57.39%	4.636	55.46%	33.20
WEST FLOWING RIVERS OF SOUTH	14.766	12.412	84.06%	9.929	67.24%	11.064	74.93%	12.18
TOTAL	161.993	107.883		105.913		109.842		
PERCENTAGE								-1.78

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 08.11.2018

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	508.28	6.229	5.366	08-11-2018	86	82	81	676	1200
*2	PONG DAM	423.67	421.74	6.157	5.455	05-11-2018	89	70	72	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	524.11	2.344	2.039	08-11-2018	87	55	58	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	280.85	1.711	1.711	08-11-2018	100	100	86	63	140
5	JHAKAM	359.50	359.45	0.132	0.132	08-11-2018	100	98	85	28	-
*6	RANA PRATAP SAGAR	352.81	348.46	1.436	0.651	08-11-2018	45	22	63	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	259.69	0.821	0.404	06-11-2018	49	54	46	-	-
8	MAITHON	146.3	142.80	0.471	0.266	06-11-2018	56	100	88	342	-
*9	PANCHET HILL	124.97	123.83	0.184	0.131	06-11-2018	71	100	85	\$	80
10	KONAR	425.81	423.76	0.176	0.139	06-11-2018	79	80	87	\$	-
11	TILAIYA	368.81	368.43	0.142	0.128	06-11-2018	90	58	82	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	191.08	5.378	4.227	04-11-2018	79	87	90	153	307
*13	BALIMELA	462.08	460.37	2.676	2.347	07-11-2018	88	49	57	-	360
14	SALANADI	82.30	74.99	0.558	0.335	08-11-2018	60	43	42	42	-
*15	RENGALI	123.50	118.59	3.432	1.856	07-11-2018	54	98	86	3	200
*16	MACHKUND(JALPUT)	838.16	837.13	0.893	0.794	07-11-2018	89	97	88	-	115
*17	UPPER KOLAB	858.00	855.79	0.935	0.726	07-11-2018	78	62	60	89	320
*18	UPPER INDRAVATI	642.00	639.24	1.456	1.159	07-11-2018	80	60	71	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	112.06	0.480	0.123	06-11-2018	26	99	47	227	-
20	KANGSABATI	134.14	126.28	0.914	0.336	06-11-2018	37	88	48	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	92.15	0.312	0.247	07-11-2018	79	99	56	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	95.74	6.615	2.373	08-11-2018	36	51	76	348	300
23	SABARMATI(DHAROI)	189.59	182.24	0.735	0.183	08-11-2018	25	87	69	95	1
*24	KADANA	127.7	126.32	1.472	1.050	08-11-2018	71	74	67	200	120
25	SHETRANJI	55.53	52.12	0.300	0.106	08-11-2018	35	57	70	36	-
26	BHADAR	107.89	103.54	0.188	0.052	06-11-2018	28	87	65	27	-
27	DAMANAGANGA	79.86	77.55	0.502	0.375	08-11-2018	75	96	97	51	1
28	DANTIWADA	184.1	168.83	0.399	0.036	08-11-2018	9	91	42	45	-
29	PANAM	127.41	127.10	0.697	0.532	08-11-2018	76	73	66	36	2
*30	SARDAR SAROVAR	138.68	128.79	5.760	2.945	08-11-2018	51	48	27	2120	1450
31	KARJAN	115.25	111.59	0.523	0.412	08-11-2018	79	89	91	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 08.11.2018

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	459.23	2.171	0.706	08-11-2018	33	99	49	227	-
*33	KOYANA	657.90	655.62	2.652	2.380	03-11-2018	90	100	94	-	1920
34	BHIMA(UJJANI)	496.83	495.81	1.517	1.188	05-11-2018	78	100	82	125	12
35	ISAPUR	441.00	437.32	0.965	0.618	08-11-2018	64	15	60	104	-
36	MULA	552.30	546.23	0.609	0.329	08-11-2018	54	99	85	139	-
37	YELDARI	461.77	450.35	0.809	0.073	29-10-2018	9	14	45	78	-
38	GIRNA	398.07	391.00	0.524	0.225	08-11-2018	43	71	50	79	-
39	KHADAKVASLA	582.47	580.77	0.056	0.034	01-11-2018	61	77	64	78	8
*40	UPPER VAITARNA	603.50	602.96	0.331	0.314	05-11-2018	95	100	92	-	61
41	UPPER TAPI	214.00	213.84	0.255	0.244	08-11-2018	96	100	100	45	-
*42	PENCH (TOTALADOH)	490.00	471.91	1.091	0.139	08-11-2018	13	30	60	127	160
43	UPPER WARDHA	342.50	337.78	0.564	0.221	08-11-2018	39	97	90	70	-
44	BHATSA	142.07	136.50	0.942	0.796	05-11-2018	85	95	90	29.378	15
45	DHOM	747.70	744.60	0.331	0.263	03-11-2018	79	99	85	36.2	2
46	DUDHGANGA	646.00	644.10	0.664	0.615	08-11-2018	93	100	98	2.441	24
47	MANIKDOH (KUKADI)	711.25	702.48	0.288	0.151	08-11-2018	52	83	63	2.2	6
48	BHANDARDARA	744.91	734.58	0.304	0.156	08-11-2018	51	100	97	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	306.60	0.707	0.446	05-11-2018	63	60	76	-	30
*50	RIHAND	268.22	262.50	5.649	3.220	06-11-2018	57	57	51	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	355.04	2.196	1.460	03-11-2018	66	63	71	1897	198
*52	TEHRI	830.00	825.60	2.615	2.435	08-11-2018	93	88	85	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	392.56	6.827	2.873	08-11-2018	42	42	53	220	115
54	TAWA	355.40	351.95	1.944	1.443	08-11-2018	74	73	92	247	-
*55	BARGI	422.76	420.50	3.180	2.590	08-11-2018	81	85	87	157	90
*56	BANSAGAR	341.64	340.63	5.166	4.718	08-11-2018	91	70	64	488	425
*57	INDIRA SAGAR	262.13	261.83	9.745	9.542	08-11-2018	98	37	72	2380	1000
58	BARNA	348.55	344.35	0.456	0.200	08-11-2018	44	50	75	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	354.12	3.046	2.002	06-11-2018	66	65	65	-	120
60	MAHANADI	348.70	346.07	0.767	0.538	06-11-2018	70	39	70	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	260.51	8.288	2.480	08-11-2018	30	63	62	0	770
*62	NAGARJUNA SAGAR	179.83	172.55	6.841	3.260	08-11-2018	48	58	55	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	94.63	1.994	1.189	08-11-2018	60	72	60	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	327.02	2.300	0.992	08-11-2018	43	64	61	411	27
65	LOWER MANAIR	280.42	273.42	0.621	0.251	08-11-2018	40	38	53	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 08.11.2018

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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
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	751.74	1.163	1.163	07-11-2018	100	69	76	79	-
*67	TUNGABHADRA	497.74	494.29	3.276	1.783	08-11-2018	54	66	68	529	72
68	GHATAPRABHA	662.95	660.15	1.391	1.184	07-11-2018	85	90	81	317	-
69	BHADRA	657.76	656.23	1.785	1.610	07-11-2018	90	74	79	106	39
70	LINGANAMAKKI	554.43	552.45	4.294	3.704	08-11-2018	86	60	79	-	55
71	NARAYANPUR	492.25	489.79	0.863	0.455	08-11-2018	53	78	80	425	-
72	MALAPRABHA(RENUKA)	633.83	630.05	0.972	0.553	07-11-2018	57	41	57	215	-
73	KABINI(Sancherla Tank)	696.16	695.31	0.444	0.394	07-11-2018	89	87	45	85	-
74	HEMAVATHY	890.63	884.46	0.927	0.553	07-11-2018	60	26	59	265	-
75	HARANGI	871.42	866.12	0.220	0.111	07-11-2018	50	59	50	53	-
76	SUPA	564.00	559.35	4.120	3.569	08-11-2018	87	60	66	-	-
77	VANIVILAS SAGAR	652.28	633.18	0.802	0.029	06-11-2018	4	3	16	123	-
*78	ALMATTI	519.60	515.69	3.105	1.629	08-11-2018	52	100	82	@	290
*79	GERUSOPPA	55.00	52.85	0.130	0.117	05-11-2018	90	73	81	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	114.05	0.507	0.448	07-11-2018	88	85	79	62	-
*81	IDAMALAYAR	169.00	158.06	1.018	0.707	07-11-2018	69	78	74	33	75
*82	IDUKKI	732.43	727.23	1.460	1.174	07-11-2018	80	68	65	-	780
*83	KAKKI	981.46	974.73	0.447	0.340	07-11-2018	76	79	78	23	300
*84	PERIYAR	867.41	865.74	0.173	0.129	07-11-2018	75	45	52	84	140
85	MALAPMUZHA	115.06	113.77	0.224	0.193	08-11-2018	86	70	81	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	279.10	0.792	0.792	07-11-2018	100	48	46	105	8
*87	METTUR(STANLEY)	240.79	234.53	2.647	1.815	07-11-2018	69	50	47	122	360
88	VAIGAI	279.20	278.59	0.172	0.158	07-11-2018	92	51	48	61	6
89	PARAMBIKULAM	556.26	554.82	0.380	0.349	07-11-2018	92	49	75	101	-
90	ALIYAR	320.04	318.46	0.095	0.085	07-11-2018	89	44	78	#	60
*91	SHOLAYAR	1002.79	999.42	0.143	0.112	07-11-2018	78	48	72	-	95
TOTAL FOR 91 RESERVOIRS				161.993	107.883						
PERCENTAGE							67	65	68		

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.