

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 13.09.2018)

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 **13.09.2018**, live storage available in these reservoirs is **121.655 BCM**, which is **75%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **92.878 BCM** and the average of last 10 years live storage was **109.688 BCM**. Thus, the live storage available in 91 reservoirs **as per 13.09.2018 Bulletin** is **131%** of the live storage of corresponding period of last year and **111%** 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 **13.09.2018**, the total live storage available in these reservoirs is **13.81 BCM** which is **77%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **86%** and average storage of last ten years during corresponding period was **82%** 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 **13.09.2018**, the total live storage available in these reservoirs is **15.90 BCM** which is **84%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **61%** 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 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 **13.09.2018**, the total live storage available in these reservoirs is **17.17 BCM** which is **55%** 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 **63%** 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 **13.09.2018**, the total live storage available in these reservoirs is **33.17 BCM** which is **78%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **59%** 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 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 **13.09.2018**, the total live storage available in these reservoirs is **41.60 BCM** which is **81%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **41%** 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 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 and 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 **49** and reservoirs having storage more than average of last ten years are **63**. 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 **5**.

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 13.09.2018

- 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 13.09.2018 is 121.655 BCM (75 percent of the live storage capacity at FRL).The current year's storage is nearly 131 percent of last year's storage and 111 percent of the average of last ten years.

3 Region wise storage status:-

REGION (States), (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	11 %	
									RAJASTHAN	-7 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	3	4	4	1	-	2	1	-	JHARKHAND	12 %	
									ODISHA	33 %	
									W. BENGAL	-5 %	
									TRIPURA	41 %	
WEST (Guj.& Mah.), (27 Resv.)	4	4	2	4	1	1	5	6	GUJARAT	-27 %	
									MAH.	1 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	1	3	3	2	-	2	-	1	U.P.	32 %	
									UTTARAKHAND	-3 %	
									M.P.	10 %	
									CHHATISGARH	22 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	7	6	10	3	1	1	1	2	AP&TG	15 %	
									A,P	48 %	
									TG	58 %	
									KARNATAKA	20 %	
									KERALA	31 %	
									T.N.	67 %	
Status of 91 reservoirs	15	17	22	12	3	6	7	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

- Out of 91 reservoirs, 78 reservoirs reported more than 80% of normal storage & 13 reservoirs reported 80% or below of normal storage. Out of these 13 reservoirs 5 having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
KADANA	11		
VANIVILAS SAGAR	18		
YELDARI	27		
PENCH (TOTALADOH)	36		
SABARMATI(DHAROI)	37		

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

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

12 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 :- 13.09.2018

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	19.149	68.16%	19.006	67.65%	17.698	62.99%	8.20
INDUS	14.730	11.331	76.92%	12.869	87.37%	12.165	82.59%	-6.86
NARMADA	21.608	16.579	76.73%	9.650	44.66%	14.351	66.42%	15.53
TAPI	7.394	3.280	44.36%	3.508	47.44%	5.112	69.14%	-35.84
MAHI	4.012	2.148	53.54%	3.569	88.96%	3.014	75.12%	-28.73
SABARMATI	0.735	0.188	25.58%	0.722	98.23%	0.508	69.12%	-62.99
RIVERS OF KUTCH	0.887	0.303	34.16%	0.709	79.93%	0.436	49.15%	-30.50
GODAVARI	15.394	10.702	69.52%	7.565	49.14%	8.171	53.08%	30.98
KRISHNA	32.831	25.708	78.30%	14.943	45.51%	22.898	69.75%	12.27
MAHANADI & NEIGHBOURING EFRS	13.181	11.498	87.23%	8.509	64.56%	9.932	75.35%	15.77
CAUVERY& NEIGHBOURING EFRS	8.359	7.145	85.48%	3.126	37.40%	4.693	56.14%	52.25
WEST FLOWING RIVERS OF SOUTH	14.766	13.624	92.27%	8.702	58.93%	10.710	72.53%	27.21
TOTAL	161.993	121.655		92.878		109.688		
PERCENTAGE								10.91

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 13.09.2018

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	502.94	6.229	4.570	13-09-2018	73	90	87	676	1200
*2	PONG DAM	423.67	419.60	6.157	4.961	13-09-2018	81	88	83	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	521.20	2.344	1.800	12-09-2018	77	80	69	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	278.35	1.711	1.393	12-09-2018	81	100	85	63	140
5	JHAKAM	359.50	357.40	0.132	0.112	12-09-2018	85	100	85	28	-
*6	RANA PRATAP SAGAR	352.81	350.37	1.436	0.977	13-09-2018	68	53	76	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	259.06	0.821	0.380	13-09-2018	46	48	44	-	-
8	MAITHON	146.3	147.09	0.471	0.471	13-09-2018	100	84	86	342	-
*9	PANCHET HILL	124.97	125.43	0.184	0.184	13-09-2018	100	95	80	\$	80
10	KONAR	425.81	424.24	0.176	0.148	12-09-2018	84	66	83	\$	-
11	TILAIYA	368.81	368.47	0.142	0.129	13-09-2018	91	96	83	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	190.89	5.378	4.102	13-09-2018	76	60	80	153	307
*13	BALIMELA	462.08	461.53	2.676	2.570	12-09-2018	96	40	41	-	360
14	SALANADI	82.30	79.87	0.558	0.481	13-09-2018	86	43	44	42	-
*15	RENGALI	123.50	123.61	3.432	3.432	12-09-2018	100	78	73	3	200
*16	MACHKUND(JALPUT)	838.16	837.65	0.893	0.842	12-09-2018	94	70	70	-	115
*17	UPPER KOLAB	858.00	856.56	0.935	0.799	12-09-2018	85	45	47	89	320
*18	UPPER INDRAVATI	642.00	640.78	1.456	1.320	12-09-2018	91	52	65	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	116.22	0.480	0.256	13-09-2018	53	73	58	227	-
20	KANGSABATI	134.14	129.36	0.914	0.532	13-09-2018	58	77	60	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	92.40	0.312	0.258	11-09-2018	83	98	59	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	96.87	6.615	2.776	13-09-2018	42	44	72	348	300
23	SABARMATI(DHAROI)	189.59	182.35	0.735	0.188	12-09-2018	26	98	69	95	1
*24	KADANA	127.7	126.26	1.472	0.104	12-09-2018	7	80	64	200	120
25	SHETRUNJI	55.53	52.77	0.300	0.129	12-09-2018	43	60	59	36	-
26	BHADAR	107.89	105.31	0.188	0.095	12-09-2018	51	81	56	27	-
27	DAMANAGANGA	79.86	77.70	0.502	0.381	13-09-2018	76	86	81	51	1
28	DANTIWADA	184.1	172.39	0.399	0.079	12-09-2018	20	94	38	45	-
29	PANAM	127.41	127.20	0.697	0.539	12-09-2018	77	79	70	36	2
*30	SARDAR SAROVAR	138.68	125.71	5.760	2.252	12-09-2018	39	41	28	2120	1450
31	KARJAN	115.25	113.05	0.523	0.452	13-09-2018	86	86	80	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 13.09.2018

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	460.41	2.171	1.004	13-09-2018	46	84	42	227	-
*33	KOYANA	657.90	658.93	2.652	2.652	12-09-2018	100	100	98	-	1920
34	BHIMA(UJJANI)	496.83	497.05	1.517	1.517	12-09-2018	100	100	72	125	12
35	ISAPUR	441.00	437.70	0.965	0.648	12-09-2018	67	8	51	104	-
36	MULA	552.30	548.71	0.609	0.432	12-09-2018	71	87	74	139	-
37	YELDARI	461.77	450.40	0.809	0.075	12-09-2018	9	6	34	78	-
38	GIRNA	398.07	391.92	0.524	0.254	12-09-2018	48	62	34	79	-
39	KHADAKVASLA	582.47	581.86	0.056	0.048	12-09-2018	86	96	77	78	8
*40	UPPER VAITARNA	603.50	603.26	0.331	0.325	12-09-2018	98	99	90	-	61
41	UPPER TAPI	214.00	213.93	0.255	0.250	12-09-2018	98	98	71	45	-
*42	PENCH (TOTALADOH)	490.00	746.87	1.091	0.287	12-09-2018	26	21	74	127	160
43	UPPER WARDHA	342.50	338.60	0.564	0.269	13-09-2018	48	64	87	70	-
44	BHATSA	142.07	140.97	0.942	0.912	12-09-2018	97	98	92	29.378	15
45	DHOM	747.70	747.16	0.331	0.318	12-09-2018	96	85	85	36.2	2
46	DUDHGANGA	646.00	645.47	0.664	0.661	12-09-2018	100	100	96	2.441	24
47	MANIKDOH (KUKADI)	711.25	707.02	0.288	0.216	12-09-2018	75	76	54	2.2	6
48	BHANDARDARA	744.91	744.71	0.304	0.304	12-09-2018	100	100	96	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	308.40	0.707	0.635	12-09-2018	90	24	85	-	30
*50	RIHAND	268.22	264.44	5.649	4.022	13-09-2018	71	66	52	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	350.04	2.196	1.179	07-09-2018	54	50	62	1897	198
*52	TEHRI	830.00	822.55	2.615	2.311	13-09-2018	88	90	85	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	391.53	6.827	2.501	12-09-2018	37	65	53	220	115
54	TAWA	355.40	351.86	1.944	1.429	13-09-2018	74	58	93	247	-
*55	BARGI	422.76	422.55	3.180	3.136	13-09-2018	99	76	89	157	90
*56	BANSAGAR	341.64	341.64	5.166	5.166	12-09-2018	100	75	71	488	425
*57	INDIRA SAGAR	262.13	261.30	9.745	9.058	13-09-2018	93	31	75	2380	1000
58	BARNA	348.55	345.31	0.456	0.252	12-09-2018	55	63	87	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	358.70	3.046	2.728	13-09-2018	90	67	76	-	120
60	MAHANADI	348.70	348.57	0.767	0.755	12-09-2018	98	48	73	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	267.71	8.288	4.986	13-09-2018	60	16	65	0	770
*62	NAGARJUNA SAGAR	179.83	178.95	6.841	4.925	13-09-2018	72	0	47	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	92.82	1.994	0.978	13-09-2018	49	19	33	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	330.98	2.300	1.974	12-09-2018	86	49	46	411	27
65	LOWER MANAIR	280.42	271.52	0.621	0.178	12-09-2018	29	33	50	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 13.09.2018

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
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	751.92	1.163	1.163	12-09-2018	100	54	76	79	-
*67	TUNGABHADRA	497.74	497.40	3.276	2.735	13-09-2018	83	63	78	529	72
68	GHATAPRABHA	662.95	662.94	1.391	1.387	12-09-2018	100	69	87	317	-
69	BHADRA	657.76	657.72	1.785	1.781	12-09-2018	100	61	85	106	39
70	LINGANAMAKKI	554.43	553.99	4.294	4.160	13-09-2018	97	56	79	-	55
71	NARAYANPUR	492.25	491.92	0.863	0.697	13-09-2018	81	86	82	425	-
72	MALAPRABHA(RENUKA)	633.83	631.21	0.972	0.664	12-09-2018	68	28	57	215	-
73	KABINI(Sancherla Tank)	696.16	696.07	0.444	0.438	12-09-2018	99	80	62	85	-
74	HEMAVATHY	890.63	889.80	0.927	0.927	12-09-2018	100	38	78	265	-
75	HARANGI	871.42	870.69	0.220	0.206	10-09-2018	94	96	93	53	-
76	SUPA	564.00	562.55	4.120	3.940	13-09-2018	96	55	66	-	-
77	VANIVILAS SAGAR	652.28	632.17	0.802	0.016	12-09-2018	2	2	11	123	-
*78	ALMATTI	519.60	519.60	3.105	3.105	13-09-2018	100	100	91	@	290
*79	GERUSOPPA	55.00	48.92	0.130	0.096	12-09-2018	74	74	81	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	113.54	0.507	0.436	07-09-2018	86	50	61	62	-
*81	IDAMALAYAR	169.00	162.84	1.018	0.840	12-09-2018	83	63	70	33	75
*82	IDUKKI	732.43	728.27	1.460	1.231	12-09-2018	84	48	60	-	780
*83	KAKKI	981.46	977.21	0.447	0.375	12-09-2018	84	55	72	23	300
*84	PERIYAR	867.41	865.58	0.173	0.127	12-09-2018	73	46	49	84	140
85	MALAPMUZHA	115.06	114.06	0.224	0.199	13-09-2018	89	44	71	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	279.24	0.792	0.792	12-09-2018	100	37	49	105	8
*87	METTUR(STANLEY)	240.79	239.80	2.647	2.501	12-09-2018	94	34	56	122	360
88	VAIGAI	279.20	277.80	0.172	0.140	12-09-2018	81	10	35	61	6
89	PARAMBIKULAM	556.26	556.23	0.380	0.379	12-09-2018	100	38	73	101	-
90	ALIYAR	320.04	319.89	0.095	0.094	12-09-2018	99	32	73	#	60
*91	SHOLAYAR	1002.79	1002.76	0.143	0.129	12-09-2018	90	48	84	-	95
TOTAL FOR 91 RESERVOIRS				161.993	121.655						
PERCENTAGE							75	57	68		

* 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.

Sd/-

Director

W. M. , CWC